

# Monetary Stability

The Linked Exchange Rate system – a cornerstone of Hong Kong's monetary and financial stability – continued to function smoothly and effectively in 2010. The Hong Kong Government is fully committed to the maintenance of the system.

## OBJECTIVES

The overriding objective of Hong Kong's monetary policy is currency stability. This is defined as a stable external exchange value of Hong Kong's currency, in terms of its exchange rate in the foreign-exchange market against the US dollar, within a band of HK\$7.75 - 7.85 to US\$1. The structure of the monetary system is characterised by Currency Board arrangements, requiring the Monetary Base to be at least 100% backed by US dollar reserves held in the Exchange Fund, and changes in the Monetary Base to be 100% matched by corresponding changes in US dollar reserves.

The Monetary Base (Table 1) comprises

- Certificates of Indebtedness, which provide full backing to the banknotes issued by the three note-issuing banks
- Government-issued notes and coins in circulation
- the Aggregate Balance, which is the sum of clearing account balances of banks kept with the HKMA
- Exchange Fund Bills and Notes issued by the HKMA on behalf of the Government.

The stability of the Hong Kong dollar exchange rate is maintained through an automatic interest rate adjustment mechanism and the firm commitment by the HKMA to honour the Convertibility Undertakings (CUs). When the demand for Hong Kong dollars is greater than the supply and the market exchange rate strengthens to the strong-side CU of HK\$7.75 to the US dollar, the HKMA stands ready to sell Hong Kong dollars to banks for US dollars. The Aggregate Balance will then expand to push down Hong Kong dollar interest rates, creating monetary conditions that move the Hong Kong dollar away from the strong-side limit to within the Convertibility Zone of 7.75 to 7.85. Conversely, if the supply of Hong Kong dollars is greater than the demand and the market exchange rate weakens to the weak-side CU of HK\$7.85 to the US dollar, the HKMA will buy Hong Kong dollars from banks. The Aggregate Balance will then contract to drive Hong Kong dollar interest rates up, pushing the Hong Kong dollar away from the weak-side limit to stay within the Convertibility Zone.

**Table 1** Monetary Base

\$ million	31 Dec 2010	31 Dec 2009
Certificates of Indebtedness <sup>1</sup>	<b>226,705</b>	200,185
Government-issued currency notes and coins in circulation <sup>1</sup>	<b>8,929</b>	8,477
Balance of the banking system	<b>148,702</b>	264,567
Exchange Fund Bills and Notes (EFBN) issued <sup>2</sup>	<b>655,220</b>	537,429
<b>Total</b>	<b>1,039,556</b>	1,010,658

<sup>1</sup> The Certificates of Indebtedness and the government-issued notes and coins in circulation shown here are stated at Hong Kong dollar face values. The corresponding items shown in the balance sheet of the Exchange Fund in this Annual Report are in Hong Kong dollars equivalent to the US dollar amounts required for their redemption at the prevailing exchange rates on the balance sheet date. This arrangement is in accordance with the accounting principles generally accepted in Hong Kong.

<sup>2</sup> The amount of EFBN shown here is different from that in the balance sheet of the Exchange Fund in this Annual Report. In accordance with the accounting principles generally accepted in Hong Kong, the EFBN held by the HKMA on behalf of the Exchange Fund in relation to its trading of the EFBN in the secondary market are offset against the EFBN issued, and the net amount is recorded in the balance sheet.

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## REVIEW OF 2010

### Exchange-rate stability

Despite the European sovereign debt crisis, volatile international capital flows and buoyant fund raising activities in the local equity market, currency stability was well maintained during the year (Chart 1). As concerns over European sovereign debt problems intensified in May, the Hong Kong dollar market exchange rate weakened to around 7.80. Between June and October, the exchange rate strengthened towards 7.75, supported by equity-related demand associated with initial public offerings and a buoyant stock market. Partly reflecting the repatriation of funds raised in the equity market, the exchange rate weakened in November and December. Overall, the exchange rate moved within a narrow range between 7.7511 and 7.8034 during the year.

Activities in the local foreign-exchange market were generally orderly. The market remained calm when signs of additional monetary easing in the US emerged in early August and when the US Federal Reserve announced on 3 November a second round of quantitative easing through large-scale Treasury bond purchases (widely known as QE2). On the Mainland, the People's Bank of China announced on 19 June that it would proceed with the reform of the renminbi exchange rate regime and enhance the exchange-rate flexibility. Although the renminbi faced renewed appreciation pressures, the Hong Kong dollar forward discounts traded within a narrow range during the year, with their movements broadly in line with HIBOR-LIBOR differentials.

Chart 1 Market exchange rate in 2010

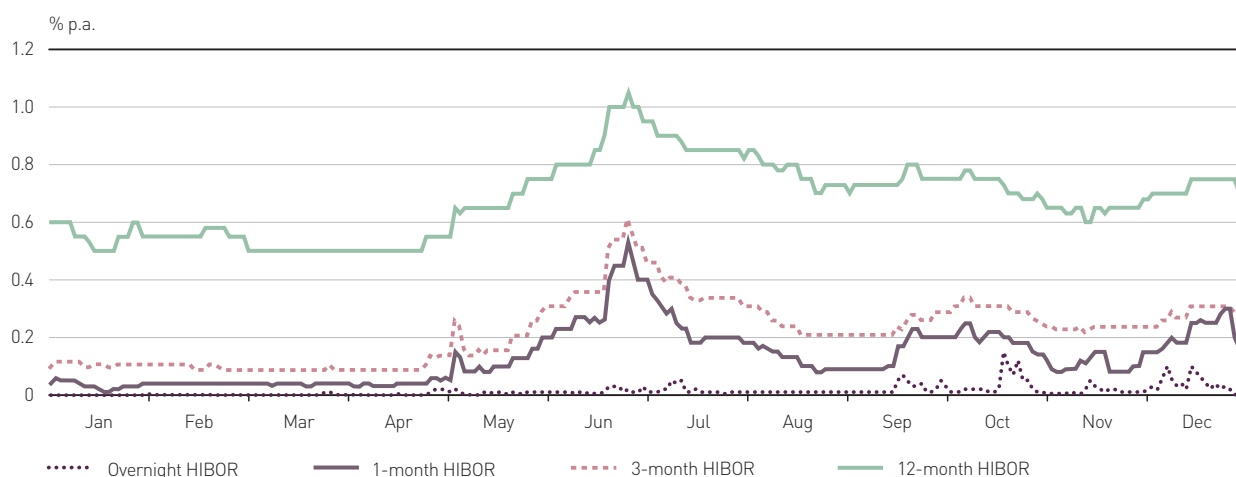


## Money market

The money market was stable in a low interest rate environment. Underpinned by low US dollar interest rates and ample interbank liquidity locally, HIBORs generally stayed below 1% during the year (Chart 2). Term HIBORs increased slightly in May and June following upward movements in their US dollar counterparts. The temporary rise in US dollar interbank rates partly reflected the concerns about the exposure of European banks to the debt-ridden countries in the Euro area. HIBORs rose occasionally in the second half of the year due to increased demand for equity funds.

While there were signs of capital flows from slowly recovering economies, including the US, to economies in the region with higher growth, the CUs were not triggered and the HKMA did not conduct any foreign-exchange operations within the Convertibility Zone during the year. In response to market demand, the HKMA issued additional Exchange Fund Bills in the first five months of the year, bringing the total additional supply since September 2008 to \$502.4 billion (Table 2). The Aggregate Balance contracted accordingly from \$264.6 billion on 4 January to \$148.6 billion on 12 May, and stabilised at around this level for the remainder of the year (Chart 3). These market operations were consistent with Currency Board principles and had little impact on the exchange rate and interest rates.

**Chart 2** Hong Kong dollar interest rates in 2010

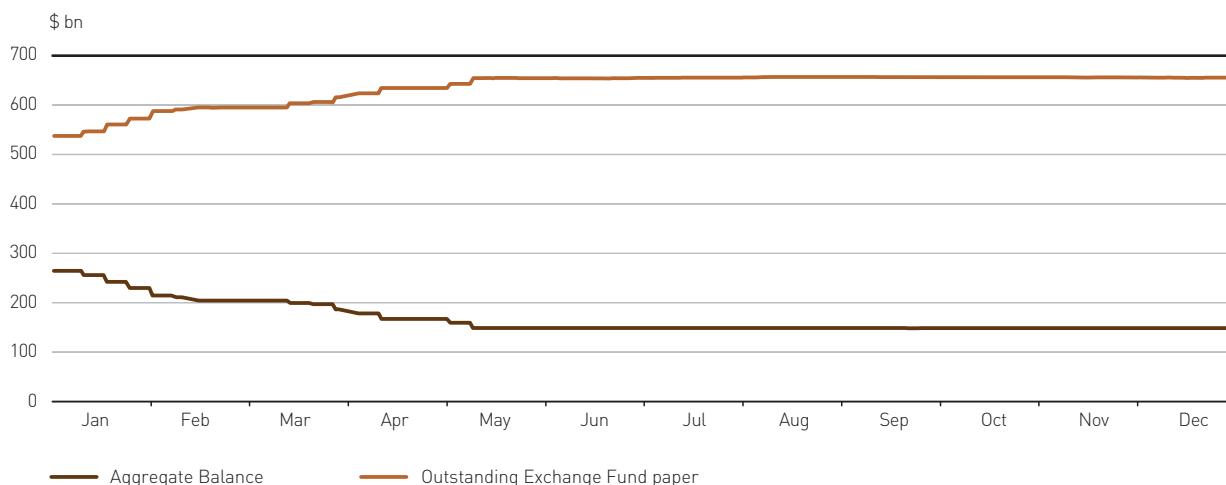


**Table 2** Additional issuance of Exchange Fund Bills since September 2008

	\$ billion
September – December 2008	12.0
January – December 2009	374.4
January – May 2010	116.0
<b>Total</b>	<b>502.4</b>

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**Chart 3** Aggregate Balance and Exchange Fund paper in 2010



The markets also reacted calmly when the temporary Full Deposit Guarantee and the Contingent Bank Capital Facility provided by the Exchange Fund expired at the end of the year as scheduled. This indicated the HKMA's exit strategies over the past two years were successful.<sup>1</sup> As an example, the Deposit Protection Scheme (Amendment) Ordinance 2010 was passed on 30 June 2010 and an enhanced Deposit Protection Scheme came into effect on 1 January 2011. Under the enhanced scheme, the protection limit has been raised from \$100,000 to \$500,000, which will be able to fully cover about 90% of bank depositors.

## The Linked Exchange Rate system

In the face of a volatile and complex external environment, the Linked Exchange Rate system continued to serve as an anchor for Hong Kong's highly externally oriented economy and as a cornerstone of its monetary and financial stability. However, against the backdrop of additional quantitative easing in the US and the increased use of the renminbi in Hong Kong, there was renewed discussion about the suitability of the Hong Kong dollar peg to the US dollar. The Hong Kong Government has reiterated its commitment to the Linked Exchange Rate system. Stability in the foreign-exchange and money markets suggests the market showed strong confidence in the Government's commitment.

<sup>1</sup> For more details on the HKMA's exit strategies, see *HKMA Annual Report 2009*, pages 45 – 47.

A sound banking system is a crucial condition for the normal functioning of the Linked Exchange Rate system. To guard against the risk of a credit-fuelled property market bubble in Hong Kong that would threaten banking and financial stability, the HKMA stepped up its supervisory efforts on residential mortgage lending during the year by introducing a series of measures to help the banks manage related risks. The measures include lowering the loan-to-value ratio for residential mortgages; assessing thoroughly the repayment ability of borrowers by computing debt servicing ratio prudently; and stress testing borrowers' repayment ability by assuming that interest rates would increase by at least two percentage points.

Over the years, the structure of the Currency Board has become stronger and more transparent. In view of potential changes to the long-term framework for monetary policy implementation in the US, the suitability of the existing formula for determining the Base Rate was reviewed in 2010. The review concluded that the formula for determining the Base Rate continues to be appropriate. Throughout 2010, the HKMA Base Rate remained unchanged at 0.5% (50 basis points above the lower boundary of the target range of the US Federal Funds Target Rate) according to the modified formula announced on 26 March 2009. To improve the transparency of the Currency Board Account, a specific portion of Exchange Fund assets has been allocated to back the Monetary Base since October 1998. The Backing Ratio (defined as the Backing Assets divided by the Monetary Base) moved within a tight range of 107 – 108.5% during the year, without touching either the Upper or Lower Trigger Level. The ratio closed at 107.81% on 31 December (Chart 4).

**Chart 4** Daily movement of the Backing Ratio in 2010



# Monetary Stability

## EFAC Currency Board Sub-Committee

The EFAC Currency Board Sub-Committee monitors and reviews issues relevant to monetary and financial stability in Hong Kong. In 2010, the Sub-Committee considered issues including the renminbi exchange rate and its implications for inflation in Hong Kong; Hong Kong as an offshore renminbi centre and its implications for the Hong Kong dollar; external demand for Hong Kong dollar currency; and the development of, and prospects for, the real exchange rate of the Hong Kong dollar. Records of the Sub-Committee's discussions on these issues and the reports on Currency Board operations submitted to the Sub-Committee are published on the HKMA website.

## Hong Kong Institute for Monetary Research

The Hong Kong Institute for Monetary Research (HKIMR) continued to sponsor research in the fields of monetary policy, banking and finance. In 2010, the Institute hosted 28 research fellows and five post-doctoral fellows. It also published 31 working papers.

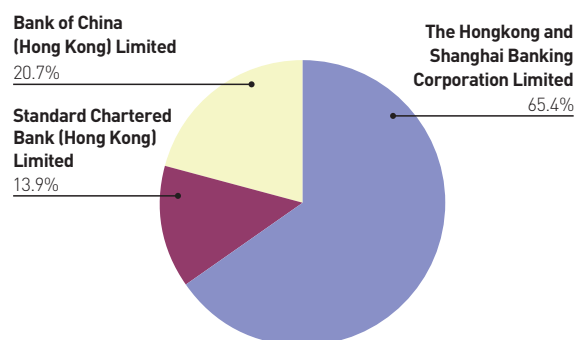
The Institute organised a number of international conferences. In January, the First Annual International Conference on the Chinese Economy was held with the theme "China and the Global Economy: Macro, Trade and Financial Linkages". It covered topics ranging from China's savings rate, trade structure and productivity growth, to exchange-rate policies and capital account liberalisation. In July, the Institute, together with the Bank for International Settlements, held the "Financial Stability: Towards a Macroprudential Approach" conference, which dealt with theoretical and empirical issues related to the macroprudential approach to financial stability. Other programmes included a five-day Macroeconomic Modelling Seminar with the International Monetary Fund on the Global Integrated Monetary and Fiscal Model and the Global Projection Model; the Eighth Annual Summer Workshop, which focused on recent developments in exchange rate economics; a workshop with the Boyuan

Foundation on "The Development of Hong Kong as an Offshore Renminbi Centre"; and the Eighth HKIMR workshop on the Mainland economy with the theme "The Role of Property Markets in Macroeconomic Fluctuations in China". Forty public seminars were organised during the year covering a broad range of economic and monetary issues.

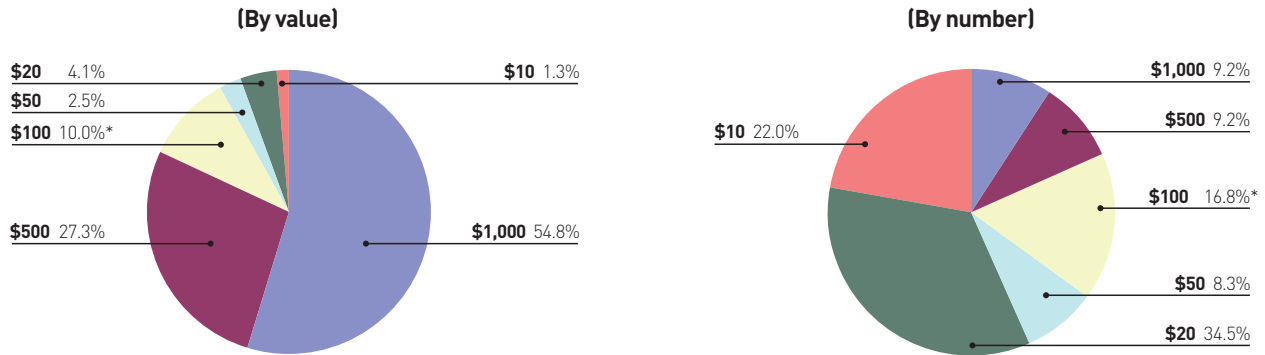
## Notes and Coins

At the end of 2010, the total value of banknotes in circulation was \$226.7 billion, an increase of 13% from a year earlier (Charts 5, 6 and 7). The total value of government-issued notes and coins in circulation amounted to \$8.7 billion, up 5% (Charts 8 and 9). The value of \$10 notes issued by the Government in circulation (both paper and polymer notes) reached \$3 billion, an increase of 10% from 2009.

**Chart 5 Banknotes in circulation by note-issuing banks at the end of 2010**

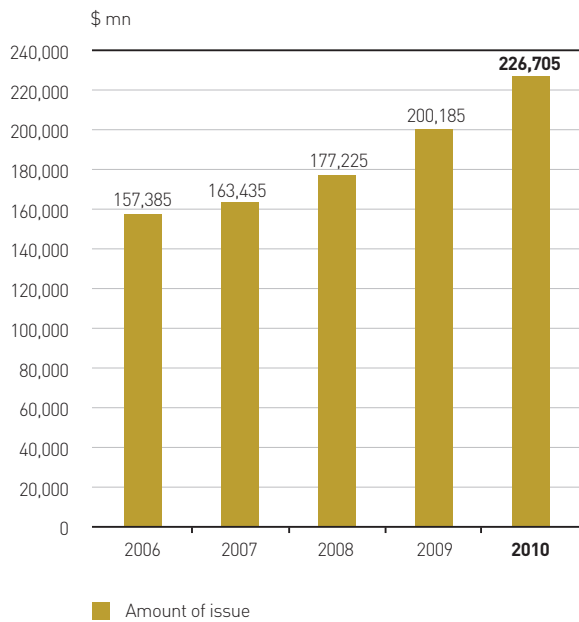


**Chart 6** Distribution of banknotes in circulation at the end of 2010

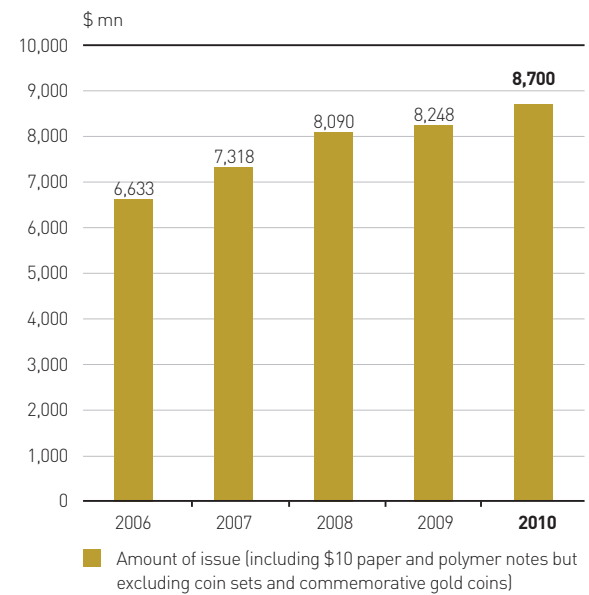


\* Includes 0.1 percentage points contributed by \$150 banknote.

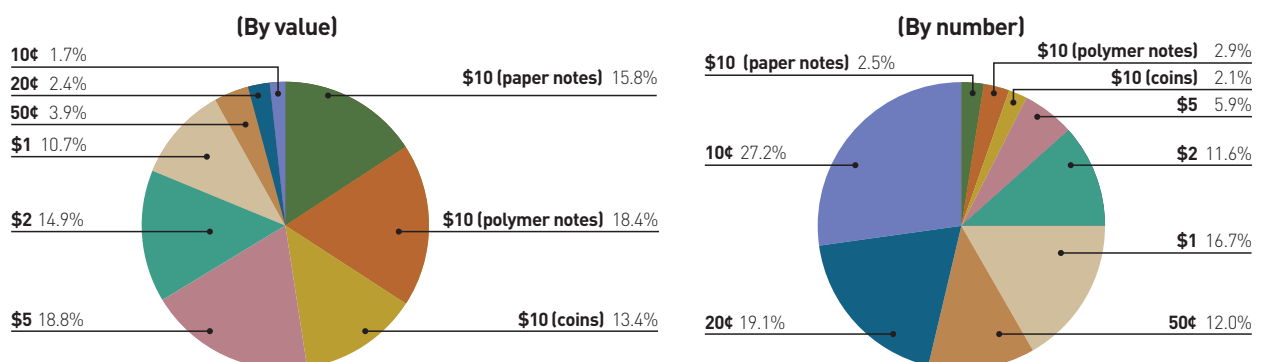
**Chart 7** Banknotes in circulation at the end of 2010



**Chart 8** Government-issued notes and coins in circulation at the end of 2010



**Chart 9** Government-issued notes and coins in circulation at the end of 2010





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## **New series Hong Kong banknotes**

The HKMA and the three note-issuing banks announced in July the issue of a new series of banknotes which carry state-of-the-art security features to stay ahead of counterfeiting and additional accessibility features for the visually impaired. New \$1,000 banknotes were put into circulation in December and the remaining four denominations of banknotes, \$500, \$100, \$50 and \$20, will go into circulation between 2011 and 2012.

The new security features are effective and easy to recognise, including the dynamic colour-changing pattern, colour-changing windowed metallic thread, enhanced watermark, fluorescent see-through pattern and fluorescent serial number.

For the first time, Braille and tactile lines have been embossed on Hong Kong banknotes to help the visually impaired differentiate between the denominations. A new note-measuring template has also been made available to the visually impaired through related organisations.

An extensive publicity campaign was launched to raise public awareness of the new banknotes. In all, 65 seminars were conducted for over 5,000 participants, including bank tellers, retailers, money changers, the visually impaired, the elderly, teachers and students. Roving exhibitions were held in six districts to enable people to view and feel the new banknotes, and student ambassadors visited major shopping centres to distribute educational leaflets to retailers.

## **\$10 polymer note**

About 160 million polymer notes were in circulation at the end of 2010, representing 54% of the \$10 notes issued by the Government.

## **Coin replacement programme**

The withdrawal of coins bearing the Queen's Head design continued, with 17 million coins removed from circulation in 2010.



*Norman Chan (third from left), Chief Executive of the HKMA, and the chief executives of the three note-issuing banks unveil the designs of the new series Hong Kong banknotes.*



*Roving exhibitions attract keen public interest in the new banknotes.*

## Exchange Fund Bills and Notes

Since the strong-side CU was not triggered in 2010, banks' demand for short-dated Exchange Fund paper eased compared with 2009. Against this background, the HKMA gradually slowed down the pace of issuing additional Exchange Fund Bills. An additional \$116 billion of 91- and 182-day Exchange Fund Bills were issued during the year, resulting in a corresponding decrease in the Aggregate Balance. By the end of 2010, the amount of outstanding Exchange Fund paper stood at \$653 billion (Table 3). During the year, the HKMA continued to fine-tune the maturity mix of the Exchange Fund Bills and Notes with increased issuance of 5-, 10- and 15-year Exchange Fund Notes.

## PLANS FOR 2011 AND BEYOND

The macro-financial environment remains highly challenging in 2011. Financial stability could be vulnerable to the sovereign debt problems in Europe and geopolitical tensions in the Middle East and North Africa. Domestically, rising inflationary pressures, rapid growth in credit and the still buoyant property market will pose risks to monetary and financial stability.

The HKMA will closely monitor risks and vulnerabilities in the domestic and external environment and study issues affecting the economy in its research programme for the coming year. The EFAC Currency Board Sub-Committee will continue to examine issues relevant to Hong Kong's monetary and financial stability, review the technical aspects of the Currency Board arrangements and, where appropriate, recommend measures to strengthen them.

**Table 3** Outstanding issues of Exchange Fund Bills and Notes

\$ million	2010	2009
Exchange Fund Bills (by original maturity)		
91 days	<b>346,038</b>	299,162
182 days	<b>195,000</b>	123,000
364 days	<b>42,200</b>	42,200
Sub-total	<b>583,238</b>	464,362
Exchange Fund Notes (by remaining tenor)		
1 year or below	<b>17,000</b>	16,200
Over 1 year and up to 3 years	<b>29,200</b>	29,200
Over 3 years and up to 5 years	<b>11,500</b>	13,600
Over 5 years and up to 10 years	<b>8,000</b>	7,700
Over 10 years	<b>4,200</b>	3,000
Sub-total	<b>69,900</b>	69,700
<b>Total</b>	<b>653,138</b>	534,062