Box A: Developments in the US Federal Reserve's Instruments

Since the start of September, a number of central banks have made further changes to their policy instruments in light of increased strains in credit and money markets.[1] This has been in addition to ongoing liquidity injections through normal short-term operations and various standing facilities. The Fed in particular has implemented a number of changes that can be broadly categorised as expanding the provision of term funding and alleviating tensions in specific markets. Taken together, these changes have resulted in a significant rise in US dollar liquidity provided by the Fed (Table A1).

Table A1: Federal Reserve Lending Facilities – Outstandings
US$ billion

	As at 3 Sep 2008	As at 29 Oct 2008	Change
Repos	109	80	–29
Discount window	19	111	92
PDCF	0	79	79
TAF	150	301	151
TSLF	116	197	82
AMLF	na	96	96
CPFF	na	145	145
MMIFF	na	na	na
US$ swap facility	62	442	380

Source: Board of Governors of the Federal Reserve System

In response to the deterioration in term money markets, the Fed has extended the availability of term funding in a number of ways. Earlier in the year the maximum duration of loans available through the discount window was lengthened to three months. In contrast, the Primary Dealer Credit Facility (PDCF), which performs a similar role for certain financial institutions that do not qualify for access to the discount window, has remained an overnight facility but the range of accepted collateral has been widened. The Fed has also expanded its Term Auction Facility (TAF) and Term Securities Lending Facility (TSLF) by increasing the total amount available and by broadening the range of securities accepted as collateral. For deposit-taking institutions, the maximum amount available under the TAF was increased to US$600 billion, with US$150 billion provided at each auction for 28- and 84-day funds. Two additional TAF auctions, of US$150 billion each, will be held to provide funding through the year end.[2] For primary dealers, the total amount of US Treasuries that can be made available through the TSLF has been increased from US$175 billion in mid September to US$200 billion.

1 *See Reserve Bank of Australia (2008),* Statement on Monetary Policy, *May, Box A for earlier changes.*

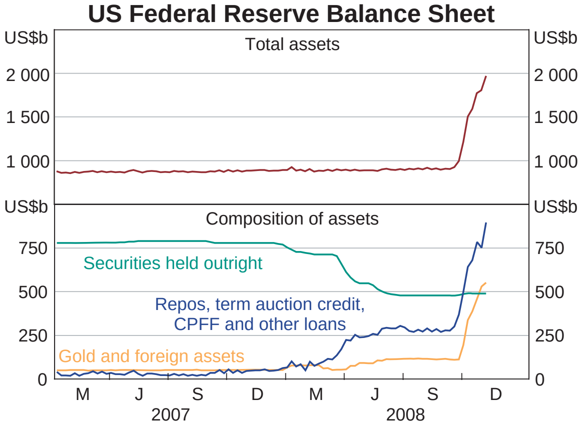
2 *Two TAF auctions have been scheduled in November to make funds available prior to the Christmas break for maturity in the second week of January.*

The Fed has also taken steps to alleviate tensions in specific markets. In light of increasing reluctance by investors to purchase commercial paper and increased redemptions from money market mutual funds, the Fed extended credit to banks to purchase high-quality asset-backed commercial paper (ABCP) from these funds through the ABCP Money Market Mutual Fund Liquidity Facility (AMLF). The Fed has also established the Commercial Paper Funding Facility (CPFF) to provide a liquidity backstop to commercial paper issuers. Under this facility, the Fed will fund the outright purchase of securities through a special purpose vehicle (SPV), thereby removing much of the risk that issuers will be unable to roll over maturing paper. To facilitate the sales of term money market instruments in the secondary market at prices that reflect the underlying value, the Fed subsequently introduced the Money Market Investor Funding Facility (MMIFF). This facility will extend secured loans to private-sector SPVs for the purchase of certificates of deposits, bank notes and financial commercial paper from money market mutual funds. This officially-backed conduit aims to ensure liquidity to meet redemptions by funding vehicles able to hold term paper to maturity. As such, the operation of the MMIFF will complement the operation of the AMLF.

In addition to these facilities, the Fed has started buying the short-term debt of the recently nationalised mortgage agencies to foster liquidity in the agency debt market, while the US Treasury is buying mortgage-backed securities issued or guaranteed by the agencies. Finally, the Fed's foreign exchange swap facility with other major central banks was expanded extensively to ease pressure in offshore US dollar funding markets (see Box B).

The changes in the Fed's operations from late 2007 initially only resulted in changes to the composition of the Fed's balance sheet, as the Fed ran down stocks of securities held outright (Graph A1). However, more recently, there has been a sharp increase in the overall size of the balance sheet, from around US$0.9 trillion at end August 2008 to US$2.0 trillion currently. This expansion has been facilitated by US Treasury funding and the passing of legislation that allows the Fed to pay interest on depository institutions' reserve balances. The Fed now pays the target federal funds rate, which increases banks' demand for reserve balances and helps the Fed to increase its provision of liquidity without putting downward pressure on its policy interest rate. The increase in the Fed's foreign exchange swaps with other central banks (see Box B) has also temporarily expanded the Fed's balance sheet through an increase in gross foreign exchange reserve assets.

Graph A1
US Federal Reserve Balance Sheet



Source: Thomson Reuters