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The dependence of the financial system on central bank and government support[1]

How much does the banking sector depend on public support? Utilisation of many support facilities has declined, due mainly to a fall in demand. Supply factors play a smaller, but not insignificant role, as governments and central banks have tightened the conditions on which certain support measures are available or have phased them out entirely. However, not all financial institutions have reduced their use of support facilities. Weaker banks especially continue to depend on public support.

JEL classification: E5, G2.

Over the past few months, authorities have taken their first steps to end some of the public support measures put in place in response to the financial crisis. For instance, the Federal Reserve completed its purchase of Treasury securities in October 2009; new issuance under the UK credit guarantee scheme ended in December; the ECB conducted a last 12-month euro repo and the Bank of Japan stopped its purchases of commercial paper and corporate bonds in the same month; and the Swiss National Bank ceased providing Swiss francs through foreign exchange (FX) swaps against euros in January 2010.

Thus, the exit has begun. This feature analyses the use of central bank liquidity facilities and government debt guarantees[2] to assess to what extent the financial system continues to depend on those measures. The take-up of many measures has declined. On the one hand, this seems to reflect better market access and hence reduced demand for government support. On the other hand, supply conditions have also become more restrictive, at least for some facilities. There is also some evidence of tiering in the use of government debt guarantees.

[1] The author thanks Bilyana Bogdanova, Thomas Faeh and Gert Schnabel for research assistance and Claudio Borio, Piti Disyatat, Ingo Fender, Corrinne Ho, Marion Kohler, Robert McCauley and Christian Upper for comments. The views expressed in this article are the author's and do not necessarily reflect those of the BIS.

[2] Other government support facilities that were widely adopted in the crisis include deposit insurance guarantees, capital injections and asset purchase guarantees. See also FSB (2009).

Extent and take-up of support

Table 1 documents the take-up of selected support measures in the United States, the euro area and the United Kingdom between March and December 2009. Many of the facilities employed by the central banks had actually been in place already before the crisis, although the terms and conditions have been changed in response to the new environment. The Federal Reserve, the ECB and the Bank of England used repurchase agreements (repos) as the standard way to provide the financial system with liquidity. Those repos tended to be of relatively short maturity (overnight to two weeks).[3] The Federal Reserve also

Selected indicators of support measures in 2009

	March	June	September	December
	Level, in billions of own currency units, end of month			
	United States			
Federal Reserve: Total assets	2,073	2,027	2,162	2,237
Repos and term auction credit	469	283	196	76
Standing facility lending[1]	81	49	28	19
Other lending[2]	249	165	85	62
FX swaps providing own currency	328	119	59	10
Securities	761	1,217	1,588	1,845
Of which: MBS and agency securities	287	564	823	1,068
Issuance of government-guaranteed debt	90	25	16	5
	Euro area			
Eurosystem: Total assets	1,803	1,997	1,790	1,905
Repos[3]	661	896	681	749
US dollar repos	166	60	44	1
Standing facility lending[4]	1	0	0	1
FX swaps providing own currency[5]	2	5	4	3
Covered bonds[6]	0	0	14	29
Issuance of government-guaranteed debt[7]	42	27	6	7
	United Kingdom			
Bank of England: Total assets	181	220	223	238
Repos[8]	130	91	39	24
US dollar repos	10	2	0	0
Operational lending facility	0	0	0	0
Securities[9]	15	99	154	190
Of which: gilts	13	96	152	188
Issuance of government-guaranteed debt	33	15	5	18

[1] Primary credit and Primary Dealer Credit Facility. [2] Term Asset-Backed Securities Loan Facility, Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility and Commercial Paper Funding Facility. [3] Main refinancing, long-term refinancing and fine-tuning operations in euros. [4] Marginal lending facility. [5] From swap lines providing euros to the central banks of Denmark and Sweden. [6] Held for monetary policy purposes. [7] Debt guaranteed by the governments of Germany, the Netherlands and Spain. [8] Short- and long-term repos. [9] Bought under Asset Purchase Facility.

Source: Central banks. Table 1

[3] The ECB has provided regular three-month repos since 1999 to cover longer-term liquidity needs, but has acted as a price-taker to minimise the impact on market prices.

used securities purchases and sales, a tool not employed in normal times by the ECB or the Bank of England, to influence market liquidity. Lending facilities were in place at all three central banks before the crisis, though commercial banks rarely used them.

Take-up is on the decline

During the crisis, central banks substantially increased their liquidity provision through repos and extended maturities (see also BIS (2009), Borio and Nelson (2008) and Disyatat (2009)). They allowed banks to access other lending facilities more cheaply and relaxed collateral requirements. The Federal Reserve and the Bank of England introduced several new liquidity facilities, such as the Term Auction Facility in the United States. As the crisis proceeded, all three central banks purchased large amounts of securities directly. Finally, to ease international funding shortages, central banks provided one another with currency through FX swaps (McGuire and von Peter (2009)).

From the data collated in Table 1, it is striking that asset purchases, for which the decision to act lies mainly with policymakers, increased in the course of 2009, but that the take-up of facilities where the volumes outstanding are largely driven by the decisions of financial institutions declined, albeit with some exceptions. All three central banks increased their outright holdings of securities in every quarter of 2009.[4] By contrast, the volume provided by repos and the usage of FX swap lines generally went down. The issuance of bonds covered by government debt guarantees also declined up to September 2009 but rebounded in the last quarter of the year in the euro area and the United Kingdom.[5]

Interpreting the decline in support: demand or supply effects?

To assess how far the financial system still depends on public support, it is crucial to know whether the drop in the usage of support facilities is driven by a fall in demand or by a restriction in supply. Disentangling the two is possible because support measures come in two flavours. Some measures, such as most repos offered by the ECB, are available on unchanged terms and conditions and without any restrictions in the supply of support. The take-up of these measures thus provides a direct indicator for the demand for support. Other facilities have their terms and conditions actively set by the authorities. Their take-up will therefore reflect a mixture of demand and supply factors.

Lower demand …

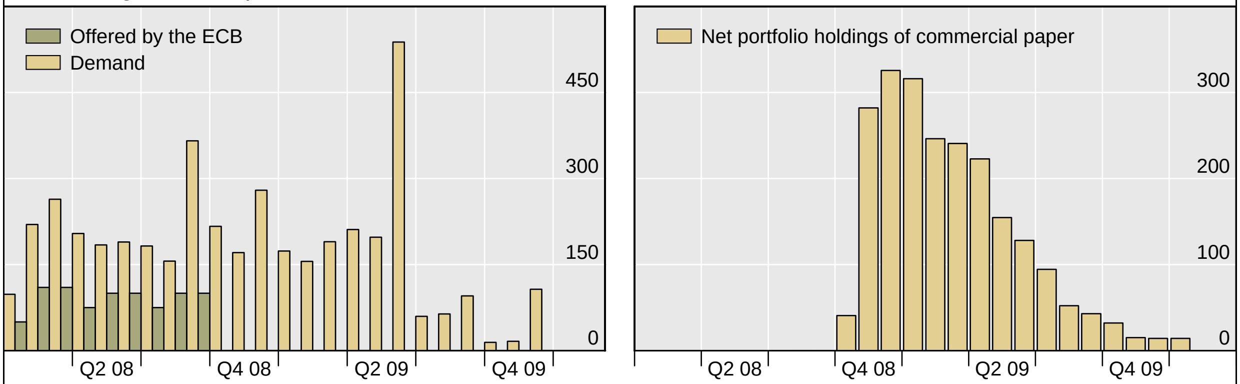
The volumes outstanding of the first type of measure clearly point towards a decline in the demand for support. The left-hand panel of Graph 1 shows that the demand for longer-term euro repos declined after September 2008, when

[4] Certain facilities are currently nearing preannounced limits. For instance, the Federal Reserve has announced that it is slowing down the process of purchasing mortgage-backed securities and expects to end the programme by the end of the first quarter of 2010.

[5] In the United Kingdom, this increase seems at least partly due to last-minute demand: the credit guarantee programme ended in December 2009.

Declining demand for support

ECB longer-term repos, in EUR bn[1] | Federal Reserve CPFF funds, in USD bn[2]



[1] Longer-term repos have a maturity of one to 12 months. There has been full allotment in at least one longer-term repo auction since September 2008 and a fixed interest rate since October 2008. [2] Commercial Paper Funding Facility; month-end.

Sources: Central bank websites; BIS calculations. Graph 1

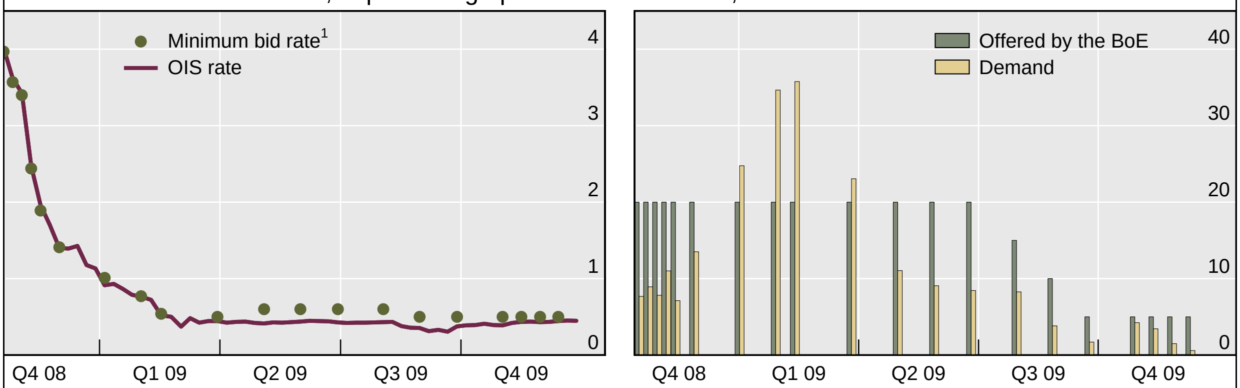
the ECB began to charge its policy rate and fully met all bids.[6] The take-up of the Commercial Paper Funding Facility (CPFF) in the United States (right-hand panel) paints a similar picture. The cost of using that facility is given by the three-month overnight index swap (OIS) rate, which reflects the expected path of the overnight market rate over the next three months, plus a constant surcharge. These terms became less attractive as risk spreads in financial markets tightened, and usage of the facility subsequently declined.

At the same time, central banks tightened the supply of other facilities. One of the few support facilities where prices have been actively managed is

Restrictive supply of support

Bank of England three-month repos

Three-month interest rates, in percentage points | Amounts, in GBP bn



[1] The minimum bid rate is the lowest rate at which the Bank of England is ready to supply liquidity in a repo auction. The overnight index swap (OIS) rate is the average expected rate for overnight swaps over the next three months.

Sources: Central bank website; Bloomberg; BIS calculations. Graph 2

[6] The rise in demand in June and December 2009 was due to high bids in the 12-month repo auctions. The ECB announced that the December auction would be the last of its kind and adopted a new pricing mechanism.

… has been complemented by tighter supply

the longer-term repos of the Bank of England.[7] The left-hand panel of Graph 2 shows that the terms of this facility have become less attractive over time. Bids for funds dropped below the amounts offered by the Bank of England in March 2009, precisely when three-month Libor-OIS spreads fell below the minimum bid rate demanded by the Bank of England. Another example of a support measure with flexible pricing is the euro/Swiss franc swap facility that was offered by the Swiss National Bank, the ECB, the National Bank of Poland and the Magyar Nemzeti Bank. Take-up of these swaps declined considerably when the authorities tightened supply by increasing the swap price relative to the market.

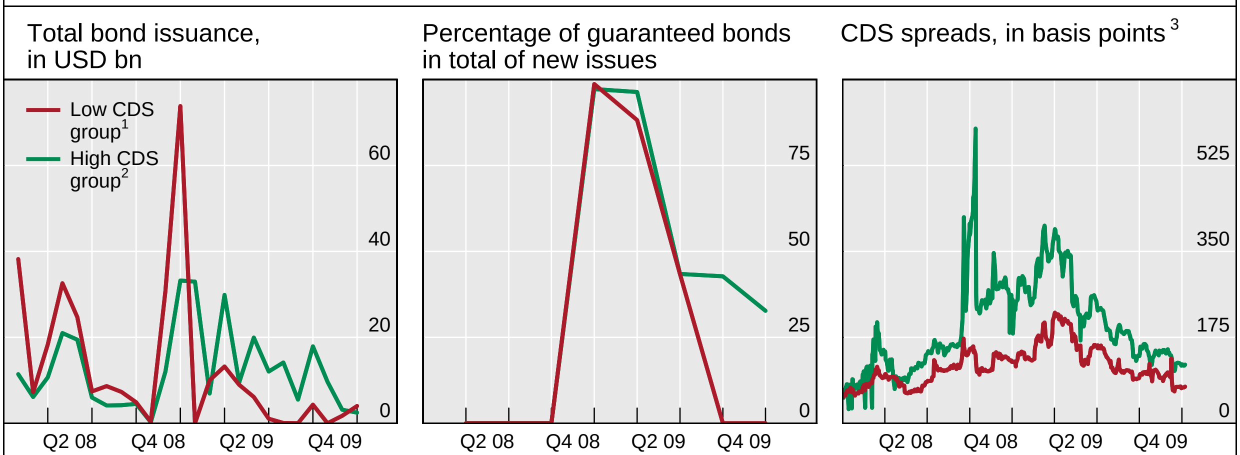
Tiering in the demand for support

A key question is whether the decline in the usage of support documented in the previous sections has been widespread or whether it is limited to stronger financial institutions. It is impossible to answer this question with regard to central bank liquidity facilities on the basis of publicly available data since monetary authorities usually do not reveal the identities of their counterparties. However, the use of government debt guarantees can provide some hints, given that guaranteed bonds are traded in public markets.

The need for support differs between banks

There is evidence for tiering at least in the US market, as some financial institutions continue to depend on government guarantees to issue debt. We proxy the riskiness of banks by the average level of credit default swap (CDS) premia on their debt between January 2008 and January 2010. Admittedly, this measure has some shortcomings. For instance, CDS spreads tend to be comparatively low for institutions that the markets perceive as too big to fail, but volatile for fundamentally strong banks that are exposed to large swings in

Tiering in US bond markets



[1] Bank of NY Mellon, JPMorgan Chase, PNC, US Bancorp and Wells Fargo. [2] Bank of America, Citibank, Goldman Sachs, Morgan Stanley and State Street. [3] Group averages of end-of-day data.

Sources: Government websites; Bloomberg; Dealogic; BIS calculations. Graph 3

[7] Issuance costs for government-guaranteed debt have also been changed in many countries (FSB (2009)).

returns. The findings therefore need to be interpreted with these caveats in mind.

The US government guaranteed essentially all bond issuance of US financial institutions, shown in the left-hand panel of Graph 3, between the adoption of the debt guarantee programme in October 2008 and mid-2009. Tiering becomes apparent from the third quarter of 2009 onwards, when the five banks with the lowest CDS premia (the "low CDS group" in the centre panel) ceased issuing government-guaranteed bonds.[8] By contrast, riskier banks (the "high CDS group") continued to use this facility: at the end of 2009, guaranteed bonds still made up a third of their new issuance.

Conclusions

The removal of support has been marginal to date, but it is likely to continue unless conditions deteriorate substantially. There are at least two reasons for phasing out support schemes. First, they may distort competition.[9] Second, continued support could induce banks to postpone necessary balance sheet adjustments and encourage additional risk-taking.[10]

The decline in demand for public support identified in this article is therefore clearly good news. The finding that some institutions rely more on support measures than others is not. This suggests that a differentiated exit strategy is desirable. Such an approach would aim for a timely discontinuation of public support while taking into account that some financial institutions remain weak.

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[8] The "low CDS group" also issued little unguaranteed debt in the second half of 2009.

[9] See Panetta et al (2009) for an analysis of domestic and international distortions. FSB (2009) notes that cross-border differences in the timing of the withdrawal of support might lead to additional problems.

[10] It is not clear whether ending the facilities in place would completely address these problems. Financial institutions may interpret the authorities' response to this past crisis as an implicit and standing guarantee to support banks in any future crisis.

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