2. International and Foreign Exchange Markets

Central Bank Policy

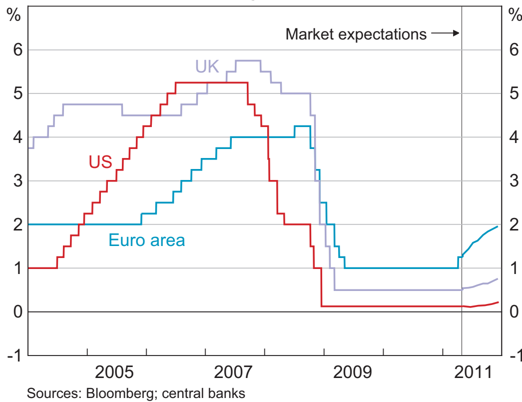
Monetary policy tightening commenced or continued in a number of jurisdictions over recent months (Table 2.1). The European Central Bank (ECB) increased its policy rate by 25 basis points to 1.25 per cent in April from the 1 per cent level it had been at since May 2009. Financial markets have brought forward the expected timing of further policy rate increases with at least two more expected by year end (Graph 2.1). The Bank of England is expected to commence its tightening phase around the end of this year.

Table 2.1: Policy Rates

	Current level Per cent		**Most recent change**	**Cumulative increase** Basis points
Euro area	1.25	↑	Apr 11	25
Japan	0.05	↓	Oct 10	–
United States	0.125	↓	Dec 08	–
Brazil	12.00	↑	Apr 11	325
Canada	1.00	↑	Sep 10	75
China	6.31	↑	Apr 11	100
India	7.25	↑	May 11	250
Indonesia	6.75	↑	Feb 11	25
Israel	3.00	↑	Mar 11	250
Malaysia	2.75	↑	Jul 10	75
Mexico	4.50	↓	Jul 09	–
New Zealand	2.50	↓	Mar 11	–
Norway	2.00	↑	May 10	75
Russia	8.25	↑	Apr 11	50
South Africa	5.50	↓	Nov 10	–
South Korea	3.00	↑	Mar 11	100
Sweden	1.75	↑	Apr 11	150
Switzerland	0.25	↓	Mar 09	–
Taiwan	1.75	↑	Apr 11	50
Thailand	2.75	↑	Apr 11	150
United Kingdom	0.50	↓	Mar 09	–

Source: central banks

Graph 2.1
Policy Rates



Sources: Bloomberg; central banks

The central banks of China and India have increased their policy interest rates twice since February; the People's Bank of China has also further raised banks' reserve requirement ratios. The Monetary Authority of Singapore tightened policy by increasing the centre of its exchange rate policy band, its main policy instrument. In contrast, the Reserve Bank of New Zealand lowered its policy rate by 50 basis points following the Christchurch earthquake in February.

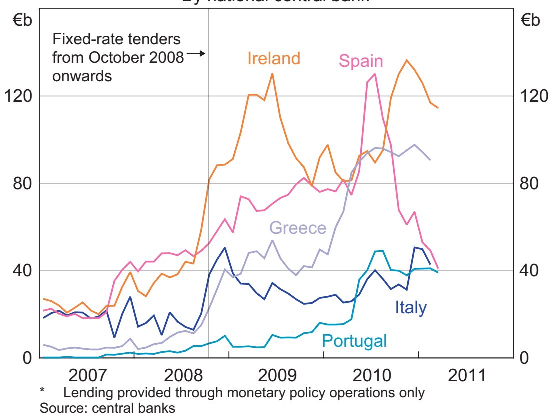
Two major central banks have continued to ease monetary policy. Following the Japanese earthquake on 11 March, the Bank of Japan (BoJ) undertook several measures to help support the Japanese economy. It provided banks with significant short-term liquidity and increased the size of its Asset Purchase Program by ¥5 trillion (1 per cent of GDP). The BoJ and other G7 central banks also intervened in the foreign exchange market to stabilise the yen after it appreciated significantly following the earthquake (see the section on Foreign Exchange).

In addition, the BoJ announced a support program for financial institutions in earthquake disaster areas: up to ¥1 trillion of one-year loans will be available against eligible collateral at a rate of 0.1 per cent. These policies have expanded the BoJ's balance sheet which, relative to the size of its economy, is already much larger than those of other major central banks.

The US Federal Reserve's balance sheet has also continued to expand due to its large-scale asset purchases. About three-quarters of the planned US$600 billion purchases of US Treasuries announced in November 2010 have been conducted with the balance to be completed by the end of June. In his inaugural press conference following the recent Federal Open Market Committee meeting, Chairman Bernanke stated that the Fed will maintain the size of its securities holdings after the end of June.

In contrast, the ECB's balance sheet has contracted in recent months. Liquidity provided to banks through its market operations fell to the lowest level since early 2008. Spanish banks have become less reliant on ECB liquidity as they have been able to utilise market sources of funding (Graph 2.2). Nevertheless, lending to Portuguese and Irish banks remains at high levels as they are virtually unable to obtain market funding. The fall in lending to Irish banks via ECB operations appears to have been fully offset by funds provided by the Central Bank of Ireland; Irish banks' aggregate central bank funding accounts for more than one-fifth of their total liabilities.

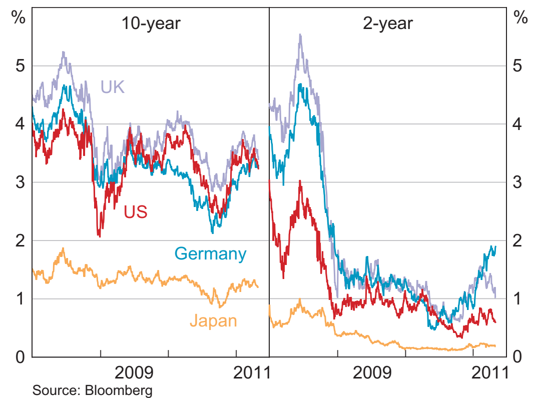
Graph 2.2
ECB Lending to Banks*
By national central bank

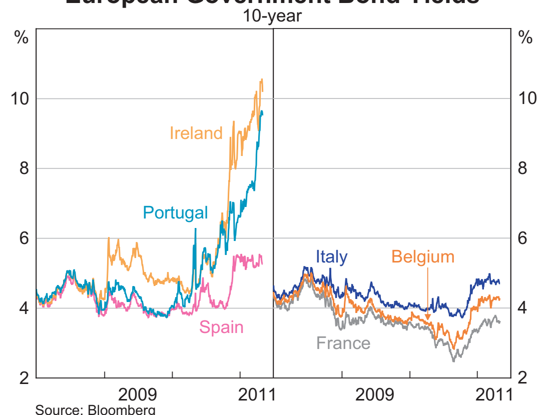


* Lending provided through monetary policy operations only
Source: central banks

Sovereign Debt Markets

Longer-term sovereign bond yields in most major advanced economies have been broadly unchanged this year after rising significantly from around their historic lows in the second half of 2010 (Graph 2.3). Yields fell at times due to tensions in the Middle East and North Africa, the Japanese earthquake and concerns regarding the euro area periphery. At other times, yields rose in response to concerns about rising inflation. US and Japanese yields were largely unaffected by moves to place their credit ratings on negative outlook. German bond yields have increased as financial markets brought forward the expected timing of monetary policy tightening by the ECB, with the 2-year yield reaching its highest level since December 2008.

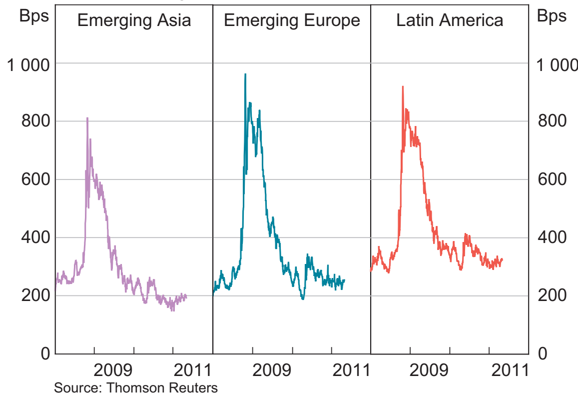




Spreads between yields on Portuguese government bonds and German Bunds have widened sharply in recent months amid heightened concern about the state of Portugal's government finances. Following the resignation of Portugal's Prime Minister in March after the parliament rejected further austerity measures, Portuguese longer-term bond yields increased sharply to more than 8 per cent (Graph 2.4). In early April, the caretaker administration requested financial assistance from the European Union (EU) and the International Monetary Fund, and announced in early May that Portugal will receive €78 billion. Portugal's credit rating was downgraded by Standard & Poor's (S&P) and Fitch to BBB- and by Moody's to the equivalent of BBB+, all with negative outlooks.

Prior to mid April, Spanish spreads narrowed in conjunction with measures to shore up its banking system and the implementation of austerity measures, and despite Moody's downgrading Spain's sovereign credit rating to the equivalent of AA. Irish sovereign spreads had narrowed by more than 100 basis points following the release of Irish banks' stress test results. Notwithstanding this, Moody's downgraded Ireland's sovereign credit rating by two notches to the equivalent of BBB-; S&P had previously downgraded it by one notch to BBB+. Peripheral euro area sovereign bond spreads then widened significantly in the second half of April due to heightened speculation about the possibility of a Greek sovereign debt restructuring. The exception was Spain whose spreads had little net change.

Concerns about the euro area periphery and tensions in the Middle East and North Africa have generally had little effect on spreads of emerging market US dollar-denominated sovereign debt (Graph 2.5). While emerging Asian sovereign spreads



have widened somewhat this year they remain at low levels. In April, S&P raised Indonesia's credit rating to BB+ and Fitch raised Brazil's sovereign credit rating to BBB.

Government Financial Policy

In March, euro area leaders announced a package of measures to further strengthen the financial stability of the euro area:

- the effective lending capacity of the euro area's current stability facility, the European Financial Stability Facility (EFSF), will be raised to €440 billion from around €250 billion. The details of how this will be achieved are expected to be announced in June, having been delayed, in part, by rising political opposition in some European countries;
- the effective lending capacity of the European Stability Mechanism (ESM), which will replace the current facilities (the EFSF and the €60 billion European Financial Stabilisation Mechanism (EFSM)) from mid 2013, will be €500 billion. It will be backed by €80 billion of paid-in capital and €620 billion of callable capital and guarantees from euro area countries (the current EFSF is backed solely by guarantees);
- the EFSF and ESM will be allowed to purchase, on the primary market, bonds of governments under assistance programs;
- the interest rate paid on €80 billion of bilateral loans from the euro area to Greece will be lowered by 100 basis points and the maturity of these loans will be lengthened to 7.5 years from 3 years, in line with the country's IMF loans; and
- each euro area country will announce concrete national commitments annually to improve its competitiveness and economic convergence in the euro area.

The European Banking Authority provided details on the parameters for its stress test of EU banks, the results of which will be published in mid June. The adverse scenario will test the ability of banks to withstand a negative macroeconomic shock, including falling property and equity prices and higher interest rates, over a two-year horizon. The 'core' Tier 1 capital benchmark will be set at 5 per cent of risk-weighted assets, with core Tier 1 capital confined to ordinary shares or similar instruments issued by participating banks.

Following its recent stress test, four of Ireland's banks will be required to raise a combined €24 billion (16 per cent of GDP) in capital in order to meet both a minimum 10.5 per cent core Tier 1 capital ratio and an additional protective buffer. The Irish Government will provide capital to the extent that the banks cannot raise funds privately. These banks will also be required to sell assets to reduce their loan-to-deposit ratios from around 180 per cent to around 120 per cent. The Government also announced a restructuring of the banking system which, through mergers of some banks and wind-downs of others, will result in just two full-service domestic 'pillar' banks.

The Spanish Government announced further measures to restructure its banks. From September 2011, all banks will be required to meet a minimum core Tier 1 capital ratio of

8–10 per cent, which is higher than the 7 per cent required by 2019 under Basel III. According to Bank of Spain calculations, a number of lenders will need to raise capital up to a total of €17 billion by 30 September 2011 to meet the new requirements. Those banks that are unable to cover their capital shortfalls from private sources will receive an equity injection from a state-financed fund.

In the United Kingdom, the Independent Commission on Banking released an interim report outlining possible reforms to improve stability and competition in the UK banking sector. The Commission proposed that large banks hold equity capital of at least 10 per cent of risk-weighted assets, together with genuinely loss-absorbent debt. This would apply to the business as a whole and separately to retail banking operations, which would be 'ring-fenced' from wholesale and investment banking operations in a stand-alone subsidiary. To improve competition, particularly in the retail transaction account market, the Commission proposed that Lloyds divest more assets than the 600 branches it is already required to sell as an EU condition of government support. The Commission's final report will be issued in September.

The US Federal Reserve completed a review of 19 large US banks' capital adequacy and distribution policies, including the ability to absorb losses under several scenarios. As a result, the Fed allowed some, but not all, of these banks to increase or restart dividend payments. The Fed will review the capital plans for the largest banks on an annual basis.

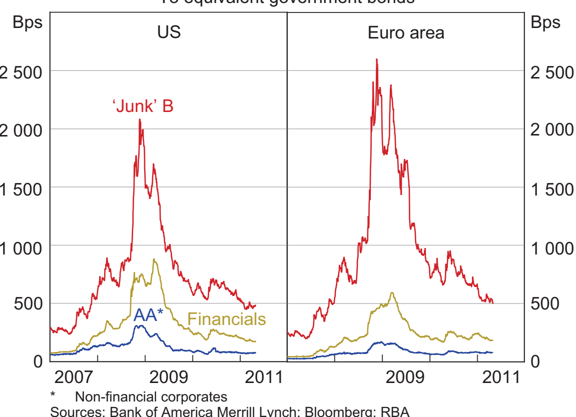
The US Administration released a plan to reform the housing finance market, including a number of proposals to wind down Freddie Mac and Fannie Mae and to increase the role of private capital in providing housing finance. US authorities also announced enforcement orders against the largest mortgage servicers after a review found a pattern of misconduct and negligence related to mortgage loan servicing and foreclosure processing.

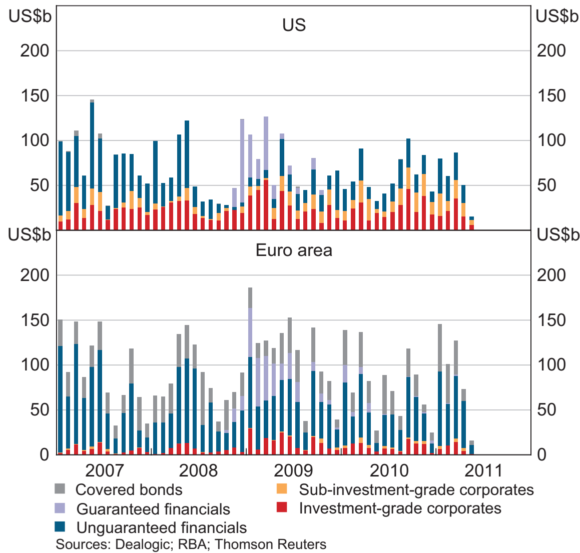
The US Securities and Exchange Commission proposed new 'limit up-limit down' rules to address extraordinary market volatility in US equity markets. For most listed equities, trades will not occur if the price is 5 per cent above or below the average price over the preceding five minutes; the bands will be doubled during the opening and closing periods, and broader price bands would apply to stocks priced below US$1. All trading centres, not just exchanges, would have to comply with the proposals.

Credit Markets

Conditions in money markets have continued to be generally favourable in recent months. Spreads between interbank unsecured lending rates (LIBOR) and expected policy rates, which provide measures of the perceived riskiness of banks, remained low.

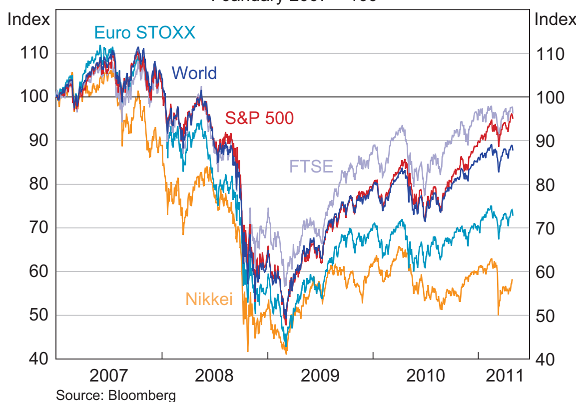
Borrowing conditions for corporates have also remained favourable. Spreads between yields on financial corporate bonds and equivalent government securities have narrowed over the past few months, with those in the United States reaching the lowest level since late 2007 (Graph 2.6). Spreads on highly rated non-financial corporate bonds have been unchanged and remain at relatively low levels, particularly in the United States.





Corporate bond issuance in the United States and euro area has been strong this year (Graph 2.7). In the United States, issuance of sub-investment-grade bonds has been encouraged by yields on these bonds falling to be below pre-crisis levels as credit quality has improved and as investor appetite for higher yielding assets has increased. Issuance by US banks has remained relatively subdued amid ongoing balance sheet deleveraging. In the euro area, part of the pick-up in bank bond issuance has been to roll over maturing debt. A large share of that issuance has been in covered bonds, because some institutions have been unable to issue unsecured debt as their government-guaranteed debt has matured and due to investor expectations that regulators will write down the value of unsecured debt in the event of bank restructurings.

Equities



Global equity prices have been unchanged in net terms over recent months but volatility increased during this period (Graph 2.8, Table 2.2). Following a period of rising equity prices, most equity markets fell from mid February as political tensions in the Middle East and North Africa rose. There were particularly sharp falls following the Japanese earthquake. Equity markets mostly retraced these falls; the S&P 500 reached its highest level since June 2008, in part due to generally better-than-expected US corporate earnings reports for the March quarter. The Japanese equity market remains 4 per cent below its pre-earthquake level, having fallen by 11 per cent on one day after the earthquake, its third largest fall in at least 30 years.

Table 2.2: Changes in International Share Prices
Per cent

	Past year	Since previous *Statement*
United States		
– Dow Jones	16	6
– S&P 500	15	3
– NASDAQ	17	3
Euro area		
– STOXX	11	–1
United Kingdom		
– FTSE	11	0
Japan		
– Nikkei	–10	–4
Canada		
– TSE 300	13	–1
Australia		
– ASX 200	0	–1
China		
– China A	1	2
MSCI Indices		
– Emerging Asia	14	2
– Latin America	3	–5
– Emerging Europe	19	1
– World	**9**	**0**

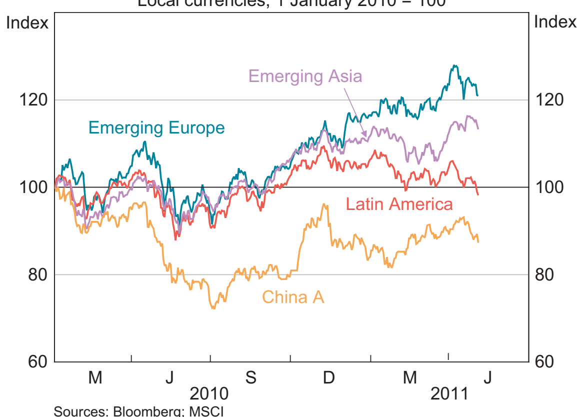
Source: Bloomberg

Banks' share prices have fallen significantly in recent months, in part due to ongoing uncertainty about the effect of regulatory changes on their profitability and, in Europe, on renewed concerns about bank exposures to sovereign debt issued by countries with weak government finances. Since early February, banking sector equity prices have fallen by around 8 per cent in the United States and euro area (Graph 2.9). Earnings of large US banks in the March quarter mostly met or exceeded analysts' expectations but overall revenue growth was weak and the composition of earnings disappointed markets. While quarterly earnings were supported by further reductions in loan-loss provisions and generally higher trading income, higher costs related to mortgage-servicing and foreclosure practices weighed on some banks' earnings. Most large European banks' earnings reported for the March quarter have exceeded expectations, in part supported by higher trading income.

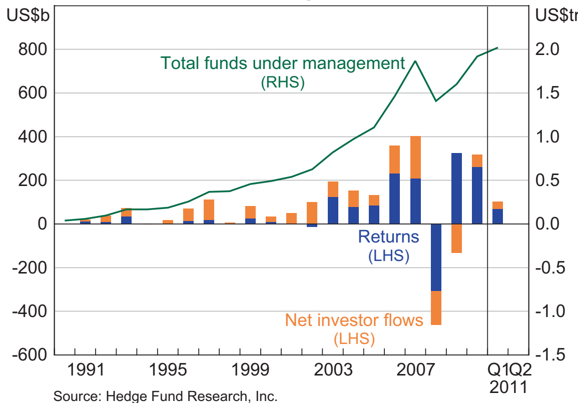
Graph 2.9
Banks' Share Prices Relative to Market

Emerging market equity prices have been mixed in recent months (Graph 2.10). In emerging Asia, broad-based gains in equity prices since mid March followed a period of underperformance from the start of the year. Chinese equity prices have risen by 2 per cent this year and remain around their level of a year ago. In emerging Europe, Russian equity prices have been supported by higher oil prices. Equity prices in Latin America have declined, in part due to concerns that government efforts to contain inflation may dampen economic growth.

Graph 2.10
Emerging Market Share Price Indices

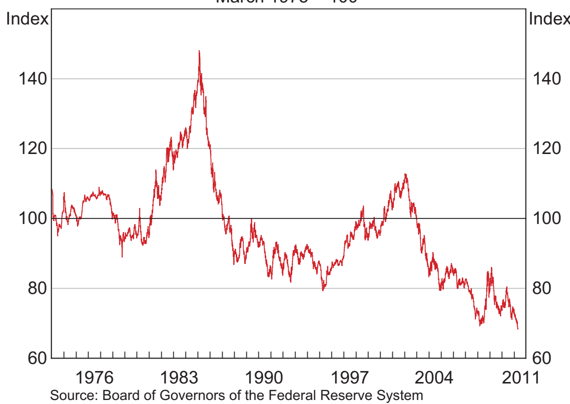


Graph 2.11
Global Hedge Funds



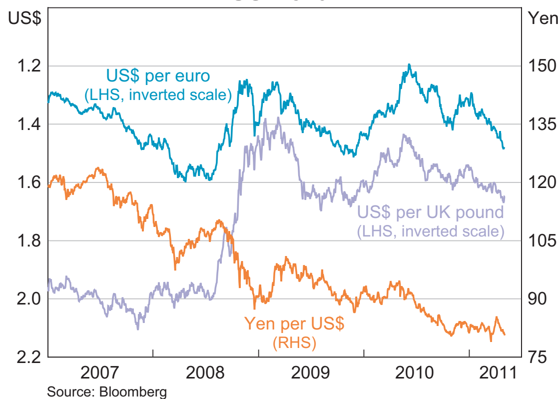
Source: Hedge Fund Research, Inc.

Graph 2.12
US Nominal TWI
March 1973 = 100



Source: Board of Governors of the Federal Reserve System

Graph 2.13
US Dollar



Source: Bloomberg

Hedge Funds

Hedge funds have performed in line with global share markets over the year to March 2011, returning an average of 9 per cent (Graph 2.11). Investors have also increased their net capital contributions to hedge funds. In the March quarter 2011, US$33 billion of new capital was injected into the industry, the largest quarterly inflow in more than three years. Reflecting these inflows and positive investment returns, funds under management have increased to more than US$2 trillion.

Foreign Exchange

The past few months have been a relatively volatile period for foreign exchange markets, reflecting the broadening tensions in the Middle East and North Africa, ongoing concerns regarding the fiscal positions of Portugal and Greece, and the earthquake and nuclear emergency in Japan.

The US dollar has continued to depreciate on a trade-weighted basis over recent months, falling by around 7 per cent since the start of the year and by 14 per cent since mid last year, to reach an historical low (Graph 2.12, Table 2.3). In part, this reflects the divergence in monetary policy between the United States and most other jurisdictions. This is evident in the appreciation of the euro to its highest level against the US dollar since December 2009 following the ECB's policy tightening, and notwithstanding ongoing concerns regarding the fiscal positions of some euro area economies (Graph 2.13).

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

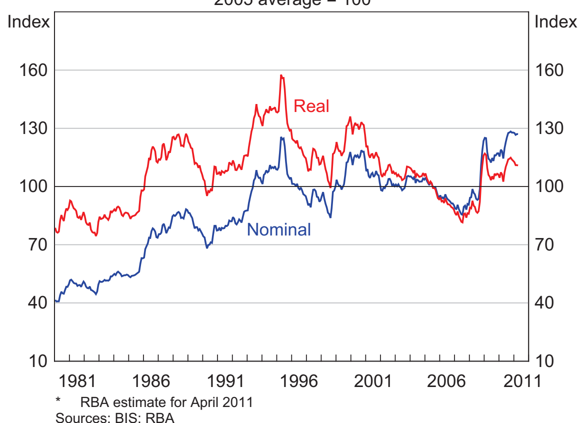
	Past year	Since previous *Statement*
Japanese yen	–15	–1
Chinese renminbi	–5	–1
New Taiwan dollar	–9	–2
UK pound sterling	–8	–2
Malaysian ringgit	–7	–2
New Zealand dollar	–9	–2
South Korean won	–5	–2
Indian rupee	0	–2
Thai baht	–7	–3
Philippine peso	–5	–3
Canadian dollar	–6	–3
Brazilian real	–8	–3
Mexican peso	–7	–3
Singapore dollar	–11	–3
Swedish krona	–18	–5
Indonesian rupiah	–5	–5
Australian dollar	–15	–6
South African rand	–12	–7
European euro	–12	–7
Swiss franc	–22	–8
Majors TWI	**–11**	**–5**
Broad TWI	**–8**	**–3**

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

The earthquake that struck Japan on 11 March and the subsequent nuclear emergency had a significant effect on currency markets. Volatility in yen-crosses increased to their highest levels since mid 2010. The yen initially appreciated in the week following the earthquake on expectations of repatriation flows to fund the rebuilding effort, although these flows have not subsequently materialised. The yen briefly reached an all-time high against the US dollar of 76.59 on 17 March in abnormal trading conditions that caused the yen to appreciate by 4 per cent in a 5 minute period. In response, on 18 March, G7 authorities undertook a coordinated intervention in order to curb the upward pressure on the currency: the Bank of Japan sold approximately US$8.5 billion worth of yen while the other countries sold smaller amounts. The yen has since depreciated but is currently stronger than pre-earthquake levels. While the effective exchange rate for the yen remains just below historical highs in nominal terms, the yen is not at a particularly high level in real terms, reflecting falling prices in Japan over a number of years (Graph 2.14).

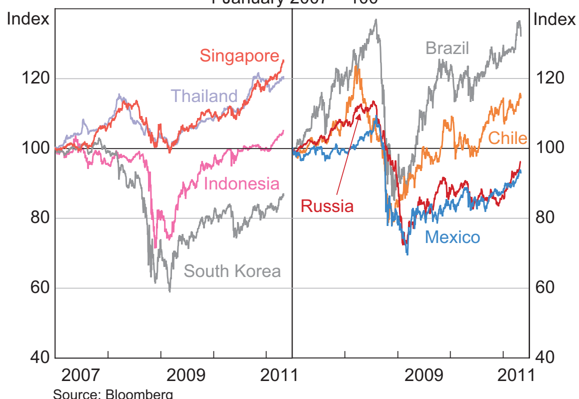
Emerging market currencies have generally appreciated over recent months, despite ongoing intervention, reflecting expectations that policy rates will need to be tightened further, or that exchange rates will be allowed to appreciate, to contain domestic inflation pressures (Graph 2.15).

Graph 2.14
Japanese Effective Exchange Rates*
2005 average = 100



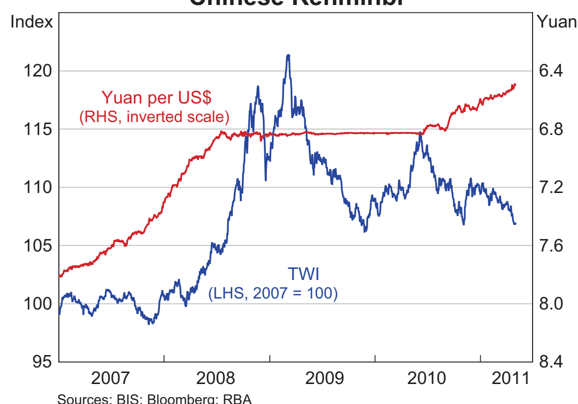
* RBA estimate for April 2011
Sources: BIS; RBA

Graph 2.15
Selected Currencies against the US Dollar
1 January 2007 = 100



Source: Bloomberg

Graph 2.16



Among the Asian currencies, the Malaysian ringgit and Indonesian rupiah recently reached their highest levels against the US dollar in 13 and 7 years respectively, while the Singapore dollar reached a record high.

In Latin America, the Brazilian real has appreciated strongly over recent months. The Brazilian authorities intervened in the foreign exchange market in April and increased the tax on foreign borrowing by domestic banks and companies to slow capital inflows. The Russian rouble has also appreciated strongly, supported by higher oil prices, despite Russia's central bank having also intervened in its foreign exchange market during the period.

The appreciation of the Chinese renminbi against the US dollar has slowed in recent months, to 1 per cent since the beginning of the year (Graph 2.16). As this rise against the US dollar has been less than for most other currencies, the renminbi has depreciated by nearly 3 per cent in nominal trade-weighted terms over this period. The premium in the non-deliverable forward market indicates an expected further appreciation of almost 3 per cent against the US dollar over the next 12 months.

China's foreign exchange reserves reached US$3 trillion at the end of March 2011 (Table 2.4). Central banks elsewhere in Asia and Latin America also accumulated foreign exchange reserves at a relatively rapid pace during the first three months of the year, consistent with reported intervention by these countries in foreign exchange markets.

Table 2.4: Foreign Exchange Reserves

As at end March 2011

	Three-month-ended change		Level
	US$ billion	Per cent	US$ billion
China	197	7	3 045
Japan	6	1	1 041
Russia	21	5	454
Taiwan	11	3	393
Brazil(a)	28	10	309
South Korea	7	2	294
Thailand	9	5	174
South Africa	5	15	41
Chile(a)	4	13	30

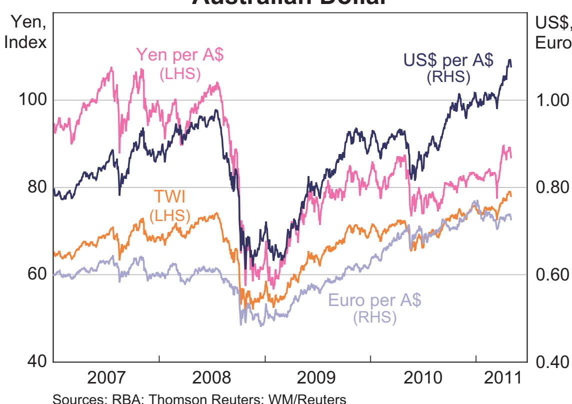
(a) RBA estimates of official reserve assets excluding gold
Sources: Bloomberg; CEIC; RBA

Australian Dollar

The Australian dollar has appreciated strongly over recent months, recording a new post-float high of 79 on a trade-weighted basis and above US$1.10 (Table 2.5, Graph 2.17). The Australian dollar is currently 8 per cent higher against the US dollar than its average level in January when it was trading close to parity. In trade-weighted terms, the appreciation is smaller, around 5 per cent, in part reflecting only a small appreciation of the Australian dollar against the euro over this period. The Australian dollar has been supported by high international prices for Australian commodities.

The Australian dollar fell sharply against the yen in mid March following the Japanese earthquake and ensuing nuclear emergency. Australian assets have been a significant destination for Japanese investment over recent years, which led the Australian dollar to depreciate more than most other currencies when markets expected Japanese investors to repatriate funds after the earthquake; these flows have generally not materialised. However, following the coordinated G7 intervention on 18 March, the Australian dollar appreciated against the yen to its highest level since September 2008.

Graph 2.17
Australian Dollar

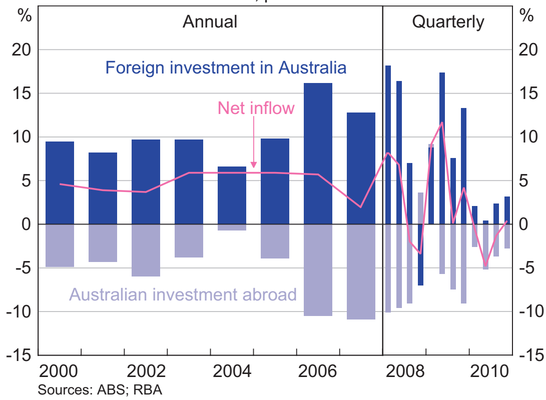


Sources: RBA; Thomson Reuters; WM/Reuters

Table 2.5: Australian Dollar against Selected TWI Currencies
Per cent

	Change over past year	Change since previous *Statement*	Deviation from post-float average
US dollar	19	6	47
Japanese yen	2	5	–8
Chinese renminbi	13	5	48
UK pound sterling	9	4	45
Malaysian ringgit	9	4	42
New Zealand dollar	8	4	10
South Korean won	12	4	66
Indian rupee	17	4	76
Thai baht	10	4	36
Canadian dollar	10	3	10
Singapore dollar	5	3	6
Indonesian rupiah	9	1	138
South African rand	4	–1	58
European euro	3	–1	9
Swiss franc	–9	–3	–13
TWI	**9**	**4**	**31**

Sources: Bloomberg; Thomson Reuters; W/M Reuters



Capital Flows

For 2010 as a whole, there was net capital outflow from the private sector (Graph 2.18). With the exception of periods of difficult market conditions in late 2007 and again in late 2008, there has previously been only two quarters of net private capital outflow since at least the late 1980s, when the series began. As discussed elsewhere, this primarily reflects relatively less offshore issuance by Australia's banking sector as it experienced slower asset growth and stronger deposit growth. On the other hand, net foreign investment in government securities was relatively strong in 2010, with net inflows to the public sector equivalent to 4 per cent of GDP over the year.