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25 YEARS OF MONETARY UNION: THE EUROZONE THROUGH ITS CRISES

Elliot Aurissergues, Christophe Blot, Edgar Carpentier-Charléty, Magali Dauvin, François Geerolf,
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Summary

The eurozone has gone through a series of crises that have sometimes threatened its survival, but these have also led to reforms in its fiscal governance and to changes in how it conducts monetary policy. On the eve of the European elections, 25 years after its creation, the question arises of how well the eurozone's economy has performed in comparison with the US economy. While the trajectories of their GDP per capita were relatively similar between 1999 and 2008, since then they have diverged markedly.

We look at the possible causes of this growing gap, distinguishing between supply and demand factors.

- On the supply side, the eurozone's productivity has grown much less than in the United States over the period as a whole. In contrast, while the employment rate of the working-age population has stagnated in the United States, it has improved significantly in European countries, although there continue to be disparities within the continent. More recently, the divergence has been due to the impact of the energy crisis and the steeper rise in energy prices in Europe as a result of the drop in the supply of Russian natural gas following the outbreak of the Ukraine war.
- On the demand side, it has to be said that there is a very real deficit in aggregate demand in the eurozone. Saving has clearly outstripped investment since 2010, fuelling global trade imbalances. One reason for this extra saving is a more restrictive fiscal policy in Europe than in the United States.

The aggregate under-performance of the eurozone as a whole has gone together with very heterogeneous trajectories within the zone. For the period as a whole, the "northern" countries have grown faster than France and the "southern" countries, although some countries, notably Italy, have recently closed part of the gap.

The challenge over the years ahead will be to handle fiscal consolidation and its impact on activity.

- It is imperative not to repeat the mistake of 2011-2014. Fiscal consolidation may be appropriate during a period of economic recovery, but it is pernicious or at least ineffective when the economy is sluggish; if it proves necessary during a period of economic weakness, it will harm activity less if it is gradual, smoothed out and not synchronized across the eurozone.
- Furthermore, the priority on this side of the Atlantic cannot solely be to restore public finances, when this risks further widening the economic gap with the United States: given the new global and geostrategic challenges, Europe must finance its security, the ecological transition and new green industries. An ambitious European recovery plan should use its structural saving surplus to target both supply and demand, so as to make it possible to meet these challenges and put pressure on the economies, thereby stimulating growth and productivity. Higher potential growth is crucial to ensure the long-term sustainability of the public debt.

The eurozone has experienced numerous crises since it was created twenty-five years ago: the bursting of the Internet bubble at the start of the 2000s, the 2008-2009 global financial crisis, the sovereign debt crisis in 2011-2013, the Covid pandemic in 2020-2021, and more recently, the energy crisis.

These crises have had an impact on the eurozone's growth and at times even threatened its very survival. They have also led to changes in economic governance. This situation is not unique to the countries of the European Monetary Union, which is why it may be informative to analyse the eurozone's economic performance in the light of the performance of another monetary union of comparable size and level of economic development: the United States. This comparison looks first at the dynamics of GDP per capita and then seeks to analyse the role of supply and demand factors in growth trends. Moreover, since, unlike the United States, the eurozone is a monetary union without a fiscal union, the issue of the heterogeneity of national economic dynamics is significant.¹ The analysis cannot therefore be restricted to aggregate growth, but also needs to shed light on the centrifugal and centripetal forces characterising the eurozone. This Policy Brief does not claim to be exhaustive and focuses on the macroeconomic dimension to establish a narrative of economic performance over the last 25 years. We draw lessons from this to inform the public debate about the challenges facing the eurozone in the aftermath of Covid and the energy crisis. While environmental and social issues are clearly important, they will not be dealt with here beyond their links to certain aspects of the labour market.² Likewise, although we highlight certain areas of divergence, we cannot claim to have a detailed understanding of the situation in each eurozone country.

1.

The US States are also heterogeneous, but the point here is to shed light on the European debate. Furthermore, in the United States, the Union is both budgetary and political, which leads to more substantial and more systematic mechanisms for transfers between States.

2.

The environmental issues are examined in a forthcoming Policy Brief.

3.

The analysis here complements the approach of [Bock et al. \(2024\)](#). Starting from the same observation that Europe is falling behind, the authors focus on each country's productive fabric, divergences in investment rates by type of asset and their potential impact on productivity gains.

4.

See [Fuest et al. \(2024\)](#), [Letta \(2024\)](#) and [Villeroy de Galhau \(2024\)](#).

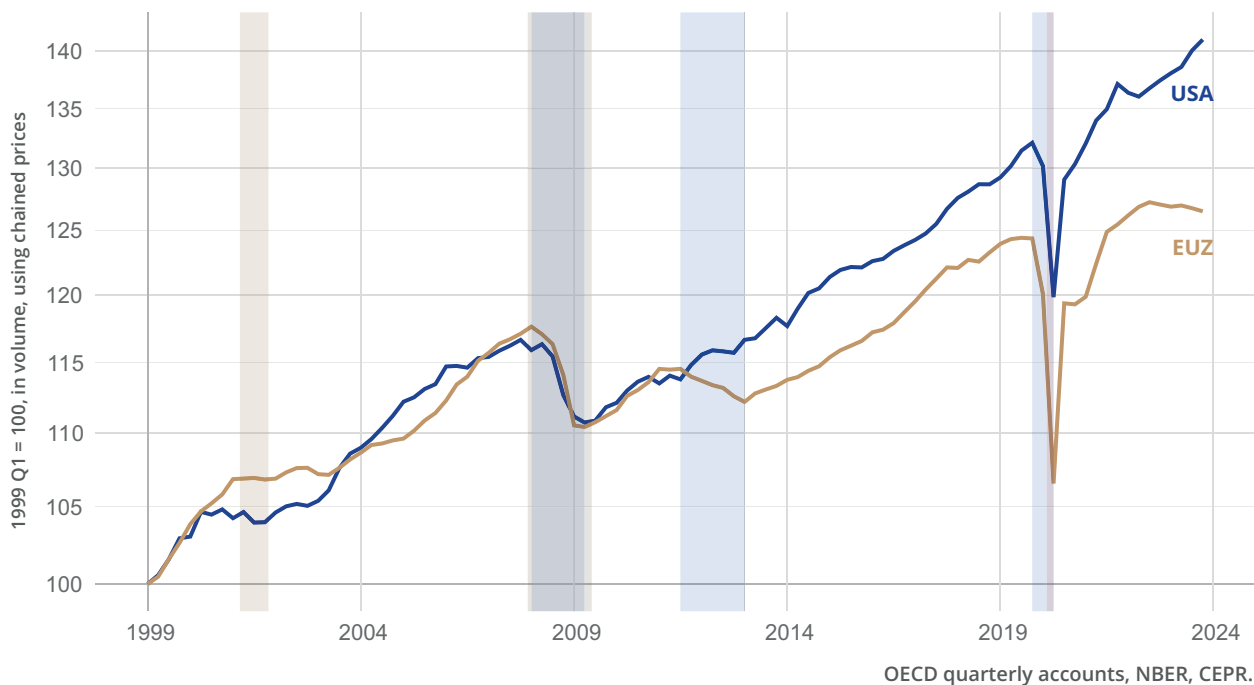
How has the eurozone economy performed since 1999? Has it done better or worse than the US economy in terms of growth and employment? What is the respective role of supply and demand factors in the differentials in economic growth?³ While GDP per capita trajectories were relatively similar between 1999 and 2008 on both sides of the Atlantic, they now seem to be diverging, with the eurozone experiencing phases of recession or slowdown that are relatively longer and more intense than in the United States.

Notwithstanding all this, analysis of the eurozone's labour market over the long term shows a significant improvement in its employment rate, which is making a positive contribution to economic growth. This raises the question of whether Europe's slower growth is in some sense inevitable, bound up with the determinants of potential growth, or whether this situation is the result of ill-conceived economic policy choices. Examining our macroeconomic history over the last twenty-five years should certainly provide some clues and complement other studies on the subject.⁴

1. Less growth in the eurozone with diverse performances between countries

GDP per capita is the primary indicator that economists use to assess a country's economic performance. In this respect, the current state of eurozone growth suggests that the situation is deteriorating relative to the United States. But is this a recent development, or has the eurozone long been falling behind the US? And since when? And how large is the gap? The answer to the first question is yes, but it is more difficult to assess the extent of the gap precisely, as it varies depending on how it is measured. To avoid these methodological issues, we choose the national accounts measures in volume with base 100 for the first quarter of 1999; these are available for each of the countries and already indicate some decline in the standard of living in the eurozone (Figure 1).

Figure 1. GDP per capita in the United States and the eurozone

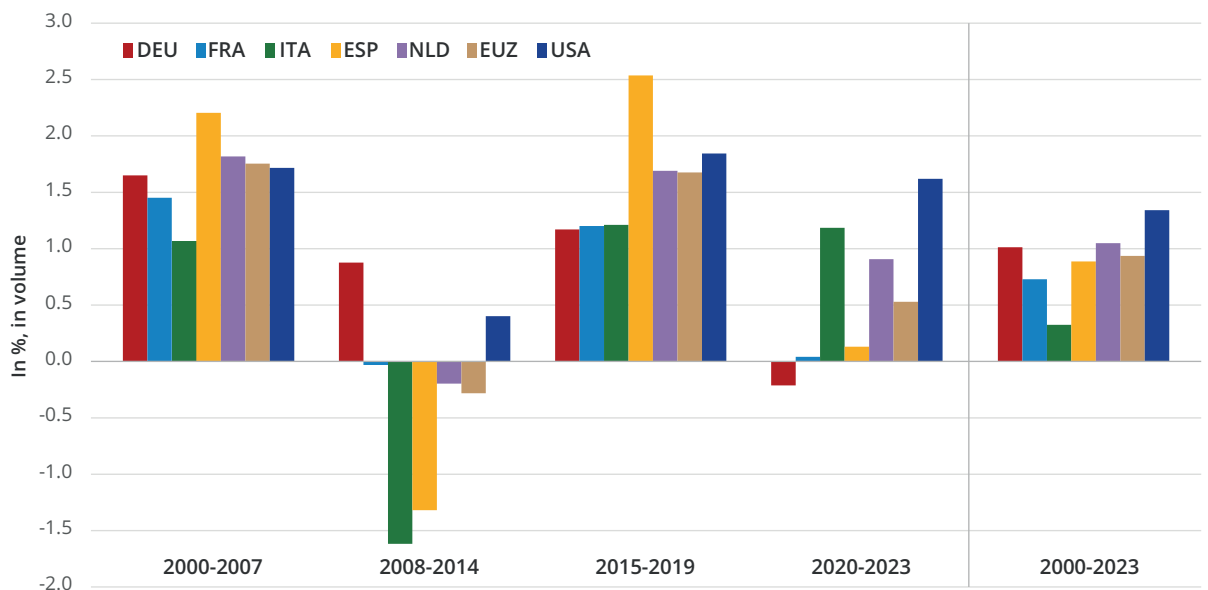


Note: The red (resp. blue) periods represent US (resp. European) recessions as defined by the NBER (resp. CEPR).

As can be seen in Figure 2, from the creation of the euro in 1999 until 2023, the eurozone has recorded average annual real GDP per capita growth of 0.9%, a lower rate than for the United States (1.3%). However, the 0.4 point differential is not uniform over the entire period. Between 1999 and 2007, GDP per capita followed relatively parallel trajectories, with the eurozone even growing at a slightly higher rate than the United States: 1.8% per capita compared with 1.7%. However, the US economy has shown a much greater capacity to bounce back from the shocks that have hit the global economy since then. The eurozone economy first began to fall behind in 2010-2013, during the sovereign debt crisis in the eurozone, when the Member States focused on reducing their budget deficits.

In the eurozone, GDP per capita fell by an annual average of 0.3% during the financial and sovereign debt crisis (2008-2014), while it continued to rise in the US. The United States and the eurozone then followed a relatively parallel path until 2019, indicating that the gap created earlier was not closing. The gap seems to have been widening again since Covid hit, with GDP per capita growth in the eurozone expected to be 0.5% per year over the period 2020-2023, marked by the pandemic and the energy crisis, versus 1.6% in the United States.

Figure 2. Average annual growth rate of GDP per capita between 1999 and 2023



OECD, authors' calculations.

The trajectory of GDP per capita in the eurozone nevertheless conceals major disparities between its members. Of the major countries, Germany and the Netherlands fared best over the period as a whole (1.0%), ahead of Spain (0.9%), France (0.7%)⁵ and above all Italy (0.3%). But the dynamics vary according to the sub-period. Germany, for example, enjoyed relatively strong growth over the period 2008-2014, enabling it to post average per capita growth equivalent to that of the United States over the period 1999-2019. Its economy has stagnated since the pandemic arose in 2020, and it has been hit particularly hard by the energy shock. Italy is the exception, with GDP per capita falling over the 2008-2019 period, but since the Covid crisis it has seen the strongest rise of any major eurozone country. Spain has experienced very pronounced economic cycles, but its economy has rebounded sharply from the plunge of 2008-2014. France, whose GDP per capita was relatively close to the eurozone average between 1999 and 2014, seems to have stalled since that time. France and Germany have had the worst performance in terms of per capita GDP growth over the period 2015-2023. Finally, the Netherlands' average GDP per capita growth over the various periods has been close to the eurozone average, with the exception of the last four years when, along with Italy, it has weathered the two successive crises better than its European partners.

5.

The publication on 31 May 2024 of the new 2020-based national accounts modifies GDP growth over the period 2020-2023. The change in GDP per capita is 0.3% rather than 0.0% over this period, bringing France closer to the eurozone average. Over the long term (1999-2023), France's GDP per capita now increases by 0.8%, compared with the 0.7% previously indicated and used in our calculations.

2. Behind the growing gap: Supply factors

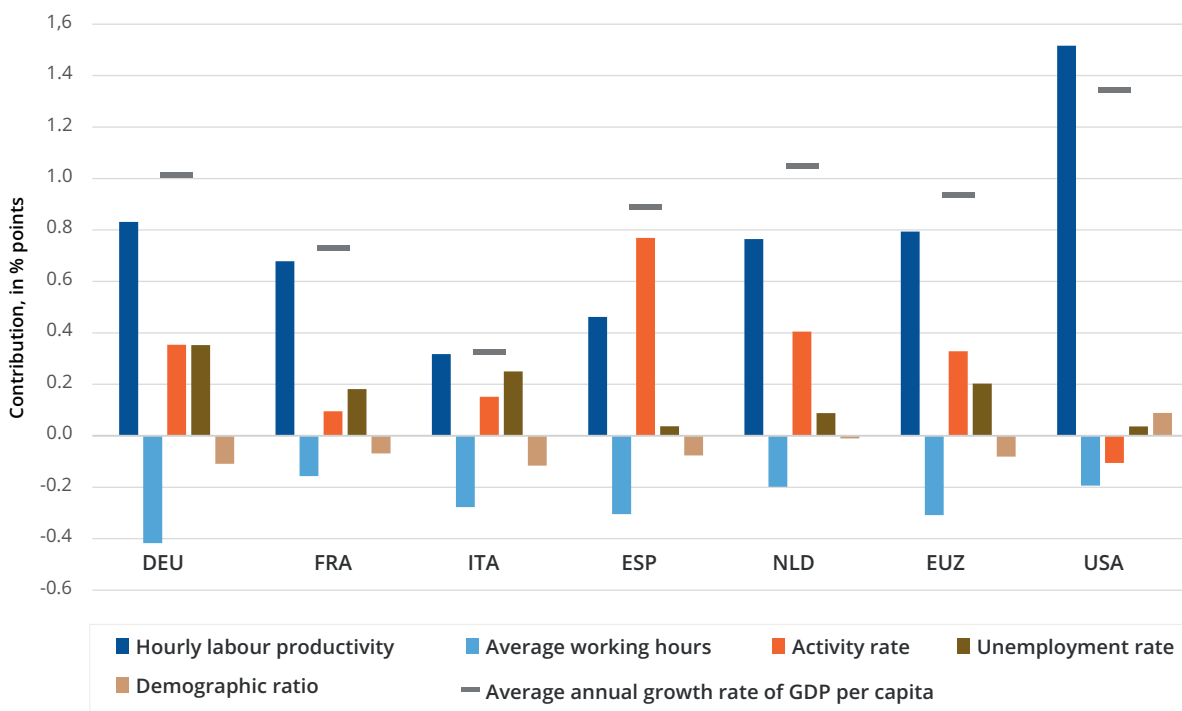
Breaking down per capita growth to understand the reasons for the gap

Using OECD data for the period 1999-2023, it is possible to refine the analysis of the changing gap on the basis of an accounting breakdown of per capita growth for each of the countries studied.⁶ This decomposition enables us to identify the role of various factors in the growth of GDP per capita: hourly labour productivity, average working hours, the activity rate of the working-age population (15-74), the unemployment rate and the demographic ratio corresponding to the share of people of working age in the total population. On the basis of this accounting decomposition, we can see that gains in hourly labour productivity are the primary factor in the growth of GDP per capita. Over the period 1999-2023, per capita growth in the United States was driven by strong gains in hourly productivity and, to a lesser extent, by demographics. The pattern is very different in the eurozone, where hourly productivity gains have contributed half as much to growth as in the US (0.8% versus 1.5%) and have fallen off sharply since the start of the Covid crisis. Within the eurozone, Germany, the Netherlands and France are faring better than Italy and Spain, where weak growth is clearly linked to modest productivity gains. Hourly productivity contributed 0.3% to growth in Italy and 0.5% in Spain, compared with 0.8% in Germany and the Netherlands, and 0.7% in France (Figure 3).

6.

The breakdown proposed here does not cover the same period (1999-2019) as do Bock *et al.* (2024), who set out to analyse the interactions between the decomposition of per capita growth and the structure of the productive fabric as well as the composition and nature of investment by country from the creation of the euro to the period preceding the outbreak of the Covid crisis.

Figure 3. Breakdown of average annual growth of GDP per capita between 1999 and 2023



OECD, authors' calculations.

The eurozone countries are partially offsetting the lack of growth in productivity relative to the US by raising their labour force participation rates and cutting their unemployment rates. This is particularly clear in Spain, Germany and the Netherlands, but it is still not enough to compensate for the weakness of hourly productivity gains over the period compared with the United States. Among the main eurozone countries, France has benefited from gains in per capita productivity close to those of Germany (after correcting for the smaller fall in working hours) and from more favourable demographics than its partners. On the other hand, France's labour market has not improved as much since 1999 as have the other major eurozone countries, both in terms of the rise in the participation rate and the fall in the unemployment rate. Per capita GDP in France has thus risen by an average of 0.3 point per year, compared with 0.8 point in Germany and Spain, 0.5 point in the Netherlands and 0.4 point in Italy.

This initial analysis of supply factors therefore shows that the difference in per capita GDP growth between the eurozone and the United States mainly reflects differences in productivity. Over and above the average for the period as a whole, it is also important to analyse trends in unemployment and employment in order to examine in greater detail the differences between the eurozone and the United States, and also to see whether the European economies have tended to converge.

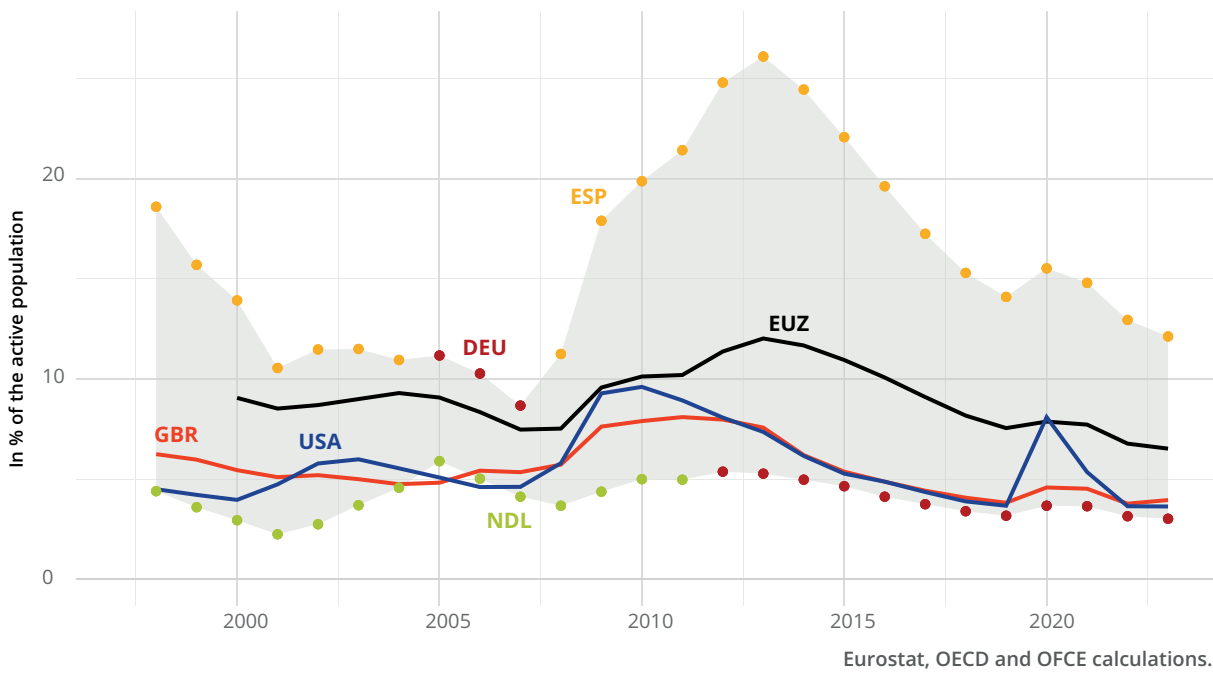
Are labour markets tending to converge?

On the eve of creation of the eurozone, ILO unemployment rates in the five largest eurozone economies ranged from 4.4% to 18.6% of the working population (Figure 4). Today, these rates are generally lower, at between 3% and 12%. The bursting of the dotcom bubble in 2000 led to higher unemployment rates in Europe, but the disparities narrowed until 2007, with the maximum gap between the five major European economies then only 4.5 points. At that point, Germany had the highest unemployment rate (in 2005 and 2007). After 2007, Spain's unemployment rate soared to 26.1% of the working population in 2013, as a result of the side-effects of the subprime crisis and the European debt crisis.

The gap in the unemployment rate between the eurozone and the United States has remained relatively stable over time, mainly due to differences in the way the labour markets operate. During periods of crisis, the greater flexibility in the United States leads to a sharper rise in its unemployment rate than in the eurozone. However, while the European sovereign debt crisis widened divergences in unemployment rates within the eurozone, the Covid-19 crisis had a more measured effect, due to the implementation of similar policies on short-time working. While the US unemployment rate rose by 4.2 points over one year in 2020, the eurozone rate increased by only 0.3 point on average that year.

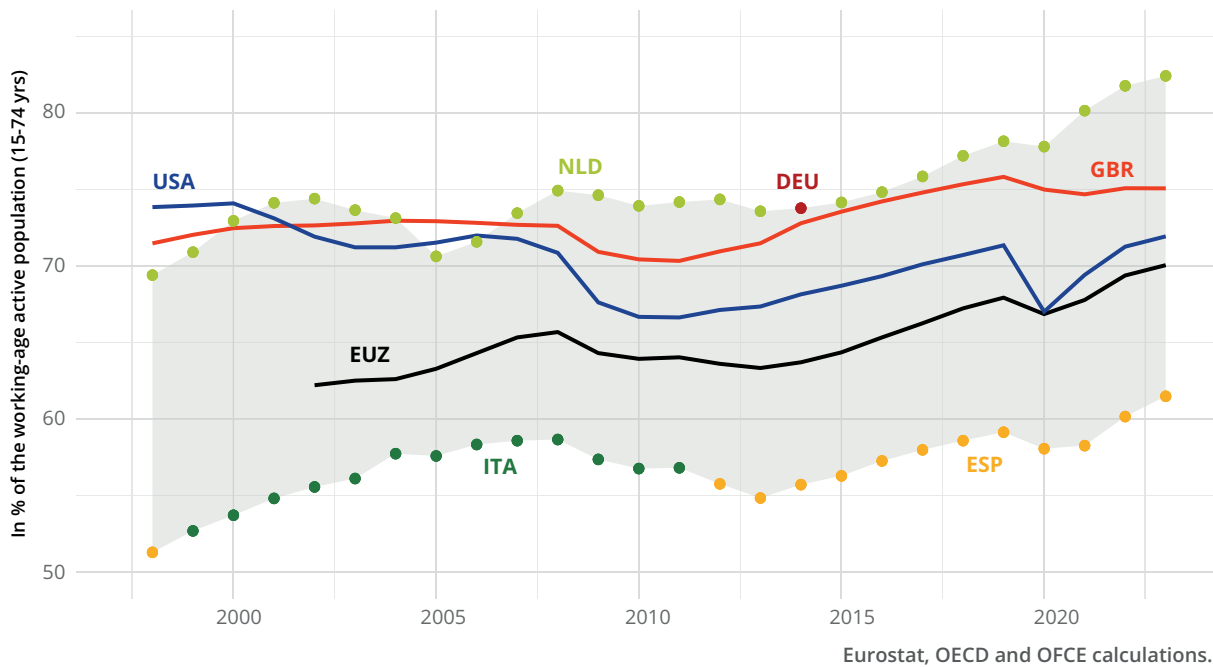
Trends in the unemployment rate are closely linked to trends in the employment rate. Overall, over the last 25 years, we have seen an upward trend in employment rates in most European countries (Figure 5). The rate has risen by an average of 8 points in the eurozone since the creation of the single currency, while it has fallen by 2 points in the United States. This narrowing of the gap between the two regions is partly because employment in the United States was less resilient during the crises, particularly in 2008. It took almost a decade for the US employment rate to return to its pre-crisis level.

Figure 4. Unemployment rate in Europe and the United States



Note: The shaded area shows the range of unemployment rates for the five largest economies in the eurozone. Of these, Germany had the highest unemployment rate in 2005, and the Netherlands the lowest.

Figure 5. Employment rate in Europe and the United States



Note: The shaded area shows the range of employment rates for the 15-74 age group in the five largest economies in the eurozone. Of these, the Netherlands had the highest employment rate in 2005, and Italy the lowest.

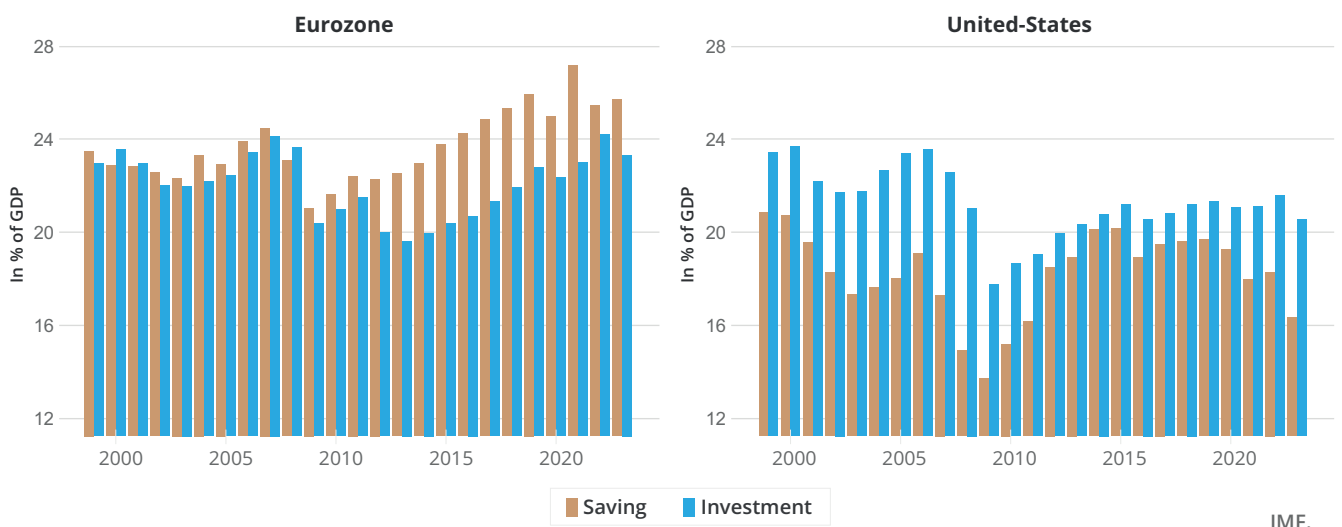
These variations in employment rates reflect the specific economic features and employment policies of each European country. It is essential to continue monitoring these indicators in order to understand the dynamics of the labour market in Europe. In the United States, the labour market remains more flexible and adjusts more quickly both upwards and downwards during and after a crisis. Note, however, that although productivity growth has been more dynamic on the other side of the Atlantic, the employment rate has fallen in line with the fall in the labour market participation rate

3. Behind the growing gap: Demand factors

The role of saving behaviour...

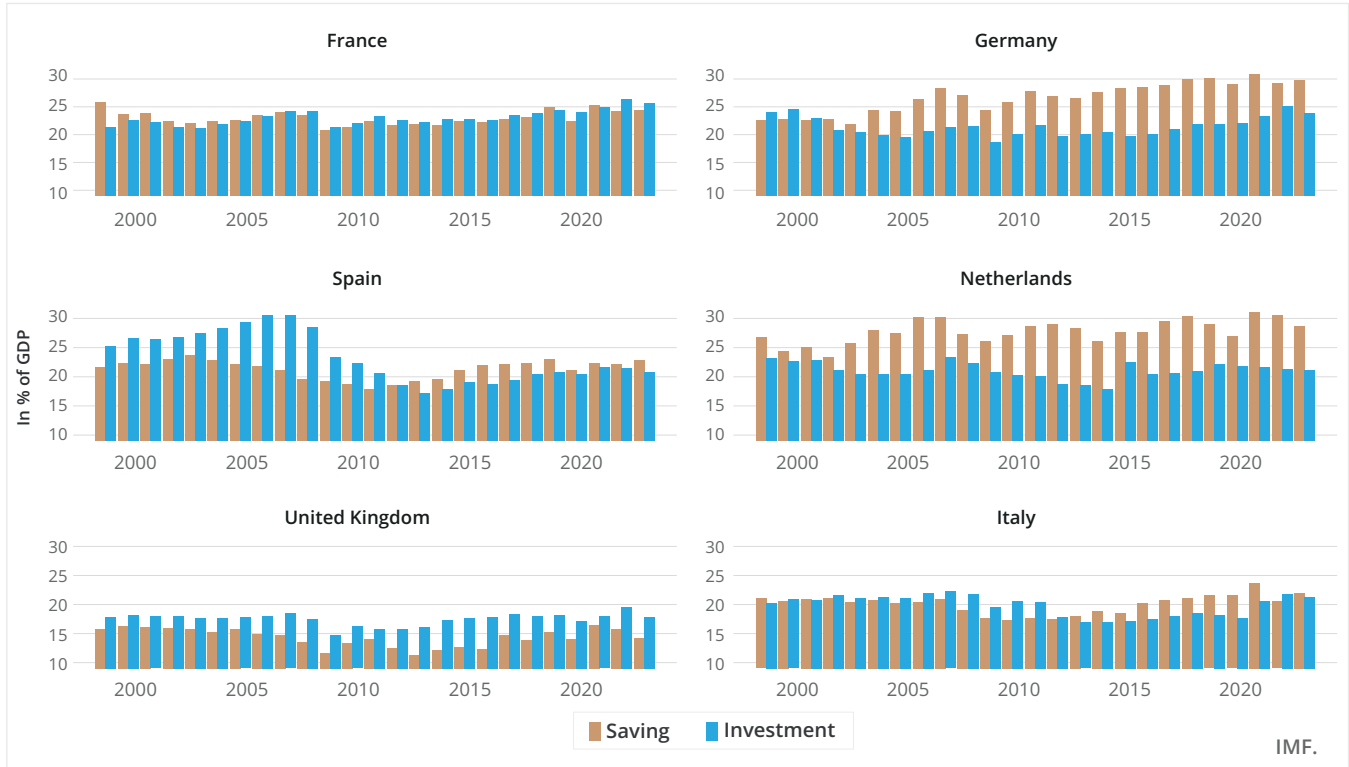
Could Europe's lag be due to a deficit in aggregate demand? The idea that such a deficit could have a medium or even long-term impact on the level of GDP remains highly controversial and goes well beyond the scope of this Policy Brief. However, it has to be said that the aggregate demand deficit in the eurozone is very real. While the investment rate in 2023 was returning to a level close to that observed in 1999, the saving rate for all institutional sectors in the eurozone has risen sharply, from 23% to while the Federal Reserve 26% of GDP. In 2023, it was 9 points above the US rate. The difference in 1999 was only 2 points, with the US saving rate falling from 21% to 17% in 25 years (Figure 6). A corollary of the combination of a rising saving rate and less dynamic income is that per capita consumption is growing much more slowly in the eurozone (around 22% between 1999 and 2023) than in the US (45% over the same period). The eurozone's high saving rate is not justified by a greater need for investment. Since 2010, the saving rate has been significantly higher than the investment rate, suggesting that the eurozone is living "below its means".

Figure 6. Saving rate and investment rate in the eurozone and the United States



Within the eurozone, Germany and the Netherlands have exceptionally high saving rates, of around 30% of GDP, while France, Spain and Italy have rates of between 20% and 25% of GDP (Figure 7).

Figure 7. Saving rate and investment rate in the large European countries



... which results in external and internal imbalances for the eurozone

When saving exceeds investment, the counterpart is a current account surplus. The eurozone's current account has changed significantly since the introduction of the single currency in 1999. The eurozone as a whole generated modest trade surpluses in the 2000s, which fluctuated in line with changes in energy prices in particular. The sovereign debt crisis triggered a major change. From 2010-2011, and for the decade as a whole, the surplus grew larger and now appears to be structural. It reached 0.5 point of world GDP in 2014 and remained above this level until 2018. Over this period, the order of magnitude is similar to that of the US trade deficit and greater than China's surplus (excluding Hong Kong). Only the energy crisis of 2022 brought the eurozone's trade balance back to near balance. However, the year 2023 suggests that this situation was only short-lived, with the near balance giving way once again to a significant surplus (Figure 8).

Figure 8. Trade and income balances in the eurozone, the United States and China

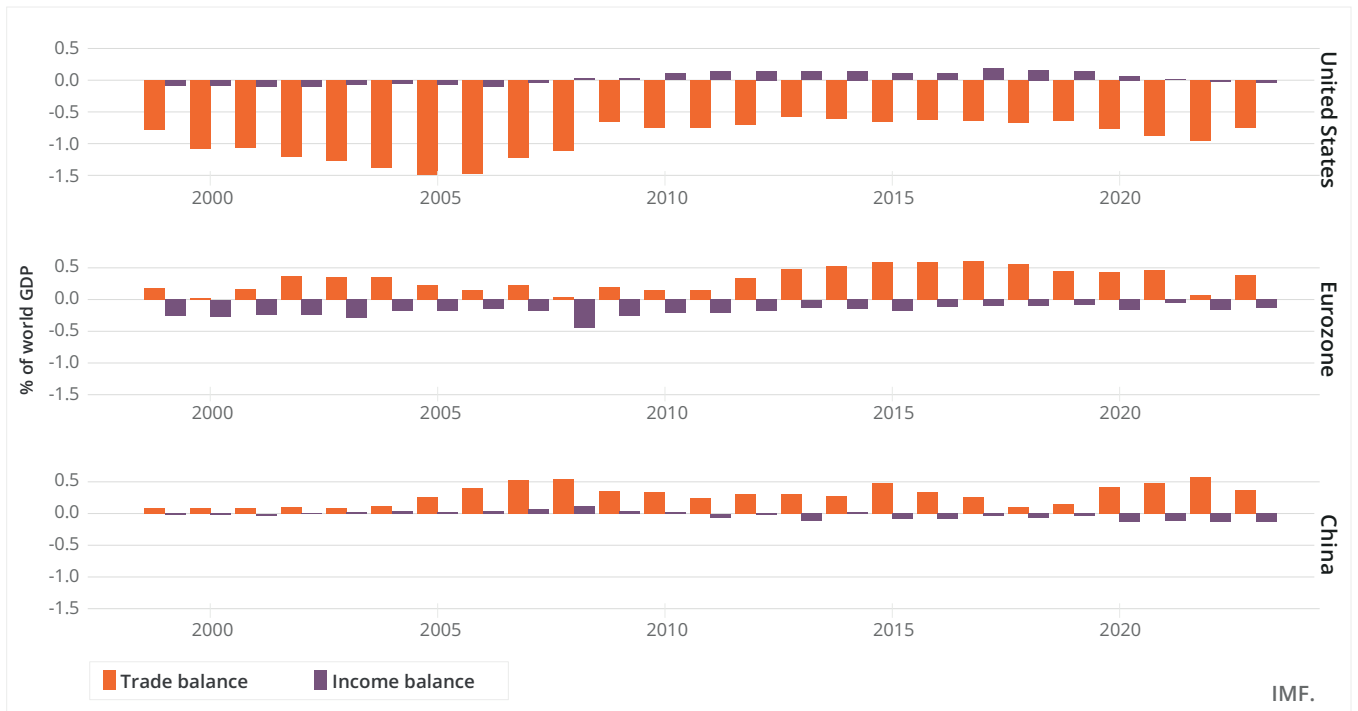
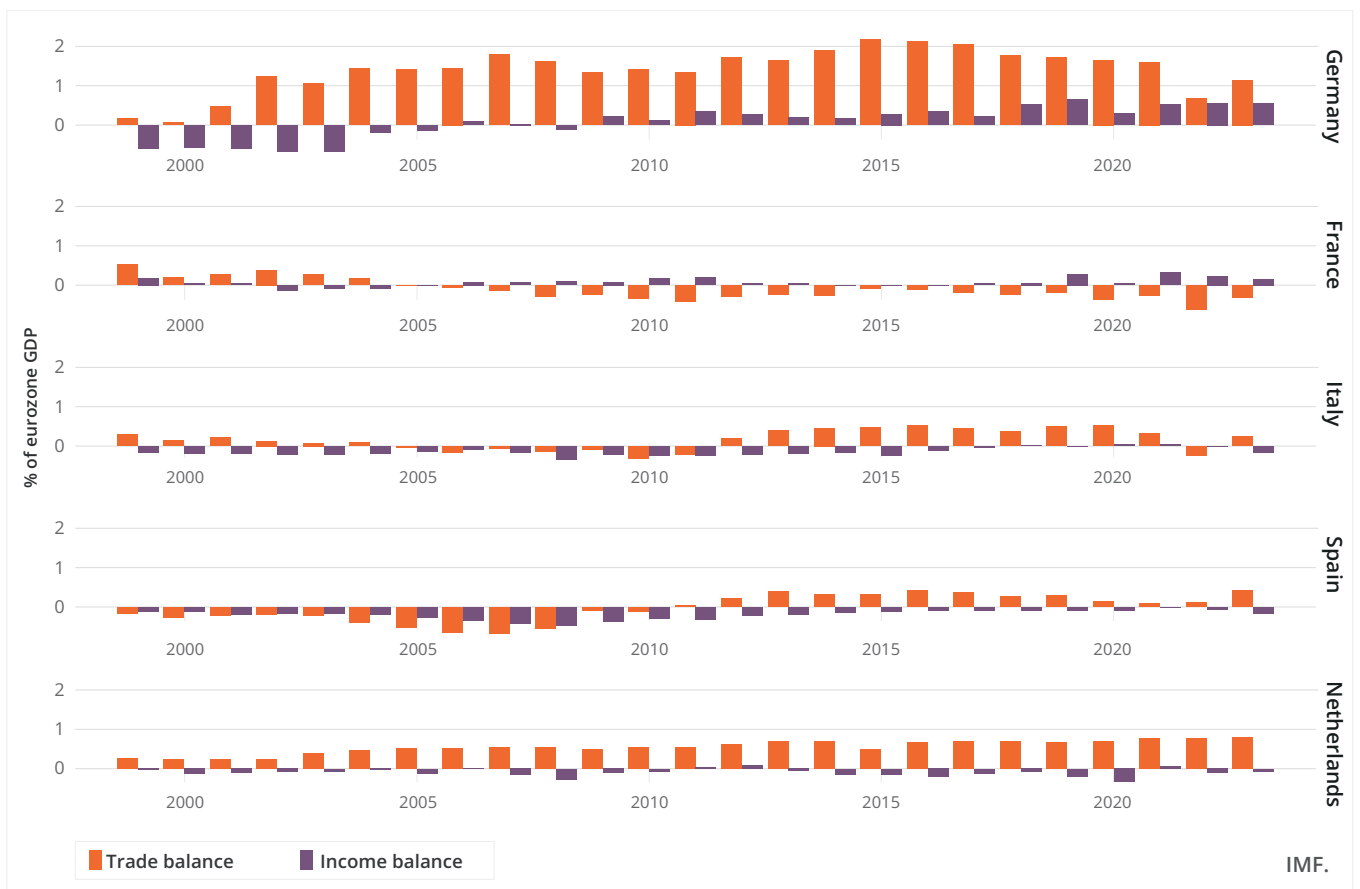
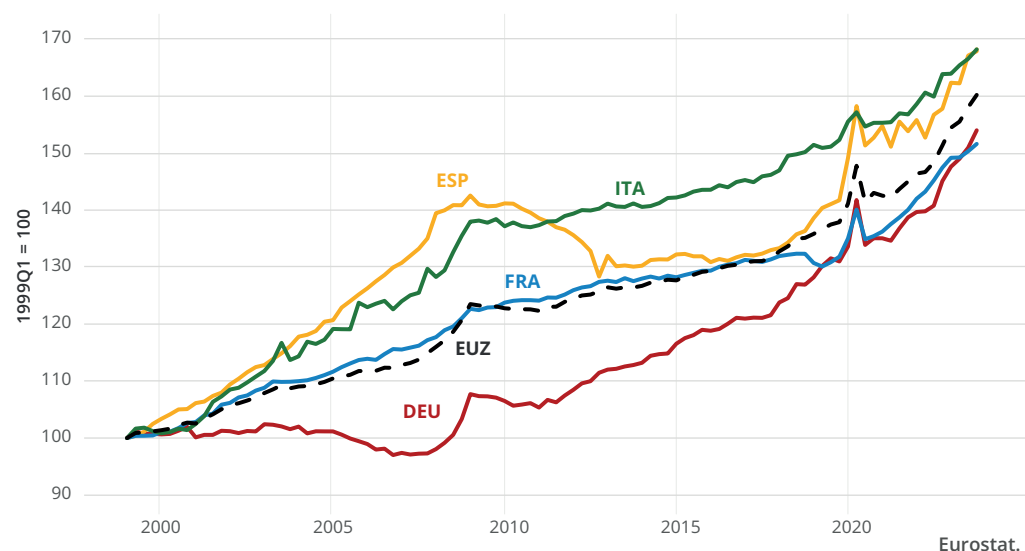


Figure 9. Trade and income balances within the eurozone



This eurozone-wide trade surplus is very unevenly distributed between the different Member States, and mainly reflects the German and Dutch trade surpluses. Between 2002 and 2021, Germany's surplus accounted continuously for more than 1% of the zone's GDP, and even exceeded 2% between 2015 and 2017. The two countries have accounted for between 70% and 80% of the eurozone's total surplus since 2013, while the zone excluding Germany and the Netherlands was in deficit over the period 2004-2012. Until 2010-2011, these surpluses were offset by deficits in Spain, Italy and France. However, the first two turned significant surpluses after the introduction of austerity policies, which both reduced imports by squeezing incomes and stimulated exports by improving price competitiveness. Today the countries in both northern and southern Europe are in surplus, while France still runs moderate deficits (Figure 9). The internal imbalances of the 2000s were accompanied by a sharp divergence in nominal unit labour costs within the zone, with stagnation in Germany and sharp rises in Spain and Italy. On the other hand, the convergence observed since 2010 has not been accompanied by a reduction in the northern countries' surpluses (Figure 10).

Figure 10. Nominal unit labour costs in the eurozone



Imbalances set to persist unless there is a change in behaviour and economic policy

In economies characterized by high international capital mobility, such as the European and American economies, a high desired saving rate relative to the investment rate translates into desired exports of capital and therefore a strong demand for foreign currency. All other things being equal, this demand causes the real exchange rate to adjust downwards, generating a trade surplus. The trade surplus itself does not directly put upward pressure on the exchange rate to rebalance trade. The process that leads to the rebalancing of trade balances is indirect. The accumulation of trade surpluses by a given country should lead to the accumulation of financial assets in other countries. The income associated with these assets increases the national income, and therefore overall consumption for a given level of GDP, reducing the saving rate in GDP points, along with the trade surpluses, by increasing imports. The key element in this rebalancing process is therefore the improvement in the income balance of countries with trade surpluses and the corresponding deterioration in countries with trade deficits.

However, Figures 8 and 9 also show that the phenomenon is very limited in scale, even though some countries have accumulated trade surpluses or deficits over more than 20 years. The United States will thus maintain a balanced income account in 2023 despite significant trade deficits since 1975 and high interest rates. Conversely, Germany's income balance remains modest while that of the Netherlands is structurally negative. Surplus countries tend to accumulate low-yielding assets, while the United States, and to a certain extent France, offset their external debt through direct investments abroad and high-yielding portfolios. The small movements in the income balance explain why imbalances have persisted so far and suggest that they will persist in the future, with the risks in terms of financial stability and macroeconomic dynamics that this entails, unless saving rates converge across the major regions and within the eurozone. The deficit countries will have to contribute by raising their saving rates. However, it is very difficult to envisage a significant rebalancing unless the surplus countries reduce their saving rates, in particular through more expansionary fiscal policy, especially since it is difficult to understand the economic rationality of such a low level of consumption if it results in the accumulation of low-yielding assets.⁷

7.

This theoretical reasoning can also hold in the symmetrical case of an accumulation of deficits. It is valid if the mobility of capital is perfect and when the economies' capacities are fully utilized. These conditions are not met in reality, but they seem to be a reasonable approximation for the United States and the eurozone, and for the problem under consideration. It should not be forgotten that this reasoning is not necessarily suited to the analysis of other countries, in particular China, where capital outflows and inflows are controlled. In addition, if the desired saving are exceeded, an adjustment may not result entirely from a fall in the exchange rate but also from a fall in domestic output (and therefore in unused capacity).

8.

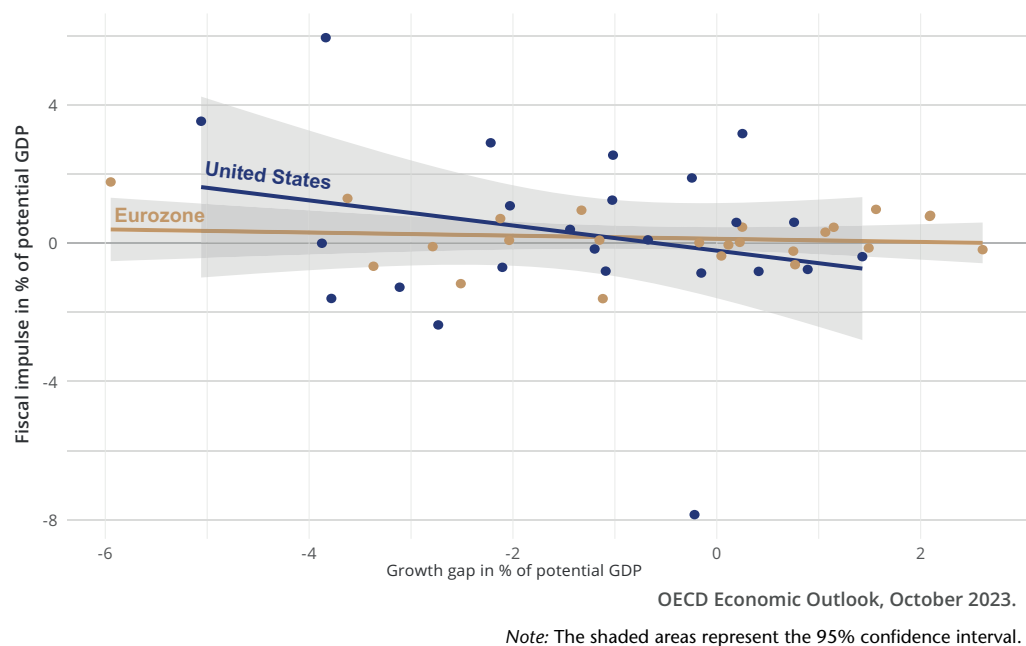
The primary structural balance corresponds to the general government balance adjusted for nominal interest expense and the effects of the business cycle. Indeed, even with no change in policy, some government revenues and expenditures react to the cycle. For example, unemployment insurance expenditure rises or corporate tax revenues fall. This "mechanical" change in the balance corresponds to the automatic stabilizers. Governments can then take measures that go beyond these stabilizers to support or curb activity. For example, in times of economic downturn, they may decide to temporarily increase the amount of unemployment insurance or reduce the income tax rate. A given increase in the budget deficit can also lead to a greater or lesser stimulus to aggregate demand, depending on whether it benefits households with greater or lesser propensities to consume.

The role of the policy mix?

The poorer growth performance of European countries compared to the United States could be linked to the conduct of economic policy. To stabilize activity requires countercyclical fiscal and monetary policy. Nevertheless, a more expansionary fiscal policy results in an increase in the budget deficit, and thus an increase in public debt, while a more expansionary monetary policy may come up against the central bank's inflation target. Thus, the orientation of economic policy not only reflects the shocks that economies face but may also depend on the monetary authorities' preferences or goals. The countercyclical role of fiscal policy is essential, because it helps to cushion shocks, complementing the effect of the automatic stabilizers. But not all choices respond to the need for macroeconomic stabilization, as illustrated for example by the tax cuts that Donald Trump implemented in 2017, or the still high level of the US deficit. These fiscal choices may correspond to the goal of stimulating demand in a more long-term way, including in periods of economic expansion, or they may respond to purely political considerations.

The annual changes in the primary structural balance provide information about whether fiscal policy is expansionary or restrictive.⁸ Figure 11 illustrates the relationship between economic activity and the fiscal impulse, which reflects the discretionary composition of fiscal policy. While on average the link seems tenuous in the eurozone, for the United States there is a downward slope, indicating that when activity is below potential, the fiscal policy stance becomes more expansionary. This also reflects the fact that the tax and social welfare system is less protective on the other side of the Atlantic. Cyclical downturns therefore result in a faster loss of income and also potentially in less access to the health system. Discretionary fiscal policy therefore plays a more important macroeconomic stabilizing role. For example, during the 2008-2009 recession, the cumulative impulse over these two years amounted to 6 points of GDP in the United States according to the OECD estimate, compared with 2.3 points in the eurozone. Furthermore, European countries implemented an early fiscal consolidation policy even before activity had returned to its potential. The reduction of the primary structural deficit has been relatively more gradual in the United States.

Figure 11. The fiscal impulse and economic cycle in the eurozone and the United States between 1999 and 2023



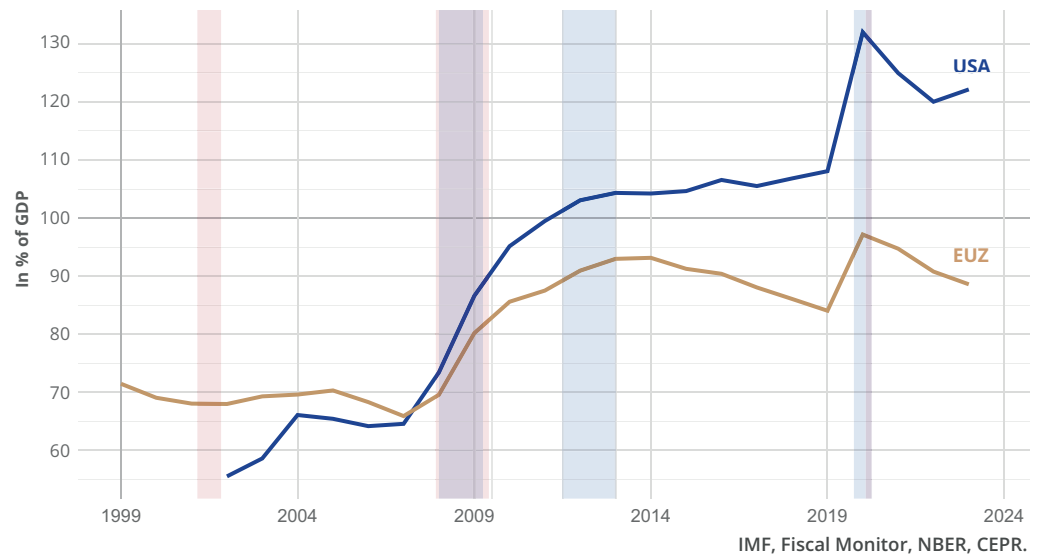
Discretionary fiscal policy in the United States therefore appears to be not only more expansionary on average but also more countercyclical than in the eurozone. This can be seen in the higher US structural deficit on average: -2.9% of GDP between 1999 and 2023 compared to 0.3%, which has the corollary of a greater increase in US public debt (Figure 12). Thus, the United States seems to have clearly favoured growth, accepting in return an increase in its public debt, particularly after 2008.⁹ Between 1999 and 2023, this increased by more than 64 GDP points, while for the eurozone as a whole it rose by 17 points.¹⁰ Note that even while there seems to be a positive link between public debt and growth when comparing the eurozone and the United States, it is not possible to generalize this relationship. Indeed, among the eurozone countries, those whose public debt has increased the most are not necessarily those that have recorded the best economic performance. So while Germany had the highest average GDP per capita growth between 1999 and 2023, its public debt did not rise much (+4.7 points) – Germany succeeded in growing via external demand from its trading partners and not via internal demand, as its very large trade (and current account) surplus suggests. In comparison, Italy’s public debt rose by 23 percentage points of GDP but with much more modest growth. In this specific case, the rise in Italy’s debt can also be seen as a consequence of its very weak growth over the past two decades.

9. The revision of the European Stability Pact, which entered into force in 2013 and was incorporated into the Treaty on Stability, Coordination and Governance (TSCG), required Member States to target reducing their public debt whenever it exceeded 60% of GDP. Even if the goal was not met, it nevertheless highlighted the importance of making public debt reduction one of the objectives of European economic policy.

10. The rise was especially great after 2008.

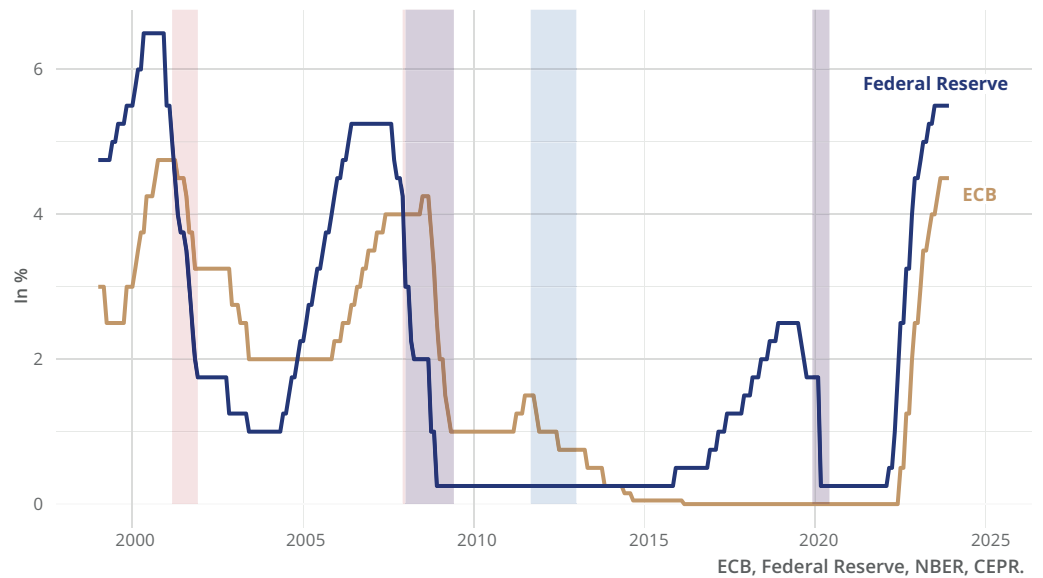
Institutional differences between the eurozone and the United States play less of a role with regard to monetary policy, since in both cases this is implemented by a central bank at the level of the union. On average over the entire period, the ECB’s monetary policy rate was lower than the Federal Reserve rate, particularly because of the post-2015 period (Figure 13). Indeed, while the Federal Reserve gradually began to normalize its monetary policy and raised its rates from the end of 2016, the ECB stepped up its monetary easing by adopting an asset purchase policy similar to that implemented by the Federal Reserve from 2009. However, these so-called unconventional measures are not reflected in the central bank’s key interest rate, which is constrained by the zero interest rate limit.

Figure 12. Trends in the public debt in the eurozone and the United States since 1999



Note : The red (resp. blue) periods represent US (resp. European) recessions as defined by the NBER (resp. CEPR).

Figure 13. Key rates of the ECB and the Federal Reserve



Note : The red (resp. blue) periods represent US (resp. European) recessions as defined by the NBER (resp. CEPR).

Changes in the size of balance sheets, expressed as a percentage of GDP, help to provide a better account of these unconventional monetary policies.¹¹ Figure 14 shows that the US central bank has been quicker to adopt these measures than its European counterpart. Indeed, the Federal Reserve's balance sheet rose higher and more quickly in 2009 than that of the ECB. The operations to expand liquidity enacted by the ECB in late 2011 and early 2012 resulted in a temporary increase in the balance sheet, but it was not until 2015 that the ECB adopted an asset purchase policy similar to the one adopted by the Federal Reserve in 2009. The aim of this policy was to combat a persistent deflationary risk. It nevertheless came at the wrong time with respect not only to the 2008-2009 recession but also to the next recession arising from the sovereign debt

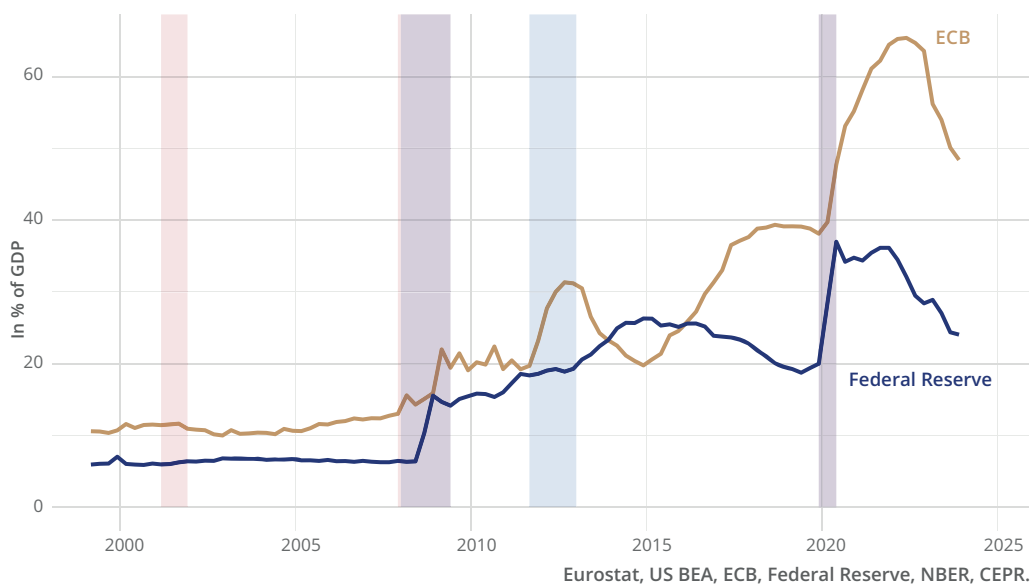
11.

The balance sheet size reflects not only asset purchase policies but also the central banks' liquidity operations. In this respect, the ECB's support in the early stages of the crisis was reflected mainly in the provision of additional liquidity for the banking system.

crisis. This lag in the timing of quantitative easing might also have contributed to the differences in growth between the eurozone and the United States.

This could indicate that the members of the ECB’s Governing Council are more sensitive to inflation than the Federal Reserve members. In fact, the inflation rate in the eurozone between 1999 and 2023 was on average lower than in the United States: 2.1% compared to 2.6%. These differences in preferences could explain the ECB’s reluctance to adopt more expansionary measures back in 2009.

Figure 14. Balance sheets of the ECB and the Federal Reserve



Note: The red (resp. blue) periods represent US (resp. European) recessions as defined by the NBER (resp. CEPR).

It is also possible that the Federal Reserve’s explicit dual mandate gave it more manoeuvring room when it came to stimulating activity in order to pull out of the recession on a lasting basis. It could also be argued that the eurozone’s institutional shortcomings in fiscal governance have made it more complicated to implement this type of measure. Indeed, in the absence of a European debt market and because of the “no bailout” clause prohibiting the bailout of states in difficulty, the ECB has undoubtedly been reluctant to intervene in the debt markets of the states.

During and after periods of crisis, the eurozone’s economic policies have been less expansionary than in the United States, which could help explain the relatively weaker growth performance after the crisis. On the other hand, public debt in the eurozone as a whole has risen less sharply and inflation has been lower on average. These differences highlight that Europe’s fiscal rules may have limited the states’ capacities for macroeconomic stabilization, even as no supranational European fiscal policy could play this role. As for monetary policy, the Federal Reserve’s dual mandate could also give it some additional manoeuvring room to arbitrate between its goals of price stability and growth.¹²

12. It can also be argued that the ECB’s monetary policy would have been more effective if it had been better coordinated with a centralized fiscal policy.

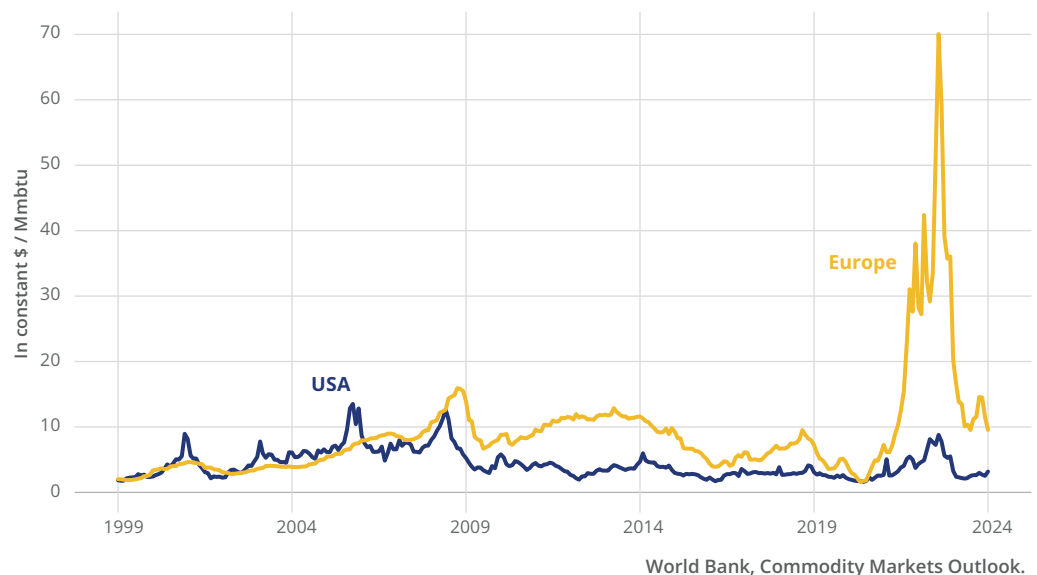
4. In the wake of the pandemic and the energy crisis, is there growing convergence in the eurozone?

13.

See Département analyse and prévision de l'OFCE (2024).

As the OFCE already indicated in its latest forecast,¹³ in 2023 the US economy was still managing to avoid a slowdown even while Europe's economies were in the doldrums. This is tending to accentuate the divergence between the United States and the eurozone that has appeared since the pandemic hit. Beyond the differences in potential growth between countries and the differences in fiscal policy, the recent divergence is partly linked to the impact of the energy crisis and the steeper rise in energy prices in Europe (Figure 15), particularly natural gas prices, mainly due to the reduction in the Russian supply of natural gas after the outbreak of the Ukraine war. This divergence between the eurozone and the United States has gone hand-in-hand with a relative convergence within the eurozone.

Figure 15. Price of natural gas in Europe and in the United States



The growth gap has narrowed since 2020

Within the eurozone, the singularity of these latest periods of crisis lies more in the fact that the German economy has been lagging behind its main European partners, particularly in southern Europe. Since the establishment of the eurozone, after each crisis, Germany rebounded stronger and faster than did the other major European countries, notably Spain and especially Italy, but this time the situation seems to have reversed. In the fourth quarter of 2023, four years after the start of the pandemic and two years after the onset of the energy crisis, real GDP has just returned to its pre-crisis level in Germany (0.1%), while it is 3% higher in the eurozone, in France and Spain, and 3.6% higher in Italy.

This heterogeneity in European performance is even greater if we take into account the differences in pre-crisis trends. Referring to the European Commission's estimates of potential growth made before 2019 for each European country (AMECO database) and extending them over the following four years, the level of activity observed at end 2023

is still well below that which it could potentially have reached for Germany (-3.5 GDP points), while it is very positive (+2.8 points of GDP) for Italy. For the eurozone as a whole, the deficit in activity is expected to be around 1 GDP point.

While it is not possible to exclude that the pandemic will have an impact on the level or rate of potential growth of developed economies, particularly in Europe, no consensus on this seems to be emerging for now. Some analyses point to factors that may have a lasting negative impact on the economy, such as interruptions in supply chains and constraints on production processes.¹⁴ At the same time, other developments since the pandemic, in particular the stepped-up investment in digital technologies, could have positive, long-term effects on activity.¹⁵ Empirical studies using business data show a very wide variety of situations in terms of productivity.¹⁶

Two polar cases among European countries can be envisaged in relation to the issue of potential growth. With respect to the German economy, it is very likely that this crisis has produced a more lasting shock: by weighing on German price-competitiveness in energy-intensive sectors, the energy shock could be more structural, intensifying the shocks that existed before 2019 in certain industrial sectors such as the automotive industry. Conversely, Italy's good performance can be explained in part by the weakness of its pre-Covid potential growth – zero according to the European Commission – which is more in line with its situation after it was hit hard by the debt crisis in the eurozone from the early 2010s than with its current fundamentals.

Beyond these structural effects, other factors could be put forward to explain the differences in performance between the eurozone countries, in particular the significant impact of the European Recovery Plan.

Fiscal support that is differentiated within the European countries

One explanatory factor could be the implementation of the more or less expansionary economic policies implemented during the pandemic and the energy crisis. Like all developed countries, European countries responded fiscally to deal with the Covid-19 crisis.

And from 2022 onwards, they had to take new fiscal measures to cushion the energy and then food inflation shocks following Russia's invasion of Ukraine. One way of analysing and comparing the extent of these fiscal responses is to consider changes in the deficit and sort out what is mechanically linked to the consequences of the crisis (lower revenues and higher social spending) from what is due to the implementation of specific emergency or recovery measures. As shown in Figure 16, the fiscal impulses, as calculated and accumulated over the past four years, seem to explain some of the differences in performance. Note that, among the European countries, Italy has provided particularly significant fiscal support, notably in the form of tax credits for housing renovations. The bill for this amounts to more than 150 billion euros over the last four years, with the "superbonus"¹⁷ representing nearly three-quarters of that.

14.

See Fernald and Li (2022).

15.

Remote work could also lead to gains in productivity. See Bergeaud *et al.* (2023) for a confirmation using French data

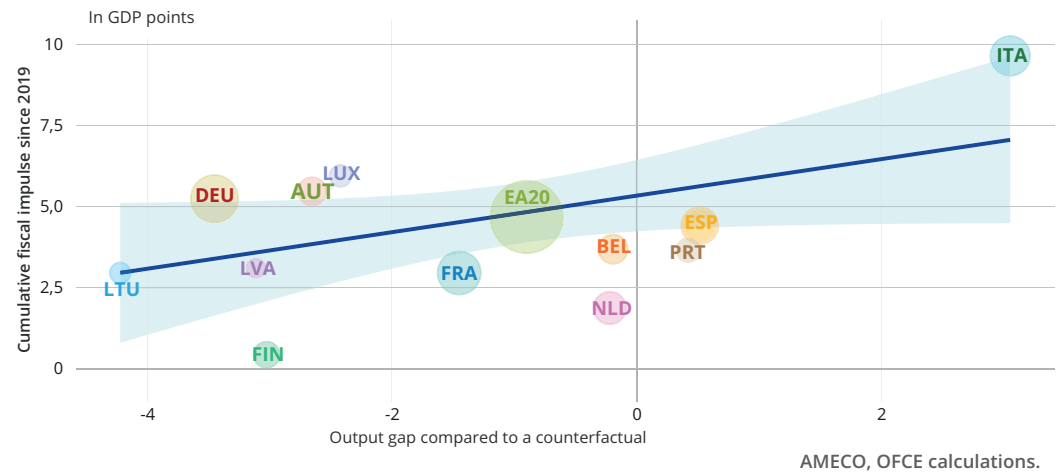
16.

See Bloom *et al.* (2023).

17.

The so-called "superbonus" scheme consists of a tax credit of up to 110% of the amount of work carried out to renovate one's home. Over the period 2020-2023, its cost came to 100 billion euros, according to Istat.

Figure 16. Impact of the shocks on activity and fiscal policy in Europe since the pandemic



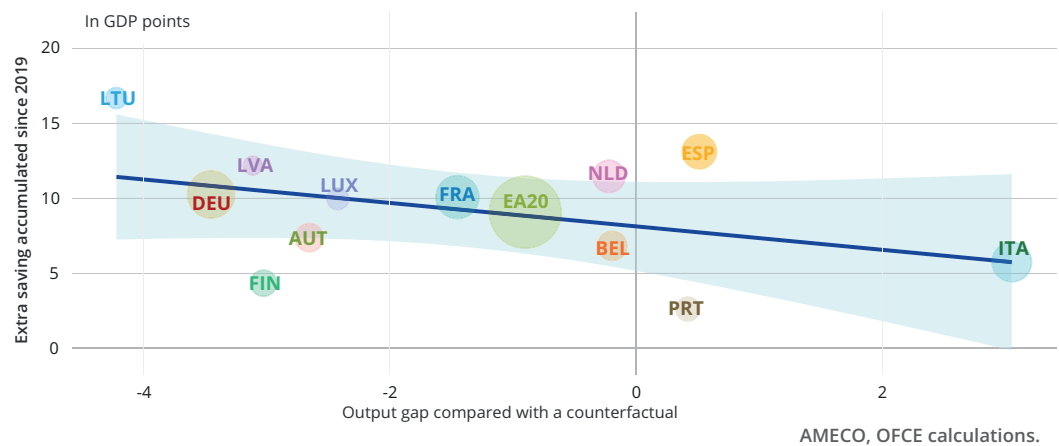
Notes: The fiscal impulse corresponds to the change in the primary structural balance calculated by AMECO. The output gap is assessed against a counterfactual calculated from the potential GDP growth rates estimated by AMECO before the pandemic. The diameter of the circles is proportional to the GDP of the countries in 2019. The blue line corresponds to the regression line weighted by country size (excluding the eurozone 20 – EZ20).

Households' different saving behaviour

In addition to this first income effect, there is also a difference in the use of the extra saving accumulated by households. In a context where certain spending has been constrained, these fiscal measures have induced households to save massively compared to their pre-Covid behaviour. However, differences in the use of this excess saving may have led to differences in activity.

During the pandemic, for instance, Italian households, as in other European countries, accumulated saving due to health restrictions that held back consumption, but they subsequently drew on these saving more than did their counterparts in other European countries, further stimulating domestic demand (Figure 17).

Figure 17. Impact of shocks on activity and household extra saving in Europe since the pandemic



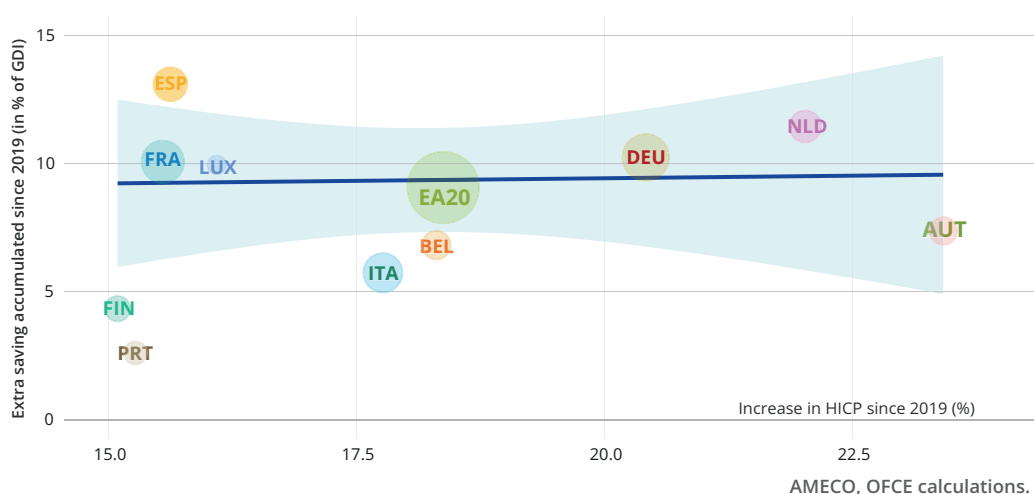
Notes: Extra saving is calculated in relation to the average saving rate observed over the ten years before the pandemic. The output gap is assessed against a counterfactual calculated from the potential GDP growth rates estimated by AMECO before the pandemic. The diameter of the circles is proportional to the GDP of the countries in 2019. The blue line corresponds to the regression line weighted by country size (excluding the eurozone 20 – EZ20).

Differentiated cumulative inflation

In a context where supply is under pressure, these differences in consumption behaviour could have led to higher inflation in countries where the extra saving are lowest. However, this is not what we observe, as causality, although weak, tends to go in the opposite direction: the higher the inflation, the more European households seem to have adopted a prudent consumption behaviour by saving even more (Figure 18).

Among the reasons mentioned, inflation also helps explain part of Germany's poor performance since 2019. Inflation over the past four years has been among the highest in the major European countries, holding back household consumption and therefore domestic demand. This excess inflation is linked to Germany's greater dependence on cheap Russian energy as well as the very late implementation (March 2023) of a price shield on gas and electricity.

Figure 18. Inflation and households' extra saving in Europe since the pandemic



Notes: Extra saving is calculated in relation to the average saving rate observed over the ten years before the pandemic. The diameter of the circles is proportional to the GDP of the countries in 2019. The blue line corresponds to the regression line weighted by country size (excluding the eurozone 20 – EZ20).

5. Do not repeat the mistake of 2011-2014! For a new European Recovery Plan

While, as we have just seen, there is still some doubt about the impact of these four years of crisis on the level and rate of the European economies' potential growth, a comparison with US performance nevertheless suggests that the eurozone economies are lagging significantly. Based on this observation, the most suitable method for forecasting activity in the medium term (five years) consists of assessing the economy's spontaneous return (speed and magnitude) to its potential level, but also and above all to quantify the impact of shocks on this spontaneous trajectory.

Among the shocks expected, the one related to fiscal policy is the most likely given the stability programmes already announced. However, since the Great Recession of 2008-2009, economic thinking has been divided around the expected impact of fiscal policy on economic activity. The 2011-2014 episode in the eurozone is rich in lessons. In 2011, three years after the start of the subprime crisis, public debt rose sharply in all the European countries. In the eurozone, it grew on average over the period by nearly

18.

The rises in unemployment observed between 2010 and 2014 cannot be considered as an increase in equilibrium unemployment: during this period, there were no significant changes in labour market institutions or practices, which are the main determinants of equilibrium unemployment. Admittedly, in the short term, equilibrium unemployment may have been modified by a sectoral poor allocation of capital or labour resources. Reallocation can also result in lower productivity. But, in any case, there is nothing to suggest a lasting increase in equilibrium unemployment.

19.

For a review of the literature, see for example Creel *et al.* (2011).

20.

See Blanchard and Leigh (2013).

21.

See Batini *et al.* (2012).

22.

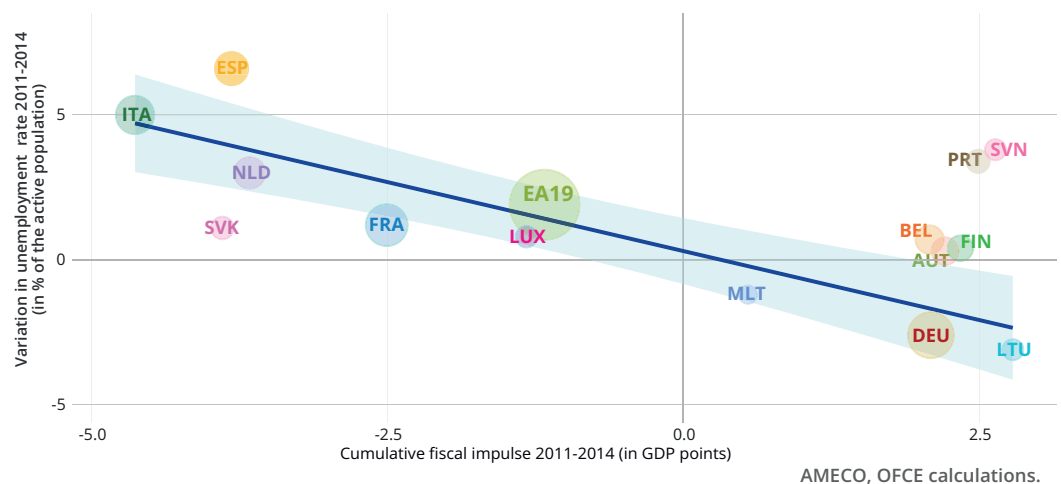
See Corsetti *et al.* (2012) ; Auerbach and Gorodnichenko (2012) ; DeLong *et al.* (2012). Note, however, that the hypothesis according to which the multipliers vary during the cycle is not confirmed by Ramey (2019).

20 GDP points, while the overall deficit deteriorated to 4.3 GDP points. This phenomenon is not unique to the eurozone: on the contrary, the deficit in the United Kingdom and the United States deteriorated even more spectacularly, with the UK running a deficit of 7.4% and the US nearly 11%. But only the eurozone then decided to embark on a fiscal strategy aimed at rebalancing the public finances as quickly as possible. Thus, from 2011 onwards, large (and small) European countries have implemented policies requiring significant fiscal restraint, mainly focused on tax increases. The changes observed in unemployment have been spectacular and linked to the intensity of the fiscal austerity put in place, calling into question the idea that fiscal contraction could have expansionary effects (Figure 19).¹⁸

During this episode, many empirical studies attempted to settle this theoretical debate, arguing that in the short term the fiscal multiplier is positive and that it would be higher in certain configurations.¹⁹ For example, fiscal consolidations have more negative effects – the multipliers are higher – when they are carried out in synchrony between trading partners²⁰ or when they are rapid and large-scale.²¹ In addition, some studies tend to show higher multipliers in a context of a lag in activity.²² Finally, Zidar (2019) showed that the effect of tax cuts is greater when measures are targeted at individuals at the bottom of the income distribution, thus making it possible to reconcile the objective of macroeconomic stabilization with that of reducing inequality.

At the moment, everything suggests that the multipliers are high in the eurozone: the economic situation is still weak and far from its equilibrium position; a reduction in interest rates is certainly coming, but it will take time before the economy feels the impact; and all European countries will be carrying out similar fiscal policies over the next five years, aimed mainly at reducing public spending. While a fiscal consolidation policy can be adapted in a period of economic recovery, it is pernicious or at least ineffective when the economy is sluggish. But if it must be enacted in a period of economic downturn, it will be less harmful to activity if it is relatively gradual, smoothed and not synchronized.

Figure 19. Fiscal impulse and unemployment in Europe during the 2011-2014 period



Notes: The fiscal impulse corresponds to the change in the primary structural balance calculated by AMECO. The diameter of the circles is proportional to the GDP of the countries in 2019. The blue line corresponds to the regression line weighted by country size (excluding the eurozone 20 - EZ20).

Finally, in view of a relatively low aggregate public deficit in the eurozone (3.6% of GDP in 2023 despite two successive crises and weak growth), especially in comparison with that of the United States (8.5% of GDP despite dynamic growth, low unemployment and low energy prices), the priority on this side of the Atlantic cannot be solely the restoration of the public finances, at the risk of seeing the economic gap with the United States continue to widen. To meet the new global challenges and adapt to the new geostrategic situation since the start of the Ukraine war, Europe must not stick with fiscal rules that limit its scope of action. It must ensure its security and defence, finance the massive investments needed for the ecological transition to achieve the objective of net zero emissions by 2050 and promote the rapid emergence of new “green” industries. At the same time, it is crucial to accelerate the decarbonization of more traditional industries, to deal with high energy prices, to respond to the US Inflation Reduction Act (IRA) and not to miss the shift to disruptive technologies such as artificial intelligence or messenger RNA. Only an ambitious European recovery plan focused on strategic sectors can meet such a challenge. Europe as a whole has the wherewithal to do this, as confirmed by macroeconomic analysis. Europe benefits from a structural saving surplus that could be earmarked for financing these investments for the future. It also has a large trade surplus and sluggish domestic demand compared to the United States. Targeting fiscal support on both supply and demand would boost European growth and restore productivity gains by putting pressure on the economy, as in the United States. Finally, increased potential growth is a key factor to ensure the long-term sustainability of the public debt.

In the absence of a consensus on a new European recovery plan, it is necessary to implement more accommodative fiscal policies, aimed at stimulating domestic demand in countries with large trade surpluses.²³ Finally, public deficit calculations conducted under European fiscal rules should at least exclude public investments allocated to the energy transition, the reduction of CO₂ emissions and defence.

23.

For more information, see Creel et al. (2022).

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