2. International and Foreign Exchange Markets

Central Bank Policy

Policy actions by major central banks have underpinned a significant improvement in global market sentiment since the middle of the year. The avoidance of some key risks in Europe and generally better-than-expected global economic data have also supported markets.

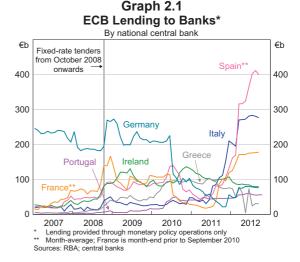
At its 6 September meeting, the European Central Bank (ECB) confirmed its willingness to purchase shorter-term sovereign bonds in secondary markets, through a new program of Outright Monetary Transactions (OMT). The existing Securities Markets Program, which had not been used to purchase sovereign debt since March 2012, was terminated. The aim of OMT is to safeguard the transmission of monetary policy in the euro area by addressing what the ECB assesses to be the 'severe distortions' in euro area government bond markets, particularly those arising from 'unfounded' fears of a euro area break-up. Key features include:

- Purchases will focus on bonds with a residual maturity of between one and three years.
- No limit has been set on the size of purchases.
- Before any ECB action occurs, governments must first request an official assistance program under which 'strict and effective' conditionality is imposed.
- For countries already under an adjustment program, such as Ireland and Portugal, the ECB will consider purchases once these countries regain full market access.
- In assessing whether purchases are warranted, the ECB will not target a particular level of

yields; rather, it will examine a range of market indicators, including yields, CDS spreads, bid-ask spreads, liquidity and volatility.

Conditions in euro area sovereign debt markets improved considerably when ECB President Draghi indicated in late July that the ECB was prepared to take decisive action to preserve the euro, and improved further after the OMT program was confirmed (see 'European Sovereign Debt Markets'). With bank funding conditions also improving, ECB lending to banks for monetary policy purposes has fallen by about 5 per cent since the end of August, to be around \in 1.1 trillion. A reduction in lending via the Bank of Spain has accounted for much of the overall decline (Graph 2.1).

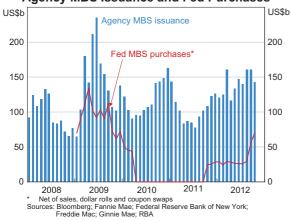
In the United States, at its September meeting, the Federal Reserve announced additional measures to ease monetary policy by expanding its asset purchases and extending its forward rate guidance.

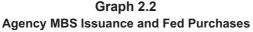


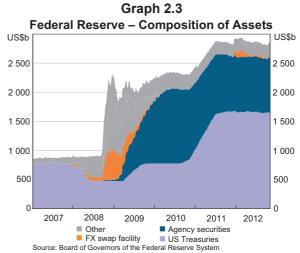
It also explicitly linked its policy outlook to economic outcomes.

The Fed will purchase additional agency mortgagebacked securities (MBS) at a pace of US\$40 billion per month. Purchases began in mid September and will continue until a 'substantial improvement' in the outlook for the labour market is seen. It was also noted that further policy action, including additional asset purchases, may be warranted. The Fed emphasised that it expects a highly accommodative stance of monetary policy to remain appropriate for a considerable time after the economic recovery strengthens and anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least until mid 2015 (previous guidance was late 2014).

The policy of reinvesting principal repayments from its holdings of agency debt and MBS into agency MBS will also be maintained. In total, around US\$65–70 billion of agency MBS will be purchased on a monthly basis, equivalent to roughly half the average gross monthly issuance of agency MBS (Graph 2.2). The Fed already held around US\$850 billion of agency MBS, purchased as part of its first round of large-scale asset purchases (Graph 2.3). The Fed will also continue its Maturity Extension Program as planned through to the end of the year; to date, the Fed has purchased about US\$585 billion of longer-term US Treasuries – funded







by the sale of short-term securities – as part of the US\$667 billion program.

The Bank of Japan increased the size of its Asset Purchase Program in September and October by a total of ¥21 trillion, to ¥91 trillion; planned purchases will now be completed by the end of 2013 (an extension of six months). The Bank also established the 'Stimulating Bank Lending Facility' which will provide funds at its policy rate to banks (against eligible collateral) that increase lending. The Bank of England has completed purchases under the £375 billion Asset Purchase Facility.

A number of other central banks have eased policy by lowering policy rates in recent months (Table 2.1). The central banks of Israel, Korea, Sweden and Thailand all cut their policy rates by 25 basis points. The Central Bank of Brazil lowered its policy rate by a total of 75 basis points, to 7.25 per cent, bringing the cumulative reduction to 525 basis points since August last year. In contrast, the Central Bank of the Russian Federation increased rates by 25 basis points to 8.25 per cent.

European Sovereign Debt Markets

Yields on euro area 'periphery' government bonds have fallen markedly since ECB President Draghi indicated in late July that the ECB would do'whatever it takes to preserve the euro'. Yields on shorter-dated

	Current level Per cent		Most recent change	Change from 2011 peak Basis points
Euro area	0.75	\downarrow	Jul 12	-75
Japan	0.05	\downarrow	Oct 10	_
United States	0.125	\downarrow	Dec 08	-
Australia	3.25	\downarrow	Oct 12	-150
Brazil	7.25	\downarrow	Oct 12	-525
Canada	1.00	\uparrow	Sep 10	-
China	6.00	\downarrow	Jul 12	-56
India	8.00	\downarrow	Apr 12	-50
Indonesia	5.75	\downarrow	Feb 12	-100
Israel	2.00	\downarrow	Oct 12	-125
Malaysia	3.00	\uparrow	May 11	-
Mexico	4.50	\downarrow	Jul 09	-
New Zealand	2.50	\downarrow	Mar 11	-50
Norway	1.50	\downarrow	Mar 12	-75
Russia	8.25	\uparrow	Sep 12	-
South Africa	5.00	\downarrow	Jul 12	-50
South Korea	2.75	\downarrow	Oct 12	-50
Sweden	1.25	\downarrow	Sep 12	-75
Switzerland	0.00	\downarrow	Aug 11	-25
Taiwan	1.875	\uparrow	Jun 11	
Thailand	2.75	\downarrow	Oct 12	-75
United Kingdom	0.50	\downarrow	Mar 09	_

Table 2.1: Policy Rates

Source: central banks

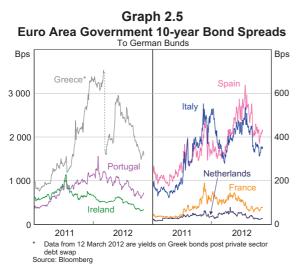
Spanish government bonds have fallen particularly sharply, with the 2-year yield declining by around 350 basis points from its recent peak, to be around the lowest level since early 2012 (Graph 2.4). Spanish 10-year government bond yields have fallen by around 200 basis points from their peak of over 7½ per cent in July. Italian government bond yields have also fallen sharply, particularly at the short end of the yield curve. More generally, spreads between yields on all periphery government bonds and German bunds have narrowed in recent months (Graph 2.5).

Notwithstanding the decrease in sovereign bond yields, investors remain concerned about the situation in Spain. There is ongoing uncertainty surrounding a potential request by the Spanish



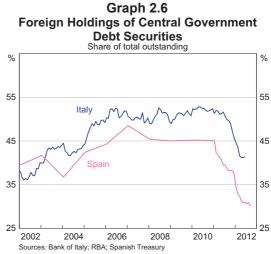


Government for a precautionary financial assistance program from European authorities which, as



noted above, is one of the prerequisites for the ECB to purchase Spanish sovereign debt under the OMT program. On the presumption that Spain will request official assistance, Moody's affirmed Spain's sovereign credit rating in October at BBB- (Standard & Poor's equivalent), the lowest investment-grade rating. The fact that Moody's did not downgrade Spain to sub-investment grade alleviated concerns that such a move would force some bond index funds that invest only in investment-grade securities to sell their holdings of Spanish government debt. Recent data suggest that foreign holdings of Spanish and Italian debt securities have stabilised at lower levels (Graph 2.6).

The results of the independent 'bottom-up' audits of the Spanish banking sector were published in late September. In aggregate, banks are assessed as needing nearly €60 billion in additional capital under an adverse macroeconomic scenario, in line with estimates from 'top-down' stress tests published in June. Half of the 14 banks reviewed will be required to raise additional capital. Most of these banks are partly state-owned, through Spain's Fund for Orderly Bank Restructuring. Government officials have indicated that Spain may need to borrow €40 billion from the European Stability Mechanism (ESM) (rather than the full €60 billion capital shortfall), after taking into account transfers of impaired assets to a 'bad



bank', private sources of capital, and imposing losses on subordinated debtholders. This would increase Spain's government debt-to-GDP ratio by around 4 percentage points.

Problems with Spanish regional governments' finances have contributed to pressure for the central government to seek further financial assistance. Nine Spanish regional governments have sought around €17 billion in financial aid from the central government's €18 billion regional liquidity fund.

In Greece, the first report on the second assistance package by the 'troika' of official agencies has been delayed by several months. Greek officials have indicated that the Greek Government will struggle to meet its payment obligations beyond mid November in the absence of ongoing official support. The review is now expected to be concluded in November. The recent Greek budget indicated that sovereign debt will peak at around 190 per cent of GDP in 2014, rather than around 170 per cent in 2013 as projected by the IMF back in March. Greek sovereign bond yields recently fell to their lowest level since August 2011 (though they remain at a very high level).

The troika completed its latest review of the Irish assistance package, noting that all fiscal targets were being met despite challenging macroeconomic conditions. Yields on Irish sovereign bonds have fallen sharply since the beginning of the year and are broadly comparable to those in Spain and Italy.

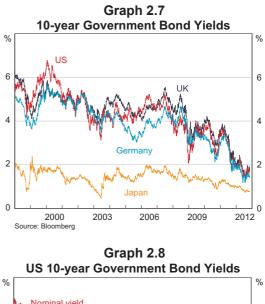
European finance ministers have agreed to give Portugal an extra year (until 2014) to bring its deficit below the European Union's (EU) 3 per cent of GDP target; the 2012 deficit is expected to be 5 per cent of GDP. Portugal has introduced new tax increases and spending cuts to meet the targets. The next disbursement of funds to Portugal under its assistance program has been approved. In addition, Portugal made its first step towards re-establishing bond market access, by exchanging \in 4 billion of bonds maturing in September 2013 for securities maturing in 2015. The bond exchange will reduce the size of the September 2013 maturity, which is unfunded under the current assistance program, to \in 6 billion (from \in 10 billion).

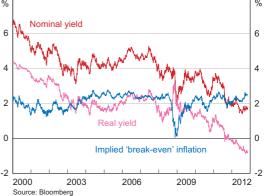
The ESM was officially launched in October. The ESM will become the euro area's main financial assistance mechanism with a peak lending capacity of €500 billion by 2014. To ensure that €500 billion is available for new programs in the interim, the temporary European Financial Stability Facility will remain available for new lending until July 2013 (as well as for the ongoing support for Greece, Ireland and Portugal).

Other Sovereign Debt Markets

Government bond yields in the major advanced economies have increased over recent months, though they remain at very low levels (Graph 2.7). Yields on 10-year German, US and UK government bonds have increased by around 20–30 basis points since late July. Yields on shorter-term government debt have also increased modestly, although 2-year government bond yields in Germany remain negative.

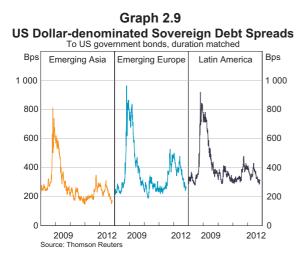
In the United States, yields on 10-year inflationlinked bonds fell to a record low of -0.9 per cent in early October, which implies a 10-year 'break-even' inflation rate of around 2½ per cent (Graph 2.8). The





slight rise in this market-based measure of inflation expectations was consistent with the announcement of additional policy stimulus by the Fed.

Spreads on US dollar-denominated debt issued by emerging market sovereigns have narrowed considerably since late July to be around their lowest levels since the onset of the financial crisis (Graph 2.9). South Korea's sovereign credit rating was upgraded by all three major credit rating agencies, based on strong fiscal fundamentals and reduced vulnerability of the Korean banking sector. In contrast, South Africa's sovereign credit rating was cut by one notch by both S&P and Moody's.



Government Financial Policy

In September, the European Commission (EC) released proposals for a single supervisory mechanism (SSM) for banks in the euro area, which followed the announcement of plans for centralised bank supervision at the June EU Leaders' Summit. At their October summit, European leaders committed to agreeing on the legislative framework for the SSM by 1 January 2013, with work on the 'operational implementation' to take place in the course of 2013. While a number of aspects of the SSM are still being debated, the proposals involve the ECB gaining additional responsibilities for bank supervision, which would be carried out in cooperation with national supervisors.

The SSM is a precondition for the ESM to be given the ability to potentially recapitalise banks directly, rather than channelling funds via the sovereign. This would avoid an ESM-funded bank recapitalisation increasing the sovereign's debt. There remains a debate about whether sovereign debt that has already been used to recapitalise banks – which is relevant for Ireland and Spain – could be retrospectively shifted to the ESM once the SSM is established.

In the United States, the US Treasury announced changes to the way the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac will repay the financial support they were provided by the

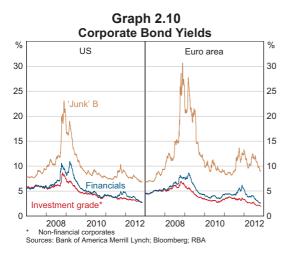
government. Instead of making a preferred dividend payment each quarter, and potentially having to request additional funds from the government to make the payment, from 2013 the GSEs will instead transfer their profits to the US Treasury in an effort to expedite the repayment of financial assistance. The GSEs' combined obligations to the US Treasury are around US\$190 billion.

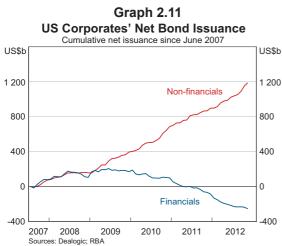
Credit Markets

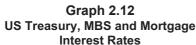
Conditions in credit markets have improved since the middle of the year, though some strains remain in European markets. Corporate bond spreads have declined and yields are at record low levels for many issuers (Graph 2.10). Corporates have responded to the favourable conditions by refinancing existing debt and reducing their use of short-term funding. Bond issuance by US non-financial firms has been particularly strong, with around US\$550 billion of bonds having been issued so far this year. In contrast, gross issuance by US financials remains subdued and has been less than the value of maturing bonds for a number of years (Graph 2.11). Euro area periphery banks' access to unsecured funding remains limited, though issuance by Spanish and Italian non-financial corporates has picked up recently.

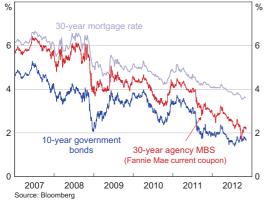
Spreads on unsecured interbank borrowing in the euro area have fallen to their lowest levels since mid 2007, while spreads in other major markets have also declined. The cost of swapping euros into US dollars in the foreign exchange market (relative to the cost of unsecured interbank funding) has fallen in recent months.

In the United States, the Fed announcement of additional agency MBS purchases led to a decline in agency MBS yields to record lows, though yields have since partly reversed those falls (Graph 2.12) There has also been a small decline in mortgage rates, with 30-year fixed rates falling by around 15 basis points since the Fed's decision, to be around 3½ per cent. However, the spread between primary mortgage rates and agency MBS yields remains elevated









relative to history and households with lower-rated credit scores still face limited access to credit.

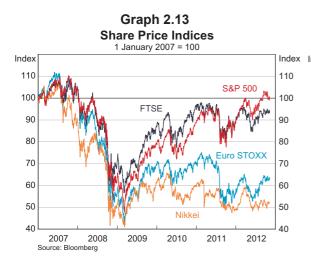
Equities

Global equity prices have risen in recent months, to be around 10 per cent higher since the start of the year (Table 2.2; Graph 2.13). As in other asset markets, sentiment has been supported by central bank actions, with better-than-expected economic data also contributing recently. Since late July, share prices have risen by around 15 per cent in the euro area and by around 5 per cent in the other major developed markets. US equities rose to around their highest level since January 2008, but have

Table 2.2: Changes in International Share Prices Per cent

	Since end 2011	Since late July
United States		
– Dow Jones	6	2
– S&P 500	11	5
– NASDAQ	13	3
Euro area		
– STOXX	9	13
United Kingdom		
– FTSE	4	5
Japan		
– Nikkei	б	7
Canada		
– TSE 300	2	6
Australia		
– ASX 200	11	10
China		
– China A	-4	-1
MSCI indices		
– Emerging Asia	11	10
– Latin America	5	5
– Emerging Europe	8	7
– World	9	6

Source: Bloomberg

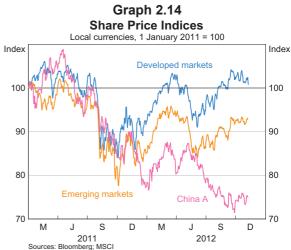


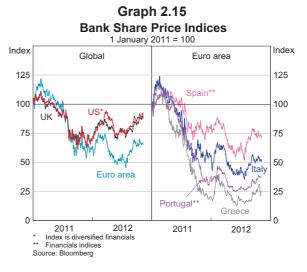
fallen from recent highs, in part due to some mixed corporate earnings results. In contrast, share prices in Japan and the euro area remain well below their pre-crisis levels.

Consistent with the improvement in sentiment, share market volatility has fallen to low levels in the United States and Europe, and global equity issuance has been firm. Furthermore, the amount of shares traded in equity markets has picked up a little recently, after volumes had declined in August to the lowest level in a number of years alongside uncertainty about key policy decisions in Europe and the United States.

Chinese equity prices have underperformed global equity markets since the middle of the year, having fallen by around 20 per cent between their May peak and late September (Graph 2.14). Much of the underperformance was due to concerns about China's economic outlook. More recently, some better-than-expected economic data and continued speculation about government policy actions have seen share prices retrace some of the decline.

Bank share prices have risen by around 20 per cent in the United States and United Kingdom from their recent lows (Graph 2.15). European bank share prices have now risen by around 45 per cent since ECB President Draghi's comments in late July, with the strength broad based across the region. US banks





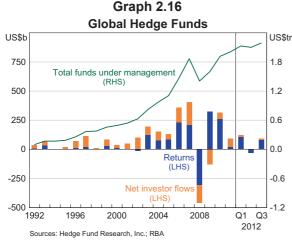
reported better-than-expected earnings for the September quarter: revenues were supported by an improvement in conditions in the US housing market, in particular a pick-up in refinancing activity, while investment banking revenues were also generally firm. Banks' mortgage lending practices continue to attract attention, with the US Department of Justice recently filing a lawsuit against Bank of America, alleging that the bank's Countrywide subsidiary committed fraud by selling poor-quality mortgages to government-sponsored enterprises.

September quarter earnings reported by European banks have been mixed. Several banks have

announced plans to cut costs, including by scaling back their investment banking activities. Increased provisions for non-performing property loans continue to weigh on the profits of Spanish banks. Claims on British banks relating to the mis-selling of payment protection insurance continue to affect profit results.

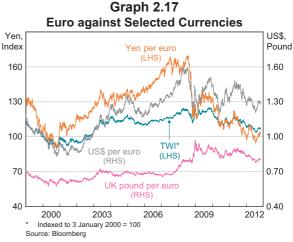
Hedge Funds

Global hedge funds recorded an average return on investments of 6 per cent over the year to September, which was substantially smaller than the return recorded by global equity markets on a total return basis (that is, including dividends) over the same period (Graph 2.16). Nevertheless, monthly returns from hedge funds have continued to be less volatile than equity market returns. Funds under management by the global hedge funds industry increased to US\$2.2 trillion over the September quarter, reflecting both the positive average investment return and a small injection of new capital.



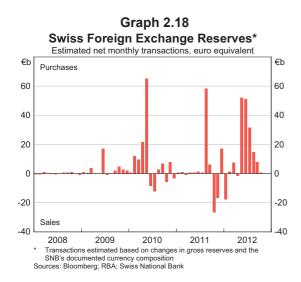
Foreign Exchange

Foreign exchange markets have also been influenced by recent central bank policy measures announced in Europe and the United States. Markets interpreted the ECB's OMT program as alleviating some of the near-term risks associated with the outlook for the euro area, and this has contributed to the euro appreciating by around 2 per cent on a trade-weighted basis from the 10-year low it reached in July (Graph 2.17). The appreciation over recent months has been broad based, with the euro rising not only against the US dollar, but also against the currencies of highly rated sovereigns, such as Australia, Canada and Sweden. Since the start of the year, the euro is moderately lower against both the US dollar and on a trade-weighted basis.



The reduction in near-term risks associated with the outlook for the euro area has led to a moderation in safe-haven flows into the Swiss franc, which has depreciated slightly against the euro since early September after trading very close to its ceiling of 1.20 francs per euro since the start of the year. This has also been reflected in a scaling back in recent months of foreign currency purchases by the Swiss National Bank (SNB) to defend the ceiling (Graph 2.18). The reserves data published by the SNB suggest that a significant amount of the euros purchased have since been exchanged for other currencies.

The anticipated announcement by the Federal Reserve of a third round of asset purchases weighed on the US dollar, which has depreciated by around 3 per cent on a trade-weighted basis since its peak in late July (Graph 2.19). The recent broad-based





depreciation of the US dollar reverses its broadbased appreciation during the period of heightened market uncertainty in May, leaving the tradeweighted index unchanged over 2012 to date and not far above its historical low (Table 2.3).

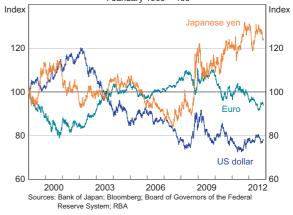
Consistent with a reduction in safe-haven and repatriation flows, the yen depreciated by 2 per cent in trade-weighted terms between late July and early October, depreciating in particular against the strengthening euro (Graph 2.20). Nonetheless, with the yen not far below the multi-decade highs it reached in 2011 against the US dollar and on a tradeweighted basis, the Japanese authorities reiterated

Table 2.3: Change in US Dollar against Selected Currencies Per cent

	Since end 2011
Brazilian real	9
South African rand	7
Indonesian rupiah	6
Japanese yen	4
Indian rupee	2
European euro	1
Swiss franc	1
Chinese renminbi	-1
Australian dollar	-2
Canadian dollar	-2
Thai baht	-3
UK pound sterling	-3
Swedish krona	-3
Malaysian ringgit	-3
New Taiwan dollar	-4
Singapore dollar	-6
South Korean won	-6
New Zealand dollar	-6
Mexican peso	-6
Philippine peso	-7
Majors TWI	0
Broad TWI	-1
Sources: Bloomberg; Board of	Governors of the Federal

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





their willingness to curtail further appreciation if required. The Japanese yen has since depreciated by a further 2 per cent against the US dollar and in trade-weighted terms, in part reflecting the Bank of Japan's decision to increase the size of its asset purchase program. Nevertheless, the yen remains around its long-run average in real effective terms.

The Chinese renminbi (RMB) has appreciated by around 2 per cent against the US dollar from its trough in July, to be slightly stronger than its early May peak (Graph 2.21). The widening of the official trading band for the RMB against the US dollar in April has led to greater flexibility in the exchange rate. Over recent months, the RMB has traded over the full range of its +/-1 per cent daily trading band against the US dollar, appreciating from the lower bound of the band in late July to the upper bound of the band in October. On a trade-weighted basis, the RMB has appreciated since mid September, but still remains slightly below its late May peak.

The recent appreciation of the RMB has coincided with a rise in China's foreign exchange reserves (in US dollar terms) over the September guarter



(Table 2.4). Official data suggest that the increase primarily reflects valuation effects (related to the appreciation of the euro) with negligible net purchases of foreign exchange reserves over the quarter, despite the appreciation pressure on the renminbi over this period. This is in contrast to the June quarter, when depreciation pressures on the RMB were accompanied by rare net sales of foreign exchange by the People's Bank of China to support the currency.

	Three-month-end	Level	
	US\$ equivalent (billions)	Per cent	US\$ equivalent (billions)
China ^{(a),(b)}	45	1	3 285
Japan	-1	0	1 197
Switzerland	36	9	455
Russia	10	2	453
Taiwan ^(a)	8	2	399
Brazil ^(c)	1	0	368
South Korea	9	3	315
Hong Kong ^(a)	11	4	302
India	4	2	260
Thailand ^(b)	8	5	172
Indonesia	4	4	103

Table 2.4: Foreign Currency Reserves As at end October 2012

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

(b) End September

(c) Excludes intervention using currency swaps

Sources: Bloomberg; CEIC; IMF; RBA; central banks

Other central banks in Asia and Latin America also accumulated reserves (in US dollar terms) over recent months, consistent with market reports of intervention to counter appreciation pressure on local currencies, although valuation effects will have also played some role. In October, for the first time since December 2009, the Hong Kong Monetary Authority intervened in the foreign exchange market to cap the rise in the Hong Kong dollar, purchasing a total of US\$2.6 billion in foreign exchange.

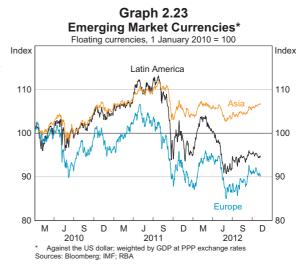
RMB-denominated trade settlement increased further in the September guarter, accounting for around 121/2 per cent of China's total foreign trade (Graph 2.22). In order to further promote the use of the RMB in cross-border transactions, the Chinese authorities have taken additional steps to develop the offshore RMB market over recent months. Notably, China and Taiwan signed a Memorandum of Understanding to establish a clearing and settlement mechanism for RMB-denominated trade between the two jurisdictions. The proposed arrangement will include the establishment of an offshore RMB clearing bank in Taiwan (similar to the current arrangement in Hong Kong) and the establishment of a Taiwanese dollar clearing bank in Mainland China. In addition, a number of restrictions governing the Qualified Foreign Institutional Investors (QFII) scheme were eased, including allowing investment in the domestic

Graph 2.22 RMB Trade Settlement



interbank bond market and the purchase of larger stakes in domestic listed companies.

After depreciating between February and early June, most other Emerging Asian currencies have since appreciated gradually against the US dollar (Graph 2.23). The Indonesian rupiah and Indian rupee are two exceptions, and in each case the authorities have introduced measures designed to encourage net capital inflows. Although the Indian rupee appreciated sharply in late September in response to the announcement of some recent reforms, both the rupee and the rupiah remain 8–10 per cent below their late January/early February peaks.

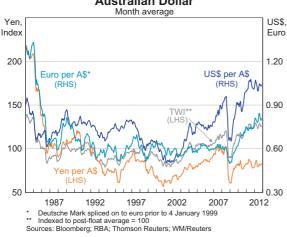


In Latin America, the Brazilian real has appreciated modestly against the US dollar since its trough in late May, with the authorities intervening in the foreign exchange market to counter appreciation pressures on the currency. In contrast, both the Mexican and Chilean pesos have appreciated by around 6 per cent against the US dollar over the same period.

The currencies of emerging European economies generally experienced relatively pronounced appreciations against the US dollar between early June and early October, reflecting improved market sentiment towards the euro area, particularly following the announcement of the ECB's OMT program.

Australian Dollar

The Australian dollar is little changed since the beginning of the year on a trade-weighted basis and remains at a high level by historical standards, notwithstanding the decline in Australia's terms of trade and softer global outlook (Graph 2.24; Table 2.5).



Graph 2.24 Australian Dollar

Table 2.5: Change in Australian Dollar against Selected TWI Currencies Per cent

	Since end 2011
South African rand	9
Indonesian rupiah	8
Japanese yen	6
Indian rupee	5
European euro	4
Swiss franc	3
US dollar	2
Chinese renminbi	1
Canadian dollar	0
Thai baht	-1
UK pound sterling	-1
Malaysian ringgit	-1
Singapore dollar	-4
New Zealand dollar	-4
South Korean won	-4
TWI	2

Sources: Bloomberg; Thomson Reuters; W/M Reuters

Consistent with developments in other currencies, the Australian dollar has depreciated against the euro over recent months, to be around 5 per cent below its mid August peak. Intraday volatility in the Australian dollar has been below the level of recent years.

Capital Flows

In contrast to the trend over the past few years, net capital inflows in the June guarter were directed to the private sector, with the public sector recording a small net outflow (Graph 2.25). Nevertheless, nonresidents continue to hold around 77 per cent of the stock of Commonwealth Government securities on issue. The net outflow from the public sector may have been related to a large Commonwealth Government bond maturing during the guarter and another coming due for maturity in a year's time, which for some foreign investors is a trigger to roll out of these positions and possibly into bank deposits. This scenario would be consistent with the observed increase in non-resident deposits with Australian banks in the June guarter, which was a key driver of the net private capital inflow. Ongoing net equity inflows to Australian corporates - particularly the mining sector - also contributed to the net inflow of private capital.

