

## 2. International and Foreign Exchange Markets

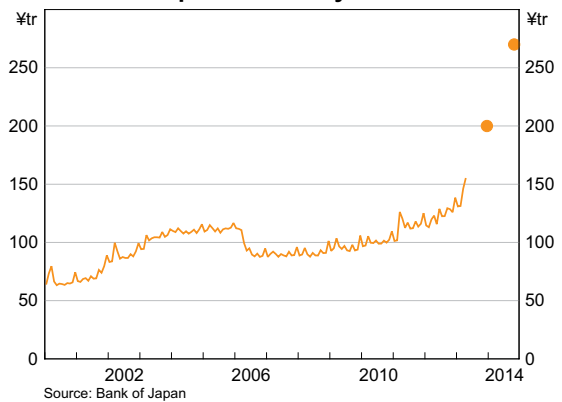
Policy actions by major central banks continue to have a significant effect on global financial markets. In particular, new policy measures announced by the Bank of Japan at the beginning of April have had a significant impact on a number of asset prices and contributed to a further depreciation of the Japanese yen. Developments in Europe also remain a source of potential market volatility, although the crisis in Cyprus and the political uncertainty in Italy generated little lasting market reaction.

### Central Bank Policy

The Bank of Japan (BoJ) announced a range of major policy measures, characterised as 'quantitative and qualitative monetary easing', that were significantly more expansionary than expected. The BoJ has shifted its operational target from a short-term interest rate to the money base (currency in circulation plus banks' deposits at the BoJ), and will conduct monetary operations to increase the money base at an annual pace of ¥60–70 trillion (US\$600–700 billion) for at least the next two years. As a result, the money base will nearly double in size by the end of 2014 (Graph 2.1). Much of the targeted growth will be achieved through purchases of Japanese government bonds (JGBs), although an increase in loan support programs and small purchases of other assets will also contribute. The BoJ will increase its holdings of JGBs by around ¥50 trillion per year (US\$500 billion) and the average maturity of purchases will more than double to about seven years. Monetary easing will be maintained for as long as necessary to achieve the price stability target of 2 per cent in a 'stable manner'. The BoJ has indicated

that the announced measures are expected to achieve this target in about two years.

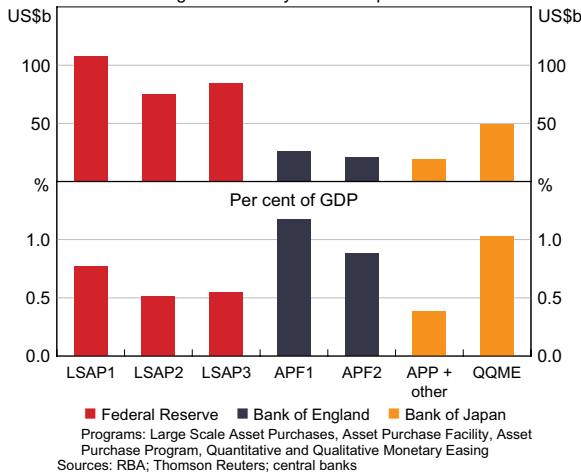
**Graph 2.1**  
**Japanese Money Base**



The planned expansion of the BoJ balance sheet is larger than that previously announced for 2013, and significantly larger than any of the BoJ's previous expansions. Over the remainder of 2013 and 2014, the BoJ will purchase on average ¥5 trillion (US\$50 billion) in securities each month in net terms. In comparison, the Fed is currently purchasing securities at a monthly pace of US\$85 billion in net terms (Graph 2.2). Relative to the size of the domestic economy, however, the monthly pace of purchases is much larger than the Fed's program and broadly equivalent to the Bank of England's asset purchases.

Initial market commentary around the BoJ announcement suggested that the lower returns available on domestic securities would prompt some Japanese investors (who hold around 95 per cent of the stock of JGBs outstanding) to allocate more

**Graph 2.2**  
**Central Bank Asset Purchase Programs**  
 Average net monthly securities purchases



funds to offshore securities (Table 2.1). However, it is possible that many large holders will take some time to adjust their portfolios. In fact, Japanese investors have been net sellers of foreign bonds and equities since elections were announced in mid November as investors have sought to realise profits resulting from the lower yen. That said, a small shift in the asset allocation of Japanese investors offshore could constitute a large flow for the recipient country.

**Table 2.1: Holders of Japanese Government Bonds**  
 Per cent of stock outstanding, end 2012<sup>(a)</sup>

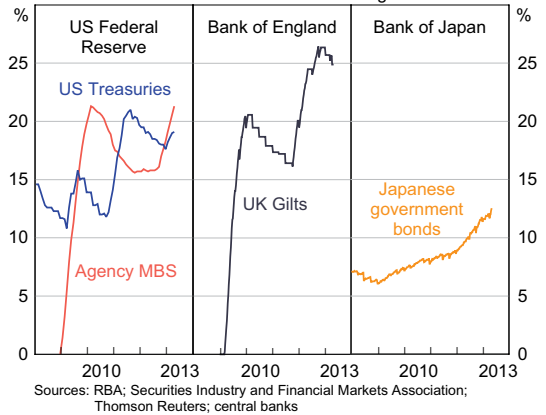
Insurance companies	23
Banks	21
Japan Post Bank	17
Pension funds	12
Bank of Japan	12
Other financial companies	5
Foreign	4
Households	3
Other	2

(a) Figures do not sum due to rounding  
 Sources: Bank of Japan; Japan Post Bank

As mentioned, the US Federal Reserve continues to purchase US\$85 billion in longer-term securities each month. The Fed currently holds US\$1.8 trillion

in US Treasuries and US\$1.2 trillion in agency mortgage-backed securities (MBS), accounting for around 20 per cent of the outstanding stock in each market (Graph 2.3). At its most recent meeting, the Fed indicated it could increase as well as decrease its monthly purchases, as conditions warrant.

**Graph 2.3**  
**Central Bank Holdings of Securities**  
 Per cent of stock outstanding



European Central Bank (ECB) lending to banks has declined by almost a third since August, to be around €850 billion. The decrease is primarily due to the early repayment of funds borrowed under the ECB's three-year lending operations conducted in December 2011 and February 2012. Partial data on ECB lending by national central banks indicate that banks from Spain and France have accounted for a significant proportion of the early repayments, although banks from Germany, Belgium, the Netherlands and Austria have repaid more as a share of loans outstanding (Graph 2.4). In contrast, lending via the Bank of Italy has remained broadly unchanged since the beginning of the year.

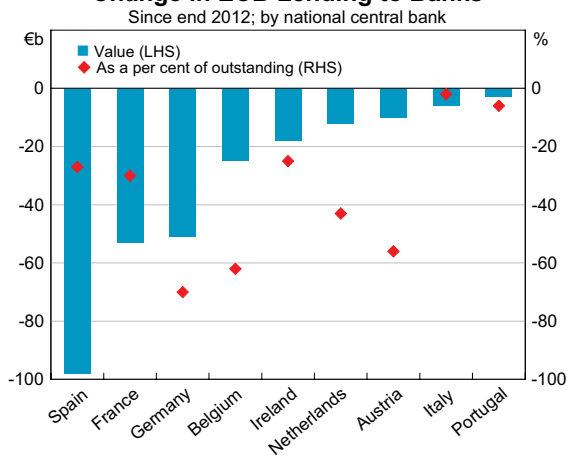
Meanwhile, the ECB cut its policy rate by 25 basis points at its meeting on 2 May. Similarly, central banks in India, Mexico and South Korea have reduced their policy rates in recent months. In contrast, the central bank of Brazil increased its policy rate by 25 basis points (Table 2.2).

**Table 2.2: Policy Rates**

	Current level Per cent	Most recent change	Change from 2011 peak Basis points
Euro area	0.50	↓ May 13	-100
Japan <sup>(a)</sup>	0.10	↓ Oct 10	-
United States	0.125	↓ Dec 08	-
Australia	2.75	↓ May 13	-200
Brazil	7.50	↑ Apr 13	-500
Canada	1.00	↑ Sep 10	-
China	6.00	↓ Jul 12	-56
India	7.25	↓ May 13	-125
Indonesia	5.75	↓ Feb 12	-100
Israel	1.75	↓ Dec 12	-150
Malaysia	3.00	↑ May 11	-
Mexico	4.00	↓ Mar 13	-50
New Zealand	2.50	↓ Mar 11	-50
Norway	1.50	↓ Mar 12	-75
Russia	8.25	↑ Sep 12	-
South Africa	5.00	↓ Jul 12	-50
South Korea	2.50	↓ May 13	-75
Sweden	1.00	↓ Dec 12	-100
Switzerland	0.00	↓ Aug 11	-25
Taiwan	1.875	↑ Jun 11	-
Thailand	2.75	↓ Oct 12	-75
United Kingdom	0.50	↓ Mar 09	-

(a) Since April 2013, the Bank of Japan's main operating target has been the money base  
Source: central banks

**Graph 2.4**  
**Change in ECB Lending to Banks**  
Since end 2012; by national central bank



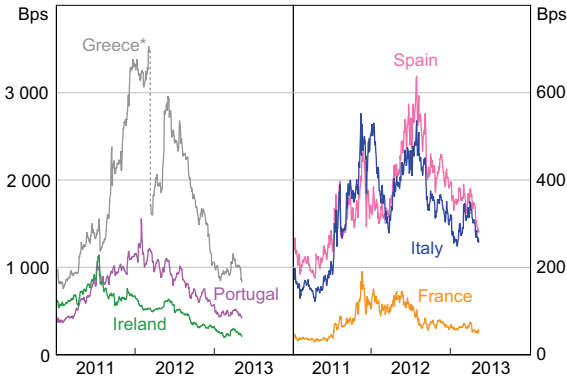
Sources: RBA; central banks

## Sovereign Debt Markets

Spreads between yields on long-term euro area periphery government bonds and German Bunds have declined since the end of 2012 (Graph 2.5). Peripheral spreads had risen notably in February, especially for Italian bonds amid heightened political uncertainty, but have since retraced on the formation of a coalition government in Italy and progress towards resolving the crisis in Cyprus. Indeed, Italian 2-year bond yields are around historically low levels while 10-year yields have fallen below 4 per cent. Meanwhile, the BoJ's announcement of additional asset purchases in April provided some support to euro area government bonds on expectations that Japanese investors will alter their investment

**Graph 2.5**

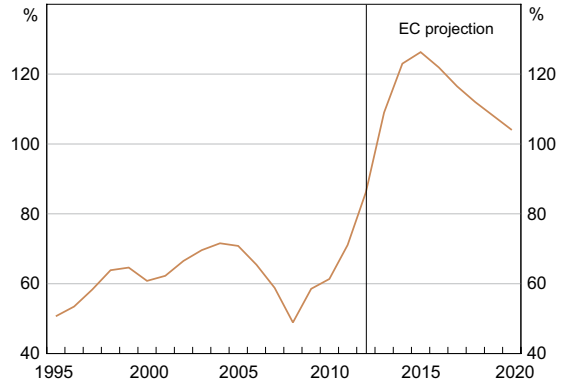
**Euro Area Government 10-year Bond Spreads To German Bunds**



\* Data from 12 March 2012 are yields on Greek bonds post first private sector debt swap  
Source: Bloomberg

**Graph 2.6**

**Cypriot Government Debt Per cent of GDP**



Sources: European Commission; IMF

allocations, although, as noted above, to date there has not been any evidence to suggest Japanese investors have increased their purchases of foreign securities.

Cyprus has reached agreement with the 'troika' of official agencies on a financial assistance package of up to €10 billion (60 per cent of GDP) as part of a three-year macroeconomic adjustment program aimed at redressing the nation's fiscal position and recapitalising its large banking sector. Under the agreement with the troika, the Cypriot debt-to-GDP ratio is projected to increase to around 125 per cent in 2015 before declining gradually (Graph 2.6).

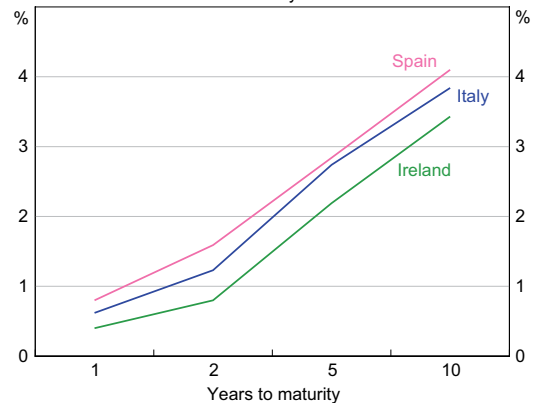
Central to the Cypriot adjustment program is a bank restructuring whereby shareholders, bondholders and large depositors are expected to contribute around €10 billion to bank recapitalisations. The country's second largest bank, Laiki Bank, has been wound up and insured deposits (those less than €100 000) and 'good' assets have been transferred to the country's largest bank, the Bank of Cyprus. Uninsured deposits at Laiki Bank are likely to face heavy losses, while up to half of uninsured deposits at the Bank of Cyprus will be converted into equity in that bank. Temporary controls to limit cash withdrawals and other deposit outflows have been implemented during the restructuring process.

An initial proposal for a one-time levy on all bank deposits in Cyprus, including insured deposits, was rejected by the Cypriot Parliament.

Irish government bond yields have declined considerably over the past year, and are currently trading below equivalent Spanish and Italian debt (Graph 2.7). In March, Ireland raised €5 billion in its first long-term bond issue since 2010. The Irish finance minister has suggested Ireland needs to raise only a further €1.5 billion to be fully funded to the end of 2014. Despite signs of improved access to bond markets for both Ireland and Portugal in 2013, concerns remained around the size of government

**Graph 2.7**

**Euro Area Government Bond Yield Curves As at 8 May 2013**

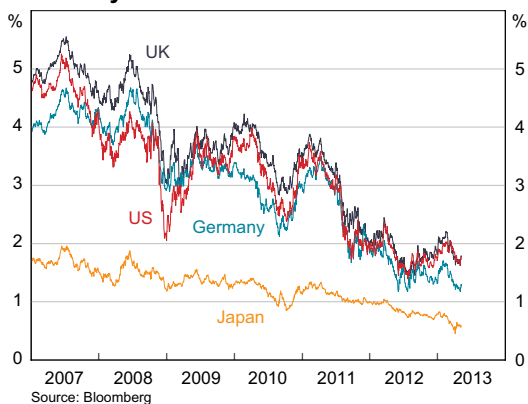


Source: Bloomberg

debt maturities in years following the end of their external assistance programs. In response to these concerns, euro area finance ministers have agreed to extend the average maturities of loans to both nations by seven years. The Portuguese extension is contingent on its government passing alternative austerity initiatives for a series of measures recently struck down by the nation's Constitutional Court.

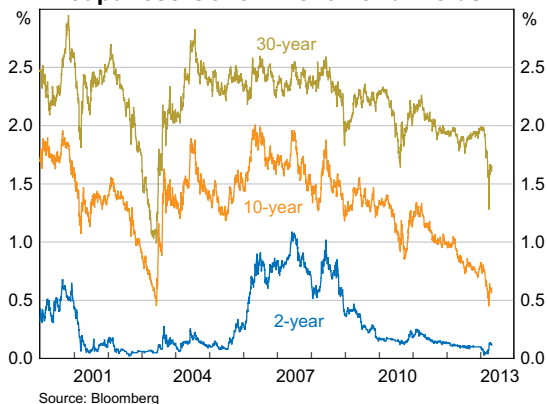
Major market government bond yields have decreased over recent months (Graph 2.8). Yields on 10-year US government bonds have fallen by around 20 basis points since early February, while 10-year German government bond yields have decreased by around 35 basis points to be close to their historic lows.

**Graph 2.8**  
**10-year Government Bond Yields**



In Japan, anticipation of further asset purchases by the BoJ contributed to a decline in government bond yields over February and March, with longer-term yields reaching their lowest levels since 2003 (Graph 2.9). Yields have since increased, although longer-term yields remain below the level recorded late last year. Volatility in the Japanese government bond market increased markedly following the BoJ announcement, reflecting investor uncertainty around the implications of the measures for government bond yields.

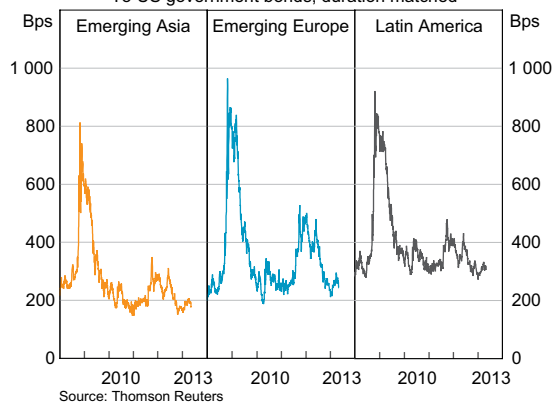
**Graph 2.9**  
**Japanese Government Bond Yields**



Moody's and Fitch have downgraded the United Kingdom's sovereign credit rating to AA+ (S&P equivalent), from AAA, noting the United Kingdom's weak growth and fiscal outlook. Yields on UK government bonds were broadly unaffected by the announcements, and have declined by around 30 basis points since early February.

Spreads on US dollar-denominated debt issued by emerging market sovereigns have widened marginally since the start of the year, although they remain at low levels (Graph 2.10).

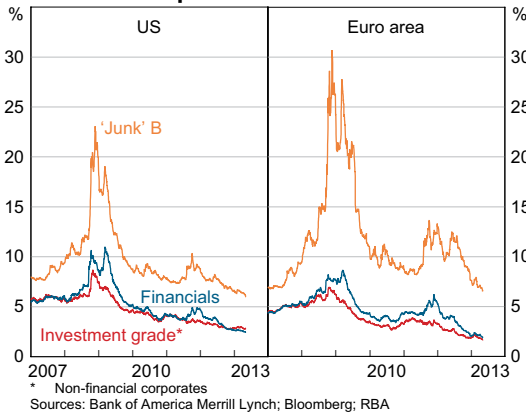
**Graph 2.10**  
**US Dollar-denominated Sovereign Debt Spreads**  
To US government bonds, duration matched



## Credit Markets

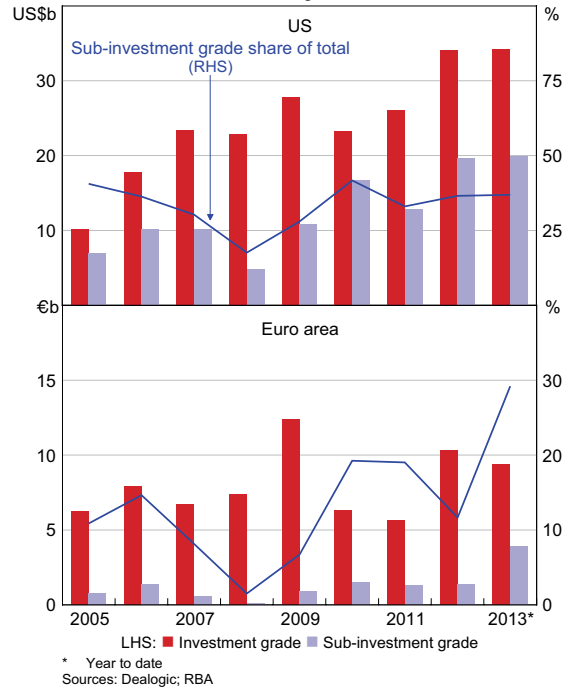
Credit market conditions for non-financial corporates remain favourable as investors continue to seek higher-yielding investments amid historically low sovereign bond yields. Corporate bond yields have fallen to record lows across a number of market segments, most notably in the euro area and among sub-investment grade corporates (Graph 2.11).

**Graph 2.11**  
**Corporate Bond Yields**



Non-financial corporate bond issuance has remained strong so far in 2013 (Graph 2.12). In the euro area, the share of sub-investment grade bond issuance has increased substantially as a result of the favourable issuance conditions, as well as in response to reduced access to intermediated credit. In contrast, financial corporates' bond issuance in the major markets remains subdued. US banks' bond issuance has offset maturities in 2013 to date, while euro area banks' net bond issuance remains negative. Peripheral euro area banks have issued very few bonds since January.

**Graph 2.12**  
**Non-financial Corporate Bond Issuance**  
Month-average issuance



## Government Financial Policy

The Dutch Government nationalised the country's fourth-largest bank, SNS Reaal, following losses on the bank's real estate assets. The government will inject €2.2 billion in new capital, write off €700 million of the bank's real estate assets and forgive €800 million that the bank still owes from previous government assistance. Part of this cost will be recouped by a one-off €1 billion levy to be imposed on Dutch banks in 2014.

In the United Kingdom, the government announced two new programs to support mortgage lending for properties worth less than £600 000. The first program will provide home buyers who are unable to raise a sufficient deposit with a loan of up to 20 per cent of the value of a newly built owner-occupier home; £3.5 billion has been made available to finance the loans, which will be interest free for

the first five years. Under the second program, from January 2014 the UK Treasury will provide lenders with an option to buy a guarantee against some of the losses on mortgages with a loan-to-value ratio of between 80 per cent and 95 per cent. The government will compensate lenders for losses occurring over the first seven years of the loan, up to 20 per cent of the purchase price of the home (though lenders will pay a fee and still be liable for 5 per cent of losses on the protected amount).

The Bank of England (BoE) and the UK Treasury announced a one-year extension of the Funding for Lending Scheme (FLS) until January 2015. Under the FLS, participating banks can borrow UK Treasury bills (against eligible collateral) from the BoE worth up to 5 per cent of their stock of existing lending to the real economy, plus any net expansion of lending that occurs between June 2012 and December 2014. To provide support to small- and medium-sized enterprises (SMEs), the new rules allow banks to draw down on the FLS up to ten times the amount that net lending to SMEs increases over the remainder of 2013, and up to five times the net increase in 2014. Additionally, lending to certain non-bank credit providers will now also contribute to drawdown limits.

## Equities

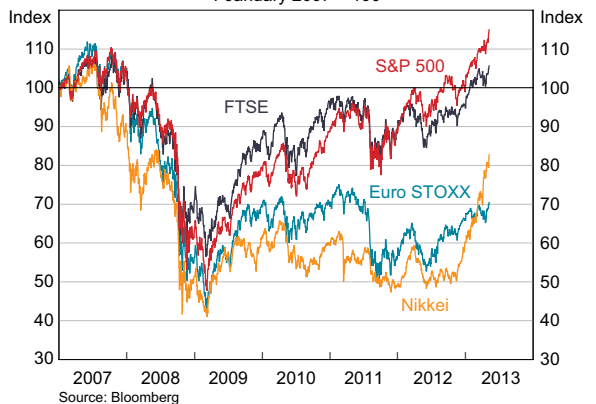
Global equity prices have risen by 13 per cent so far this year, while measures of equity market volatility remain below their long-term averages (Table 2.3). In the United States, the S&P 500 has surpassed its earlier peak in 2007, although markets in other countries remain some way below their peaks. In Japan, share prices have increased by nearly 40 per cent since the start of the year and by more than 70 per cent since the middle of last year in the lead up to, and following, further policy easing by the BoJ (Graph 2.13). The rise in Japanese equities has occurred alongside large foreign investor inflows into the Japanese market and a substantial increase in trading activity.

**Table 2.3: Changes in International Share Prices**  
Per cent

	Over 2012	Since end 2012
United States		
– Dow Jones	7	15
– S&P 500	13	14
– NASDAQ	16	13
Euro area		
– STOXX	16	7
United Kingdom		
– FTSE	6	12
Japan		
– Nikkei	24	37
Canada		
– TSE 300	4	1
Australia		
– ASX 200	15	12
China		
– China A	3	–1
MSCI indices		
– Emerging Asia	15	2
– Latin America	9	–3
– Emerging Europe	13	1
<b>– World</b>	<b>13</b>	<b>13</b>

Source: Bloomberg

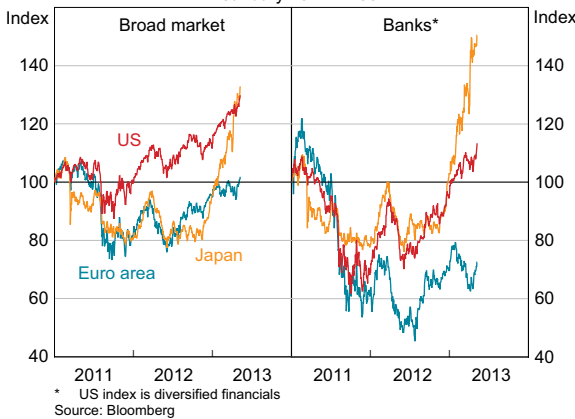
**Graph 2.13**  
**Share Price Indices**  
1 January 2007 = 100



The largest US banks reported generally better-than-expected earnings for the March quarter, supported by investment banking revenues and declines in loan-loss provisions and other expenses. However, most banks' share prices fell following their earnings announcements as investors focused on compressions of net interest margins and weaker-than-expected trading revenues. The share prices of most major US banks rose after Federal Reserve approval of their capital plans. However, the capital plans of Goldman Sachs and JPMorgan only received conditional approval, with these banks required to submit new plans by the end of September.

In the euro area, equity prices have underperformed since the start of the year. Financial sector equity prices have been particularly weak, with banking sector share prices falling around 10 per cent from their January highs as political uncertainty in several peripheral countries weighed on the sector (Graph 2.14). Large European banks reported better-than-expected earnings for the March quarter, supported by ongoing reductions in expenditure and growth in investment banking revenues.

**Graph 2.14**  
**Share Price Indices**  
1 January 2011 = 100

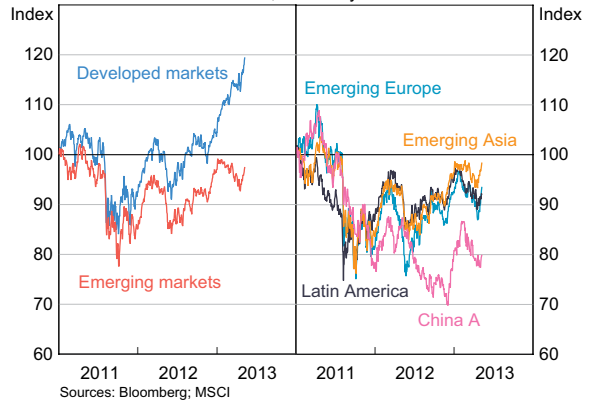


Share prices in emerging markets have underperformed those in developed markets in 2013 (Graph 2.15). In China, equity prices rose early in the year in anticipation of policy reforms following the leadership transition. However, Chinese share

**Graph 2.15**

**Share Price Indices**

Local currencies, 1 January 2011 = 100

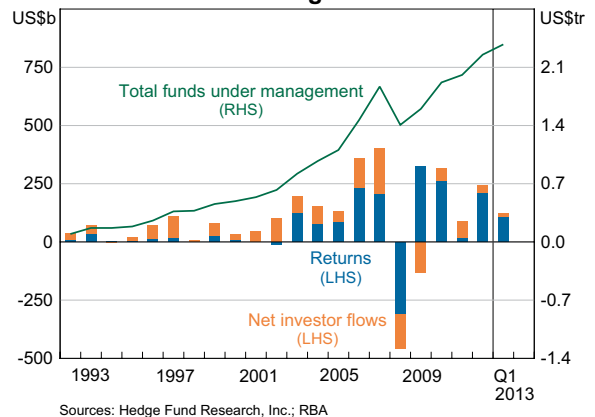


prices have fallen by 8 per cent over recent months, weighed down by weaker-than-expected economic data, further controls on property prices and regulatory tightening of 'shadow banking' activities. Latin American share prices have continued to decline, with Brazilian share prices falling by 8 per cent so far this year amid concerns around domestic growth.

**Hedge Funds**

Global hedge funds recorded an average return on investments of 5.5 per cent over the year to March, which was less than the total return from equity markets (which include dividends) over the period (Graph 2.16). Funds under management increased by

**Graph 2.16**  
**Global Hedge Funds**





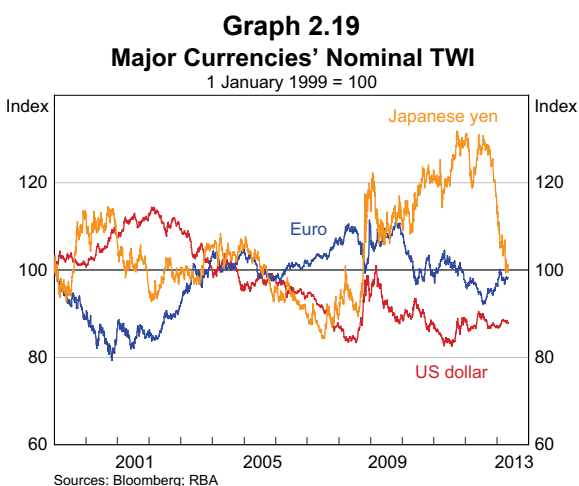
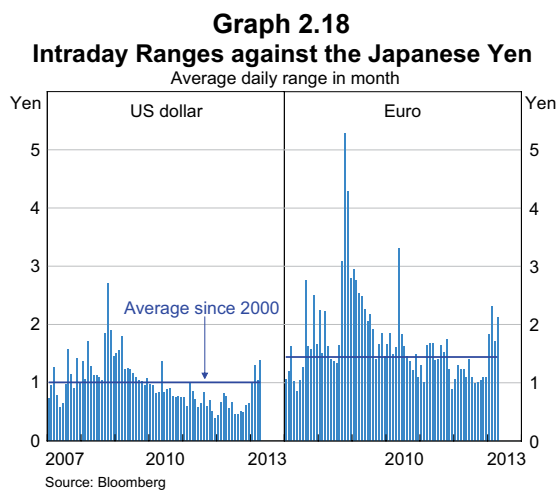
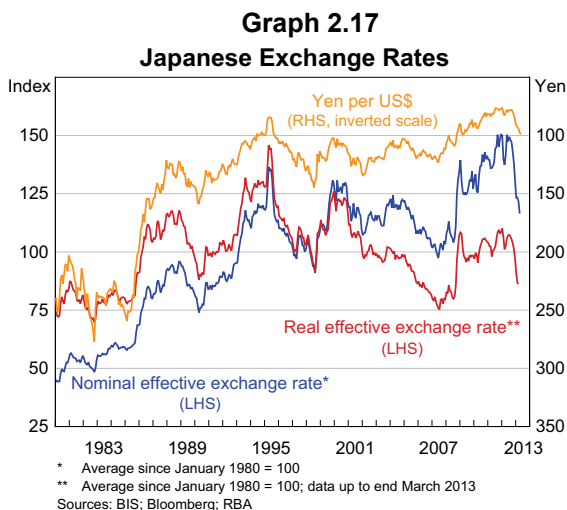
5.4 per cent over the March quarter to US\$2.4 trillion, largely reflecting the accumulation of positive returns, with only a modest injection of new capital.

## Foreign Exchange

Foreign exchange markets have primarily been influenced by developments in Japanese monetary policy. The Japanese yen has depreciated by a further 7 per cent on a nominal effective basis since the BoJ's policy announcement in early April and by 19 per cent since mid November, but remains relatively high compared with its average over the past 30 years (Graph 2.17). In real effective terms, the yen is well below its average since 1980, though not outside the range observed over that time. Although policymakers in some other economies remain concerned about the relative strength of their currencies, the G20 has described Japan's policy actions as being 'intended to stop deflation and support domestic demand'. The developments in Japanese monetary policy have led to an increase in the intraday ranges of both the US dollar and the euro against the Japanese yen, with both measures rising from the very low levels reached in late 2012 (Graph 2.18).

The US dollar is little changed on a broad trade-weighted basis over 2013 to date, and remains at a historically low level (Graph 2.19, Table 2.4). The euro has depreciated by 2 per cent on a trade-weighted basis since early February, consistent with increased market expectations of further monetary policy easing by the ECB. Notwithstanding the recent political uncertainty in Italy and market concerns about Cyprus, the euro remains 7 per cent higher than the 10-year low it reached in mid 2012 on a trade-weighted basis.

The Chinese renminbi (RMB) has appreciated by a further 1 per cent against the US dollar since the beginning of 2013 to be 4 per cent higher than its July 2012 trough, remaining in the upper part of its +/-1 per cent daily trading band. In part reflecting the depreciation of the Japanese yen, the RMB has appreciated by 6–7 per cent on a real and nominal



**Table 2.4: Changes in the US Dollar against Selected Currencies**  
Per cent

	Over 2012	Since end 2012
Japanese yen	13	14
South African rand	5	6
UK pound sterling	-4	5
Australian dollar	-2	2
Swiss franc	-2	2
South Korean won	-8	2
Canadian dollar	-3	1
New Taiwan dollar	-4	1
Singapore dollar	-6	0
European euro	-2	0
Swedish krona	-6	0
Indonesian rupiah	8	-1
Philippine peso	-6	-1
Indian rupee	3	-1
New Zealand dollar	-6	-1
Chinese renminbi	-1	-1
Brazilian real	10	-2
Malaysian ringgit	-3	-3
Thai baht	-3	-4
Mexican peso	-8	-7
<b>Majors TWI</b>	<b>0</b>	<b>3</b>
<b>Broad TWI</b>	<b>-1</b>	<b>1</b>

Source: Bloomberg

effective basis since mid September and is at a historically high level on both measures (Graph 2.20).

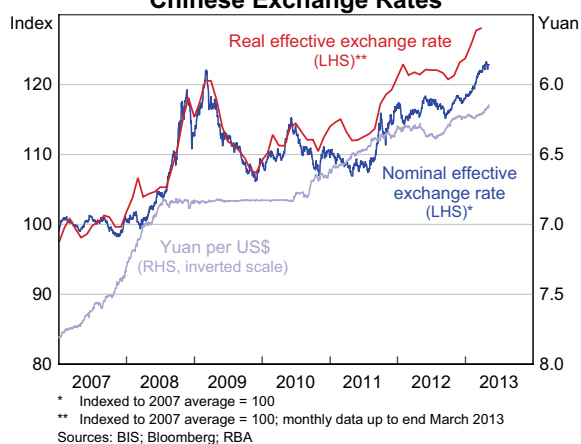
Chinese foreign exchange reserves increased by US\$131 billion (around 4 per cent) over the March quarter, after being broadly unchanged over the previous three quarters (Table 2.5). This reflects net purchases of foreign exchange reserves totalling US\$157 billion, which were partly offset by negative valuation effects (Graph 2.21). This is in contrast to the more subdued purchases seen in recent quarters, but is consistent with strong capital inflows.

Other Asian central banks' holdings of foreign exchange reserves have generally been little changed (in US dollar terms) over recent months.

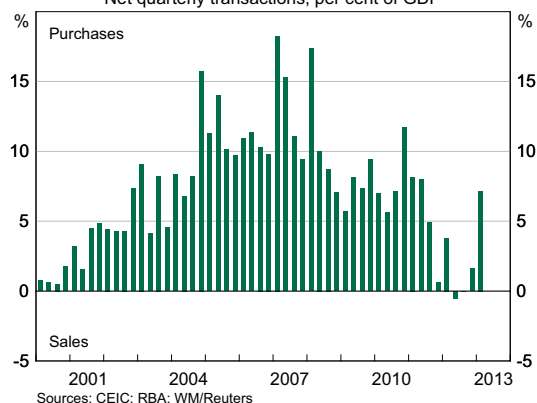
One exception has been Bank Indonesia, which actively sold foreign currency reserves early in the year in order to increase US dollar liquidity in the onshore market.

The Chinese authorities continue to take steps towards internationalising the RMB, including relaxing restrictions on inward investment and signing additional or expanded local currency swap agreements with other central banks. In addition, 'direct trading' between the Australian dollar and the RMB – that is, trading between these two currencies without the use of the US dollar as an intermediate currency – commenced in Mainland China's interbank market on 10 April. The Australian dollar is

**Graph 2.20**  
**Chinese Exchange Rates**



**Graph 2.21**  
**Chinese Foreign Exchange Reserves**  
Net quarterly transactions, per cent of GDP



**Table 2.5: Selected Asian Foreign Currency Reserves**  
As at end April 2013

	Change since end 2012		Level
	US\$ equivalent (billions)	Per cent	US\$ equivalent (billions)
China <sup>(a), (b)</sup>	131	4	3 443
Taiwan <sup>(a)</sup>	2	1	405
South Korea	1	0	319
Hong Kong <sup>(b)</sup>	-14	-4	292
India	2	1	264
Singapore	2	1	259
Thailand <sup>(b)</sup>	-3	-2	167
Malaysia	1	1	127
Indonesia	-5	-5	100
Philippines	0	0	71

(a) Foreign exchange reserves (includes foreign currency and other reserve assets)

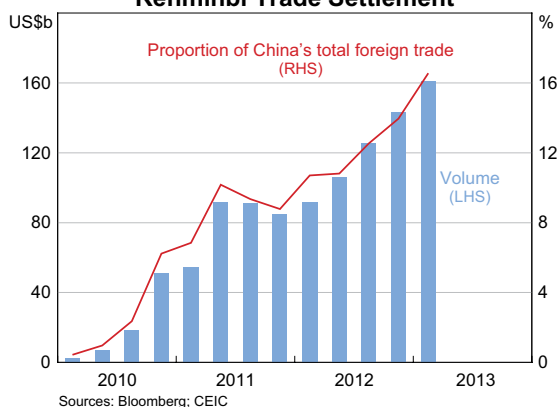
(b) End March

Sources: Bloomberg; CEIC; Hong Kong Monetary Authority; IMF; RBA

the fifth currency to be approved for direct trading against the RMB in the Chinese market, alongside the US dollar, Japanese yen, Russian rouble and Malaysian ringgit. Over time, direct trading should promote greater use of the RMB as an invoicing currency for bilateral trade between Australia and China. While the use of RMB for trade payments between Australia and China is currently very small, data from the People's Bank of China suggest that China's total RMB-denominated trade settlement increased further in the March quarter, accounting for more than 16 per cent of China's total foreign trade (although a significant portion reflects China's trade with Hong Kong) (Graph 2.22).

Other Asian currencies have continued to appreciate against the Japanese yen, to be around 29 per cent higher, on average, since the end of September (Graph 2.23). However, Asian currencies have been more mixed against the US dollar over recent months, partly reflecting differences in relative economic performance within the region. The South Korean won has depreciated by 2 per cent against the US dollar since the end of December, in part reflecting market concerns about a potential loss of external competitiveness to Japan. In contrast,

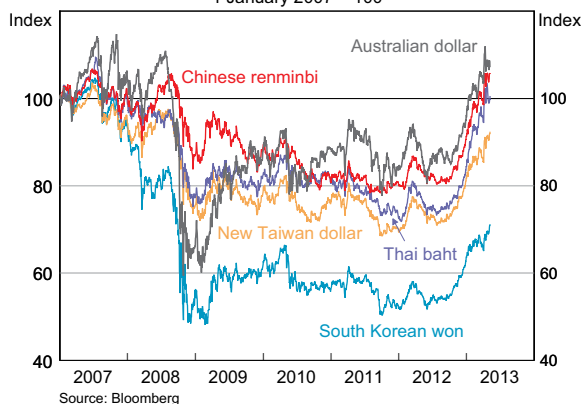
**Graph 2.22**  
**Renminbi Trade Settlement**



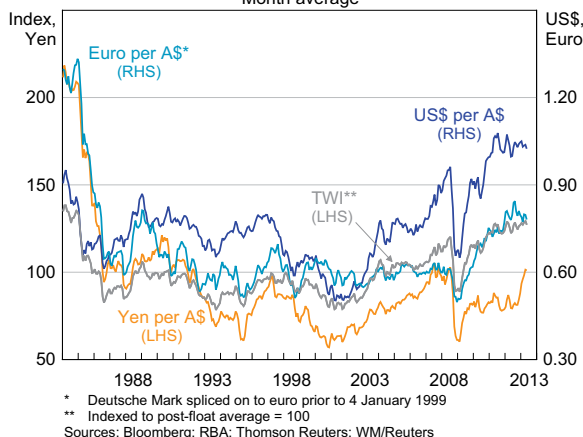
the Thai baht has appreciated by 4 per cent against the US dollar over the same period, reflecting an improved domestic economic outlook and reports of strong capital inflows.

Latin American currencies have generally appreciated against the US dollar over 2013 to date. The Mexican peso has appreciated by a further 7 per cent against the US dollar since the beginning of the year to be 20 per cent higher than its mid 2012 low, supported by recent and proposed structural

**Graph 2.23**  
**Selected Currencies against the Yen**  
 1 January 2007 = 100



**Graph 2.24**  
**Australian Dollar**  
 Month average



reforms across a range of sectors. The Brazilian real has appreciated modestly over 2013 to date, with the Brazilian authorities intervening in foreign exchange markets to limit volatility as required. The authorities in a number of other Latin American countries have expressed concerns about appreciation pressures on their currencies, with some adjusting capital control measures and/or intervening in foreign exchange markets in response.

### Australian Dollar

The Australian dollar has appreciated by around 5 per cent on a trade-weighted basis since early October 2012, largely reflecting a 26 per cent appreciation against the Japanese yen, but there has been little net change so far this year (Graph 2.24, Table 2.6). After briefly reaching its highest level since 1985 on a trade-weighted basis in early April, the Australian dollar has since depreciated against most currencies. Nevertheless, it remains at a high level by historical standards, notwithstanding the decline in export prices and interest rates.

**Table 2.6: Changes in the Australian Dollar against Selected TWI Currencies**  
 Per cent

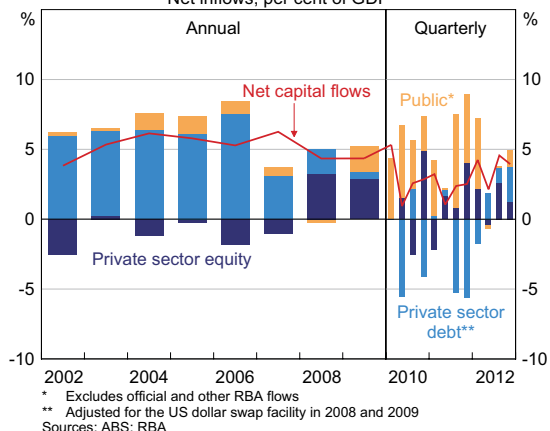
	Over 2012	Since end 2012
Japanese yen	15	12
South African rand	7	4
UK pound sterling	-3	2
Swiss franc	-1	0
South Korean won	-7	0
Canadian dollar	-1	-1
Singapore dollar	-4	-2
European euro	0	-2
US dollar	2	-2
Indonesian rupiah	10	-3
Indian rupee	5	-3
New Zealand dollar	-4	-3
Chinese renminbi	1	-4
Malaysian ringgit	-2	-5
Thai baht	-1	-6
<b>TWI</b>	<b>2</b>	<b>0</b>

Sources: Bloomberg; Thomson Reuters; WM/Reuters

## Capital Flows

Consistent with the previous two quarters, net capital inflows to the Australian economy were largely directed to the private sector in the December quarter (Graph 2.25). The net inflow primarily reflected inflows of debt and equity to private non-financial corporates, particularly to the mining sector, continuing a trend that has been evident over recent years.<sup>1</sup> The banking sector also recorded a small net inflow driven by net deposit inflows and foreign investment in bank debt, though this was partially offset by an increase in bank lending to non-residents. There was also a net inflow of capital to the public sector, though it remained well below levels seen throughout most of the 2009–2011 period and was less than new issuance. Accordingly, foreign ownership of Commonwealth Government securities declined slightly to around 70 per cent in the December quarter from 72 per cent in the September quarter.

**Graph 2.25**  
**Australian Capital Flows**  
Net inflows, per cent of GDP



<sup>1</sup> See Arsov I, B Shanahan and T Williams (2013), 'Funding the Australian Resources Investment Boom', RBA *Bulletin*, March, pp 51–61.