

## 2. International and Foreign Exchange Markets

### Central Bank Policy

While financial markets continue to expect the US federal funds rate target to remain unchanged through 2011, expectations of initial monetary policy tightening in the euro area and United Kingdom have been brought forward to around mid 2011, in part due to a less benign outlook for inflation. The People's Bank of China has tightened policy further

by increasing its lending and deposit policy rates and raising banks' reserve requirement ratios several times, while banks will also be required to bring off-balance sheet lending onto their balance sheets by around the end of the year. Policy rates were also increased in Brazil, India, Israel, South Korea, Sweden, Taiwan and Thailand but were lowered in South Africa (Table 2.1).

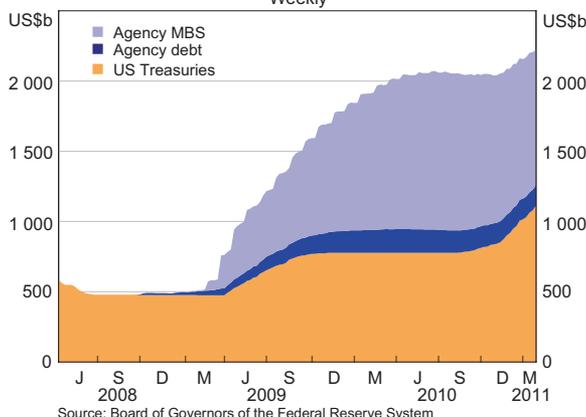
**Table 2.1: Policy Rates**

	Current level Per cent		Most recent change	Cumulative increase Basis points
Euro area	1.00	↓	May 09	–
Japan	0.05	↓	Oct 10	–
United States	0.125	↓	Dec 08	–
Brazil	11.25	↑	Jan 11	250
Canada	1.00	↑	Sep 10	75
China	5.81	↑	Dec 10	50
India	6.50	↑	Jan 11	175
Indonesia	6.50	↓	Aug 09	–
Israel	2.25	↑	Jan 11	175
Malaysia	2.75	↑	Jul 10	75
Mexico	4.50	↓	Jul 09	–
New Zealand	3.00	↑	Jul 10	50
Norway	2.00	↑	May 10	75
Russia	7.75	↓	Jun 10	–
South Africa	5.50	↓	Nov 10	–
South Korea	2.75	↑	Jan 11	75
Sweden	1.25	↑	Dec 10	100
Switzerland	0.25	↓	Mar 09	–
Taiwan	1.625	↑	Dec 10	37.5
Thailand	2.25	↑	Jan 11	100
United Kingdom	0.50	↓	Mar 09	–

Source: central banks

The US Federal Reserve's balance sheet has expanded further following the commencement of its second round of large-scale asset purchases in November. The Fed has purchased around US\$200 billion of the US\$600 billion purchases of US Treasuries planned by mid 2011 (Graph 2.1). The Fed extended the expiration of its US dollar swap lines with several central banks to 1 August 2011. This was a precautionary move; use of the swap lines has been minimal since their re-establishment in May 2010.

**Graph 2.1**  
**Federal Reserve Holdings of Securities**  
Weekly

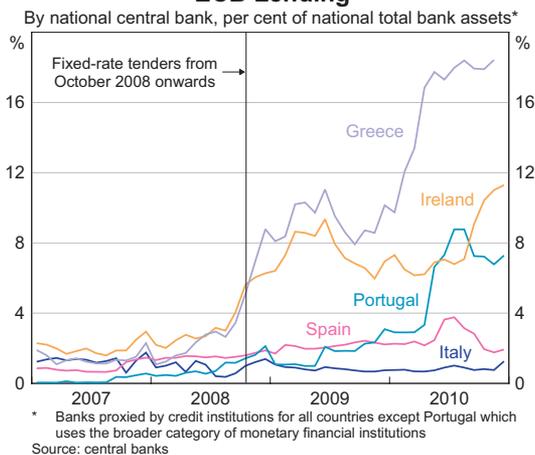


The European Central Bank's (ECB) balance sheet has increased marginally in recent months but remains below its peak in June 2010. While the ECB purchased further amounts of sovereign debt during recent bouts of market volatility, liquidity provided through its monetary policy operations fell to the lowest level since September 2008. Lending to Irish banks accounts for around one-quarter of aggregate ECB liquidity outstanding (Graph 2.2). While lending to Irish banks fell marginally in December, this was more than offset by an increase in support provided by the Irish central bank.

## Sovereign Debt Markets

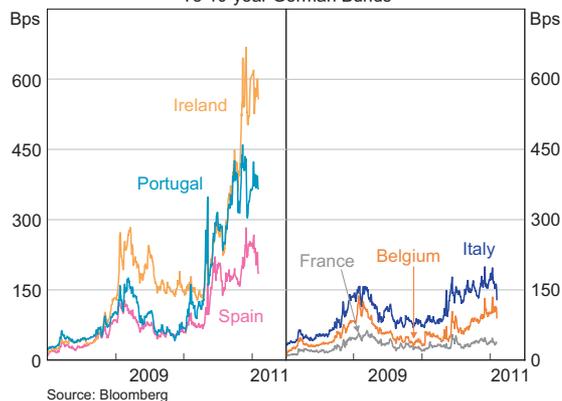
Spreads between yields on most peripheral euro area sovereign bonds and German Bunds reached historic highs in November, with concerns primarily focused on the Irish Government's ability to support the banking sector (Graph 2.3). Spreads narrowed briefly following the announcement of an €85 billion financial assistance package for Ireland, jointly funded by the European Union and IMF. Spreads again widened, however, as financial markets turned their attention to the sustainability of government

**Graph 2.2**  
**ECB Lending**



**Graph 2.3**

## European Government Bond Spreads To 10-year German Bunds

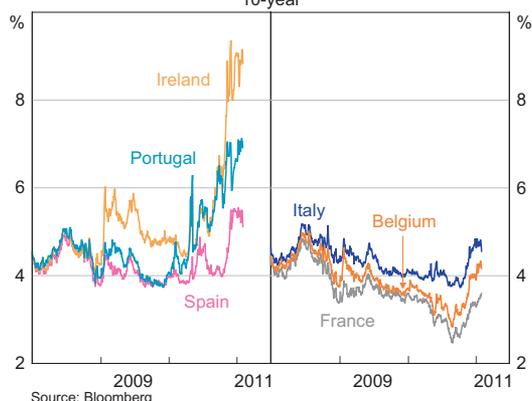


finances in Portugal, as well as Spain and Belgium (which has had a caretaker government since mid 2010). The Portuguese Government expects to issue debt of around €20 billion (11 per cent of GDP) in 2011, while the Spanish Government expects to issue debt of more than €90 billion (9 per cent of GDP). These amounts are only a little lower than issuance in 2010. Peripheral euro area spreads declined in January as the ECB increased its purchases of sovereign bonds, government bond auctions in Portugal were well received and there was discussion of an expansion of the euro area support facility. However, actual borrowing costs – the level of yields – in the euro area periphery remain elevated (Graph 2.4).

At the same time, longer-term bond yields in the major economies have risen, partly reflecting data showing stronger economic conditions (Graph 2.5). Both ‘real’ yields and compensation for expected inflation have increased. 10-year government bond yields in the major advanced economies rose to their highest levels since mid 2010. Shorter-term bond yields have also increased after falling to historic lows in 2010. S&P lowered Japan’s sovereign credit rating to AA- in late January, citing fiscal concerns, but this had little impact on yields.

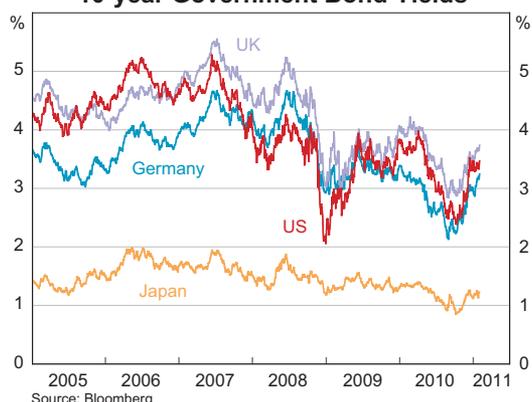
The concerns about the euro area periphery have, to date, not spread to other regions: spreads of emerging market US dollar-denominated sovereign debt have been broadly stable over the past few months after narrowing since mid 2010 (Graph 2.6). In December, S&P raised China’s sovereign credit rating to AA-, citing China’s large foreign asset position, low levels of public debt and structural reforms during the crisis. Moody’s upgraded Indonesia’s sovereign rating to the equivalent of BB+.

**Graph 2.4**  
**European Government Bond Yields**  
10-year



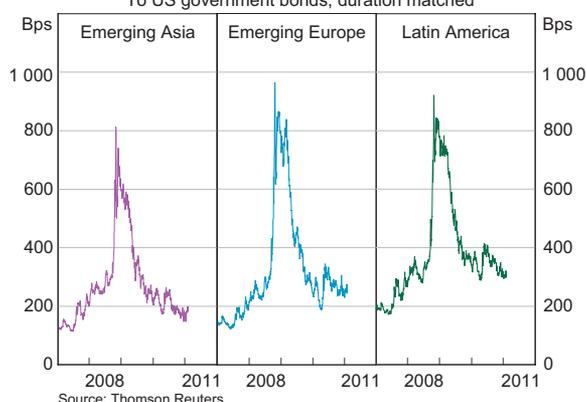
Source: Bloomberg

**Graph 2.5**  
**10-year Government Bond Yields**



Source: Bloomberg

**Graph 2.6**  
**US Dollar-denominated Sovereign Debt Spreads**  
To US government bonds, duration matched



Source: Thomson Reuters

## Government Financial Policy

The US Treasury sold its remaining stake in Citigroup, realising a profit of US\$12 billion on its US\$45 billion investment. AIG and the US Treasury also took further steps towards unwinding AIG's government obligations, using proceeds from asset sales and TARP funds to repay its loans from the New York Fed. Following this repayment, the US Treasury converted some of its preferred shares to common equity and now owns 92 per cent of AIG.

In Europe, the European Council endorsed the creation of a permanent crisis mechanism to safeguard the financial stability of the euro area. In mid 2013, the European Stability Mechanism (ESM) will replace the European Financial Stability Facility initiated in May 2010 following the support package for Greece. The ESM will be able to provide financial assistance to euro area governments under strict conditionality. Claims of private creditors on these governments will be subordinated to those of the ESM and IMF. In the event that a member state which has received ESM support is subsequently considered insolvent, the government will be required to negotiate a restructuring plan with private-sector creditors to restore debt sustainability. In addition, all new euro area government bonds issued from mid 2013 will include collective action clauses to enable a majority of private creditors to vote for a legally binding change to a sovereign's terms of payment – an extension of the maturity, interest rate cut and/or 'haircut' – in the event that the sovereign is unable to pay its obligations.

The European Commission launched a public consultation paper on a possible European Union framework for crisis management. Alongside more traditional resolution tools, such as creating a 'bridge bank' or effecting a 'good bank/bad bank' split, the consultation paper discusses a 'last resort'

proposal for converting to equity, or writing down debt, to the extent needed to ensure a financial institution's viability. This would be achieved either by allowing authorities to determine bond holders' losses or requiring banks to issue a certain amount of 'bail-in' debt that could be written off or converted into equity on a specified trigger. The European Commission's proposal has the potential to impose losses on a broader range of debt holders than recently announced Basel Committee on Banking Supervision (BCBS) proposals that apply to subordinated debt but not senior debt.

Following its announcement in September concerning proposed changes to capital requirements under Basel III, the BCBS has advised national authorities of alternative treatments for banks' liquidity coverage ratio (LCR) in jurisdictions where the supply of liquid assets (primarily government debt) is insufficient to meet the total demand of resident banks. One such treatment is to allow banks to establish contractual committed liquidity facilities provided by their central bank, subject to an appropriate fee, with such facilities counting towards the LCR requirement. This approach will be taken in Australia (see the 'Domestic Financial Markets' chapter for further discussion).

In addition, the BCBS provided further guidelines on banks' required countercyclical capital buffers. The guidelines envisage national authorities raising minimum capital requirements by as much as 2.5 percentage points during periods of 'excessive' aggregate credit growth, as determined by the national authorities. For internationally active banks, the additional capital requirement will be a weighted average of the buffers deployed across all the jurisdictions to which they have credit exposures.

The Irish Government passed the *Credit Institutions (Stabilisation) Act* in December which gives the government broad powers to force subordinated bondholders to share the cost of rescuing a bank. Following the approval of the Act, the Irish Government announced that the National Pensions Reserve Fund would provide a further €3.7 billion in capital support to Allied Irish. The Irish Government's 'bad bank', the National Asset Management Agency, reported that it had met its objective of acquiring problem loans with a nominal value of around €71 billion (45 per cent of GDP) from Irish banks. On average, these loans were acquired at a 58 per cent discount to the nominal value.

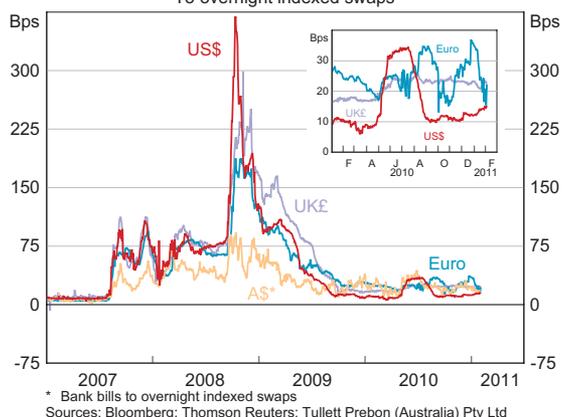
## Credit Markets

Conditions in credit markets have been mixed in recent months. In the euro area, spreads between money market rates and expected policy rates have been volatile (Graph 2.7). Money market spreads in other major economies, however, have been relatively stable.

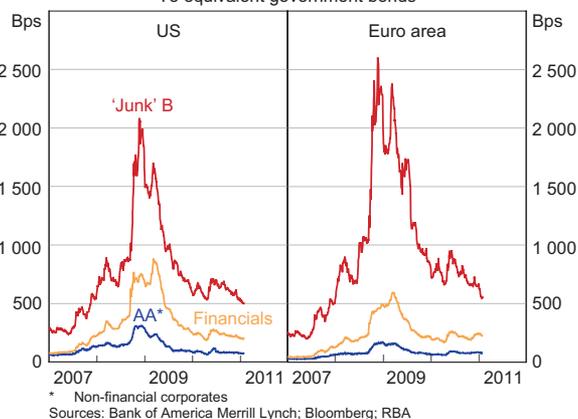
Corporate debt market conditions have also been mixed. In the United States, spreads between yields on corporate bonds (both financial and non-financial) and US Treasuries have declined in recent months to be around the levels prior to the Greek crisis in May 2010 (Graph 2.8). In contrast, spreads on euro area financial institution bonds increased to their highest levels since mid 2010. In both markets, spreads on higher-yield 'junk' bonds have fallen to their lowest levels since around end 2007.

Corporate bond issuance in the United States has remained strong and in the euro area rose significantly in January following limited issuance in December (Graph 2.9). Portuguese, Irish and Spanish banks face relatively large debt maturities in the

**Graph 2.7**  
**3-month LIBOR Spreads**  
To overnight indexed swaps

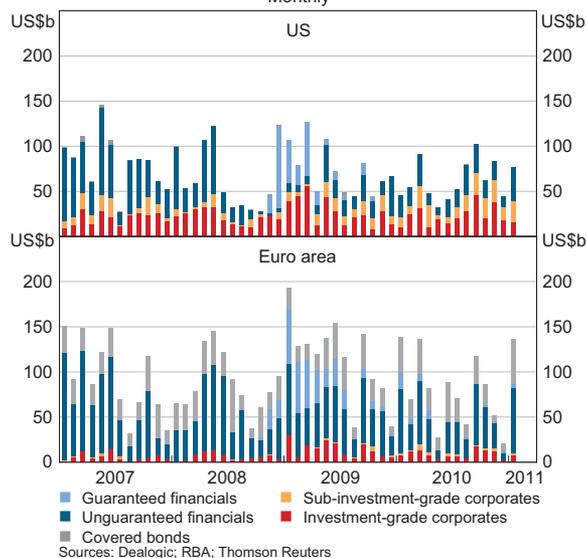


**Graph 2.8**  
**Corporate Bond Spreads**  
To equivalent government bonds



first half of 2011. More generally, there is a sizeable amount of debt issued by financial institutions globally to be refinanced in the first half of the year. While investors will obviously need to re-invest the maturing funds, there may be more discrimination than previously between weaker and stronger financial institutions.

**Graph 2.9**  
**Corporate Bond Issuance**  
Monthly



## Equities

Over 2010, there was quite a divergence in equity market performance (Graph 2.10, Table 2.2). While equity prices in the United States and United Kingdom recorded solid increases, equity prices fell in Japan, largely reflecting the appreciation of the yen, although Japanese markets have outperformed those in other major advanced economies markedly in recent months. Despite a recent recovery, European equity prices and particularly those of

**Graph 2.10**  
**Major Share Price Indices**  
1 January 2007 = 100



**Table 2.2: Changes in International Share Prices**  
Per cent

	Over 2010	Since previous Statement
United States		
– Dow Jones	11	7
– S&P 500	13	9
– NASDAQ	17	8
Euro area		
– STOXX	0	6
United Kingdom		
– FTSE	9	4
Japan		
– Nikkei	–3	14
Canada		
– TSE 300	14	8
Australia		
– ASX 200	–3	2
China		
– China A	–14	–8
MSCI Indices		
– Emerging Asia	12	0
– Latin America	7	–4
– Emerging Europe	16	7
<b>– World</b>	<b>8</b>	<b>6</b>

Source: Bloomberg

euro area banks have underperformed most other major equity market prices. Chinese equity prices fell by nearly 15 per cent over 2010, with much of the fall in recent months reflecting ongoing concerns about Chinese policy tightening.

In recent months, global equity prices have increased to their highest level since September 2008. Prices have been supported, particularly in the United States, by increased investor risk appetite, reflecting the improving economic outlook, the Fed's large-scale asset purchases and generally better-than-expected corporate earnings reports. However, US bank earnings for the December quarter were

mixed: some earnings results were below analyst expectations but underlying profits generally rose in the quarter. Loan-loss provisions continued to decline on an improved outlook for credit quality. Some banks increased reserves, however, for any litigation and restitution of funds resulting from mortgage buy-backs. Generally, revenue was adversely affected by banks' trading activities, particularly in fixed income.

Emerging market equity prices generally outperformed those in developed markets over 2010, although they have been mixed in recent months (Graph 2.11). Concerns about policy tightening in China have also contributed to the recent underperformance of some other emerging Asian equity markets. Latin American equity prices have also underperformed recently over concerns about the impact that inflation and currency appreciation may have on the region's economic recovery.

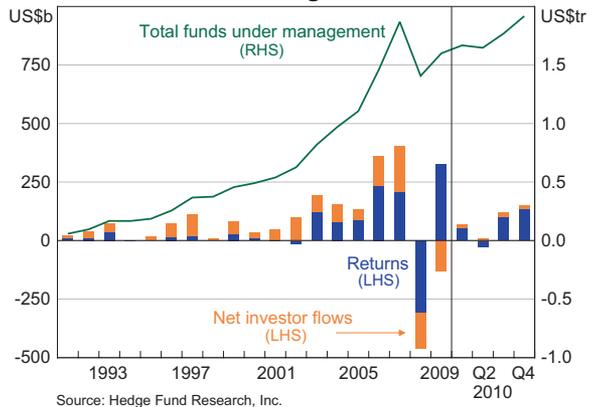
**Graph 2.11**  
**MSCI Share Price Indices**  
Local currencies, 1 January 2007 = 100



## Hedge Funds

Hedge funds underperformed equity markets over the second half of 2010. However, over 2010 as a whole, the average return on hedge funds was 10 per cent, broadly in line with equity market returns over the year. Most of the increase in funds under management over 2010 has been driven by

**Graph 2.12**  
**Global Hedge Funds**

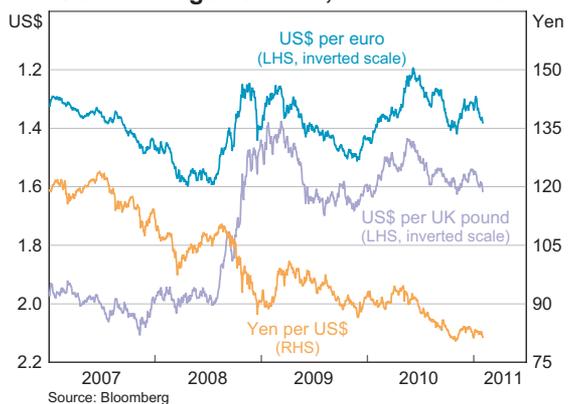


returns, although investors have also increased their exposure to hedge funds, making small positive capital contributions over the past four quarters (Graph 2.12). Funds under management have now reached US\$1.9 trillion, regaining the previous high in mid 2008.

## Foreign Exchange

Concerns about European sovereign debt have continued to dominate developments in major foreign exchange markets, albeit with some improvement in investor sentiment towards the euro in recent weeks (Table 2.3). From around mid 2010 to early November, the US dollar depreciated against the other major currencies including the euro (Graph 2.13). However, news of the Irish

**Graph 2.13**  
**US Dollar against Euro, Pound and Yen**

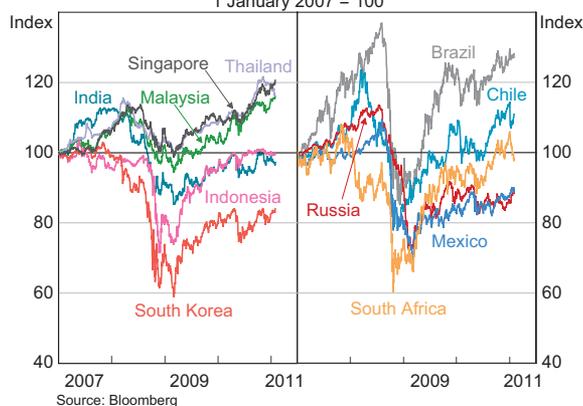


**Table 2.3: Changes in the US Dollar against Selected Currencies**  
Per cent

	Past year	Since previous Statement
European euro	1	2
Indian rupee	-1	3
UK pound sterling	-1	-1
Chinese renminbi	-4	-1
Indonesian rupiah	-4	1
South African rand	-4	4
South Korean won	-4	-1
Philippine peso	-5	4
Mexican peso	-7	-2
Canadian dollar	-7	-2
Thai baht	-7	4
New Zealand dollar	-8	0
Brazilian real	-9	-2
New Taiwan dollar	-9	-5
Singapore dollar	-10	-1
Japanese yen	-10	1
Swiss franc	-11	-3
Malaysian ringgit	-11	-1
Swedish krona	-11	-2
Australian dollar	-12	0
<b>Majors TWI</b>	<b>-4</b>	<b>0</b>
<b>Broad TWI</b>	<b>-5</b>	<b>-1</b>

Sources: Bloomberg; Board of Governors of the Federal Reserve System

**Graph 2.14**  
**Selected Currencies against the US Dollar**  
1 January 2007 = 100



support package and concerns over the fiscal positions of other peripheral euro area economies weighed on the euro from early November to early January. During this period, the euro depreciated by 8 per cent against the US dollar. Investor sentiment towards the euro improved during January following the well-received debt auctions by Portugal, and also Italy and Spain. Safe-haven buying of the Swiss franc saw it reach a record high against the euro in December.

The currencies of many emerging economies of Asia and South America have continued to face strong appreciation pressures, with a number of currencies reaching highs against the US dollar, as investors continued to seek out higher-yielding assets. Among the Asian currencies, the Malaysian ringgit, New Taiwan dollar and Thai baht all reached 13-year highs, and the Singapore dollar reached a record high (Graph 2.14). Elsewhere, the Brazilian real, the Chilean peso and South African rand recorded their highest levels against the US dollar for at least two years. The Canadian dollar also approached record high levels against the US dollar in early January, supported by rising commodity prices and speculation of faster economic recovery in the United States.

In an effort to curb capital inflows, a number of Asian countries have introduced additional measures in recent months. South Korean authorities re-imposed a 14 per cent withholding tax on foreign investors' earnings from government bonds and have announced plans to impose a 'Macro-prudential Stability Levy' on non-deposit foreign currency liabilities of financial institutions. Taiwanese authorities now limit foreigners to hold no more than 30 per cent of their investment in Taiwan in government bonds and in Indonesia the central bank introduced measures designed to limit rupiah deposits held by foreigners.

In Latin America, authorities in Brazil and Chile intervened in foreign exchange markets in an effort to reduce appreciation pressure on their currencies. The Central Bank of Chile announced that it would buy US\$12 billion of foreign exchange over 2011. The Chilean peso has depreciated by around 3 per

cent since its peak in early January. In January, the Central Bank of Brazil acted in the futures market to reduce pressure on its exchange rate, having introduced a reserve requirement on short US dollar positions earlier in the month. At the same time, however, Brazil has eased some of its capital controls as it seeks foreign capital to finance the infrastructure required to host the 2014 World Cup and 2016 Olympics.

The Chinese renminbi has appreciated by around 4 per cent against the US dollar since mid June when the People's Bank of China announced that it would increase the flexibility of the exchange rate (Graph 2.15). However, over this period the renminbi has depreciated by around 3 per cent in trade-weighted terms. The premium in the non-deliverable forward market indicates an expected further appreciation of around 2 per cent against the US dollar over the next 12 months. Over recent months, China has introduced a number of additional measures as part of the incremental easing of restrictions on the convertibility of the renminbi and its use by foreigners: exporters are able to keep foreign exchange income offshore without converting it back into renminbi; and, under a pilot scheme announced by the People's Bank of China, mainland enterprises can conduct direct overseas investment using renminbi. At the same time, domestic banks are now required to maintain a minimum foreign exchange position set at the level held on 8 November 2010.

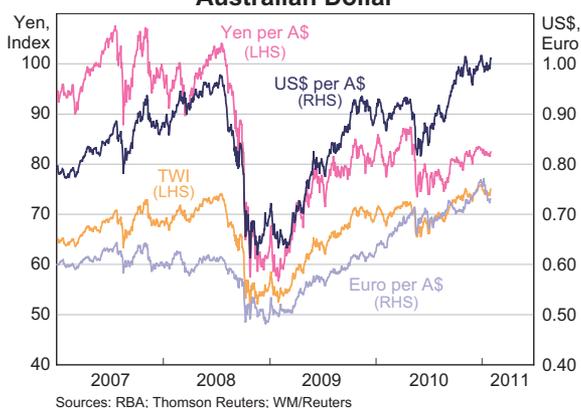
**Graph 2.15**  
**Chinese Renminbi**  
2005 average = 100



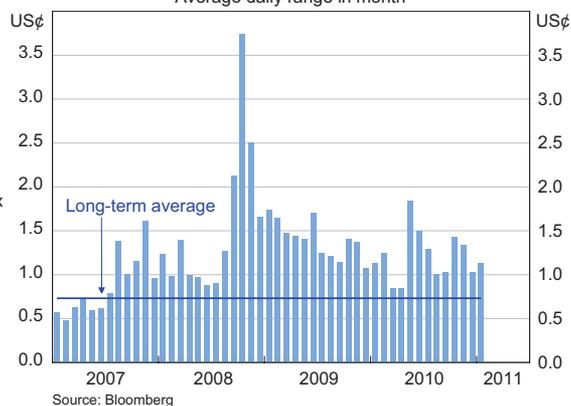
## Australian Dollar

The Australian dollar remains close to its post-float highs (Graph 2.16, Table 2.4). It recorded a new post-float high against the US dollar in thin trading on the last trading day of 2010. Developments in the Australian dollar over recent months have been strongly influenced by offshore events, particularly news related to European sovereign debt. Uncertainty in the foreign exchange market continues to be reflected in above-average intraday volatility of the currency (Graph 2.17).

**Graph 2.16**  
**Australian Dollar**



**Graph 2.17**  
**Intraday Range in AUD/USD**  
Average daily range in month



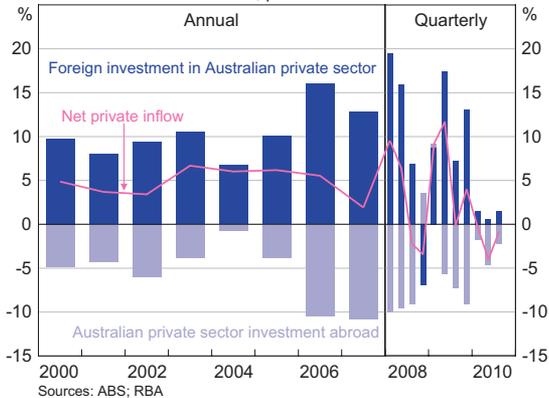
**Table 2.4: Australian Dollar against Selected TWI Currencies**  
Per cent

	Change over past year	Change since previous Statement	Deviation from post-float average
European euro	15	3	10
US dollar	14	0	38
Indian rupee	13	3	69
UK pound sterling	12	0	38
Indonesian rupiah	11	1	136
Chinese renminbi	10	-1	41
South Korean won	9	0	60
South African rand	9	5	59
Thai baht	7	4	31
Canadian dollar	6	-2	7
New Zealand dollar	3	0	5
Singapore dollar	3	-1	3
Japanese yen	2	1	-12
Malaysian ringgit	2	-1	36
Swiss franc	1	-3	-11
<b>TWI</b>	<b>9</b>	<b>0</b>	<b>26</b>

Sources: Bloomberg; Thomson Reuters; W/M Reuters

**Graph 2.18**  
**Capital Flows**

Gross flows, per cent of GDP



## Capital Flows

Over the first three quarters of 2010, the domestic banking sector issued less debt abroad than that maturing, largely accounting for net outflows from the private sector as a whole (Graph 2.18). This is in contrast to the strong issuance over 2009. There were larger inflows into government debt, with net foreign investment in government securities equivalent to around 4 per cent of GDP over the first three quarters of 2010. ↘