Government debt in the euro area: developments in creditor structure

Euro area government debt amounted to 96% of gross domestic product (GDP) at last count. This article describes how creditor structure has evolved in recent years. The focus is on the euro area as a whole and on the four largest Member States, Germany, France, Italy and Spain.

Creditor structure has shifted significantly since 2015 as a result of the Eurosystem's asset purchases. By the end of 2021, the European Central Bank (ECB) and the national central banks had bought government debt in a magnitude of 30% of euro area GDP. Meanwhile, the volume of debt held by other creditors fell. In relation to GDP it was consequently also lower than before the financial and economic crisis. Indebtedness to euro area banks and non-euro area creditors, in particular, has been on the decline since then.

In the large Member States, the respective national central banks, especially, acquired government bonds. As in the euro area as a whole, this was accompanied by a simultaneous decline in the weight of domestic banks and foreign creditors. Overall, government interest payments (including any risk premia) largely flow to domestic recipients, with a good portion going to the national central banks. Profit distributions by central banks mean that interest payments ultimately flow back to the government. De facto, the government thus pays the short-term, risk-free deposit rate for these bonds rather than the bond rate. This channel renders public finances more sensitive to changes in central bank interest rates. Meanwhile, the remaining bonds are less sensitive to interest rates because the residual maturities of government bonds have lengthened in recent years.

Commercial banks are the second-largest creditor sector in the euro area after central banks. Their weight as creditors has developed differently in the individual Member States. Compared with the period before the financial and economic crisis, banks in Germany currently hold less national government debt (securities and loans, as a percentage of GDP). In France, holdings were stable, overall, during this period. In Spain and Italy, meanwhile, they increased significantly on balance. A similar development is seen for the ratio of home-country government debt held by banks as a percentage of national banking systems' own funds. The nexus between national banking systems and their home country harbours risks to financial stability. Reducing these risks seems particularly important if risk sharing in the European banking union is to be stepped up. Reducing the regulatory privileges that government debt enjoys on bank balance sheets would reduce these risks. This proposal has, however, found no political majority to date.

Introduction

Focus on creditor structure of government debt

This article focuses on the creditor structure of euro area government debt. A brief outline will also be given of the structure of debt instruments. The euro area is analysed as a whole and, by way of example, the four largest euro area countries — Germany, France, Italy and Spain. Among the creditor groups, the Eurosystem (the ECB and the national central banks) and the national banking systems especially are looked at in greater detail. These groups have played a key role in shaping developments in recent years.

Various data sources are used

Different data sources are used in the various sections of the article. In some cases, their definitions differ, and the data are also obtained from different sources. The data sources, their statistical definition and the associated ambiguities are explained on pp. 82 and 83. The main data base used for creditor structure has been available since the middle of the last decade.

Government debt: size, instruments and residual maturity

High debt ratio in the euro area

At the end of 2021, the total government debt of all euro area countries amounted to 96% of the euro area's GDP. From a starting point of 70% at the end of 2008, the debt ratio had risen sharply during the financial and sovereign debt crisis. After declining moderately until 2019, the ratio jumped back up during the coronavirus pandemic. It reached 97% at the end of 2020, its highest level since the start of monetary union (see the upper chart on p. 79).1

Long-term debt dominates Debt instruments predominantly constitute medium to long-term liabilities. They have become even more significant over time:² the percentage of liabilities with a maturity of more than one year in total debt rose from 85% at the end of 2008 to almost 90% at the end of 2021. The list is topped by debt securities (especially bonds), which are generally marketable. They

have significantly greater weight than loans, which banks, in particular, issue to governments. State liabilities from currency and deposits represent only a small share of government debt, at around 3%. These are liabilities related to government coin issuance or deposits made with the government.

The individual Member States' debt ratios vary widely (see the lower chart on p. 79). Figures range from 18% in Estonia to 193% in Greece. The structure is mostly dominated by long-term debt in the form of securities. The main exceptions are those countries that still have significant levels of long-term assistance loans (Greece, Portugal and Cyprus).³ The assistance loans were granted in connection with the sovereign debt crisis.

Large differences in national debt ratios

The average residual maturity of government securities debt has increased in recent years (see the chart on p. 80 for the four large Member States). Changes in interest rates therefore have a smaller impact on government finances, as interest payments are, for the most part, fixed for longer periods.⁴ After the onset of the financial and economic crisis, residual maturities had mostly fallen markedly.

Increase in bonds' average residual maturity

- 1 In addition, the EU level took out debt for the Support to mitigate Unemployment Risks in an Emergency (SURE) programme and the Next Generation EU (NGEU) programme. The EU Member States ultimately shoulder the interest and principal payments for this debt. Where these funds are used to finance grants to the EU Member States, they are not included in national debt levels. For example, grants totalling €390 billion (in 2018 prices) are planned under the NGEU programme. This is equivalent to roughly 3% of the EU's GDP in 2021. For more detailed information, see Deutsche Bundesbank (2020, 2022a).
- 2 Classification into short-term and long-term liabilities according to Eurostat's Government Finance Statistics: short-term liabilities with original maturities of up to one year, long-term liabilities with original maturities of more than one year or without details on maturity.
- **3** Greece was also issued with bilateral assistance loans by the other euro area Member States (Greek Loan Facility). In addition, the Member States most affected by the sovereign debt crisis received financial assistance from the European Commission (under the European Financial Stabilisation Mechanism, EFSM) and the International Monetary Fund.
- 4 In individual cases, variable interest rates may also have been agreed for long maturities. On the other hand, debtors can also use derivatives to secure fixed interest rates beyond the residual maturity.

Government debt: structure of creditors⁵

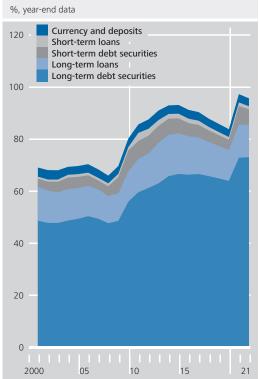
A look at the euro area as a whole

In the middle of the last decade, euro area banks and foreign creditors represented the largest creditor groups In the middle of the last decade, almost one-third of euro area countries' government debt was held outside of the euro area (see the chart on p. 81). Looking at the domestic euro area sectors, monetary financial institutions dominated (hereinafter referred to as "banks", excluding central banks). They also held almost one-third of total debt. They were followed by insurance corporations and pension funds (13%) as well as other financial institutions such as investment funds (9%). Looking at the euro area as a whole, households, international institutions, the Eurosystem and non-financial corporations played only a minor role as creditors.

From 2015, large-scale government bond purchases by the Eurosystem central banks Creditor structure has shifted considerably since then, mainly as a result of the Eurosystem's large-scale government bond purchases.⁶ At the end of 2021, the Eurosystem's holdings of government bonds issued by Member States amounted to around €3.6 trillion, or 30% of euro area GDP.⁷ The Eurosystem's holdings were therefore significantly larger than the increase in Member States' debt since the end of 2014, which amounted to €2.3 trillion.⁸ Since

8 Increase in Maastricht debt levels at nominal values.



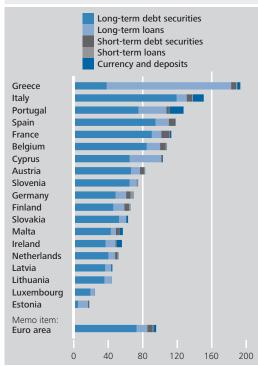


Source: Eurostat.

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Government debt ratios of the euro countries by instrument

%, data as at end-2021



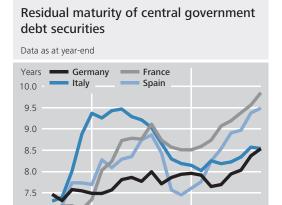
Source: Eurostat.

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⁵ The data used have been consistently available since the fourth quarter of 2013.

⁶ The Eurosystem purchased public sector bonds on a large scale through the public sector purchase programme (PSPP) from March 2015 and the pandemic emergency purchase programme (PEPP) from March 2020. National central banks predominantly acquired bonds issued by their own Member State. The ECB bought around 10% of the purchase volume. Purchases by the national central banks are not subject to risk sharing, and the national central bank receives the interest income. The ECB purchases are subject to risk sharing. For information on the rationale behind and the design of the various programmes, see the Official Journal of the European Union L 39 (2020a) and the Official Journal of the European Union L 91 (2020b).

⁷ This does not include bonds purchased by supranational institutions. Including these "supras", holdings total around €4 trillion or 33% of euro area GDP. Holdings of government bonds that the Eurosystem central banks acquired in line with the Agreement on Net Financial Assets (ANFA) are likewise not included.



Source: Bloomberg (all government bonds).

Deutsche Bundesbank

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the onset of the financial and economic crisis, Eurosystem holdings account for around three-quarters of the rise in debt (+€5.0 trillion since the end of 2008). As a percentage of GDP, debt not held by the Eurosystem is lower than before the financial and economic crisis.

Eurosystem largest creditor The Eurosystem was thus by far the largest creditor sector at the end of 2021 (see the upper chart on p. 81). For almost all other sectors, the holdings of government debt fell in absolute terms and as a percentage of GDP as compared with the end of 2014. Insurance corporations and pension funds are the only exception. The decline in debt to foreign creditors (non-euro area) was particularly significant, followed by banks and other financial institutions within the euro area.

A closer look at Germany, France, Italy and Spain

Different creditor structures in the four large Member States A more detailed description of developments in the four large Member States Germany, France, Italy and Spain is given below. Developments in their government debt ratios and creditor structures have diverged. They also differed significantly at the end of 2021. The debt ratios in the four countries rose considerably from different levels following the onset of the financial and economic crisis (see the lower chart on p. 81). By the time the coronavirus pandemic broke out in 2020, Germany's debt ratio was well below its level of end-2008 again. During the same period, the debt ratio in France continued to rise moderately, whereas it stagnated at the higher level in Spain and Italy. During the coronavirus pandemic in 2020 and 2021, all countries experienced a renewed sharp rise in their debt ratios. The German debt ratio was only 4 percentage points higher at the end of 2021 than at the end of 2008. In France, it had risen by 44 percentage points, in Italy by 45 percentage points and in Spain it was 79 percentage points higher (starting from a moderate level).

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Differences

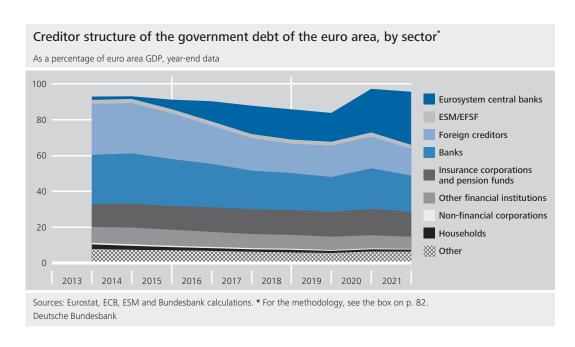
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The table on p. 85 contains detailed information on the creditor structure of the four countries. It shows the holdings of the creditor groups both in relation to total debt and in relation to national GDP. In Germany and France, foreign creditors (in this case, creditors from outside the respective Member State excluding the Eurosystem central banks) held just under 60% of government debt in 2014. Domestic banks were the second-largest creditor group in Germany, holding around one-quarter of government debt, while the figure for France was around one-fifth. In Italy, meanwhile, external debt stood at just over one-third and in Spain at just under 40% of government debt. At close to one-third, debt to domestic banks was only moderately lower in these countries.

Prior to 2015, the main holders of government debt were foreign creditors in Germany and France and domestic banks in Italy and Spain

In 2015, the large-scale asset purchases by the Eurosystem central banks started and altered creditor structures considerably (see the table on p. 85, chart on p. 84). At the end of 2021, asset holdings under the purchase programmes amounted to 39% in Germany, 27% in France, 25% in Italy and 32% in Spain, as a percentage of the respective government debt. In Germany and France, meanwhile, the shares held by foreign creditors (excluding the ECB, which is included under the Eurosystem in this presenta-

Creditor structure has shifted significantly since the start of the asset purchase programmes



tion), in particular, fell. They previously held an especially large percentage. In Italy, the shares of all other creditor groups fell relatively broadly. In Spain, the percentage held by domestic banks, in particular, dropped.

the Eurosystem exceeded the increase in debt over the same period.¹⁰ For the pandemic years 2020 and 2021, the build-up of Eurosystem holdings in the four Member States was roughly in line with the increase in debt.¹¹

The macroeconomic relevance can be seen in holdings relative to national GDP. At the end of 2021, the Eurosystem's (Bundesbank's and ECB's) holdings of German government debt acquired for monetary policy purposes amounted to 27% of (German) GDP. The equivalent figure for France was 31%, while it was 38% for both Italy and Spain.⁹ Everywhere except for France, the holdings accumulated by

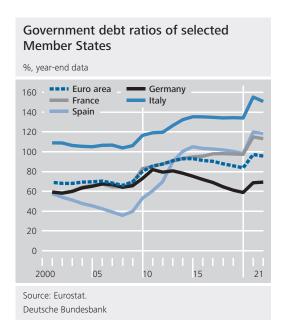
The creditor structure can be used to determine the extent to which government interest expenditure remains within a country or goes beyond its borders. This also applies to the risk premia that this expenditure contains. Debt held by foreign creditors as a percentage of GDP gives some indication of the flow of inter-

Interest payments pass through to foreign creditors to only a limited extent

9 The restrictions regarding the interpretation and presentation of the Eurosystem's share mentioned on p. 82 apply. The figures diverge because the purchases under the PSPP and PEPP are based on the Eurosystem's capital key. This is made up of the respective share of a Member State in the total population (currently for 2018) and euro area GDP (currently the average for 2013-17), whereby both have equal weighting. In 2021, the ratio of capital key to GDP share was 90% for Germany, 102% for France, 119% for Italy and 120% for Spain.

10 At the end of 2021, Germany's holdings of government bonds amounted to around €970 billion, whereas its debt level rose by €270 billion between 2014 and 2021. For France, the figures are around €760 billion and €770 billion respectively, for Italy around €670 billion and €470 billion respectively, and for Spain around €460 billion and €340 billion respectively.

11 For Germany and Italy, the ratio between the increase in Eurosystem holdings and the rise in debt was 109% over this period, for Spain it was 100%, and for France it was 82%.



holdings (as a percentage of the respective GDP) range between 27% for Germany and 38% for Italy and Spain

Eurosystem

Information on the data and their statistical definition

Various data sources were combined in this article so as to provide the most comprehensive picture possible. The data are not fully compatible in some cases, nor are they uniformly defined, leading to ambiguities in some places. However, this is unlikely to have a significant impact on the fundamental developments presented. The last date for which the data used are jointly available is the end of 2021.

Data on the volume and instrument structure of government debt are taken from Eurostat's Government Finance Statistics (GFS). This is general government debt (according to the national accounts) at nominal values, which is also referred to as the Maastricht debt level.¹

Data on the creditor structure of securities are taken mainly from the Securities Holdings Statistics (SHS) and the Securities Holdings Statistics by Sector (SHSS) of the European Central Bank (ECB). These comprise the bond holdings of the aggregate sectors for the euro area as a whole and for individual Member States, excluding central banks in each case. Consistent data are available for these from the fourth quarter of 2013. All figures are nominal.

These securities data are supplemented by data on the creditor structure of banks' credit claims (nominal values), taken from the ECB's balance sheet statistics. No separate information on holders is available for credit claims on general government not held by banks or government liabilities from currency and deposits (6% and 1%, respectively, of total debt in the euro area). These categories are reported under "Other".

These data are supplemented by data from the European Stability Mechanism (ESM) on the outstanding financial assistance provided under the European Financial Stability facility (EFSF) and the ESM (nominal values).

Data on the government bonds of Member States held by the Eurosystem are taken from publications by the ECB and the national central banks. The holdings reported include all purchases of public sector bonds issued by Member States under the monetary policy asset purchase programmes (purchases of bonds issued by supranational institutions are not taken into account in this article). However, in addition to government bonds issued by Member States, the Eurosystem also purchases bonds issued by national development banks and other national public undertakings. The latter are not usually included in national government debt. In this respect, the Eurosystem's actual holdings of government debt (as defined by the GFS) are likely to be lower than reported here (this is probably the case for Germany, at least).

Moreover, the holdings of the Eurosystem are measured differently to the other figures reported in this article. For example, only holdings under the Securities Markets Programme are published at nominal values. By contrast, holdings under the significantly larger purchase programmes from 2015 onwards are reported according to balance sheet data. Wherever the Eurosystem has purchased securities at prices above the nominal value, its share is thus overstated (this is likely to have been the case in most instances).

However, the share of Eurosystem central banks as creditors of government bonds is underreported in a different context. Specifically, the Eurosystem's reported shares do not include government bonds purchased by national central banks for their own portfolios outside the monetary policy asset purchase programmes (based on the Agree-

ment on Net Financial Assets (ANFA)).² Data on the holdings of domestic government bonds that these contain are not published.

Government bonds held abroad are not explicitly recorded in the creditor structure statistics, which are the main source used here. This is because securities depositories from non-euro area countries are not subject to reporting requirements. For this reason, the category of government debt held abroad was calculated and reported as a residual figure in this article. This is the result of the difference between the outstanding national debt securities according to the GFS and the sum of the holdings reported in the SHS and SHSS holdings statistics as well as the holdings of the Eurosystem (again, excluding supranational bonds).3 The aforementioned ambiguities stemming from the different statistical definitions of the data (in particular with regard to the Eurosystem's holdings) affect this residual.

In this respect, Germany's external debt, for example, is likely to be underestimated whilst Italy's is overestimated. There is one further aspect to bear in mind when interpreting and differentiating between the domestic country and foreign countries. Although the reported statistics distinguish domestic holdings of government bonds from holdings abroad, this does not necessarily mean they are held by domestic or foreign creditors in each case. Foreign creditors can also hold government bonds in domestic safe custody accounts, and vice versa

2 ANFA governs the extent to which the national central banks are allowed to invest beyond monetary policy purposes. See Deutsche Bundesbank (2016).

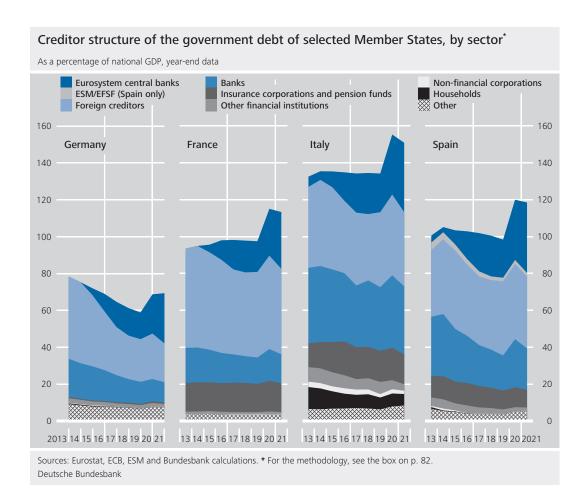
3 In order to provide financial assistance to Member States that were hit especially hard by the financial and debt crisis, euro area countries jointly borrowed through the EFSF. In the figures reported for individual Member States in this article, this share was allocated to external debt.

est to other countries. To examine this aspect, the analysis of Eurosystem bond holdings conducted so far has to be expanded to include a distinction between domestic and foreign holdings. From a national perspective, the ECB's holdings are held largely by foreign creditors. This is because they are subject to risk sharing and, therefore, the bulk of the interest paid on the ECB's holdings goes to other countries. 12 By contrast, all interest payments on national central banks' holdings remain within their respective home countries. Defined in this way, debt held by foreign creditors in Germany amounted to 23% of German GDP. The equivalent figure for France was 49%, 43% for Italy and 44% for Spain.

At present, a large share of the interest expenditure remaining inside respective euro area countries is being channelled to their national central banks, mainly owing to the national central banks' holdings of bonds issued by their home countries. In addition, there are the hold-

ings of bonds issued by the home countries and purchased by the Eurosystem with risk sharing (see the table on p. 86). This is because the interest paid on these bonds is distributed to all national central banks in line with the capital key. At the end of 2021, holdings calculated in this manner as a percentage of national GDP stood at 25% (Bundesbank holdings) for Germany, 28% for France, 34% for

National central banks have sizeable claims on home countries **12** The Eurosystem agreed on full risk sharing for purchases under the Securities Markets Programme (SMP). For purchases under the PSPP and PEPP, it agreed that 20% of purchases would be subject to risk sharing. These are the ECB's purchases of government bonds and bonds issued by development banks and other public undertakings, as well as purchases by the national central banks of bonds issued by supranational institutions (10% in each instance). Interest income on holdings subject to risk sharing is distributed between the national central banks in accordance with the Eurosystem's capital key. 80% of purchases under the PSPP and PEPP are excluded from risk sharing. These are purchases by the national central banks of securities issued by regional and local governments, development banks and other public undertakings within the national central banks' jurisdiction.



Italy and 35% for Spain. ¹³ In addition, the Eurosystem central banks can (under ANFA) hold government bonds in portfolios for nonmonetary policy purposes. The Bundesbank does not make use of this option. The relevant ANFA balance sheet items of the Banque de France total around 2% of national GDP, while those for the Banca d'Italia amount to 7% and those for the Banco de España 2%. ¹⁴ The share of government bonds issued by national central banks' home countries within these aggregate items is not published, but is likely to be substantial in some cases.

Eurosystem bond purchases affect debt burden on government finances ...

Eurosystem government bond holdings influence the way in which debt puts pressure on government finances and in which interest rate changes affect government finances. ¹⁵ Put in highly simplified terms, national central banks' bond purchases convert the rate of interest paid on government debt from the country-specific medium to longer-term bond rates (including any risk premia) to a variable interest

13 For these figures, bonds purchased by the Eurosystem with risk sharing were allocated to the respective Member States according to the capital key. These are SMP holdings and the ECB's country-specific purchases under the PSPP and the PEPP, each excluding holdings of bonds issued by supranational institutions. In addition, central banks also receive income from holdings of non-domestic securities and bonds issued by supranational institutions for purchases of which risk sharing has been agreed. As a percentage of national GDP, the Eurosystem's holdings of this nature amounted to around 5% for the Bundesbank, 6% for the Banque de France and 7% for the Banca d'Italia and the Banco de España.

14 The data were taken from the balance sheets of the national central banks for the 2021 financial year. These figures concern all relevant euro-denominated investments, not just national government bonds. The table on p. 86 shows, in particular, balance sheet items 7.2. (Other securities not held for monetary policy purposes) and 11.3 (Other financial assets). Relevant supplementary information in the annual reports has been taken into account. See Banca d'Italia (2022), Banco de España (2022), Banque de France (2022) and Deutsche Bundesbank (2022b). The Bundesbank has no holdings in this context. The Banque de France has holdings of €43.4 billion and the Banco de España holdings of €28.8 billion. In its annual report on other investment in euro area government bonds, the Banca d'Italia reported a figure of €125.1 billion.

15 For more details on the mechanism outlined here in a simplified manner as well as additional influences and features, see Deutsche Bundesbank (2021a).

Government debt of Germany, France, Italy and Spain, by creditor sector*

0/

	Germany	,	France		Italy		Spain		
Item	2014	2021	2014	2021	2014	2021	2014	2021	
	Shares of government debt								
Eurosystem central banks SMP	0	39	0	27	3	25 0	3	32 0	
PSPP1 PEPP1	0	24 15	0	17 10	0	15 10	0	20 12	
Foreign creditors ²	58	30	58	41	35	27	39	33	
Banks Loans	26 15	16 10	20 11	14 8	30 12	24 10	32 9	19 6	
Debt securities	11	6	9	6	18	15	23	13	
Households Insurance corporations and pension funds	1	0	0 17	0 14	8 11	4 11	0 12	0	
Other financial institutions Non-financial corporations	3	2	1	1 0	6 2	2	5 1	1	
European Stability Mechanism Other	. 11	11	4		5	6	4 5	2 5	
	Shares of national GDP								
Eurosystem central banks SMP	0	27	0	31	5 5	38 0	3	38 0	
PSPP1 PEPP1	0	17 10	0	20 11	0	23 14	0	24 14	
Foreign creditors ²	44	21	55	46	47	40	41	39	
Banks Loans Debt securities	19 11 8	11 7 4	19 10 9	16 8 7	41 17 25	37 15 22	34 10 24	23 7 16	
Households Insurance corporations and pension funds	0	0	0 16	0 16	11 14	6 16	0 12	0	
Other financial institutions Non-financial corporations	2	2	1	1 0	8	4 2	5 1	2	
European Stability Mechanism Other	. 8	7	4	3	6	. 8	4 5	2 5	

Sources: Eurostat, ECB, ESM and Bundesbank calculations. * See the methodological notes on p. 82, in particular with respect to shares held by Eurosystem central banks and by foreign creditors. 1 Excluding bonds issued by supranational institutions. 2 Residual government debt that cannot be attributed to any of the creditor groups listed here (therefore also excluding Eurosystem central banks).

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rate at the monetary policy (risk-free) rate. This is due to the fact that interest payments on the purchased government bonds go to the national central banks. As bond purchases grew, so did commercial banks' deposits at central banks. In turn, the national central banks pay interest on these (now 0%, previously at a negative deposit facility rate). The difference between income from bond holdings and expenditure on the deposit facility affects central bank profit. As soon as it is distributed, it has an impact on government finances. ¹⁶ In this respect, the balance sheet link between central banks and government finances means that interest rates on bonds (including risk premia)

flow back to the Member States, which effectively pay the short-term deposit rate.

In terms of interest rate risk to government finances, the described lengthening of the residual maturities for government debt should therefore be interpreted with caution. Where central banks engage in maturity transformation via their balance sheets, this increases the sensitivity of government finances to short-term changes in central bank interest rates. This counterbalances the longer residual maturities.

... and sensitivity to short-term changes in central bank interest rates

 $^{{\}bf 16}$ The timeframe can be influenced by provisions and loss carryforwards.

Bond holdings of selected Eurosystem central banks as at the end of 2021, including bonds allocated according to interest income

As a percentage of national GDP

	Deutsche	Banque		Banco
Item	Bundesbank	de France	Banca d'Italia	de España
Bonds issued by the home country not subject to risk sharing				
(own holdings)	24.4	27.5	33.7	34.3
PSPP excluding bonds issued by supranational institutions	15.0	17.6	20.8	21.5
PEPP excluding bonds issued by supranational institutions	9.3	9.9	12.9	12.8
Bonds issued by the home country (via risk sharing) ¹	0.8	0.7	0.7	0.5
SMP			0.0	0.0
PSPP excluding bonds issued by supranational institutions	0.5	0.4	0.4	0.3
PEPP excluding bonds issued by supranational institutions	0.3	0.3	0.3	0.2
Bonds issued outside the home country (via risk sharing)1	5.0	5.7	6.7	7.2
SMP	0.0	0.1	0.0	0.1
PSPP excluding bonds issued by supranational institutions	1.2	1.5	1.8	1.9
PEPP excluding bonds issued by supranational institutions	0.8	1.0	1.1	1.2
Bonds issued by supranational institutions	2.9	3.2	3.8	3.9
Memo item:				
Holdings of asset positions in line with ANFA ²	0.0	1.7	7.0	2.4

Sources: Eurostat, balance sheet data of the Banco de España, Banca d'Italia, Banque de France and Deutsche Bundesbank as well as Bundesbank calculations. 1 Holdings of public sector bonds purchased by the Eurosystem subject to risk sharing were reallocated to the national central banks according to the capital key. 2 Not necessarily bonds issued by the home country.

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Bond purchases are reflected in central bank profits The varying interest rates on holdings of government bonds issued by the home country are reflected in the national central banks' balance sheets. Although other effects also play a role (including changes in provisions and reserves), this can be seen, for example, in last year's annual accounts of the national central banks of the four large Member States. While the Bundesbank did not distribute any profit to the government in 2022 (2021 financial year), transfers (including payments of profit-related taxes) amounted to 0.3% of GDP in France and Spain and to 0.8% of GDP in Italy in the same year.

Government debt held by the national banking sector

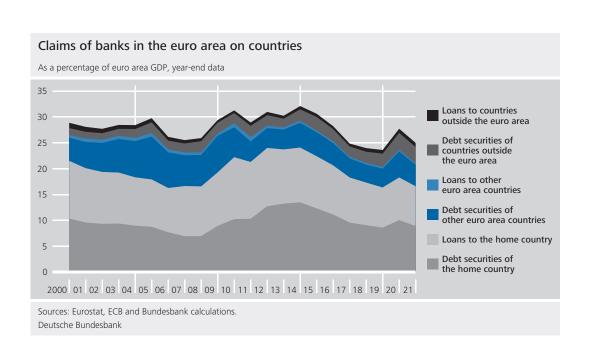
The domestic banking system is the secondlargest creditor sector in the euro area after central banks. The banking system is of particular importance in terms of financial stability. The sovereign debt crisis showed that problems with government finances and in the banking system can quickly be mutually reinforcing and pose a threat to financial stability. For example, government solvency risks feed through various transmission channels to affect the credit quality and funding options of banks. At the same time, distress in the banking system can trigger or exacerbate sovereign debt crises. In view of this, changes in national banking sectors' claims on their home countries are of particular interest.

As major lenders to government, banks play a particularly important role in safeguarding financial stability

A look at the euro area as a whole

At the end of 2021, the aggregate euro area banking sector (euro area monetary financial institutions excluding central banks) held claims on Member States amounting to 21% of GDP (see the chart on p. 87). These were mainly claims on the respective home country. These

Euro area banks mainly hold claims on their home countries



play a crucial role in the national sovereign-

bank nexus.

Banks' claims on home countries as they were prior to financial and economic

crisis

At the end of 2021, banks' claims on their home countries were back at a level similar to the one recorded at the end of 2008 (17% of euro area GDP in each case; see the chart above).17 Over the course of the financial and sovereign debt crisis, banks had considerably expanded their holdings of these claims (particularly government bonds). However, they reduced them again when the Eurosystem launched its large-scale asset purchase programmes.

Ratio of government bond holdings to own funds somewhat reduced

Looking at claims in relation to the own funds of domestic banks, the picture is similar. These funds are ultimately the buffer that banks can use to absorb any losses. Comparing claims on the home countries to the own funds of the domestic banking system, this figure has fallen slightly, from 90% prior to the financial and economic crisis to just under 80% (see the lower chart on p. 88).18

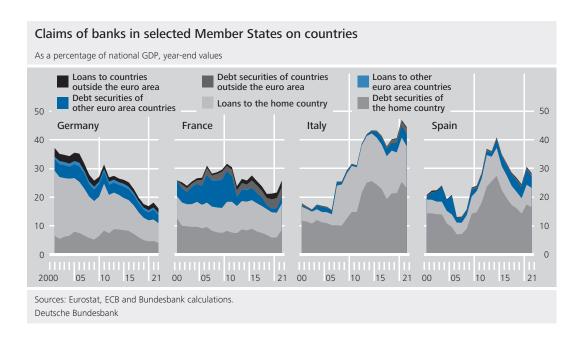
A closer look at Germany, France, Italy and Spain

In turn, developments in the four large Member States were very different (see the upper chart on p. 88). Upon the outbreak of the financial and economic crisis, banks in all Member States increased their claims on their respective home countries. In Germany and France, these claims rose only slightly and remained roughly at the level then reached from 2011 onwards. By contrast, banks domiciled in Spain and Italy considerably expanded their claims on their home countries. Following the launch of the Eurosystem's purchase programmes, banks' claims on their home countries fell in all Member States from 2015 onwards, especially in Spain. In Italy, this trend then reversed starting in early 2018 amid heightened uncertainty surrounding the country's elections and the formation of a new government. In France and Spain, the banking sectors started expanding their holdings of national government bonds again when the coronavirus pandemic broke out. Compared with the situation prior to the financial and economic crisis, it was only in Germany that banks' claims on the home country decreased – in relation to GDP, they went from just under 19% at the end of 2008 to 11% at the end of 2021. At 16% of GDP, the

Differing developments in the four larae Member States

^{17 46%} of the claims on home countries are credit claims and 54% are government bonds.

¹⁸ Own funds of the domestic banking sector are defined as capital and reserves according to the ECB's balance sheet statistics. These values may differ from bank to bank. They are therefore only a rough, aggregate indicator.



ratio in France was back on par with the one recorded at the end of 2008. In Spain, it went up from 14% to 23%, whilst in Italy, starting at 24%, it reached a new peak of 38%.¹⁹

financial and economic crisis, they rose from 67% to 110% in Spain and in Italy from 147% to just under 200% at the end of the period under review.

Looking at the claims on each home country in relation to the own funds of its domestic banks also reveals a mixed picture (see the chart above).²⁰ While the ratio for Germany stood at 126% at the end of 2008, it had fallen to 62% by the end of 2021. For France, this figure decreased from 77% to 56% over the same period. By contrast, these ratios increased in Spain and Italy. Following the outbreak of the

Overall, it is clear that banks are interconnected, sometimes closely, with their home country. Compared with the situation prior to the financial and economic crisis, the link is in some cases even stronger. Banks, therefore, have not all become more resilient to the fiscal risks of their home country. In this respect, financial stability risks remain. Further steps towards broader risk redistribution within the framework of the banking union are currently under discussion. If this should fail to achieve a larger-scale redistribution of fiscal risks, it would be necessary to place a tight limit on the risks for banks arising from government bonds.²¹

Banking sectors in Spain, but especially Italy, vulnerable to sovereign default risks

Bank sectors of selected Member States: claims on the home country in relation to own funds



Sources: Eurostat, ECB and Bundesbank calculations. Deutsche Bundesbank 19 Deviations from the table on p. 85 arise from the valuation approach used in the balance sheet statistics, which report bond holdings at book values. By contrast, they are reported at nominal values in the SHSS holdings statistics. Bonds accounted for 37% of domestic banks' total claims on the home country for Germany, 46% for France, 61% for Italy and 71% for Spain.

20 The situation in which individual banks find themselves can vary considerably.

21 In addition, risks in banks' balance sheets arising from legacy debt, such as the various losses arising from non-performing loans, would have to be sufficiently mitigated in advance. The current resolution regime for banks also needs to be reformed so that, wherever possible, no public funds will be used to bail out banks in future. For more details, see Deutsche Bundesbank (2021b).

Close interconnectedness between banks and their home country continues Reducing the regulatory privileges that government debt enjoys on bank balance sheets

would go some way to achieving this, but so far this has lacked a political majority.

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