

# 2. International and Foreign Exchange Markets

Over the past few months, changes in expectations regarding monetary policy have been a key driver of developments in financial markets. The US Federal Reserve and the Bank of Canada (BoC) have raised their policy rates in recent months. The US Federal Reserve has also indicated that it intends to begin to reduce its balance sheet in the near term. In addition, a number of central banks in advanced economies have indicated that they are more likely to tighten policy in the future or are at least less likely to ease policy (than was previously the case). These changes have occurred against the backdrop of a general improvement in economic conditions, including a further tightening in labour markets, but with some recent declines in inflation (driven in part by lower oil prices). In response to these developments, sovereign bond yields have generally risen, but the increase has been modest in comparison with some earlier episodes, and financial conditions remain favourable. Equity valuations remain high and credit spreads remain narrow. Exchange rates have also responded to changing expectations for monetary policy. The US dollar is now lower than it was at the time of the US election. Consistent with that, a number of currencies are close to highs of the past few years against the US dollar, including the euro, the Canadian dollar and the Australian dollar.

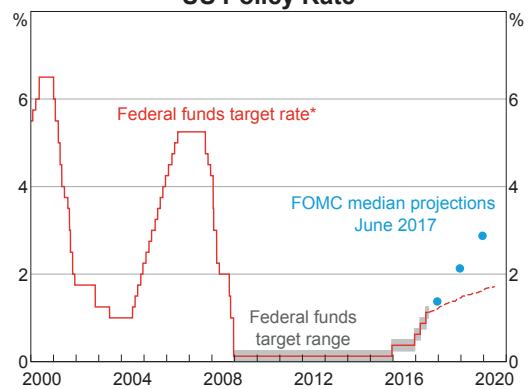
## Central Bank Policy

The US Federal Reserve has increased its policy rate three times since December last year. The most recent increase was in June by 25 basis points to 1–1.25 per cent. The Federal Open

Market Committee (FOMC) expects to raise the policy rate by a further 100 basis points by the end of 2018 (Graph 2.1). It has also recently outlined a plan to gradually reduce the size of its balance sheet, which it expects to start relatively soon. The FOMC has noted that the appropriate size of the balance sheet in the long run is uncertain but that it is likely to be larger than the US\$1 trillion it was before the financial crisis. The FOMC expects inflation to remain somewhat below its goal in the near term but to stabilise around its goal over the medium term. Chair Yellen has acknowledged that if inflation continues to undershoot the FOMC's goal, then the FOMC would adjust the pace of its policy tightening accordingly. Market participants generally expect a substantially slower pace of tightening than that projected by the FOMC.

The BoC increased its policy rate by 25 basis points in July. In the accompanying statement, the BoC observed that the economy is growing

**Graph 2.1**  
**US Policy Rate**



\* Dashed line shows current market expectations  
Sources: Bloomberg; Board of Governors of the Federal Reserve System

quicker than its potential rate and judged that recent softness in inflation will be temporary. Market prices suggest that the BoC is expected to raise its policy rate further in the coming months. In a number of other advanced economies, monetary policy is expected to become less accommodative than had previously been the case. The Bank of England (BoE) has signalled that it may be closer to increasing its policy rate than it was a couple of months ago. It has noted that its tolerance for above-target inflation will decline as spare capacity in the economy lessens. Monetary policy is also expected to be less accommodative in Sweden than previously anticipated, after the central bank stated that it is less likely to lower its policy rate than before. Similarly, in Norway the central bank has indicated that it is less likely to lower its policy rate than previously. It now expects to keep its policy rate unchanged over the next couple of years.

The European Central Bank (ECB) has left its policy settings unchanged in recent months but in June it removed its bias to ease interest rates further. It stated that the risks to the outlook for economic growth had improved and were now broadly balanced. Nonetheless, the ECB noted that very accommodative monetary policy remains appropriate given that inflationary pressures are still subdued. Consistent with this, market prices imply that the ECB is expected to keep the deposit rate at its current level until at least late 2018. The ECB has indicated that it will discuss whether to reduce the pace of asset purchases at one of its forthcoming meetings. Market analysts generally expect that such a reduction will begin in early 2018.

The Bank of Japan (BoJ) has left its policy settings unchanged since announcing its policy of 'yield curve control' in September 2016. The BoJ has reiterated its intention to purchase around ¥80 trillion in Japanese government bonds

annually, although its actual purchases have fallen below this pace recently (Graph 2.2). While the BoJ expects inflation to continue to pick up as economic growth remains above potential, inflation is not expected to reach the BoJ's target within its three-year forecast horizon.

The central bank of Mexico increased its policy rate in recent months, citing the need to anchor inflation expectations (Table 2.1). In contrast, the central banks of Brazil, India, Russia and South Africa have lowered interest rates because inflation has slowed substantially in their economies.

**Table 2.1: Monetary Policy**

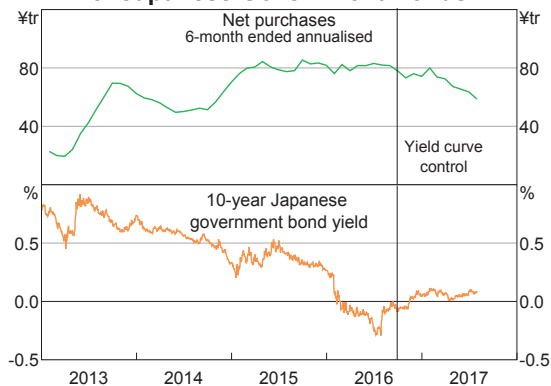
	<b>Policy rate</b> Per cent	<b>Most recent change</b>	
Euro area <sup>(a)</sup>	-0.40	↓	Mar 16
Japan <sup>(a)</sup>	-0.10	↓	Jan 16
United States <sup>(b)</sup>	1.125	↑	Jun 17
Australia	1.50	↓	Aug 16
Brazil	9.25	↓	Jul 17
Canada	0.75	↑	Jul 17
Chile	2.50	↓	May 17
India	6.00	↓	Aug 17
Indonesia	4.75	↓	Oct 16
Israel	0.10	↓	Feb 15
Malaysia	3.00	↓	Jul 16
Mexico	7.00	↑	Jun 17
New Zealand	1.75	↓	Nov 16
Norway	0.50	↓	Mar 16
Russia	9.00	↓	Jun 17
South Africa	6.75	↓	Jul 17
South Korea	1.25	↓	Jun 16
Sweden	-0.50	↓	Feb 16
Switzerland <sup>(b)</sup>	-0.75	↓	Jan 15
Thailand	1.50	↓	Apr 15
Turkey	8.00	↑	Nov 16
United Kingdom	0.25	↓	Aug 16

(a) Marginal rate paid on deposits at the central bank

(b) Midpoint of target range

Sources: Central banks; RBA; Thomson Reuters

**Graph 2.2**  
**Bank of Japan Purchases**  
**of Japanese Government Bonds**



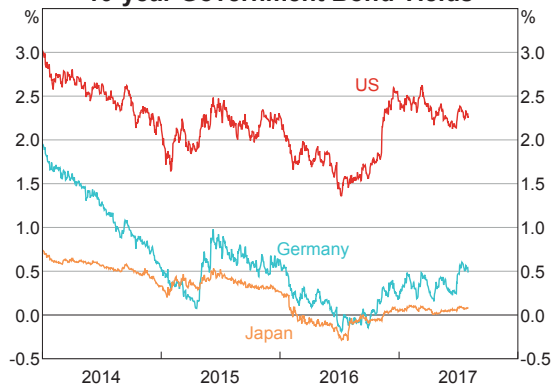
Sources: Bloomberg; RBA; Thomson Reuters

## Sovereign Debt Markets

Government bond yields in advanced economies have increased as markets have adjusted their expectations regarding the extent of future monetary policy accommodation (Graph 2.3). Nonetheless, yields remain at historically low levels, consistent with the current and prospective low levels of central bank policy rates and the high demand for government bonds, including from central banks under their asset purchase programs.

Notwithstanding their recent increase, yields on 10-year US Treasuries are lower than at the

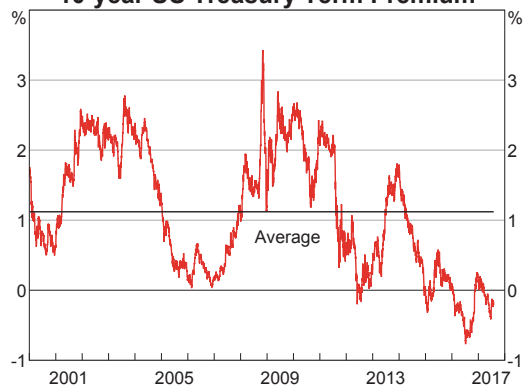
**Graph 2.3**  
**10-year Government Bond Yields**



Source: Bloomberg

beginning of the year. This reflects the market's reduced expectations for US fiscal stimulus and weaker-than-expected inflation data. One of the reasons that longer-term yields remain historically low is the very low level of the term premium – which is the additional return investors require to compensate for the risks of holding long-term bonds. This is at a low level partly because of the Federal Reserve's large holdings of US dollar securities (Graph 2.4). The Federal Reserve has estimated that if it reduces the size of its balance sheet over the next five years or so, the term premium would increase by about 60 basis points over this period.<sup>1</sup>

**Graph 2.4**  
**10-year US Treasury Term Premium**



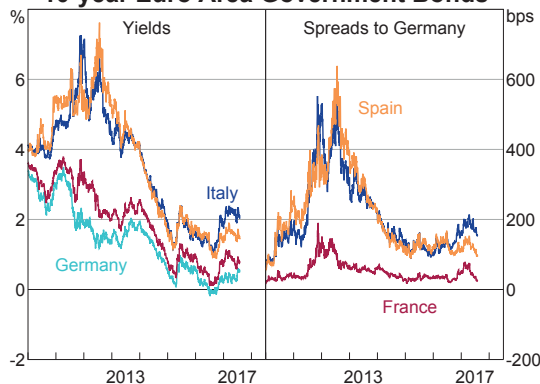
Source: Federal Reserve Bank of New York

In Europe, yields on 10-year German government bonds increased to their highest level since early 2016 after comments by the ECB President in late June were interpreted by the market as signalling less accommodative monetary policy than previously expected. The spreads between yields on other euro area government bonds and German government bonds have narrowed along with the decline in political uncertainty in the currency union (Graph 2.5). Of particular

<sup>1</sup> See Bonis B, J Ihrig and M Wei (2017), 'The Effect of the Federal Reserve's Securities Holdings on Longer-term Interest Rates', *FEDS Notes*, Washington: Board of Governors of the Federal Reserve System, 20 April. Available at <<https://doi.org/10.17016/2380-7172.1977>>.

**Graph 2.5**

**10-year Euro Area Government Bonds**



Source: Bloomberg

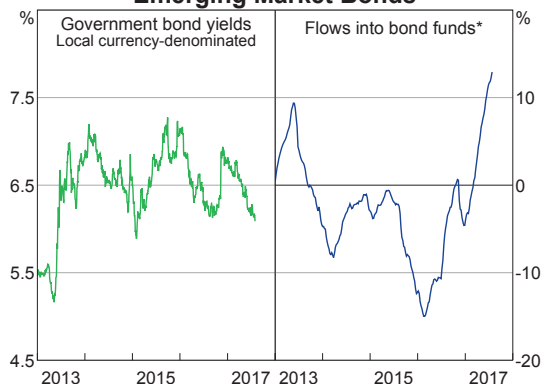
note was the election of Emmanuel Macron, a pro-euro candidate, to the French Presidency and the strong majority gained by his party in the National Assembly. Meanwhile, Greece reached an agreement with its creditors for the disbursement of another tranche of funding that was largely used to meet substantial debt repayments in July. Greece also returned to the bond market for the first time in three years, issuing €3 billion worth of 5-year bonds.

Yields on 10-year Japanese government bonds remain close to the BoJ's target of around 0 per cent under its policy of 'yield curve control'. To stem a rise in yields in early July, the BoJ offered to purchase an unlimited quantity of government bonds with maturities of 5–10 years at yields slightly above those prevailing in the market. Although there was no take-up of the offer, the BoJ operation signalled an intention to limit any rise in yields and yields declined modestly in response.

In emerging markets, yields on government bonds that are denominated in local currencies have declined since the beginning of the year (Graph 2.6). The decline in yields is consistent with a decrease in inflation, a lowering of monetary policy rates in many emerging markets and a decline in risk premia as the economic

**Graph 2.6**

**Emerging Market Bonds**



\* Cumulative since end 2012, per cent of initial assets under management

Sources: EPFR Global; Thomson Reuters

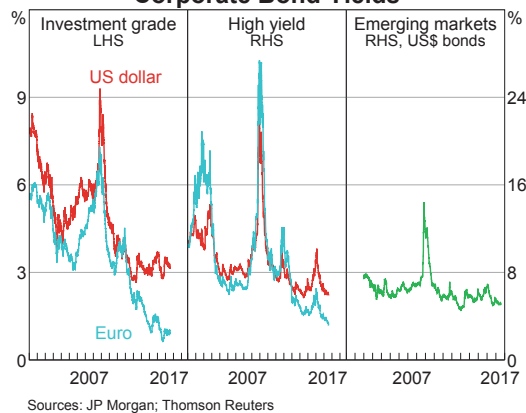
outlook has improved. This latter change has been accompanied by persistent flows of capital into emerging market bonds, as investors have sought to enhance their returns amid a global environment of low yields.

## Credit Markets

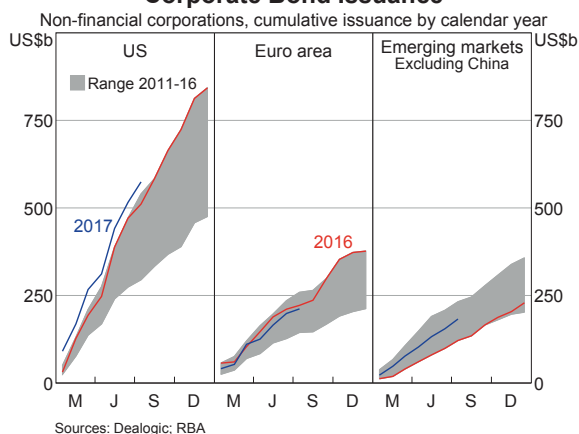
Financial conditions for the corporate sector remain very favourable. Yields on corporate bonds are low in part because spreads to sovereign bonds have continued to narrow (Graph 2.7). Non-financial corporations appear to have good access to funding and have taken advantage of the low yields by increasing their issuance of bonds (Graph 2.8). For firms headquartered in the United States, gross issuance over the year to date has been very strong. Issuance by firms from emerging markets has also been strong relative to recent years. For European firms, issuance of euro-denominated bonds has been supported by continued purchases of these securities by the ECB.

The favourable funding conditions have persisted even as the US Federal Reserve has raised its policy rate and as markets have revised down their expectations regarding the extent of monetary policy accommodation elsewhere. Conditions have been underpinned by the

**Graph 2.7**  
**Corporate Bond Yields**



**Graph 2.8**  
**Corporate Bond Issuance**

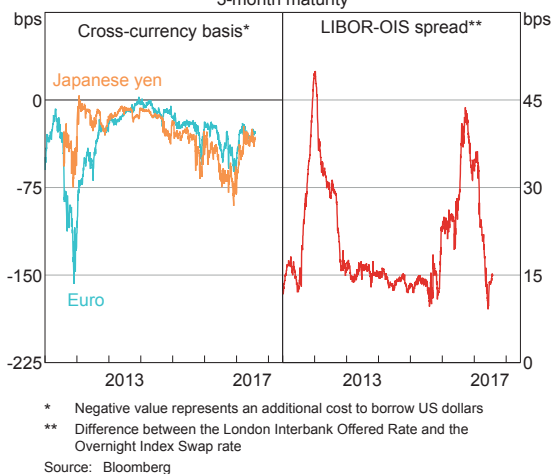


improved global economic environment (see ‘International Economic Developments’ chapter), which has supported corporate earnings. At the same time, uncertainty about the future path of earnings has declined in part because economic data have generally evolved largely as expected.

Conditions in short-term US dollar funding markets remain favourable. The additional cost of borrowing US dollars in exchange for foreign currency remains lower than in the second half of 2016, as does the cost of borrowing US dollars in exchange for high-quality collateral. Moreover, the rate on unsecured lending compared with the risk-free rate (as captured by the LIBOR-OIS

spread) has fallen markedly over the year to date, after rising ahead of the implementation of US money market fund reforms in 2016 (Graph 2.9). In part, the spread has declined because banks have diversified their funding sources to other markets – including by raising deposits – and have reduced their reliance on unsecured short-term debt.

**Graph 2.9**  
**US Dollar Funding Costs**  
3-month maturity

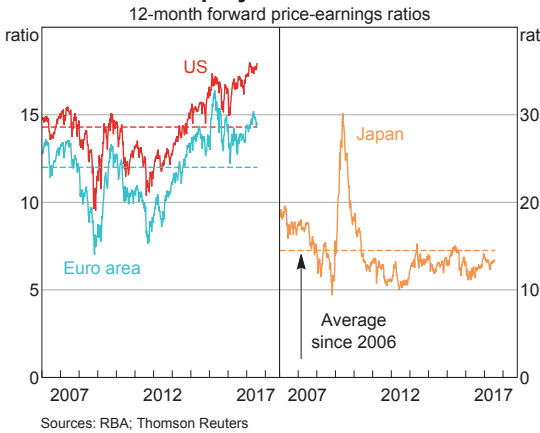


## Equity Markets

Conditions in equity markets also remain favourable for corporations, with valuations historically high on a range of measures (Graph 2.10). Share prices in advanced economies have risen steadily since around the middle of 2016, partly reflecting an improvement in economic conditions and a pick-up in corporate earnings growth. Although earnings growth slowed somewhat in the June quarter, earnings tended to be higher than analysts had expected.

The information technology (IT) sector has experienced the largest increase in share prices this year. This increase, along with the sector’s large and growing share of the overall equity market, has contributed to the relatively high equity valuations more broadly.

**Graph 2.10**  
**Equity Valuations**

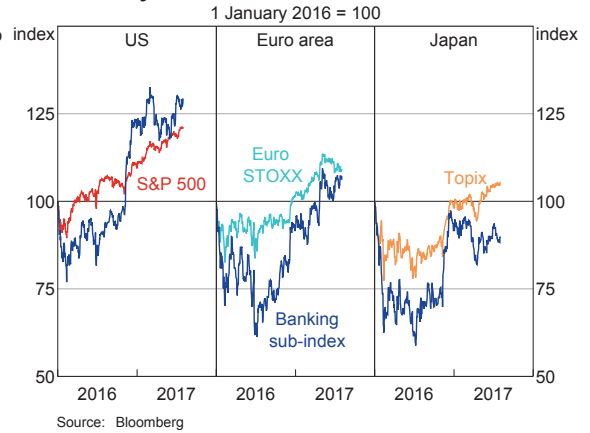


Bank share prices have recently been supported by the higher yields on long-term government bonds (Graph 2.11). Prices of US bank shares were also buoyed by the results of the Federal Reserve's annual stress tests. All 34 banks covered by the tests would exceed their minimum capital requirements under the 'severely adverse' scenario. The Federal Reserve also approved the capital plans of the 34 banks, which include substantially higher dividend payments and share buybacks than last year.

The June quarter earnings of US and European banks exceeded analysts' expectations, primarily reflecting higher investment banking revenues and lower provisions for loan losses. However, trading revenues declined amid low volatility in financial markets.

In Europe, recent regulatory actions to deal with a number of troubled banks were viewed positively by the market. The European Commission authorised a 'precautionary recapitalisation' of Italy's Monte dei Paschi di Siena, which will involve the provision of €5.4 billion in state aid. The Commission also approved plans whereby the Italian Government will take ownership of the non-performing assets of two small Italian banks, with their other assets

**Graph 2.11**  
**Major Market Bank Share Prices**



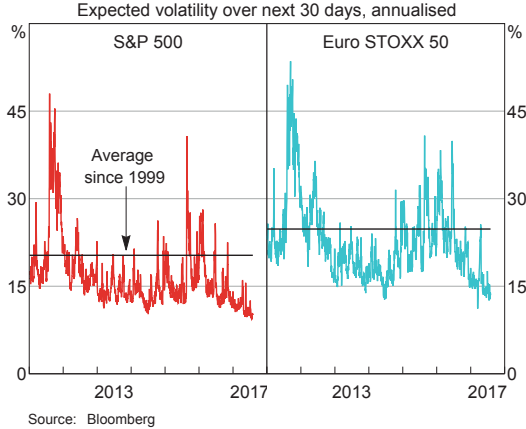
transferred to Intesa Sanpaolo, which in turn will receive a €5.2 billion capital injection from the government (plus substantial government guarantees). In Spain, the Commission approved the resolution of Banco Popular, under which its equity and subordinated debt were written down and the bank was sold to Banco Santander for the notional sum of €1.

Volatility remains low across financial markets, especially in equity markets (Graph 2.12). This appears to reflect a number of factors, including low volatility in global economic growth over recent years and perceptions of greater certainty around central bank policy. Measures of implied volatility, which are derived from option prices, have been further dampened by an increase in the supply of options – or 'insurance' – by investors seeking yield enhancement.

Share prices in emerging Asian markets have increased considerably this year (Graph 2.13). The rise in prices has been especially large for IT firms, consistent with the strong growth that has occurred in semiconductor production and trade. Foreign capital has flowed steadily into emerging market equity funds more broadly this year, encouraged by the improving outlook for economic growth in many of these economies.

**Graph 2.12**

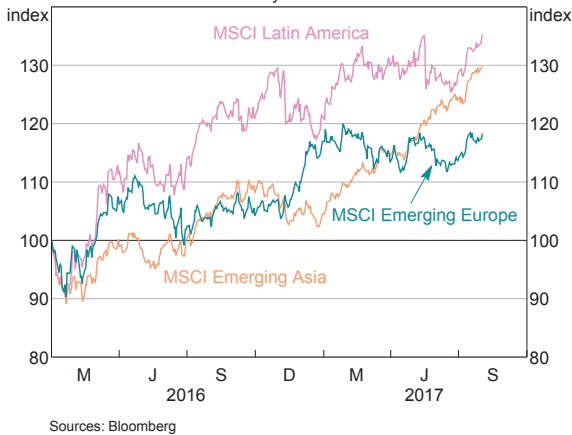
**Equity Volatility Indices**



**Graph 2.13**

**Emerging Market Share Prices by Region**

1 January 2016 = 100



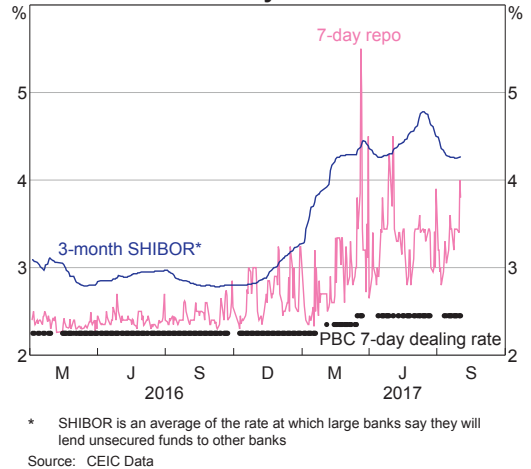
**Chinese Financial Markets**

Conditions in Chinese financial markets have tightened this year as the Chinese authorities address concerns about financial system stability, particularly the extent of leverage within the financial system (see 'Box B: Recent Developments in Chinese Financial Regulations'). In particular, the People's Bank of China (PBC) has facilitated a rise in money market interest rates since late last year (Graph 2.14). This change, combined with the announcement of various regulatory measures, has contributed to tighter financial conditions

for corporations. Yields on bonds issued by Chinese corporations have increased markedly since late 2016 (Graph 2.15). Weaker demand for corporate bonds has weighed on bond issuance by non-financial corporations, which has declined over 2017 to date.

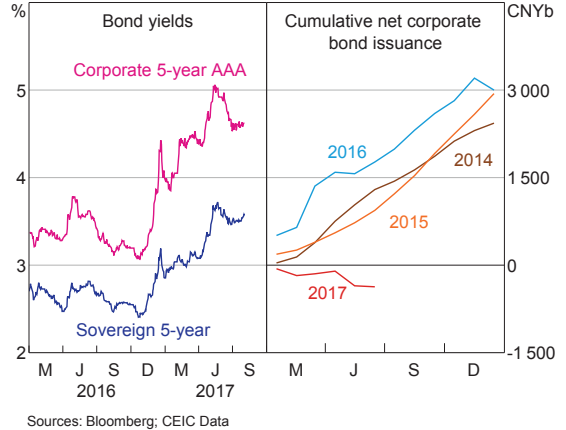
**Graph 2.14**

**Chinese Money Market Rates**



**Graph 2.15**

**Chinese Bond Markets**



More recently, conditions in financial markets have eased somewhat following an increase in the supply of liquidity by the PBC in its market operations, which steered money market rates a little lower. Sovereign bond yields declined in response and corporate bond spreads narrowed,

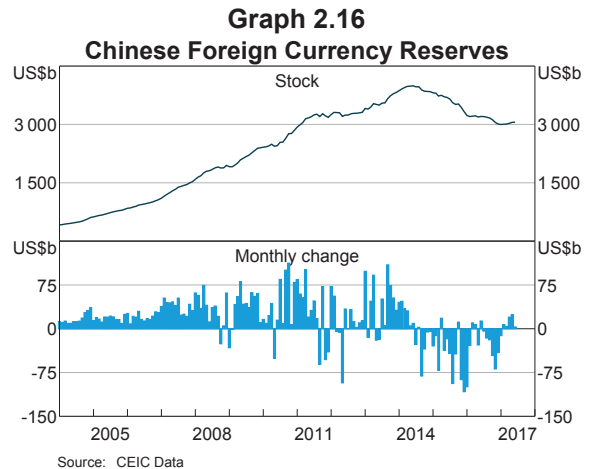
though these remain elevated compared with late last year and corporate bond issuance remains weak.

Chinese share prices have risen in the past few months, partly in response to easing monetary conditions. Global index provider MSCI announced that it would include most Chinese onshore shares (A shares) with a large capitalisation in its Emerging Market Index. Beginning in June 2018 the onshore shares will have a weight of 0.7 per cent in the index, giving fund managers that track the index about one year to buy around US\$12 billion of A shares.

China's Bond Connect became operational last month, allowing most offshore investors to access the Chinese bond market via Hong Kong (in so-called 'northbound' trade) without use of a custodian located in mainland China (which would otherwise hold assets on behalf of clients and provide services, such as transaction settlements). While this makes it easier for new investors to access the Chinese bond market, onshore custodians are still required for investors to access some onshore hedging markets. The possibility of 'southbound' trading will be explored by the authorities at a later date.

The introduction of China's Bond Connect is consistent with other actions by the Chinese authorities to encourage capital inflows. Authorities have also been placing greater scrutiny on capital outflows. These changes, combined with some appreciation of the Chinese renminbi (RMB) against the US dollar, have reduced the pace of capital outflows over 2017 to date relative to previous years. Over the March quarter, there were net capital inflows, mostly reflecting an increase in foreigners' holdings of RMB with Chinese banks and the repayment of trade credit by foreign firms to Chinese firms. Chinese firms had previously extended the time frame over which foreign firms were required to settle invoices so as

to delay receiving their (foreign currency-denominated) export earnings in the expectation that the RMB would depreciate further. The reduction in capital outflows over 2017 to date has contributed to a stabilisation of the value of the PBC's foreign currency reserves at a little above US\$3 trillion, following a marked decline in reserves since mid 2014 (Graph 2.16).



Following a noticeable depreciation over 2016, the RMB has depreciated further on a trade-weighted (TWI) basis over 2017 to date (Graph 2.17). In contrast, the currency has appreciated by around 3 per cent against the US dollar. The RMB appreciated noticeably against the US dollar around the end of May, in part reflecting the PBC setting the RMB's daily fixing rate – around which it can trade within a  $\pm 2$  per cent band – at a more appreciated rate than the previous day's closing rate. The move coincided with an announcement by the PBC that it had added a discretionary 'counter-cyclical adjustment factor' to the mechanism used to set the RMB's daily fixing rate against the US dollar.

## Foreign Exchange

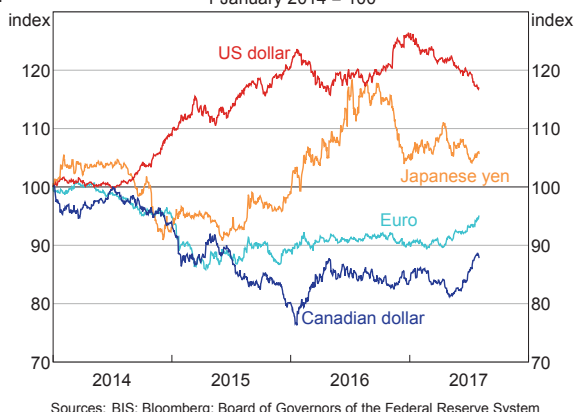
Similar to recent developments in other financial markets, exchange rates have been affected by market participants' expectations that monetary



**Graph 2.17**  
**Chinese Exchange Rates**



**Graph 2.18**  
**Nominal Trade-weighted Exchange Rates**  
1 January 2014 = 100



policy will be less accommodative in some advanced economies than earlier anticipated. In particular, the euro and the Canadian dollar appreciated following actions or changes in forward guidance by central banks in those economies, and are close to highs of recent years against the US dollar (Graph 2.18). The euro has also been supported by a reduction in political uncertainty, following the defeat of euro-sceptic parties in a number of elections in the region.

In contrast, the US dollar has depreciated further in recent months, to be a little below its level just prior to the US election (Table 2.2). The broad-based depreciation of the US dollar has occurred despite the Federal Reserve having increased its policy rate further. As in other financial markets, measures of volatility in foreign exchange markets remain at low levels.

Developments in emerging market currencies have been mixed over recent months (Graph 2.19). The Mexican peso has appreciated against the US dollar since the start of the year, to be above its level prior to the US election. This is consistent with recent political developments in Mexico, an easing of concerns about trade relations between Mexico and the United States and a tightening of monetary policy in Mexico.

**Table 2.2: Changes in the US Dollar against Selected Currencies**  
Per cent

	Over 2016	2017 to date
Philippine peso	6	2
Indonesian rupiah	-2	-1
Russian rouble	-14	-2
Chinese renminbi	7	-3
Brazilian real	-18	-4
Malaysian ringgit	5	-4
Swiss franc	2	-5
Japanese yen	-3	-5
Singapore dollar	2	-6
Indian rupee	3	-6
Canadian dollar	-3	-6
UK pound sterling	19	-7
New Taiwan dollar	-1	-7
New Zealand dollar	-1	-7
South Korean won	3	-7
Thai baht	-1	-7
Australian dollar	1	-10
Swedish krona	8	-11
European euro	3	-11
Mexican peso	21	-14
<b>Trade-weighted index</b>	<b>4</b>	<b>-7</b>

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

**Graph 2.19**  
**Asian and Emerging Market Currencies**

Against the US dollar, 1 July 2016 = 100



Source: Bloomberg

The currencies of most emerging European economies have also appreciated against the US dollar over this period, moving broadly in line with the euro. The Argentine peso has depreciated noticeably against the US dollar in recent months, amid uncertainty regarding the

outcome of the upcoming mid-term legislative election.

The gross foreign currency reserves of most emerging market economies have increased since the end of March 2017 (Table 2.3). This is consistent with the depreciation of the US dollar in the June quarter, which increased the US dollar value of reserves held in other currencies.

### Australian Dollar

Between 2013 and 2015, the Australian dollar depreciated significantly against the US dollar and on a trade-weighted basis, following the decline in commodity prices and mining investment (Graph 2.20). The currency has appreciated since the start of the year and has risen to late-2014 levels on a trade-weighted basis (Table 2.4). Part of that reflects the broad-based depreciation of the US dollar and the fact that the RMB, which has a large weight in the Australian dollar

**Table 2.3 Gross Foreign Currency Reserves<sup>(a)</sup>**

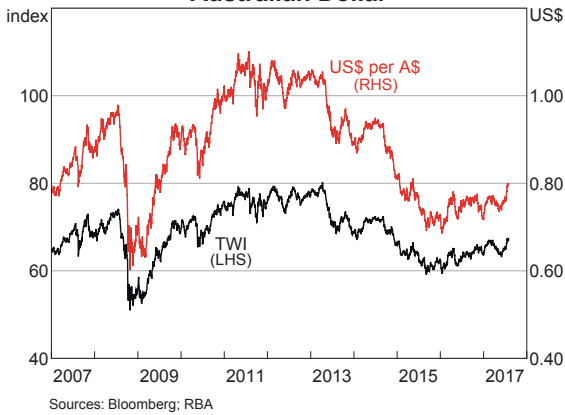
	Percentage change:		Level US\$ equivalent (billions)
	End June 2016 to latest	End March 2017 to latest	
China	-5	2	3 057
Saudi Arabia	-12	-2	491
Taiwan <sup>(b)</sup>	2	1	442
Hong Kong	14	3	399
South Korea	3	1	371
India	8	6	367
Brazil	3	3	364
Russia	5	4	334
Singapore	7	3	264
Thailand	4	3	177
Mexico	-2	-2	166
Indonesia	13	1	117
Malaysia	4	4	93
Turkey	-16	-3	84

(a) Data to end June for China, Hong Kong, Indonesia, Mexico, Saudi Arabia, Singapore, South Korea, Taiwan, and Thailand; to 14 July for Malaysia; to 21 July for India, Russia and Turkey; to 1 August for Brazil

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

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

**Graph 2.20**  
**Australian Dollar**



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

	Over 2016	2017 to date
US dollar	-1	11
Indonesian rupiah	-3	9
Chinese renminbi	6	7
South African rand	-12	7
Malaysian ringgit	3	6
Swiss franc	1	5
Japanese yen	-4	5
Singapore dollar	1	4
Indian rupee	1	4
Canadian dollar	-4	4
UK pound sterling	18	3
New Zealand dollar	-3	3
South Korean won	1	3
Thai baht	-2	3
European euro	2	-2
<b>Trade-weighted index</b>	<b>2</b>	<b>5</b>

Sources: Bloomberg; RBA

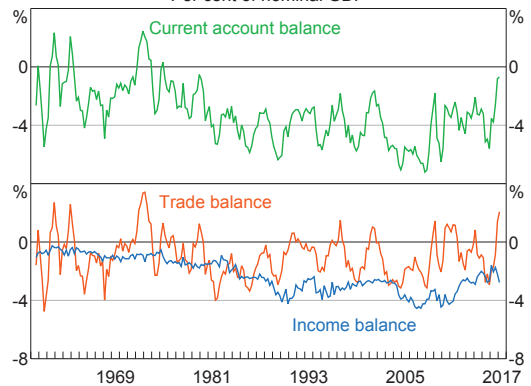
trade-weighted index, has moved more closely with the US dollar than have many other currencies this year. Nevertheless, the Australian dollar has appreciated against other currencies as well, with the euro being a notable exception.

## Capital Flows

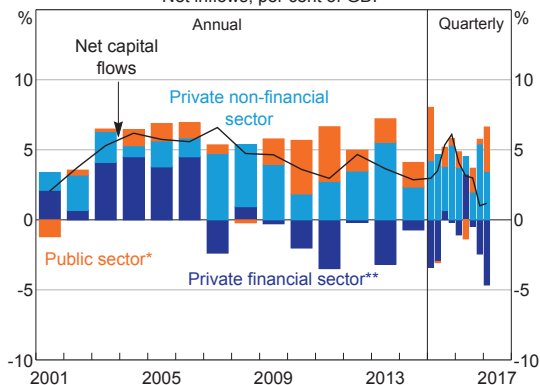
The difference between Australia's saving and investment rates has narrowed markedly in recent years, such that the current account deficit (as a ratio to GDP) is around its lowest level since 1980 (Graph 2.21). The trade surplus increased further in the March quarter, owing to higher resource export revenues from the increase in commodity prices in late 2016 and early 2017. This was partly offset by a widening in the net income deficit (NID), which comprises payments made on Australia's net foreign liabilities. Some part of the widening of the NID followed the increase in profits of the mining sector – which is majority foreign owned – that led to larger payments to the foreign owners in the form of dividend payments or reinvested earnings.

Consistent with the small current account deficit, there were only modest net capital inflows into Australia in the March quarter relative to history (Graph 2.22). Net inflows to the public sector and to private non-financial corporations were mostly offset by outflows from the financial sector, as banks repaid foreign-held debt. Over recent years, declining net capital flows into

**Graph 2.21**  
**Current Account Balance**  
Per cent of nominal GDP



**Graph 2.22**  
**Australian Capital Flows**  
 Net inflows, per cent of GDP



\* Excludes official reserves and other RBA flows  
 \*\* Adjusted for US dollar swap facility in 2008 and 2009  
 Sources: ABS; RBA

Australia have reflected a gradual reduction in inflows to the mining sector. This follows the gradual transition of a number of large liquefied natural gas projects from the investment phase (which had been largely funded offshore) to the production and export phase. ↘