## Box 3 <br> The second series of targeted longerterm refinancing operations (TLTRO II)


#### Abstract

On 10 March 2016 the Governing Council announced a second series of targeted longer-term refinancing operations (TLTRO II), which will reinforce the ECB's accommodative monetary policy stance and strengthen the transmission of monetary policy. The new operations offer long-term funding at attractive conditions to banks to further ease private sector credit conditions and to stimulate bank lending to the real economy. In conjunction with the other nonstandard measures in place, TLTRO II will contribute to a return of inflation rates to levels below, but close to, $2 \%$ over the medium term.

TLTRO II will consist of a series of four operations which will be conducted once a quarter between June 2016 and March 2017. Counterparties ${ }^{1}$ will be able to borrow in the operations a total amount of up to $30 \%$ of a specific eligible part of their outstanding loans ${ }^{2}$ as at 31 January 2016, less any amount which was previously borrowed under the first two TLTRO operations conducted in 2014 and still outstanding at the time of the settlement of TLTRO II. The upper limit for the aggregated borrowing allowances is estimated to amount to around $€ 1.6$ trillion. ${ }^{3}$ However, as illustrated by the take-up in the first series of TLTROs (TLTRO I), this figure cannot be treated as a reflection of the expected take-up in the operations. Take-up of the total allowance would require that all banks with eligible loans apply for participation in TLTRO II (which requires optimal formation of TLTRO groups) and fully repay the amounts borrowed in the first two TLTRO I operations conducted in 2014. More importantly, banks will assess the attractiveness of the new operations against market conditions, their issuance plans, their overall funding needs and their lending outlook.


Targeted longer-term refinancing operations have a track record of supporting the transmission of lower policy rates to better borrowing conditions for the non-financial private sector. Such operations were first introduced as part of the June 2014 credit-easing package. Lending rates for euro area non-financial enterprises and households declined markedly after the announcement of the crediteasing package, and the associated reductions in bank funding costs have increasingly been passed on to bank borrowers (see Chart 11 in Section 5). The observed reductions have been more pronounced in vulnerable countries, where lending rates had previously been elevated vis-à-vis those prevailing elsewhere in

[^0]the euro area. Moreover, in the former group of countries, there is evidence that counterparties that borrowed in the first series of TLTROs have lowered the rates charged to non-financial enterprises by more than their non-participating peers. ${ }^{4}$ In line with these observations, the majority of banks surveyed in the euro area bank lending survey (in January 2015, July 2015 and January 2016) reported that they intended to use the funds obtained in the first series of TLTROs to grant loans, in particular loans to enterprises and consumer credit.

The main gauge of the measure's effectiveness will be its performance in improving funding conditions for final borrowers in the real economy. While widespread participation in TLTRO II is welcome, the amount of liquidity allotted is only one of the criteria by which to assess the likely success of the measure, as also seen by the experience with TLTRO I. In fact, the mere availability of long-term funding at low rates for banks via TLTRO II (together with the other monetary policy measures in place) is expected to ease bank funding conditions in general and to lower the cost of market-based bank funding. As was the case for TLTRO I, this cost advantage is in turn expected to be passed on to bank borrowers.

All TLTRO II operations have a maturity of four years from the time of settlement, with the possibility of voluntary early repayment after two years. The long maturity of the operations will provide counterparties with funding certainty and allow them to match the maturity of their funding with that of loans that finance real investment spending. At the same time, the measure provides flexibility as counterparties will be able to repay the amounts borrowed under TLTRO II at a quarterly frequency starting two years from the settlement of each operation. Counterparties will not be subject to mandatory early repayments, as was possible under TLTRO I. Moreover, an additional voluntary repayment possibility in June 2016 for all currently outstanding TLTRO I operations has been introduced, just ahead of the settlement of the first TLTRO II operation. This will allow counterparties that participated in the previous series of TLTROs to transfer their funding to TLTRO II and thereby benefit from the more accommodative terms of the new series of operations.

## The pricing mechanism of TLTRO II is intended to incentivise banks to pass on

 to ultimate borrowers the accommodative funding conditions it offers. The rate at which counterparties can borrow under TLTRO II depends on their lending pattern (see Chart A). ${ }^{5}$ The maximum interest rate applied under TLTRO II will be fixed for each operation at the rate applied in the main refinancing operation (MRO) prevailing at the time of allotment. However, counterparties whose eligible net lending in the period between 1 February 2016 and 31 January 2018 exceeds a certain benchmark - which depends on each counterparty's past lending behaviour, as explained below - will benefit from a lower rate for the entire term of the operation. In particular, the rate on TLTRO II borrowing can be as low as the rate on the deposit facility prevailing at the time of allotment for counterparties with a sufficiently strong lending[^1]performance. Counterparties will achieve this rate if they exceed their benchmark stock of eligible loans by $2.5 \%$ in total as at 31 January 2018. Up to this limit, the level of the interest rate will be graduated linearly depending on the percentage by which a counterparty exceeds its benchmark stock of eligible loans. This means that all counterparties with positive eligible net lending or with an improved lending performance compared with the 12 months to 31 January 2016 will borrow at a rate lower than the MRO rate prevailing at the time of allotment.

## Chart A

Illustration of the borrowing rate for TLTRO II


Deviation of outstanding amount of eligible loans as at 31 January 2018 from
benchmark outstanding amoun
(percentages of the benchmark oustanding amount of eligible loans

Chart B
Illustration of the TLTRO II benchmark


Source: ECB.
Note: This illustration abstracts from adjustments to the outstanding amounts of loans, such as those resulting from loan sales and purchases or securitisations.

Counterparties' benchmarks depend on their lending pattern over the 12 months to 31 January 2016. For counterparties that exhibited positive eligible net lending in the 12-month period to 31 January 2016, the benchmark net lending is set at zero. For counterparties that exhibited negative eligible net lending in the 12month period to 31 January 2016, the benchmark net lending is equal to the eligible net lending in that period. The benchmark lending concept is illustrated in Chart B. The chart gives a stylised example for a counterparty with positive lending during the 12 months up to 31 January 2016, as well as for a counterparty with negative lending during that period. For the counterparty with positive net lending (blue line), the benchmark net lending flow is zero, so that the benchmark stock is equal to the outstanding amount of eligible loans on 31 January 2016. By contrast, for the counterparty with negative net lending (yellow line), the benchmark net lending flow is equal to the negative net lending flow during that period. The benchmark stock that counterparties have to exceed is thus equal to the outstanding amount of eligible loans on 31 January 2016 plus the (negative) net lending flow recorded in the 12 months to 31 January 2016.

Table A
Stylised examples of TLTRO II benchmarks

| (EUR millions) |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Counterparty | Eligible net lending <br> 1 February 2015 - <br> 31 January 2016 | Outstanding amount of <br> eligible loans as at <br> 31 January 2016 | Benchmark net <br> lending | Benchmark <br> outstanding <br> amount |
| A, B, C | 50 | 1,000 | 0 | 1,000 |
| D, E, F | -40 | 1,000 | -40 | 960 |

Source: ECB.
The application of this pricing mechanism is illustrated with a few stylised examples. ${ }^{6}$ Table A considers stylised cases of three counterparties with positive eligible net lending in the 12-month period to 31 January 2016 (counterparties A, B and C ) and three with negative eligible net lending in that period (counterparties $\mathrm{D}, \mathrm{E}$ and F). Counterparties A, B and C, as positive net lenders in the 12-month period to 31 January 2016, are assigned a zero net lending benchmark. For counterparties D, $E$ and $F$, which had negative eligible net lending in the 12 months to 31 January 2016, the benchmark net lending is equal to their net lending in that period, i.e. - $€ 40$ million in these examples.

In Table B it is assumed that counterparty A achieves positive net lending of $€ 30$ million in the period from 1 February 2016 to 31 January 2018. This counterparty therefore exceeds its benchmark outstanding amount (assumed to be $€ 1,000$ million) by $3.0 \%$ and as a result obtains the lowest possible rate of $-0.40 \%$, i.e. the current rate on the deposit facility (all examples are based on the current MRO and deposit facility rates). Counterparty $B$ registers negative net lending of $-€ 10$ million. This counterparty does not meet its benchmark net lending and, therefore, the maximum rate of $0.00 \%$, i.e. the current MRO rate, will be applied to its borrowing under TLTRO II. Counterparty $C$ exhibits positive net lending, thereby meeting its benchmark net lending. However, its positive net lending of $€ 10$ million results in this counterparty exceeding its benchmark outstanding amount by only $1.0 \%$, i.e. less than the $2.5 \%$ necessary to obtain the minimum rate. In this case a rate of $-0.16 \%$ will be applied to counterparty C's borrowing under TLTRO II. This is $40 \%$ of the difference between the current deposit facility rate ( $-0.40 \%$ ) and the rate applied in the MRO ( $0.00 \%$ ), reflecting the fact that this counterparty exceeded its benchmark by only $40 \%$ of the amount required to receive the minimum possible rate.

Counterparty $D$ exhibits net lending of - $€ 10$ million in the period from 1 February 2016 to 31 January 2018. This counterparty exceeds its benchmark outstanding amount (assumed to be $€ 960$ million) by $3.1 \%$ and as a result obtains the lowest possible rate of $-0.40 \%$. By contrast, counterparty E does not meet its benchmark net lending, as it registers eligible net lending of -€50 million in the period from 1 February 2016 to 31 January 2018. In this case the MRO rate of $0.00 \%$ will be applied. Finally, counterparty $F$ exhibits net lending of - $€ 35$ million, thereby exceeding its benchmark outstanding amount by only $0.5 \%$, i.e. $20 \%$ of what is required in order to achieve the minimum rate on TLTRO II borrowing. In this case

[^2]the rate applied to counterparty F's borrowing under TLTRO II will be $20 \%$ of the difference between the current deposit facility rate ( $-0.40 \%$ ) and the rate applied in the MRO (0.00\%), i.e. $-0.08 \%$.

Table B
Stylised examples of the application of the TLTRO II pricing mechanism

|  | Eligible net lending <br> Counterparty | Percentage deviation from <br> benchmark outstanding amount <br> (percentages) | ( February 2016-31 January 2018 <br> (EUR millions) | TLTRO II interest rate <br> (percentages per annum) |
| :--- | ---: | ---: | ---: | ---: |
| A | 30 | -1.0 | -0.40 |  |
| B | -10 | -1.0 | 0.00 |  |
| C | 10 | 1.0 | -0.16 |  |
| D | -10 | 3.1 | -0.40 |  |
| E | -50 | -1.0 | 0.00 |  |
| F | -35 | 0.5 | -0.08 |  |

Source: ECB.


[^0]:    1 As in the first series of TLTROs, counterparties can participate in TLTRO II individually or, subject to certain conditions, on a group basis.
    ${ }^{2}$ As in the first series of TLTROs, eligible loans are defined as those to euro area non-financial corporations and households excluding loans to households for house purchase.
    3 Amounts which were previously borrowed under the first two TLTRO operations conducted in 2014 and not repaid will reduce this borrowing allowance. Currently such borrowings amount to €212 billion.

[^1]:    4 For more details, see the article entitled "The transmission of the ECB's recent non-standard monetary policy measures", Economic Bulletin, Issue 7, ECB, 2015.
    5 The precise technical details pertaining to TLTRO II, including the method for the calculation of the applicable interest rate, are specified in the relevant legal act.

[^2]:    6 Please note that all calculations are rounded. The exact number of decimal places to apply is specified in the TLTRO II legal act.

