Box A: Term Funding Schemes

What are term funding schemes?

Term funding schemes involve central banks providing low-cost, long-term funding to banks (or other financial intermediaries). Such schemes were used in the years following the global financial crisis by central banks including the Bank of Japan, the European Central Bank and the Bank of England, as they sought to impart further stimulus at a time when policy rates were near the effective lower bound and the supply of credit had contracted. More recently, these schemes have been used by central banks including the Swedish Riksbank, the Reserve Bank of New Zealand and the Reserve Bank of Australia in response to challenges arising from COVID-19. Term funding schemes are distinct from regular liquidity operations in that they tend to involve lending for several years and provide explicit incentives to bolster the supply of credit. They also differ from operations that some central banks have used to extend credit directly to businesses and households (such as purchasing corporate bonds or securitised loans) because they operate indirectly via the banking system. Funding is secured with collateral to mitigate financial risks to the central bank.

How do term funding schemes support monetary policy objectives?

Term funding schemes support monetary policy objectives in two key ways.

First, by offering low-cost funding to financial institutions, they reduce banks' funding costs and so help to reduce interest rates for borrowers. This stimulus is particularly

important when policy rates are close to the effective lower bound. Bank lending rates tend to be less responsive to a decline in the policy rate when interest rates are already very low.^[1] This is because the margin banks earn between the rate of interest charged on loans and that paid on deposits becomes compressed. As policy rates approach zero, banks' capacity to lower lending rates is limited by the fact that they are unwilling or unable to lower their deposit rates below zero. Banks may also be reluctant to extend loans at very low returns. Moreover, a decline in profitability will make it more difficult for banks to maintain capital to support additional lending or absorb losses on nonperforming loans. By directly lowering bank funding costs, and providing banks with access to low-cost funding for an extended and known period, term funding schemes help to reduce interest rates paid by borrowers and support the supply of credit to the private sector at low interest rates. Term funding schemes can also indirectly lower bank funding costs by reducing the demand, and hence the cost, of other sources of funding. This indirect effect benefits all banks, regardless of whether they draw upon funding from the central bank. These schemes are also treated as stable funding for the purposes of the Liquidity Coverage Ratio and Net Stable Funding Ratio regulatory requirements in some countries, including Australia. This can reduce liquidity pressures even if institutions do not draw on funds.

Second, term funding schemes encourage the supply of credit to the private sector via

the rules of the scheme. A key feature of such schemes is that the quantity of funding available to a financial institution (its funding allowance) is related to its lending to the private sector. In some cases, the funding allowance depends on the *change* in an institution's net lending over a specified time period. That is, those banks that expand their lending to households and/or businesses can access more low-cost funding. The Reserve Bank's Term Funding Facility (TFF) provides one dollar of additional funding to a bank for every dollar increase in credit outstanding to large businesses, and five dollars of additional funding for every dollar increase in credit outstanding to small and medium enterprises (SMEs). Some central bank schemes have a further incentive by reducing the rate of interest on the facility if lending growth exceeds given thresholds. Others, including the TFF, apply a fixed rate of interest. The interest rate of 0.25 per cent on funds borrowed under the TFF complements the Reserve Bank's yield curve target and its forward guidance on the cash rate, helping to ensure funding costs remain low throughout the economy. Elsewhere, some schemes impose penalties on banks that shrink their net lending by charging a progressively higher rate of interest on the funding. Over time, schemes have tended to make greater use of incentives that 'reward' desirable behaviour (such as increasing lending), rather than those that penalise undesirable behaviour on the part of the participants (such as decreasing lending).

Term funding schemes often aim to encourage lending to specific segments of the economy that face particularly tight financial conditions. They do so by providing larger funding allowances for growth in specific types of loans. For instance,

allowances under the FCB's schemes reward lending to businesses but do not reward new mortgage lending. Sometimes, there is an additional funding allowance that is a multiple of the growth in lending to specific sectors. As noted, the Reserve Bank's TFF provides a multiple of additional funding to banks that increase lending to SMEs. Relative to larger businesses, SMEs often face greater difficulties in obtaining finance.^[2]

The schemes introduced by several central banks since the outbreak of COVID-19 have focussed on encouraging lending to businesses, especially SMEs. In this way, these schemes have complemented government guarantees of bank loans to SMEs. In some cases the schemes have been directly linked to loans extended with those guarantees.

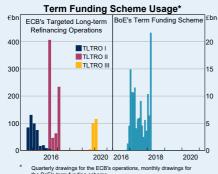
Have term funding schemes been effective?

It is too early to assess the effects of term funding schemes introduced in response to COVID-19. However, central banks have generally judged earlier term funding schemes to have been effective in achieving their aims. For instance, the BoE assessed that its scheme in 2016 (which followed an earlier scheme introduced in 2012) increased pass through of its policy rate reductions to lending rates for households and businesses.^[3] This was achieved without a significant decline in bank profitability or a reduction in other forms of credit. The BoE estimated that bank funding costs were lower than what they would have been in the absence of the Term Funding Scheme, owing to both the direct and indirect effects of the scheme

The ECB's Targeted Longer-term Refinancing Operations (TLTROs) were judged to be effective in supporting lending volumes.

These operations have extended nearly €1.4 trillion in lending since 2014 (including the renewal of funding as new schemes have been progressively introduced) (Graph A.1). The ECB noted that the TLTROs appeared to have significantly reduced funding costs, and that these were passed through to households and businesses. The programs were particularly effective in euro area countries experiencing tight financial conditions, with banks that participated in the program reducing their lending rates by more than non-participating banks. A number of empirical studies have found that the TLTROs contributed to faster lending growth and the transmission of lower





* Quarterly drawings for the ECB's operations, monthly drawings the BoE's term funding scheme.
Sources: Bank of England; Bloomberg; European Central Bank

Table A1: Term Funding Schemes^(a)

Banco de Mexico	
Scheme	Financing facility (April 2020 – current)
Maturity	1.5 – 2 years
Interest rate	Policy rate (600 bps)
Initial allowance	n/a
Additional allowance	1 x net increase in lending to SMEs and households affected by COVID-19
Price incentive	n/a
Bank of England	
Scheme	Funding for Lending Scheme (2012 –2018)
Maturity	4 years
Interest rate	Policy rate ^(b) plus fee (50 to 200 bps)
Initial allowance	5% of stock of outstanding loans
Additional allowance	1 x net increase in lending (excl. SMEs) + 5 x net increase in lending to SMEs
Price incentive	Banks that contract stock of loans pay penalty fee which increases linearly up to a maximum fee of 150bps
Scheme	Term Funding Scheme (2016 –2018)
Maturity	4 years
Interest rate	Policy rate plus fee (25 to 75 bps)
Initial allowance	5% of stock of outstanding loans
Additional allowance	1 x net increase in lending
Price incentive	Banks that contract stock of loans pay penalty fee which increases linearly up to a maximum of 25bps
Scheme	Term Funding Scheme with Additional Incentives for SMEs (April 2020 – current)
Maturity	4 years
Interest rate	Policy rate plus fee (10 to 35 bps)
Initial allowance	5% of stock of outstanding loans; later increased to 10%
Additional allowance	1 x net increase in household and business lending (excl. SMEs) + 5 x net increase in lending to SMEs
Price incentive	Banks that contract stock of loans pay penalty fee which increases linearly up to a maximum of 25bps
Bank of Japan	
Scheme	Loan Support Program I (2010 – current)
Maturity	1 – 4 years
Interest rate	Uncollateralised overnight call rate; later fixed at 10 bps (6 to 10 bps)
Initial allowance	n/a
Additional allowance	1 x net increase in lending to firms that 'strengthen the foundations for economic growth'
Price incentive	n/a
Scheme	Loan Support Program II (2012 – current)

Maturity	1 – 4 years
Interest rate	Uncollateralised overnight call rate; later fixed at 10 bps (7 to 10 bps)
Initial allowance	n/a
Additional allowance	1 x net increase in lending to businesses and households
Price incentive	n/a
European Central Bank	
Scheme	Targeted Longer-Term Refinancing Operations I (2014 – 2016)
Maturity	4 years
Interest rate	Initially fixed at prevailing main refinancing rate plus a spread of 10 bps; spread later removed (0 to 15 bps)
Initial allowance	7% of stock of loans to non-financial private sector, excluding mortgages
Additional allowance	3 x net increase in lending in excess of a benchmark
Price incentive	n/a
Scheme	Targeted Longer-Term Refinancing Operations II (2016 –2017)
Maturity	4 years
Interest rate	Fixed at prevailing main refinancing rate (0 to -40 bps)
Initial allowance	30% of eligible stock of loans less any existing TLTRO outstanding
Additional allowance	n/a
Price incentive	Discount applied if banks exceed a net lending benchmark. Discount increases linearly until interest rate reaches prevailing ECB deposit rate
Scheme	Targeted Longer-Term Refinancing Operations III (2019 – current)
Maturity	2 – 3 years
Interest rate	Initially variable with main refinancing rate plus 10 bps; later lowered to be 50 bps below prevailing main refinancing rate (10 to -100 bps)
Initial allowance	30% of eligible stock of loans less any existing TLTRO outstanding; later raised to 50% of eligible stock of loans less any existing TLTRO outstanding
Additional allowance	n/a
Price incentive	Discount applied if banks exceed a net lending benchmark. Initially linearly increasing discount up to 40 bps. Later adjusted to a fixed discount of 50bps
Monetary Authority of S	Singapore
Scheme	MAS SGD Facility for ESG Loans (April 2020 – current)
Maturity	2 years
Interest rate	10 bps
Initial allowance	n/a
Additional allowance	Linked to lending under government SME loan scheme
Price incentive	n/a
Reserve Bank of Austral	ia
Scheme	Term Funding Facility (April 2020 – current)
Maturity	3 years
	5 years

Initial allowance	3% of total credit outstanding
Additional allowance	1 x increase in credit outstanding to large businesses + 5 x increase in credit outstanding to SMEs
Price incentive	n/a
Reserve Bank of India	
Scheme	Targeted Longer-Term Repo Operations (April 2020 – current)
Maturity	Up to 3 years
Interest rate	Prevailing policy rate plus fee (440 to 640 bps)
Initial allowance	Depending on bid amount
Additional allowance	n/a
Price incentive	Banks that do not invest the funds in private securities as specified (at least 50% invested in SMEs and micro-finance institutions) must pay a penalty fee of 200 bps
Reserve Bank of New Ze	ealand
Scheme	Term Lending Facility (April 2020 – current)
Maturity	3 years
Interest rate	25 bps
Initial allowance	n/a
Additional allowance	1 x outstanding loans under Government's Business Finance Guarantee Scheme
Price incentive	n/a
Riksbank	
Scheme	Program for onward lending to companies (April 2020 – current)
Maturity	2 years
Interest rate	Policy rate (0 to 20 bps)
Initial allowance	Depending on bid amount; highest allocation is SEK12.5bn
Additional allowance	n/a
Price incentive	Maximum penalty fee of 20 bps applied if funds are not lent to non-financial companies
US Federal Reserve	
Scheme	'Paycheck Protection Program' Liquidity Facility (April 2020 – current)
Maturity	2 years
Interest rate	35 bps
Initial allowance	n/a
Additional allowance	1 x amount of Paycheck Protection Program loans extended
Price incentive	n/a

 $[\]hbox{(a)} \quad \hbox{The terms of these programs were often modified after their introduction to ease conditions further.}$

Sources: Central banks

⁽b) The Funding for Lending Scheme lent short-dated government securities, which could then be used to borrow money from markets at rates close to the expected path of the policy rate.

Endnotes

- [1] For example, see Borio C and L Gambacorta (2017), 'Monetary policy and bank lending in a low interest rate environment: diminishing effectiveness?', Bank for International Settlements Working Paper No 612.
- [2] Connolly E and J Bank (2018), 'Access to Small Business Finance', RBA *Bulletin*, September, viewed 29 April 2020. Available at https://www.rba.gov.au/publications/bulletin/2018/sep/access-to-small-business-finance.html
- [3] Bank of England (2018), 'The Term Funding Scheme: design, operation and impact', *Bank of England Quarterly Bulletin*, December, and Bank of England (2012), 'The Funding for Lending

- Scheme', Bank of England Quarterly Bulletin, December.
- [4] Andreeva D and M Garcia-Posada (2020), 'The impact of the ECB's targeted long-term refinancing operations on banks' lending policies: the role of competition', European Central Bank Working Paper Series No 2364, and Andrade P, C Cahn, H Fraisse and J-S Mesonnier, 'Can the provision of long-term liquidity help to avoid a credit crunch? Evidence from the Eurosystem's LTRO', Journal of the European Economic Association.