

# Is monetary policy dominated by fiscal policy?\*



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*The change in the interest rate environment and the high levels of public debt following the severe shocks that hit the euro area in recent years have given rise to the question whether monetary policy's ability to act – and therefore its independence – is being constrained by fiscal policy.*

*The determined monetary policy response and well-anchored inflation expectations demonstrate that the ECB has unwaveringly pursued its price stability objective, confirming monetary dominance.*

*At the same time, the ECB managed to prevent fragmentation in the euro area, without undermining the disciplinary effect of financial markets. In future, it will mostly be up to fiscal policy to protect central bank independence by advancing fiscal consolidation in line with the new European fiscal rules while not neglecting investments urgently needed to meet future challenges.*

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\*This Policy Note is based on the [speech](#) by Isabel Schnabel, Member of the Executive Board of the ECB, at a conference organised by Stiftung Geld und Wahrung on 25 years of the euro – Perspectives for monetary and fiscal policy in an unstable world, at a panel on “Inflation and public budget. Is monetary policy dominated by fiscal policy?” on 7 June 2024 in Frankfurt, Germany.

In the past four years, the euro area has faced several severe shocks that caused a fundamental shift in the macroeconomic environment.

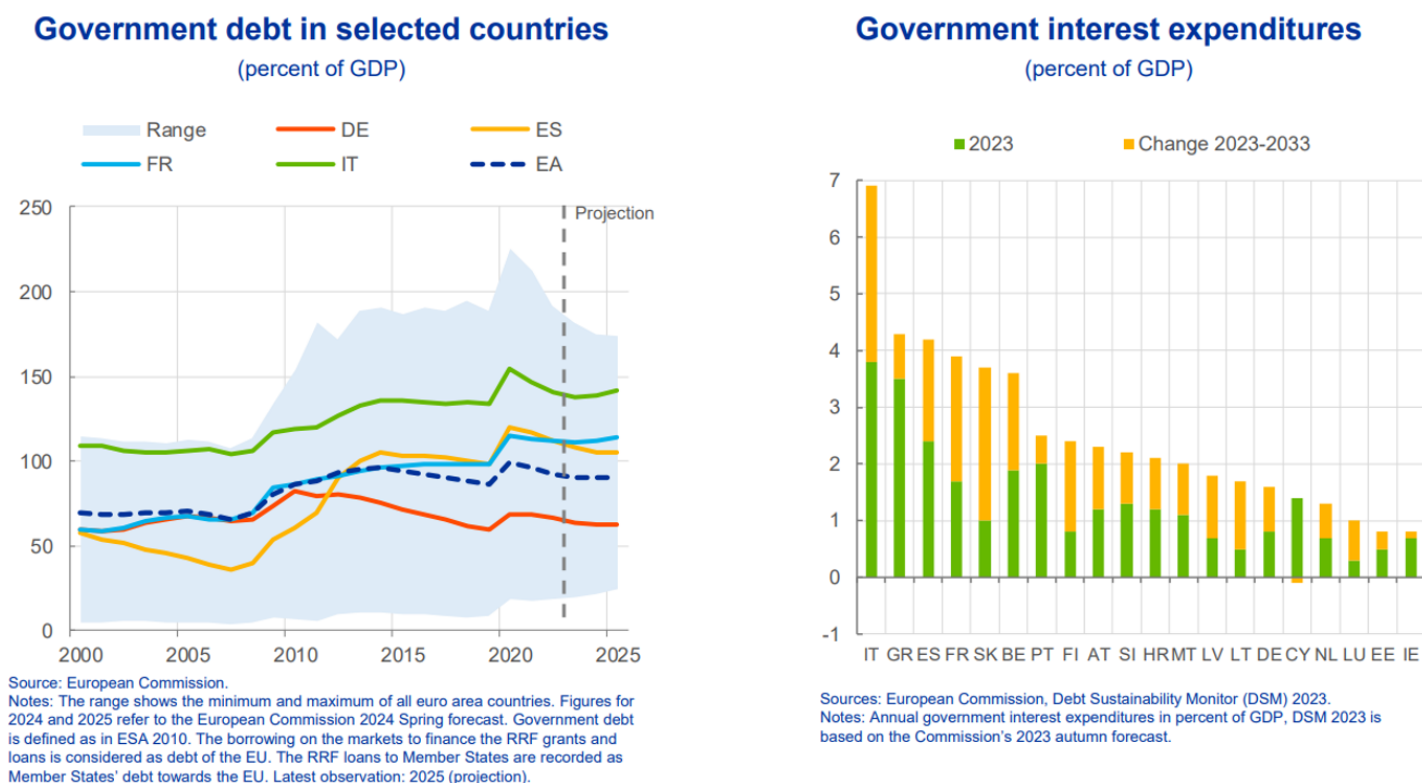
The long period of very low inflation and low interest rates ended abruptly with the pandemic and Russia’s invasion of Ukraine. In response to the sharp increase in inflation, the ECB hiked interest rates at an unprecedented scale, which markedly increased funding costs for governments, households and firms.

Governments reacted to the pandemic and the war with wide-ranging support measures that were aimed at cushioning their negative impact on income, employment and growth. This led to a significant increase in government debt as a share of gross domestic product, which was softened by the rise in inflation.

Today’s public debt ratio of 90% in the euro area remains close to its high reached during the European debt crisis, by far exceeding the ceiling of 60% set out in the Maastricht Treaty, while there are still considerable differences between Member States (Figure 1, left-hand side).

Fiscal measures played a key role in overcoming the crises. However, the new interest rate environment means that the high debt levels, in particular in highly indebted countries, will result in a considerably higher interest burden in the coming years (Figure 1, right-hand side).

**Figure 1: Higher interest rates imply rising interest expenditures as a share of GDP**



The question therefore arises of whether monetary policy’s ability to act – and therefore its independence – is being constrained by fiscal policy. This is called fiscal dominance.<sup>1</sup>

<sup>1</sup>See also Schnabel, I. (2020), "[The shadow of fiscal dominance: Misconceptions, perceptions and perspectives](#)", speech at the Centre for European Reform and the Eurofi Financial Forum on “Is the current ECB monetary policy doing more harm than good and what are the alternatives?”, 11 September.

My key message is that over the past few years the ECB has pursued its price stability target with great determination, providing credible evidence of monetary dominance.

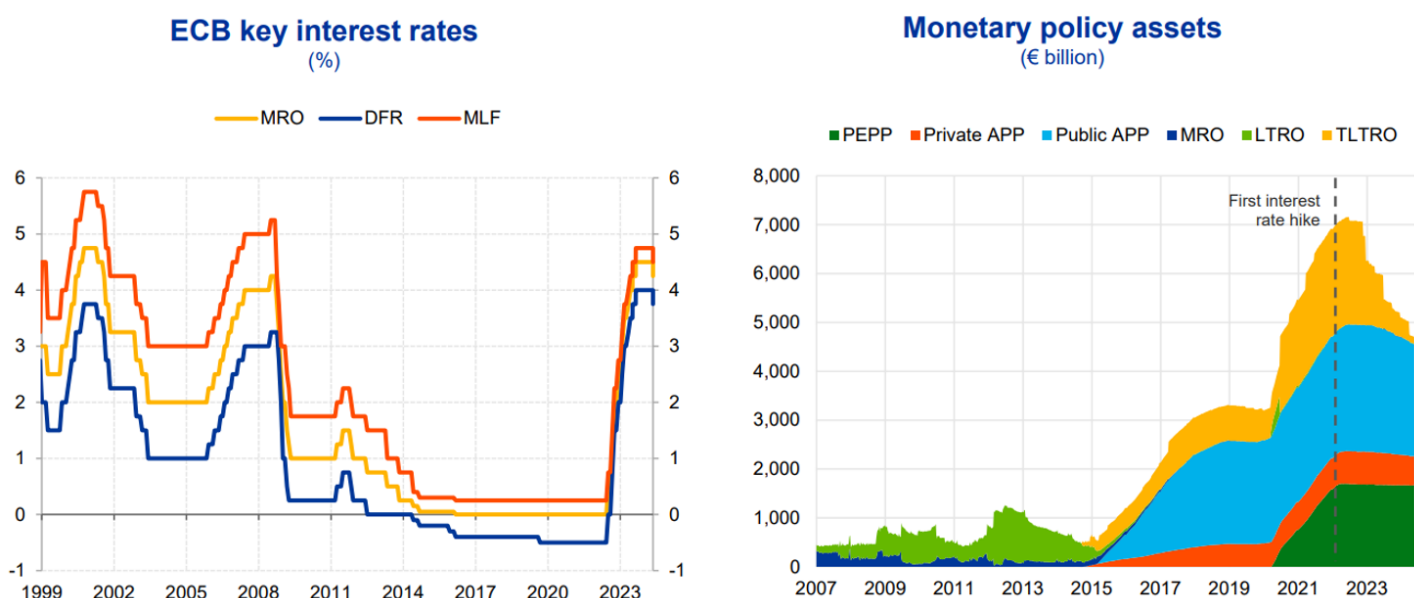
At the same time, it managed to prevent fragmentation in the euro area, without undermining the disciplinary effect of financial markets. In future, it will mostly be up to fiscal policy to protect central bank independence by advancing fiscal consolidation in line with the new European fiscal rules while not neglecting investments urgently needed to meet future challenges.

### Determined monetary policy action disproves fiscal dominance

The determined monetary policy response to the steepest rise in inflation in the history of the euro area convincingly demonstrates that the ECB has by no means deviated from its price stability mandate as predicted by the fiscal dominance theory.

Within a short period of 14 months the ECB raised interest rates, sometimes in big increments, by a total of 4.5 percentage points (Figure 2, left-hand side). It also began to swiftly reduce its balance sheet, mostly by phasing out targeted longer-term refinancing operations (TLTROs) as well as by ending net asset purchases and then reinvestments under the asset purchase programmes (Figure 2, right-hand side).

**Figure 2: ECB has taken determined policy action to tackle unprecedented inflation surge**



Source: ECB.  
Latest observation: June 2024.

Source: ECB.  
Notes: Public APP is PSPP, Private APP is CBPP3, ABSPP and CSPP.  
Latest observation: May 2024.

Critics may argue that the monetary policy response was too hesitant at first. It was not until 12 months after inflation exceeded our 2% target that interest rates were raised for the first time, in July 2022.

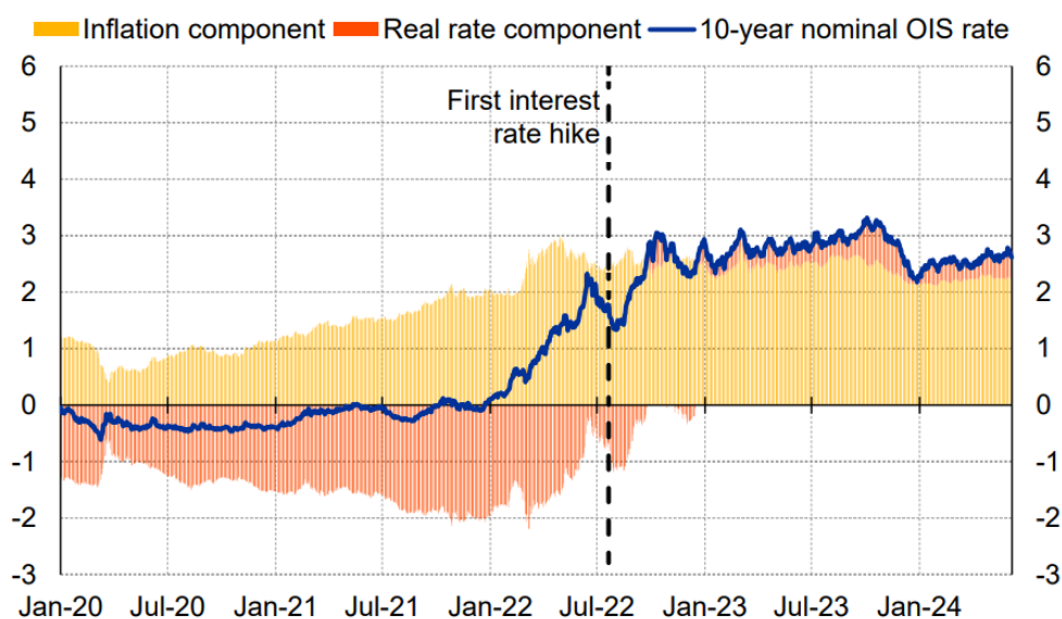
However, two facts are worth bearing in mind here.

First, the monetary policy turnaround started as early as December 2021, with the announcement of the end of net purchases under the pandemic emergency purchase programme (PEPP).<sup>2</sup> So financing conditions started to tighten well before the first interest rate hike (Figure 3).

<sup>2</sup> ECB (2021), [Monetary Policy Statement](#), 16 December.

**Figure 3: Financing conditions began to tighten well ahead of first ECB rate hike****Decomposition of 10-year EA OIS into inflation compensation and real rates**

(percentages per annum, percentage points)



Sources: Bloomberg, LSEG and ECB calculations.

Notes: The EA real rate is calculated by subtracting the inflation-linked swap rate from the nominal OIS rate. For the US, it is calculated by subtracting the break-even inflation rate from the US Treasury yield.

Latest observation: 5 June 2024.

Second, the hesitation to act needs to be seen in the context of a decade of very low inflation and heightened uncertainty due to reoccurring waves of the pandemic.

Central banks only gradually became convinced that the repeated errors in forecasting inflation suggested a sustained increase in inflation that warranted a strong monetary policy response.

The most important evidence of the ECB's credibility can be found in the development of longer-term inflation expectations.<sup>3</sup>

At first, the ECB welcomed the increase in inflation expectations towards its inflation target of 2% (Figure 4, left-hand side). However, inflation expectations soon began to overshoot that target, with both market- and survey-based indicators pointing to an increasing risk of deanchoring. For a while, a significant part of respondents were expecting medium-term inflation rates well above the inflation target (Figure 4, right-hand side).

In the meantime, however, expectations have returned to the vicinity of our medium-term inflation target of 2%. The broad stability of long-term inflation expectations disproves the theory of fiscal dominance. It rather suggests that our monetary policy response has strengthened the confidence households, firms and market participants have in the ECB's commitment to bring inflation sustainably back to our 2% target.

This was a remarkable success for monetary policy, which contributed to our decision yesterday to lower interest rates by 25 basis points. However, as the future inflation outlook remains uncertain, we cannot pre-commit to a particular rate path.

<sup>3</sup> See Reis (2023), "What can keep euro area inflation high?" *Economic Policy* 38(115), November. See also Bianchi, F. and Melosi, L. (2022), "Inflation as a Fiscal Limit", *Federal Reserve Bank of Chicago Working Paper*, No 2022-37; Cochrane, J. (2022), *The Fiscal Theory of the Price Level*, Princeton University Press.

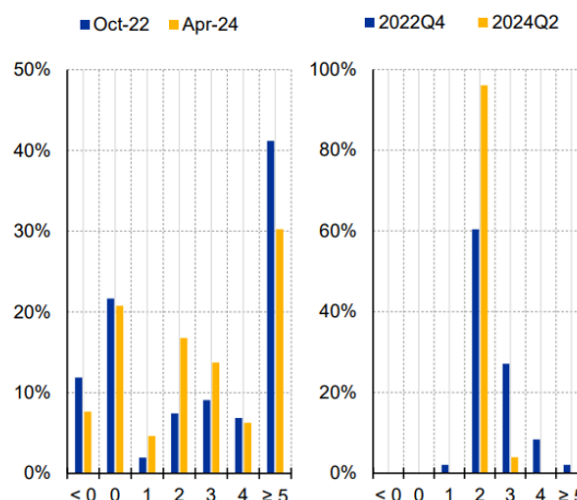
**Figure 4: Monetary policy action has prevented a deanchoring of inflation expectations**

**Market-based measure of inflation compensation**  
(percentages per annum)



Sources: Bloomberg, Refinitiv and ECB calculations.  
Latest observation: 5 June 2024.

**Inflation expectations:**  
**Consumer Expectations Survey (LHS)**  
& **Survey of Professional Forecasters (RHS)**



Sources: ECB Consumer Expectations Survey (CES), ECB Survey of Professional Forecasters (SPF) and ECB staff calculations.

Notes: Left panel shows histogram of 3 years ahead CES point expectations for October 2022 [median peak] and April 2024 waves. Right panel shows histogram of SPF point expectations targeting 2 calendar years ahead for 2022 Q4 [median peak] and 2024 Q2 rounds.  
Latest observations: April 2024 for CES and 2024 Q2 for SPF.

## Bond spreads reflect fundamental factors and risk appetite

The sharp increase in the ECB’s interest rates did not trigger a sustained rise in sovereign bond spreads between Member States (Figure 5, left-hand side). Some observers have interpreted this as a sign of fiscal dominance. They claim that the ECB may be keeping risk premia artificially low by investing in sovereign bonds of selected highly indebted countries, thus undermining fiscal discipline. In the medium term, so the argument goes, this could lead to fiscal dominance and higher inflation.

Yet, it needs to be borne in mind that when interest rates started rising, sovereign bond yields rose significantly for all Member States (Figure 5, right-hand side). Today, average yields on ten-year sovereign bonds in the euro area are around three percentage points higher than just before the pandemic. This significant increase provides a clear incentive for all Member States to reduce their debt levels.

The yield increases were largely due to rising interest rate expectations and term premia, while credit risk premia – measured here by credit default swaps – remained remarkably stable or even fell slightly (Figure 6, left-hand side).

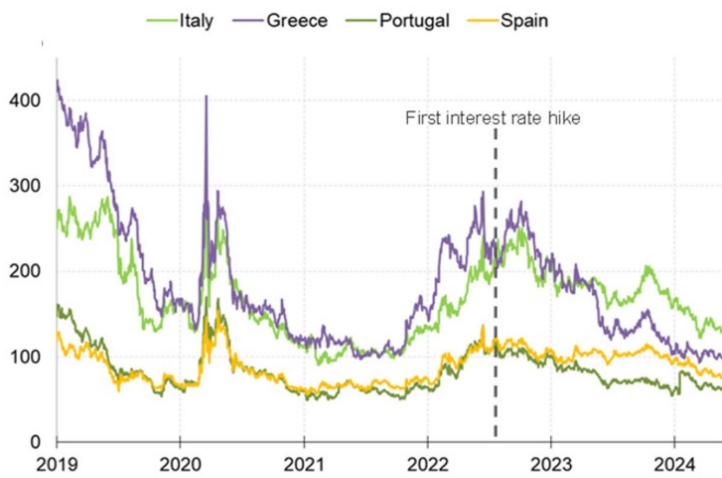
There are various factors that can help explain recent developments in credit risk premia.

The most important one is the comparably benign economic development of more highly indebted countries. While economic growth is particularly depressed in the “safe haven” of Germany, the countries that were in crisis before have fared much better since (Figure 6, right-hand side).

Higher long-term growth, in turn, supports debt sustainability. Ultimately, the level of risk premia is dependent on the differential between interest rates and growth (r-g).

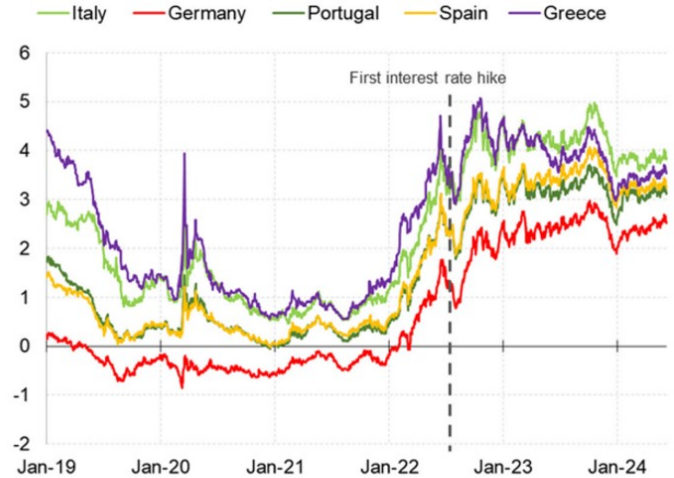
**Figure 5: Sovereign yields increased markedly, while sovereign spreads remained contained**

**10-year euro area sovereign bond spreads towards German Bund**  
(basis points)



Source: Bloomberg.  
Last observation: 5 June 2024

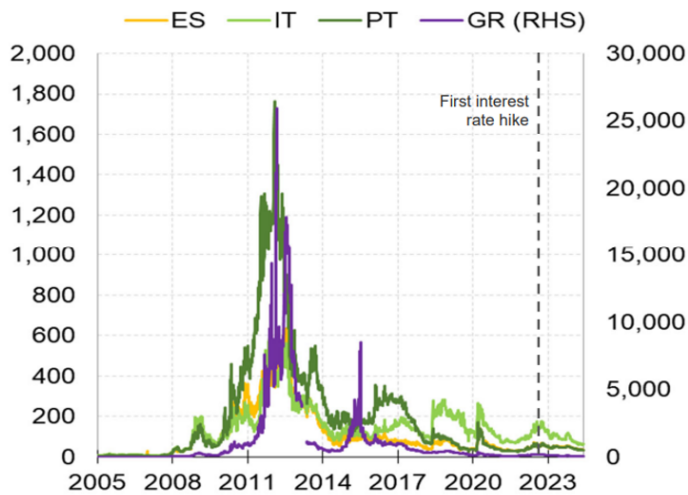
**10-year euro area sovereign bond yields**  
(percentages per annum)



Source: Bloomberg.  
Last observation: 5 June 2024.

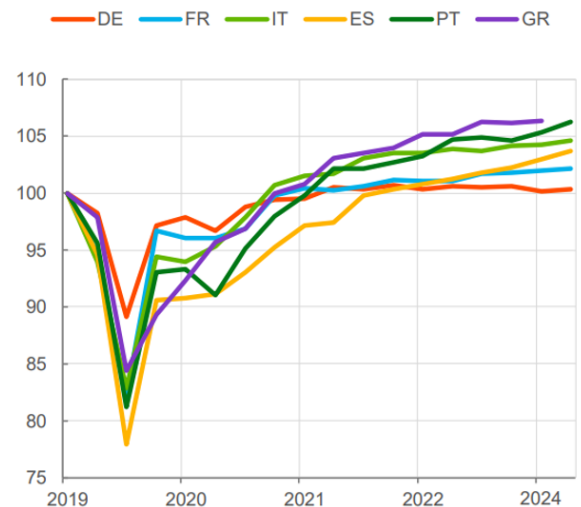
**Figure 6: Lower risk premia supported by outperformance of higher-yielding economies**

**Credit default swap spreads**  
(basis points)



Source: SDW.  
Last observation: 5 June 2024.

**Real GDP**  
(Index Q4 2019 = 100)



Sources: Eurostat and ECB staff calculations.  
Latest observations: 2023 Q4 for Greece and 2024 Q1 for all other countries.

The positive economic development in parts of the euro area is, first and foremost, the result of years of effort invested into strengthening resilience and economic dynamism after the sovereign debt crisis.

The European fiscal measures in response to the pandemic – in particular the Next Generation EU (NGEU) programme – are likely to have played an important role as well.

First, countries with higher debt levels benefit from NGEU funds to a larger extent, which should support euro area convergence in the long run by increasing potential growth in these countries.

Second, NGEU was a strong vote of confidence in Europe’s ability to act. NGEU is a symbol of a Europe capable of handling crises decisively together. It likely has sustainably lowered the risk of fragmentation in the euro area – contributing to lower bond spreads.

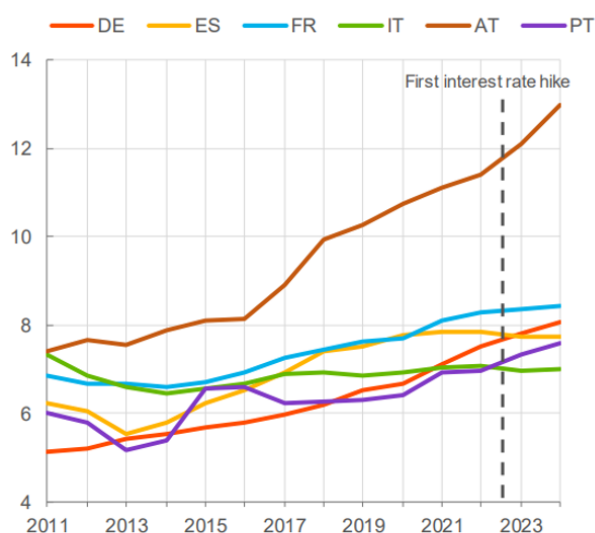
The second factor is that the future debt burden depends on average yields, not just current interest rates.

Before the pandemic, many governments locked in low interest rates by issuing long-term bonds. The average bond maturity of euro area countries rose from around six to eight years (Figure 7, left-hand side).

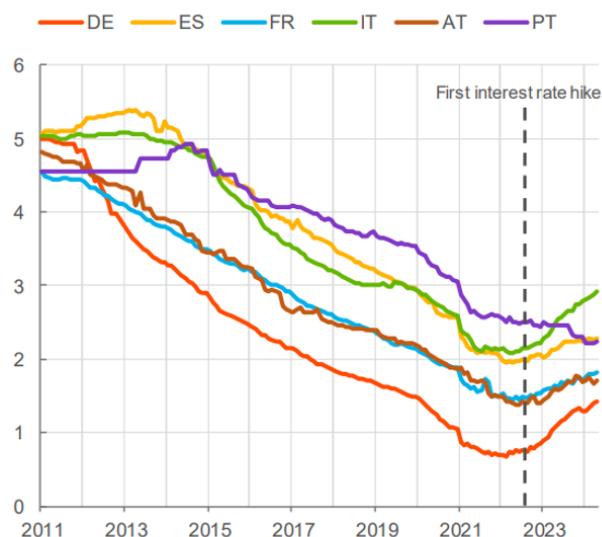
Therefore, a large part of outstanding debt still benefits from low interest rates (Figure 7, right-hand side).

**Figure 7: Longer maturities of sovereign bonds shield governments from rising yields**

**Residual maturities of sovereign bonds**  
(years)



**Average yields on total government debt securities**  
(percentages per annum)



Sources: ECB and ECB staff calculations.  
Notes: All original maturities. Annual averages per year, for 2024 average over the period January-April.

Finally, the third factor behind low risk premia is the current high risk appetite displayed by investors in global financial markets.<sup>4</sup>

The risk premia for European corporate bonds have fallen sharply since the beginning of monetary policy tightening, while equity markets are booming, likewise largely due to the falling risk premia (Figure 8).

The resilience of asset prices can probably be explained in part by the fact that excess liquidity remains high. The ECB and other central banks have adopted a gradual and cautious approach to balance sheet reduction as going too fast could cause disturbances in financial markets.

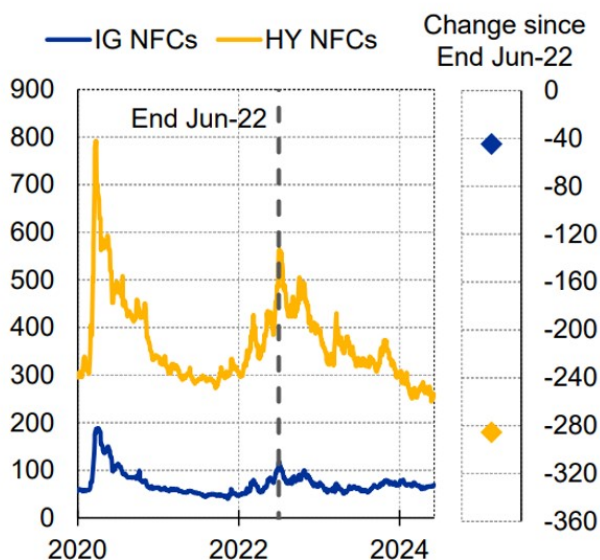
Such constraints, which may restrict the central bank’s ability to act, need to be carefully examined as part of the proportionality assessment when asset purchases are being considered as a monetary policy instrument.<sup>5</sup>

<sup>4</sup> See ECB (2024), *Financial Stability Review*, May.

<sup>5</sup> Schnabel, I. (2024), "[The benefits and costs of asset purchases](#)", speech at the 2024 BOJ-IMES Conference on “Price Dynamics and Monetary Policy Challenges: Lessons Learned and Going Forward”, 28 May.

**Figure 8: Strong risk appetite of global investors compresses risk premia**

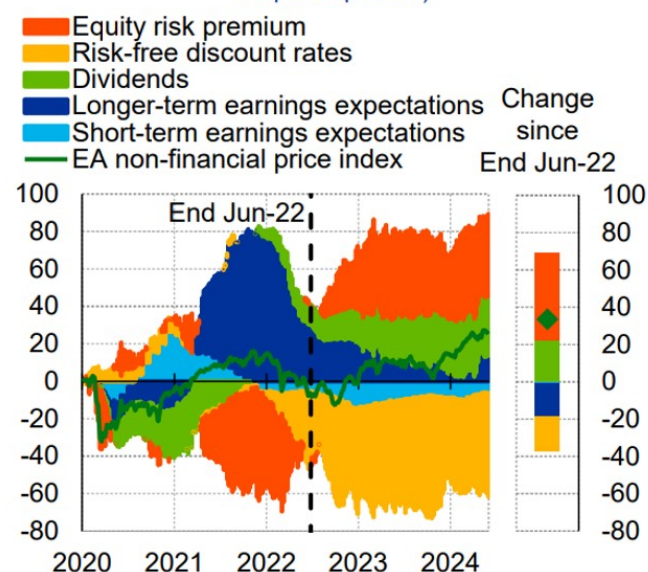
**Non-financial corporate bond spreads**  
(basis points)



Sources: iBoxx, and ECB calculations.  
Notes: The spreads are based on indices including companies that issue bonds in EUR, without strict restriction to their domicile, and are calculated as weighted averages of bond spreads over Markit iBoxx swap curve. The vertical line refers to 30 June 2022. Latest observation: 5 June 2024.

**Drivers of equity prices: NFCs**

(lhs panel: cumulative percentage changes relative to Jan-20, rhs panel: percent)



Sources: Refinitiv, IBES, Consensus Economics, Bloomberg and ECB calculations.  
Notes: The decomposition is based on a dividend discount model. The model includes share-buybacks, discounts future cash-flows with interest rates of appropriate maturity and includes five expected dividend growth horizons. See ECB Economic Bulletin, issue 4/2018 for more details. The vertical line refers to 24 June 2022. Latest observation: 31 May 2024 (weekly data).

That said, the gradual and predictable approach to balance sheet reduction contributed to a smooth exit that also benefitted from favourable market conditions.

Recently, the record volume of government bond issuance has met with strong demand in financial markets. The bid-to-cover ratios, a measure used to gauge demand relative to supply in bond markets, have consistently increased since the start of 2023 (Figure 9).

Given the anticipated peak in interest rates, investors were keen to lock in the attractive yields over the long term. As the Eurosystem reduced its presence in sovereign and corporate bond markets, notably foreign investors returned as yields in the euro area had become considerably more attractive (Figure 10).<sup>6</sup>

In some Member States, domestic households also played a significant role as purchasers of government bonds.

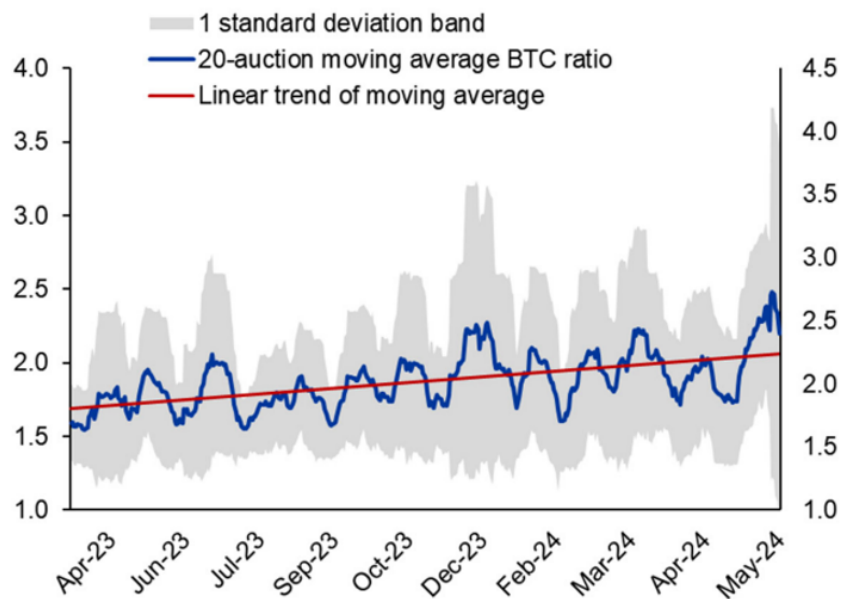
The ECB's withdrawal from asset purchases was thus supported by favourable macroeconomic and global conditions.

<sup>6</sup> ECB (2024), " [Who buys bonds now? How markets deal with a smaller Eurosystem balance sheet](#)", The ECB Blog, March.



Figure 9: Strong bond demand supports smooth ECB balance sheet run-off

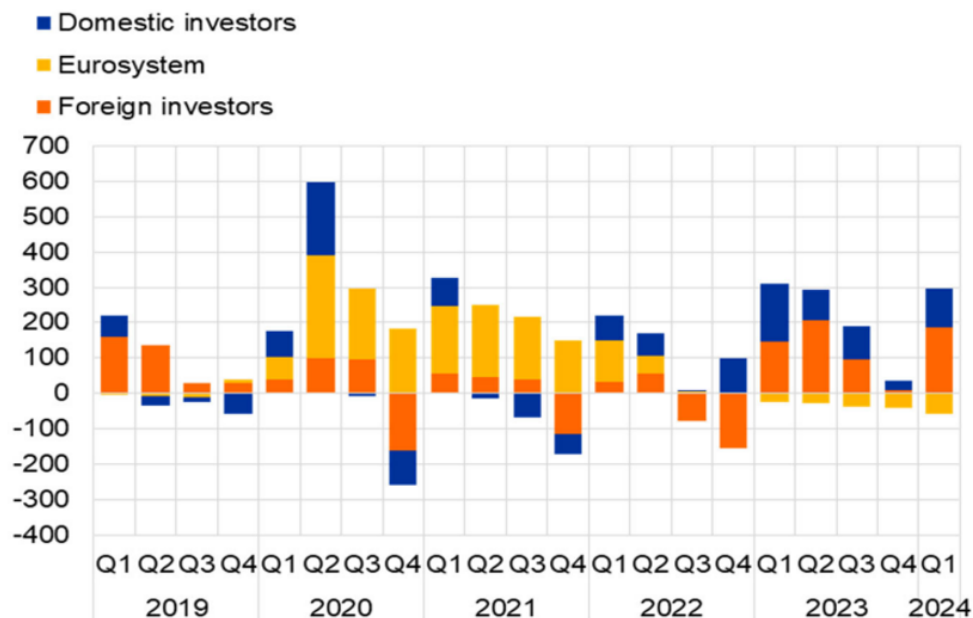
### Bid-to-cover ratios of major 4 EA sovereigns plus European Union (ratio)



Sources: National Debt Management Offices, ECB.  
Notes: Includes central government bond auctions in Germany, France, Italy, Spain and EU-supranational bond auctions. Excludes syndications and bills.  
Latest observation: May 2024.

Figure 10: Foreign investors and domestic households absorb large part of net issuance

### Buyers and sellers of euro area government bonds (€ billion)



Sources: ECB Securities Holding Statistics by Sector (SHSS) and Eurosystem (SHSE) and ECB calculations.  
Notes: Government bond holdings of domestic bonds are excluded to address distortions caused by retained bonds.  
Latest observation: 31 March 2024.

## Smooth transmission of monetary policy supports price stability

In June 2022, however, when the ECB's Governing Council announced its intention to increase interest rates for the first time at its next monetary policy meeting, such a smooth interest rate cycle could not have been foreseen. Just shortly after the monetary policy meeting, sharp movements in bond markets emerged.<sup>7</sup>

This dynamic was triggered by concerns that inflation would be more persistent than expected. These concerns were prompted by poor inflation data from the United States, which led to a sharp rise in US yields – for example of around 70 basis points for the two-year US Treasury within one week. Market turbulence was hence by no means confined to the euro area.

However, the architecture of the euro area carries a particular risk of self-reinforcing interest rate dynamics. As investors can quickly transfer funds from one part of the monetary union to another part that is regarded as a safe haven, without incurring any currency risk, the combination of national fiscal policy and European monetary policy can – in times of great uncertainty – result in sudden interest rate spirals in bond markets.

Past experience shows that such interest rate spirals can make single monetary policy impossible. If sovereign bond yields of different Member States diverge abruptly, a smooth transmission of monetary policy across the whole euro area can no longer be ensured.

In the conditions prevailing at the time, the necessary interest rate steps could therefore have led to disproportionately higher interest rate adjustments in parts of the euro area.

In response to this market turbulence, the ECB announced its Transmission Protection Instrument (TPI) in July 2022.<sup>8</sup> The TPI aims to ensure the smooth transmission of monetary policy by countering disorderly market dynamics, unwarranted by fundamentals.

The TPI sets clear conditions for the purchase of a Member State's bonds. These conditions are intended to ensure that the instrument is only used in countries that pursue sound and sustainable fiscal and macroeconomic policies.

The TPI is hence not simply a continuation of the flexibility under the PEPP. During the pandemic the latter allowed for conducting asset purchases flexibly over time, across asset classes and among jurisdictions. This flexibility was used temporarily at the outset of the pandemic and at the start of the hiking cycle to counteract disorderly movements in bond prices. However, deviations from the ECB's capital key remained limited.

Speculation that the ECB has permanently skewed its asset purchases in certain directions is unfounded. Temporary fluctuations in the capital key often occurred for technical reasons and, as shown by the examples of Italy and France, added up to zero over the entire calendar year 2023 (Figure 11).<sup>9</sup>

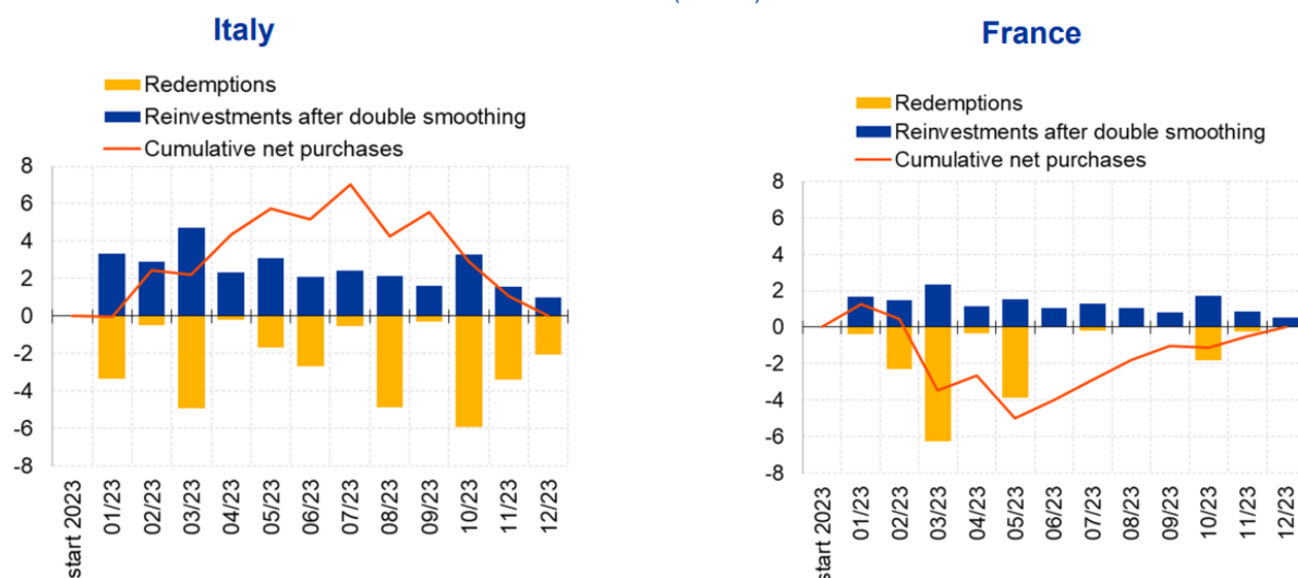
<sup>7</sup> Schnabel, I. (2022), "[United in diversity - Challenges for monetary policy in a currency union](#)" speech to the graduates of the Master Program in Money, Banking, Finance and Insurance of the Panthéon-Sorbonne University, Paris, 14 June.

<sup>8</sup> ECB (2022), [The Transmission Protection Instrument](#).

<sup>9</sup> ECB (2024), "[The dynamics of PEPP reinvestments](#)", The ECB Blog, 13 February.

**Figure 11: ECB has not steered purchases permanently towards specific countries**  
**Redemptions, reinvestments and cumulative net purchases**

(€ billion)



Sources: ECB and ECB staff calculations.  
 Note: Chart shows reinvestment amounts before allocation to the catch-up in supranational bonds.

The TPI, by contrast, is a new instrument in the ECB’s toolkit. Its targeted orientation and conditionality ensure the smooth transmission of monetary policy, even in times of heightened uncertainty and volatility, thus enabling monetary policy to pursue its key task of maintaining price stability.<sup>10</sup>

By announcing possible interventions or, if necessary, by carrying out targeted, temporary interventions, the central bank can quickly restore confidence and prevent destabilising interest rate spirals, which might otherwise drag the euro area into a severe crisis.

In this respect, the TPI is an expression of monetary rather than fiscal dominance. Indeed, the announcement of the TPI is likely to have been an essential precondition for the ECB to be able to increase rates to such a large extent and so avoid a deanchoring of inflation expectations and ensure price stability.

Under the TPI, the ECB cannot counter persistent tensions that are due to country fundamentals. It could only do so in combination with a macroeconomic adjustment programme under the Outright Monetary Transactions (OMT) programme.

These precautions ensure that market discipline is preserved. Within the TPI there is no interest rate level that is targeted; this level remains fully determined in the market, with the substantial differences in sovereign bond yields across euro area countries reflecting different fundamentals. The TPI can only be used to tackle disorderly dynamics that temporarily prevent price determination in the market. These conditions preserve the incentive for sound fiscal policies.

<sup>10</sup> Schnabel, I (2022), "[Finding the right mix: monetary-fiscal interaction at times of high inflation](#)", speech at the Bank of England Watchers’ Conference, 24 November.

## Fiscal discipline and structural reforms are the best protection against fiscal dominance

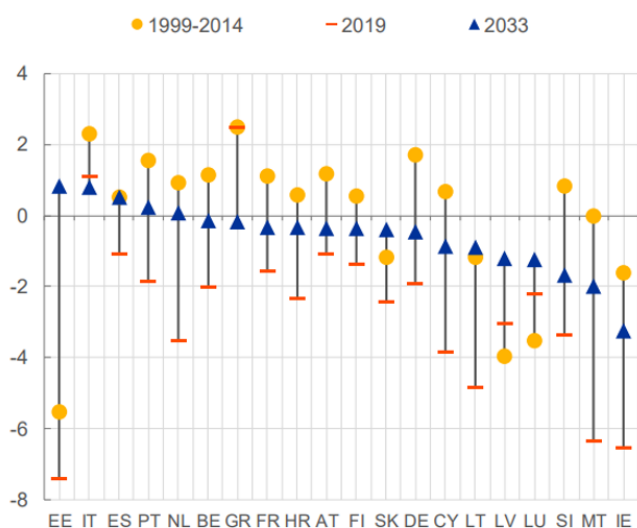
The best protection against fiscal dominance is therefore a future-proof fiscal policy. This is precisely why the European Treaties provide for a fiscal framework that permanently guarantees the central bank’s independence.

The challenges for fiscal policy are likely to increase in future.

As long as the yields on newly issued sovereign bonds surpass the average yields on outstanding debt, the interest burden will increase. For example, a prolonged period of high interest rates will gradually affect the interest-growth differential (r-g), which, in addition to the evolution of government primary balances, determines the development of public debt ratios (Figure 12, left-hand side).<sup>11</sup>

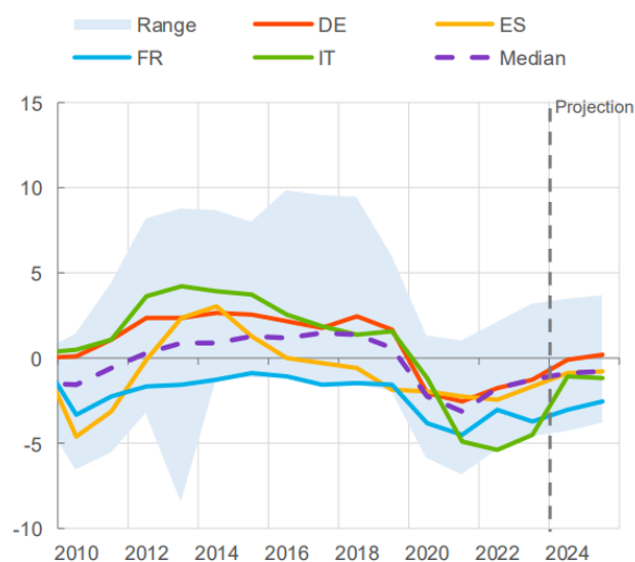
**Figure 12: Low growth, higher yields and primary deficits may weigh on public debt outlook**

**Interest rate-growth differential (r-g)**  
(percentage points)



Source: ECB and ECB staff calculations.  
Notes: Projections are derived from the current yield curve consistent with the 'sound fiscal policy' scenario (baseline of the Eurosystem DSA; based on June 2024 BMPE data). The data is sorted based on 2033.

**Structural primary balance**  
(percent of GDP)



Source: European Commission.  
Notes: Median shows the median of all euro area countries, and the range shows the minimum and maximum of all euro area countries. Figures for 2024 and 2025 refer to the European Commission 2024 Spring forecast.  
Latest observation: 2025.

Whether (r-g) will become a burden in the medium term will largely depend on how fiscal policy will tackle the multiple structural challenges facing our economies.

An ageing society, the need for higher defence spending in view of the changed geopolitical situation, as well as the green and digital transformations require substantial additional public spending.

The huge investment required to meet all of these challenges suggests that the era of very low interest rates is likely to be over, also in the medium to long term.<sup>12</sup>

<sup>11</sup> Blanchard, O. (2019), "Public Debt and Low Interest Rates," *American Economic Review*, Vol. 109, No 4, pp. 1197-1229.

<sup>12</sup> Schnabel, I. (2024), "[R\(ising\) star?](#)", speech at The ECB and its Watchers XXIV Conference session on: Geopolitics and Structural Change: Implications for Real Activity, Inflation and Monetary Policy, 20 March.

This calls for policies that, on the one hand, take advantage of times of favourable cyclical developments to consolidate public finances but, on the other, prioritise necessary investment and structural reforms.

The new European fiscal framework provides for precisely such a balance.

Current projections give cause for concern, however. Structural primary balances in 2024 and 2025 are expected to remain well below pre-pandemic levels, thereby putting upward pressure on government debt (Figure 12, right-hand side). One reason for this is that some government support measures taken during the crisis years were not fully phased out.

The lack of fiscal consolidation, despite high debt levels, may impede monetary policy and heighten the risk of fiscal dominance.<sup>13</sup>

Measures to strengthen long-term growth are equally important.

Europe plays a central role here. It still offers considerable unexploited growth potential. Deeper integration of the internal market for services could boost productivity, as could the urgently needed progress on the banking union and the capital markets union.

NGEU can accompany this process. However, it's not yet certain whether this programme can meet the high expectations. A successful evaluation of the programme is likely to determine whether a follow-up programme is eventually conceivable at European level.

At the same time, structural reforms to improve labour mobility, increase labour market participation, promote lifelong education and exploit the potential of new technologies such as artificial intelligence are essential.

It is precisely in the area of information and communication technology that many firms domiciled in the euro area are lagging behind global developments.<sup>14</sup>

Reforms that increase potential output would not only ease debt reduction but would also reduce inflation pressures in the long run. This is all the more important at a time of looming de-globalisation and climate change, when the European economy is likely to be more exposed to supply-side shocks.

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<sup>13</sup> According to the fiscal theory of the price level, inflation is determined by fiscal policy. See Leeper, E. (1991), "Equilibria under 'active' and 'passive' monetary and fiscal policies", *Journal of Monetary Economics*, Vol. 27, Issue 1, pp. 129-147; Sims, C. (1994), "A Simple Model for Study of the Determination of the Price Level and the Interaction of Monetary and Fiscal Policy," *Economic Theory*, Vol. 4, pp. 381-399; Cochrane, J. (2005), "Money as stock", *Journal of Monetary Economics*, Vol. 52, Issue 3, pp. 501-528; Sargent, T. and Wallace, N. (1981), "Some Unpleasant Monetarist Arithmetic", *Federal Reserve Bank of Minneapolis Quarterly Review*, Fall, pp. 1-17.

<sup>14</sup> Schnabel, I. (2024), "[From laggard to leader? Closing the euro area's technology gap](#)", inaugural lecture of the EMU Lab at the European University Institute, 16 February.

## Conclusion

This brings me to the conclusion that monetary policy was not dominated by fiscal policy in recent years and that monetary policy's ability to act was ensured.

The determined monetary policy response to the sharp increase in inflation and the anchoring of inflation expectations despite inflation rates in double digits show that monetary policy has unwaveringly pursued its objective of price stability and that confidence in monetary policy has successfully been preserved.

The TPI made a decisive contribution by ensuring a smooth transmission and was thus a prerequisite for being able to resolutely tackle the inflation problem. Self-reinforcing interest rate spirals run counter to the objective of price stability. The design of the programme ensures that the disciplining effect of financial markets is not undermined.

In the coming years, a future-proof fiscal policy will be a prerequisite for safeguarding the independence of monetary policy. Fiscal consolidation in line with the new European fiscal rules, while prioritizing investment in the future, is essential to safeguard long-term growth and price stability. ■

The original slides accompanying the speech can be found [here](#).

## About the author

**Isabel Schnabel** is a member of the Executive Board of the European Central Bank (ECB) where she is responsible for Market Operations, Research and Statistics. Before joining the ECB, she was Professor of Financial Economics at the University of Bonn (currently on leave) and spokesperson of the Cluster of Excellence “ECONtribute: Markets & Public Policy”. From 2014 to 2019 she served as a member of the German Council of Economic Experts, and in 2019 she was Co-Chair of the Franco-German Council of Economic Experts.

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