



## Central bank asset purchase programmes: how is money created and then destroyed?

Over the last decade, central banks have made extensive use of asset purchase programmes to tackle a number of crises. In addition to their impact on interest rates, these programmes have led to a mechanical and temporary increase in the amount of money in circulation in the economy. This article explains how the creation of central bank money, i.e. money exchanged in a closed circuit between the government, the central bank and commercial banks, is combined with the creation of commercial bank money held by businesses and households. The redemption of the securities held then gradually ensures the destruction of the money previously created. Since 2022, the Eurosystem has been reducing the amount of outstanding securities it holds by only partially reinvesting principal payments from maturing securities.

**David Adam, Thibaut Gentil**  
Directorate General Financial Stability and Operations  
Analytical Modelling Centre for Financial Stability

JEL codes  
E51, E58  
GO

**William Arrata, Nicolas Maggiar**  
General Secretariat  
Finance Directorate

Thanks to Vincent Bignon and Régis Breton for kindly proof-reading this article.

EUR **5,000** billion  
in cumulative net purchases by the Eurosystem  
within the monetary policy framework

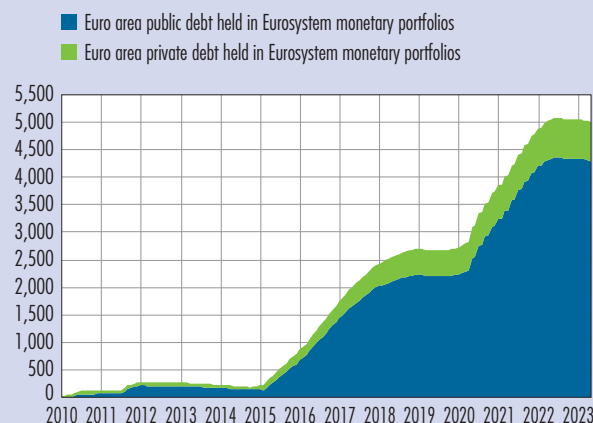
of which

EUR **4,300** billion  
in public sector securities

EUR **700** billion  
in securities issued by companies or banks

### Cumulative net purchases of securities held on the Eurosystem's balance sheet for monetary policy purposes at end-May 2023

(EUR billions)



Source: European Central Bank.



Over the last decade, conventional monetary policy instruments have proved inadequate to deal with the risks of market dislocation triggered by successive crises and of an inflation level that was, until recently, too low. Central banks responded to this situation by implementing non-standard monetary policies, in particular quantitative easing (QE) programmes. These programmes were stepped up in 2020 in response to the economic and financial repercussions of the Covid-19 crisis. Since 2022, central banks paused these programmes before gradually exiting them by reducing the size of their securities portfolios in an orderly manner (quantitative tightening). Outstanding amounts at 31 December 2022 are shown in the Table 1.

Generally speaking, when a central bank increases the size of its balance sheet by purchasing securities, it finances these purchases by creating money in the commercial banks' current accounts, in the form of central bank money, recorded as its liability and which it has a monopoly on issuing. This money circulates i) in the form of banknotes ("cash") and ii) in the form of deposits ("non-cash money") which are held only by commercial banks, the central government, and certain institutions, i.e. the only entities authorised to open an account with the central bank. These purchases therefore do not have any impact on the money supply, i.e. the commercial bank money held and used by economic agents (households, corporations, and public administrations). However, central bank purchases are only one stage in the purchase programme, which involves solely previously issued securities.

In practice, in the euro area, if we take into account the entire life cycle of securities, we can see that the increase

in central bank money to finance monetary portfolios has gone hand in hand with an almost equivalent increase in commercial bank money held by all non-bank economic players (resident and non-resident). The monetary and accounting mechanisms behind this dual increase in the monetary base, which should persist throughout the entire period during which the securities are held by the central bank, are described below.

The creation of commercial bank money associated with asset purchase programmes can also be seen in the recent developments of traditional monetary aggregates (i.e. restricted to residents) and their counterparts (Bê Duc et al., 2022).

### 1 Asset purchases by central banks are financed by the creation of central bank money

#### Central bank money and commercial bank money: two parallel money circuits

Commercial banks hold a deposit account with the central bank of their jurisdiction. The holdings on this account, on the assets side of their balance sheet, are known as reserves or central bank money and play an essential role in the transmission of monetary policy (Barthélemy et al., 2020, or Bussière et al., 2021). It is through this reserve account that they carry out all their transactions with the central bank, but also with each other and with the government, whose account is also held by the central bank. In turn, these reserves appear on the liabilities side of the central bank's balance sheet and, together with the banknotes in circulation, form the monetary base.

Central bank money (non-cash) is created by the central bank, which has a monopoly on issuing it, mainly when it grants loans to commercial banks, through refinancing operations, or when it buys financial securities. It circulates exclusively between the central bank and the institutions authorised to hold accounts with it: commercial banks, the Treasury and a number of other institutions.

Non-bank economic agents (households, businesses, public administrations) use another form of money, commercial money. It is created by commercial banks, mainly when they grant a loan, and is recorded as a liability in the form of deposits. This creation does not change the outstanding

#### T1 Assets of the main central banks that have implemented purchase programmes – at 31 December 2022

(EUR billions)

	Eurosystem	US Federal Reserve	Bank of Japan	Bank of England
Securities portfolios (asset purchase programmes)	4,937	7,512	4,365 <sup>a)</sup>	953
Bank lending operations	1,324	15	575	230
Other assets	1,695	507	74	35
<b>Total assets</b>	<b>7,956</b>	<b>8,034</b>	<b>5,014</b>	<b>1,277</b>

Sources: Eurosystem, central banks.

a) Of which EUR 270 billion in equities (via investment funds).



amount of central bank money: the two forms of money – central bank money and commercial bank money – operate in parallel circuits. The transformation of a share of bank reserves into banknotes constitutes a link between these two circuits, but the amounts involved are small and will not be taken into account in the rest of this article.

### Asset purchases by central banks are carried out through the central bank money circuit

Under a purchase programme, the securities acquired by the central bank are financed by the creation of central bank money: the current account of the selling commercial bank (or the seller's bank, if the seller is not a bank), with the central bank, is credited with the transacted amount. The mechanism is the same whether the issuer is a public or private entity. The operation therefore results in an increase in central bank money, which can have two effects on commercial bank money:

- An incentive to grant loans, according to the monetary multiplier theory, whose magnitude varies. In particular, in the context of asset purchase programmes, when the supply of liquidity is exogenous and does not result from an initial liquidity deficit, the money multiplier does not work on this new liquidity, thereby diluting the corresponding ratio (Bussière et al., 2020);
- A mechanical effect that is observed throughout the period during which the securities are held by the central bank, and which can be demonstrated by a full analysis of monetary flows over the entire life cycle of the securities (from issuance to redemption).

This mechanical effect is developed in the analysis below.

## 2 The steps involved in the acquisition of debt securities by a central bank entail a two-fold money creation process

### Assets sold to the central bank: mainly by non-bank agents

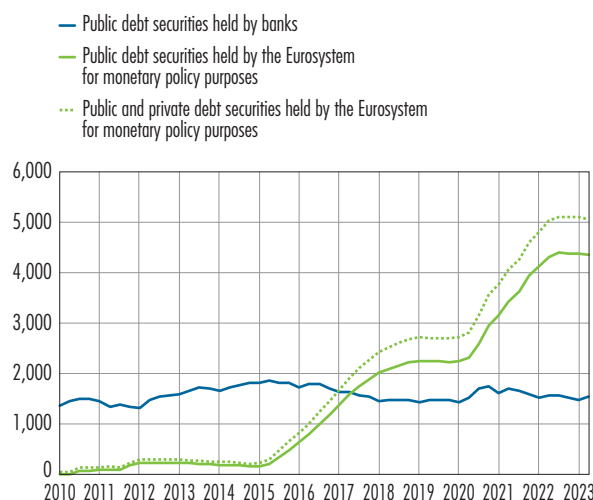
Under an asset purchase programme, the central bank mainly acquires debt securities on the secondary market,

usually from commercial banks. There are two possible scenarios: either the commercial bank sells the securities it holds in order to obtain liquidity (an alternative to refinancing), or it acts as an intermediary for the sale of securities held by non-bank economic players. In the latter case, it buys the securities from the non-bank sector with a view to selling them to the central bank.

Between 2015 and 2022, the outstanding amount of government securities on the balance sheets of commercial banks in the euro area remained virtually stable, while that of the Eurosystem rose sharply (see chart below). This means that, in the vast majority of cases, commercial banks did not sell the securities they held in their portfolios.<sup>1</sup>

We therefore limit our analysis here to cases where banks act as intermediaries. This is precisely where asset purchase programmes result in an increase in the money supply;<sup>2</sup> simply put, private non-bank players sell their securities to the central bank – either directly or, more often, via a bank – in exchange for bank deposits created in the process. This relationship is confirmed by the step-by-step identification of financial flows between players, and can be captured by analysing monetary aggregates (see box on page 6).

### Outstanding debt securities held by euro area commercial banks compared with outstanding debt securities held by the Eurosystem (EUR billions)



Source: European Central Bank.

<sup>1</sup> In practice, banks may have sold their own securities, but replaced them with other securities acquired from non-banks: there was no net disposal by banks.

<sup>2</sup> When commercial banks sell the securities they hold in their portfolios, money creation is no longer strictly linked to the purchase programmes; it takes place beforehand, when the securities are purchased by the commercial banks.



### Analysing monetary flows, from the issuance of public debt to its redemption, in the case of central bank sovereign debt purchase programmes

This analysis takes a detailed look at the case of government debt securities purchases, which make up the bulk of the portfolios held by central banks, by studying the monetary flows that pass, stage by stage, between the government (the Treasury), the central bank, the aggregate of commercial banks and, lastly, the aggregate of other economic players. These stages can be divided into three consecutive phases: issuance of the sovereign debt security (which precedes the purchase programme), purchase by the central bank, and redemption. They are explained in Table 2 below.

#### Issuance of government debt securities

- 1 Only a few banks are authorised to buy government debt on the primary market. With each new issue, the Treasury account (held at the central bank) is credited with the amount of central bank money (M) paid by the purchasing bank, which becomes the owner of the security issued. Correspondingly, the government records as a liability an identical amount of that debt security (S) which is held by the bank. From a monetary perspective, this transaction simply involves a transfer of central bank money between the purchasing bank and the government.
- 2 The security purchased at issuance by a bank are repurchased on the secondary market by an insurance company, an investment fund or another non-bank player. The purchaser's current account is debited to finance the transaction, which reduces the amount of commercial bank money.
- 3 With the liquidity it obtains by incurring debt, the government makes payments to economic players, both resident and non-resident, via banks. This involves the creation of commercial bank money in an amount (M) equal to the value (S) of the security issued on the market.

In this way, the government finances part of its spending with central bank money transferred to the commercial banks that hold the accounts of economic players.

At the end of these first three stages, it appears that the issuance of a debt security by the government (and the use of the resulting funds) does not lead to any monetary creation, as shown by subtotal 1 to 3. A transfer from the government to the other economic players is recorded in the form of a debt security.

#### Central bank sovereign debt purchase programmes

- 4 When the central bank purchases a debt security on the secondary market, a commercial bank usually acts as an intermediary for the transaction.<sup>3</sup> It must then buy the security<sup>4</sup> by crediting the seller's current account, which amounts to creating commercial bank money in the amount (M) purchased.
- 5 The central bank buys the corresponding security by crediting the account of the selling bank, which increases monetary reserves by an amount equal to the value of the security.<sup>5</sup>

On completion of the stages involved in the central bank's purchasing programme, commercial bank money is created, together with monetary reserves (subtotal 1 to 5). In a nutshell, asset purchase programmes do not change the wealth of the different economic players, but they do allow central banks (via commercial banks) to purchase securities held by the non-bank private sector in exchange for money created in this way.

#### Redemption at maturity of government securities held by the central bank

- 6 The Treasury must retrieve the cash needed to repay the holder of the security (the central bank) when it reaches maturity. Assuming that this liquidity is obtained through tax levies, it implies collecting money from the deposit

3 In some instances, the central bank purchases the security directly from a non-bank client without the intermediary of a commercial bank, but this does not alter the overall logic.

4 If the commercial bank is unable to purchase the security (for example, because the investors who own the security are unwilling to sell it), it can borrow it, usually on the repo market, which defers the purchase without affecting the mechanisms described.

5 If the commercial bank purchases the security directly from the issuer and not from an economic player, steps 2 and 4 should be removed from the process, which does not change the overall logic.



### T2 Simplified monetary accounting of the issuance of a public security by the government, from its purchase on the secondary market by a central bank to its redemption

#### Double entry accounting:

- the Treasury account (t) is recorded as an asset of the government and as a liability of the central bank;
- bank money reserves (r), the current accounts held by commercial banks with their central bank, appear on the liabilities side of the central bank's balance sheet and on the assets side of the commercial banks' balance sheets;
- bank deposits (d), which are liabilities of commercial banks, are assets on the balance sheet of other economic players.  
To simplify, it is assumed that the money supply is entirely in the form of deposits; but transforming part of the deposits into banknotes would not change the analysis.

#### Money creation:

- [in blue] the creation/destruction of central bank money (bank reserves and the Treasury account), recorded as a liability of the central bank;
- [in orange] the creation/destruction of commercial bank money, measured by the deposits of other economic players, both resident and non-resident, in commercial banks.

Player ▶		Government		Central bank			Commercial banks			Other economic players <sup>a)</sup>	
		Assets	Liabilities	Assets	Liabilities		Assets	Liabilities		Assets	
Item on balance sheet ▶		Treasury account (t)	Bond liabilities	Securities	Treasury account (t)	Bank reserves (r)	Securities	Bank reserves (r)	Deposits (d)	Securities	Deposits (d)
Action ▼											
Government bond issuance	1 The government issues a public debt security and a commercial bank buys the security	+ M	+ T		+ M	- M	+ T	- M			
	2 A non-bank player purchases this security						- T		- M	+ T	- M
	3 The government spends borrowed money	- M			- M	+ M		+ M	+ M		+ M
	▶ Subtotal 1 to 3	0	+ T	0	0	0	0	0	0	+ T	0
Purchase of the security by the central bank	4 A bank buys again the security from an economic player						+ T		+ M	- T	+ M
	5 The central bank purchases the security from the bank			+ T		+ M	- T	+ M			
	▶ Subtotal 1 to 5	0	+ T	+ T	0	+ M	0	+ M	+ M	0	+ M
Redemption of the security	6 The government collects taxes	+ M			+ M	- M		- M	- M		- M
	7 The government redeems the security	- M	- T	- T	- M						
	▶ Total	0	0	0	0	0	0	0	0	0	0

a) Residents or non-residents.

Note: It is assumed that the security is denominated in the same currency as that issued by the central bank. (S) represents the public debt security and (M) is the amount of its monetary counterpart: (S) is therefore equal to (M). Not taking into account interest and changes in intermediary costs between issuance and redemption, the flows on the assets and liabilities sides of each player are zero-sum.

accounts of the agents concerned at commercial banks, and commercial bank money decreases. At the same time, payments into the Treasury account take the form of central bank money transferred from the banks' account to the government's account. Furthermore, if the government obtains the funds required for redemption, not by raising revenue, but by issuing new debt, then step 6 is replaced by steps 1 and 2 (the impact on central bank money

and commercial bank money of combining steps 1 and 2 is the same as that observed in step 6).

7 Redemption is carried out by debiting the Treasury's account, and in return, by removing the matured security from the assets side of the central bank's balance sheet. This means that the money created is destroyed when the debt is redeemed. If the central bank rolls over its maturing



position, the money created remains in circulation until the central bank decides to reduce its position.

Conversely, the central bank can always destroy this money before the security matures, without waiting for redemption, if it sells it to non-bank players: the opposite flows to entries ④ and ⑤ are then implemented instead of flows ⑥ and ⑦.

At the end of this seven-stage cycle, the debt security issued has been redeemed and the money creation, be it central bank money or commercial bank money, has been cancelled. The sum of accounting flows for each player is zero. This shows that the money creation resulting from asset purchase programmes is temporary.

### Same double money creation process in the case of securities issued by non-government issuers

While the most frequent scenario is the acquisition of sovereign debt by the central bank, there are several other possible cases:

- Debt securities purchased may be issued by public bodies other than the government, such as supranational European issuers in the euro area;
- Debt securities purchased may also be issued by companies or banks. In this case, the mechanism is different (see Appendix), but the main principle remains the same: temporary money creation until the security is redeemed (or sold before maturity).

Some central banks, such as the Bank of Japan, have also been able to buy equities, through shares of investment fund, with no maturity. In this case, money creation lasts until the central bank sells the fund shares.

#### BOX

### Analysis of monetary aggregates confirms the effect of public and private securities purchase programmes on the money supply in circulation

The impact of the Eurosystem's asset purchase programmes on commercial bank money can be observed by looking at the usual monetary aggregates and their counterparts. Bê Duc et al. (2022) showed that the very strong growth in the money supply in 2020 was essentially due to the purchase of government securities by the banking sector as a whole (including central banks). The analysis is also verified for the year 2021 with the continuation of the Eurosystem's pandemic emergency purchase programme (PEPP), as illustrated in Chart A below, which breaks down the contributions of the different counterparts of the monetary aggregate M3.

However, Bê Duc et al. (2022) found that money supply growth was not particularly strong between 2015 and 2018, despite the purchases of government securities over this period, because a large proportion of the securities were purchased from non-residents, which had no impact on the M3 aggregate considered in their analysis. More specifically, when a commercial bank buys a security from a resident, the security acquired on the assets side of its balance sheet is offset by money creation in the form of a deposit on the liabilities side of the seller's bank, recorded in the M3 aggregate. In contrast, if the purchase is made from a non-resident, the deposit created is not taken into account in this aggregate. According to the rules for compiling monetary statistics, the counterpart of the security purchased is then recorded as a net foreign asset, which represents the monetary transactions with non-residents.

.../...

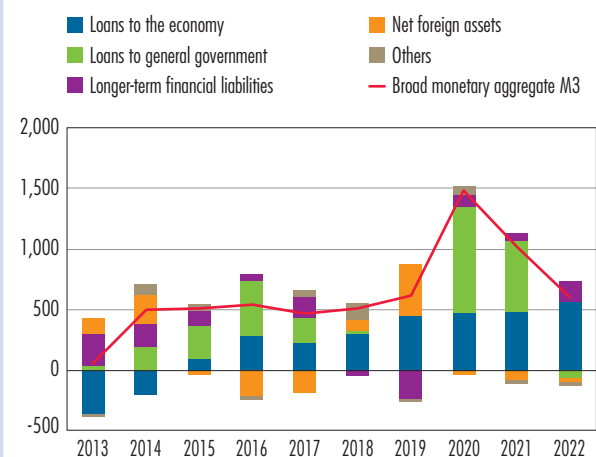


As a reminder, the M3 monetary aggregate corresponds to banknotes in circulation, deposits with an agreed maturity of up to two years, deposits redeemable at notice of up to three months and reverse repos, money market funds and debt securities with an agreed maturity of up to two years. This aggregate does not include money held by non-residents.

If we include the money created by non-residents, via net foreign assets, monetary creation appears to have been driven by the Eurosystem's government securities purchases in 2020 and 2021, but also over the period 2015-18 after the first public sector securities programme was put in place (see chart B). In 2022, the contribution was lower due to the gradual phasing out of purchase programmes.

**Chart A Growth in the M3 aggregate for the euro area and contributions of its counterparts**

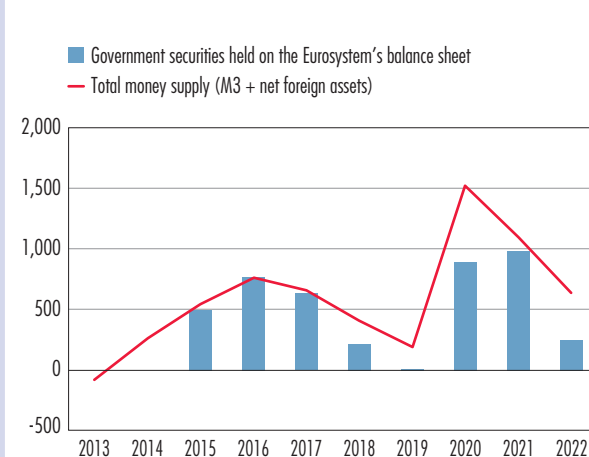
(year-on-year, EUR billions)



Source: Eurosystem (consolidated balance sheet of monetary financial institutions).

**Chart B Growth in total money supply and changes in government debt securities on the Eurosystem's balance sheet**

(year-on-year, EUR billions)



Source: Eurosystem (consolidated balance sheet of monetary financial institutions).

\*

\*\*

Central banks' securities purchase programmes have led to rise the amount of money in circulation in the economy. The mechanisms behind this increase guarantee that this money is destroyed when the securities mature. In the euro area, for example, the money created is gradually being absorbed: since 2022, securities held by the Eurosystem have been redeemed at maturity and the amounts received are not being reinvested in full, thus reducing the amount outstanding in monetary policy portfolios.

Asset purchase programmes therefore do not result in the permanent and irreversible creation of money in the same way as "printing money": central banks retain their ability to adjust the quantity of money (for example, when the securities they hold are duly redeemed, they can decide not to purchase new ones) as well as the interest rate, thereby controlling inflation.



## References

Archer (D.) and Moser Boehm (P.) (2013)  
"Central bank finances", *BIS Papers*, No. 71, Bank for International Settlements, April.

Barthélemy (J.) and Penalver (A.) (2020)  
"There is nothing magic in central bank money",  
*Eco Notepad*, No. 162, Banque de France, May.  
[Consult the post](#)

Bê Duc (L.), Bricongne (J.-C.), Bussière (M.), Jude (C.),  
Penalver (A.), Sédillot (F.), Vari (M.) and Wicky (Y.) 2022  
"The increase in the money supply during the Covid  
crisis: analysis and implications", *Banque de France  
Bulletin*, No. 239/2, January-February.  
[Download the document](#)

Bindseil (U.), Manzanares (A.) and Weller (B.) (2004)  
"The role of central bank capital revisited", *Working  
Paper Series*, No. 392, European Central Bank, September.

Bussière (M.), Pfister (C.) and Sahuc (J.-G.) (2020)  
"The link between money and inflation since 2008", *Banque  
de France Bulletin*, No. 232/8, November-December.  
[Download the document](#)

Bussière (M.), El Amri (W.), Horny (H.), Mouriaux (F.),  
Sahuc (J.-G.) and Wicky (Y.) (2021)  
"Money and its counterparts: instruments and reflections  
of monetary policy", *Banque de France Bulletin*,  
No. 234/2, March-April.  
[Download the document](#)





## Appendix

### Simplified monetary accounting [details]

The aim is to present the main positions on the balance sheets of the central bank, commercial banks and other economic players, taken as a whole. This involves identifying monetary flows, in particular the increase in deposits from other economic players, both resident and non-resident, which corresponds to an increase in commercial bank money.

There are a number of different cases, from issuance to redemption, depending on whether the issuer of the debt is public or private (in the latter case, it may be a non-financial company or a bank). It should be noted that while government debt securities make up the bulk of portfolios, bank and corporate debt also merit attention. For example, at 31 December 2022, the Eurosystem held a bank debt portfolio of EUR 308 billion and a corporate debt portfolio of EUR 390 billion.

In the tables below, A1 (case of a private non-bank issuer) and A2 (case of a bank issuer), the intermediate stages of money creation (subtotal ① to ③, then subtotal ① to ⑤, and zero-sum total) are all identical to those in Table 2 (in the article above). **The money creation mechanisms, from the issuance of a debt security to its redemption, are identical for both public and private debt issuers.**

Table A3 shows the final case: when the issuer of the security purchased by the central bank defaults, i.e. when the security is not redeemed at maturity. Temporary money creation, which occurs while a security is held by the central bank until it is redeemed in the three previous examples, then becomes permanent.



## The case of the issuance of a private security, its purchase on the secondary market by a central bank and its redemption

### TA1 Simplified monetary accounting entries for the issuance of a private security by a non-bank economic player, its purchase on the secondary market by a central bank and its redemption

#### Double entry accounting:

- bank money reserves (r), the current accounts held by commercial banks with their central bank, appear on the liabilities side of the central bank's balance sheet and on the assets side of the commercial banks' balance sheets;
- bank deposits, which are liabilities for commercial banks, are assets on the balance sheets of the issuer of the security (d1) and other economic players (d2) ;
- the Treasury account is not involved.

#### Money creation:

- [in blue] the creation/destruction of central bank money (banks' monetary reserves and the Treasury's current account), recorded as a liability of the central bank ;
- [in orange] the creation/destruction of money in circulation, measured by the deposits of other economic players, both resident and non-resident, in commercial banks.

Player ▶	Private non-bank issuer		Central bank			Commercial banks			Other economic players <sup>a)</sup>	
	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities	Assets		
Balance sheet item ▶	Deposits	Bond liabilities	Securities	Treasury account	Banks reserves	Securities	Banks reserves	Deposits	Securities	Deposits
Action ▼	(d1)			(t)	(r)		(r)	(d1) + (d2)		(d2)
Issue of the debt security	1 A non-bank economic player issues a private debt security and a bank buys this security	+ M	+ T					+ M		
	2 A non-bank player purchases this security							- M	+ T	- M
	3 The issuer spends the borrowed money	- M						- M + M		+ M
	▶ Subtotal 1 to 3	0	+ T	0	0	0	0	0	+ T	0
Purchase of the security by the central bank	4 A bank buys again the security on the secondary market					+ T		+ M	- T	+ M
	5 The central bank purchases the security from the bank			+ T	+ M	- T	+ M			
	▶ Subtotal 1 to 5	0	+ T	+ T	0	+ M	+ M	+ M	0	+ M
Redemption of the security	6 The issuer generates income	+ M						+ M - M		- M
	7 The issuer redeems the security	- M	- T	- T		- M	- M	- M		
	▶ Total	0	0	0	0	0	0	0	0	0

a) Residents or non-residents.



**TA2 Simplified monetary accounting entries for the issue of a private security by a bank, from its purchase on the secondary market by a central bank to its redemption**

Player ▶		Bank issuer		Central bank			Other commercial banks			Other economic players <sup>a)</sup>	
		Assets	Liabilities	Assets	Liabilities		Assets		Liabilities	Assets	
Balance sheet item ▶		Banks reserves (r1)	Debt Securities	Debt Securities	Treasury account (t)	Banks reserves (r1) + (r2)	Debt Securities	Banks reserves (r2)	Deposits (d)	Debt Securities	Deposits (d)
Action ▼											
Issue of the debt security	1 A bank issues a private debt security and another bank buys this security	+ M	+ T			+ M - M	+ T	- M			
	2 A non-bank player purchases this security						- T		- M	+ T	- M
	3 The issuer spends the borrowed money	- M						+ M	+ M		+ M
	▶ Subtotal 1 to 3	0	+ T	0	0	0	0	0	0	+ T	0
Purchase of the security by the central bank	4 A bank buys again the security on the secondary market						+ T		+ M	- T	+ M
	5 The central bank purchases the security from the bank			+ T		+ M	- T	+ M			
	▶ Subtotal 1 to 5	0	+ T	+ T	0	+ M	0	+ M	+ M	0	+ M
Redemption of the security	6 The issuer generates income	+ M				+ M - M		- M	- M		- M
	7 The issuer redeems the security	- M	- T	- T		- M					
	▶ Total	0	0	0	0	0	0	0	0	0	0

a) Residents or non-residents.

Note 1: It is assumed that the security is denominated in the same currency as that issued by the central bank. (S) represents the private debt security and (M) its monetary counterpart: so (S) is equal to (M). If we exclude interest and intermediate price changes between issuance and redemption, the flows on the assets and liabilities side of each player are zero-sum.

Note 2: Central banks can purchase securities issued by companies or banks directly at issuance (primary market). In this case, stages 1 and 2 are combined, and stages 2 and 4 are eliminated, but the overall balance of the security's life cycle is not affected.



## If the debt securities held by the central bank are not redeemed: money creation becomes permanent

If we consider the life cycle from the issuance of the security to the purchase of this security by the central bank (see steps 1 to 5 in the previous tables), step 8 in the table below would replace the redemption process (see steps 6 and 7 above). This stage would not give rise to any monetary flows.

If the securities are not redeemed, the money created when they were purchased, be it central bank money (shown in blue in the table) or commercial bank money (shown in orange), becomes permanent.

This mechanism is the same regardless of the defaulting issuer, whether the security is issued by the government, a bank or another private player.

### TA3 Simplified monetary accounting entries: scenario with no redemption of debt securities held by the central bank

Player ▶	Issuer		Central bank			Commercial banks			Other economic players <sup>a)</sup>	
	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities		Assets	
Balance sheet item ▶	Current account	Debt securities	Debt securities	Treasury account (t)	Bank reserves (r)	Debt securities	Bank reserves (r)	Deposits (d)	Debt securities	Deposits (d)
Action ▼										
▶ Subtotal 1 to 5	0	+ T	+ T	0	+ M	0	+ M	+ M	0	+ M
8 The debt security is not redeemed		- T	- T							
▶ Total	0	0	0	0	+ M	0	+ M	+ M	0	+ M

a) Residents or non-residents.

**Published by**  
Banque de France

**Managing Editor**  
Claude Piot

**Editor-in-Chief**  
Claude Cornélis

**Editor**  
Didier Névonnic  
Nelly Noulin

**Translator/English Editor**  
Anthony Dare

**Technical production**  
Studio Creation  
Press and Communication

ISSN 1952-4382

To subscribe to the Banque de France's publications  
<https://www.banque-france.fr/en/alertes/abonnements>

