International and Foreign Exchange Markets

Central Bank Policy

With policy interest rates at their effective lower bounds in the United States and Japan, the US Federal Reserve and Bank of Japan recently announced further asset purchases. However, the European Central Bank's balance sheet has contracted in recent months. Financial markets continue to expect policy rates to remain unchanged in these economies and in the United Kingdom for the foreseeable future. In contrast, the People's Bank of China increased its lending and deposit policy rates after being unchanged since December 2008 and policy rates increased further in Canada, India, Sweden and Taiwan (Table 2).

Table 2: Policy Rates

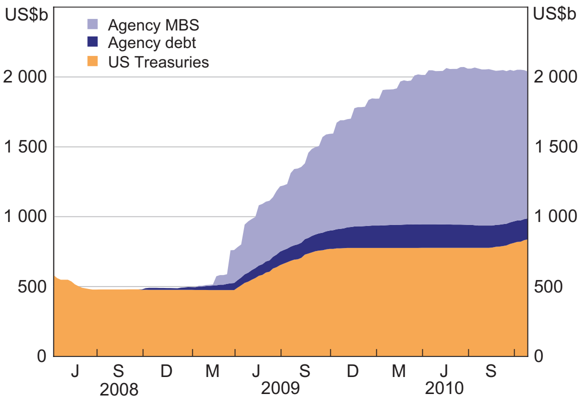
	Current level Per cent		**Most recent change**	**Cumulative increase** Basis points
Euro area	1.00	↓	May 09	–
Japan	0.05	↓	Oct 10	–
United States	0.125	↓	Dec 08	–
Brazil	10.75	↑	Jul 10	200
Canada	1.00	↑	Sep 10	75
China	5.56	↑	Oct 10	25
India	6.25	↑	Nov 10	150
Indonesia	6.50	↓	Aug 09	–
Israel	2.00	↑	Sep 10	150
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	6.00	↓	Sep 10	–
South Korea	2.25	↑	Jul 10	25
Sweden	1.00	↑	Oct 10	75
Switzerland	0.25	↓	Mar 09	–
Taiwan	1.50	↑	Oct 10	25
Thailand	1.75	↑	Aug 10	50
Turkey	7.00	↓	Nov 09	–
United Kingdom	0.50	↓	Mar 09	–

Source: central banks

Graph 18

Federal Reserve Holdings of Securities

Weekly

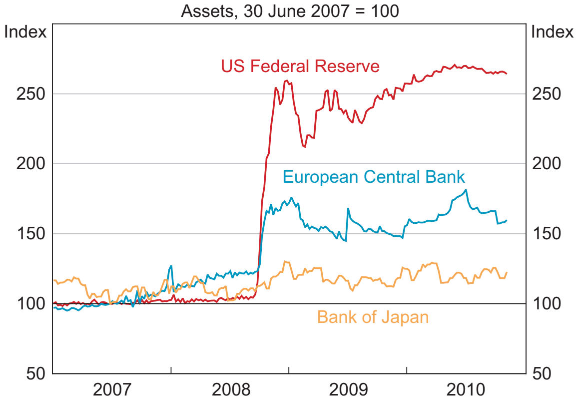


Source: Board of Governors of the Federal Reserve System

Graph 19

Central Bank Balance Sheets

Assets, 30 June 2007 = 100

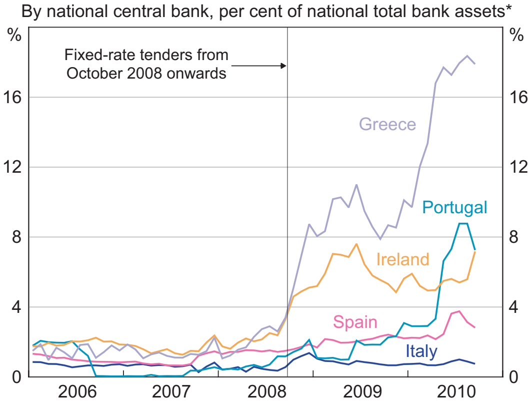


Source: Thomson Reuters

Graph 20

ECB Lending

By national central bank, per cent of national total bank assets*



* Monetary financial institutions used as a proxy for total bank assets

Source: central banks

The US Federal Reserve announced further quantitative easing in early November. The Fed intends to purchase US$600 billion of US Treasuries by end June 2011, increasing its holdings of securities to US$2.6 trillion, but will adjust asset purchases if warranted by economic conditions. In mid August the Fed had announced that it would re-invest principal payments from its holdings of agency debt and agency mortgage-backed securities (MBS) in longer-term US Treasury securities to prevent its balance sheet from contracting (Graph 18).

The Bank of Japan (BoJ) has announced a number of additional measures aimed at supporting the Japanese economy. In late August, the BoJ announced that it would provide liquidity of ¥10 trillion (2 per cent of GDP) in fixed-rate collateralised loans for 6-month terms; this is in addition to ¥20 trillion in BoJ loans announced previously. The BoJ also intervened in currency markets in mid September for the first time since 2004 in an effort to slow the yen's appreciation (see the section on Foreign Exchange). More recently, the BoJ lowered its policy rate target to a range of 0 to 0.1 per cent (from 0.1 per cent) and committed to a near-zero policy rate target until medium- to long-term price stability is expected. In an attempt to reduce longer-term interest rates and risk premia, the BoJ also announced that it will purchase assets of around ¥5 trillion.

Liquidity provided through the European Central Bank's (ECB) monetary policy operations has declined in recent months as some of its longer-term liquidity operations matured, resulting in a contraction of the ECB's balance sheet and a rise in short-term money market interest rates (Graph 19). However, data to September show that the decline in liquidity has not been uniform across national banking systems (Graph 20). While borrowing by most peripheral European banking systems has fallen, there was a marked increase in borrowing by Irish banks following S&P's downgrade of Ireland's sovereign credit rating in August – around one-fifth of ECB liquidity outstanding in September was held by Irish banks.

Government Financial Policy

The Basel Committee on Banking Supervision (BCBS) announced further details of its new capital and liquidity standards for banks. Under the BCBS reforms, banks will be required to meet a minimum common equity ratio, after capital deductions, of 4.5 per cent, a Tier 1 capital ratio of 6 per cent and a total capital ratio of 8 per cent. Banks will also be required to hold an additional 2.5 per cent 'capital conservation buffer' of common equity or face restrictions on earnings distributions. A 'countercyclical buffer' of between 0 and 2.5 per cent may also be introduced by national authorities during periods of 'excessive' aggregate credit growth. The new standards are to be phased in over a number of years.

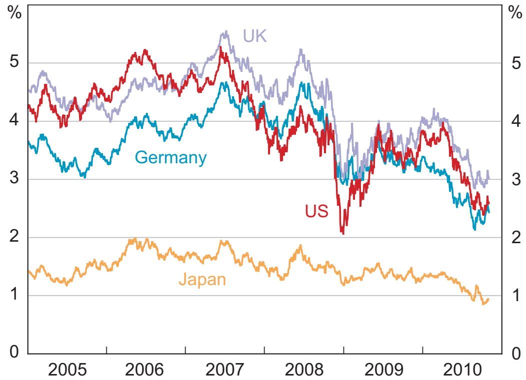
Swiss authorities proposed new capital requirements for systemically important Swiss banks. Under the proposal, banks deemed 'too big to fail' – UBS and Credit Suisse – would require minimum total capital ratios currently calculated to be 19 per cent, of which at least 10 percentage points must be in the form of common equity.

The Irish Government announced further capital injections for several lenders and a resolution plan for its most distressed bank, Anglo Irish Bank. Under the plan, Anglo Irish will be split into two separate entities: a 'funding' bank containing its deposit book and an 'asset recovery' bank containing all assets that are not transferred to the National Asset Management Agency – the Irish Government's 'bad bank'. Neither entity will be permitted to engage in any new lending and the asset-recovery bank is expected to be sold or run-off over time. The Irish Government expects total capital injections since early 2009 for all Irish banks to be around €40 billion, equivalent to 25 per cent of Ireland's annual GDP. Similarly, the German Financial Market Stabilisation Agency announced a resolution plan for the nationalised lender Hypo Real Estate, under which half of its assets will be transferred to a 'bad bank'.

During September, Greece received the €9 billion second loan tranche from its €110 billion financial assistance package, following the first quarterly review of the Greek Government's economic program by the European Commission, ECB and IMF. They noted that all quantitative performance criteria for the end of June had been met and that important reforms are ahead of schedule.

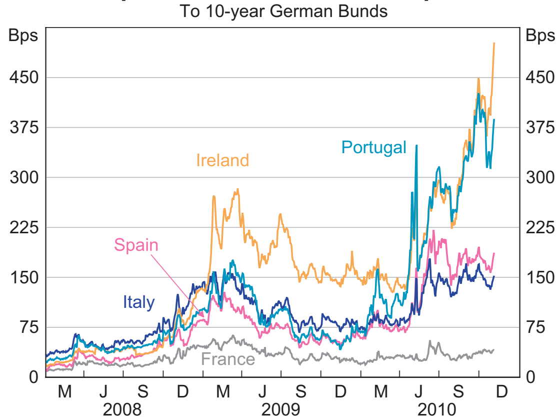
In the United States, authorities are investigating home foreclosure practices amid reports that staff at, or representing, some banks and loan servicers approved foreclosure documents without adequately meeting legal requirements. Several lenders placed a moratorium on foreclosures in order to assess foreclosure processes, although some have since been partly lifted. Of all US residential mortgages at end June, almost 5 per cent were in the process of foreclosure. Around one-fifth of all mortgages are in negative equity and the rate of negative equity is likely to be considerably higher for mortgages in foreclosure. The foreclosure issues are likely to delay any recovery in the housing market and have generated some uncertainty about banks' earnings. Separately, several US financial institutions have been required to buy back some mortgages (at principal and all interest owing) that have been securitised, in part because they have not met declared underwriting standards. Several banks have recently raised provisions related to mortgage buy-backs.

Graph 21
10-year Government Bond Yields



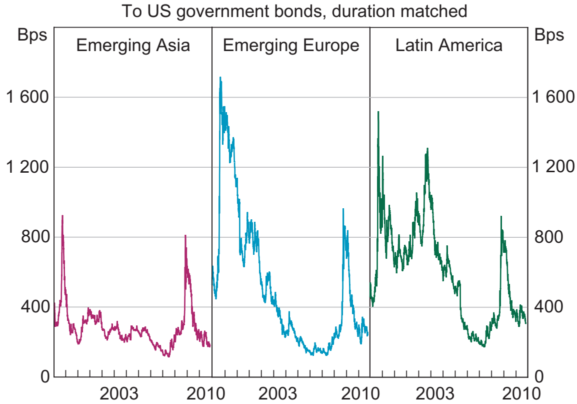
Source: Bloomberg

Graph 22
European Government Bond Spreads
To 10-year German Bunds



Source: Bloomberg

Graph 23
US Dollar-denominated Sovereign Debt Spreads
To US government bonds, duration matched



Source: Thomson Reuters

Sovereign Debt Markets

Longer-term government bond yields in the major advanced economies have fallen further in recent months to be around historical lows (Graph 21). This reflects ongoing concerns about the global economic outlook and the expected impact of additional quantitative easing in the United States and Japan. US 10-year government bond yields fell to below 2½ per cent while 10-year bond yields in Germany and the United Kingdom fell to their lowest levels since at least the 1920s and 1950s, respectively. Short-term bond yields also declined in some countries, with the 2-year US Treasury yield reaching a new 70-year low of 0.34 per cent.

Spreads between yields on peripheral euro area sovereign bonds and German Bunds have increased over recent months (Graph 22). In the past couple of weeks, spreads on Irish government debt in particular have widened significantly to over 5 percentage points. Reflecting concerns over the fiscal cost of assistance to Irish financial institutions, S&P and Fitch have both downgraded Ireland's sovereign credit rating in recent months to AA- and A+, respectively. Moody's also downgraded Spain's credit rating to the equivalent of AA+.

Spreads of emerging market US-dollar denominated debt have been broadly stable in recent months and remain considerably lower than those prevailing mid year (Graph 23). In September, S&P raised Argentina's sovereign credit rating to B, reflecting improved government finances due to Argentina's strong economic expansion. More recently, Moody's announced a review of China's sovereign credit rating for a possible upgrade given the resilience of the Chinese economy and the stability of the government's finances.

Credit Markets

Conditions in money markets have stabilised over recent months. Spreads between both US dollar and euro LIBOR and expected policy rates (a measure of perceived bank risk) have returned to around the levels prevailing prior to the deterioration in credit market conditions in May.

Spreads on US and euro area corporate bonds have been relatively stable in recent months and remain above pre-crisis levels (Graph 24). With government yields near record lows, however, actual borrowing costs for corporates – the level of corporate bond yields – are at low levels. Partly reflecting this, corporate bond issuance has been solid in recent months, particularly for non-financial corporates in the United States (Graph 25).

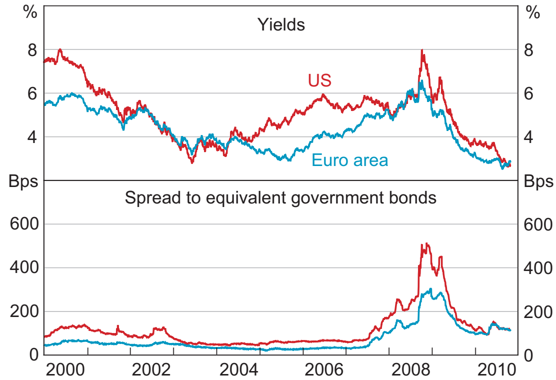
Issuance of US agency mortgage-backed securities (MBS) has trended higher this year although non-agency MBS issuance has remained negligible. Agency MBS spreads to US Treasuries have increased but both the spread and yield on these securities remain at relatively low levels. Consistent with this, interest rates on US 30-year fixed rate mortgages fell to a record low of 4.2 per cent in October. As a result, mortgage refinancing has risen sharply to reach its highest level since May 2009.

Equities

Global equity prices have recovered to be only a little below their mid-April peaks, although they are still well below the peaks in late 2007 (Graph 26, Table 3). Despite continued concerns over the global economic growth outlook, equity markets were buoyed by renewed risk appetite in part due to the anticipation of further quantitative easing by the Fed, and generally better-than-expected corporate earnings in the September quarter. A notable exception has been Japanese equity prices, which

Graph 24

US and Euro Area Corporate Bonds*



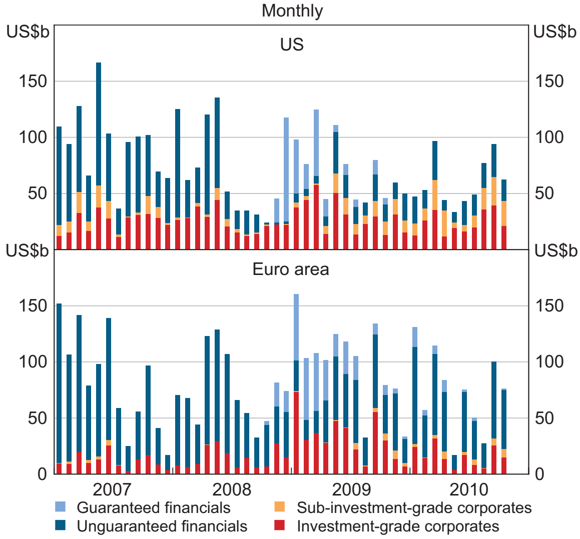
* AA-rated industrial and financial corporates; euro area comprised of European Monetary Union euro-denominated bonds

Sources: Bank of America Merrill Lynch; Bloomberg

Graph 25

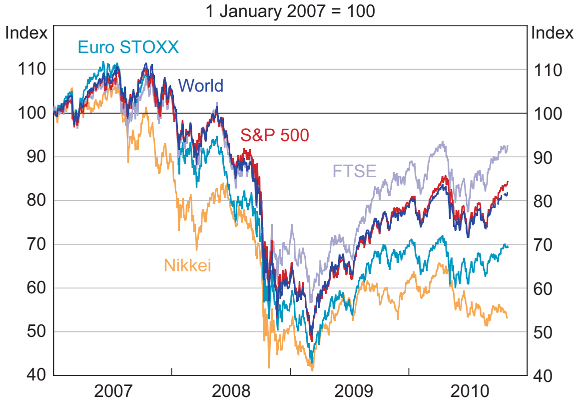
Corporate Bond Issuance

Monthly



Sources: RBA; Thomson Reuters

Graph 26
Major Share Price Indices



Source: Bloomberg

Table 3: Changes in International Share Prices
Per cent

	Since mid April peak	Since previous *Statement*
United States		
– Dow Jones	0	5
– S&P 500	–2	6
– NASDAQ	0	10
Euro area		
– STOXX	–4	2
United Kingdom		
– FTSE	–1	7
Japan		
– Nikkei	–19	–3
Canada		
– TSE 300	3	7
Australia		
– ASX 200	–6	4
China		
– China A	–4	15
MSCI indices		
– Emerging Asia	8	9
– Latin America	3	7
– Emerging Europe	1	7
– World	**–2**	**5**

Source: Bloomberg

have substantially underperformed other major equity markets amidst ongoing concerns about the effect of the strong yen on corporate profits. Equity market volatility has remained around its long-run average.

In the United States, banks' equity prices have underperformed the broader market (Graph 27). Contributing to the weakness have been concerns about lenders' mortgage foreclosure practices and mortgage buy-backs. US bank earnings for the September quarter were mixed. Some results beat analyst expectations as declines in loan-loss provisions were generally larger than anticipated. However, revenues generally continued to decline, typically due to lower trading revenue and income from retail operations. Technology sector equity prices, however, have risen more strongly than the broader market as reflected in the sharp increase in the NASDAQ.

In early October, the Commodity Futures Trading Commission (CFTC) and Securities and Exchange Commission (SEC) released their findings regarding the sharp intraday stock market decline on 6 May (the 'flash crash'). The report indicates that the fall was triggered by a severe lack of liquidity following a large order to sell S&P 500 futures contracts known as E-minis. This order was automated in such a way that the pace of sales was solely based on market trading volumes. The sell rate of the contracts automatically increased as market participants, in particular high-frequency traders, began absorbing the order and quickly re-selling the contracts. Prices of E-minis fell and triggered significant price declines in the physical equities market. The withdrawal of many market participants and the resulting lack of liquidity in both the futures and physical equities markets exacerbated the sharp price movements. The price falls stopped, and were quickly reversed, when trading in E-minis was halted on the Chicago Mercantile Exchange. Following these events, the CFTC and SEC have begun piloting circuit breaker programs.

In Europe, a number of large financial institutions, including Deutsche Bank and Standard Chartered, have issued new equity partly to increase their regulatory capital ratios ahead of the expected Basel III regulatory changes. Financial institutions in Europe have so far reported mixed earnings for the September quarter. While underlying earnings were better than expected for some banks, others reported declines in revenue driven by subdued trading activity, with some also increasing their provisions for loan losses.

Emerging market equity prices have increased strongly in recent months (Graph 28). In particular, equity price indices in emerging Asia and Latin America have risen to the highest levels since mid 2008, reflecting the relatively favourable economic outlooks for these regions. While Chinese equity prices have underperformed those of other emerging economies this year, they have recently increased sharply following a number of better-than-expected economic data releases and analyst upgrades of Chinese stocks.

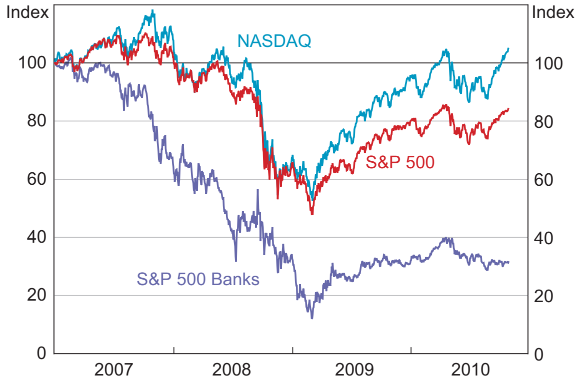
Hedge Funds

Hedge funds tended to underperform equity and bond markets in the September quarter, earning an average return of 5 per cent. Over the year, however, hedge funds have outperformed bonds and equities, returning 8 per cent. The September quarter saw the largest quarterly net inflow, of US$19 billion, into hedge funds for more than three years and funds under management are now only 8 per cent below the peak reached in mid 2008 (Graph 29).

Graph 27

US Share Price Indices

1 January 2007 = 100

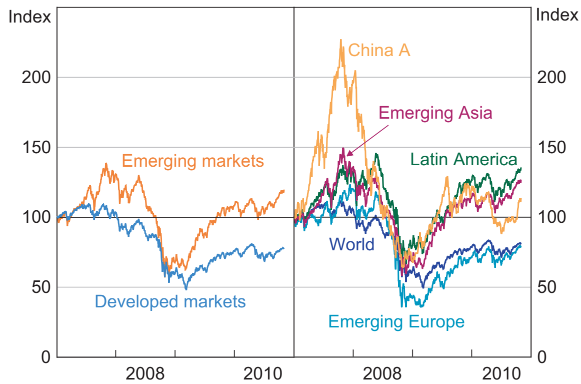


Source: Bloomberg

Graph 28

MSCI Share Price Indices

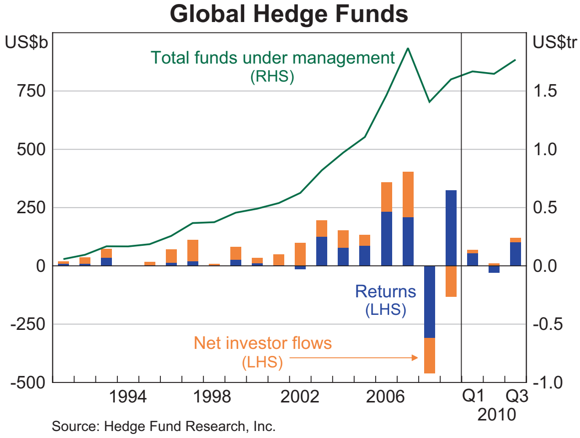
Local currencies, 1 January 2007 = 100



Source: Bloomberg

Graph 29

Global Hedge Funds



Source: Hedge Fund Research, Inc.

Graph 30

US Nominal TWI

March 1973 = 100

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

Table 4: Changes in US Dollar against Selected Currencies

Per cent

	Since mid 2008 trough	Since previous *Statement*
Japanese yen	–23	–6
Thai baht	–11	–7
South African rand	–10	–6
Philippine peso	–6	–6
Singapore dollar	–5	–5
Malaysian ringgit	–4	–3
Swiss franc	–4	–8
Australian dollar	–3	–9
Indonesian rupiah	–2	0
Chinese renminbi	–2	–1
New Zealand dollar	–1	–6
New Taiwan dollar	0	–4
Canadian dollar	0	–1
Indian rupee	3	–4
Brazilian real	7	–3
South Korean won	10	–5
Swedish krona	10	–8
European euro	13	–7
Mexican peso	19	–2
UK pound sterling	25	–1
Majors TWI	**3**	**–4**
Broad TWI	**4**	**–3**

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

Foreign Exchange

Exchange rates have become a focus of international financial markets in recent months; ongoing concerns about the United States' economic recovery and growing anticipation of further quantitative easing saw the US dollar depreciate against most currencies. With some currencies close to record highs in US dollar terms, several countries have responded by increasing intervention in currency markets or strengthening capital controls. In trade-weighted terms, the US dollar is 4 per cent lower than at the time of the previous *Statement* and 11 per cent below its recent peak in June 2010 following the height of the European debt crisis. The index is now only 3 per cent above the historic lows reached in mid 2008 prior to the collapse of Lehman Brothers (Graph 30, Table 4).

Against the US dollar, a range of major currencies are currently close to or have exceeded previous highs. The Australian dollar is at a new post-float high just above US$1.00. The Swiss franc also appreciated significantly to reach a new record high in October; the Swiss authorities have not intervened in the market since April. Despite residual concerns over the fiscal position of a number of euro area countries, the euro has appreciated against the US dollar since the trough in May. However, in trade-weighted terms the euro remains 10 per cent below the high in 2008.

The Japanese yen reached a 15-year high against the US dollar during September, prompting the Bank of Japan to unilaterally sell approximately US$25 billion worth of yen, the first official intervention since 2004. Immediately following the intervention, the yen depreciated by 3 per cent against the US dollar but has since more than retraced this fall to be almost at its record high of 1995.

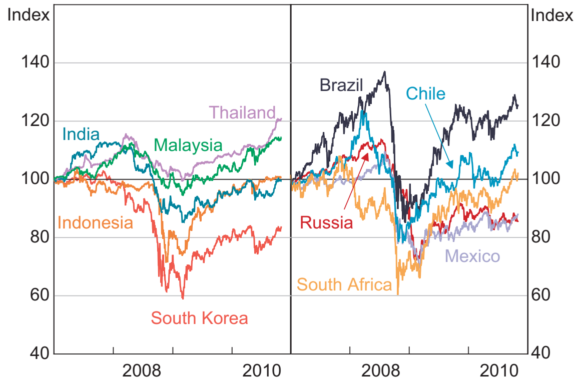
Emerging market currencies have also tended to appreciate against the US dollar as investors have sought out higher-yielding assets. In Latin America, the Brazilian real has appreciated by 11 per cent since early June to be 8 per cent below the peak in August 2008 (Graph 31). In an effort to reduce pressure on the currency, authorities in Brazil have increased the tax rate on foreign purchases of domestic bonds to 6 per cent, from 2 per cent, and have indicated that they are willing to continue accumulating US dollars to reduce pressure on the currency. Brazil has also increased the tax rate on inflows of capital required to make margin deposits on futures market trades to 6 per cent. In Asia, the Thai baht has risen by 7 per cent against the US dollar over the past few months to a post Asian crisis high. The rising baht prompted Thai authorities to remove foreigners' exemption from the 15 per cent withholding tax on income from government securities.

Several emerging market countries in Asia and Latin America have recorded large increases in the level of foreign exchange reserves. Although a portion of the change in reserves is due to valuation effects, the size of the change over the quarter suggests some countries have also been accumulating reserves at a rapid pace (Table 5). In particular, Thailand, South Korea and Brazil have been adding to reserves to alleviate the upward pressure on their exchange rates.

Graph 31

Selected Currencies against the US Dollar

1 January 2007 = 100



Source: Bloomberg

Pressure on China to accelerate the pace of the renminbi's appreciation against the US dollar has intensified. Although the renminbi has appreciated by 2 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, in trade-weighted terms it has depreciated by around 5 per cent (Graph 32). The renminbi's appreciation against the US dollar gathered momentum in September and early October, to be around the pace seen in late 2007 and early 2008 when it was

Table 5: Selected Economies Foreign Exchange Reserves

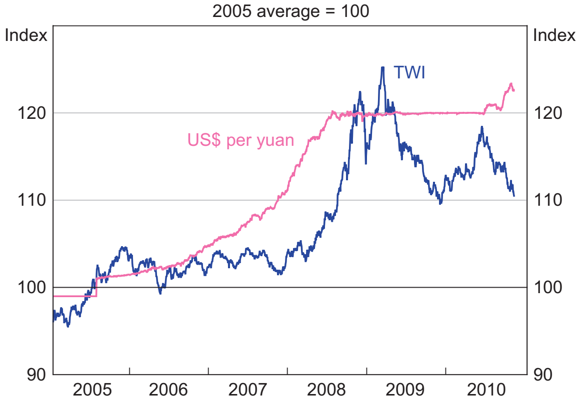
As at end September 2010

	Three-month-ended change		Level
	US$ billion	Per cent	US$ billion
China	194	8	2 648
Japan	56	6	1 052
Russia	25	6	448
Brazil	22	9	268
Taiwan	18	5	381
Thailand	16	11	157
South Korea	15	6	285

Sources: CEIC; Thomson Reuters

last on an appreciation path, but has since slowed again. Based on non-deliverable forward contracts, the market expects the renminbi to appreciate by 4 per cent over the next 12 months. Chinese reserves increased by a record US$194 billion over the September quarter, to US$2.65 trillion.

Graph 32
Chinese Renminbi
2005 average = 100



Source: Bloomberg

Australian Dollar

The Australian dollar has continued to appreciate against most currencies, as global risk appetite has rebounded and investors have sought higher-yielding assets, to reach a new post-float high in trade-weighted terms (Table 6). Increases in commodity prices over September and October have also supported the appreciation in the currency. The Australian dollar is around its post-float high against the currencies of several of its large trading partners, including the US dollar, Chinese renminbi and euro. Against the Japanese yen, however, the Australian dollar is still well below the highs recorded in 2007 (Graph 33).

After declining following the European debt crisis in May, volatility picked up in October (Graph 34). The Australian dollar moved sharply on several occasions following announcements relating to domestic and foreign monetary policy.

Table 6: Australian Dollar against Selected TWI Currencies
Per cent

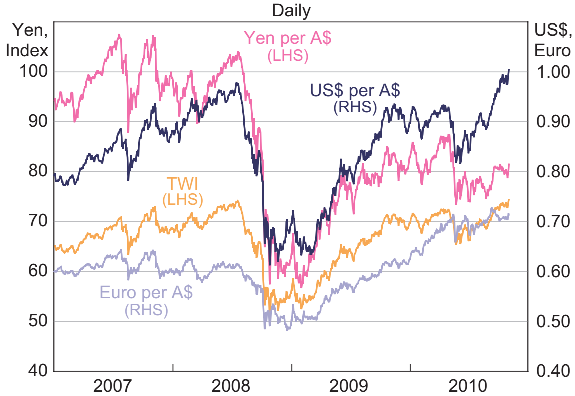
	Change since May trough	Change since previous *Statement*	Deviation from post-float average
US dollar	23	10	38
Chinese renminbi	20	8	42
Indonesian rupiah	19	9	133
Indian rupee	17	6	65
Canadian dollar	16	8	8
Malaysian ringgit	16	7	38
Thai baht	13	1	25
South Korean won	13	4	60
Singapore dollar	12	4	4
Japanese yen	11	3	–13
UK pound sterling	10	8	39
European euro	9	2	7
South African rand	6	4	52
New Zealand dollar	5	3	5
Swiss franc	4	1	–8
TWI	**15**	**6**	**25**

Sources: Bloomberg; Thomson Reuters; WM/Reuters

Graph 33

Australian Dollar

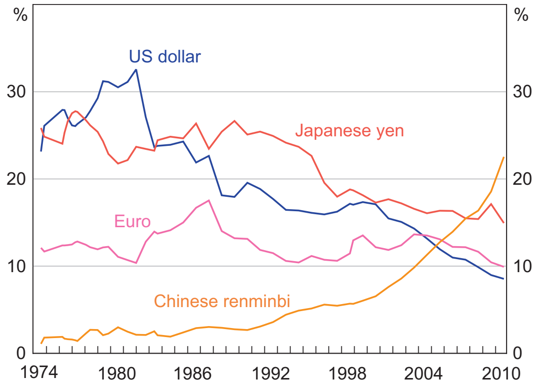
Daily



Sources: RBA; Thomson Reuters; WM/Reuters

Graph 35

Selected TWI Currency Weights

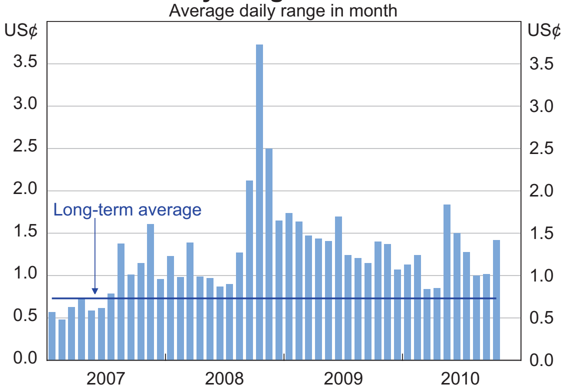


Sources: ABS; RBA

Graph 34

Intraday Range in AUD/USD

Average daily range in month

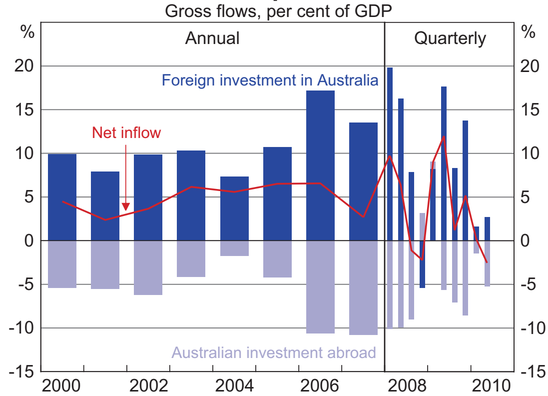


Source: Bloomberg

Graph 36

Private Capital Flows

Gross flows, per cent of GDP



Sources: ABS; RBA

New weights for the trade-weighted index (TWI) of the Australian dollar, reflecting the country composition of Australia's merchandise trade in 2009/10, were applied on 1 October 2010. The weight of Asian currencies in the TWI continues to increase, reflecting further growth of trade with the region, in particular with China, as well as a decline in the value of trade with Europe and North America. The weight of the Chinese renminbi remains the highest in the index, increasing a further 4 percentage points to 23 per cent (Graph 35). At a regional level, the combined weight of the Asia-Pacific currencies increased by 4 percentage points this year to 74 per cent, while the combined weights of the European and North American currencies fell to 15 per cent and 9 per cent respectively.

Capital Flows

There was a net outflow of private capital in the June quarter as offshore borrowing by the domestic banking sector slowed (Graph 36). Australian banks' net short-term issuance was close to zero. Their issuance of long-term debt, which typically accounts for a large proportion of net capital inflows, was also subdued in the June quarter following several quarters of quite strong issuance. The decline in private inflows in the June quarter continued to be accommodated by stronger inflows into government debt; net foreign investment in government securities was around 6 per cent of GDP.