Box B: US Dollar Swap Arrangements between Central Banks

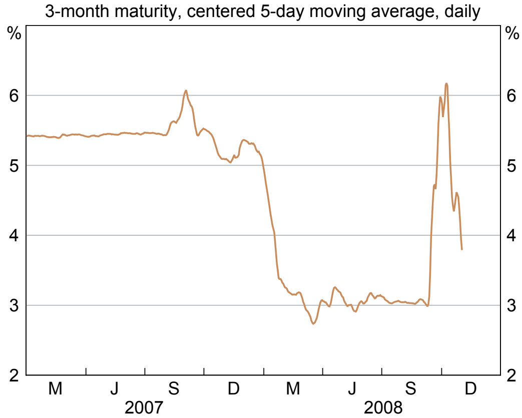
Since the onset of financial market turbulence in August 2007, the cost of raising US dollars outside the United States has increased relative to funding rates available in local US markets. This is evident in the interest rate premium institutions are paying for US dollars in the euro-US dollar foreign exchange swap market (Graph B1).[1] This situation began to place undue pressure on stable financial institutions outside the United States with no direct exposure to sub-prime related assets or other vulnerabilities currently being experienced in global financial markets.

To ease this pressure, central banks around the world have taken actions to provide US dollar funding to their respective markets using temporary foreign exchange swap lines with the Fed.[2] Initially, in December 2007, these swap arrangements were set up with the European Central Bank (ECB) and the Swiss National Bank (SNB). More recently, these swap lines have been expanded, and new lines have been established with 12 other central banks including the Bank of Japan (BoJ), the Bank of England (BoE) and the Reserve Bank of Australia (RBA) (Table B1). Notably, the decision to provide US dollar funding by some of these central banks, including the RBA, does not reflect vulnerabilities in their own banking sectors; rather, it is intended to alleviate global pressures by improving the distribution of US dollar liquidity across different time zones and locales.

Graph B1

EUR/USD Swap-implied US Interest Rate

3-month maturity, centered 5-day moving average, daily



Source: Bloomberg

Amounts available under these swap lines with the Fed were increased in several stages over September and October amid continued strains in offshore markets for US dollar funding and strong demand at early US dollar auctions held by some of these central banks. Since mid October, an unlimited amount of US dollar funding has been made available to the ECB,

1 *For more on foreign exchange swaps, see Reserve Bank of Australia (2008),* Statement on Monetary Policy, *February, Box A.*

2 *Also see Reserve Bank of Australia (2008),* Statement on Monetary Policy, *May, Box A.*

Table B1: Amount Available under US Dollar Swap Auction Facilities(a)
US$ billion

	As at 19 Dec 2007	As at 24 Sep 2008	As at 29 Oct 2008	Amount outstanding as at 29 Oct 2008
European Central Bank	20	110	Unlimited	210
Bank of England	–	40	Unlimited	74
Bank of Japan	–	60	Unlimited	70
Sveriges Riksbank	–	10	30	27
Swiss National Bank	4	27	Unlimited	26
Reserve Bank of Australia	–	10	30	18
Danmarks Nationalbank	–	5	15	15
Norges Bank	–	5	15	3
Bank of Canada	–	10	30	0
Banco Central do Brasil	–	–	30	0
Banco de México	–	–	30	0
Bank of Korea	–	–	30	0
Monetary Authority of Singapore	–	–	30	0
Reserve Bank of New Zealand	–	–	15	0
Total	**24**	**277**	**Unlimited**	**442**

(a) Excludes central banks' direct foreign exchange swaps with counterparties
Source: central banks

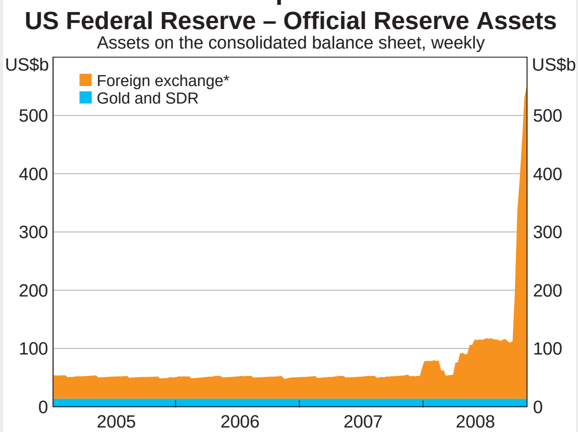
BoJ, BoE and SNB. These central banks have subsequently been able to lend any amount of US dollars demanded in their respective markets at various maturities of up to three months, against local eligible collateral.

In operational terms, the recipient central bank enters a foreign exchange swap agreement with the Fed in which it borrows US dollars and lends its local currency, and agrees to reverse the transaction at a specified future date. The recipient central bank then auctions the US dollars to its domestic counterparties, typically against local-currency-denominated collateral eligible in its usual domestic liquidity operations. The availability of US dollar funding for sound banks operating outside the United States is therefore less adversely affected by the current turmoil in international financial markets.

Central bank auctions of US dollars appear to have helped alleviate the upward pressure on overnight interest rates observed in recent weeks. In particular, offshore US dollar rates implied by euro-US dollar swaps fell rapidly, and term LIBOR rates began to fall, following the introduction of fixed-rate auctions for unlimited amounts.

As a result of these swaps, the balance sheet of the Fed has expanded as its gross foreign exchange reserves reflect a temporary increase in foreign currency holdings (Graph B2). The gross foreign exchange reserves of the receiving central banks are unaffected by the swap, as the proceeds are immediately lent out in domestic operations for local currency collateral and are therefore not categorised as official foreign exchange reserve assets. However, the receiving central banks' domestic assets have expanded. ✠

Graph B2



* Includes exchange-translation assets, which are revalued daily at market exchange rates.
Source: Thomson Reuters