Box B

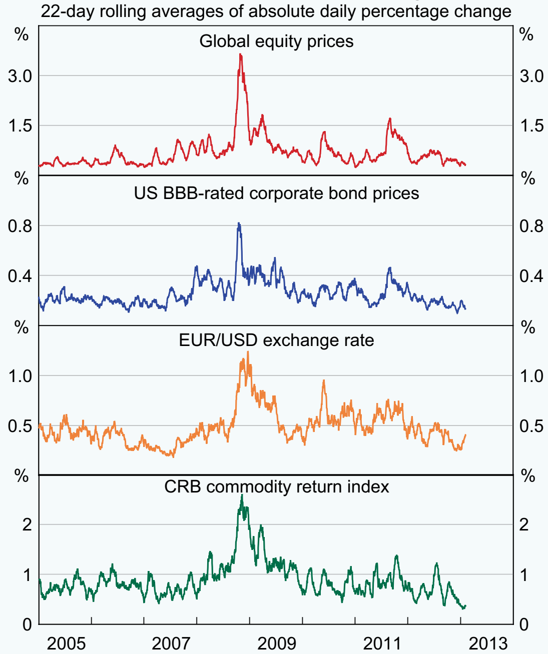
Financial Market Volatility

Volatility in global financial markets declined markedly over the second half of 2012, to around levels not seen on a consistent basis since before the financial crisis. For example, absolute daily changes in global equity prices have averaged 0.4 per cent per day over the past six months, compared with 0.8 per cent over the preceding year. The recent low levels of market volatility have occurred against the backdrop of ongoing uncertainty surrounding the health of the global economy, US fiscal policy and the situation in Europe.

A notable feature of the current period of relatively low volatility is that it has been evident across a range of financial markets, including equity, fixed income, currency and commodity markets (Graph B1). In some cases, such as major equity markets, measures of historical (or realised) volatility are around levels that were typical of the years immediately preceding the financial crisis. In other cases, realised volatility has recently reached its lowest level in quite some time – over the past month or so volatility in the CRB commodity return index was as low as it has been since the mid 1990s. More forward-looking measures of volatility implied by options prices have also fallen to around their lowest levels in a number of years, suggesting that investors are expecting markets to remain relatively stable in the near future (Graph B2). For example, in December 2012, option-implied volatility reached its lowest level since 2007 for a range of major exchange rates, including the Australian dollar/US dollar currency pair.

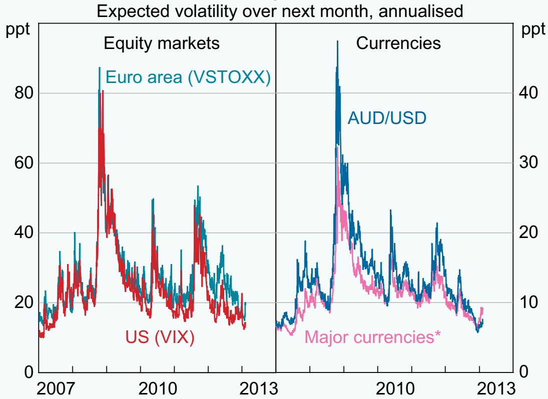
Another feature of financial markets in the second half of 2012 was that trading volumes were low in some markets compared with recent history. This was most notable in the equity market, where volumes have been declining since 2009 (Graph B3).

Graph B1
Financial Market Volatility
22-day rolling averages of absolute daily percentage change



Sources: Bank of America Merrill Lynch; Bloomberg; MSCI; RBA

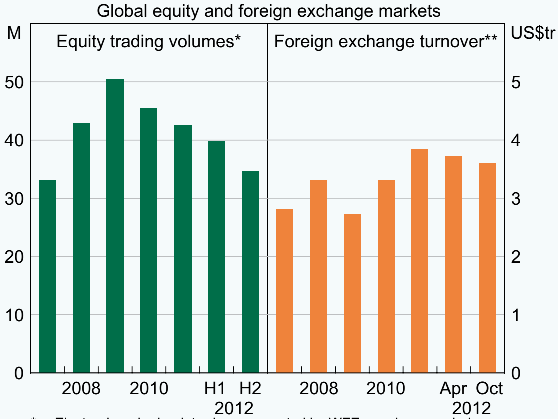
Graph B2
Volatility Indices
Expected volatility over next month, annualised



* CVIX index constructed from EUR/USD, USD/JPY, GBP/USD, AUD/USD, CAD/USD, USD/CHF, EUR/JPY, EUR/GBP, EUR/CHF weighted by turnover

Sources: Bloomberg; Deutsche Bank

Graph B3
Average Daily Trading Activity
Global equity and foreign exchange markets



* Electronic order book trades as reported by WFE members; excludes negotiated deals and trades reported through a Trade Reporting Facility
** Aggregate of Australia, Canada, Japan, Singapore, UK and US markets; annual observations are average daily turnover in April and October
Sources: RBA; World Federation of Exchanges (WFE); foreign exchange committees

During the second half of 2012, trading in the shares of large US and European companies was 30 per cent lower than over the same period a year earlier. While reduced volumes could be associated with higher volatility – for example, if volumes are low, a small number of trades could move the market – it has been more common historically for equity market volatility and volumes to move in the same direction. In equity markets, volatility has also tended to be lower in a rising market than when share prices are falling, and global share prices have risen by around 15 per cent since late July 2012. There was also a decline in trading activity in major foreign exchange markets, with average daily turnover in October 2012 around 7 per cent lower than a year earlier. While activity for a number of fixed income securities has declined recently, there has been less evidence of a decline in activity in some segments of the market, such as US corporate bonds.

The step down in volatility since the middle of 2012 followed policy actions by major central banks. Conditions in European sovereign debt markets improved markedly after European Central Bank (ECB) President Draghi indicated in late July 2012 that the ECB was prepared to take decisive action to preserve the euro, and improved further on the subsequent announcement of the ECB's Outright Monetary Transactions program. Together with developments such as the recent commitment to provide further official funding to Greece, this appears to have helped alleviate investor concerns about extreme scenarios such as a break up of the euro area. In the United States, the Fed announced further asset purchases in the second half of 2012 (see section on 'Central Bank Policy' in the 'International and Foreign Exchange Markets' chapter), and has been providing explicit guidance on the expected path of its policy rate since the second half of 2011. This has led to less uncertainty about the future path of short-term interest rates in the United States, which in turn is likely to have influenced volatility in a range of other markets.

In currency markets, policy actions taken by major central banks have also prompted the authorities in a number of other countries to introduce measures designed to counter the resulting appreciation pressures on their exchange rates. These measures, which include (actual or implied) foreign exchange market intervention, may have also contributed to the reduction in volatility in currency markets in the latter half of 2012.