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Rethinking the Policy Mix: Challenges for the Euro Area

Monetary and fiscal policies are traditionally seen as two partially substitutable demand-side policies with different transmission channels, delays, legacies and geographic perimeters. The making of the policy mix designed in the Maastricht Treaty was consistent with the view that the euro area would be mostly affected by demand-side shocks. The legacy of the COVID-19 pandemic includes a significant rise in government debts and central banks' balance sheets. Additionally, the dramatic increase in energy prices in 2021-22 led to supply-side fiscal policies aimed at stabilising prices through price regulation and subsidies for gas storage and energy capacity. Looking forward, climate change will likely involve more frequent supply shocks. This article argues that such shocks require a medium-term view of the policy mix: provided expectations remain anchored, both fiscal and monetary policies should allow time to understand the shock and seek to "look through" it while preserving a sustainable path. It also discusses how the concept of automatic stabilisers may apply to supply shocks.

The traditional policy mix

A combination of demand-side policies

Both monetary and fiscal policies are traditionally considered demand-side policies: when GDP falls below its potential level, a counter-cyclical policy mix involves a loosening of both instruments. Cutting the policy rate, increasing public spending or cutting net taxes will stimulate aggregate demand, thereby bringing GDP closer to its potential level. By the same token, deflationary pressures will be alleviated. These two demand-side policies are of course imperfect substitutes (Tobin, 1989; see Table 1).

Monetary policy affects demand indirectly, via interest rates, whereas fiscal policy may act directly, via public spending, or indirectly, via taxes and transfers that affect households' disposable income.

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Monetary policy decisions can be taken rapidly, but their transmission to the economy is slow, generally taking around 18 months. Conversely, the discretionary part of fiscal policy is subject to a slow legislative process but, once implemented, it can have a fast impact on aggregate demand. In fact, only automatic (fiscal) stabilisers have immediate impact, both because they do not require any decision and because they very quickly affect disposable income (although not entirely immediate, e.g. if households or firms may pay in year N taxes on their income of year N-1).

Monetary policy influences debt accumulation directly through interest rates, and indirectly through its impact on activity and prices. Fiscal policy directly affects the primary balance. Like monetary policy, it also affects the accumulation of government debt through its impact on nominal GDP.

Monetary policy is usually a blunt instrument, affecting the economy as a whole, and more specifically, economic agents with a large balance sheet (e.g. the housing sector), whereas fiscal policy can be more targeted, affecting specific sectors or groups of the population.

In an open economy with a high degree of international capital mobility and with a flexible exchange rate regime, the Mundell-Fleming model teaches us that monetary policy is reinforced by its external transmission channel, whereas the impact of fiscal policy is muted by the ex-

Table 1

Main differences between monetary policy and fiscal policy

Monetary policy	Fiscal policy
Affects demand indirectly	Affects demand directly and indirectly
Quick decision, slow transmission	Long decision (aside automatic stabilisers), fast transmission
Affects government debt directly (interest rate) and indirectly (nominal GDP)	Affects government debt directly (primary balance) and indirectly (nominal GDP)
General instrument	Can be targeted to specific sectors or households
More powerful in a flexible exchange-rate regime	More powerful in a fixed exchange-rate regime or monetary union
Impact depends on expectations of future inflation and policy rates	Impact depends on expectations of future taxes
May be constrained by effective lower bound	May be constrained by state of public finances, fiscal rules or market pressure

Source: Authors' elaboration.

ternal channel (to the extent that the sovereign debt path remains sustainable). By the same token, monetary policy and fiscal policy have opposite effects on the external current account in a flexible exchange rate regime.

Finally, both policies can be constrained. As regards monetary policy, interest rates cannot fall below a slightly negative level. As regards fiscal policy, fiscal rules and market pressure may prevent a government from responding to a negative shock.

The effectiveness of each policy also depends on its credibility (Bartsch et al., 2020).

The impact of a policy rate cut depends on the reaction of longer-term interest rates (the yield curve), hence on expectations about the future monetary stance as well as about fiscal sustainability (that shapes the risk premium).

The impact of a fiscal stimulus on the economy depends on debt sustainability, through the endogenous reaction of private savings (Ricardian equivalence) or of the interest-rate spread (risk premium); it also depends on the ability of monetary policy to keep inflation at a low level in the short run but also in the medium and long run.

Hence, the optimal combination of monetary and fiscal policies depends on their respective characteristics, the risks to their credibility and the possibility to coordinate the two instruments.

The Maastrichtian policy mix

The making of the policy mix of the euro area was designed in the Maastricht Treaty (1992), which later became the Treaty on the Functioning of the European Union (TFEU). After the completion of the disinflation process in the 1980s, the framework was consistent with the view that the euro area would be mostly affected by demand-side shocks. In an influential paper, Bayoumi and Eichengreen (1992) demonstrated that EU countries were more subject to demand shocks than to supply shocks in the 1980s, whereas US regions were subject to demand and supply shocks on more equal footing. Furthermore, in the EU, the correlation of demand shocks across countries seemed to be much lower than the correlation of supply shocks. In brief, euro area countries would be mostly hit by idiosyncratic demand shocks.

National fiscal policies would therefore play a major role in stabilising economies. Within a monetary union, such policies would become more powerful as crowding-out effects through interest rates or exchange rates would be muted. The main issue then was to avoid a deficit bias that could be a deterrent to the credibility of monetary policy, and this is why the Stability and Growth Pact was appended to the Treaty (Eichengreen & Wyplosz, 1998).

The Maastricht framework is summarised in the bottom-left to top-right diagonal in Table 2: monetary policy reacts to symmetric shocks, which affect aggregate demand in the euro area as a whole, aiming to stabilise prices; fiscal policies react to specific (or idiosyncratic) shocks, aiming to stabilise the output gap at the member-state level.

Before the 2021-22 inflation wave, policy actions on the main (top-left to bottom-right) diagonal of Table 2 did not materialise.

In the run-up to the global financial crisis and subsequent euro area sovereign debt crisis, the divergence of inflation rates in some periphery countries remained largely unaddressed. Despite the requirement of economic policy coordination specified in the Treaty (TFEU, Art. 5), the divergence of prices was not taken seriously, overshadowed by the surveillance of fiscal policies. Hence, the bottom-right cell in Table 2 remained empty until the energy crisis erupted in 2021.

During the two decades of very low inflation before the pandemic (2000-19), the European Commission and the European Fiscal Board tried to promote the coordination of fiscal policies in order to steer the overall fiscal stance and thus bolster monetary policy action (top-left cell of

Table 2
The policy mix in the euro area framework

Objectives	Shocks		
	Symmetric		Idiosyncratic
	Output stabilisation	(Aggregate fiscal stance)	National fiscal stance
	Price stabilisation	Monetary policy	Ø

Source: Authors' elaboration.

Table 2). In 2014, Mario Draghi, then President of the European Central Bank, called for fiscal policy to support the efforts of monetary policy to raise the level of aggregate demand and the rate of inflation: "It would be helpful for the overall stance of economic policy if fiscal policy could play a greater role alongside monetary policy" (Draghi, 2014).

However, these appeals went largely unheeded, which is not surprising since each government remains accountable to its national constituency. Maduro et al. (2021), among others, suggest adapting European fiscal rules in case monetary policy is constrained by the effective lower bound, which would circumvent the collective action problem, absent a central fiscal capacity.

The return of supply shocks

The period between the mid-1980s and 2007 is generally referred to as the "Great Moderation" period, characterised by low macroeconomic volatility (see Hakkio, 2013). The causes of the moderation have been widely discussed in the literature: structural changes, good luck or good policy. All three likely contributed, compared to the previous, high inflation period. Globalisation, fewer oil price shocks and central bank independence are major factors that characterised the Great Moderation period, covering the three dimensions of the discussion.

Moving from demand to supply shocks

European monetary unification took place in 1999, after over a decade of moderation. Globalisation was already well advanced, and central banks were independent in all countries joining the euro. Within this new regime, Liepneks et al. (2024) have estimated the contribution of supply and demand shocks to inflation, based on data for 12 euro area countries from 1999Q1 to 2023Q1. They use a very simple vector autoregression with two variables (output growth and inflation) and identify supply

and demand shocks through sign restrictions.¹ They confirm the Great Moderation in euro area countries over the period from 1999Q1 to the global financial crisis (2008Q4). During the period under consideration, inflation was mainly driven by demand shocks up to 2022, except for large declines in energy prices in 2014-15. The period just after Russia's full-scale invasion of Ukraine (2022Q1 to 2023Q1) is marked by a surge in energy and food prices, which explained a large part of the inflation surge.

Supply shocks are a challenge for the policy mix. For example, a rise in energy prices leads to an increase in inflation and a fall in production and consumption. If this type of shock occurs, there is a risk of a conflict between monetary policy and fiscal policy: the central bank would tighten monetary policy to fight inflation, while governments would stimulate the economy to support production.

The energy crisis of 2021-22 provided us with a concrete example of this problem. European governments responded to the rise in energy prices by supporting households' purchasing power and providing aid to businesses (fiscal expansion). At the same time, the ECB raised its policy rates by 4.5 percentage points between July 2022 and September 2023 (monetary tightening).

The impact of this cocktail was initially uncertain, but several studies (Dao et al., 2023; Lemoine et al., 2024) have concluded that fiscal policies in fact contributed to mitigating the inflationary pressure. Energy price caps had both a direct and an indirect negative effect on headline inflation: by limiting the increase in energy prices, they also limited the risk of a price-wage spiral of the type experienced in the 1970s. This supply-side effect seems to have dominated the more traditional inflationary impact of fiscal support to aggregate demand.

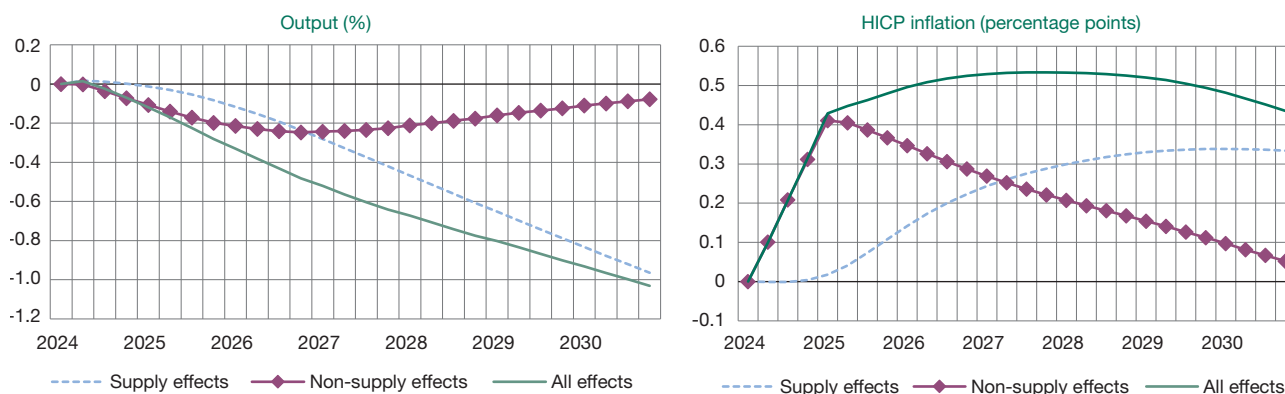
Some model simulations point to significant macroeconomic effects of the discretionary fiscal policy measures over the energy crisis of 2021-22 and subsequent return to normal (2024), compared with a counterfactual scenario in which these measures were not introduced (Angelini et al., 2025). These simulations point to a dampening effect on inflation in 2022, mainly on account of the energy and inflation compensatory measures that helped to smooth the peak impact of the energy shock. However, they reveal an upward impact later on (during 2023-24), notably when

¹ Supply shocks move output and prices in opposite directions, whereas demand shocks move them in the same direction. By construction, all variations in output growth and in inflation are attributed to either supply or demand shocks.

Figure 1

Impact of a gradual increase in the carbon tax in France by €185 per tonne over five years

Supply-side and demand-side effects, constant real interest rate



Note: HICP: harmonised index of consumer prices.

Source: Henriët et al. (2025).

governments started to withdraw the energy price support granted in 2022.

Supply shocks as the “new normal”

Looking forward, the scenarios of the Network for Greening the Financial System (NGFS)² suggest that supply shocks are likely to be major drivers of inflation and output along the process of global warming. For instance, the Disasters and Policy Stagnation short-term scenarios published in May 2025 feature a succession of rare but plausible events: severe dry events in 2026 (droughts, heatwaves and wildfires), followed by severe wet events in 2027 (floods and storms; NGFS, 2025). Monetary policy is supposed to follow a Taylor rule. When these events hit the European region, output falls by 5% the first year, and inflation increases by 0.55 percentage points (see NGFS, 2025).

Extreme weather events are a powerful source of temporary supply shocks (see NGFS, 2026, for case studies). In turn, climate mitigation policies provide a source of permanent demand and supply shocks. For instance, Henriët et al. (2025) study the impact of a linear increase in the carbon tax in France, from €90 per tonne in 2024 to €275 per tonne in 2030, where tax revenues are rebated equally to households and firms. The rest of the euro area is supposed to follow a similar policy and the common monetary policy is neutral (the real interest rate is kept

constant). A general equilibrium model is used to transform the gradual increase in the carbon tax into an aggregate shock on total factor productivity, as well as a shock on the energy mix. These two outcomes of the general equilibrium model are then introduced into a macroeconomic model to simulate the impact of the tax path on key macroeconomic variables.

The result is a simultaneous rise in inflation and fall in output. Demand-side effects (labelled as non-supply effects in Figure 1) are short-lived, whereas supply-side effects (which amount to a succession of negative productivity shocks) are long-lived, raising inflation by 0.4-0.5 percentage points during the transition period (see Figure 1).

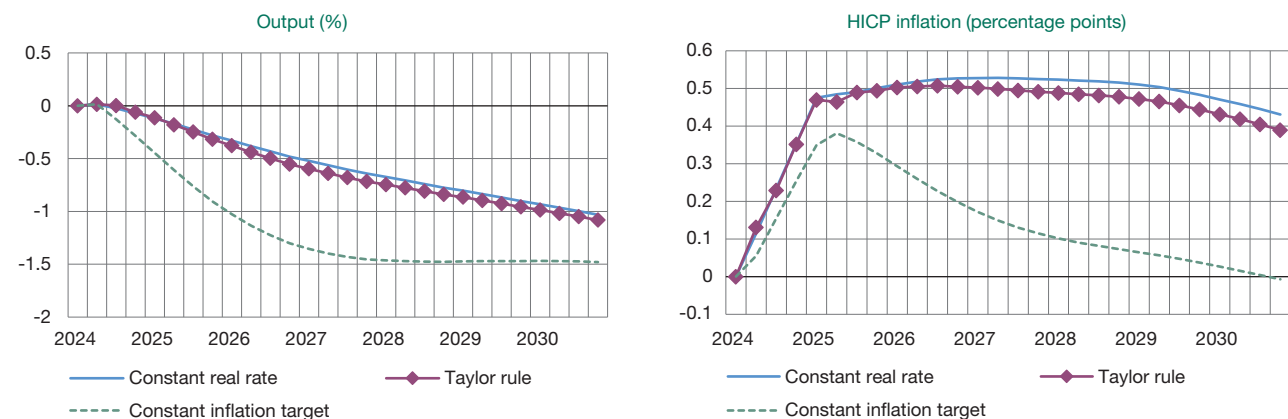
Whether the origin of the inflation surge is supply-side or demand-side, the central bank can always tighten its policy to bring inflation back to target. In the case in which inflation is driven by a positive demand shock, monetary policy will stabilise both output and inflation. Conversely, if inflation is caused by a succession of supply shocks (which is the case in the above simulation), monetary policy tightening will amplify the negative impact of the shock on output.

Figure 2 illustrates this dilemma. The blue line replicates the impact of a gradual increase in the carbon price for output and inflation in France when monetary policy is neutral (see constant real rate line in Figure 2). The line with marks depicts the simulation in which the central bank follows a Taylor rule, which means that it reacts both

² www.ngfs.net/ngfs-scenarios-portal/

Figure 2

Impact of a gradual increase in the carbon tax in France by €185/tonne over five years for different monetary policy rules



Note: HICP: harmonised index of consumer prices. "Constant inflation target" refers to a case in which monetary policy is set such as to bring inflation back to target in the medium term.

Source: Henriët et al. (2025).

to inflation deviations and to the output gap. The results are close to the ones with a constant real rate, illustrating the dilemma of the central bank (the two objectives are contradictory). Finally, the dotted line depicts the reaction of output and inflation to the carbon tax path when the central bank has a single, price stability objective (constant inflation target). Inflation rapidly comes back to its baseline level, albeit with a significant cost to the real economy.

In the next section, we discuss how monetary policy can adapt to a world where supply shocks become prominent.

Reinventing the policy mix

The return of supply shocks comes at a moment when most European governments have accumulated a large amount of debt over the pandemic and the subsequent inflation crisis and have turned to fiscal adjustment. Therefore, the fiscal leg of the policy mix is likely to be highly constrained in the coming years.

Fiscal policy as an insurance

Given the lack of fiscal space, governments may want to rely more on households' savings to smooth the impact of supply or demand shocks. These savings have accumulated since the pandemic (see Figure 3), providing some room for consumption smoothing: in case of a negative shock to their purchasing power, households can draw on

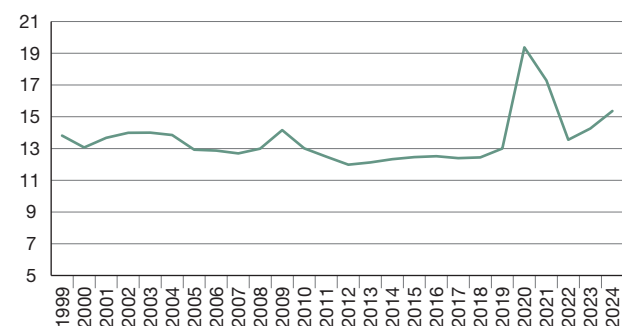
their savings to maintain their level of consumption. Governments may then concentrate their interventions on the most vulnerable households, who are generally financially constrained and hence have a high marginal propensity to consume. Governments may even impose temporary tax surcharges to the most well off in order to finance such means tested support.

Several studies highlight the effectiveness of targeted transfers to low-income households. In the case of the US, Baker et al. (2020) analyse the directed large cash

Figure 3

Savings rate in the euro area, 1999-2024

% of disposable income



Source: Eurostat.

payments to households during the first phase of the COVID-19 crisis. They show that households with lower incomes, greater income drops and lower levels of liquidity display stronger responses of private spending, highlighting the importance of targeted measures. Based on individual household's bank account details, Fize et al. (2021) show that targeted transfers (here, a back-to-school allowance) do help to alleviate the budget constraint of vulnerable households: beneficiaries show a relatively high marginal propensity to consume the one-off transfer.

In contrast, broad transfers to households during a crisis may not be an efficient way of stabilising aggregate demand, since heightened uncertainty may prevent them from spending.

However, the political economy, or the size of the shock, may require a more extensive protection of households and firms. Blanchard (2025) suggests enhancing automatic stabilisers by activating quasi-automatic stabilisers, i.e. fiscal parameters (e.g. the VAT rate) that are automatically triggered by a macroeconomic variable (e.g. a threshold of unemployment rate). Unlike discretionary fiscal policy, well-designed automatic stabilisers are neutral over the cycle, hence they comply with the inter-temporal fiscal constraint. Such "quasi-automatic" transfers may be obtained through counter-cyclical unemployment benefits, as is the case in the United States and, since 2023, in France: the maximum length of unemployment compensation is extended during a downturn and shortened during a recovery. Changes in tax rates over the cycle are more difficult to implement in practice. The temptation may be to let tax rates fall automatically during a crisis but discontinue the rule when the economy recovers.

However, as highlighted by Blanchard, the stabilisation properties of such quasi-automatic stabilisers rely on the demand-side nature of the shocks. In case of a negative productivity shock, for instance, output may decrease while the output gap increases (effective output declines less than potential output). An automatic stabiliser based on output (or on the unemployment rate) may in fact widen the output gap by supporting aggregate demand instead of potential output.

Can the quasi-automatic stabiliser concept be transposed to address supply shocks? The natural catastrophe insurance scheme in France suggests it is possible. In case of an extreme weather event, households and companies are covered by a public-private partnership whereby a public scheme reinsures private insurers. The negative supply shock resulting from the destruction of

offices, factories, shops or inventories is mitigated by the insurance that provides resources to rebuild supply capacities.³

Another example of supply-side, quasi-automatic stabilisation schemes concerns energy markets where contracts for difference (CfDs) have been proposed as a way to mitigate the volatility of energy prices in the case of large supply shocks.⁴ For energy producers, CfDs provide a predictable income stream by guaranteeing a fixed strike price: if the market price is below the strike price, the producer receives a top-up payment from the government; if the market price is above another threshold, they pay back the difference. Such a scheme provides a partial insurance to the supply side of the market in case the price falls below a certain threshold. Absent derivative markets for long horizons, it is conducive to lower risk, hence higher investment. This will lead to more production capacity that will secure energy provision in case of a negative supply shock in the future.

In brief, the stabilisation objective of fiscal policy can be reframed as a macroeconomic insurance objective. As an insurer, the government should make sure that it can recoup the cost of the damages through receiving premia in normal times and adjusting their levels depending on past and expected damage costs. Such intertemporal neutrality can only be achieved through an automatic scheme, but it involves relatively high fees or tax pressure in normal times.⁵ Stabilisation has a cost which is made more transparent through explicit, quasi-automatic stabilisers.

Adapting monetary policy

According to the academic literature (e.g. Dupraz & Marx, 2023), the optimal response to a temporary shock in commodity prices is to "look through", hence to refrain from reacting forcefully, provided inflation expectations remain "anchored". However, short-term deviations in the inflation rate may have lasting effects that undermine this general principle.

First, the pass-through of input prices is often asymmetric, particularly in the food sector: cost increases are

³ See EIOPA & ECB (2024) joint paper.

⁴ CfD was introduced in the UK in October 2014 for the electricity market. The European Union reformed its wholesale electricity market in 2023-24 to curb extreme price volatility, reduce reliance on natural gas and accelerate the energy transition. A central feature of the reform is the use of two-way CfDs for new, and potentially some existing, low-carbon generation.

⁵ In France, for instance, the compulsory natural catastrophe surcharge on private housing insurance was raised from 12% to 20% as of January 2025.

passed on more quickly and more significantly to prices than cost cuts, which can lead to persistent inflation.

Second, sudden price adjustments, particularly in the energy and food sectors, can cause inflation expectations to become de-anchored. As households and businesses pay greater attention to these visible price changes, they could raise their expectations of inflation in the longer term, which could prove to be a self-fulfilling prophecy.

Third, firms' forecasting errors resulting from these shocks can lead to a misallocation of economic resources and therefore, ultimately, to a weakening of potential growth, which can reinforce inflationary pressures. A study by Ropele et al. (2024) focusing on Italy highlighted this phenomenon during the 2021-22 inflationary episode.

Given these challenges, Reichlin and Zettelmeyer (2024) suggest that central banks should accept a longer stabilisation period for supply shocks than for demand shocks. This approach would allow monetary policy to adapt with greater flexibility to different types of economic shock while maintaining its price stability objective over the medium term.

However, not all supply shocks are equal: the inflationary impact of a supply shock is less if it affects a downstream sector (like tourism), a sector with close substitutes (like wine), or a sector where prices are flexible upwards but also downwards (like unprocessed food); if the shock comes from abroad (like an oil price shock) because of the loss in terms of trade weighs on aggregate demand; or if it can be easily predicted (like an increase in the carbon tax). Hence, the reaction to supply shocks will need careful calibration on a case-by-case basis.

Amplified fiscal-monetary interactions

The combination of supply shocks and high government debt tends to amplify the interaction between monetary policy and fiscal policy when the central bank has a price stability mandate. For instance, a negative supply shock lowers GDP and increases inflation. To stabilise inflation, the central bank raises its policy rate. Except in the very short term where higher inflation may result in a lower debt in real terms, the debt-to-GDP ratio increases. If the government wants to stabilise the debt ratio, it has to cut public expenditures or increase taxation. Such fiscal adjustment should normally reduce inflation, hence contribute to disinflation. However, if it is carried out by increasing consumption taxes (e.g. the VAT), inflation may rather increase, leading to another round of monetary tightening.

Of course, it all depends on whether the shock is temporary or permanent. If it is expected to be temporary, and if inflation expectations are well anchored, the central bank may choose to "look through" (see above). In that case, the interest rate would not rise. However, the debt ratio would still increase after an initial erosion due to inflation. If it has some fiscal space, the government may let the debt ratio increase temporarily. Depending on how the interest rate on government debt reacts to such slippage, the debt path may enter a destabilising spiral where $r - g$ (the gap between the implicit interest rate and the GDP growth rate) lies well above zero. In this case, the credibility of monetary policy could be damaged, and long-term interest rates would increase further.

An interesting case is that of a gradual increase in the carbon tax, where tax revenues are rebated to the households. In this case, the negative, permanent supply shock does not induce a loss in households' purchasing power and the debt ratio is not much affected. The rise in inflation in the short term may even result in a temporary fall in the debt ratio. To the extent that the debt maturity is relatively long, the government may have the impression of a relaxation of the fiscal constraint and distribute this additional gain, amplifying inflation and the subsequent increase in interest rates. In the medium run, the government is squeezed between higher interest payments and a fall in GDP due to the negative supply shock.

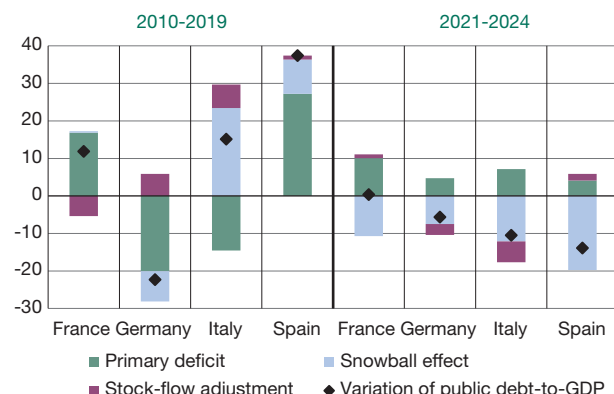
One takeaway is that, in the presence of a supply shock, both central banks and governments should adopt a medium-term perspective, primarily for two reasons:

First, the shock may be temporary. If inflation expectations remain anchored, this justifies "looking through" by both monetary and fiscal authorities. In the euro area, large, accumulated savings suggest a significant consumption smoothing capacity. Additionally, automatic stabilisers are relatively large in the euro area, and they may be enhanced by quasi-automatic stabilisers. Hence, fiscal authorities could concentrate on protecting the most vulnerable households and firms from the shock.

Second, the short-term evolution of the debt ratio could be misleading. Depending on average debt maturity and indexation of public expenditures, a surge in inflation could reduce the debt-to-GDP ratio in the short term. This was the case in the recent years following the inflation surge: debt-to-GDP ratio decreased in several European countries between 2022 and 2024 due to the inflation surprise that temporarily reduced the snowball effect (see Figure 4). Additionally, the imperfect indexation of government expenditures and tax brackets limited the increase

Figure 4
Contributions to the variation of public debt-to-GDP ratio

% of GDP



Source: European Commission, AMECO database.

in primary deficits during this period.⁶ However, windfall gain is expected to be short-lived due to the subsequent increase in interest payments and rise in primary expenditure, which will tighten the fiscal constraint eventually. Hence, the fiscal space in the short term is an illusion and should not be used.

In the case of a demand shock, the main problem of the policy mix is to react fast enough to stabilise the economy, given implementation and transmission delays. A delayed reaction can easily translate into a pro-cyclical policy. In the case of a supply shock, the main problem is rather to evaluate the ability to “look through” without de-anchoring inflation expectations and while protecting the most vulnerable. Opposite strategies are warranted depending on the nature of the shock.

Conclusions

The policy mix has traditionally been understood as a combination of demand-side policies designed to smooth output and inflation cycles when the economy is hit by demand shocks. The various supply shocks and the experience of policy constraints (lack of fiscal space, zero lower bound) that have hit advanced economies since the pandemic have called for an overhaul of the concept.

The policy mix should embrace a more medium-term perspective, with strong commitments backed by more automaticity of fiscal policies, allowing for better predictability and enhanced ability for monetary policy to “look through” according to the type of shocks. Such an overhaul is especially urgent in the euro area, which is still vulnerable to fossil fuel and key commodity price fluctuations, while having built its macroeconomic policy framework at a time when demand shocks were dominant.

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⁶ This is in contrast to the 2010-19 sub-period, during which the debt-to-GDP increase was pushed upwards by an unfavourable snowball effect in some countries (see Italy and, to a lesser extent, Spain).