Box 5

IMPACT OF THE APPLICATION OF THE TWO-TIER SYSTEM

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On 12 September 2019, the Governing Council of the European Central Bank (ECB) adopted a comprehensive package of monetary policy measures to ensure the sustained convergence of euro area inflation towards its target.[1] Specifically, in order to support the credit institution-based transmission of monetary policy, the ECB decided to introduce a two-tier system (TTS) for the remuneration of the reserves held by credit institutions in their current accounts at their national central banks. Under this new system, the negative deposit facility rate is not applied to a portion of credit institutions' excess reserve holdings.[2]

This box describes the main features of the TTS and assesses its impact on the distribution of excess liquidity within the euro area and on money market rates.

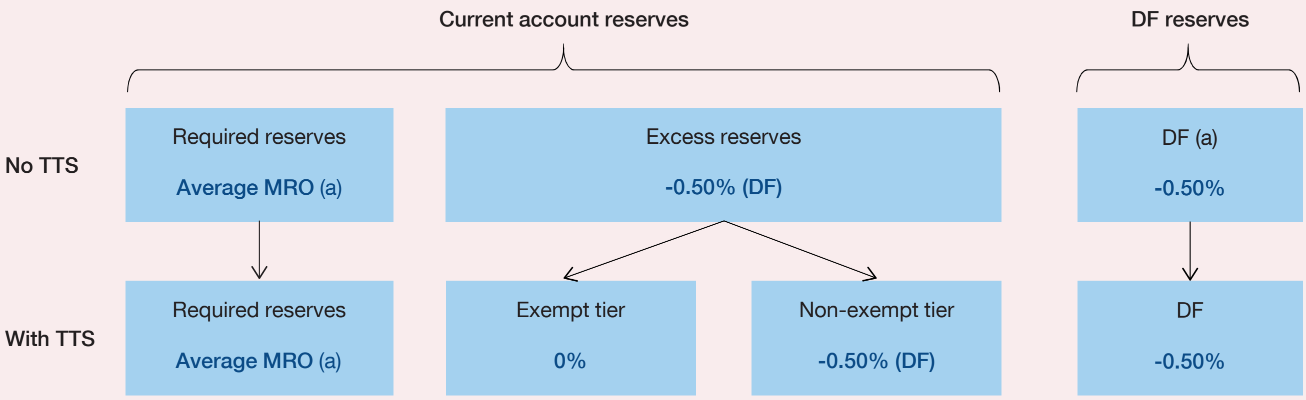
The TTS came into effect on 30 October 2019 (start of the seventh reserve maintenance period, MP7). The Governing Council decided that the exempt tier would be equal to six times (multiplier) the minimum reserve requirement and would be remunerated at zero percent. The multiplier is the same for all credit institutions and is set such that short-term money market rates in the euro area are not unduly affected. It may be adjusted over time in line with changing levels of excess liquidity holdings. The second tier (non-exempt) will apply to all the excess reserves held by credit institutions in their current accounts exceeding that threshold and will continue to be remunerated at zero percent or at the deposit facility rate (currently -0.5%), whichever is lower (see Diagram 1).

The application of TTS generates two types of situations for institutions, since excess reserves are unevenly distributed across the Eurosystem. Some institutions have excess reserves exceeding the exemption threshold and others' excess reserves are below this threshold. The latter institutions have unused exemption allowances and can raise liquidity without increasing its cost.

This uneven distribution of excess reserves prompted institutions to embark on a redistribution process as soon as the TTS came into effect, to benefit as much as possible from the new system. As a result of this process, the unused exemption allowances have now become residual, representing, in relative terms, 5% and 4% of total exemption allowances in MP7 and MP8, respectively.

As was to be expected, credit institutions with unused exemption allowances and with reserve holdings at the deposit facility immediately transferred them to their current accounts to take advantage of the new measure (see Chart 1).

Figure 1
TWO-TIER REMUNERATION SYSTEM



SOURCE: Banco de España.

a DF: Deposit facility; MRO: Main refinancing operations.

1 For more details, see Box 1.2 of the *Financial Stability Report* (Autumn 2019, Banco de España).

2 Bank reserves are liquid balances held by credit institutions at their central bank. Credit institutions are required to maintain a minimum level of reserves (known as the "minimum reserve requirement") equal to 1% of their eligible liabilities. The amount of reserves held by credit institutions in excess of the reserve requirements are known as "excess reserves".

Box 5

IMPACT OF THE APPLICATION OF THE TWO-TIER SYSTEM (cont'd)

Also, in the first few days of MP7, credit institutions entered into agreements with one another to transfer liquidity from those with excess reserves exceeding the threshold to those with unused exemption allowances. Based on MP6 data, if the TTS had been applied in that period, the Eurosystem would have had unused exemption allowances totalling €227 billion. As a result of the liquidity tranfers, this amount was reduced to €37 billion in MP7 and decreased further to €30 billion in MP8. This reduction in unused exemption allowances was observed in all euro area countries (see Chart 2).

The redistribution of liquidity has mostly taken place within each country. However, liquidity has also been

Chart 1
EUROSYSTEM CURRENT ACCOUNTS AND DF

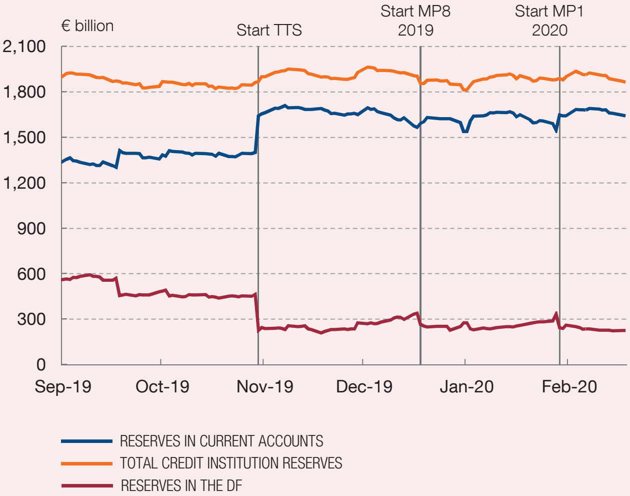


Chart 2
EXEMPT TIER AND UNUSED EXEMPTION ALLOWANCES

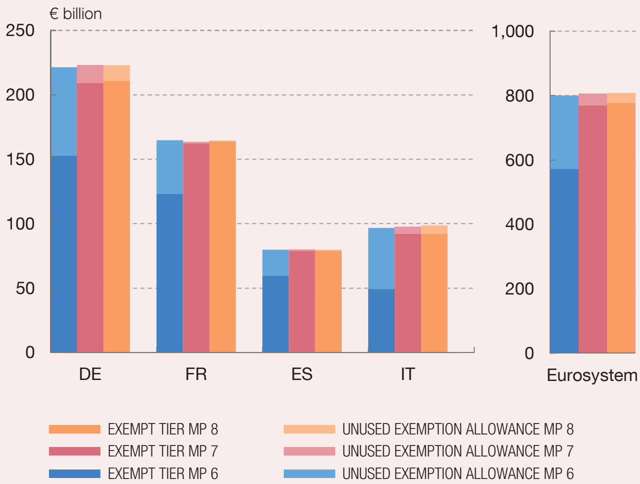


Chart 3
TOTAL EUROSYSTEM TARGET2 BALANCES (a)

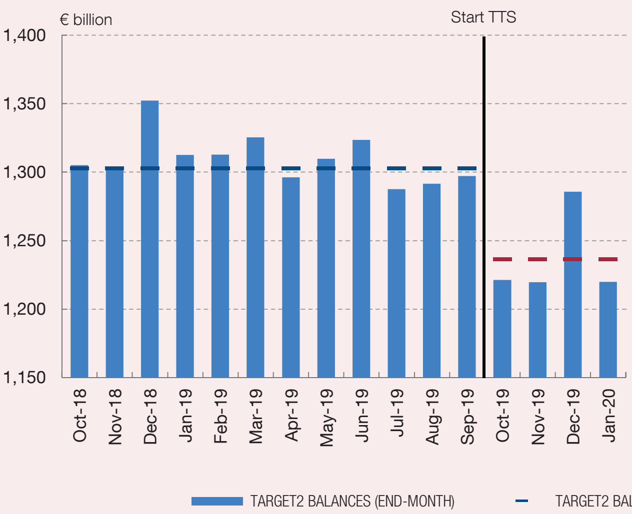
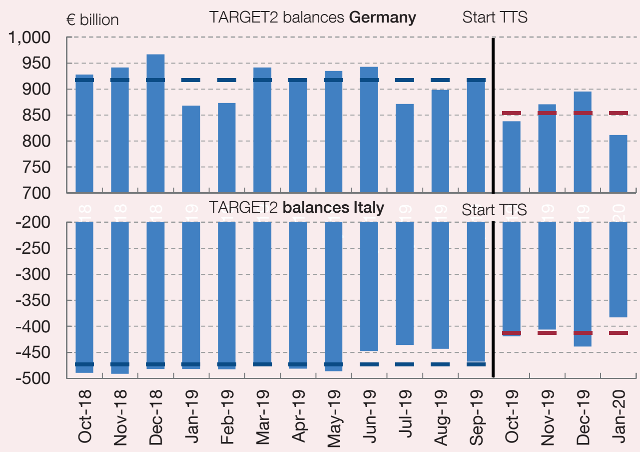


Chart 4
TARGET2 BALANCES IN GERMANY AND ITALY (b)



SOURCES: ECB website (www.ecb.europa.eu/stats/policy_and_exchange_rates/minimum_reserves/html/index.en.html), ECB Statistical Data Warehouse, MMSR and RepoFunds Rate website (www.repofundsrate.com).

a The aggregate Eurosystem Target2 balance is always zero as, by definition, the sum of Target2 assets is equal to the sum of Target2 liabilities. To illustrate the TTS effect, this chart shows only the sum of the assets balance or liabilities balance. This prevents the balances from offsetting each other.

b Germany is shown with a positive Target2 balance because its Target2 is on the asset side of the balance sheet. Italy is shown with a negative Target 2 balance because its Target2 is on the liabilities side of the balance sheet.

redistributed among credit institutions across euro area countries. Specifically, based on MP6 data, there were four countries (Italy, Greece, Portugal and Slovakia) whose unused exemption allowances would not have been fully exhausted with domestic liquidity transfers and could therefore be used up with cross-border liquidity transfers. Of the €227 billion of the unused exemption allowances, €188 billion could be accounted for by domestic transactions and €39 billion by cross-border transactions. Although this effect has not significantly reduced the concentration of excess liquidity in a few countries, it has been sufficient to reduce the Eurosystem's total TARGET2 balances (see Chart 3). This effect is clearly observed in Germany, in the decline of its TARGET2 asset balances which reflects liquidity outflows to other countries, possibly including Italy, where liquidity inflows via TARGET2 are reflected in the decrease of its TARGET2 liability balances (see Chart 4).

The deals reached by institutions have largely taken place in the money markets,[3] mostly concentrated in the repo

Chart 5
SHORT-TERM BORROWING VOLUMES OF MMSR BANKS WITH UNUSED EXEMPTION ALLOWANCES

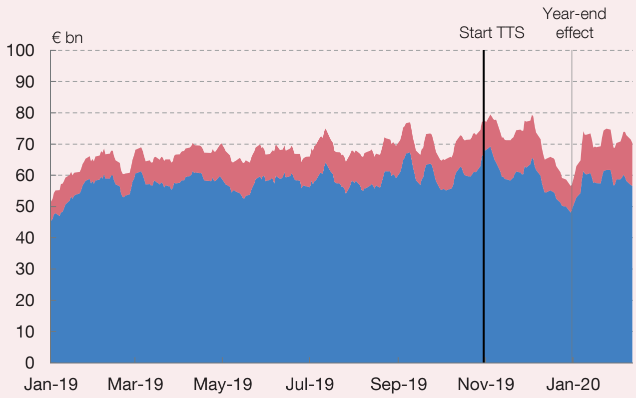
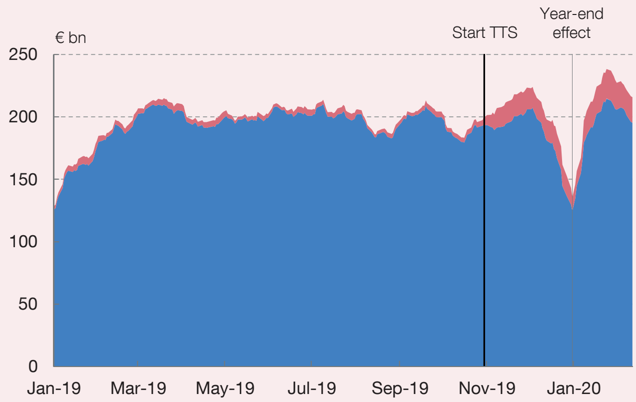
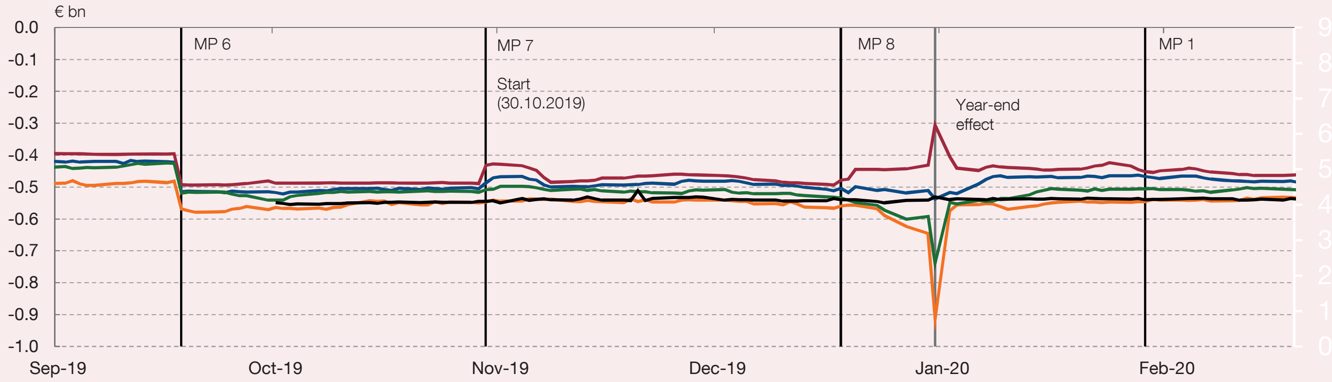


Chart 6
SHORT-TERM LENDING VOLUMES OF MMSR BANKS WITHOUT UNUSED EXEMPTION ALLOWANCES



SECURED SEGMENT
UNSECURED SEGMENT

Chart 7
MONEY MARKET RATES



SOURCES: MMSR, ECB Statistical Data Warehouse and the RepoFunds Rate website (www.repofundsrate.com).

3 Institutions could also have redistributed liquidity through asset sales and intragroup distribution.

segment and using central counterparty clearing houses. An increase in the activity of the unsecured segment has also been observed, to some extent revitalising a market that had very low volumes before application of the TTS (see Charts 5 and 6). The heightened activity was due to an increase in financing transactions by institutions with unused allowances.

Following the liquidity redistribution process and the calibration of the multiplier at six times the minimum reserve requirements, the excess reserves that continue to be remunerated at -0.5% amount to €900 billion. This is a sufficiently large amount for interest rates to have been only marginally affected in the first few days of MP7 and to remain aligned with policy rates. In the deposit segment, the €STR (unsecured interbank rate) has barely been affected and remains at levels that are very close to those before the TTS was applied. Conversely, in the repo segment, a rise in interest rates was observed when the TTS came into effect, particularly in repos with Italian or Spanish collateral (6 bp and 4 bp, respectively), but it was corrected within a few days (see Chart 7). It should be noted that the year-end effect in MP8 makes it difficult to interpret the impact on money markets of applying the TTS during that period.

To conclude, application of the TTS has led to higher interbank activity to redistribute excess liquidity not only at the national level but also among euro area countries. Money market rates have only been marginally affected and remain aligned with policy rates. Since the measure has only recently been implemented, a more thorough assessment would be advisable in subsequent maintenance periods.