## Cash Management activity of the Italian DMO: an increasing presence in money market

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Milan

## Agenda

- Cash Management Activity
- Cash Management Tools
- Recent changes to cash management instruments
- Impact on debt and cash management

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Cash Management Activity

## Objectives

$>$ Ensure cash is available to line ministries and spending agencies to meet budget obligations and commitments, when due.
> Manage cash by:

- borrowing to cover expected cash shortfalls, and avoid "idle" balances,
- investing during periods of surplus,
- minimizing borrowing costs.
> Cost aspects are subordinate to risks.
$>$ Cash management policy is strictly linked to the general debt management policy, whose objectives are to secure coverage of the General Government funding needs and to reduce financing cost, while taking into account a prudent level of risk.
> Italian DMO manages liquidity with the aim of:
- offsetting short-term fluctuations,
- reducing volatility affecting the Treasury account.
$>$ Cash management also aims to ensure market efficiency and transparency and to reduce possible negative effects on the efficiency of the monetary policy transmission.

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## Constraints and rules in cash flows management

$>$ Funds are deposited on an account (the Treasury Account) held at the Bank of Italy (Bol), which must fulfill some constraints in terms of cash balance, set by law;
$>$ Should the balance be negative, State treasury payments would be blocked until the temporary debt is repaid;
$>$ In the past a minimum threshold of $€ 10$ billion was applicable, to be fulfilled at the end of each month. Furthermore, in case of balance lower than $€ 5$ billion, the Minister was required to inform the Parliament about the reasons, explaining the strategy to be adopted to respect the threshold;
> Interest paid on the Treasury Account is based on rules defined by ECB on Government Deposits, that refers to money market rates and policy rates sets by ECB.

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## Forecasting cash balance and flows: a very structured approach

$>$ Cash management activity is based on detailed information shared by the DMO, the MEF Accounting Department (Ragioneria Generale dello Stato - RGS) and the Bank of Italy (Bol), regarding the cash flows affecting the Treasury balance.
$>$ The Department of Treasury is responsible for the State treasury management through the Bol operational arm and responsible in forecasting the interest of public debt. RGS is in charge of forecasting both inflows (fiscal revenues, social contributions, etc.) and outflows (salaries, pensions, transfer of funds to local authorities, etc.).
$>$ Information on expected and effective flows is updated 6 times a day, in order to forecast the end-of-day cash balance, while rough data on future flows and balances (usually referred to the following 30 days) are shared on a weekly basis.
$>$ MEF rough daily cash balance forecasts cover an annual period: as the reference period becomes closer, the assessment gets more and more precise, since the amount and timing of each cash flow become increasingly certain.
$>$ Forecasting capability is strongly affected by several factors, such as the significant number of public entities involved, seasonal trends, huge fiscal revenues and economic cycle.

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## Flow mismatches

Net Cash Borrowing Requirement: cumulative non-linear monthly evolution


Revenues and payments


Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23Mar-23 Apr-23 May-23 Jun-23


## Average infra-monthly change in the Treasury cash balance: Spread vs the minimum monthly size

Volatility in cash daily changes is mostly due to inflows related to tax revenues in the second half of the month while payment of pensions and interest on government bonds occurs on the first day of the month. In addition, such movements are rounded out by Treasury issues, and more especially, the maturities of government securities.

Average infra-monthly variation in Treasury cash and cash equivalents - Gap with the monthly low - 2020-2023 (euros million)


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Cash Management Tools

## Available tools

$>$ T-Bills (BOTs)<br>> Commercial Papers<br>$>$ Liability Management operations<br>$>$ Deposits<br>$>$ Repos

## BOTs (1) - Features

$>$ BOTs (Buoni Ordinari del Tesoro) are the Italian T-Bills, with different maturities up to 1 year;
$>$ Standard maturities are 3,6 and 12 months, issued on a monthly basis; 6 and 12 months are issued regularly, while 3 months only for cash needs;
$>$ Other possible maturities, the so called "Flexible BOTs", are issued for exclusive coverage of temporary liquidity requirements;
$>$ Flexible BOTs, like 3 month bills, are used as a cash management tool, to fill possible mismatches between financing needs and medium-long term issuance.

## BOTs (2) - T-bills vs other government bonds

Each year, the Minister of Economy and Finance set a minimum/maximum issuance share for each type of bond (out of the total outstanding government bonds at the year end): $5-15 \%$ is the range usually applied to short term bonds.

Nevertheless, BOTs represent a relevant share of the government bond issues (30$50 \%$ of the total gross issuance in the latest years).


## Liability Management operations

$>$ These operations are flexible and strategic instruments for the public debt management aimed at:

- containing refinancing risk,
- smoothing the redemption profile,
- fostering the liquidity and efficiency of the secondary market.
$>$ LM operations are not subject to a fixed calendar, the execution depends on specific Treasury needs and market conditions.
> The Treasury holds the LM operations through:
- Buybacks (reverse auctions, platform operations, bilateral),
- Bond Exchanges (auctions, platform operations, syndications).


## Commercial papers

- Commercial paper is an instrument for raising short term fund by corporate issuers and Sovereign issuers
- It is issued in the form of unsecured promissory notes, sold on a discount basis, with maturities of under one year
- CP is purchased by a wide range of institutional investors and companies wishing to invest short term cash surpluses at rates competitive with bank deposit
- In general the credit quality of the paper is high
- Global programme for ECP and USCP - The Programme has a set terms and a maximum size (€ 10 bln ).
- Commercial Paper are issued on a daily basis over the counter keeping constantly in touch with the lead managers of the Program
- Dealers - The notes are distributed through dealers who sell the paper to investors on behalf of the issuer. Vast majority of our Primary Dealer are also Dealers for CPs.
$>$ Why issue $C P$ ?
- Financial Flexibility: the timing and maturity dates of CP can be structured precisely to meet the cash flows needs of the borrowers.
- Access to a separate investors base: the investors represent a new source of funds for the issuer besides other ones.
> Why invest in CP? CP represents an attractive alternative to other short term investments for the following reasons:
- Flexibility
- Liquidity
- Risk diversification

MEF

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Recent changes to cash management instruments

## The recent review of the cash management legal framework

$>$ In 2021, the Treasury closed the reviewing process of the current regulatory framework for cash management activities, with two main objectives:

- to better adapt it to the market context;
- equip itself with instruments that are even more flexible and adequate to current market practices.

Innovations introduced with the new regulation :

- OPTES operations (daily Treasury liquidity operations) connected to overnight auctions have been suspended since 2019, given the large liquidity in the system, while the possibility of longer-term bilateral forms of lending and borrowing is kept, as these still have significant room for demand;
- authorization to use additional cash management instruments in use on the markets, also through trading platforms, so as to facilitate the activity of both the Treasury and the counterparties concerned;
- operational introduction of repos.


## Improvement liquidity management tools - Depo

Enabled counterparties
Thanks to the new regulatory framework the number of counterparties authorized to negotiate non-collateralized liquidity collection and use transactions with the Treasury through bilateral negotiations has been steadily increased overtime.


Active counterparties
There is also a clear increasing trend in the average (30-day rolling) of the number of counterparties with at least one existing deposit with the Treasury.


## Repo operations - Role in financial markets

(Repo as a liquidity product: mainly the GC segment

- "Securitized Loan": "Deposit like" \& Investment tool
- Market is driven by the providers of liquidity
> Repo as a security product: mainly the Special Repo segment
- Underlying security becomes the driver of the transaction
- Instrumental to support all Market Maker and Primary Dealership activities
- Financing \& covering of short securities positions
- Market is more balanced between buyers and sellers of collateral


## Term Repo volumes: an increasing funding source

Overall term repo volumes traded on the MTS-Repo. A steady increase in trading activity has been noted since 2022.

Term repo market volumes

- 10-working day moving avg



## The DMO Repo Facility

$>$ The Repo facility, officially launched on May 17, 2021, is an important tool for the Ministry of Economy and Finance (MEF) to streamline liquidity management. It can be used for both liquidity absorption and provision of liquidity to the market.
$>$ Through repo operations, the MEF can also intervene to limit any distortions on the government bond yield curve and normalize repo rates for specific securities. Moreover through repo facility MEF provide collateral to the market in order to facilitate the market making activity of the PDs.
> The main characteristics of repo transactions are as follows:

- the underlying securities are mainly nominal BTPs. MEF have created its own portfolio of bonds dedicated to this activity. At the moment the portfolio is constituted by 50 bonds each of 1 billion euros;
- the transactions take place on the MTS Repo Market and typically involve Special securities for funding and GC securities for reverse repo operations;
- the contracts have maturities longer than one day, with an average of 20-30 days;
- all contracts are executed through the central counterparty, Euronext Clearing.

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## Repo - Portfolio

> The Ministry of Economy and Finance (MEF) has established a portfolio of government securities through the issuance of specific tranches.
$>$ Currently, the portfolio consists only of nominal BTPs, each with a value of 1,000 million Euros. The portfolio will be periodically updated, either by adding securities that will mature over time or by adjusting quantities based on specific cash management needs.
$>$ The securities in the portfolio do not count as public debt for Eurostat purposes. Debt only arises when there are open Repo positions, and it is in the form of loans from financial institutions.
$>$ Initially, the portfolio consisted of 15 securities, subsequently it was expanded to 30 securities and now stands at 50 securities.
$>$ The selection of securities for the portfolio is primarily based on the following criteria:

- "specialness";
- total outstanding;
- repo trading volumes;
- and on/off-the-run status.


## Operational activity

$>$ All participants in the MTS Repo platform are potential counterparties of the Ministry of Economy and Finance (MEF), although the majority of contracts have been made with counterparties chosen among the Primary Dealers.
$>$ Due to market interest rate levels, during the initial months of operation, the MEF only engaged in borrowing activities in the Repo market. However, in recent weeks, following a radical market shift, the MEF has found it advantageous to also engage in lending activities (see next slide).
$>$ Contract maturities have typically been at least 20/30 days. The duration of contracts has shown a declining trend over time, while the number of contracts continues to increase. This decline is due to the current higher uncertainty in monetary rate movements compared to past years, when the monetary rate curve was substantially flat even for horizons of 5-6 months.

## Challenges and drawbacks of repo acrivity

$>$ Accounting aspects $\rightarrow$ ad-hoc meeting with accounting institution (national and European)
$>$ Operational aspects (back office / front office / middle office) $\rightarrow$ high need for dedicated human and IT resources
$>$ Liquidity concentrated on very short-term tenors $\rightarrow$ for bonds that are severely and permanently squeezed the activity is based mainly on a reverse inquiries (even for longer terms).
$>$ Large portfolio but non complete $\rightarrow$ flexibility to increase or modify it regularly and quickly

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Impact on debt and cash management

## Strategy review on T-bill issuance (2023)

$>$ The strategy involves halving the number of new 6 -month BOTs, going from 6 to 3 , with the issuing of the new sixmonth BOT every other month and the reopening of the second tranche the following month.
$\checkmark$ Better calibration of the issuance size evaluated from time to time, based on funding needs. No needs to roll the same amount that redeem.
$\checkmark$ The opportunity to tap 6-month BOT for a limited amount, frees up room to issue outstanding BOTs that time to time require to be reopened (retail demand; repo squeeze; need to cover funding for specific months).
$>$ Flexibility
> T-bills as a fully treasury instrument
Smoothing the secondary yield curve

## Repo volumes

## Contribution of the MEF as provider of collateral



## Specialness

Thanks to repo operations, we contributed to normalizing tense situations on the market. For example, the trend of the specialness for the two bonds included in the portfolio in mid-October 2023 is analysed. The amount supplied to the market of the security is indicated on the left axis, while the specialness on the spot/next tenor is indicated on the right axis. A negative correlation is noted between the two variables for both securities. An important movement on the specialness of 72 s is evident when the security enters the portfolio (red line). The movement towards 36s is more limited. The specialness of both bonds remains limited in the following months.

Specialness/Outstanding
BTPS 1.450 01/03/36


Specialness/Outstanding
BTPS 2.150 01/03/72


## Collateral vs liquidity

The following charts show the European growing need for liquidity in recent months compared to 2022, when liquidity motivated repo transactions were very limited.

Collateral- vs liquidity-motivated repo transactions in 2022
(\% shares)

■ Liquidity-motivated Collateral-motivated


Sources: SFTD, BrokerTec, MTS, ECB calculations.
Notes: Chart displays the share of liquidity-motivated (general collateral, GC) and collateral-motivated (non-general collateral, non-GC) outstanding volumes. Averages are based on 2022 data.

Excess liquidity and outstanding volumes of liquidity-motivated repo transactions (EUR billion)
_—Cash driven repos_Excess Liquidity (rhs)


Sources: ECB, SFTD, BrokerTec, MTS, ECB calculations.
Notes: Chart displays liquidity-motivated (general collateral, GC) repo volumes based on BrokerTec/MTS one-day repo transactions and on Eurex GC pooling trades as reported in SFTD. Calculations are based on a single-counting approach
Last observation: 06 March 2024.

## Reverse Repo: efficient liquidity management tool

- The charts below show the liquidity traded on the GC Repo market for spot/next, tom/next and overnight tenors in the second half of the last year. In blue and yellow respectively the volumes traded by liquidity takers and liquidity providers.
- The MEF activity has intensified since September with the start of operations on short tenors, even at 1 day. It provided greater liquidity to the market to satisfy the growing demand shown in the previous charts.
- The activity is visible from the increase in volumes starting from that date. Furthermore, this activity occurred without altering market levels.

Liquidity driven repo market volumes
(second half 2023)


## Reverse repo rates

In recent months there has been a progressive narrowing of the spread between GC and SR rates; a stability of the spread between GC and $€_{s t r}$ rate. This last consideration highlights the neutrality on market levels despite the substantial increase in volumes invested by the Treasury, which began in September 2023 with reverse repo contracts, including short-term ones.

Spread vs Deposit Facility


## Management of the liquidity

The Treasury invested on average $57 \%$ of the total liquid assets in 2023 , compared to $22 \%$ in 2022 and $12 \%$ in 2021 . In the last year there has been a clear increase in the amount invested in depos and reverse repos.


## Treasury Account balance volatility

Treasury Account volatility


## Future possible steps

- Risk Framework Review - strenghten monitoring instruments including not only CRAs (external factor) but also liquidity and solvencies ratios.
- Repos - Widen the scope of the repo transactions through:
- 1) GMRA
- 2) Collateral framework
- 3) Collateral exchange
- 4) Tri-party repos / GC pooling
- Non standard term deposits (evergreen; callable)
- Bank Account
- Securities Lending (GMSLA)
- Explore reopening CP channel
- Explore MM funds liquidity needs


## Market evolutions and challenges

- New ECB operational framework : risks and opportunities;
- Potential effect arising from the asimmetric treatment of Security Financing Transaction for european banks and for repo market;


## Thank you!

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