

Annual Accounts of the ECB

2022



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Key figures



The ECB's Balance Sheet increased by €18.7 billion in 2022, mainly due to the acquisition of monetary policy securities.



Part of the provision for financial risks was released to offset losses incurred in 2022. After the release, this provision stood at €6.6 billion.

€457.3 billion Monetary policy securities

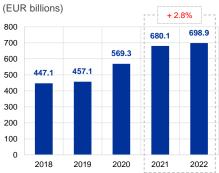
Securities held for monetary policy purposes increased by €11.9 billion, mainly owing to purchases of securities under the PEPP and the APP.



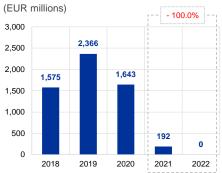
€0 ECB's financial result after the release from the provision for financial risks

The ECB's loss before the release from the provision for financial risks stood at €1,627 million and mainly arose from the interest expense resulting from the net TARGET2 liability, securities write-downs and realised price losses from securities sales. The release from the provision for financial risks brought the ECB's financial result to zero.

ECB's Balance Sheet



ECB's financial result



1 Management report

1.1 Purpose of the ECB's management report

The management report¹ is an integral part of the ECB's Annual Accounts and is designed to provide readers with contextual information related to the financial statements.² Given that the ECB's activities and operations are undertaken in support of its policy objectives, the ECB's financial position and result should be viewed in conjunction with its policy actions.

To this end, the management report presents the ECB's main tasks and activities, as well as their impact on its financial statements. Furthermore, it analyses the main developments in the Balance Sheet and the Profit and Loss Account during the year and includes information on the ECB's financial resources. Finally, it describes the risk environment in which the ECB operates, providing information on the specific risks to which the ECB is exposed, and the risk management policies used to mitigate risks.

1.2 Main tasks and activities

The ECB is part of the Eurosystem, which comprises, besides the ECB, the national central banks (NCBs) of the Member States of the European Union (EU) whose currency is the euro.³ The Eurosystem has the primary objective of maintaining price stability. The ECB performs its tasks as described in the Treaty on the Functioning of the European Union⁴ and in the Statute of the European System of Central Banks and of the European Central Bank (Statute of the ESCB)⁵ (Figure 1). The ECB conducts its activities in order to fulfil its mandate and not with the intention of generating profit.

Throughout this document, the numbers presented may not add up precisely to the totals and percentages may not precisely reflect the absolute figures owing to rounding.

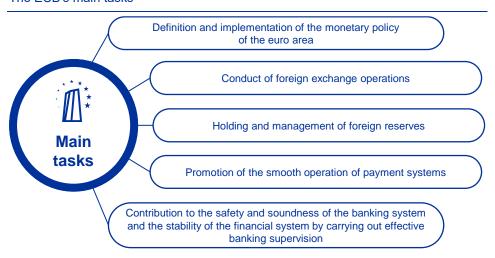
The "financial statements" comprise the Balance Sheet, the Profit and Loss Account and the related notes. The "Annual Accounts" comprise the financial statements, the management report, the independent auditor's report and the note on profit distribution/allocation of losses. Further details on the related preparation and approval process can be found on the ECB's website.

The number of NCBs in the Eurosystem in 2022 was 19. On 12 July 2022 the Council of the European Union formally approved the adoption of the euro by Croatia on 1 January 2023. As of that date the addition of Hrvatska narodna banka increased the number of Eurosystem NCBs to 20.

Consolidated version of the Treaty on the Functioning of the European Union (OJ C 202, 7.6.2016, p.1), as amended. The unofficial consolidated text with the list of amendments can be found here.

Protocol (No 4) on the Statute of the European System of Central Banks and of the European Central Bank (OJ C 202, 7.6.2016, p. 230). The European System of Central Banks (ESCB) comprises the ECB and the NCBs of all 27 EU Member States.

Figure 1
The ECB's main tasks



The Eurosystem's monetary policy operations are recorded in the financial statements of the ECB and of the euro area NCBs, reflecting the principle of decentralised implementation of monetary policy in the Eurosystem. Table 1 below provides an overview of the main operations and functions of the ECB in pursuit of its mandate, and their impact on the ECB's financial statements.

Table 1The ECB's key activities and their impact on its financial statements

Implementation of monetary policy

Lending and liabilities to euro area credit institutions related to monetary policy operations

Securities held for monetary policy purposes

Securities lending

The monetary policy operational framework of the Eurosystem consists of a set of monetary policy instruments. The Eurosystem conducts open market operations, offers standing facilities and requires credit institutions to hold minimum reserves.¹

These monetary policy instruments are used in a decentralised manner by the NCBs and are reflected in their financial statements under the balance sheet items "Lending to euro area credit institutions related to monetary policy operations denominated in euro" and "Liabilities to euro area credit institutions related to monetary policy operations denominated in euro". Accordingly, they have no impact on the ECB's financial statements.

Purchases of these securities are conducted by the ECB and the NCBs of the Eurosystem and are recorded under the balance sheet item "Securities held for monetary policy purposes". The securities currently held are accounted for at amortised cost subject to impairment.

Coupon accruals and amortised premiums and discounts are included in the Profit and Loss Account on a net basis under either "Other interest income" or "Other interest expense", depending on whether the net amount is positive or negative.

Realised gains and losses, if any, are included in the Profit and Loss Account under "Realised gains/losses arising from financial operations".

Securities held for monetary policy purposes are available for lending by the Eurosystem.² For the ECB, these operations are conducted via specialised institutions. These operations are recorded in the balance sheet items "Other liabilities to euro area credit institutions denominated in euro" and "Liabilities to non-euro area residents denominated in euro" if collateral is provided in the form of cash and this cash remains uninvested. Otherwise, the related securities lending operations are recorded in off-balance-sheet accounts.

Interest accruals are included in the ECB's Profit and Loss Account as "Other interest income" or "Other interest expense".

Liquidity provision in foreign currency

The ECB acts as an intermediary between non-euro area central banks and the Eurosystem NCBs by means of swap transactions aimed at offering short-term foreign currency funding to Eurosystem counterparties.³

These operations are recorded in the balance sheet items "Liabilities to non-euro area residents denominated in euro" and "Other claims within the Eurosystem (net)" / "Other liabilities within the Eurosystem (net)", as well as in off-balance-sheet accounts.

Interest accruals are included in the ECB's Profit and Loss Account as "Other interest income" or "Other interest expense".

Liquidity provision to non-euro area central banks in euro

The Eurosystem may provide euro liquidity to non-euro area central banks by means of swap and repo transactions in exchange for eligible collateral.⁴

For the ECB, the swap operations are recorded in the balance sheet items "Claims on non-euro area residents denominated in foreign currency" and "Liabilities to non-euro area residents denominated in euro" or "Other claims within the Eurosystem (net)" / "Other liabilities within the Eurosystem (net)", as well as in off-balance-sheet accounts. The related repo claims are recorded in the balance sheet item "Claims on non-euro area residents denominated in euro".

Interest accruals are included in the ECB's Profit and Loss
Account as "Other interest income" or "Other interest expense".

Conduct of foreign exchange operations and management of foreign reserves

Foreign exchange operations and management of foreign reserves

The ECB's foreign reserves are presented on the Balance Sheet, mainly under "Gold and gold receivables", "Claims on non-euro area residents denominated in foreign currency" and "Claims on euro area residents denominated in foreign currency", while any related liabilities would be presented under "Liabilities to euro area residents denominated in foreign currency" and "Liabilities to non-euro area residents denominated in foreign currency". Foreign exchange transactions are reflected in off-balance-sheet accounts until the settlement date.

Net interest income, including coupon accruals and amortised premiums and discounts, is included in the Profit and Loss Account under the item "Interest income on foreign reserve assets".

Unrealised price and exchange rate losses exceeding previously recorded unrealised gains on the same items and realised gains and losses arising from the sale of foreign reserves are also included in the Profit and Loss Account under the items "Write-downs on financial assets and positions" and "Realised gains/losses arising from financial operations" respectively. Unrealised gains are recorded on the Balance Sheet under the item "Revaluation accounts".

Promotion of the smooth operation of payment systems

Payment systems (TARGET2)

Intra-Eurosystem balances of euro area NCBs vis-à-vis the ECB arising from TARGET2⁵ are presented together on the Balance Sheet of the ECB as a single net asset or liability position under "Other claims within the Eurosystem (net)" or "Other liabilities within the Eurosystem (net)". TARGET2 balances of non-euro area NCBs vis-à-vis the ECB are recorded on the Balance Sheet under "Liabilities to non-euro area residents denominated in euro". Balances of ancillary systems connected to TARGET2 through the TARGET2-ECB component are recorded on the Balance Sheet under "Liabilities to other euro area residents denominated in euro" or "Liabilities to non-euro area residents denominated in euro", depending on whether the managing entity is established in or outside the euro area. Interest accruals are included in the Profit and Loss Account under "Other interest income" or "Other interest expense".

Contribution to the safety and soundness of the banking system and the stability of the financial system

Banking supervision – the Single Supervisory Mechanism

The annual expenses of the ECB in relation to its supervisory tasks are recovered via annual supervisory fees levied on the supervised entities. The supervisory fees are included in the Profit and Loss Account under the heading "Net income/expense from fees and commissions"

Furthermore, the ECB is entitled to impose administrative penalties on supervised entities for failure to comply with applicable EU banking law on prudential requirements (including ECB supervisory decisions). The related income is recorded in the Profit and Loss Account under the heading "Net income/expense from fees and commissions".

Other

Banknotes in circulation

The ECB has been allocated an 8% share of the total value of euro banknotes in circulation. This share is backed by claims on the NCBs, which bear interest at the rate used by the Eurosystem in its tenders for main refinancing operations and are recorded on the Balance Sheet under the item "Claims related to the allocation of euro banknotes within the Eurosystem". The interest is included in the Profit and Loss Account under the item "Interest income arising from the allocation of euro banknotes within the Eurosystem"

Expenses arising from the cross-border transportation of euro banknotes between banknote printing works and NCBs, for the delivery of new banknotes, and between NCBs, for the compensation of shortages with surplus stocks, are borne centrally by the ECB. These expenses are presented in the Profit and Loss Account under the heading "Banknote production services".

Own funds portfolio

The own funds portfolio of the ECB is presented on the Balance Sheet, mainly under the item "Other financial assets"

Coupon accruals and amortised premiums and discounts are included in the Profit and Loss Account under "Other interest income" and "Other interest expense".

Unrealised price losses exceeding previously recorded unrealised price gains on the same items and realised gains and losses arising from the sale of securities are also included in the Profit and Loss Account under the items "Write-downs on financial assets and positions" and "Realised gains/losses arising from financial operations" respectively. Unrealised price gains are recorded on the Balance Sheet under the item "Revaluation accounts".

- 3) Further details on the currency swap lines can be found on the ECB's website
- 4) Further details on the Eurosystem's euro liquidity operations against eligible collateral can be found on the ECB's website.
- 5) Further details on TARGET2 can be found on the ECB's web

¹⁾ Further details on the Eurosystem's monetary policy instruments and more specifically on the open market operations can be found on the ECB's website.

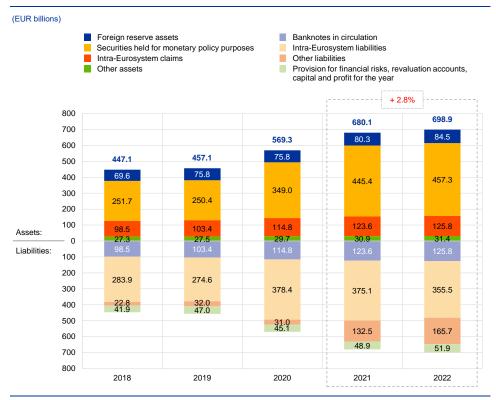
2) Further details on securities lending can be found on the ECB's website.

1.3 Financial developments

1.3.1 Balance Sheet

The ECB's Balance Sheet expanded significantly in the period from 2018 to 2022, mainly driven by outright purchases of securities by the ECB in the context of the implementation of the monetary policy of the Eurosystem (Chart 1). As net purchases under the asset purchase programme (APP)⁶ ceased in December 2018 and resumed again in November 2019, growth was moderate in 2019 and stemmed mainly from rises in the market value of the ECB's foreign reserve assets and the value of euro banknotes in circulation. The main drivers of the substantial expansion in 2020 and 2021 were net purchases of securities under the APP and the launch of the pandemic emergency purchase programme (PEPP)⁷ in March 2020. Net purchases of securities under the PEPP and APP were discontinued as of the end of March 2022 and 1 July 2022 respectively, leading to a more moderate increase in the ECB's Balance Sheet in 2022.

Chart 1
Main components of the ECB's Balance Sheet



Source: ECB.

The APP consists of the third covered bond purchase programme (CBPP3), the asset-backed securities purchase programme (ABSPP), the public sector purchase programme (PSPP) and the corporate sector purchase programme (CSPP). The ECB does not acquire securities under the CSPP. Further details on the APP can be found on the ECB's website.

⁷ Further details on the PEPP can be found on the ECB's website.



In 2022 the ECB's Balance Sheet increased by €18.7 billion to €698.9 billion, mainly owing to the ECB's share of securities purchases under the PEPP and the APP. These purchases resulted in an increase in securities held for monetary policy purposes, while the cash settlement of these purchases via TARGET2 accounts led to a corresponding rise in intra-Eurosystem liabilities. This rise in intra-Eurosystem liabilities was more than offset by cash inflows as a result of higher deposits placed with the ECB by euro area residents, which simultaneously resulted in an increase in other liabilities.

The rise in the euro equivalent value of the ECB's foreign reserve assets and in the value of euro banknotes in circulation also contributed to the growth of the ECB's Balance Sheet.



65%Share of securities held for monetary policy purposes in total assets

Euro-denominated securities held for monetary policy purposes made up 65% of the ECB's total assets at the end of 2022. Under this balance sheet item, the ECB holds securities acquired in the context of the Securities Markets Programme (SMP), the CBPP3, the ABSPP, the PSPP and the PEPP. All remaining securities held under the first and the second covered bond purchase programmes (CBPP1 and CBPP2) matured during 2022.

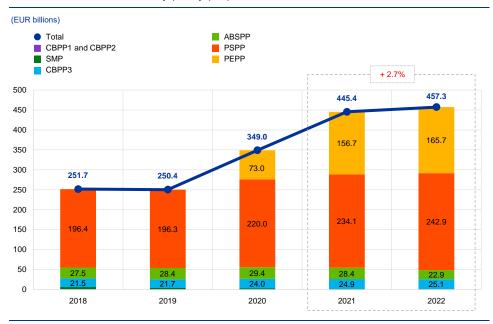


Based on the relevant Governing Council decisions, the ECB continued its net purchases of securities under the PEPP until the end of March 2022, while net purchases under the APP ended as of 1 July 2022. At the same time, the principal payments from maturing securities held in both portfolios continued to be fully reinvested during the year. As a result of these purchases and reinvestments, the portfolio of securities held by the ECB for monetary policy purposes rose by €11.9 billion to €457.3 billion (Chart 2), with PEPP and PSPP holdings increasing by €9.0 billion and €8.8 billion respectively. The €5.5 billion decrease in ABSPP holdings was due to redemptions.

In December 2022 the Governing Council announced⁸ that, from the beginning of March 2023, the APP portfolio would decline at a measured and predictable pace, as the Eurosystem will not reinvest all the principal payments from maturing securities. The decline will amount to €15 billion per month on average until the end of June 2023, and its subsequent pace will be determined over time. The Governing Council will continue reinvesting, in full, the principal payments from maturing securities purchased under the PEPP until at least the end of 2024 and will continue applying flexibility across time, asset classes and jurisdictions in these reinvestments with a view to countering risks to the monetary policy transmission mechanism related to the coronavirus (COVID-19) pandemic.

⁸ For further details, see the press release of 15 December 2022 on the Governing Council's decisions.

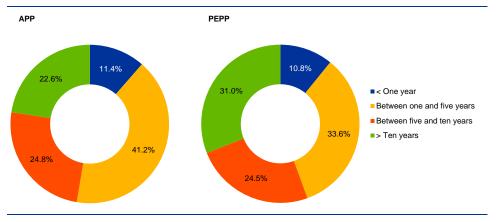
Chart 2Securities held for monetary policy purposes



Source: ECB.

For the active programmes of securities held for monetary policy purposes, namely the APP and the PEPP, securities held by the ECB at the end of 2022 had a diversified maturity profile⁹ (Chart 3).

Chart 3Maturity profile of the APP and the PEPP



Source: ECB.

Note: For asset-backed securities, the maturity profile is based on the weighted average life of the securities rather than the legal maturity date.

In 2022 the total euro equivalent value of the **ECB's foreign reserve assets**, which consist of gold, special drawing rights, US dollars, Japanese yen and Chinese renminbi, increased by €4.1 billion to €84.5 billion.

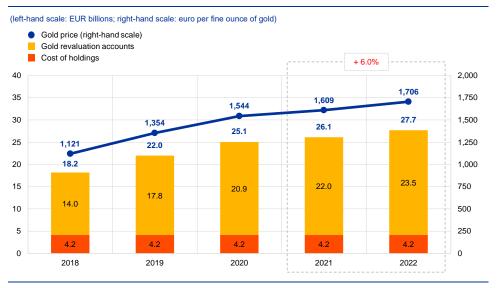
More information about maturity restrictions for both the APP and the PEPP can be found on the ECB's website.



The value of the ECB's holdings of gold and gold receivables increased owing to the increase in the market price of gold in euro terms

The euro equivalent value of the ECB's holdings of gold and gold receivables increased by €1.6 billion to €27.7 billion in 2022 (Chart 4) owing to an increase in the market price of gold in euro terms, while the size of these holdings in fine ounces remained unchanged. This increase also led to an equivalent rise in the ECB's gold revaluation accounts (see Section 1.3.2 "Financial resources").

Chart 4Gold holdings and gold prices



Source: ECB.

Note: "Gold revaluation accounts" does not include the contributions of the central banks of the Members States that joined the euro area after 1 January 1999 to the accumulated gold revaluation accounts of the ECB as at the day prior to their entry into the Eurosystem.



Increase in the ECB's foreign currency holdings, mainly owing to the appreciation of the US dollar against the euro

The ECB's foreign currency holdings¹⁰ of US dollars, Japanese yen and Chinese renminbi increased in euro terms by €2.0 billion to €55.0 billion (Chart 5), mainly owing to the appreciation of the US dollar against the euro. The appreciation of the US dollar is also reflected in higher balances in the ECB's revaluation accounts (see Section 1.3.2 "Financial resources").

These holdings comprise assets included under the balance sheet items "Claims on non-euro area residents denominated in foreign currency – Balances with banks and security investments, external loans and other external assets" and "Claims on euro area residents denominated in foreign currency".

Chart 5
Foreign currency holdings



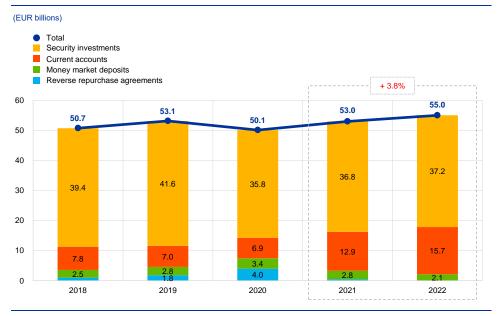
Source: ECB.

The US dollar continued to be the main component of the ECB's foreign currency holdings, accounting for approximately 78% of the total at the end of 2022.

The ECB manages the investment of its foreign currency holdings using a three-step approach. First, a strategic benchmark portfolio is designed by the ECB's risk managers and approved by the Governing Council. Second, the ECB's portfolio managers design the tactical benchmark portfolio, which is approved by the Executive Board. Third, investment operations are conducted in a decentralised manner by the NCBs on a day-to-day basis.

The ECB's foreign currency holdings are mainly invested in securities and money market deposits or are held in current accounts (Chart 6). Securities in this portfolio are valued at year-end market prices.

Chart 6Composition of foreign currency investments



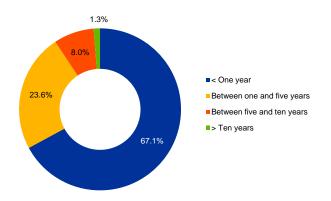
Source: ECB



67%Foreign currency-denominated securities with a maturity of less than one year

The purpose of the ECB's foreign currency holdings is to finance potential interventions in the foreign exchange market. For this reason, the ECB's foreign currency holdings are managed in accordance with three objectives (in order of priority): liquidity, safety and return. Therefore, this portfolio mainly comprises securities with short maturities (Chart 7).

Chart 7
Maturity profile of foreign currency-denominated securities

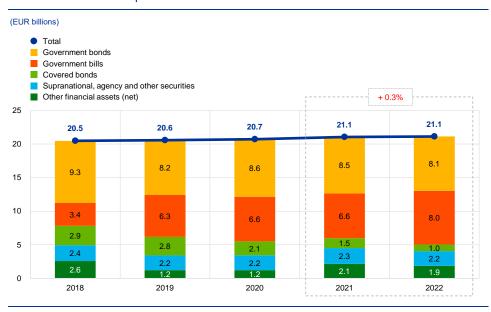


Source: ECB.

The value of the **own funds portfolio** remained virtually unchanged at €21.1 billion (Chart 8) as its main drivers in 2022 were largely mutually offsetting. The investment of a total amount equal to the amount transferred to the ECB's provision for financial risks in 2021 and the amount paid up by the euro area NCBs in 2022 in respect of

the second instalment of their increased subscriptions in the ECB's capital following the withdrawal of the Bank of England from the ESCB (see Section 1.3.2 "Financial resources") increased the size of the own funds portfolio. However, this increase was almost fully offset by the decline in the market value of the securities held in this portfolio as a result of the significant rise in euro area bond yields (Chart 16).

Chart 8
The ECB's own funds portfolio



Source: ECB

The portfolio mainly consists of euro-denominated securities which are valued at year-end market prices. In 2022 government debt securities accounted for 76% of the total portfolio.



The share of green investments in the own funds portfolio continued to increase, rising from 7.6% at the end of 2021 to 13.1% at the end of 2022. The ECB plans to further increase this share over the coming years. Since 2021 purchases of green bonds in secondary markets are complemented by investments in the eurodenominated green bond investment fund for central banks launched by the Bank for International Settlements in January 2021.

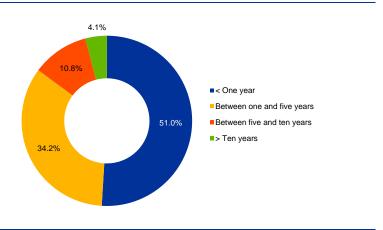
The ECB's own funds portfolio predominantly consists of investments of the ECB's financial resources, namely its paid-up capital and amounts set aside in the general reserve fund and in the provision for financial risks. The purpose of this portfolio is to provide income to help fund the ECB's operating expenses which are not related to the delivery of its supervisory tasks. ¹² It is invested in euro-denominated assets,

In accordance with the recommendations of the Task Force on Climate-related Financial Disclosures, the ECB will publish climate-related financial disclosures with regard to its own funds and pension portfolios on the ECB's website in March 2023.

The expenses incurred by the ECB in the performance of its supervisory tasks are recovered via annual fees levied on supervised entities. Further details can be found on the ECB's banking supervision website.

subject to the limits imposed by its risk control framework. This results in a more diversified maturity structure (Chart 9) than in the foreign reserves portfolio.

Chart 9
Maturity profile of the ECB's own funds securities



Source: ECB.

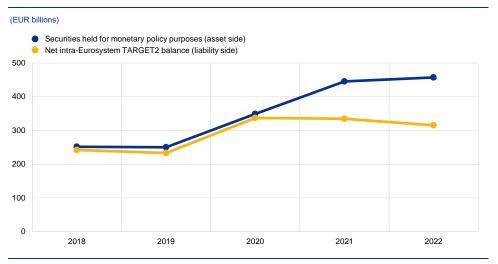
At the end of 2022, the total value of euro **banknotes in circulation** was €1,572.0 billion, an increase of 1.8% compared to the end of 2021. The ECB has been allocated an 8% share of the total value of euro banknotes in circulation, which amounted to €125.8 billion at the end of the year. Since the ECB does not issue banknotes itself, it holds **intra-Eurosystem claims** vis-à-vis the euro area NCBs for a value equivalent to the value of the banknotes in circulation.

The ECB's **intra-Eurosystem liabilities**, which mainly comprise the net TARGET2 balance of euro area NCBs vis-à-vis the ECB and the ECB's liabilities with regard to the foreign reserve assets transferred to it by the euro area NCBs when they joined the Eurosystem, decreased by €19.7 billion to €355.5 billion in 2022.

The development of the intra-Eurosystem liabilities over the period from 2018 to 2020, was mostly driven by the evolution of the net TARGET2 liability as a result of the ECB's net purchases of securities held for monetary policy purposes, which are settled via TARGET2 accounts (Chart 10). In 2021 and 2022 the impact of monetary policy securities purchases on the net TARGET2 liability was more than offset by other factors. In 2022 these factors were mainly the higher deposits of euro area residents accepted by the ECB in its role as fiscal agent¹³ and the higher balances of euro area ancillary systems connected to TARGET2 through the TARGET2-ECB component.

In accordance with Article 21 of the Statute of the ESCB, the ECB may act as fiscal agent for Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States.

Chart 10Net intra-Eurosystem TARGET2 balance and securities held for monetary policy purposes



Source: ECB

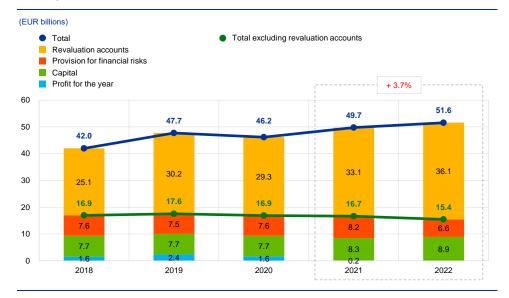
The ECB's **other liabilities** consist mainly of deposits accepted by the ECB in its role as fiscal agent and balances of ancillary systems connected to TARGET2 through the TARGET2-ECB component. In 2022 the ECB's other liabilities increased by €33.2 billion to €165.7 billion, mainly due to higher deposits of euro area residents accepted in its role as fiscal agent.

1.3.2 Financial resources



The ECB's financial resources consist of its capital, any amounts held in the provision for financial risks and the general reserve fund, the revaluation accounts and any profit for the year. These financial resources are (i) invested in assets that generate income and/or (ii) used to offset losses. As at 31 December 2022, the ECB's financial resources totalled €51.6 billion (Chart 11). This was €1.8 billion higher than in 2021 owing to (i) the increase in the revaluation accounts as a result of the appreciation of the US dollar against the euro and the rise in the market price of gold in euro terms in 2022 and (ii) the increase in the paid-up capital. These increases were partially offset, mainly by the reduction in the provision for financial risks following its partial use to offset losses incurred in 2022.

Chart 11
The ECB's financial resources



Source: ECB.

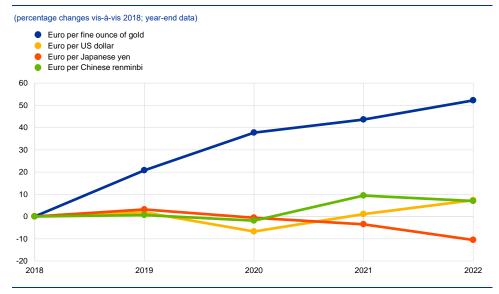
Note: "Revaluation accounts" includes total revaluation gains on gold, foreign currency and securities holdings, but excludes the revaluation account for post-employment benefits.



Unrealised gains on gold and foreign currencies and unrealised gains on securities that are subject to price revaluation are not recognised as income in the Profit and Loss Account but are recorded directly in **revaluation accounts** shown on the liability side of the ECB's Balance Sheet. The balances in these accounts can be used to absorb the impact of any future unfavourable movement in the respective prices and/or exchange rates and thus strengthen the ECB's resilience against the underlying risks. In 2022 the revaluation accounts for gold, foreign currencies and securities¹⁴ increased by €3.0 billion to €36.1 billion owing to higher revaluation balances for foreign currencies and gold as a result of the appreciation of the US dollar against the euro and the rise in the market price of gold in euro terms (Chart 12), which were partially offset by the decrease in the revaluation balances for securities.

The balance sheet item "Revaluation accounts" also includes remeasurements in respect of postemployment benefits.

Chart 12
The main foreign exchange rates and gold price over the period 2018-22



Source: ECB

Following the Bank of England's departure from the ESCB in 2020, the shares of the remaining NCBs in the subscribed capital of the ECB increased. The Governing Council decided that the remaining NCBs would cover only the Bank of England's withdrawn paid-up capital of €58 million in 2020 and that the euro area NCBs would pay up in full their increased subscriptions in two equal annual instalments in 2021 and 2022. Following the payment of the final instalment by the euro area NCBs, the ECB's paid-up capital increased by €0.6 billion to €8.9 billion in 2022.



In view of its exposure to financial risks (see Section 1.4.1 "Financial risks"), the ECB maintains a **provision for financial risks**. The provision for financial risks, together with any amount held in the ECB's general reserve fund, may not exceed the value of the capital paid up by the euro area NCBs. The size of this provision is reviewed annually, taking a range of factors into account, including the level of holdings of risk-bearing assets, the projected results for the coming year and a risk assessment. Following the annual review, the Governing Council decided to release €1,627 million from the provision for financial risks to offset losses incurred in 2022, after which the **ECB's financial result** was zero (see Section 1.3.3 "Profit and Loss Account"). Following this release, the size of the provision for financial risks fell to €6.6 billion.

1.3.3 Profit and Loss Account

After several years of increases, the ECB's annual profit reached a peak in 2019 before starting to decrease in 2020. The movements in the ECB's profit were driven mainly by changes in the income generated on foreign reserve assets and on

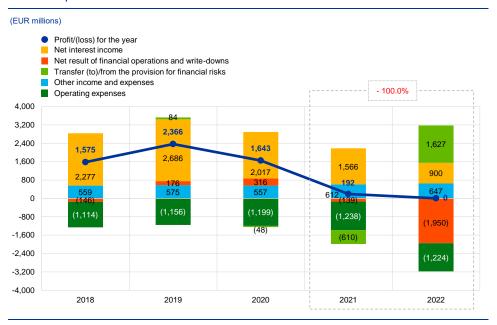
See the press release of 30 January 2020 on the ECB's subscribed capital following the Bank of England's withdrawal from the ESCB.

securities held for monetary policy purposes. In 2021 there was also a significant transfer to the provision for financial risks, which reduced the ECB's profit by a corresponding amount.



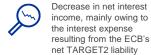
Following the release of €1,627 million from the provision for financial risks to offset losses incurred in 2022, the **ECB's financial result** was zero (2021: €192 million). The losses mainly arose from (i) the interest expense resulting from the ECB's net TARGET2 liability and (ii) the negative net result from financial operations and writedowns (Chart 13).

Chart 13
Main components of the ECB's Profit and Loss Account



Source: ECB.

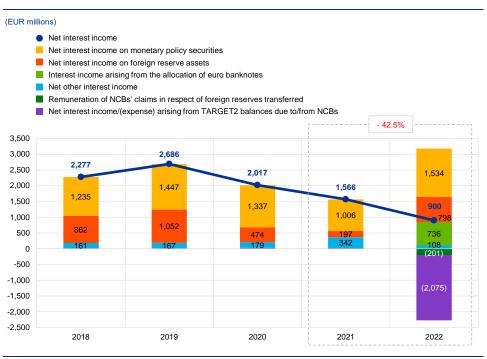
Note: "Other income and expenses" consists of "Net income/expense from fees and commissions", "Income from equity shares and participating interests", "Other income" and "Other expenses".



The **net interest income** of the ECB decreased by €666 million to €900 million (Chart 14), mainly owing to the interest expense resulting from the ECB's net TARGET2 liability. The interest expense related to the remuneration of euro area NCBs' claims in respect of foreign reserves transferred to the ECB also contributed to this decrease. These expenses were partially offset by higher interest income arising from (i) the ECB's claims related to the allocation of euro banknotes within the Eurosystem, (ii) foreign reserve assets and (iii) securities held for monetary policy purposes.

Chart 14

Net interest income



Source: ECB.

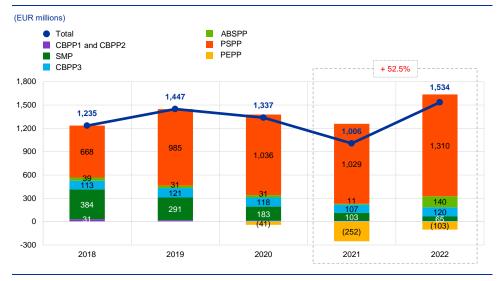


Higher interest income on monetary policy related securities, mainly owing to higher yields on public sector securities acquired under the APP and PEPP

Net interest income generated on securities held for monetary policy purposes

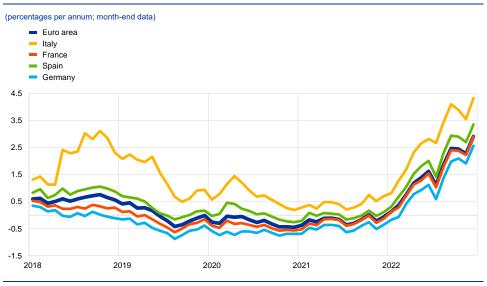
increased by €528 million to €1,534 million in 2022 (Chart 15), mainly owing to the higher net interest income arising from the APP (from securities held under the CBPP3, ABSPP and PSPP) and the lower negative net interest income on the PEPP portfolio. APP net interest income rose by €424 million to €1,571 million in 2022, while PEPP negative net interest income fell to €103 million from €252 million. These developments were mainly driven by the significant rise in euro area bond yields in 2022 (Chart 16), which allowed purchases of securities under both programmes at higher yields than the historical yield of the respective portfolios. Net interest income on the SMP, CBPP1 and CBPP2 portfolios decreased by €45 million to €66 million owing to the decline in the size of these portfolios as a result of maturing securities.

Chart 15
Net interest income/(expense) on securities held for monetary policy purposes

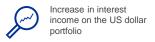


Source: ECB

Chart 16Seven-year sovereign bond yields in the euro area

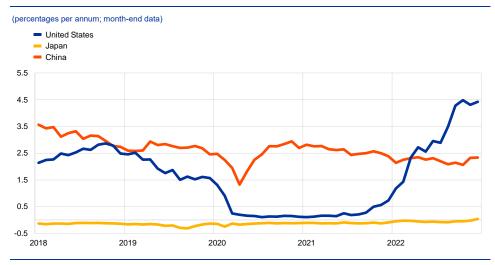


Source: ECB.



Net interest income on foreign reserve assets increased by €602 million to €798 million, predominantly as a result of higher interest income from securities denominated in US dollars. The average interest rate earned on the ECB's US dollar portfolio increased in 2022 compared to the previous year owing to (i) sales and redemptions of lower-yield bonds purchased in the past and (ii) purchases of securities with higher yields owing to the increase in US dollar bond yields since the end of 2021 (Chart 17).

Chart 17
Two-year sovereign bond yields in the United States, Japan and China



Source: Bloomberg and ECB.



0.6%

Average MRO rate in 2022; gradual increase in the second half of the year, from 0% to 2.5% at the year-end



€2,075 million

Interest expense resulting from the ECB's net TARGET2 liability following the increase in the MRO rate

Interest income arising from the allocation of euro banknotes to the ECB and interest expense stemming from the remuneration of NCBs' claims in respect of foreign reserves transferred amounted to €736 million and €201 million respectively in 2022, while both were zero in the previous year. The changes were the result of increases in the rate on the main refinancing operations (MRO), which is the rate used for the interest calculation on these balances. This rate had stood at 0% since March 2016, but was increased gradually as of 27 July 2022 and stood at 2.5% at the end of the year.

The net interest expense arising from TARGET2 balances due to/from NCBs amounted to €2,075 million, compared to an interest income of €22 million in 2021. The net interest expense in 2022 resulted from the remuneration of the ECB's intra-Eurosystem TARGET2 balances at the MRO rate, which started increasing in 2022. The interest income of €22 million in 2021 resulted from the remuneration of TARGET2 balances of non-euro area NCBs at a negative average remuneration rate.

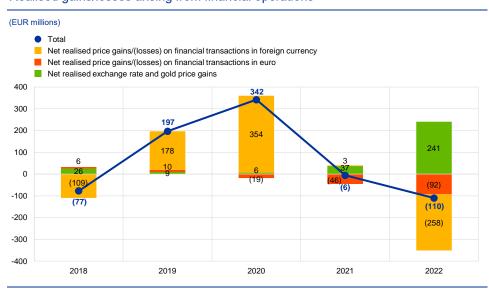
Net other interest income decreased, mainly owing to the remuneration of deposits accepted by the ECB in its role as fiscal agent. While in 2021 the ECB earned interest income on these deposits owing to the negative average remuneration rate applied to them, in 2022 the ECB incurred an interest expense as the applicable remuneration rates turned positive and average deposits were higher towards the end of the year. This was partially offset by the higher interest income earned on the own funds portfolio as a result of increasing yields in the euro area (Chart 16).



Net realised price losses were mainly driven by developments in US dollar bond yields Net realised losses arising from financial operations increased by €104 million to €110 million in 2022 (Chart 18). This was due to price losses realised mainly on sales of US dollar-denominated securities, as their market value was negatively affected by the increase in US dollar bond yields during the year (Chart 17). These

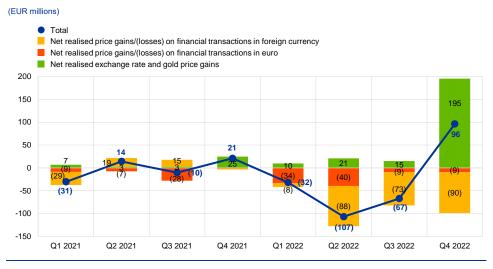
losses occurred mainly in the last three quarters of 2022 (Chart 19). The realised price losses were partially offset by realised exchange rate gains, which largely arose as a consequence of the year-end price write-downs of US dollar securities.

Chart 18
Realised gains/losses arising from financial operations



Source: ECB

Chart 19Quarterly realised gains/losses arising from financial operations in 2021 and 2022

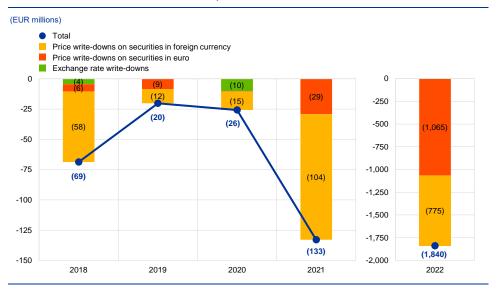


Source: ECB



Unrealised revaluation losses are expensed in the form of **write-downs** at the yearend in the ECB's Profit and Loss Account. In 2022 these write-downs amounted to €1,840 million, compared to €133 million in 2021 (Chart 20), and resulted mainly from the decline in the market value of securities held in the own funds and US dollar portfolios as a result of the significant increase in the corresponding yields.

Chart 20Write-downs on financial assets and positions



Source: ECB.

As at 31 December 2022, the Governing Council decided to release €1,627 million from the **ECB's provision for financial risks** to offset losses incurred in 2022 (see Section 1.3.2 "Financial resources").

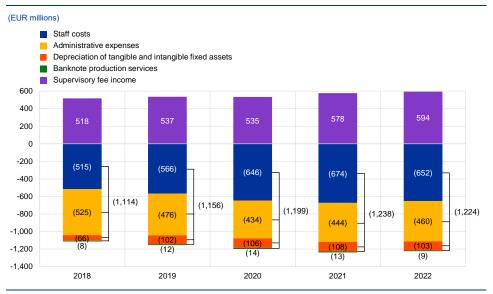
The **total operating expenses** of the ECB, including depreciation and banknote production services, decreased by €14 million to €1,224 million (Chart 21). The decrease compared to 2021 was mainly due to lower staff costs resulting from actuarial gains in relation to other long-term benefits as a consequence of the higher discount rate used for the actuarial valuation at the end of 2022. Administrative expenses increased slightly, mainly owing to a gradual return to normal levels of activity following the pandemic and the new and improved IT services in banking supervision.



Banking supervision-related expenses are fully covered by fees levied on the supervised entities. Based on the actual expenses incurred by the ECB in the performance of its banking supervision tasks, supervisory fee income for 2022 stood at €594 million.¹⁶

¹⁶ Supervisory fee income is included under "Other income and expenses" (Chart 13).

Chart 21Operating expenses and supervisory fee income

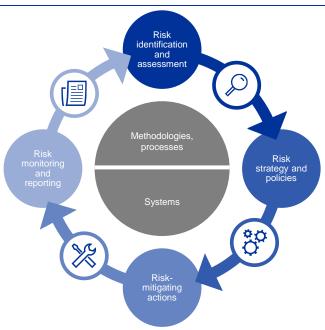


Source: ECB.

1.4 Risk management

Risk management is a critical part of the ECB's activities and is conducted through a continuous process of (i) risk identification and assessment, (ii) review of the risk strategy and policies, (iii) implementation of risk mitigating actions and (iv) risk monitoring and reporting, all of which are supported by effective methodologies, processes and systems.

Figure 2
Risk management cycle



The following sections focus on the risks, their sources and the applicable risk control frameworks.

1.4.1 Financial risks

The Executive Board proposes policies and procedures that ensure an appropriate level of protection against the financial risks to which the ECB is exposed. The Risk Management Committee (RMC), which comprises experts from Eurosystem central banks, contributes to the monitoring, measuring and reporting of financial risks related to the balance sheet of the Eurosystem and defines and reviews the associated methodologies and frameworks. In this way, the RMC helps the decision-making bodies to ensure an appropriate level of protection for the Eurosystem.

Financial risks arise from the ECB's core activities and associated exposures.

The risk control frameworks and limits that the ECB uses to manage its risk profile differ across types of operation, reflecting the policy or investment objectives of the different portfolios and the risk characteristics of the underlying assets.

To monitor and assess the risks, the ECB relies on a number of risk estimation techniques developed by its experts. These techniques are based on a joint market and credit risk simulation framework. The core modelling concepts, techniques and assumptions underlying the risk measures draw on industry standards and available market data. The risks are typically quantified as the expected shortfall (ES),¹⁷ estimated at the 99% confidence level over a one-year

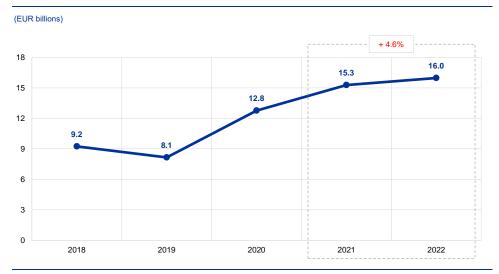
¹⁷ The ES is defined as a probability-weighted average loss that occurs in the worst (1-p)% of scenarios, where p denotes the confidence level.

horizon. Two approaches are used to calculate risks: (i) the accounting approach, under which the ECB's revaluation accounts are considered as a buffer in the calculation of risk estimates in line with all applicable accounting rules; and (ii) the financial approach, under which the revaluation accounts are not considered as a buffer in the risk calculation. The ECB also calculates other risk measures at different confidence levels, performs sensitivity and stress scenario analyses and assesses longer-term projections of exposures and income to maintain a comprehensive picture of the risks.¹⁸



The total risks of the ECB increased during the year. At the end of 2022 the total financial risks for all the ECB's portfolios combined, as measured by the ES at the 99% confidence level over a one-year horizon under the accounting approach, stood at €16.0 billion, which was €0.7 billion higher than the risks estimated as at the end of 2021 (Chart 22). The rise in estimated risks continued a trend which began in 2020 and reflects the growth of the ECB's monetary policy portfolios as a result of asset purchases conducted under the PEPP and the APP.

Chart 22
Total financial risks (ES 99%, accounting approach)



Source: ECB.



Credit risk arises from the ECB's monetary policy portfolios, its euro-denominated own funds portfolio and its foreign reserve holdings. While securities held for monetary policy purposes are valued at amortised cost subject to impairment and are therefore, in the absence of sales, not subject to price changes associated with credit migrations, they are still subject to credit default risk. Euro-denominated own funds and foreign reserves are valued at market prices and, as such, are subject to credit migration and default risk. Credit risk increased compared with the previous year owing to the expansion of the ECB's Balance Sheet through purchases of securities under the PEPP and the APP.

Further details on the risk modelling approach can be found in "The financial risk management of the Eurosystem's monetary policy operations", ECB, July 2015.

Credit risk is mitigated mainly through the application of eligibility criteria, due diligence procedures and limits that differ across portfolios.



Currency and commodity risks arise from the ECB's foreign currency and gold holdings. The currency risk remained stable compared with 2021.

In view of the policy role of these assets, the ECB does not hedge the related currency and commodity risks. Instead, these risks are mitigated through the existence of revaluation accounts and the diversification of the holdings across different currencies and gold.



The ECB's foreign reserves and euro-denominated own funds are mainly invested in fixed income securities and are subject to mark-to-market interest rate risk, given that they are valued at market prices. The ECB's foreign reserves are mainly invested in assets with relatively short maturities (see Chart 7 in Section 1.3.1 "Balance Sheet"), while the assets in the own funds portfolio generally have longer maturities (see Chart 9 in Section 1.3.1 "Balance Sheet"). The interest rate risk of these portfolios, as measured under the accounting approach, increased compared to 2021, reflecting developments in market conditions.

The mark-to-market interest rate risk of the ECB is mitigated through asset allocation policies and the revaluation accounts.

The ECB is also subject to interest rate risk arising from mismatches between the interest rate earned on its assets and the interest rate paid on its liabilities, which has an impact on its net interest income. This risk is not directly linked to any particular portfolio but rather to the structure of the ECB's Balance Sheet as a whole and, in particular, the existence of maturity and yield mismatches between assets and liabilities. It is monitored by means of projections of the ECB's profitability, which indicate that the ECB, before any releases from or transfers to the provision for financial risks may experience losses in the short to medium term, while expecting a return to profits in the long run.

This type of risk is managed through asset allocation policies and is further mitigated by the existence of unremunerated liabilities on the ECB's Balance Sheet.



The risks associated with climate change will gradually be incorporated into the ECB's risk management framework in the coming years. In 2022 the Eurosystem conducted the first climate stress test of the Eurosystem balance sheet¹⁹, which allowed a preliminary estimate of the impact of this risk on the ECB's Balance Sheet to be obtained. In the coming years climate stress testing will be performed on a regular basis.

The results of this stress test for corporate bond holdings will be incorporated in climate-related disclosures on corporate bond holdings of euro area NCBs under the CSPP and the PEPP, which the ECB will start publishing annually as of March 2023. In addition, the general qualitative results of this stress test are planned to be published in the Economic Bulletin in March 2023.

1.4.2 Operational risk

The Executive Board is responsible for and approves the ECB's operational risk²⁰ management (ORM) policy and framework. The Operational Risk Committee (ORC) supports the Executive Board in the performance of its role in overseeing the management of operational risks. **ORM is an integral part of the ECB's governance structure²¹ and management processes.**

The main objective of the ECB's ORM framework is to contribute to ensuring that the ECB achieves its mission and objectives, while protecting its reputation and assets against loss, misuse and damage. Under the ORM framework, each business area is responsible for identifying, assessing, responding to, reporting on and monitoring its operational risks, incidents and controls. In this context, the ECB's risk tolerance policy provides guidance with regard to risk response strategies and risk acceptance procedures. It is linked to a five-by-five risk matrix based on impact and likelihood grading scales using quantitative and qualitative criteria.

The environment in which the ECB operates is exposed to increasingly complex and interconnected threats and there are a wide range of operational risks associated with the ECB's day-to-day activities. The main areas of concern for the ECB include a wide spectrum of non-financial risks resulting from people, systems, processes and external events. Consequently, the ECB has put in place processes to facilitate ongoing and effective management of its operational risks and to integrate risk information into the decision-making process. Moreover, the ECB is focusing on enhancing its resilience, taking a broad view of risks and opportunities from an end-to-end perspective, including sustainability aspects. Response structures and contingency plans have been established to ensure the continuity of critical business functions in the event of any disruption or crisis.

1.4.3 Conduct risk

The ECB has a dedicated Compliance and Governance Office as a key risk management function to strengthen the ECB's governance framework in order to address conduct risk.²² Its purpose is to support the Executive Board in protecting the integrity and reputation of the ECB, to promote ethical standards of behaviour and to strengthen the ECB's accountability and transparency. An independent Ethics Committee provides advice and guidance to high-level ECB officials on integrity and conduct matters and supports the Governing Council in managing risks at executive level appropriately and coherently. At the level of the Eurosystem and the Single Supervisory Mechanism (SSM), the Ethics and Compliance Committee works

Operational risk encompasses all non-financial risks and is defined as the risk of a negative business, reputational or financial impact on the ECB resulting from people, the inadequate implementation or failure of internal governance and business processes, the failure of systems on which processes rely, or external events (e.g. natural disasters or external attacks).

²¹ Further information about the ECB's governance structure can be found on the ECB's website.

Conduct risk management has gained increasing attention in the corporate and public sector. It complements financial and operational risk management and for the ECB can be defined as the risk of suffering reputational or other harm caused by high-level ECB officials or staff not acting in conformity with the ECB's ethics and integrity rules and/or good governance and good administration standards.

towards achieving coherent implementation of the conduct frameworks for NCBs and national competent authorities (NCAs).

In the course of 2022, the ECB expanded its conduct risk management to also cover conduct risk stemming from the recourse to external contractors supporting ECB tasks.

2 Financial statements of the ECB

2.1 Balance Sheet as at 31 December 2022

| ASSETS | Note number | 2022 € millions | 2021 € millions |
|--|----------------|--------------------|--------------------|
| Gold and gold receivables | 1 | 27,689 | 26,121 |
| Claims on non-euro area residents denominated in foreign currency | | 55,603 | 51,433 |
| Receivables from the IMF | 2.1 | 1,759 | 1,234 |
| Balances with banks and security investments, external loans and other external assets | 2.2 | 53,844 | 50,199 |
| Claims on euro area residents denominated in foreign currency | 2.2 | 1,159 | 2,776 |
| Claims on non-euro area residents denominated in euro | 3 | - | 3,070 |
| Balances with banks, security investments and loans | 3.1 | - | 3,070 |
| | | | |
| Other claims on euro area credit institutions denominated in euro | 4 | 12 | 38 |
| | | | |
| Securities of euro area residents denominated in euro | 5 | 457,271 | 445,384 |
| Securities held for monetary policy purposes | 5.1 | 457,271 | 445,384 |
| | | | |
| Intra-Eurosystem claims | 6 | 125,763 | 123,551 |
| Claims related to the allocation of euro banknotes within the Eurosystem | 6.1 | 125,763 | 123,551 |
| | _ | | |
| Other assets | 7 | 31,355 | 27,765 |
| Tangible and intangible fixed assets | 7.1 | 1,105 | 1,189 |
| Other financial assets | 7.2 | 21,213 | 21,152 |
| Off-balance-sheet instruments revaluation differences | 7.3 | 783 | 620 |
| Accruals and prepaid expenses | 7.4 | 7,815 | 4,055 |
| Sundry | 7.5 | 438 | 749 |
| | | | |
| Total assets | | 698,853 | 680,140 |

Note: Totals in the financial statements and in the tables included in the notes may not add up due to rounding. The figures 0 and (0) indicate positive or negative amounts rounded to zero, while a dash (-) indicates zero.

| LIABILITIES | Note number | 2022 € millions | 2021 € millions |
|--|----------------|--------------------|--------------------|
| Banknotes in circulation | 8 | 125,763 | 123,551 |
| Other liabilities to euro area credit institutions denominated in euro | 9 | 17,734 | 9,473 |
| Liabilities to other euro area residents denominated in euro | 10 | 63,863 | 7,604 |
| General government | 10.1 | 48,520 | 3,200 |
| Other liabilities | 10.2 | 15,343 | 4,404 |
| Liabilities to non-euro area residents denominated in euro | 11 | 78,108 | 112,492 |
| Intra-Eurosystem liabilities | 12 | 355,474 | 375,136 |
| Liabilities equivalent to the transfer of foreign reserves | 12.1 | 40,344 | 40,344 |
| Other liabilities within the Eurosystem (net) | 12.2 | 315,130 | 334,792 |
| Other liabilities | 13 | 5,908 | 2,877 |
| Off-balance-sheet instruments revaluation differences | 13.1 | 430 | 568 |
| Accruals and income collected in advance | 13.2 | 3,915 | 32 |
| Sundry | 13.3 | 1,562 | 2,277 |
| Provisions | 14 | 6,636 | 8,268 |
| Revaluation accounts | 15 | 36,487 | 32,277 |
| Capital and reserves | 16 | 8,880 | 8,270 |
| Capital | 16.1 | 8,880 | 8,270 |
| Profit for the year | | - | 192 |
| Total liabilities | | 698,853 | 680,140 |

2.2 Profit and Loss Account for the year ending 31 December 2022

| | Note number | 2022 € millions | 2021 € millions |
|---|----------------|--------------------|--------------------|
| Interest income on foreign reserve assets | 23.1 | 798 | 197 |
| Interest income arising from the allocation of euro banknotes within the Eurosystem | 23.2 | 736 | - |
| Other interest income | 23.4 | 11,001 | 1,531 |
| Interest income | | 12,536 | 1,728 |
| Remuneration of NCBs' claims in respect of foreign reserves transferred | 23.3 | (201) | - |
| Other interest expense | 23.4 | (11,434) | (162) |
| Interest expense | | (11,636) | (162) |
| Net interest income | 23 | 900 | 1,566 |
| Realised gains/losses arising from financial operations | 24 | (110) | (6) |
| Write-downs on financial assets and positions | 25 | (1,840) | (133) |
| Transfer to/from provisions for financial risks | | 1,627 | (610) |
| Net result of financial operations, write-downs and risk provisions | | (322) | (749) |
| Net income/expense from fees and commissions | 26 | 585 | 559 |
| Income from equity shares and participating interests | 27 | 1 | 2 |
| Other income | 28 | 61 | 56 |
| Total net income | | 1,224 | 1,435 |
| Staff costs | 29 | (652) | (674) |
| Administrative expenses | 30 | (460) | (444) |
| Depreciation of tangible and intangible fixed assets | | (103) | (108) |
| Banknote production services | 31 | (9) | (13) |
| Other expenses | 32 | - | (5) |
| Profit/(loss) for the year | | - | 192 |

Frankfurt am Main, 14 February 2023 European Central Bank

Christine Lagarde President

2.3 Accounting policies

Form and presentation of the financial statements

The financial statements of the ECB have been drawn up in accordance with the following accounting policies, ²³ which, in the view of the Governing Council of the ECB, achieve a fair presentation of the financial statements, reflecting at the same time the nature of central bank activities.

Accounting principles

The following accounting principles have been applied: economic reality and transparency, prudence, recognition of post-balance-sheet events, materiality, going concern, the accruals principle, consistency and comparability.

Recognition of assets and liabilities

An asset or liability is only recognised in the Balance Sheet when it is probable that any associated future economic benefit will flow to or from the ECB, substantially all of the associated risks and rewards have been transferred to the ECB, and the cost or value of the asset or the amount of the obligation can be measured reliably.

Basis of accounting

The accounts have been prepared on a historical cost basis, modified to include the market valuation of marketable securities (other than securities currently held for monetary policy purposes), gold and all other on-balance-sheet and off-balance-sheet assets and liabilities denominated in foreign currency.

Transactions in financial assets and liabilities are reflected in the accounts on the basis of the date on which they were settled.

With the exception of spot transactions in securities, transactions in financial instruments denominated in foreign currency are recorded in off-balance-sheet accounts on the trade date. At the settlement date, the off-balance-sheet entries are reversed, and transactions are booked on-balance-sheet. Purchases and sales of

The detailed accounting policies of the ECB are laid down in Decision (EU) 2016/2247 of the ECB of 3 November 2016 on the annual accounts of the ECB (ECB/2016/35) (OJ L 347, 20.12.2016, p. 1), as amended. The unofficial consolidated text with the list of amendments can be found here. In order to ensure the harmonised accounting and financial reporting of Eurosystem operations, the above-mentioned Decision is based on Guideline (EU) 2016/2249 of the ECB of 3 November 2016 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34) (OJ L 347, 20.12.2016, p. 37), as amended. The unofficial consolidated text with the list of amendments can be found here.

These policies, which are reviewed and updated regularly as deemed appropriate, are consistent with the provisions of Article 26.4 of the Statute of the ESCB, which require a harmonised approach to the rules governing the accounting and financial reporting of Eurosystem operations.

foreign currency affect the net foreign currency position on the trade date, and realised results arising from sales are also calculated on that date. Accrued interest, premiums and discounts related to financial instruments denominated in foreign currency are calculated and recorded daily, and the foreign currency position is also affected daily by these accruals.

Gold and foreign currency assets and liabilities

Assets and liabilities denominated in foreign currency are converted into euro at the exchange rate prevailing on the balance sheet date. Income and expenses are converted at the exchange rate prevailing on the recording date. The revaluation of foreign exchange assets and liabilities, including on-balance-sheet and off-balance-sheet instruments, is performed on a currency-by-currency basis.

Revaluation to the market price for assets and liabilities denominated in foreign currency is treated separately from the exchange rate revaluation.

Gold is valued at the market price prevailing at the balance sheet date. No distinction is made between the price and currency revaluation differences for gold. Instead, a single gold valuation is accounted for on the basis of the price in euro per fine ounce of gold, which, for the year ending 31 December 2022, was derived from the exchange rate of the euro against the US dollar on 30 December 2022.

The special drawing right (SDR) is defined in terms of a basket of currencies and its value is determined by the weighted sum of the exchange rates of five major currencies (the US dollar, euro, Chinese renminbi, Japanese yen and pound sterling). The ECB's holdings of SDRs were converted into euro using the exchange rate of the euro against the SDR as at 30 December 2022.

Securities

Securities held for monetary policy purposes

Securities currently held for monetary policy purposes are accounted for at amortised cost subject to impairment.

Other securities

Marketable securities (other than securities currently held for monetary policy purposes) and similar assets are valued either at the mid-market prices or on the basis of the relevant yield curve prevailing on the balance sheet date, on a security-by-security basis. Options embedded in securities are not separated for valuation purposes. For the year ending 31 December 2022, mid-market prices on 30 December 2022 were used.

Marketable investment funds are revalued on a net basis at fund level, using their net asset value. No netting is applied between unrealised gains and losses in different investment funds.

Illiquid equity shares and any other equity instruments held as permanent investments are valued at cost subject to impairment.

Income recognition

Income and expenses are recognised in the period in which they are earned or incurred.²⁴ Realised gains and losses resulting from the sale of foreign currency, gold and securities are recorded in the Profit and Loss Account. Such realised gains and losses are calculated by reference to the average cost of the respective asset.

Unrealised gains are not recognised as income and are transferred directly to a revaluation account.

Unrealised losses are recorded in the Profit and Loss Account if, at the year-end, they exceed previous revaluation gains accumulated in the corresponding revaluation account. Such unrealised losses on any one security or currency or on gold are not netted against unrealised gains on other securities or currencies or gold. In the event of such unrealised losses on any item recorded in the Profit and Loss Account, the average cost of that item is reduced to the year-end exchange rate or market price.

Impairment losses are recorded in the Profit and Loss Account and are not reversed in subsequent years unless the impairment decreases and the decrease can be related to an observable event that occurred after the impairment was first recorded.

Premiums or discounts arising on securities are amortised over the securities' remaining contractual life.

Reverse transactions

Reverse transactions are operations whereby the ECB buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

Under a repurchase agreement, securities are sold for cash with a simultaneous agreement to repurchase them from the counterparty at an agreed price on a set future date. Repurchase agreements are recorded as collateralised deposits on the liability side of the Balance Sheet. Securities sold under such an agreement remain on the Balance Sheet of the ECB.

Under a reverse repurchase agreement, securities are bought for cash with a simultaneous agreement to sell them back to the counterparty at an agreed price on a set future date. Reverse repurchase agreements are recorded as collateralised loans on the asset side of the Balance Sheet, but are not included in the ECB's security holdings.

²⁴ A minimum threshold of €100,000 applies for administrative accruals and provisions.

Reverse transactions (including securities lending transactions) conducted under a programme offered by a specialised institution are recorded on the Balance Sheet only where collateral has been provided in the form of cash and this cash remains uninvested.

Off-balance-sheet instruments

Currency instruments, namely foreign exchange forward transactions, forward legs of foreign exchange swaps and other currency instruments involving an exchange of one currency for another at a future date, are included in the net foreign currency position for the purpose of calculating foreign exchange gains and losses.

Interest rate instruments are revalued on an item-by-item basis. Daily changes in the variation margin of open interest rate futures contracts are recorded in the Profit and Loss Account. The valuation of forward transactions in securities is carried out by the ECB based on generally accepted valuation methods using observable market prices and rates, as well as discount factors from the settlement dates to the valuation date.

Fixed assets

Fixed assets, including intangible assets, but excluding land and works of art, are valued at cost less depreciation. Land and works of art are valued at cost. The ECB's main building is valued at cost less depreciation subject to impairment. For the depreciation of the ECB's main building, costs are assigned to the appropriate asset components, which are depreciated in accordance with their estimated useful lives. Depreciation is calculated on a straight-line basis over the expected useful life of the asset, beginning in the quarter after the asset is available for use. The useful lives applied for the main asset classes are as follows:

| Buildings | 20, 25 or 50 years |
|--|--------------------|
| Plant in building | 10 or 15 years |
| Technical equipment | 4, 10 or 15 years |
| Computers, related hardware and software, and motor vehicles | 4 years |
| Furniture | 10 years |

The depreciation period for capitalised refurbishment expenditure relating to the ECB's existing rented premises is adjusted to take account of any events that have an impact on the expected useful life of the affected asset.

The ECB performs an annual impairment test of its main building and right-of-use assets relating to office buildings (see "Leases" below). If an impairment indicator is identified, and it is assessed that the asset may be impaired, the recoverable amount is estimated. An impairment loss is recorded in the Profit and Loss Account if the recoverable amount is less than the net book value.

Fixed assets costing less than €10,000 are written off in the year of acquisition.

Fixed assets that comply with the capitalisation criteria, but are still under construction or development, are recorded under the heading "Assets under construction". The related costs are transferred to the relevant fixed asset headings once the assets are available for use.

Leases

For all leases involving a tangible asset, the related right-of-use asset and lease liability are recognised on the Balance Sheet at the lease commencement date and included under "Tangible and intangible fixed assets" and "Sundry" (liabilities), respectively. Where leases comply with the capitalisation criteria, but the asset involved is still under construction or adaptation, the incurred costs before the lease commencement date are recorded under the heading "Assets under construction". The related right-of-use asset and lease liability are recognised under the relevant fixed asset headings once the asset is available for use (lease commencement date).

Right-of-use assets are valued at cost less depreciation. In addition, right-of-use assets relating to office buildings are subject to impairment (regarding the annual impairment test, see "Fixed assets" above). Depreciation is calculated on a straight-line basis from the commencement date to either the end of the useful life of the right-of-use asset or the end of the lease term, whichever is earlier.

The lease liability is initially measured at the present value of the future lease payments (comprising only lease components), discounted using the ECB's incremental borrowing rate. Subsequently, the lease liability is measured at amortised cost using the effective interest method. The related interest expense is recorded in the Profit and Loss Account under "Other interest expense". When there is a change in future lease payments arising from a change in an index or other reassessment of the existing contract, the lease liability is remeasured. Any such remeasurement results in a corresponding adjustment to the carrying amount of the right-of-use asset.

Short-term leases with a duration of 12 months or less and leases of low-value assets below €10,000 (consistent with the threshold used for the recognition of fixed assets) are recorded as an expense in the Profit and Loss Account.

The ECB's post-employment benefits, other long-term benefits and termination benefits

The ECB operates defined benefit plans for its staff and the members of the Executive Board, as well as for the members of the Supervisory Board employed by the ECB.

The staff pension plan is funded by assets held in a long-term employee benefit fund. The compulsory contributions made by the ECB and the staff are reflected in

the defined benefit pillar of the plan. Staff can make additional contributions on a voluntary basis in a defined contribution pillar that can be used to provide additional benefits.²⁵ These additional benefits are determined by the amount of voluntary contributions together with the investment returns arising from those contributions.

Unfunded arrangements are in place for the post-employment and other long-term benefits of members of the Executive Board and members of the Supervisory Board employed by the ECB. For staff, unfunded arrangements are in place for post-employment benefits other than pensions and for other long-term benefits and termination benefits.

Net defined benefit liability

The liability recognised in the Balance Sheet under "Sundry" (liabilities) in respect of the defined benefit plans, including other long-term benefits and termination benefits, is the present value of the defined benefit obligation at the balance sheet date, less the fair value of plan assets used to fund the related obligation.

The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is calculated by discounting the estimated future cash flows using a rate which is determined by reference to market yields at the balance sheet date on high-quality euro-denominated corporate bonds that have similar terms to maturity to the related obligation.

Actuarial gains and losses can arise from experience adjustments (where actual outcomes are different from the actuarial assumptions previously made) and changes in actuarial assumptions.

Net defined benefit cost

The net defined benefit cost is split into components reported in the Profit and Loss Account and remeasurements in respect of post-employment benefits shown in the Balance Sheet under "Revaluation accounts".

The net amount charged to the Profit and Loss Account comprises:

- 1. the current service cost of the defined benefits accruing for the year;
- 2. the past service cost of the defined benefits resulting from a plan amendment;
- 3. net interest at the discount rate on the net defined benefit liability;
- 4. remeasurements in respect of other long-term benefits and termination benefits of a long-term nature, if any, in their entirety.

The net amount shown under "Revaluation accounts" comprises the following items:

1. actuarial gains and losses on the defined benefit obligation;

The funds accumulated by a staff member through voluntary contributions can be used at retirement to purchase an additional pension. This pension is included in the defined benefit obligation from that point on.

- 2. the actual return on plan assets, excluding amounts included in the net interest on the net defined benefit liability;
- 3. any change in the effect of the asset ceiling, excluding amounts included in the net interest on the net defined benefit liability.

These amounts are valued annually by independent actuaries to establish the appropriate liability in the financial statements.

Intra-ESCB balances/intra-Eurosystem balances

Intra-ESCB balances result primarily from cross-border payments in the European Union (EU) that are settled in central bank money in euro. These transactions are for the most part initiated by private entities (i.e. credit institutions, corporations and individuals). They are settled in TARGET2 - the Trans-European Automated Realtime Gross settlement Express Transfer system - and give rise to bilateral balances in the TARGET2 accounts of EU central banks. These bilateral balances are netted and then assigned to the ECB on a daily basis, leaving each national central bank (NCB) with a single net bilateral position vis-à-vis the ECB only. Payments conducted by the ECB and settled in TARGET2 also affect the single net bilateral positions. These positions in the books of the ECB represent the net claim or liability of each NCB against the rest of the European System of Central Banks (ESCB). Intra-Eurosystem balances of euro area NCBs vis-à-vis the ECB arising from TARGET2, as well as other intra-Eurosystem balances denominated in euro (e.g. the ECB's interim profit distribution to NCBs, if any), are presented on the Balance Sheet of the ECB as a single net asset or liability position under either "Other claims within the Eurosystem (net)" or "Other liabilities within the Eurosystem (net)". Intra-ESCB balances of non-euro area NCBs vis-à-vis the ECB, arising from their participation in TARGET2,²⁶ are disclosed under "Liabilities to non-euro area residents denominated in euro".

Intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are included as a single net asset under "Claims related to the allocation of euro banknotes within the Eurosystem" (see "Banknotes in circulation" below).

Intra-Eurosystem balances arising from the transfer of foreign reserve assets to the ECB by NCBs joining the Eurosystem are denominated in euro and reported under "Liabilities equivalent to the transfer of foreign reserves".

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As at 31 December 2022 the non-euro area NCBs participating in TARGET2 were Българска народна банка (Bulgarian National Bank), Danmarks Nationalbank, Hrvatska narodna banka, Narodowy Bank Polski and Banca Natională a României.

Banknotes in circulation

The ECB and the euro area NCBs, which together comprise the Eurosystem, issue euro banknotes.²⁷ The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month in accordance with the banknote allocation key.²⁸

The ECB has been allocated an 8% share of the total value of euro banknotes in circulation, which is disclosed in the Balance Sheet under the liability item "Banknotes in circulation". The ECB's share of the total euro banknote issue is backed by claims on the NCBs. These claims, which bear interest, 29 are disclosed under the item "Claims related to the allocation of euro banknotes within the Eurosystem" (see "Intra-ESCB balances/intra-Eurosystem balances" above). Interest income on these claims is included in the Profit and Loss Account under the item "Interest income arising from the allocation of euro banknotes within the Eurosystem".

Interim profit distribution

An amount that is equal to the sum of the ECB's income on euro banknotes in circulation and income arising from the securities held for monetary policy purposes purchased under (i) the Securities Markets Programme; (ii) the third covered bond purchase programme; (iii) the asset-backed securities purchase programme; (iv) the public sector purchase programme; and (v) the pandemic emergency purchase programme is distributed in January of the following year by means of an interim profit distribution, unless otherwise decided by the Governing Council.³⁰ Any such decision shall be taken where, on the basis of a reasoned estimate prepared by the Executive Board, the Governing Council expects that the ECB will have an overall annual loss or will make an annual profit that is less than this income. The Governing Council may also decide to transfer all or part of this income to a provision for financial risks. Furthermore, the Governing Council may decide to reduce the amount of the income on euro banknotes in circulation to be distributed in January by the amount of the costs incurred by the ECB in connection with the issue and handling of euro banknotes.

Decision of the ECB of 13 December 2010 on the issue of euro banknotes (ECB/2010/29) (2011/67/EU) (OJ L 35, 9.2.2011, p. 26), as amended. The unofficial consolidated text with the list of amendments can be found here.

^{28 &}quot;Banknote allocation key" means the percentages that result from taking into account the ECB's share in the total euro banknote issue and applying the subscribed capital key to the NCBs' share in that total.

Decision (EU) 2016/2248 of the ECB of 3 November 2016 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (ECB/2016/36) (OJ L 347, 20.12.2016, p. 26), as amended. The unofficial consolidated text with the list of amendments can be found here.

Decision (EU) 2015/298 of the ECB of 15 December 2014 on the interim distribution of the income of the ECB (ECB/2014/57) (OJ L 53, 25.2.2015, p. 24), as amended. The unofficial consolidated text with the list of amendments can be found here.

Post-balance-sheet events

The values of assets and liabilities are adjusted for events that occur between the annual balance sheet date and the date on which the Executive Board authorises the submission of the ECB's Annual Accounts to the Governing Council for approval, if such events materially affect the condition of assets and liabilities at the balance sheet date.

Important post-balance-sheet events that do not affect the condition of assets and liabilities at the balance sheet date are disclosed in the notes.

Changes to accounting policies

In 2022 there were no changes to the accounting policies applied by the ECB.

Other issues

In accordance with Article 27 of the Statute of the ESCB, and on the basis of a recommendation of the Governing Council, the EU Council has approved the appointment of Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf (Federal Republic of Germany) as the external auditors of the ECB for a five-year period up to the end of the financial year 2022. This five-year period can be extended for up to two additional financial years.

2.4 Notes on the Balance Sheet

Note 1 - Gold and gold receivables

As at 31 December 2022 the ECB held 16,229,522 ounces of fine gold³¹, the market value of which amounted to €27,689 million (2021: €26,121 million). No gold operations took place in 2022 and the ECB's holdings therefore remained unchanged compared with their level as at 31 December 2021. The increase in the euro equivalent value of these holdings was due to the rise in the market price of gold in euro terms (see "Gold and foreign currency assets and liabilities" in Section 2.3 "Accounting policies" and note 15 "Revaluation accounts").

Note 2 - Claims on non-euro area and euro area residents denominated in foreign currency

Note 2.1 - Receivables from the IMF

This asset represents the ECB's holdings of SDRs and amounted to €1,759 million as at 31 December 2022 (2021: €1,234 million). It arises as the result of a two-way SDR buying and selling voluntary trading arrangement with the International Monetary Fund (IMF), whereby the IMF is authorised to arrange sales or purchases of SDRs against euro, on behalf of the ECB, within minimum and maximum holding levels. For accounting purposes, SDRs are treated as a foreign currency (see "Gold and foreign currency assets and liabilities" in Section 2.3 "Accounting policies"). The ECB's holdings of SDRs increased in 2022, mainly as a result of a transaction that took place in the context of the above-mentioned voluntary trading arrangement.

Note 2.2 - Balances with banks and security investments, external loans and other external assets; and claims on euro area residents denominated in foreign currency

These two items consist of balances with banks and loans denominated in foreign currency, and investments in securities denominated in US dollars, Japanese yen and Chinese renminbi.

³¹ This corresponds to 504.8 tonnes.

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Claims on non-euro area residents | | | |
| Current accounts | 15,687 | 12,882 | 2,805 |
| Money market deposits | 985 | 562 | 424 |
| Security investments | 37,172 | 36,755 | 417 |
| Total claims on non-euro area residents | 53,844 | 50,199 | 3,645 |
| Claims on euro area residents | | | |
| Current accounts | 34 | 33 | 1 |
| Money market deposits | 1,125 | 2,284 | (1,159) |
| Reverse repurchase agreements | - | 459 | (459) |
| Total claims on euro area residents | 1,159 | 2,776 | (1,617) |
| | | | |
| Total | 55,004 | 52,975 | 2,028 |

The total value of these items increased in 2022, mainly owing to the appreciation of the US dollar against the euro.

The ECB's net foreign currency holdings³² were as follows:

| | 2022 Foreign currency in millions | 2021 Foreign currency in millions |
|------------------|---|---|
| US dollars | 49,590 | 49,869 |
| Japanese yen | 1,090,312 | 1,093,694 |
| Chinese renminbi | 4,440 | 4,308 |

No foreign exchange interventions took place during 2022.

Note 3 - Claims on non-euro area residents denominated in euro

Note 3.1 - Balances with banks, security investments and loans

As at 31 December 2022 there were no balances under this item, while at the end of 2021 this item had consisted of a claim amounting to €3,070 million in relation to liquidity facility arrangements between the Eurosystem and non-euro area central banks.³³

These holdings comprise assets minus liabilities denominated in the given foreign currency that are subject to foreign currency revaluation. They are included under the headings "Claims on non-euro area residents denominated in foreign currency", "Claims on euro area residents denominated in foreign currency", "Accruals and prepaid expenses", "Off-balance-sheet instruments revaluation differences" (liabilities side) and "Accruals and income collected in advance" and take into account foreign exchange forward and swap transactions included in off-balance-sheet items. Price gains on financial instruments denominated in foreign currency arising as a result of revaluations are not included.

Further details on the Eurosystem's euro liquidity operations against eligible collateral can be found on the ECB's website.

Note 4 - Other claims on euro area credit institutions denominated in euro

As at 31 December 2022 this item consisted of current account balances with euro area residents amounting to €12 million (2021: €38 million).

Note 5 - Securities of euro area residents denominated in euro

Note 5.1 - Securities held for monetary policy purposes

As at 31 December 2022 this item consisted of securities acquired by the ECB within the scope of the Securities Markets Programme (SMP), the third covered bond purchase programme (CBPP3), the asset-backed securities purchase programme (ABSPP), the public sector purchase programme (PSPP) and the pandemic emergency purchase programme (PEPP).

All securities held under the first and the second covered bond purchase programmes (CBPP1 and CBPP2) matured in the course of 2022, and therefore the ECB and the euro area NCBs had no holdings of these securities as at 31 December 2022.

| Completed/Terminate CBPP1 CBPP2 | July 2009 November 2011 | June 2010 October 2012 | ECB/2009/16 | Covered bonds of euro area residents |
|---------------------------------|----------------------------|---------------------------|----------------------------|---|
| | November 2011 | | ECB/2009/16 | Covered bonds of euro area residents |
| CBPP2 | | October 2012 | | l e e e e e e e e e e e e e e e e e e e |
| | | - | ECB/2011/17 | Covered bonds of euro area residents |
| SMP | May 2010 | September 2012 | ECB/2010/5 | Public and private debt securities issued in the euro area ² |
| Asset purchase prog | gramme (APP) | | | |
| СВРРЗ | October 2014 | active | ECB/2020/8, as amended | Covered bonds of euro area residents |
| ABSPP | November 2014 | active | ECB/2014/45, as amended | Senior and guaranteed mezzanine tranches of asset-backed securities of euro area residents |
| PSPP | March 2015 | active | ECB/2020/9 | Bonds issued by euro area central, regional or local governments or recognised agencies as well as by international organisations and multilateral development banks located in the euro area |
| CSPP ³ | June 2016 | active | ECB/2016/16, as amended | Bonds and commercial paper issued by non- bank corporations established in the euro area |
| Pandemic emergency | y purchase progra | amme (PEPP) | | |
| PEPP | March 2020 | active | ECB/2020/17, as amended | All asset categories eligible under the APP ⁴ |

¹⁾ Further eligibility criteria for the specific programmes can be found in the Governing Council's decisions

Only public debt securities issued by five euro area treasuries were purchased under the SMP.
 The ECB does not acquire securities under the corporate sector purchase programme (CSPP).

⁴⁾ A waiver of the eligibility requirements was granted for securities issued by the Greek Government

During the first quarter of 2022, the Eurosystem continued its net purchases under the asset purchase programme (APP)³⁴ at a monthly pace of €20 billion on average. In March 2022 the Governing Council decided³⁵ to revise the net purchase amounts to €40 billion in April, €30 billion in May and €20 billion in June, and in June 2022 the Governing Council decided³⁶ to end net asset purchases under the APP as of 1 July 2022. The Governing Council intends³⁷ to continue reinvesting, in full, the principal payments from maturing securities until the end of February 2023. Thereafter the APP portfolio will decline at a measured and predictable pace, as the Eurosystem will not reinvest all of the principal payments from maturing securities. The decline will amount to €15 billion a month on average until the end of June 2023 and its subsequent pace will be determined over time. The Governing Council will regularly reassess the pace of the APP portfolio reduction to ensure it remains consistent with the overall monetary policy strategy and stance, to preserve market functioning, and to maintain firm control over short-term money market conditions.

In addition, during the first quarter of 2022, the Eurosystem continued its net asset purchases under the PEPP³⁸, albeit at a lower pace than in the previous quarter, following the decision of the Governing Council in December 2021.³⁹ Based on the same decision, net PEPP purchases were discontinued at the end of March 2022. The Governing Council intends to reinvest, in full, the principal payments from maturing securities purchased under the PEPP until at least the end of 2024. The Governing Council will continue applying flexibility across time, asset classes and jurisdictions in the reinvestments, with a view to countering risks to the monetary policy transmission mechanism related to the pandemic. The future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary policy stance.

The securities purchased under these programmes are valued on an amortised cost basis subject to impairment (see "Securities" in Section 2.3 "Accounting policies").

The amortised cost of the securities held by the ECB and their market value⁴⁰ (which is not recorded on the Balance Sheet or in the Profit and Loss Account and is provided for comparison purposes only) were as follows:

³⁴ Further details on the APP can be found on the ECB's website.

 $^{^{\}rm 35}$ $\,$ See the press release of 10 March 2022 on the Governing Council's decisions.

³⁶ See the press release of 9 June 2022 on the Governing Council's decisions.

 $^{^{\}rm 37}$ $\,$ See the press release of 15 December 2022 on the Governing Council's decisions.

³⁸ Further details on the PEPP can be found on the ECB's website.

³⁹ See the press release of 16 December 2021 on the Governing Council's decisions.

Market values are indicative and are derived on the basis of market quotes. When market quotes are not available, market prices are estimated using internal Eurosystem models.

| | 2022 € millions | | 2021 € millions | | Change € millions | |
|-------------------------------------|--------------------|-----------------|--------------------|-----------------|----------------------|-----------------|
| | Amortised cost | Market value | Amortised cost | Market value | Amortised cost | Market value |
| Completed/Terminated programmes | | | | | | |
| CBPP1 | - | - | 14 | 14 | (14) | (14) |
| CBPP2 | - | - | 195 | 196 | (195) | (196) |
| SMP | 718 | 766 | 1,035 | 1,191 | (318) | (425) |
| | | | | | | |
| APP | | | | | | |
| CBPP3 | 25,116 | 22,136 | 24,934 | 25,254 | 182 | (3,118) |
| ABSPP | 22,895 | 22,605 | 28,403 | 28,286 | (5,508) | (5,681) |
| PSPP – government/agency securities | 242,857 | 213,750 | 234,083 | 242,777 | 8,774 | (29,027) |
| Total APP | 290,868 | 258,491 | 287,420 | 296,317 | 3,448 | (37,825) |
| | | | | | | |
| PEPP | | | | | | |
| PEPP – covered bonds | 769 | 628 | 696 | 686 | 73 | (58) |
| PEPP – government/agency securities | 164,916 | 138,072 | 156,024 | 154,804 | 8,892 | (16,732) |
| Total PEPP | 165,685 | 138,700 | 156,720 | 155,490 | 8,965 | (16,790) |
| | | | | | | |
| Total | 457,271 | 397,957 | 445,384 | 453,208 | 11,887 | (55,251) |

The amortised cost value of the securities held by the ECB changed during the year as follows:

| | 2021 € millions | Gross purchases € millions | Redemptions € millions | Net discount/ (premium) ¹ € millions | 2022 € millions |
|-------------------------------------|--------------------|----------------------------------|---------------------------|---|--------------------|
| CBPP1 | 14 | - | (14) | 0 | - |
| CBPP2 | 195 | - | (195) | (0) | - |
| SMP | 1,035 | - | (335) | 17 | 718 |
| CBPP3 | 24,934 | 3,576 | (3,325) | (69) | 25,116 |
| ABSPP | 28,403 | 6,247 | (11,644) | (111) | 22,895 |
| PSPP – government/agency securities | 234,083 | 37,796 | (26,467) | (2,555) | 242,857 |
| PEPP – covered bonds | 696 | 92 | (17) | (1) | 769 |
| PEPP – government/agency securities | 156,024 | 34,875 | (23,570) | (2,413) | 164,916 |
| Total | 445,384 | 82,585 | (65,566) | (5,132) | 457,271 |

^{1) &}quot;Net discount/(premium)" includes net realised gains/(losses), if any.

The Governing Council assesses on a regular basis the financial risks associated with the securities held under these programmes.

In this context, impairment tests are conducted on an annual basis, using data as at the year-end, and are approved by the Governing Council. In these tests, impairment indicators are assessed separately for each programme. In cases where impairment indicators are observed, further analysis is performed to confirm that the cash flows of the underlying securities have not been affected by an impairment event. Based

on the results of this year's impairment tests, no losses have been recorded by the ECB for the securities held in its monetary policy portfolios in 2022.

The amortised cost value of the securities held by the Eurosystem was as follows:

| | | 2022 € millions | | | 2021 € millions | |
|-------------------------------------|---------|--------------------|---------------------|---------|--------------------|---------------------|
| | ECB | Euro area NCBs | Total Eurosystem | ECB | Euro area NCBs | Total Eurosystem |
| Completed/Terminated programmes | | | | | | |
| CBPP1 | - | - | - | 14 | 415 | 429 |
| CBPP2 | - | - | - | 195 | 2,211 | 2,406 |
| SMP | 718 | 2,143 | 2,860 | 1,035 | 5,486 | 6,522 |
| | | | | | | |
| APP | | | | | | |
| CBPP3 | 25,116 | 276,857 | 301,973 | 24,934 | 273,233 | 298,167 |
| ABSPP | 22,895 | - | 22,895 | 28,403 | - | 28,403 |
| PSPP – government/agency securities | 242,857 | 2,066,581 | 2,309,438 | 234,083 | 1,988,516 | 2,222,599 |
| PSPP – supranational securities | - | 275,228 | 275,228 | - | 264,537 | 264,537 |
| CSPP | - | 344,119 | 344,119 | - | 309,676 | 309,676 |
| Total APP | 290,868 | 2,962,785 | 3,253,653 | 287,420 | 2,835,961 | 3,123,382 |
| | | | | | | |
| PEPP | | | | | | |
| PEPP – covered bonds | 769 | 5,283 | 6,052 | 696 | 5,377 | 6,073 |
| PEPP – government/agency securities | 164,916 | 1,317,937 | 1,482,853 | 156,024 | 1,244,196 | 1,400,220 |
| PEPP – supranational securities | - | 145,687 | 145,687 | - | 130,590 | 130,590 |
| PEPP – corporate sector securities | - | 46,074 | 46,074 | - | 43,782 | 43,782 |
| Total PEPP | 165,685 | 1,514,981 | 1,680,666 | 156,720 | 1,423,945 | 1,580,665 |
| | | | | | | |
| Total | 457,271 | 4,479,908 | 4,937,179 | 445,384 | 4,268,019 | 4,713,403 |

Note: "Euro area NCBs" figures are preliminary and may be subject to revision, which would also result in an equivalent change in the "Total Eurosystem" figures.

Note 6 - Intra-Eurosystem claims

Note 6.1 - Claims related to the allocation of euro banknotes within the Eurosystem

This item consists of the claims of the ECB vis-à-vis the euro area NCBs relating to the allocation of euro banknotes within the Eurosystem (see "Banknotes in circulation" in Section 2.3 "Accounting policies") and as at 31 December 2022 amounted to €125,763 million (2021: €123,551 million). The remuneration of these claims is calculated daily at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations (see note 23.2 "Interest income arising from the allocation of euro banknotes within the Eurosystem").

Note 7 - Other assets

Note 7.1 - Tangible and intangible fixed assets

These assets comprised the following items:

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Cost | | | |
| Land and buildings | 1,007 | 1,009 | (2) |
| Right-of-use buildings | 296 | 289 | 8 |
| Plant in building | 222 | 222 | 0 |
| Computer hardware and software | 140 | 136 | 4 |
| Equipment, furniture and motor vehicles | 110 | 107 | 3 |
| Right-of-use equipment | 3 | 5 | (2) |
| Assets under construction | 5 | 3 | 2 |
| Other fixed assets | 11 | 11 | 0 |
| Total cost | 1,796 | 1,782 | 14 |
| Accumulated depreciation | | | |
| Land and buildings | (204) | (183) | (21) |
| Right-of-use buildings | (152) | (111) | (41) |
| Plant in building | (128) | (112) | (16) |
| Computer hardware and software | (120) | (110) | (10) |
| Equipment, furniture and motor vehicles | (82) | (71) | (10) |
| Right-of-use equipment | (2) | (3) | 1 |
| Other fixed assets | (3) | (3) | (0) |
| Total accumulated depreciation | (690) | (593) | (98) |
| Total net book value | 1,105 | 1,189 | (84) |

In respect of the ECB's main building and right-of-use office buildings, an impairment test was conducted at the end of the year and no impairment loss has been recorded.

Note 7.2 - Other financial assets

This item consists mainly of the ECB's own funds portfolio, which predominantly consists of investments of the ECB's financial resources, namely the paid-up capital and amounts set aside in the general reserve fund and in the provision for financial risks. It also includes 3,211 shares in the Bank for International Settlements (BIS) at the acquisition cost of €42 million and other current accounts denominated in euro.

The components of this item were as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|---------------------------------------|--------------------|--------------------|----------------------|
| Current accounts in euro | 38 | 39 | (1) |
| Securities denominated in euro | 19,280 | 18,928 | 352 |
| Reverse repurchase agreements in euro | 1,854 | 2,144 | (290) |
| Other financial assets | 42 | 42 | 0 |
| Total | 21,213 | 21,152 | 61 |

The net increase in this item in 2022 was primarily due to the investment in the ECB's own funds portfolio of a total amount equal to the amount transferred to the ECB's provision for financial risks in 2021 and the amount paid up by the euro area NCBs in 2022 in respect of the second instalment of their increased subscriptions in the ECB's capital (see note 16 "Capital and reserves"). The increase in this item was largely offset, mainly by the decline in the market value of euro-denominated securities held in the ECB's own funds portfolio.

Note 7.3 - Off-balance-sheet instruments revaluation differences

This item is composed of valuation changes in swap and forward transactions in foreign currency that were outstanding on 31 December 2022 (see note 20 "Foreign exchange swap and forward transactions"). These valuation changes amounted to €783 million (2021: €620 million) and are the result of the conversion of such transactions into their euro equivalents at the exchange rates prevailing on the balance sheet date, compared with the euro values resulting from the conversion of the transactions at the average cost of the respective foreign currency on that date (see "Off-balance-sheet instruments" and "Gold and foreign currency assets and liabilities" in Section 2.3 "Accounting policies").

Note 7.4 - Accruals and prepaid expenses

This item comprised the following components:

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Accrued interest on TARGET2 balances due from NCBs | 2,856 | 2 | 2,854 |
| Accrued interest on claims related to the allocation of euro banknotes | 575 | - | 575 |
| Accrued interest on financial instruments | 3,654 | 3,332 | 322 |
| Accrued income related to supervisory tasks | 594 | 577 | 16 |
| Other accruals and prepaid expenses | 137 | 144 | (7) |
| Total | 7,815 | 4,055 | 3,760 |

As at 31 December 2022 the largest component of this item was accrued interest on financial instruments, mainly stemming from coupon interest on securities, including outstanding interest paid at acquisition (see note 2.2 "Balances with banks and security investments, external loans and other external assets; and claims on euro

area residents denominated in foreign currency", note 5 "Securities of euro area residents denominated in euro" and note 7.2 "Other financial assets").

It also included accrued interest receivable on TARGET2 balances due from euro area NCBs for December 2022 (see note 12.2 "Other liabilities within the Eurosystem (net)") and accrued interest receivable from euro area NCBs for the final quarter of 2022 in respect of the ECB's claims related to the allocation of euro banknotes within the Eurosystem (see note 6.1 "Claims related to the allocation of euro banknotes within the Eurosystem"). These amounts were settled in January 2023.

Accrued income related to supervisory tasks corresponds to the supervisory fees to be received for the fee period 2022. This amount will be collected in 2023 (see note 26 "Net income/expense from fees and commissions").⁴¹

This item also includes (i) miscellaneous prepayments; (ii) accrued income from common Eurosystem projects (see note 28 "Other income"); and (iii) accrued interest income on other financial assets and liabilities.

Note 7.5 - Sundry

On 31 December 2022 this item amounted to €438 million (2021: €749 million) and mainly comprised balances with a value of €349 million (2021: €573 million) related to swap and forward transactions in foreign currency outstanding on 31 December 2022 (see note 20 "Foreign exchange swap and forward transactions"). These balances arose from the conversion of such transactions into their euro equivalents at the respective currency's average cost on the balance sheet date, compared with the euro values at which the transactions were initially recorded (see "Off-balance-sheet instruments" in Section 2.3 "Accounting policies").

Note 8 - Banknotes in circulation

This item consists of the ECB's share (8%) of total euro banknotes in circulation (see "Banknotes in circulation" in Section 2.3 "Accounting policies"), which as at 31 December 2022 amounted to €125,763 million (2021: €123,551 million).

Note 9 - Other liabilities to euro area credit institutions denominated in euro

The Eurosystem central banks have the possibility of accepting cash as collateral in their PSPP and public sector PEPP securities lending facilities without having to reinvest it. In the case of the ECB, these operations are conducted via a specialised institution.

⁴¹ Further details can be found on the ECB's banking supervision website.

As at 31 December 2022 the outstanding value of such lending transactions against cash collateral conducted with euro area credit institutions was €17,734 million (2021: €9,473 million). Cash received as collateral was transferred to TARGET2 accounts. As the cash remained uninvested at the year-end, these transactions were recorded on the Balance Sheet (see "Reverse transactions" in Section 2.3 "Accounting policies").⁴²

Note 10 - Liabilities to other euro area residents denominated in euro

Note 10.1 - General government

As at 31 December 2022 this item amounted to €48,520 million (2021: €3,200 million) and included deposits of the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF). In accordance with Article 21 of the Statute of the ESCB, the ECB may act as fiscal agent for Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States.

Note 10.2 – Other liabilities

This item consists of balances of the euro area ancillary systems⁴³ connected to TARGET2 through the TARGET2-ECB component, which as at 31 December 2022 amounted to €15,343 million (2021: €4,404 million).

Note 11 - Liabilities to non-euro area residents denominated in euro

This item comprised the following components:

⁴² Securities lending transactions that do not result in uninvested cash collateral at the year-end are recorded in off-balance-sheet accounts (see note 17 "Securities lending programmes").

Ancillary systems are financial market infrastructures that have been granted access to the TARGET2-ECB component by the Governing Council, provided they fulfil the requirements defined in Decision of the ECB of 24 July 2007 concerning the terms and conditions of TARGET2-ECB (ECB/2007/7) (2007/601/EC) (OJ L 237, 8.9.2007, p. 71), as amended. The unofficial consolidated text with the list of amendments can be found here. Depending on the managing entity, the ancillary systems are considered either euro area residents (see note 10.2 "Other liabilities") or non-euro area residents (see note 11 "Liabilities to non-euro area residents denominated in euro"). Further details on ancillary systems can be found on the ECB's website.

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| TARGET2 balances | 42,808 | 71,875 | (29,067) |
| Cash received as collateral in securities lending transactions | 15,008 | 21,750 | (6,742) |
| Administration of EU borrowing and lending activities | 19,904 | 18,033 | 1,871 |
| Liquidity-providing swap arrangements | 388 | 834 | (446) |
| Total | 78,108 | 112,492 | (34,384) |

As at 31 December 2022 the largest component of this item was TARGET2 balances, consisting of TARGET2 balances of non-euro area NCBs vis-à-vis the ECB (see "Intra-ESCB balances/intra-Eurosystem balances" in Section 2.3 "Accounting policies") and of the non-euro area ancillary systems connected to TARGET2 through the TARGET2-ECB component. The decrease in these balances in 2022 corresponds to lower balances of the non-euro area ancillary systems.

This item also included balances relating to the administration of EU borrowing and lending activities, where the ECB acts as fiscal agent for the European Commission (see note 21 "Administration of borrowing and lending operations").

It also comprised balances arising from outstanding PSPP and public sector PEPP securities lending transactions conducted with non-euro area credit institutions in which cash was received as collateral and transferred to TARGET2 accounts (see note 9 "Other liabilities to euro area credit institutions denominated in euro").

The remainder of this item consists of a balance arising from the standing reciprocal currency arrangement with the Federal Reserve System. Under this arrangement, US dollars are provided by the Federal Reserve Bank of New York to the ECB by means of swap transactions, with the aim of offering short-term US dollar funding to Eurosystem counterparties. The ECB simultaneously enters into back-to-back swap transactions with euro area NCBs, which use the resulting funds to conduct US dollar liquidity-providing operations with Eurosystem counterparties in the form of reverse transactions. The back-to-back swap transactions result in intra-Eurosystem balances between the ECB and the euro area NCBs. Furthermore, the swap transactions conducted with the Federal Reserve Bank of New York and the euro area NCBs result in forward claims and liabilities that are recorded in off-balance-sheet accounts (see note 20 "Foreign exchange swap and forward transactions").

Note 12 - Intra-Eurosystem liabilities

Note 12.1 - Liabilities equivalent to the transfer of foreign reserves

These represent the liabilities to euro area NCBs that arose from the transfer of foreign reserve assets to the ECB when they joined the Eurosystem. In line with Article 30.2 of the Statute of the ESCB, these contributions are fixed in proportion to the NCBs' shares in the subscribed capital of the ECB. No changes occurred in 2022.

| | Since 1 February 2020 € millions |
|--|--|
| Nationale Bank van België/Banque Nationale de Belgique (Belgium) | 1,470 |
| Deutsche Bundesbank (Germany) | 10,635 |
| Eesti Pank (Estonia) | 114 |
| Central Bank of Ireland (Ireland) | 683 |
| Bank of Greece (Greece) | 998 |
| Banco de España (Spain) | 4,811 |
| Banque de France (France) | 8,240 |
| Banca d'Italia (Italy) | 6,854 |
| Central Bank of Cyprus (Cyprus) | 87 |
| Latvijas Banka (Latvia) | 157 |
| Lietuvos bankas (Lithuania) | 233 |
| Banque centrale du Luxembourg (Luxembourg) | 133 |
| Central Bank of Malta (Malta) | 42 |
| De Nederlandsche Bank (The Netherlands) | 2,364 |
| Oesterreichische Nationalbank (Austria) | 1,181 |
| Banco de Portugal (Portugal) | 944 |
| Banka Slovenije (Slovenia) | 194 |
| Národná banka Slovenska (Slovakia) | 462 |
| Suomen Pankki – Finlands Bank (Finland) | 741 |
| Total | 40,344 |

The remuneration of these liabilities is calculated daily at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations, adjusted to reflect a zero return on the gold component (see note 23.3 "Remuneration of NCBs' claims in respect of foreign reserves transferred").

Note 12.2 - Other liabilities within the Eurosystem (net)

In 2022 this item consisted predominantly of the TARGET2 balances of euro area NCBs vis-à-vis the ECB (see "Intra-ESCB balances/intra-Eurosystem balances" in Section 2.3 "Accounting policies").

| | 2022 € millions | 2021 € millions |
|---|--------------------|--------------------|
| Net TARGET2 liability | 315,090 | 334,618 |
| Due to euro area NCBs in respect of TARGET2 | 1,830,483 | 1,791,771 |
| Due from euro area NCBs in respect of TARGET2 | (1,515,393) | (1,457,153) |
| Due to euro area NCBs in respect of the ECB's interim profit distribution | - | 150 |
| Other liabilities within the Eurosystem | 41 | 24 |
| Total | 315,130 | 334,792 |

The decrease in the net TARGET2 liability was mainly attributable to the cash inflows as a result of (i) higher deposits of the ESM and the EFSF (see note 10.1 "General government"); and (ii) higher balances of the euro area ancillary systems connected to TARGET2 through the TARGET2-ECB component (see note 10.2 "Other

liabilities"). The impact of these factors was partially offset by the cash outflows as a result of (i) lower balances of the non-euro area ancillary systems connected to TARGET2 through the TARGET2-ECB component (see note 11 "Liabilities to non-euro area residents denominated in euro"); and (ii) the net purchases of securities under the PEPP and the APP, which were settled via TARGET2 accounts (see note 5 "Securities of euro area residents denominated in euro").

The remuneration of TARGET2 positions held by euro area NCBs vis-à-vis the ECB, with the exception of balances arising from back-to-back swap transactions in connection with US dollar liquidity-providing operations, is calculated daily at the latest available interest rate used by the Eurosystem in its tenders for main refinancing operations.

In 2021 this item also included the amount due to euro area NCBs in respect of the ECB's interim profit distribution. With respect to 2022, the Governing Council, in view of the ECB's financial result for the year, decided to retain the full amount of income derived from banknotes in circulation, as well as income earned on securities purchased under the SMP, APP and PEPP (see "Interim profit distribution" in Section 2.3 "Accounting policies"). Therefore, no related amounts were due at the end of 2022.

Note 13 - Other liabilities

Note 13.1 - Off-balance-sheet instruments revaluation differences

This item is composed primarily of valuation changes in swap and forward transactions in foreign currency that were outstanding on 31 December 2022 (see note 20 "Foreign exchange swap and forward transactions"). These valuation changes amounted to €430 million (2021: €568 million) and are the result of the conversion of such transactions into their euro equivalents at the exchange rates prevailing on the balance sheet date, compared with the euro values resulting from the conversion of the transactions at the average cost of the respective foreign currency on that date (see "Off-balance-sheet instruments" and "Gold and foreign currency assets and liabilities" in Section 2.3 "Accounting policies").

Note 13.2 - Accruals and income collected in advance

This item comprised the following components:

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Accrued interest on TARGET2 balances due to NCBs | 3,530 | - | 3,530 |
| Accrued interest on NCBs' claims in respect of foreign reserves transferred to the ECB | 201 | - | 201 |
| Accrued interest on financial instruments | 92 | 1 | 91 |
| Other accruals and deferred income | 93 | 32 | 61 |
| Total | 3,915 | 32 | 3,883 |

As at 31 December 2022 the two main items under this heading were accrued interest payable on TARGET2 balances due to NCBs for December 2022 (see note 11 "Liabilities to non-euro area residents denominated in euro" and note 12.2 "Other liabilities within the Eurosystem (net)") and accrued interest payable to euro area NCBs for 2022 in respect of their claims relating to foreign reserves transferred to the ECB (see note 12.1 "Liabilities equivalent to the transfer of foreign reserves"). These amounts were settled in January 2023.

Note 13.3 - Sundry

On 31 December 2022 this item stood at €1,562 million (2021: €2,277 million). It included balances amounting to €974 million (2021: €535 million) related to swap and forward transactions in foreign currency that were outstanding on 31 December 2022 (see note 20 "Foreign exchange swap and forward transactions"). These balances arose from the conversion of such transactions into their euro equivalents at the respective currency's average cost on the balance sheet date, compared with the euro values at which the transactions were initially recorded (see "Off-balance-sheet instruments" in Section 2.3 "Accounting policies").

The item also includes a lease liability of €141 million (2021: €175 million) (see "Leases" in Section 2.3 "Accounting policies").

In addition, this item includes the ECB's net defined benefit liability in respect of the post-employment and other long-term benefits of its staff⁴⁴ and the members of the Executive Board, as well as the members of the Supervisory Board employed by the ECB. The termination benefits of ECB staff are also included.

The ECB's post-employment benefits, other long-term benefits and termination benefits

Balance Sheet

The amounts recognised in the Balance Sheet under the item "Sundry" (liabilities) in respect of post-employment, other long-term and staff termination benefits were as follows:

The defined benefit pillar of the plan reflects only the compulsory contributions made by the ECB and staff. Voluntary contributions made by staff in a defined contribution pillar in 2022 amounted to €189 million (2021: €220 million). These contributions are invested in the plan assets and give rise to a corresponding obligation of equal value.

| | | 2022 € millions | | | 2021 € millions | |
|---|---------|--------------------|---------|---------|--------------------|---------|
| | Staff | Boards | Total | Staff | Boards | Total |
| Defined benefit obligation | 1,947 | 31 | 1,978 | 3,165 | 43 | 3,209 |
| Fair value of plan assets | (1,638) | - | (1,638) | (1,749) | - | (1,749) |
| Net defined benefit liability included under "Sundry" (liabilities) | 309 | 31 | 340 | 1,416 | 43 | 1,459 |

Note: The columns labelled "Boards" report amounts in respect of both the Executive Board and the Supervisory Board.

In 2022 the present value of the defined benefit obligation vis-à-vis staff of €1,947 million (2021: €3,165 million) included unfunded benefits amounting to €233 million (2021: €373 million) relating to post-employment benefits other than pensions, to other long-term benefits and to staff termination benefits. The present value of the defined benefit obligation vis-à-vis the members of the Executive Board and the members of the Supervisory Board of €31 million (2021: €43 million) relates solely to unfunded arrangements in place for post-employment and other long-term benefits.

Remeasurements of the ECB's net defined benefit liability in respect of postemployment benefits are recognised in the Balance Sheet under the liability item "Revaluation accounts". In 2022 remeasurement gains under that liability item amounted to €369 million, while in 2021 the ECB recorded remeasurement losses of €799 million (see note 15 "Revaluation accounts").

Changes in the defined benefit obligation, plan assets and remeasurement results

Changes in the present value of the defined benefit obligation were as follows:

| | 2022 € millions | | | 2021 € millions | | |
|--|--------------------|--------|---------|--------------------|--------|-------|
| | Staff | Boards | Total | Staff | Boards | Total |
| Opening defined benefit obligation | 3,165 | 43 | 3,209 | 3,034 | 44 | 3,079 |
| Current service cost | 164 | 4 | 168 | 165 | 4 | 169 |
| Interest cost on the obligation | 42 | 1 | 42 | 34 | 1 | 34 |
| Contributions paid by plan participants ¹ | 40 | 0 | 41 | 33 | 0 | 33 |
| Benefits paid | (38) | (2) | (40) | (26) | (5) | (31) |
| Remeasurement gains | (1,426) | (16) | (1,441) | (75) | (1) | (76) |
| Closing defined benefit obligation | 1,947 | 31 | 1,978 | 3,165 | 43 | 3,209 |

Note: The columns labelled "Boards" report amounts in respect of both the Executive Board and the Supervisory Board.

1) Net figure including compulsory contributions and transfers into/out of the plans. The compulsory contributions paid by staff are 7.4%, whilst those paid by the ECB are 20.7% of the basic salary.

The total remeasurement gains of €1,441 million on the defined benefit obligation in 2022 arose primarily as a result of the rise in the discount rate used for the actuarial valuation from 1.3% in 2021 to 3.9% in 2022.

Changes in the fair value of plan assets in the defined benefit pillar relating to staff were as follows:

| | 2022 € millions | 2021 € millions |
|---|--------------------|--------------------|
| Opening fair value of plan assets | 1,749 | 1,447 |
| Interest income on plan assets | 23 | 16 |
| Remeasurement gains/(losses) | (228) | 201 |
| Contributions paid by employer | 71 | 67 |
| Contributions paid by plan participants | 40 | 33 |
| Benefits paid | (18) | (14) |
| Closing fair value of plan assets | 1,638 | 1,749 |

The remeasurement losses on plan assets in 2022 reflected the fact that the actual return on the fund units was lower than the assumed interest income on plan assets, which was based on the discount rate assumption of 1.3%.

Changes in the remeasurement results were as follows:

| | 2022 € millions | 2021 € millions |
|--|--------------------|--------------------|
| Opening remeasurement losses | (799) | (1,067) |
| Gains/(losses) on plan assets | (228) | 201 |
| Gains on obligation | 1,441 | 76 |
| Gains recognised in the Profit and Loss Account | (45) | (9) |
| Closing remeasurement gains/(losses) included under "Revaluation accounts" | 369 | (799) |

Profit and Loss Account

The amounts recognised in the Profit and Loss Account were as follows:

| | 2022 € millions | | 2021 € millions | | | |
|--|--------------------|--------|--------------------|-------|--------|-------|
| | Staff | Boards | Total | Staff | Boards | Total |
| Current service cost | 164 | 4 | 168 | 165 | 4 | 169 |
| Net interest on the net defined benefit liability | 19 | 1 | 19 | 18 | 1 | 18 |
| Interest cost on the obligation | 42 | 1 | 42 | 34 | 1 | 34 |
| Interest income on plan assets | (23) | - | (23) | (16) | - | (16) |
| Remeasurement (gains)/losses on other long-term and termination benefits | (44) | (0) | (45) | (9) | 0 | (9) |
| Total included in "Staff costs" | 138 | 5 | 142 | 173 | 5 | 178 |

Note: The columns labelled "Boards" report amounts in respect of both the Executive Board and the Supervisory Board.

The remeasurement gains on other long-term and termination benefits increased in 2022 to €45 million (2021: €9 million), owing mainly to a higher discount rate used for the actuarial valuation at the end of 2022.

Key assumptions

In preparing the valuations referred to in this note, the independent actuaries have used assumptions which the Executive Board has accepted for the purposes of accounting and disclosure. The principal assumptions used for the purposes of calculating the liability for post-employment benefits and other long-term benefits were as follows:

| | 2022 % | 2021 % |
|--|------------------|------------------|
| Discount rate | 3.90 | 1.30 |
| Expected return on plan assets ¹ | 4.90 | 2.30 |
| General future salary increases ² | 2.00 | 2.00 |
| Future pension increases ³ | 1.70 | 1.80 |

¹⁾ These assumptions were used for calculating the part of the ECB's defined benefit obligation which is funded by assets with an underlying capital guarantee.

Note 14 - Provisions

This item consists mainly of a provision for financial risks, which is used to the extent deemed necessary by the Governing Council to offset losses that arise as a result of exposures to financial risks. The size of and continuing requirement for this provision is reviewed annually, based on the ECB's assessment of its exposure to these risks and taking a range of factors into account. Its size, together with any amount held in the general reserve fund, may not exceed the value of the ECB's capital paid up by the euro area NCBs.

This year an amount of €1,627 million was released from this provision to cover losses that arose from exposures to financial risks, bringing the ECB's financial result for the year to zero. The losses resulted mainly from the increase in the interest rate used by the Eurosystem in its tenders for main refinancing operations, which led to a significant interest expense arising from the ECB's net TARGET2 liability (see note 23.4 "Other interest income; and other interest expense"). At the same time, the increase in the euro and US dollar yields resulted in price writedowns of securities in the own funds and US dollar portfolios, as well as losses from sales of US dollar securities (see "Income recognition" in Section 2.3 "Accounting policies", note 25 "Write-downs on financial assets and positions" and note 24 "Realised gains/losses arising from financial operations"). This release from the provision for financial risks reduced its size to €6,566 million as at 31 December 2022.

This item also includes administrative provisions amounting to €69 million (2021: €74 million).

Note 15 - Revaluation accounts

This item consists mainly of revaluation balances arising from unrealised gains on assets, liabilities and off-balance-sheet instruments (see "Income recognition", "Gold and foreign currency assets and liabilities", "Securities" and "Off-balance-sheet instruments" in Section 2.3 "Accounting policies"). It also includes remeasurements

²⁾ In addition, allowance is made for prospective individual salary increases of up to 1.8% per annum, depending on the age of the plan participants.

³⁾ In accordance with the ECB's pension plan rules, pensions will be increased annually. If general salary adjustments for ECB employees are below price inflation, any increase in pensions will be in line with the general salary adjustments. If the general salary adjustments exceed price inflation, they will be applied to determine the increase in pensions, provided that the financial position of the ECB's pension plans permits such an increase.

of the ECB's net defined benefit liability in respect of post-employment benefits (see "The ECB's post-employment benefits, other long-term benefits and termination benefits" in Section 2.3 "Accounting policies" and note 13.3 "Sundry").

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Gold | 23,794 | 22,227 | 1,568 |
| Foreign currency | 12,305 | 10,466 | 1,838 |
| US dollars | 11,225 | 8,749 | 2,476 |
| Japanese yen | 977 | 1,595 | (617) |
| Chinese renminbi | 47 | 61 | (14) |
| SDR | 56 | 62 | (6) |
| Others | - | 0 | (0) |
| Securities and other instruments | 19 | 384 | (365) |
| Net defined benefit liability in respect of post-employment benefits | 369 | (799) | 1,168 |
| Total | 36,487 | 32,277 | 4,210 |

The increase in the size of the revaluation accounts is predominately due to the appreciation of the US dollar against the euro and the rise in the market price of gold in euro terms in 2022.

The foreign exchange rates used for the year-end revaluation were as follows:

| Exchange rates | 2022 | 2021 |
|-----------------------------|-----------|-----------|
| US dollar per euro | 1.0666 | 1.1326 |
| Japanese yen per euro | 140.66 | 130.38 |
| Chinese renminbi per euro | 7.3582 | 7.1947 |
| Euro per SDR | 1.2517 | 1.2359 |
| Euro per fine ounce of gold | 1,706.075 | 1,609.483 |

Note 16 - Capital and reserves

Note 16.1 - Capital

The subscribed capital of the ECB is €10,825 million.

After the Bank of England's withdrawal from the ESCB on 31 January 2020, the ECB kept its subscribed capital unchanged and the share of the Bank of England in the ECB's subscribed capital was reallocated among both the euro area NCBs and the remaining non-euro area NCBs. In addition, the Governing Council decided that the euro area NCBs would pay up in full their increased subscriptions in two annual instalments in 2021 and 2022, each amounting to €610 million. Owing to the payment of the second instalment by the euro area NCBs on 28 December 2022, the ECB's total paid-up capital increased to €8,880 million, as shown in the table below:

| | Capital key since 1 February 2020 % | Subscribed capital since 1 February 2020 € millions | Paid-up capital since 28 December 2022 € millions | Paid-up capital as at 27 December 2022 € millions |
|--|--|--|--|--|
| Nationale Bank van België/ Banque Nationale de Belgique (Belgium) | 2.9630 | 321 | 321 | 299 |
| Deutsche Bundesbank (Germany) | 21.4394 | 2,321 | 2,321 | 2,160 |
| Eesti Pank (Estonia) | 0.2291 | 25 | 25 | 23 |
| Central Bank of Ireland (Ireland) | 1.3772 | 149 | 149 | 139 |
| Bank of Greece (Greece) | 2.0117 | 218 | 218 | 203 |
| Banco de España (Spain) | 9.6981 | 1,050 | 1,050 | 977 |
| Banque de France (France) | 16.6108 | 1,798 | 1,798 | 1,674 |
| Banca d'Italia (Italy) | 13.8165 | 1,496 | 1,496 | 1,392 |
| Central Bank of Cyprus (Cyprus) | 0.1750 | 19 | 19 | 18 |
| Latvijas Banka (Latvia) | 0.3169 | 34 | 34 | 32 |
| Lietuvos bankas (Lithuania) | 0.4707 | 51 | 51 | 47 |
| Banque centrale du Luxembourg (Luxembourg) | 0.2679 | 29 | 29 | 27 |
| Central Bank of Malta (Malta) | 0.0853 | 9 | 9 | 9 |
| De Nederlandsche Bank (The Netherlands) | 4.7662 | 516 | 516 | 480 |
| Oesterreichische Nationalbank (Austria) | 2.3804 | 258 | 258 | 240 |
| Banco de Portugal (Portugal) | 1.9035 | 206 | 206 | 192 |
| Banka Slovenije (Slovenia) | 0.3916 | 42 | 42 | 39 |
| Národná banka Slovenska (Slovakia) | 0.9314 | 101 | 101 | 94 |
| Suomen Pankki – Finlands Bank (Finland) | 1.4939 | 162 | 162 | 151 |
| Subtotal for euro area NCBs | 81.3286 | 8,804 | 8,804 | 8,194 |
| Българска народна банка (Bulgarian National Bank) (Bulgaria) | 0.9832 | 106 | 4 | 4 |
| Česká národní banka (Czech Republic) | 1.8794 | 203 | 8 | 8 |
| Danmarks Nationalbank (Denmark) | 1.7591 | 190 | 7 | 7 |
| Hrvatska narodna banka (Croatia) | 0.6595 | 71 | 3 | 3 |
| Magyar Nemzeti Bank (Hungary) | 1.5488 | 168 | 6 | 6 |
| Narodowy Bank Polski (Poland) | 6.0335 | 653 | 24 | 24 |
| Banca Naţională a României (Romania) | 2.8289 | 306 | 11 | 11 |
| Sveriges Riksbank (Sweden) | 2.9790 | 322 | 12 | 12 |
| Subtotal for non-euro area NCBs | 18.6714 | 2,021 | 76 | 76 |
| Total | 100.0000 | 10,825 | 8,880 | 8,270 |

The non-euro area NCBs are required to pay up 3.75% of their subscribed capital as a contribution to the operational costs of the ECB. Since 1 February 2020 this contribution has amounted to a total of €76 million. Non-euro area NCBs are not entitled to receive any share of the distributable profits of the ECB, nor are they liable to cover any loss of the ECB.

2.5 Off-balance-sheet instruments

Note 17 - Securities lending programmes

As part of the management of the ECB's own funds, the ECB has a securities lending programme agreement in place under which a specialised institution enters into securities lending transactions on behalf of the ECB.

In addition, in accordance with the Governing Council's decisions, the ECB has made available for lending its holdings of securities purchased under the first, second and third CBPPs, the PSPP and the PEPP, as well as its holdings of securities purchased under the SMP that are also eligible for purchase under the PSPP.

Unless these securities lending operations are conducted against cash collateral that remains uninvested at the end of the year, they are recorded in off-balance-sheet accounts.⁴⁶ Such securities lending operations with a value of €11,569 million (2021: €16,156 million) were outstanding as at 31 December 2022. Of this amount, €6,637 million (2021: €11,821 million) related to the lending of securities held for monetary policy purposes.

Note 18 - Interest rate futures

The following transactions, presented at year-end foreign exchange rates, were outstanding:

| Foreign currency interest rate futures | 2022 Contract value € millions | 2021 Contract value € millions | Change € millions |
|--|--------------------------------------|--------------------------------------|----------------------|
| Purchases | 692 | 174 | 518 |
| Sales | 1,401 | 1,535 | (134) |

These transactions were conducted in the context of the management of the ECB's foreign reserves.

Note 19 - Forward transactions in securities

As at 31 December 2022 there were no balances under this item, while as at the end of 2021 forward sales of securities in the amount of €382 million, presented at year-

The ECB does not purchase corporate sector securities under the CSPP and PEPP and consequently has no related holdings available for lending. In 2022 the ECB's securities held under CBPP1 and CBPP2 matured, and thus were no longer available for lending operations at the year-end. Further details on securities lending can be found on the ECB's website.

⁴⁶ If cash collateral remains uninvested at the year-end, these transactions are recorded in on-balance-sheet accounts (see note 9 "Other liabilities to euro area credit institutions denominated in euro" and note 11 "Liabilities to non-euro area residents denominated in euro").

end foreign exchange rates, remained outstanding. These transactions were conducted in the context of the management of the ECB's foreign reserves.

Note 20 - Foreign exchange swap and forward transactions

Management of foreign reserves

Foreign exchange swap and forward transactions were conducted in the context of the management of the ECB's foreign reserves. The outstanding claims and liabilities resulting from these transactions, presented at year-end foreign exchange rates, were as follows:

| Foreign exchange swap and forward transactions | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Claims | 3,269 | 3,145 | 123 |
| Liabilities | 3,541 | 3,055 | 485 |

Liquidity-providing swap arrangements

The ECB is part of a swap-line network of central banks and has in place reciprocal swap arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the Federal Reserve System, the Swiss National Bank and the People's Bank of China. These swap arrangements allow for the provision of (i) liquidity in any of the respective currencies of the above-mentioned central banks to euro area banks; or (ii) euro liquidity to financial institutions in the jurisdictions of the above central banks. Furthermore, swap agreements are also in place with Danmarks Nationalbank, Narodowy Bank Polski and Sveriges Riksbank for the provision of euro liquidity to financial institutions in their jurisdictions. The above arrangements are aimed at addressing possible liquidity needs to counter potential market dysfunction and thereby minimise the risk of adverse spillover effects to euro area financial markets and economies.⁴⁷

US dollar-denominated claims and liabilities with a maturity date in 2023 arose in connection with the provision of US dollar liquidity to Eurosystem counterparties (see note 11 "Liabilities to non-euro area residents denominated in euro").

Note 21 - Administration of borrowing and lending operations

In 2022 the ECB continued to be responsible for the administration of the borrowing and lending operations of the EU under the medium-term financial assistance facility and the European Financial Stabilisation Mechanism, for the loan facility agreement for Greece, and for the administration of payments relating to one EFSF loan.

In response to the COVID-19 pandemic, in 2022 the EU continued to grant loans to the Member States under its instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE). In 2022 the EU also continued to provide financing in the form of non-repayable financial support and loan support to

⁴⁷ Further details on liquidity-providing swap arrangements can be found on the ECB's website.

Member States under the Next Generation EU (NGEU) programme, which was established to support the economic recovery in the EU, while facilitating the green and digital transition of the Union's economy. As in the previous year, the ECB supported the European Commission in the administration of the operations related to both of the above-mentioned instruments.

In 2022 the ECB processed payments related to all the above-mentioned operations.

Note 22 - Contingent liabilities from pending lawsuits

Lawsuits have been filed against the ECB relating to the exercise of its supervisory functions over Banca Carige S.p.A. (Banca Carige). In one of these lawsuits, Banca Carige's shareholders are seeking financial compensation from the ECB for the harm allegedly sustained as a result of various actions by the ECB in the exercise of its supervisory functions in respect of Banca Carige, consisting both of alleged failures to act and harmful actions. This case will be decided taking into account, among other factors, the final outcome of other related cases. In one of them, the General Court of the EU deemed, in its judgment of 12 October 2022, that the ECB's decision to place Banca Carige under temporary administration lacked an appropriate legal basis under Italian law. Accordingly, the General Court annulled the ECB's decision to place Banca Carige under temporary administration as well as the first extension of the duration of temporary administration in 2019. However, the General Court's judgment was appealed by the ECB before the Court of Justice of the EU, which may still overturn that judgment. Moreover, two further ECB decisions extending the temporary administration are currently being contested in an action for annulment, which is still pending.

2.6 Notes on the Profit and Loss Account

Note 23 - Net interest income

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Net interest income on foreign reserve assets | 798 | 197 | 602 |
| Interest income arising from the allocation of euro banknotes within the Eurosystem | 736 | - | 736 |
| Remuneration of NCBs' claims in respect of foreign reserves transferred | (201) | - | (201) |
| Net other interest income/(expense) | (433) | 1,369 | (1,802) |
| Net interest income/(expense) arising from TARGET2 balances due to/from NCBs | (2,075) | 22 | (2,097) |
| Net interest income on monetary policy securities | 1,534 | 1,006 | 528 |
| Net interest income on monetary policy security lending | 80 | 73 | 7 |
| Net interest income on own funds | 57 | 31 | 26 |
| Net interest income/(expense) on other assets/liabilities | (29) | 238 | (267) |
| Net interest income | 900 | 1,566 | (666) |

Note 23.1 - Interest income on foreign reserve assets

This item includes interest income, net of interest expense, in respect of the ECB's net foreign reserve assets.

The net interest income/expense per instrument type is shown below:

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Current accounts | 22 | 1 | 21 |
| Money market deposits | 51 | 4 | 47 |
| Repurchase agreements | (0) | 0 | (0) |
| Reverse repurchase agreements | 148 | 2 | 146 |
| Securities | 513 | 179 | 334 |
| Forward and swap transactions in foreign currencies | 64 | 11 | 53 |
| Net interest income on foreign reserve assets | 798 | 197 | 602 |

The net interest income/expense per foreign currency was as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| US dollars | 771 | 186 | 585 |
| Japanese yen | (4) | (4) | 0 |
| Chinese renminbi | 14 | 15 | (1) |
| SDR | 18 | 0 | 18 |
| Net interest income on foreign reserve assets | 798 | 197 | 602 |

Note 23.2 - Interest income arising from the allocation of euro banknotes within the Eurosystem

This item consists of the interest income relating to the ECB's 8% share of the total euro banknote issue (see "Banknotes in circulation" in Section 2.3 "Accounting policies" and note 6.1 "Claims related to the allocation of euro banknotes within the Eurosystem"). The interest income in 2022 amounted to €736 million (2021: zero) and resulted from the increase in the rate on the main refinancing operations to above 0% as of 27 July 2022. In 2021 this rate had stood at 0% throughout the entire year.

Note 23.3 - Remuneration of NCBs' claims in respect of foreign reserves transferred

Remuneration paid to euro area NCBs on their claims in respect of the foreign reserve assets transferred to the ECB (see note 12.1 "Liabilities equivalent to the transfer of foreign reserves") is disclosed under this heading. The interest expense in 2022 amounted to €201 million (2021: zero) and resulted from the increase in the rate on the main refinancing operations to above 0% as of 27 July 2022. In 2021 this rate had stood at 0% throughout the entire year.

Note 23.4 - Other interest income; and other interest expense

Other interest income and other interest expense were as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Net interest income/(expense) arising from TARGET2 balances due from/to NCBs | (2,075) | 22 | (2,097) |
| Net interest income/(expense) on monetary policy securities | 1,534 | 1,006 | 528 |
| CBPP1 and CBPP2 | 2 | 8 | (6) |
| SMP ¹ | 65 | 103 | (38) |
| CBPP3 | 120 | 107 | 13 |
| ABSPP | 140 | 11 | 129 |
| PSPP | 1,310 | 1,029 | 281 |
| PEPP | (103) | (252) | 149 |
| Net interest income on monetary policy security lending | 80 | 73 | 7 |
| Net interest income on own funds | 57 | 31 | 26 |
| Net interest income/(expense) on other assets/liabilities | (29) | 238 | (267) |
| Net other interest income/(expense) | (433) | 1,369 | (1,802) |

¹⁾ The ECB's net interest income on SMP holdings of Greek government bonds amounted to €43 million (2021: €46 million).

Note 24 - Realised gains/losses arising from financial operations

Realised gains and losses arising from financial operations were as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Net realised price losses | (351) | (43) | (308) |
| Net realised exchange rate and gold price gains | 241 | 37 | 204 |
| Net realised losses arising from financial operations | (110) | (6) | (104) |

Net realised price losses include realised gains and losses on securities and interest rate futures. The net realised price losses in 2022 were mainly driven by price losses realised in US dollar-denominated securities following the increase in US dollar securities yields. The net realised price losses were partially offset by realised exchange rate gains, which largely arose as a result of the year-end price write-downs of US dollar securities.

Realised gains and losses arising from financial operations per currency and per quarter are shown below:

| | | | 2022 € millions | | | | | 2021 € millions | | |
|----------------------|-------------|-------------|--------------------|--------|-------|------|-----|--------------------|-----|-------|
| | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total |
| Net realised price g | jains/(loss | es) | | | | | | | | |
| US dollars | (9) | (87) | (76) | (88) | (260) | (28) | 17 | 11 | (3) | (3) |
| Japanese yen | (1) | (3) | 1 | (2) | (4) | (2) | 1 | 2 | 0 | 2 |
| Chinese renminbi | 2 | 2 | 2 | 0 | 6 | 0 | 1 | 2 | 1 | 4 |
| Euro | (34) | (40) | (9) | (9) | (92) | (9) | (7) | (28) | (2) | (46) |
| Subtotal | (42) | (128) | (82) | (99) | (351) | (37) | 11 | (13) | (4) | (43) |
| | | | | | | | | | | |
| Net realised exchar | nge rate an | d gold prid | ce gains/(lo | osses) | | | | | | |
| US dollars | 9 | 20 | 15 | 192 | 236 | 6 | 2 | 2 | 24 | 35 |
| Japanese yen | 1 | 1 | 0 | 3 | 4 | 1 | 0 | 0 | 1 | 2 |
| Chinese renminbi | 0 | 0 | 0 | 0 | 0 | 0 | (0) | (0) | 0 | 0 |
| Other | 0 | 0 | (0) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 10 | 21 | 15 | 195 | 241 | 7 | 3 | 3 | 25 | 37 |
| | | | | | | | | | | |
| Total | (32) | (107) | (67) | 96 | (110) | (31) | 14 | (10) | 21 | (6) |

Note 25 - Write-downs on financial assets and positions

Write-downs on financial assets and positions were as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Unrealised price losses on securities | (1,840) | (133) | (1,707) |
| Unrealised exchange rate losses | (0) | - | (0) |
| Write-downs on financial assets and positions | (1,840) | (133) | (1,707) |

The market value of the majority of securities held in the own funds and US dollar portfolios declined, alongside an increase in the corresponding yields in 2022. This resulted in unrealised price losses at the year-end.

Note 26 - Net income/expense from fees and commissions

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Income from fees and commissions | 606 | 578 | 28 |
| Expenses relating to fees and commissions | (21) | (19) | (2) |
| Net income from fees and commissions | 585 | 559 | 26 |

In 2022 income under this heading consisted primarily of supervisory fees. Expenses arose predominantly from custody fees.

Income and expenses related to supervisory tasks

Banking supervision-related income mainly comprises supervisory fee income. The ECB levies annual fees on supervised entities in order to recover expenditure incurred in the performance of its supervisory tasks. Based on the ECB's actual annual expenses incurred in the performance of its banking supervision tasks, the supervisory fee income for 2022 stood at €594 million (2021: €578 million).

In order to determine the amount of supervisory fees to be levied, the actual annual expenditure is adjusted for amounts reimbursed to/received from individual banks for previous fee periods and other adjustments, including interest received on late payments.⁴⁸ Taking into account an adjustment corresponding to interest received on late payments as well as net reimbursements to individual banks for previous fee periods, the annual supervisory fees to be levied on the supervised entities for the fee period 2022 correspond to an amount almost equal to the actual annual expenses of €594 million⁴⁹ (see note 7.4 "Accruals and prepaid expenses"). The individual supervisory fees will be invoiced in the second quarter of 2023.⁵⁰

The ECB is also entitled to impose administrative penalties on supervised entities for failure to comply with applicable EU banking law on prudential requirements (including ECB supervisory decisions). The related income is not considered in the calculation of the annual supervisory fees, nor are reimbursements of such penalties in the event that previous sanction decisions are amended or annulled. Instead, the related amounts are recorded in the ECB's Profit and Loss Account. In 2022 the income arising from penalties on supervised entities amounted to €12 million (2021: €1 million).

Thus, the income of the ECB for supervisory tasks was as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Income from supervisory fees | 594 | 578 | 16 |
| Fee income from significant entities or significant groups | 567 | 546 | 21 |
| Fee income from less significant entities or less significant groups | 27 | 31 | (4) |
| Imposed administrative penalties | 12 | 1 | 12 |
| Income related to banking supervision tasks | 606 | 578 | 28 |

Banking supervision-related expenses result from the direct supervision of significant entities, the oversight of the supervision of less significant entities and the performance of horizontal tasks and specialised services. They consist of the direct expenses of the ECB's supervisory function and the relevant expenses arising from support areas needed to fulfil the ECB's supervisory responsibilities, reflecting their services in relation to premises and facilities; human resources; information

See Article 5(3) of Regulation (EU) No 1163/2014 of the ECB of 22 October 2014 on supervisory fees (ECB/2014/41) (OJ L 311, 31.10.2014, p. 23), as amended. The unofficial consolidated text with the list of amendments can be found here.

⁴⁹ The ECB decision on the total amount of annual supervisory fees for 2022 will be adopted and subsequently published by the end of April 2023.

⁵⁰ Further details can be found on the ECB's banking supervision website.

technology (IT); legal, audit and administration; communication and translation; as well as other activities.

The actual expenses relating to the ECB's supervisory tasks, which are recovered via the annual supervisory fees for 2022, amounted to €594 million (2021: €578 million). The overall increase was driven by the continued gradual return to normal levels of activity in banking supervision following the pandemic, and ongoing developments in and improvements to IT systems dedicated to banking supervision.

Note 27 - Income from equity shares and participating interests

The dividend of €1 million in 2022 (2021: €2 million) received on shares which the ECB holds in the BIS (see note 7.2 "Other financial assets") is shown under this heading.

Note 28 - Other income

Other miscellaneous income in 2022 stood at €61 million (2021: €56 million) and arose mainly from contributions of euro area NCBs to costs incurred by the ECB in connection with joint Eurosystem projects.

Note 29 - Staff costs

Staff costs were as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|---|--------------------|--------------------|----------------------|
| Salaries and allowances ¹ | 487 | 474 | 13 |
| Staff insurance | 23 | 22 | 1 |
| Post-employment, other long-term and termination benefits | 142 | 178 | (35) |
| Staff costs | 652 | 674 | (22) |

¹⁾ Salaries and allowances are, in essence, modelled on, and comparable with, the remuneration scheme of the EU.

The average number of employees, expressed in full-time equivalents (FTEs)⁵¹, amounted to 4,136 (2021: 4,038), of which 373 were managerial staff (2021: 362).

Despite the increase in salaries and allowances as a result of the higher average number of staff employed by the ECB, the overall staff costs decreased in 2022. This decrease was mainly due to actuarial gains in relation to other long-term benefits

A full-time equivalent (FTE) is a unit equivalent to one employee working full-time for one year. Staff with permanent, fixed or short-term contracts and participants in the ECB's Graduate Programme are included in proportion to their hours worked. Staff on maternity or long-term leave are also included, while staff on unpaid leave are excluded.

resulting from a higher discount rate used for the actuarial valuation at the end of 2022 (see note 13.3 "Sundry").

Remuneration of the Executive and Supervisory Boards

Members of the Executive Board and the members of the Supervisory Board employed by the ECB receive a basic salary and a residence allowance. In the case of the President, a residence is provided in lieu of a residence allowance. Members of the Executive Board and the Chair of the Supervisory Board also receive a representation allowance. Subject to the Conditions of Employment for Staff of the European Central Bank, members of both boards may be entitled to household, child, education and other allowances, depending on their individual circumstances. Salaries are subject to a tax for the benefit of the EU, as well as to deductions in respect of contributions to the pension, medical, long-term care and accident insurance schemes. Allowances are non-taxable and non-pensionable.

In 2022 the basic salaries of the members of the Executive Board and members of the Supervisory Board employed by the ECB (i.e. excluding representatives of national supervisors) were as follows:⁵²

| | 2022 € | 2021 € |
|--|-----------|-----------|
| Christine Lagarde (President) | 427,560 | 421,308 |
| Luis de Guindos Jurado (Vice-President) | 366,504 | 361,140 |
| Philip R. Lane (Board Member) | 305,400 | 300,936 |
| Fabio Panetta (Board Member) | 305,400 | 300,936 |
| Isabel Schnabel (Board Member) | 305,400 | 300,936 |
| Frank Elderson (Board Member) ¹ | 305,400 | 314,932 |
| Total Executive Board | 2,015,664 | 2,000,188 |
| Total Supervisory Board (members employed by the ECB) ² | 1,225,887 | 1,306,458 |
| of which: | | |
| Andrea Enria (Chair of the Supervisory Board) | 305,400 | 300,936 |
| Total | 3,241,551 | 3,306,646 |

¹⁾ Frank Elderson took office as a member of the Executive Board on 15 December 2020; his remuneration for the remainder of December 2020 was included in the costs for 2021, as it was paid in January 2021.

Total allowances paid to members of both boards and the ECB's contributions to medical, long-term care and accident insurance schemes on their behalf amounted to €1,110,618 (2021: €1,097,128).

Transitional payments may be made to former members of both boards for a limited period after the end of their terms of office. In 2022 these payments, the related allowances and the ECB's contributions to the medical, long-term care and accident insurance schemes of former members of both boards amounted to €742,892 (2021: €977,547). The decrease in these payments was due to fewer former board

December 2020 was included in the costs for 2021, as it was paid in January 2021.

2) The total figure includes the remuneration of the Chair of the Supervisory Board and of four ECB representatives. Frank Elderson does not receive any additional remuneration in his role as Vice-Chair of the Supervisory Board. The totals for 2022 are lower due to a time gap between the end and start, respectively, of the terms of office of Pentiti Hakkarainen and his successor Anneli Tuominen.

Amounts are presented gross, i.e. before any tax deductions for the benefit of the EU.

members being in receipt of them in 2022, while the ones who were still entitled to them received less as they moved towards the end of their transition period.

Pension-related payments, including post-employment allowances, and contributions to the medical, long-term care and accident insurance schemes for former board members and their dependants amounted to €1,095,737 (2021: €4,047,008).⁵³ In 2021 this amount included a lump sum payment on retirement to a former board member in lieu of future pension payments.

Note 30 - Administrative expenses

Administrative expenses were as follows:

| | 2022 € millions | 2021 € millions | Change € millions |
|--|--------------------|--------------------|----------------------|
| Rent, property maintenance and utilities | 54 | 68 | (14) |
| Staff-related expenses | 60 | 50 | 10 |
| IT-related expenses | 138 | 120 | 18 |
| External services | 151 | 170 | (18) |
| Other expenses | 57 | 35 | 22 |
| Administrative expenses | 460 | 444 | 17 |

The overall increase in administrative expenses in 2022 was a result of several offsetting factors. The continued gradual return to normal levels of activity following the pandemic as well as new and improved IT services in banking supervision led to higher expenses in 2022. These increases were partially offset by lower expenses for external consultancy support, mainly in relation to IT project activities. In addition, in 2022 the rent, property maintenance and utilities expenses were lower because in 2021 there had been a one-off expense related to the remedy of defects in the infrastructure of the main building remaining from the construction phase, which had increased the expenses under the relevant category for that year.

Note 31 - Banknote production services

In 2022 this expense amounted to €9 million (2021: €13 million). It arose predominantly from the cross-border transportation of euro banknotes between banknote printing works and NCBs, for the delivery of new banknotes, and between NCBs, for the compensation of shortages with surplus stocks. These costs are borne centrally by the ECB.

These pension-related payments decreased the defined benefit obligation recognised in the Balance Sheet. For the net amount charged to the Profit and Loss Account in relation to the pension arrangements for current members of the Executive Board and current members of the Supervisory Board employed by the ECB, see note 13.3 "Sundry".

Note 32 - Other expenses

In 2021 this item comprised the reimbursement of €5 million of administrative penalties imposed by the ECB in 2018 on three supervised entities within the same group for which the relevant decisions were partially annulled by the General Court (see note 26 "Net income/expense from fees and commissions"). No expenses were recorded under this item in 2022.

2.7 Post-balance-sheet events

Note 33 - Croatia's accession to the euro area

Pursuant to Council Decision (EU) 2022/1211 of 12 July 2022, taken in accordance with Article 140(2) of the Treaty on the Functioning of the European Union, Croatia adopted the single currency on 1 January 2023. In accordance with Article 48.1 of the Statute of the ESCB and the legal acts adopted by the Governing Council on 30 December 2022, Hrvatska narodna banka paid up an amount of €69 million with effect from 1 January 2023, which is the remainder of its capital subscription to the ECB. In accordance with Article 48.1, in conjunction with Article 30.1, of the Statute of the ESCB, Hrvatska narodna banka transferred foreign reserve assets with a total value equivalent to €640 million to the ECB with effect from 1 January 2023. These foreign reserve assets comprised US dollars in the form of cash (85%) and gold (15%).

Hrvatska narodna banka was credited with claims in respect of the paid-up capital and foreign reserve assets equivalent to the amounts transferred. The latter is to be treated in an identical manner to the existing claims of the other euro area NCBs (see note 12.1 "Liabilities equivalent to the transfer of foreign reserves").

2.8 Financial statements 2018-22

2.8.1 Balance Sheet

| ASSETS | 2018 € millions | 2019 € millions | 2020 € millions | 2021 € millions | 2022 € millions |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Gold and gold receivables | 18,193 | 21,976 | 25,056 | 26,121 | 27,689 |
| | | | | | |
| Claims on non-euro area residents denominated in foreign currency | 50,415 | 51,188 | 45,971 | 51,433 | 55,603 |
| Receivables from the IMF | 692 | 710 | 680 | 1,234 | 1,759 |
| Balances with banks and security investments, external loans and other external assets | 49,723 | 50,478 | 45,291 | 50,199 | 53,844 |
| Claims on euro area residents denominated in foreign currency | 997 | 2,637 | 4,788 | 2,776 | 1,159 |
| Claims on non-euro area residents denominated in euro | - | - | 1,830 | 3,070 | - |
| Balances with banks, security investments and loans | - | - | 1,830 | 3,070 | - |
| Other claims on euro area credit institutions denominated in euro | 300 | 109 | 81 | 38 | 12 |
| Securities of euro area residents denominated in euro | 251,656 | 250,377 | 349,008 | 445,384 | 457,271 |
| Securities held for monetary policy purposes | 251,656 | 250,377 | 349,008 | 445,384 | 457,271 |
| Intra-Eurosystem claims | 98,490 | 103,420 | 114,761 | 123,551 | 125,763 |
| Claims related to the allocation of euro banknotes within the Eurosystem | 98,490 | 103,420 | 114,761 | 123,551 | 125,763 |
| | | | | | |
| Other assets | 27,033 | 27,375 | 27,797 | 27,765 | 31,355 |
| Tangible and intangible fixed assets | 1,148 | 1,330 | 1,262 | 1,189 | 1,105 |
| Other financial assets | 20,529 | 20,633 | 20,785 | 21,152 | 21,213 |
| Off-balance-sheet instruments revaluation differences | 579 | 619 | 388 | 620 | 783 |
| Accruals and prepaid expenses | 2,738 | 2,572 | 3,390 | 4,055 | 7,815 |
| Sundry | 2,039 | 2,221 | 1,970 | 749 | 438 |
| Total assets | 447,083 | 457,082 | 569,292 | 680,140 | 698,853 |

| LIABILITIES | 2018 € millions | 2019 € millions | 2020 € millions | 2021 € millions | 2022 € millions |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Banknotes in circulation | 98,490 | 103,420 | 114,761 | 123,551 | 125,763 |
| | | | | | |
| Other liabilities to euro area credit institutions | 4 000 | 4.00= | | | |
| denominated in euro | 1,399 | 1,325 | 2,559 | 9,473 | 17,734 |
| Liabilities to other euro area residents denominated | | | | | |
| in euro | 9,152 | 20,466 | 13,700 | 7,604 | 63,863 |
| General government | 7,737 | 18,198 | 10,012 | 3,200 | 48,520 |
| Other liabilities | 1,415 | 2,268 | 3,688 | 4,404 | 15,343 |
| | | | | | |
| Liabilities to non-euro area residents denominated in euro | 10,361 | 7,245 | 11,567 | 112,492 | 78,108 |
| iii euro | 10,301 | 7,245 | 11,507 | 112,432 | 70,100 |
| Intra-Eurosystem liabilities | 283,907 | 274,632 | 378,432 | 375,136 | 355,474 |
| Liabilities equivalent to the transfer of foreign reserves | 40,793 | 40,344 | 40,344 | 40,344 | 40,344 |
| Other liabilities within the Eurosystem (net) | 243,115 | 234,288 | 338,088 | 334,792 | 315,130 |
| , | | · | | | |
| Other liabilities | 1,873 | 2,962 | 3,095 | 2,877 | 5,908 |
| Off-balance-sheet instruments revaluation differences | 641 | 709 | 636 | 568 | 430 |
| Accruals and income collected in advance | 54 | 66 | 40 | 32 | 3,915 |
| Sundry | 1,178 | 2,188 | 2,419 | 2,277 | 1,562 |
| | | | | | |
| Provisions | 7,663 | 7,586 | 7,641 | 8,268 | 6,636 |
| | | | | | |
| Revaluation accounts | 24,922 | 29,420 | 28,235 | 32,277 | 36,487 |
| | | | | | |
| Capital and reserves | 7,740 | 7,659 | 7,659 | 8,270 | 8,880 |
| Capital | 7,740 | 7,659 | 7,659 | 8,270 | 8,880 |
| | | | | | |
| Profit for the year | 1,575 | 2,366 | 1,643 | 192 | - |
| | | | | | |
| Total liabilities | 447,083 | 457,082 | 569,292 | 680,140 | 698,853 |

Note: In order to ensure comparability, the amounts shown under sub-items "General government" and "Other liabilities" under the item "Liabilities to other euro area residents denominated in euro" were adjusted for 2018 and 2019 in line with the approach applied since 2020. Further details on this change can be found under "Reclassifications" in Section 2.3 "Accounting policies" of the ECB's Annual Accounts 2020.

2.8.2 Profit and Loss Account

| | 2018 € millions | 2019 € millions | 2020 € millions | 2021 € millions | 2022 € millions |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| Interest income on foreign reserve assets | 862 | 1,052 | 474 | 197 | 798 |
| Interest income arising from the allocation of euro banknotes within the Eurosystem | - | - | - | - | 736 |
| Other interest income | 1,642 | 1,828 | 1,844 | 1,531 | 11,001 |
| Interest income | 2,503 | 2,879 | 2,318 | 1,728 | 12,536 |
| Remuneration of NCBs' claims in respect of foreign reserves transferred | - | - | - | - | (201) |
| Other interest expense | (226) | (193) | (301) | (162) | (11,434) |
| Interest expense | (226) | (193) | (301) | (162) | (11,636) |
| Net interest income | 2,277 | 2,686 | 2,017 | 1,566 | 900 |
| Realised gains/losses arising from financial operations | (77) | 197 | 342 | (6) | (110) |
| Write-downs on financial assets and positions | (69) | (20) | (26) | (133) | (1,840) |
| Transfer to/from provisions for financial risks | - | 84 | (48) | (610) | 1,627 |
| Net result of financial operations, write-downs and risk provisions | (146) | 260 | 268 | (749) | (322) |
| Net income/expense from fees and commissions | 511 | 531 | 520 | 559 | 585 |
| Income from equity shares and participating interests | 1 | 1 | - | 2 | 1 |
| Other income | 47 | 43 | 37 | 56 | 61 |
| Total net income | 2,690 | 3,522 | 2,842 | 1,435 | 1,224 |
| Staff costs | (515) | (566) | (646) | (674) | (652) |
| Administrative expenses | (525) | (476) | (434) | (444) | (460) |
| Depreciation of tangible and intangible fixed assets | (66) | (102) | (106) | (108) | (103) |
| Banknote production services | (8) | (12) | (14) | (13) | (9) |
| Other expenses | - | - | - | (5) | - |
| Profit/(loss) for the year | 1,575 | 2,366 | 1,643 | 192 | - |
| Profit distribution | 1,575 | 2,366 | 1,643 | 192 | - |

3 Independent auditor's report



To the President and Governing Council of the European Central Bank Frankfurt am Main

Report on the Audit of the ECB's Financial Statements 2022

Opinion

We have audited the Financial Statements of the European Central Bank (ECB) for the year ended 31 December 2022 – included in the ECB's Annual Accounts – which comprise the balance sheet, the profit and loss account, and a summary of significant accounting policies and other explanatory notes.

In our opinion, the accompanying Financial Statements give a true and fair view of the financial position of the ECB as at 31 December 2022 and of the results of its financial operations for the year then ended in accordance with the principles established by the Governing Council, which are laid down in Decision (EU) 2016/2247 of the ECB of 3 November 2016 on the annual accounts of the ECB (ECB/2016/35), as amended, which is based on Guideline (EU) 2016/2249 of the ECB of 3 November 2016 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34), as amended.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the ECB in accordance with the German ethical requirements that are relevant to our audit of the Financial Statements, which are consistent with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ("IESBA Code") and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The ECB's Executive Board ("Executive Board") is responsible for the other information included in the ECB's Annual Accounts. The other information comprises all the information included in the ECB's Annual Accounts except the Financial Statements of the ECB and our auditor's report.

Our opinion on the Financial Statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Financial Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Financial Statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of the Executive Board and those charged with Governance for the Financial Statements

The Executive Board is responsible for the preparation and fair presentation of the Financial Statements in accordance with the principles established by the Governing Council, which are laid down in Decision (EU) 2016/2247 of the ECB of 3 November 2016 on the annual accounts of the ECB (ECB/2016/35), as amended, which is based on Guideline (EU) 2016/2249 of the ECB of 3 November 2016 on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34), as amended, and for such internal control as the Executive Board determines is necessary to enable the preparation of Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, the Executive Board is responsible for assessing the ECB's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

Those charged with governance are responsible for overseeing the ECB's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the planning and performance of the audit. We also:

- Identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design
 audit procedures that are appropriate in the circumstances, but not for the purpose of
 expressing an opinion on the effectiveness of the ECB's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness
 of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ECB's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report.
- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Frankfurt am Main, 14 February 2023

Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft (Düsseldorf)

Dr. Stefan Wolfgang Fischer Wirtschaftsprüfer

Maria Brück Wirtschaftsprüferin

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4 Note on profit distribution/allocation of losses

This note is not part of the financial statements of the ECB for the year 2022.

Pursuant to Article 33 of the Statute of the ESCB, the net profit of the ECB shall be transferred in the following order:

- an amount to be determined by the Governing Council, which may not exceed 20% of the net profit, shall be transferred to the general reserve fund, subject to a limit equal to 100% of the capital; and
- 2. the remaining net profit shall be distributed to the shareholders of the ECB in proportion to their paid-up shares.⁵⁴

In the event of a loss incurred by the ECB, the shortfall may be offset against the general reserve fund of the ECB and, if necessary, following a decision by the Governing Council, against the monetary income of the relevant financial year in proportion and up to the amounts allocated to the NCBs in accordance with Article 32.5 of the Statute of the ESCB.⁵⁵

The ECB's financial result for 2022 was zero. Therefore there was no profit distribution.

| | 2022 € millions | 2021 € millions |
|--|--------------------|--------------------|
| Profit/(loss) for the year | - | 192 |
| Interim profit distribution | - | (150) |
| Profit after the interim profit distribution | - | 42 |
| Distribution of the remaining profit | - | (42) |
| Total | 0 | 0 |

Non-euro area NCBs are not entitled to receive any share of the ECB's distributable profits, nor are they liable to cover any loss of the ECB.

Under Article 32.5 of the Statute of the ESCB, the sum of the NCBs' monetary income shall be allocated to the NCBs in proportion to their paid-up shares in the capital of the ECB.

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For specific terminology please refer to the ECB glossary (available in English only).

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