

**EXCHANGE FUND ADVISORY COMMITTEE
Currency Board Sub-Committee**

**Report on Currency Board Operations
(20 September 2008 – 20 November 2008)**

The Hong Kong dollar exchange rate strengthened to the strong-side Convertibility Undertaking of 7.75 during the review period due to unwinding of long US dollar-short Hong Kong dollar carry trades and possible repatriation of funds by domestic corporations. Local interbank interest rates rose markedly after the global financial crisis deepened in mid-September. To ease money market stress, the HKMA conducted foreign exchange operations to inject liquidity into the banking system; announced five temporary measures to provide liquidity assistance to banks; amended the formula for the calculation of the Base Rate, effectively lowering borrowing cost at the Discount Window; and increased the supply of Exchange Fund paper. The Financial Secretary announced two pre-emptive measures including a temporary 100% deposit guarantee and a contingent capital facility to bolster public confidence in the banking system. As a result, local interbank interest rates eased. The Aggregate Balance expanded during the period as a result of both the operation of the HKMA within the Convertibility Zone and the trigger of strong-side Convertibility Undertaking. These operations were in line with Currency Board principles, with changes in the Monetary Base fully matched by changes in foreign reserves.

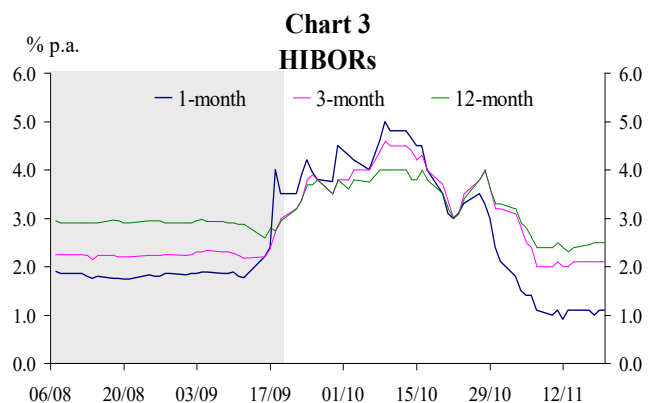
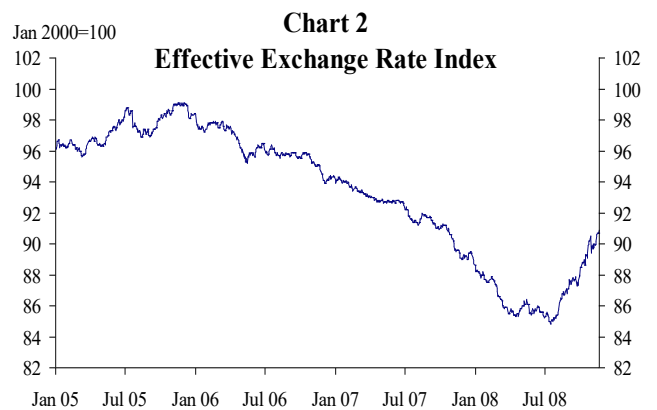
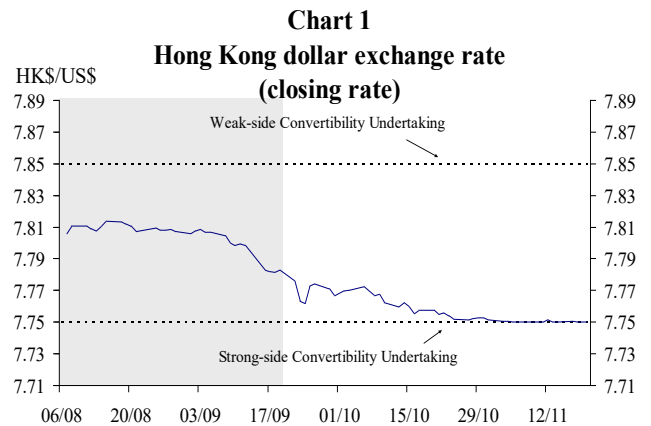
Hong Kong dollar exchange rate

1. The Hong Kong dollar exchange rate strengthened towards the strong-side Convertibility Undertaking (CU) in September and October, and stayed close to 7.75 afterwards, with the strong-side CU being triggered 26 times between 31 October and 20 November (Chart 1).

The strengthening reflected the unwinding of carry trades and possible repatriation of funds by domestic corporations. Meanwhile, the effective exchange rate index of the Hong Kong dollar rose markedly from 87.7 to 90.9, as the US dollar appreciated against other major currencies except for the Japanese yen (Chart 2).

Interest rates

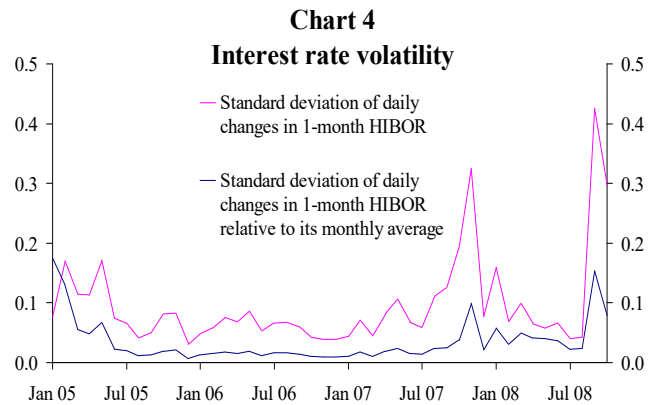
2. Following the failure of the US investment bank Lehman Brothers, global money market conditions considerably tightened. Reflecting heightened perception of counterparty credit risk and stockpiling of liquidity for contingency, local term interbank interest rates increased sharply between mid-September and mid-October (Chart 3). The one-month, three-



month and the 12-month HIBORs surged to 5.0%, 4.6% and 4.0% respectively on 9 October, in part following the rise in USD interest rates. In view of the sharp increases in HIBORs and the potential fragility of banking confidence caused by a small-scale retail-deposit run on a local bank on 24 September, the HKMA operated within the Convertibility Zone on 18 and 25 September to inject liquidity into the banking system. As a result, the overnight and one-month HIBORs temporarily eased. On 2 October, the HKMA implemented five temporary measures to provide term liquidity to licensed banks upon request, against a range of collateral of acceptable quality. On 8 October, the HKMA revised the formula for calculation of the Base Rate effectively lowering borrowing cost at the Discount Window. The Financial Secretary introduced two new precautionary measures including a temporary, 100% deposit guarantee and a contingent capital facility to bolster public confidence in the banking system. Term HIBORs generally eased following these measures and also the declines in LIBORs after the global efforts to ease market stresses. Renewed tightness in the interbank market emerged in late October on concerns about pressures on

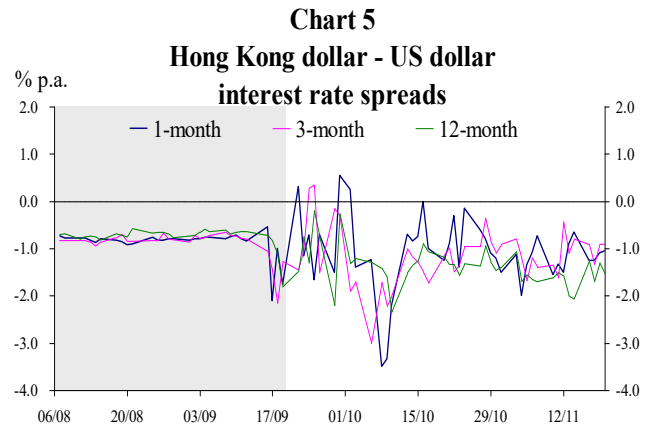
certain emerging markets. In response, the HKMA carried out three more within-zone foreign exchange operations, one on 23 October and two on 27 October, to inject liquidity in the banking system. Later on, the strong-side Convertibility Undertaking was repeatedly triggered in late October-mid November, further expanding liquidity in the banking system. As a result, interbank interest rates moderated further in late October and early November. The one-month, three-month and 12-month HIBORs closed at 1.1%, 2.1% and 2.5% respectively on 20 November.

3. **Interest rate volatility**, measured by the standard deviation of daily changes in one-month HIBOR, **rose markedly** in September but edged down in October and November as money markets showed signs of stabilisation. The standard deviation as a ratio of the average level of one-month HIBOR also showed the same pattern (Chart 4).¹

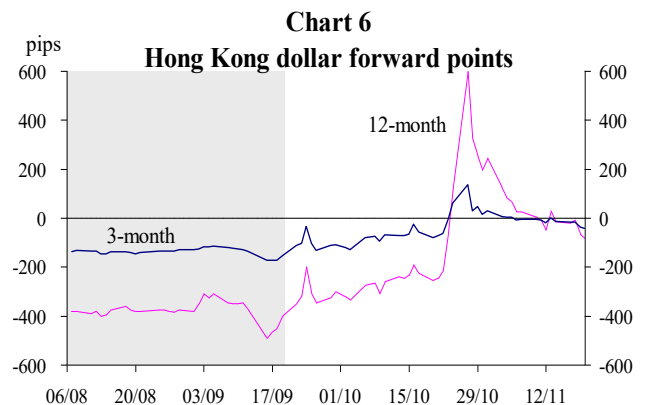


¹ The ratio of the standard deviation of daily changes in the one-month HIBOR to its monthly average measures the extent of interest rate fluctuations relative to the average level of interest rates.

4. As interest rate volatility increased, the spreads of Hong Kong dollar interest rates against their US dollar counterparts fluctuated sharply, with interest rate discounts occasionally turning into premia in the early part of the reporting period (Chart 5).



5. The Hong Kong dollar three-month and 12-month forward discounts generally narrowed in the early part of the review period, partly due to some narrowing of interest rate spreads amid heightened credit and liquidity concern in the interbank market. As interest rate spreads narrowed again towards the end of October on concerns about pressures on certain emerging markets, the forward points turned from discounts to premia in late October. The three-month and 12-month forward points closed at -42 pips and -85 pips respectively on 20 November (Chart 6).



6. Yields of Exchange Fund paper declined across-the-board during the review period (Chart 7). In particular, increased demand for Exchange Fund paper by banks for liquidity management purposes drove the implied yields of short-dated Exchange Fund paper to very low levels or below zero in late September and the first half of October. To meet the higher demand for such paper, the HKMA announced on 20 October the issuance of HK\$4 billion of additional three-month Exchange Fund Bills in the tenders on 28 October and 4 November. On that announcement date, the HKMA operated within the Convertibility Zone by purchasing US dollars against Hong Kong dollars, so that the initial HK\$4 billion increase in the Aggregate Balance was subsequently offset in two steps by completing the allotments of the additional Exchange Fund Bills. On the other hand, the ten-year and 15-year negative yield spreads of Exchange Fund paper over US Treasuries widened notably during the review period, partly because a flight to safety pushed the yields of long-term Exchange Fund Notes down (Table 1).

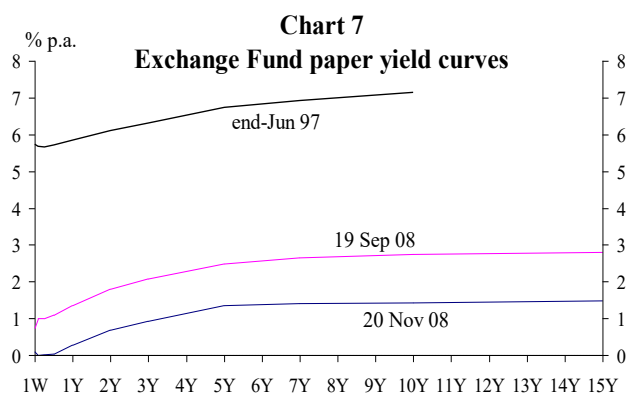
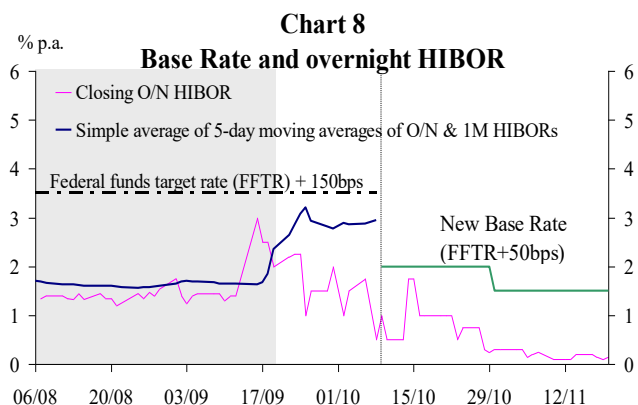


Table 1
Yield spreads of Exchange Fund paper over US Treasuries (basis points)

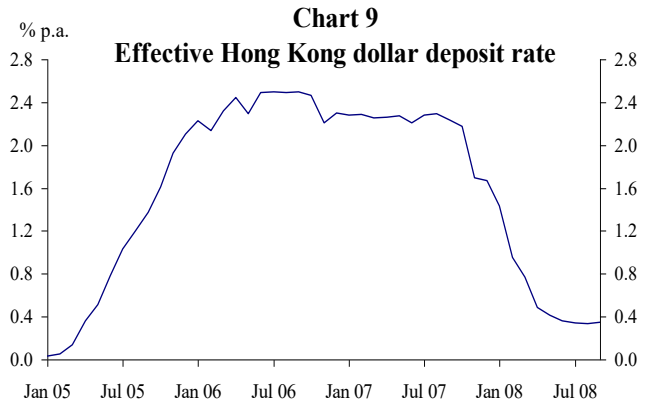
	27 Jun 97	19 Sep 08	20 Nov 08
3-month	56	88	0
1-year	21	-23	-51
3-year	3	-12	-30
5-year	27	-36	-58
10-year	54	-95	-181
15-year	-	-146	-246

7. **The HKMA Base Rate was adjusted downward from 3.5% to 2.0% on 9 October** following the revision of the Base Rate formula and a 50-basis-point cut in the US Federal Funds Target Rate (FFTR) on 8 October (US time) (Chart 8). The formula for determination of the Base Rate is changed by reducing the spread of 150 basis points above the prevailing FFTR to 50 basis points and by removing the other leg relating to the moving averages of the relevant interest rates. The change will be in place until the end of March 2009, before which a review will be made to determine an appropriate formula. **On 29 October, the Base Rate was reduced further to 1.5%.**



8. **The average one-month time deposit rate offered by major authorized institutions increased in the latter part of September and early October,** as some banks tried to secure more stable and longer term funding in view of the dislocation in the interbank market. **The average time deposit rate declined afterwards** alongside moderation in term HIBORs. Overall, the average time deposit rate decreased from 0.49% to

0.08% during the review period.² Between 8 and 10 November, major retail banks reduced their BLRs by 25 basis points while DBS Bank maintained its BLR at 5.5%. This resulted in three BLRs of 5.00%, 5.25% and 5.50% for a few days. On 14 November, DBS Bank cut its BLR by 25 basis points to 5.25%. After that, there were two Best Lending Rates of 5.00% and 5.25% through the end of the reporting period. Having declined for 12 consecutive months, the effective deposit rate increased slightly to 0.35% in September from 0.34% in July and 0.33% in August (Chart 9).³ The composite interest rate, which reflects the average cost of funds of banks, increased further to 1.28% at the end of October, compared with 1.18% at the end of September.⁴



² The figures refer to the average of interest rates offered by major authorized institutions for one-month time deposits of less than HK\$100,000.

³ This is the average of the interest rates on demand, savings and time deposits. As the banking statistics classify deposits by remaining maturities, we have made certain assumptions regarding the maturity distribution in computing the effective deposit rate.

⁴ This is a weighted average interest rate of all Hong Kong dollar interest bearing liabilities, which include deposits from customers, amounts due to banks, negotiable certificates of deposit and other debt instruments, and Hong Kong dollar non-interest bearing demand deposits on the books of banks. Data from retail banks, which account for about 90% of the total customers' deposits in the banking sector, are used in the calculation.

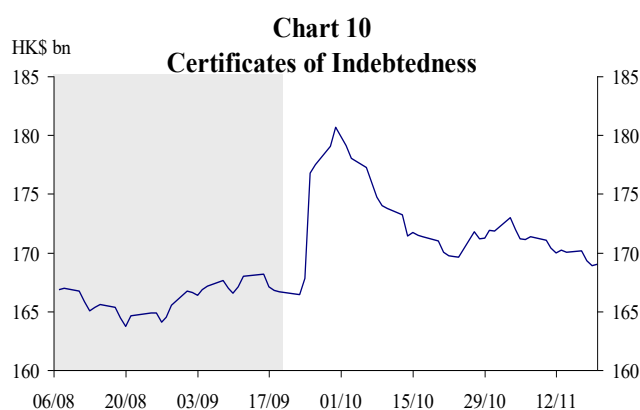
Monetary Base

9. **The Monetary Base**, which consists of Certificates of Indebtedness (CIs), government-issued currency notes and coins in circulation, the Aggregate Balance and Exchange Fund Bills and Notes, **increased from HK\$328.79 billion to HK\$385.44 billion** during the reporting period (Table 2), mainly reflecting an increase in the Aggregate Balance. Movements in the individual components are discussed below.

(HK\$bn)	22 Sep 08	20 Nov 08
CIs	166.49	168.99
Government-issued Currency Notes and Coins in Circulation	8.21	8.23
Aggregate Balance	6.40	53.08
Outstanding EFBNs	147.70	155.15
Monetary Base	328.79	385.44

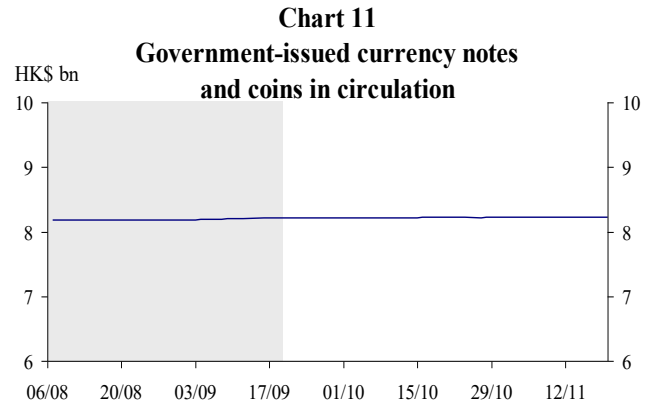
Certificates of Indebtedness

10. During the reporting period, the three note-issuing banks submitted a total of US\$321 million to the HKMA in exchange for HK\$2.5 billion worth of CIs. **The outstanding CIs surged to around HK\$180 billion at the end of September** partly due to the effects of month end and a long holiday for mainland visitors, and partly due to a small-scale retail-deposit run on a local bank, **but gradually declined to HK\$168.99 billion at the end of the review period** (Chart 10).



Government-issued currency notes and coins in circulation

11. The amount of **government-issued currency notes and coins in circulation edged up from HK\$8.21 billion to HK\$8.23 billion** during the review period (Chart 11).



Aggregate Balance

12. **The Aggregate Balance surged from HK\$6.4 billion to HK\$53.08 billion during the reporting period** (Chart 12). The marked increase reflected the liquidity injections into the banking sector by the HKMA in late September and late October, and the repeated triggerings of the strong-side Convertibility Undertaking between 31 October and 20 November (Table 3). These foreign exchange operations are consistent with Currency Board principles, as the increases in the Monetary Base were matched by equivalent increases in US dollar reserves. The Aggregate Balance is projected to rise to HK\$84.272 billion on 24 November.

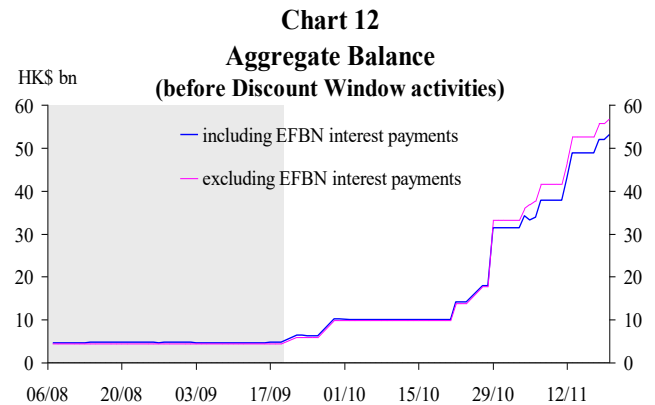


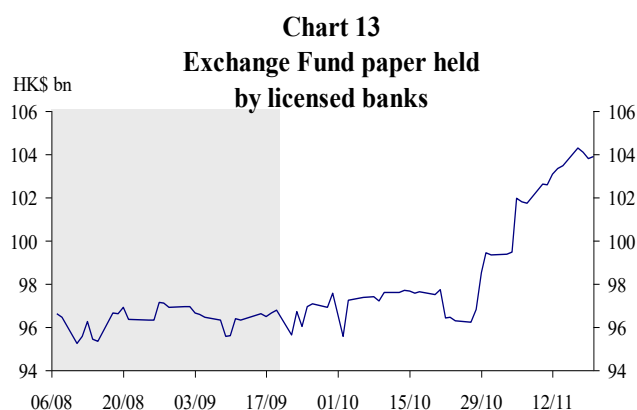
Table 3
HKMA HK\$/US\$ FX Transactions
(20 Sep 08 – 20 Nov 08)

Trade Date	Net HK\$ purchase (+) (HK\$m)
25 Sep	-3,883.00
20 Oct	-3,995.89
23 Oct	-3,876.85
27 Oct	-15,506.50
31 Oct	-2,813.25
3 Nov	-852.50
4 Nov	-813.75
5 Nov	-3,875.00
7 Nov	-3,255.00
10 Nov	-1,937.50
11 Nov	-5,812.50
14 Nov	-3,100.00
18 Nov	-1,162.50
19 Nov	-12,942.50
20 Nov	-18,212.50*
Total	-82,039.24

* Figure will be shown in the Aggregate Balance on 24 November.

Outstanding Exchange Fund Bills and Notes

13. **The market value of outstanding Exchange Fund Bills and Notes increased from HK\$147.70 billion to HK\$155.15 billion** during the review period, partly reflecting the additional supply of Exchange Fund Bills in late October and early November. **Holdings of Exchange Fund paper by the banking sector (before Discount Window activities) also expanded from HK\$95.63 billion (64.7% of total) to HK\$103.92 billion (67.0% of total) (Chart 13).**



14. During the reporting period, **HK\$279.37 million of interest payments on Exchange Fund paper were made.** Taking into account interest payments brought forward from the last reporting period, **an additional HK\$359.81 million (in market value) of Exchange Fund paper was issued to absorb these interest payments.** The Exchange Fund papers issued were well received by the market (Table 4).

	No. of issues launched	Over-subscription ratio
1-month EFB	1	2.0
3-month EFB	9	1.09-7.61
6-month EFB	5	2.00-5.88
12-month EFB	2	2.06-6.92
2-year EFN	1	3.00
3-year EFN	1	2.37
5-year EFN	1	2.10

Discount Window activities

15. Discount Window activities increased in mid-October. During the review period, **11 banks borrowed a total of HK\$5.61 billion from the Discount Window**, compared with HK\$2.69 billion in the preceding period (Chart 14 and Table 5). All borrowings used Exchange Fund paper as collateral.

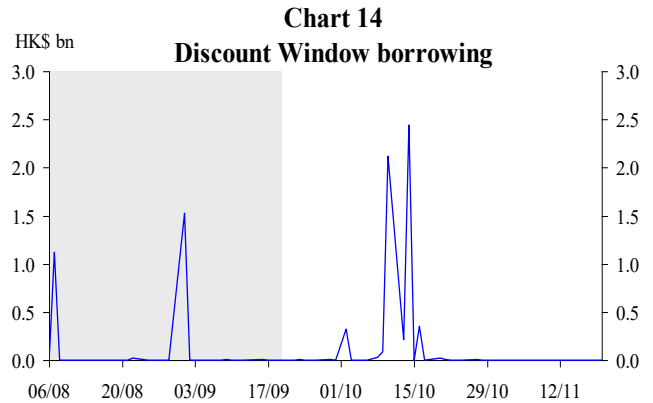
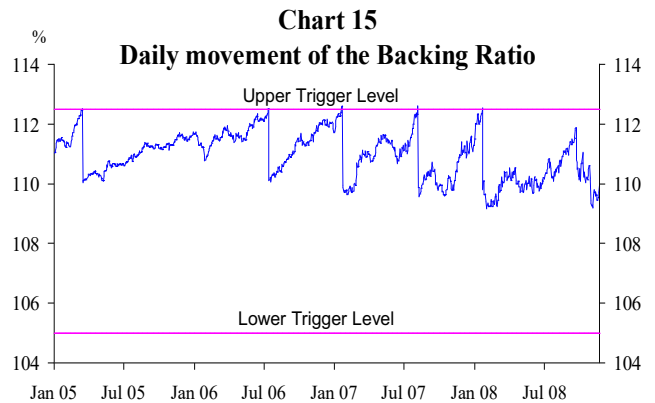


Table 5
Frequency of individual bank's access to the Discount Window
(20 Sep 08 – 20 Nov 08)

Frequency of using Discount Window	No. of banks
1	9
3	2
Total	11

Backing Portfolio

16. Backing assets increased during the reporting period, mainly reflecting the rise in the Monetary Base. As the Backing assets rose proportionally less than the Monetary Base, **the Backing Ratio decreased from 111.88% on 21 September to 109.96% on 20 November** (Chart 15). Under the Linked Exchange Rate system, while 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.



Hong Kong Monetary Authority

