

AN UPDATE ON GLOBAL FOREIGN EXCHANGE TURNOVER¹

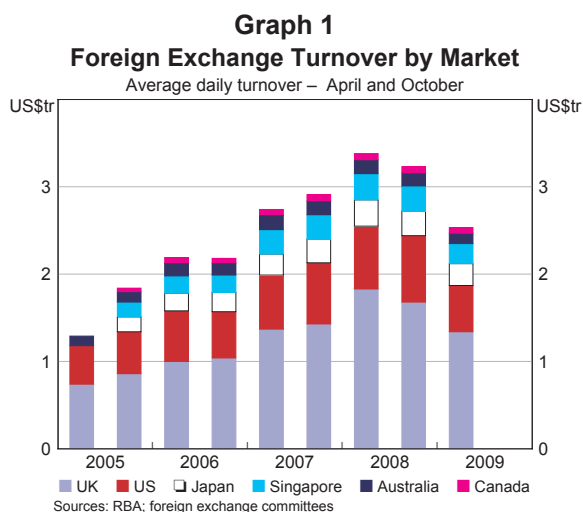
Introduction

This article discusses recent developments in the global foreign exchange market by drawing on turnover data published semi-annually for the foreign exchange markets of Australia, Canada, Japan, Singapore, the United Kingdom and the United States.² These data cover around 70 per cent of global foreign exchange activity and hence provide a good indication of global trends. In addition, developments in the Australian foreign exchange market are analysed using monthly turnover data collected by the Reserve Bank of Australia.

After growing strongly between late 2006 and early 2008, foreign exchange turnover in these six markets has since declined significantly. This decline appears to be linked to two effects of the financial crisis: the contraction in cross-border investment activity and the fall in global trade. While developments in the Australian market broadly followed these trends up to April 2009 (the latest data available for the group as a whole), more timely monthly data suggest that turnover in the Australian market troughed in early 2009 and has subsequently picked up.

Global Developments

Average daily turnover in the six markets contracted by 4 per cent between April 2008 – the peak in turnover – and October 2008. This was a markedly smaller decline than what was experienced by other financial markets during that phase of the global financial crisis (Graph 1).³ However, turnover declined by over 20 per cent between October 2008 and April 2009 to US\$2.5 trillion, to be at its lowest level in over two years, a move reflected in all six markets indicating



1 This article was prepared by Andrew Zurawski and Crystal Ossolinski of International Department.

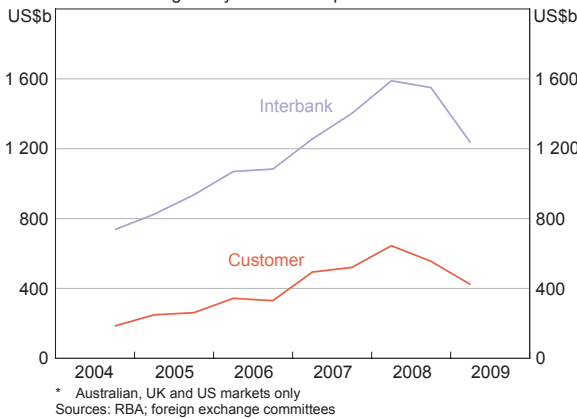
2 See <<http://www.rba.gov.au/AFXC/index.html>>. Japanese data are collected each April on an annual basis. Estimates of turnover in the Japanese market for each October are calculated using a linear interpolation of the annual April data. Data on global foreign exchange turnover are collected every three years by the Bank for International Settlements (BIS Triennial Survey), most recently in April 2007.

3 See Debelle G, P D’Arcy and C Ossolinski (2009), ‘Recent Conditions in the Australian Foreign Exchange Market’, RBA Bulletin, March, pp 9–18.

global, rather than location-specific, causes. The largest markets – the United Kingdom and the United States – experienced the sharpest percentage falls.

For Australia, the United Kingdom and the United States the aggregate figures can be separated into the turnover occurring in the interbank market, which involves transactions

Graph 2
Foreign Exchange Turnover by Counterparty*
 Average daily turnover – April and October



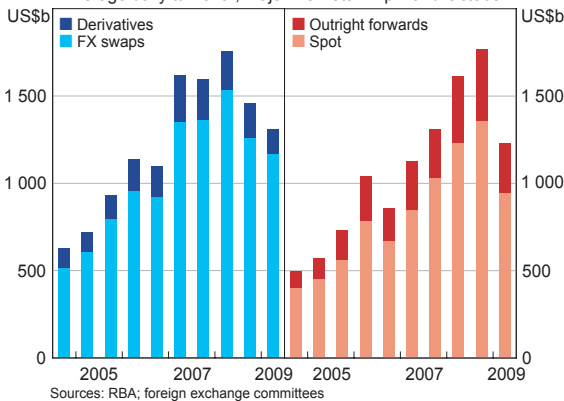
between foreign exchange dealers, and in the non-bank customer market. Turnover has fallen by a larger proportion in the non-bank customer market, declining by 24 per cent over the six months to April 2009 and by 34 per cent over the year (Graph 2), suggesting that external influences on customer demand for foreign exchange have driven the decline in total activity. Turnover in the interdealer market, which to some extent derives from customer activity, fell by 20 per cent over the six months to April 2009 and by 22 per cent over the year.

Foreign exchange swaps and over-the-counter derivatives

For foreign exchange swaps and over-the-counter derivatives – cross-currency interest rate swaps and options – turnover declined by 17 per cent over the six months to October 2008 and by a further 10 per cent over the six months to April 2009 (Graph 3). The decline in turnover of these instruments is likely to be linked to the decline in cross-border investment activity apparent since the onset of the financial crisis in 2007.⁴ For example, these instruments are used by banks when borrowing in one currency and investing in another, and by hedge funds to generate speculative

returns through strategies such as leveraged carry trades. Over recent quarters, international investments have been repatriated and strategies such as carry trades have been wound back, so that the demand for foreign exchange swaps and derivatives has fallen.

Graph 3
Foreign Exchange Turnover by Instrument
 Average daily turnover, major markets – April and October



Spot and forwards

The decline in turnover of spot and forwards occurred somewhat later than that in foreign exchange swaps and derivatives. Turnover in spot

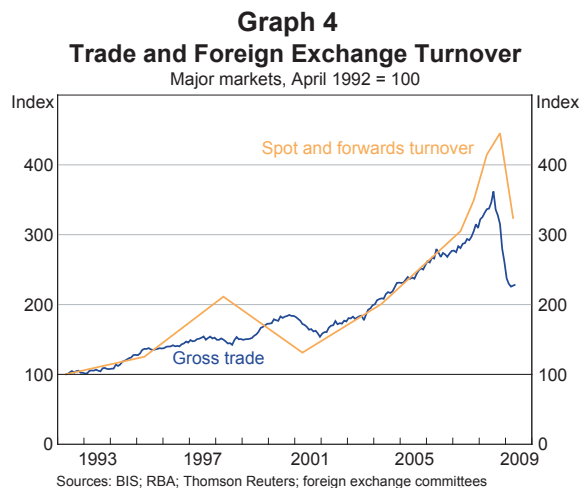
4 See 'Box C: Gross International Capital Movements', Statement on Monetary Policy, August 2009, pp 32–33.

and forwards actually increased by 10 per cent over the six months to October 2008 before declining sharply between October 2008 and April 2009. This difference in timing may reflect the fact that the drivers of spot and forwards turnover are somewhat different to the drivers of foreign exchange swaps. Spot turnover reported in October 2008 was likely to have been supported by large cross-border capital flows as investors sought to reduce risk by repatriating foreign investments. In addition, the high frequency and impact of news at the height of the crisis would have generated the need for investors to frequently adjust their positions.⁵ The decline in spot turnover over the six months to April 2009 is consistent with the subsequent decline in volatility and a reduction in repatriation flows – liaison with Australian dealers suggests the effect of these flows peaked in late 2008.

An additional factor driving developments in spot and forwards turnover is the strong increase and subsequent sharp fall in the value of global trade in late 2008 and early 2009. International trade generates demand for spot and forward foreign exchange because, on payment of the invoice, either the importer must exchange their local currency for the invoicing currency or the exporter must convert their receipts into local currency. This can be done on the day using a spot transaction or, ahead of time, using a forward transaction so as to lock in the exchange rate and provide a hedge against adverse exchange rate movements. Trade flows may even generate multiple foreign exchange transactions if the invoicing currency is foreign to both the exporter and importer; for example, a large proportion of non-US trade is still invoiced in US dollars.

The level of turnover of spot and forwards is much higher than what is required to meet the demand from trade transactions, reflecting the additional activity of foreign exchange dealers and international investors in the foreign exchange markets. However, the change in turnover is statistically related to movements in gross trade flows. For Australia, the monthly growth in trade has a strong correlation with growth in Australian dollar spot and forwards turnover (of around 50 per cent).

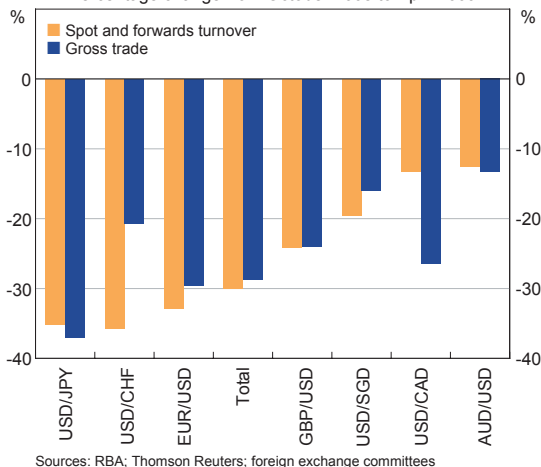
Data for the major markets also confirm the strong comovement between trade and foreign exchange turnover. Over the long run, growth in spot and forwards turnover in these six markets has broadly coincided with growth in the gross trade of these six markets, with the recent sharp fall in turnover occurring shortly after the decline in trade (Graph 4).⁶ The same



5 See Poole E and P D'Arcy (2008), 'Liquidity in the Interdealer Foreign Exchange Market', RBA Bulletin, December, pp 1–6.

6 The noticeable decline in spot turnover between 1998 and 2001 is attributed to a number of factors, including the introduction of the euro. See Galati G (2001), 'Why Has Global FX Turnover Declined? Explaining the 2001 Triennial Survey', BIS Quarterly Review, December, pp 39–47.

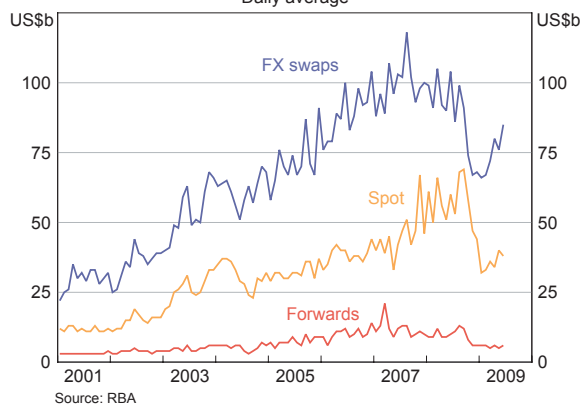
Graph 5
Trade and Foreign Exchange Turnover
 Percentage change from October 2008 to April 2009



US\$124 billion, 14 per cent lower than in October 2008 and 24 per cent lower than a year earlier. Turnover against the Australian dollar fell by a similar amount. By instrument, trends were also similar to those in the other major markets, with turnover in foreign exchange swaps declining since late 2007 (somewhat earlier than in other markets) and turnover in spot and forwards falling sharply over the six months to April 2009.

The Reserve Bank of Australia also collects data on turnover in the Australian foreign exchange market on a monthly basis. These data, current to June 2009, allow us to analyse in more detail the recent developments in the Australian foreign exchange market that may be indicative of global trends. Following the sharp fall in late 2008, turnover in the Australian

Graph 6
Australian Foreign Exchange Turnover
 Daily average



story emerges from a comparison of the change in spot and forwards turnover in major currencies against the US dollar (a common invoicing currency) with the change in gross trade of the relevant countries; in most cases, the decline in trade was proportionate to the decline in spot and forwards turnover (Graph 5).

Australian Developments

On a six-monthly basis, Australian developments largely mirror those in the other major foreign exchange markets for which data are available. In April 2009, daily average turnover in Australia was

spot and forwards markets has stabilised (Graph 6); one factor contributing to this outcome has been the stabilisation in the value of Australia's gross trade. Turnover in the foreign exchange swaps market has picked up markedly from the trough seen at the start of 2009, suggesting an increase in investor activity consistent with improved financial market conditions and investor sentiment in recent months. Likewise, turnover of cross-currency interest rate swaps has recently been supported by the relatively high level of issuance of foreign-currency bonds by Australian banks.

Summary

Turnover in foreign exchange markets over the past year has been significantly affected by the events of the financial crisis. The initial effect was seen in the foreign exchange swaps market; consistent with extreme volatility and counterparty concerns, turnover of foreign exchange swaps across the six markets declined sharply over the six months to October 2008. More recently, turnover in spot and forwards has also fallen. This is likely to be linked to the fall in the value of international trade as well as the contraction in cross-border investment activity. More timely data for the Australian foreign exchange market point to a rebound in foreign exchange turnover since early 2009, in line with improved conditions in financial markets and some stabilisation in the value of trade. ✎