EUROFI
Macroeconomic Scoreboard

APRIL 2023

Jacques de Larosière and Didier Cahen
with the support of Elias Krief

Inside

- Widening of the economic gap between the euro area and its main global competitors with Covid crisis and the war in Ukraine
- Exacerbation of existing fiscal heterogeneities across EU Member States
- Loss of competitiveness of firms in EU countries with the highest levels of government expenditure vs GDP
- Excessive public debt goes against productivity growth and employment
- Growing heterogeneity in current account imbalances across EU Member States

eurofi

Eurofi

Macroeconomic Scoreboard

•

Prepared by

Jacques de Larosière and Didier Cahen

with the support of Elias Krief

•

April 2023

Content

EXECUTIVE SUMMARY 7

1. THE ECONOMIC GAP BETWEEN THE EURO AREA AND ITS MAIN GLOBAL COMPETITORS HAS WIDENED

1.1 Over the last few decades, real GDP growth in the euro area has failed to catch up with US and Chinese levels 9

1.2 The consequences of the Covid-19 crisis have been more severe in Europe than in the US, China and Japan 11

1.2.1 *In 2020, the euro area suffered the largest GDP contraction among advanced economies*

1.2.2 *In 2021, Europe recovered at a slower pace than the United States and China*

1.2.3 *GDP growth exceeded its pre-pandemic levels in the first quarter of 2022 in many advanced economies*

1.3 The economic impact of the war in Ukraine on GDP growth is more painful in Europe than in the United States or China 13

1.4 The rise in energy prices following the war in Ukraine hit the euro area far harder than the United States 13

2. THE COVID-19 CRISIS HAS EXACERBATED EXISTING FISCAL HETEROGENEITIES ACROSS EU MEMBERS STATES

2.1 EU countries that have best managed their public finances after the Global Financial Crisis (2008) and the EU Sovereign crisis (2011-13) are those that have suffered the least from the Covid-19 shock 16

2.2 By contrast, the most indebted countries on the eve of the Covid-19 crisis have been the most severely hit in terms of output shortfall in 2020 17

2.3 Countries whose public finances deteriorated the most in 2020 still registered high fiscal deficits in 2021 17

2.4 In 2021, the fiscal heterogeneity worsened across EU members in terms of public debt-to-GDP 18

3. THE SIGNIFICANT ECONOMIC IMPACTS OF THE WAR IN UKRAINE SUFFERED BY EU COUNTRIES

3.1 A major energy shock for Europe 20

3.2 Its impact on the terms-of-trade of euro area countries was significant in 2022 21

3.3 High energy prices and lower exports to China have led to the disappearance of the euro area's external surplus in 2022 22

3.4 Governments have absorbed more than a third of the income loss in 2022 23

3.5 The divergence in terms of fiscal deficits and public debt between Member States has not increased with the war in Ukraine but the public-debt-to-GDP ratio has stabilized at elevated levels in many EU countries 25

3.6 A sizeable hit to EU growth 26

3.6.1 *European economic growth in 2022 was more resilient than expected in the face of the large negative terms-of-trade shock from the war in Ukraine*

3.6.2 *Within the EU, Germany, and some countries in Eastern Europe are particularly affected economically*

3.7 While headline inflation is likely to have peaked in both sides of the Atlantic, core inflation could prove stickier in Europe than in the US 27

3.7.1 Inflation remains a central concern in OECD economies

3.7.2 Well below the US level in the first half of 2022, core inflation in the euro area increased to 5,6% in February 2023 and is still trending up

3.7.3 Recent wage dynamics in the euro area

3.8 Stagflation is the most likely scenario in Europe for the coming months 32

3.8.1 Inflation should continue to exceed the ECB inflation target in the coming months for a number of reasons

3.8.2 Potential growth in the euro area is expected to remain very low

4. EU COUNTRIES WITH THE HIGHEST LEVEL OF GOVERNMENT EXPENDITURE AS PERCENTAGE OF GDP ARE THOSE WITH THE LEAST COMPETITIVE FIRMS

4.1 With 57.9% of its GDP in 2022 France holds the record high in terms of level of public spending in the EU 34

4.2 High levels of public expenditures imply high tax pressures on firms, lifting their production costs and so deteriorating their competitiveness 35

4.3 Most of public expenditures are allocated to social protection, health and public services instead of productive investment 37

4.4 Such levels of public expenditures have been reached at the expense of productive investment, hence weakly contributing to gross capital formation 38

5. EXCESSIVE LEVEL OF PUBLIC DEBT DOES NOT FUEL PRODUCTIVITY GROWTH AND EMPLOYMENT

5.1 The most indebted countries of the eurozone have achieved the lowest productivity growth performance in the past two decades 42

5.2 The most indebted EU Members have experienced the highest unemployment rates in the EU since 2007, as Spain (12.9% in 2022), Italy (8.1%) and France (7.3%) 42

5.3 The employment rate in France, Spain and Italy is close to 10 percentage points lower than in Germany and the Netherlands 44

5.4 "Bad jobs" are more prevalent in deindustrialising economies and are concentrated in low-skilled and precarious activities 45

5.5 The combination of low employment rate and low productivity growth leads to higher output gaps 46

6. THE EUROPEAN ECONOMY SUFFERS FROM SEVERAL STRUCTURAL IMBALANCES

6.1 Growing heterogeneity in productive specialisation 48

6.2 The existence in the euro area of countries with large current account surpluses and countries with persistent current account deficits threatens the coherence, and eventually the existence, of the Economic and Monetary Union (EMU) 50

CONCLUSION 55

Executive summary

As we have observed in this document, many Member States have relaxed their macroeconomic discipline over the last twenty years. But high levels of public debt do not favor economic growth or employment. Countries which played the card of fiscal vigilance turned out to be the winners.

The Covid-19 crisis and the war in Ukraine hit the Eurozone harder than its main competitors. Since 2020, existing heterogeneities across EU Member States have been exacerbated. It is an illusion to try to solve the structural problems of our economies by prolonged increases in public debt or by using money creation. Yet this is what has been too often tried by pursuing lax fiscal, monetary and economic policies that inevitably pose systemic risks to financial stability and therefore to future growth.

But as long as it is not sufficiently understood, especially in highly indebted countries, that excessive debt is a source of under-competitiveness, the economic situation in these countries will continue to deteriorate and it will be all the more difficult to make progress in the construction of an economic and financial Europe. Indeed, fiscal and economic divergences between EU countries make it more difficult to define in Europe a common interest, encourage a policy of “every man for himself”, create a climate of mistrust between Member States which hinders progress in terms of public and private risk sharing and weakens the euro zone.

If Europe and the euro zone are to correct their growth disadvantage in relation to the United States and China and not be relegated to the rank of second-rate powers, a considerable investment effort in research and development, in industrial equipment, in decarbonisation, in digital technology, in improving the education system and the skills of the population will therefore be necessary.

Consequently, the eurozone has to embark on the right course: fighting inflation, which requires vision and courage, more fiscal responsibility, more equity financing and more supply reforms geared to increase productivity, as well as steps to complete the Banking Union and implement the Capital Market Union. But this move can only be envisaged if sufficient discipline starts reversing the trend of ever-growing economic heterogeneities across Member States.

1. The economic gap between the euro area and its main global competitors has widened

The eurozone keeps experiencing a structural growth shortfall relative to the United States and China since the mid-1990s due to structural problems in the euro area. US GDP in volume grew by 61% from the beginning of 1998 to the third quarter of 2022 and by only 36% in the euro area.

The Covid-19 crisis has been more severe in Europe than in the US and China and has amplified the heterogeneity of economic performance across Member States. The economic and social impact of the war in Ukraine are also stronger in Europe given its exposure through energy imports.

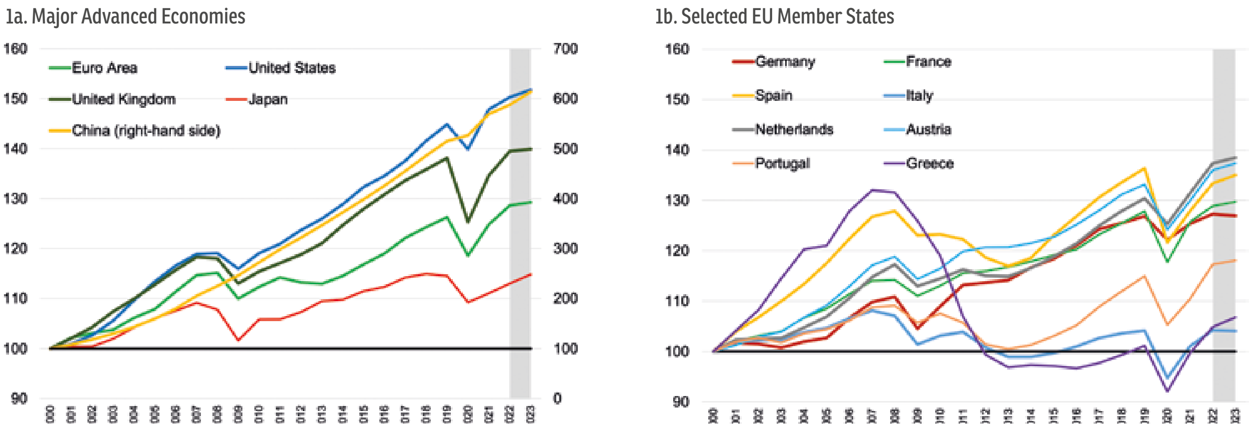
The United States and China are fighting to be the dominant economic power in the world. These two countries dominate the planet, and their conflict is intense. These two countries produce 42% of the world's GDP, provide nearly 60% of the world's military spending, control 80% of the world's unicorns and 100% of the world's major platforms with the American Gafam and the Chinese BATHX[1]. If Europe and the Eurozone do not reduce their growth lag with the United States and China, they will be relegated to the rank of second-rate powers.

1.1 Over the last few decades, real GDP growth in the euro area has failed to catch up with US and Chinese levels

From 2000 to 2007, the EU economy (excluding the UK) grew by a decent 2.1% per year on average while America's grew by 2.5%. Between 2014 and 2019 the euro area GDP growth averaged 1.5% per year, against 2.4% in the US and 7% in China.

The bulk of lagging euro area performances is mainly attributable to Italy (0.9%) and France (1.5%).

CHART 1.
Real GDP Growth Trend, 2000=100



Source: IMF World Economic Outlook Update of January 2023

Real GDP growth and productivity gains in the euro area have failed to catch up with the US and China over the past two decades and productivity gaps across member countries remain significant.

Europe has become much weaker over the last 15 years: Since 2008, the EU's share of the world economy has declined. While the EU's share of global GDP was higher than that of the US and China in 2009, it is now the lowest of the three. According to the World Bank, the share of the EU's GDP in the world GDP was 31.6% in 2007, against 24.4% for the US. In 2021, the EU's share of the world GDP declined to 14.1% while it stood at 23.3% for the US.

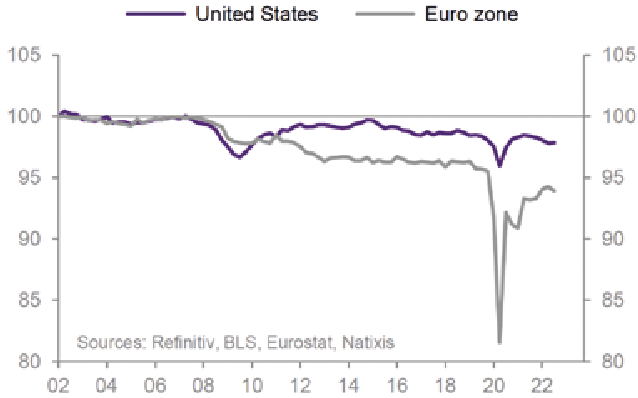
Such a growth performance gap between Europe and the US can be attributed to (i) the freer and less regulated institutional environment in which firms operate in the US, (ii) lower productivity gains and investment in Europe than in the US, (iii) the fact that labour force declines in the euro zone while it is increasing in the United, and (iv) the prominent role of financial markets in the financing of the US economy.

1. Figures quoted in the article: C. Saint-Étienne, "Le nouvel ordre stratégique mondial", Les Échos, 4 March 2023.

Enterprises are freer to work and make profits in the US than in Europe

- Less regulation and more flexible markets: Europe imposes administrative burdens on creating new firms or on growing beyond arbitrary thresholds that triggers an increase in compliance costs. This is not observed in the United States.
- Working hours are less in Europe than in the United States (*see Chart 2*);
- Fiscal and social contributions are higher in Europe.

CHART 2.
Working time per employee (January 2002=100)



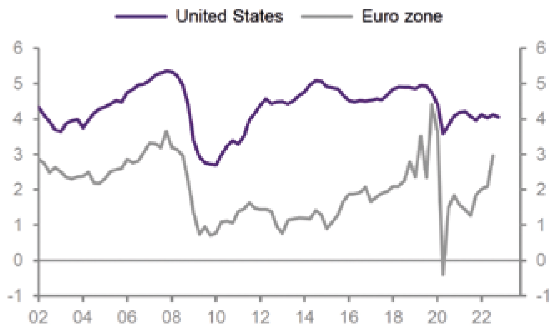
Source: P. Artus, "The euro zone's numerous disadvantages", Natixis Economic Research, February 2023

Lower investment and productivity gains in Europe than in the US

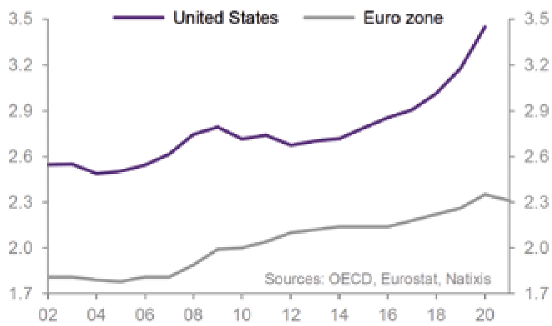
- Underinvestment in Europe lead to low productivity gains, which weakens potential growth (*see Chart 3.a*)
- Low productivity gains in Europe are due to low research spending and the decline of industry (*see Chart 3.b*). According to P. Artus[2], labour productivity increased in the Eurozone by only 14% between 1998 and the third quarter of 2022 compared to 62%.

Chart 3.
R&D Spending and Corporate Investment trend in the United States and the Eurozone

3a. Total R&D spending (as % of nominal GDP)

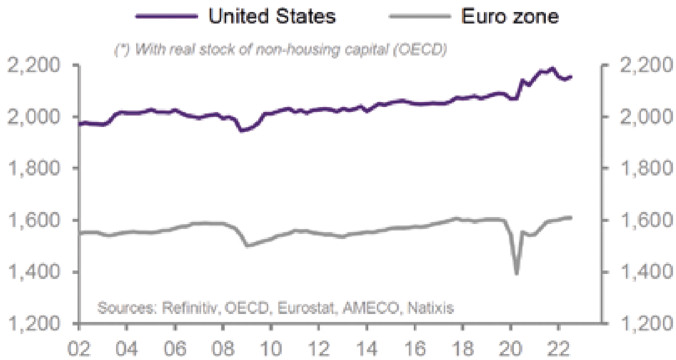


3b. Net total corporate investment (as % of real GDP)



Source: P. Artus, "What is the link between productivity gains, the corporate investment rate and R&D spending?", Natixis Economic Research, March 2023
For chart 3.a, 'net' corporate investment means that investment is net capital depreciation

CHART 4.
Level of labour productivity* (thousands of constant 2015 dollars)



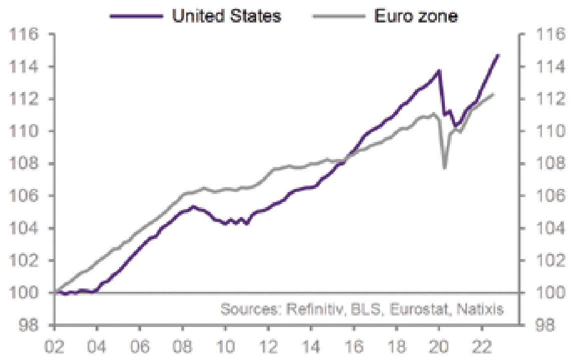
Source: P. Artus, "The euro zone's numerous disadvantages", Natixis Economic Research, February 2023

2. P. Artus : "Croissance : pourquoi les États-Unis battent toujours la zone euro", 26 janvier 2023.

Labour force decline in the euro zone while it is increasing in the United States

Demographics are also less dynamic in the eurozone than in the United States leading to a future decline in the labour force (*see Chart 5*) that will reduce potential production, tax revenues, etc.

CHART 5.
Labour force* (2002:1=100)



Source: P. Artus, "The euro zone's numerous disadvantages", Natixis Economic Research, February 2023
(*) Employment + unemployment

In spite of more buoyant savings in Europe, financial markets are three times more important in the US than in the EU in financing the economy

In 2019 about 80% of total financial debt consisted of bank loans in the euro area, while it did not exceed 40% in the US.

European enterprises rely on banks for almost three quarter of their financing (¼ in the US). Therefore, in the wake of the financial crisis which has been followed by a doubling of capital requirements for banks, such a huge recapitalisation effort is bound to have a more significant impact on the European economy than on the US.

Moreover, such a structure of financing by banks and the absence of an integrated capital market hinder an optimal allocation of capital for the financing of long-term investments such as transport infrastructure, sustainable energy generation or distribution.[3]

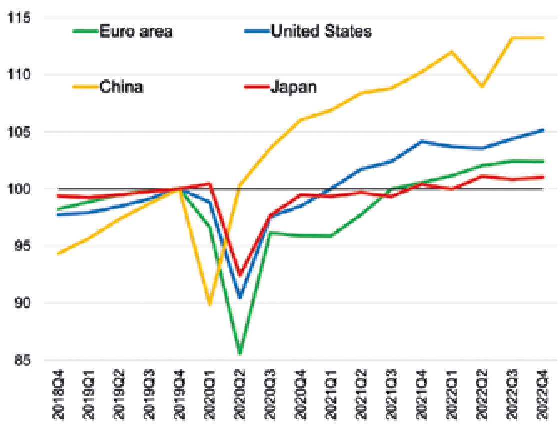
Equity-based financing is also a better suited solution than bank financing for high growth sectors (such as digital and high-tech) where most capital is intangible.

1.2 The consequences of the Covid-19 crisis have been more severe in Europe than in the US, China and Japan

1.2.1 In 2020, the euro area suffered the largest GDP contraction among advanced economies

In 2020 the eurozone GDP fell by 6.3%, nearly twice as much as the US (-3.4%). Japan (-4.6%) and China (+2.3%) have also experienced a lower output fall than the eurozone.

CHART 6.
Real GDP growth, 2019-Q4=100



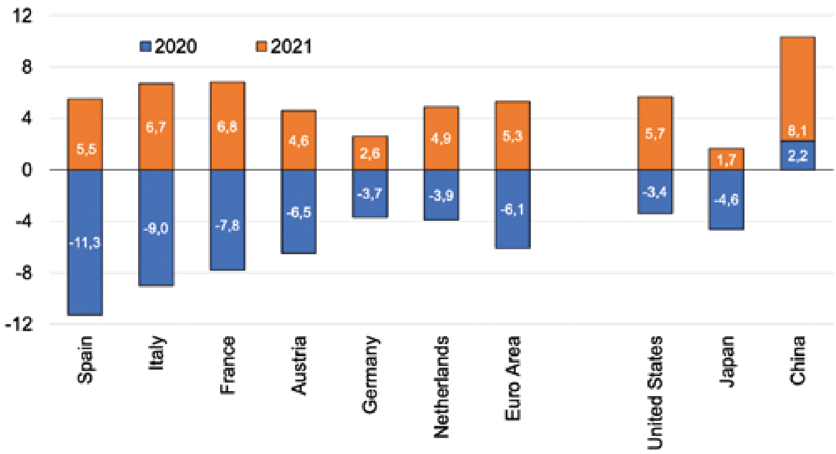
Sources: OECD, Eurostat
Last observation = 2022-Q4

3. Capital market underdevelopment in Europe is evident when comparing company financing structures to other advanced economies. Even listed companies in Europe are substantially more bank-financed than in the United States, while the aggregate market capitalisation of listed firms is much smaller relative to GDP. In 2019, the capitalisation of the EU-27 stock market accounted for 70%, compared to 194% in US.
Venture capital investments are ten times higher in the US than in Europe (as a share of GDP), and even more so in a handful of Asian countries (Singapore, China, India). European companies, especially in tech, are much more likely to be acquired by American firms than the other way around.

1.2.2 In 2021, Europe recovered at a slower pace than the United States and China

The rebound in growth of the eurozone in 2021 was 5.3% compared to 8.1% in China and 5.7% in the United States (*see Chart 7*). As of the first quarter of 2022, the eurozone GDP was just 1.1 percentage points above its pre-pandemic level, while it was up by 3.7 pp in the US, and 12 pp in China (*see Chart 6*).

CHART 7.
Real GDP Growth, Annual Change



Sources: IMF, Eurostat

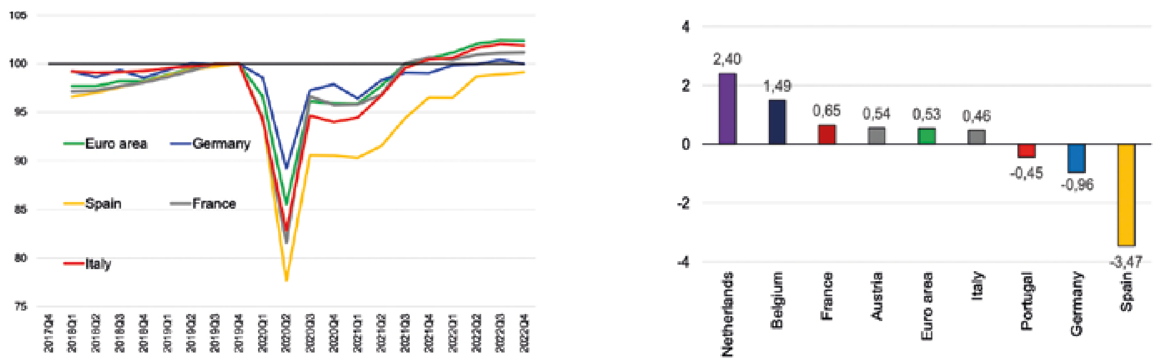
Within the euro area, the recovery is uneven across Member States. Most of them experienced a fast rebound in 2021, notably in France, the Netherlands and Belgium whose real quarterly GDP already exceeded their pre-pandemic levels as of the fourth quarter of 2021 (*see Chart 7*).

Thirteen euro-area Member States returned to pre-pandemic quarterly levels of output by the end of 2021. In the last quarter of 2021, the output of seven Member States, including Germany, Spain and Italy, had not reached pre-pandemic levels from the fourth quarter of 2019.

CHART 8.
Real GDP Growth in Selected EU Member States

8a. Real GDP Growth Trend, 2019-Q4 = 100

8b. Distance with 2019-Q4 GDP as of 2021-Q4, percentage points

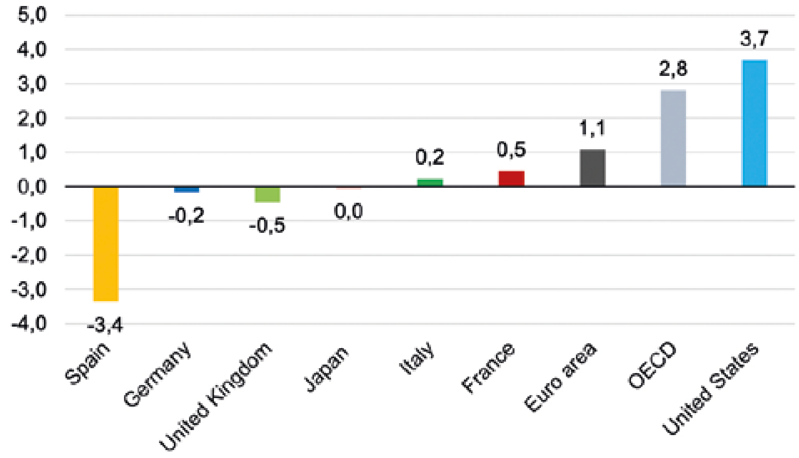


Source: Eurostat

1.2.3 GDP growth exceeded its pre-pandemic levels in the first quarter of 2022 in many advanced economies

The United Kingdom exceeded its pre-pandemic (Q4 2019) level of GDP for the first time in Q1 2022, by 0.7%. In the United States, France and Canada, GDP remained higher than before the pandemic; these countries exceeded their Q4 2019 GDP levels for the first time in the second, third and fourth quarters of 2021 respectively. However, in Germany, Italy and Japan, GDP was still below pre-pandemic levels (by 1.0%, 0.4% and 0.7% respectively) in Q1 2022.

CHART 9.
Real GDP (Distance with 2019-Q4 GDP as of 2022-Q1, percentage points)



Sources: OECD, Eurostat

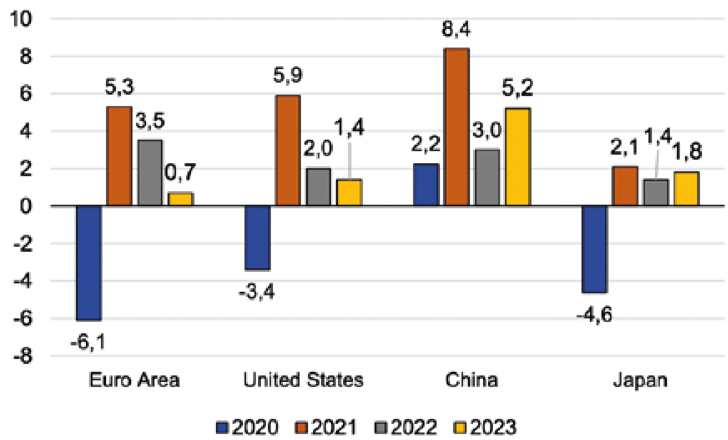
1.3 The economic impact of the war in Ukraine on GDP growth is more painful in Europe than in the United States or China

According to the IMF Forecast of January 2023, the eurozone real GDP is expected to have grown by 3.5% in 2022, compared to 2% in the US, and 3% in China (*see Chart 10*).

The resilience of the European economy to the 2022 energy shock (the European economy is currently experiencing economic stagnation but not recession) reflects the significant recourse to public borrowing. Indeed, growth coincided with high fiscal deficits across Member States (*see part 1.8*), which helped to support consumer spending in particular.

For 2023, the euro area economy is expected to grow by 0.7%[4] according to the IMF, twice as less than in the US (1.4%), and markedly below Japan (1.8%) and China (3%).

CHART 10.
Real GDP Growth rate, % change



Source: IMF World Economic Outlook Update, January 2023

1.4 The rise in energy prices following the war in Ukraine hit the euro area far harder than the United States

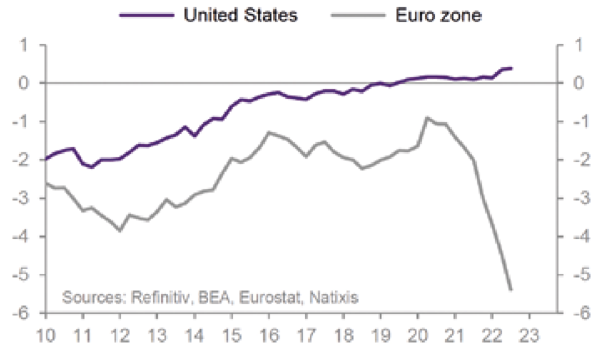
The war in Ukraine has created a new negative supply shock for the world economy, what has particularly impacted Europe.

The major difference between the United States and the euro area is that the United States produces its energy, whereas the euro zone imports its. Therefore, contrary to EU countries, the United States has not experienced any external shock.

In such a context, the United States benefit from an external surplus for energy (*see Chart 11*) which is very different situation from that of the euro zone.

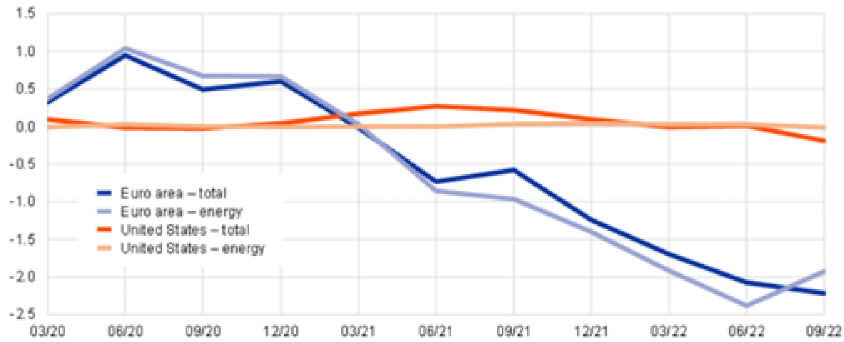
4. The EU economy is forecast to expand by 0,8% according to the Winter economic forecast of the EU Commission, February 2023.

CHART 11.
Trade balance in energy
(as % of nominal GDP)



Source: P. Artus, "What accounts for the resilience of growth in the United States and the euro zone?", Natixis Economic Research, January 2023

CHART 12.
Income effect of the terms-of-trade shock: Euro area versus United States (impact on year-on-year GDP growth in percentage points)

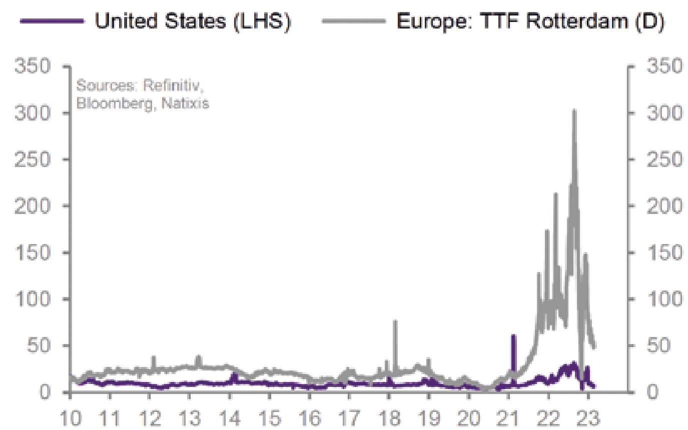


Sources: ECB Economic Bulletin, "Inflation developments in the euro area and the United States", January 2023
Notes: The income effect of terms of trade is calculated by weighting export and import price changes by their respective past values (one-year lag) and is expressed as a percentage share of GDP. The latest observations are for September 2022

The United States is a big winner after the European Union stopped Russian gas imports. Indeed, the United States has become the leading supplier of gas to the Old Continent. Nearly 75% of US exports of liquefied natural gas will go to Europe in 2022, compared with 34% in 2021.

Even if the price of energy has fallen significantly in recent months, it is still higher than in the past in Europe and much higher than the price of energy in the United States: 5 to 6 times for natural gas in January 2023 (*see Chart 13*).

CHART 13.
Natural gas (EUR/MWh)



Source: P. Artus, "The return to fossil fuels in the United States", Natixis Economic Research, January 2023

This level is sufficiently high to create a problem of competitiveness for European industry and a movement of relocation of energy-intensive companies (chemicals, fertilisers, etc.) to countries where energy is cheaper, such as the United States, especially with the implementation of the Inflation Reduction Act.

Will the United States dominate China and the Eurozone economically in the coming years?

P. Artus[5] explains that the US economy could dominate China and the Eurozone in the coming years: China could be penalised by its demography and Europe will suffer from insufficient modernisation and technical progress.

5. P. Artus, "Les États-Unis vont dominer la Chine et la zone euro", Les Échos, 5 décembre 2022.

•

If the situation described above does not change, the euro zone risks becoming a second-rate economic power compared to the United States.

A considerable investment effort in research and development, in industrial equipment, in decarbonisation, in digital technology, in improving equity financing, the education system and the skills of the population, in promoting selective immigration of “people” who can occupy sufficiently qualified jobs, will therefore be necessary if Europe and the euro zone are to correct their growth disadvantage in relation to the United States and China and not be relegated to the rank of second-rate powers.

2. The Covid-19 crisis has exacerbated existing fiscal heterogeneities across EU Members States

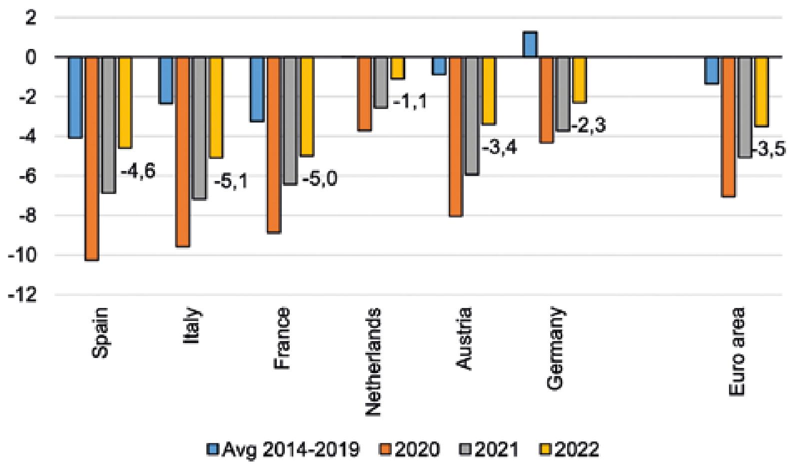
2.1 EU countries that have best managed their public finances after the Global Financial Crisis (2008) and the EU Sovereign crisis (2011-13) are those that have suffered the least from the Covid-19 shock

In 2019, the Netherlands and Germany, after several years of efforts to reduce their general government deficit and debt, brought back their public finance in line with EU fiscal rules. Indeed, between 2014 and 2019, they ensured an average public surplus of 1.3% and 0.02% of their GDP, respectively. Such fiscal efforts allowed them to gradually reduce and stabilise their public debt, at respectively 58.9% and 48.5% of GDP in 2019, from 78.3% and 67.7% in 2013. Austria also made such efforts over that period, contributing to reduce its public debt burden by nearly 11 pp to 70.6% of GDP in 2019.

Thanks to the fiscal discipline achieved since 2013, Germany and the Netherlands have much contained the shock induced by the Covid-19 crisis. At 4.3% of GDP and 3.7% respectively, their 2020 public deficit has remained mainly below the eurozone average of 7.2%. This dynamic contrasts with the close to double-digit levels that France (-9.1% of GDP), Spain (-11%) and Italy (-9.6%) have experienced during the crisis (*see Chart 14*).

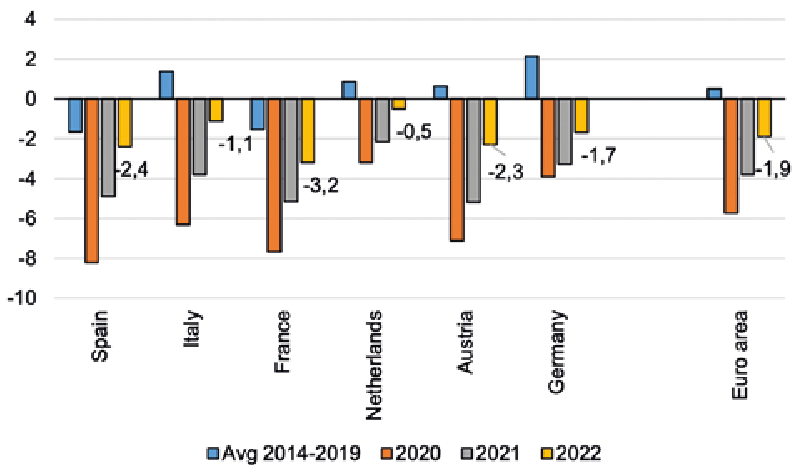
In 2021, the level of fiscal balance across EU Member States has converged towards its pre-crisis configuration: countries with healthy public finances prior to the Covid-19 crisis have registered fiscal deficits significantly lower than the eurozone average of 5.1%. This was the case of Germany and the Netherlands in particular, whose total fiscal deficit dropped to 3.7% of GDP and 2.5% respectively. By contrast, the figure remained above 5% of GDP in Spain (-6.9%), France (-6.5%) and Italy (-7.2%) in 2021.

CHART 14.
General Governement Budget Balance, % of GDP



Source: Eurostat, EU Commission's Automn Forecast, November 2022
Notes: Labels relate data for 2022 ; data for 2022 are taken from the EU Commission's forecasts of November 2022

CHART 15.
General Governement Primary Budget Balance, % of GDP



Source: Eurostat, EU Commission's Automn Forecast, November 2022
Notes: Labels relate data for 2022 ; data for 2022 are taken from the EU Commission's forecasts of November 2022

2.2 By contrast, the most indebted countries on the eve of the Covid-19 crisis have been the most severely hit in terms of output shortfall in 2020

During the post-Global Financial Crisis period, the public debt ratio of Spain, Italy and France has kept rising. Between 2012 and 2019, France increased its public debt ratio from 90.6% to 97.4%; Italy's one jumped from 126.5% to 134.1%, and Spain's rose from 90% to 98.2%.

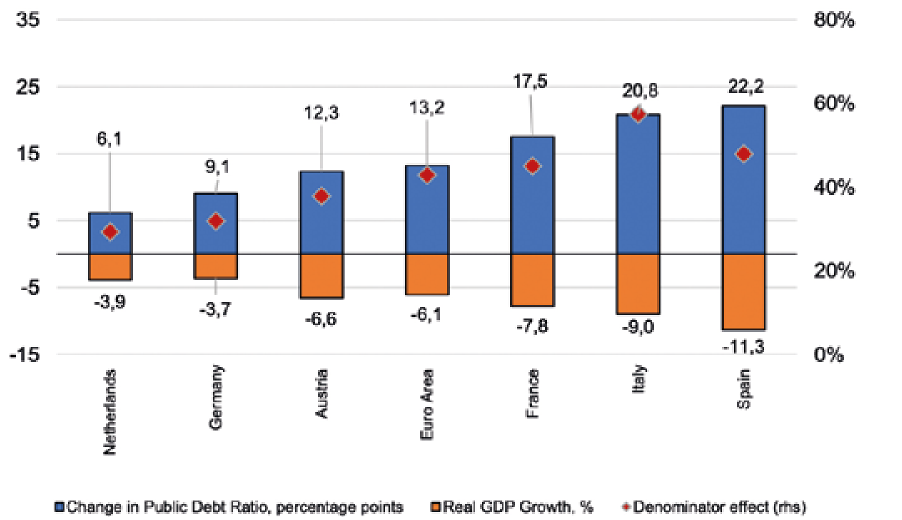
The lasting rise of public debt-to-GDP ratio in these three Member States is mainly due to the accumulation of yearly fiscal deficits. As shown in Chart 19, the average deficit of France and Spain exceeded 3% of GDP, the threshold of Maastricht fiscal rules, between 2014 and 2019. Unlike Italy, these two countries have not delivered any primary surplus, since 2002 for France and 2008 for Spain. Between 2014 and 2019, their average primary deficit reached 1.5% of GDP, while Italy secured a primary surplus at the same period of 1.4% (*see Chart 15*).

During the Covid-19 crisis, France, Italy and Spain have been the most severely hit in terms of output shortfall in the euro area. In 2020, GDP in Spain fell by 11.3%. It collapsed by 9% and 7.8% in Italy and France, respectively.

With public finances already deteriorated on the eve of the crisis, the three countries registered the strongest increase of their public debt-to-GDP ratio between 2019 and 2020. Spain experienced the highest rise (+22.2 percentage points, against 13.2 pp for the euro area). Italy and France followed, as their public debt grew by 20.8pp and 17.5 pp respectively (*see Chart 16*).

However, about 40% of the surge in public debt-to-GDP ratio is due to the fall of GDP by itself in the euro area, for 2020. For instance, taking into account the "denominator effect", 42.3% of the rise of the Spanish public debt ratio was related to the fall of GDP that year. The figure reached 56.4% in Italy – the highest level in the eurozone – and 44.5% in France. It accounted for 33.9% in the Netherlands, 29.5% in Germany and 36.4% in Austria.

CHART 16.
Real GDP Growth, Change in Public Debt Ratio and Denominator Effect in 2020



Source: Eurostat

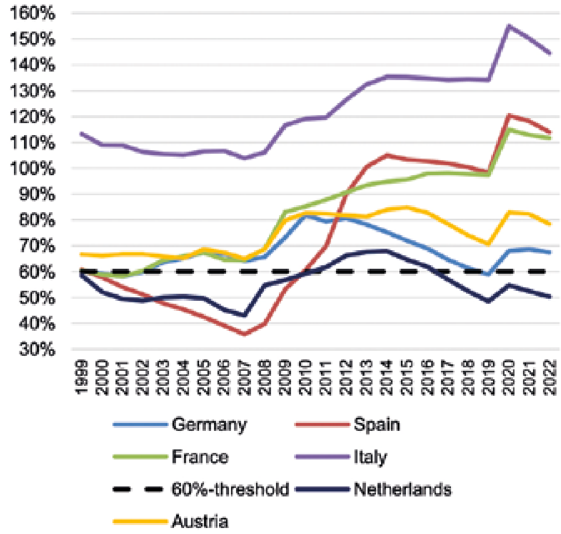
2.3 Countries whose public finances deteriorated the most in 2020 still registered high fiscal deficits in 2021

Although it declined markedly compared to 2020, fiscal deficits remained elevated in 2021 in some Southern Member States. Among the major EU Member States, Italy delivered the highest negative balance, with 7.2% of GDP in 2021, from 9.5% in 2020 (*see Chart 19*). France and Spain exhibited a fiscal deficit of respectively 6.5% of GDP and 6.9% in 2021, from 9% and 10.1% in 2020.

The figure was lower among major Northern Member States. In Germany, fiscal deficit dropped to 3.7% of GDP, from 4.3% in 2020. It returned below 3% of GDP in the Netherlands (-2.6% of GDP), from 3.7% a year earlier.

In 2021, the public debt-to-GDP ratio stabilised at high levels in some of these EU Member States. Thanks to strong GDP growth performance (*see Part 1*), the ratio fell marginally in France from 115% of GDP in 2020 to 112.8% in 2021 (*see Chart 17*). It dropped by 2.1 pp in Spain (from 120.4% to 118.3%) and by 4.7pp in Italy (from 154.9% to 150.3%). Still, these figures remained nearly twice as much high in Germany (68.6% of GDP) and the Netherlands (52.4% of GDP) in 2021.

CHART 17.
Evolution of Gross Public Debt to GDP ratio in Major Economies, %



Source: EU Commission ; Data for 2022 are projections taken from the EU Commission's Automn forecasts of November 2022

2.4 In 2021, the fiscal heterogeneity worsened across EU members in terms of public debt-to-GDP

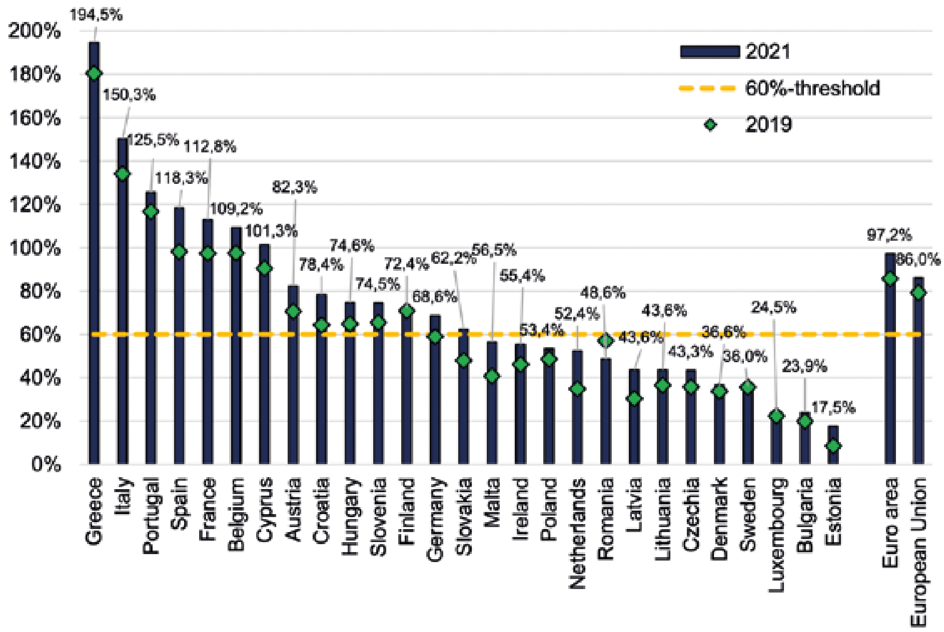
In 2021, the level of public debt ranged from 17.5% of GDP in Estonia to 194.5% in Greece. Within this range, three groups of countries can be distinguished in the European Union (*see Chart 18*).

A first group contains seven Member States whose debt remained above 100% of GDP at the end of 2021. This ratio reached 194.5 % in Greece, 150,3%, in Italy and over 110% in Portugal (125.5%), Spain (118.3%), France (112.8%). It exceeded 100% of GDP in Belgium (109.2%) and Cyprus (101.3%)

On the other hand, seventeen EU countries kept their ratio of public debt below 75% of GDP in 2021. Among them, Germany and the Netherlands saw their public debt hovering at 68.2% and 52.4% of GDP in 2021, respectively. With the Netherlands, twelve other countries had a public-debt-to-GDP ratio below the Maastricht threshold of 60% in 2021: Malta (56.5%), Ireland (55.4%), Poland (53.4%), Romania (48.6%), Latvia (43.6%), Lithuania (43.6%), the Czech Republic (43.3%), Denmark (36.6%), Sweden (36%), Luxembourg (24.5%), Bulgaria (23.9%), and Estonia (17.5%).

Three other countries, *i.e.* Austria, Croatia, Hungary, registered a level of public debt ranging from 75% of GDP to 83% in 2021.

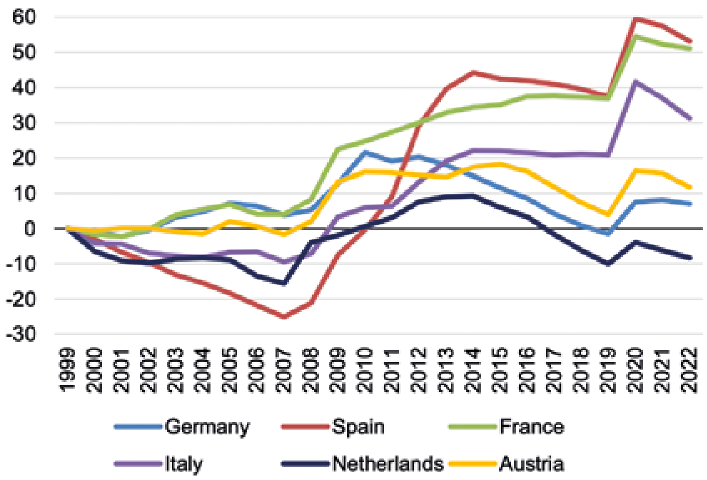
CHART 18.
Gross Public Debt, as % of GDP



Source: EU Comission
Labels refer to 2021

The heterogeneity in the level of government debt relative to GDP across euro area Member States has significantly increased since the creation of the euro area in 1999. As shown in Chart 19, the public debt-to-GDP ratio has moderately increased by 8.2 pp in Germany, 15.6 pp in Austria and even dropped in the Netherlands by 6.2 pp over the past two decades until 2021. In the meantime, the level has risen by 37 pp in Italy, 52.3 pp in France and 57.5 pp in Spain.

CHART 19.
Cumulative change of Public debt to GDP ratio since 1999, percentage points



Source: EU Commission ; Data for 2022 are projections taken from the EU Commission's Automn forecasts of November 2022

3. The significant economic impacts of the war in Ukraine suffered by EU countries

The economies of the euro zone have been heavily affected by Russia's war in Ukraine. The negative impact of the energy shock on the terms-of-trade of euro area countries was significant in 2022 and has led to the disappearance of the euro area's external surplus last year.

European economic growth in 2022 has been more resilient than expected thanks in part to lower energy prices since the fall, rapid diversification of energy supplies and government support for households and businesses. The divergence in budget deficits and public debt among member states did not increase with the war in Ukraine, but the ratio of public debt to GDP has stabilized at high levels in many EU countries.

Inflation has reached levels never seen in decades in many countries. It peaked during the last quarter of 2022 while core inflation is still increasing in the euro area (5,6% in February 2023 and 5.7% in March 2023).

Stagflation is the most likely scenario in Europe for the coming months for a number of reasons including the stagnation or even the decline in labour productivity in the major euro area countries, which is a worrying development.

3.1 A major energy shock for Europe

Following the war in Ukraine, the economies of the European Union have suffered from a loss of income due to the rise of energy and other imported commodities during 2022. Indeed, contrary to the United States which produces its energy, EU countries import its.

As François Villeroy de Galhau explained[6], "the first peaks on gas and electricity prices took place in the summer of 2021 in the context of the global post-pandemic recovery, when European countries had to build up their gas stocks for the winter and when demand for natural gas in Asia and the United States strongly increased. In this context the price of metals for example almost doubled from 2020 to mid-2021. Tensions in the oil market also emerged during the second half of 2021".

Then, the Russian war in Ukraine has caused gas prices to soar. From slightly above € 10 per megawatt hour in early 2020, the price of the natural gas delivered in Europe increased to € 80 before the start of the war in Ukraine in February 2022, soaring to a peak of € 240 in August 2022 (monthly average) and then stabilising at around € 50 since January 2023[7] (*see Chart 20*), helped by demand restraint, diversification of supply sources and exceptionally mild weather.

Oil prices have also risen sharply since the start of the war in Ukraine. As of late January 2023, futures for Brent stood at $ 85, 40% above their 2019 average of $ 60.

Electricity prices have also reached record levels: the price of electricity on the wholesale market is indeed closely correlated to the price of gas paid by the marginal electricity producer.

The rise in commodity price has coincided with the appreciation with the US dollar. In the past, commodity prices and the dollar typically moved in opposite directions: the dollar depreciated when commodity prices rose. Given dollar invoicing, these moves dampened the price increase in non-dollar terms. In the current episode, The BIS explains[8] that "the unusual sequence of shocks (the Covid-19 pandemic and then the war in Ukraine) have resulted in a positive co-movement of the dollar and commodity prices. As a result, commodity prices in local currencies have surged much more strongly than in US dollar terms. One reason for changes in the co-movement is that the United States has become a net energy exporter, especially of natural gas. Increases in oil and gas prices now improve the US terms of trade and tend to boost the US dollar, with any related monetary tightening further bolstering the currency."

Chart 21 shows that the euro depreciated sharply against the US dollar as monetary policy diverged between the euro area and the United States between January 2022 and September 2022. Between January and late September 2022, the euro currency plunged by 13.3% against the USD, bringing the value to its lowest level since 2002.

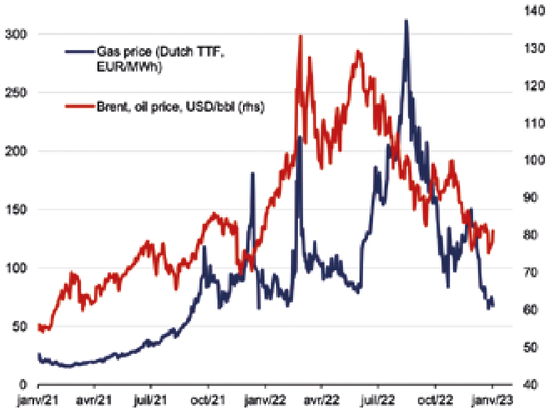
6. François Villeroy de Galhau, "The magnitude and distribution of the energy and trade shocks in the euro area and in France", Toulouse, 8 December 2022.

7. I. Visco, "Monetary policy and the return of inflation, questions and charts", Speech at the Frankfurt School of Finance & Management, March 2023.

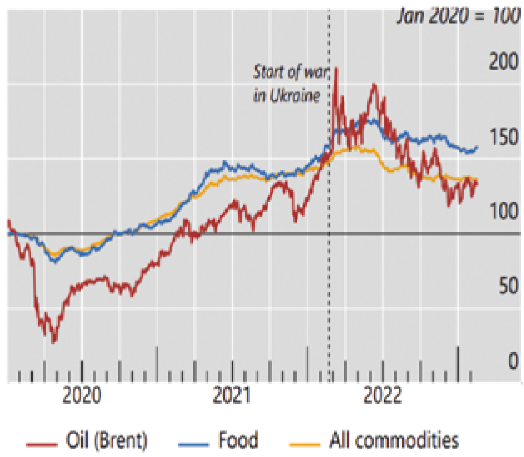
8. BIS Bulletin, "Energy markets: shock, economic fallout and policy response", 13 December 2022.

CHART 20.
Commodity prices

20a. Gas & Oil Market prices since January 2021

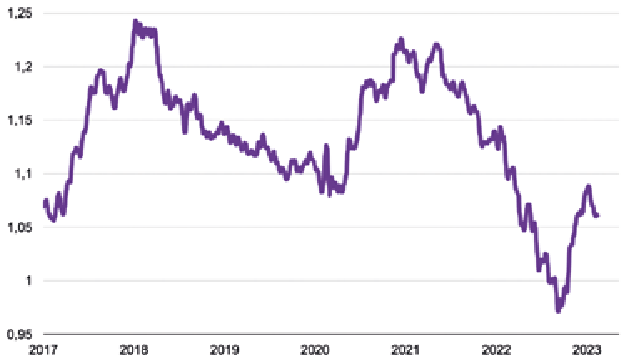


20b. Commodity price indexes since January 2020[9]



Sources: Refinitiv, St Louis Fed, Bloomberg; BIS;
For chart 20.a Last observation are from 11 January 2023
Chart 20. b is taken from the presentation of Hyun Song Shin "Global value chains under the shadow of Covid-19", BIS (February 2023); Brent oil price in US dollars/barrel. Food price index measures price movements of butter, cocoa beans, corn, cottonseed oil, hogs, lard, steers, sugar and wheat

CHART 21.
US Dollar vs Euro exchange rate



Source: Federal Reserve
Last data from 14 March 2023

The past depreciation of the euro has amplified the rise in imported prices, particularly those of commodities which are global and set in dollars. According to François Villeroy de Galhau[9], the 16% fall in the euro against the dollar between mid-2021 and mid-2022 would, if it had stayed at this level, have had an estimated impact of roughly +0.6 percentage points on the level of consumer prices over the long term. The monetary policy conducted since then by the Eurosystem has contributed to the recent re-appreciation of around 8% in the euro, which should gradually have the opposite effect.

3.2 Its impact on the terms-of-trade of euro area countries was significant in 2022

These movements in international prices have triggered significant transfers of wealth between net commodity importing and exporting countries. From the point of view of European economies, this has resulted in a real income shock that reduces household purchasing power and corporate margins, while deteriorating the competitiveness of exporting firms where energy prices have risen the most.

Several ways of measuring this external levy can be envisaged. To measure it, we use the "terms of trade" approach[10], *i.e.* the ratio of export prices to import price.

9. F. Villeroy de Galhau, "How monetary policy will defeat inflation: channels and locks", Centre des Professions Financières, 17 February 2023.

10. We calculated the terms of trade shock, using the Banque de France's following methodology:

$$shock = -\left(\frac{\frac{P_t^M}{P_t^{GDP}}}{\frac{P_{t-4}^M}{P_{t-4}^{GDP}}} - 1\right) \times \frac{Val_{t-4}^M}{Val_{t-4}^{GDP}} + \left(\frac{\frac{P_t^X}{P_t^{GDP}}}{\frac{P_{t-4}^X}{P_{t-4}^{GDP}}} - 1\right) \times \frac{Val_{t-4}^X}{Val_{t-4}^{GDP}}$$

With P_t^M (resp.P_t^X), the import price (resp. exports) of quarter t, P_t^{GDP} the GDP deflator of quarter t, Val_t^M (resp. Val_t^X), the nominal value of imports (resp. exports) of quarter t et, Val_t^{GDP}, the nominal GDP of quarter t.

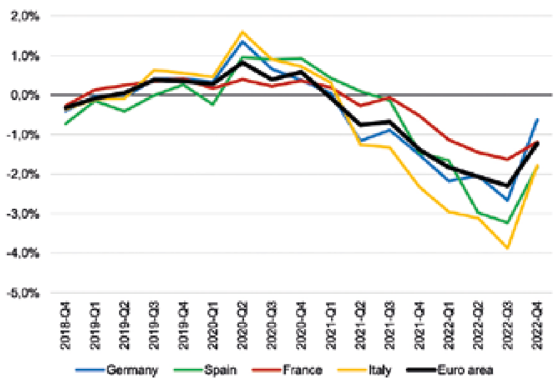
In the euro area, this ratio has deteriorated sharply since the second quarter of 2021, reflecting the faster rise in import prices than in export prices. The negative income effect due to the transfer of purchasing power is estimated by the ECB[11] at around 2.2 percentage points of GDP in the third quarter of 2022 in the euro area, based on a comparison with the same quarter the year before. For the full year of 2022, the income loss associated to the terms-of-trade shock represented for 1.9% of GDP in the euro area.

The impact of the energy crisis on the terms of trade differs across Member States

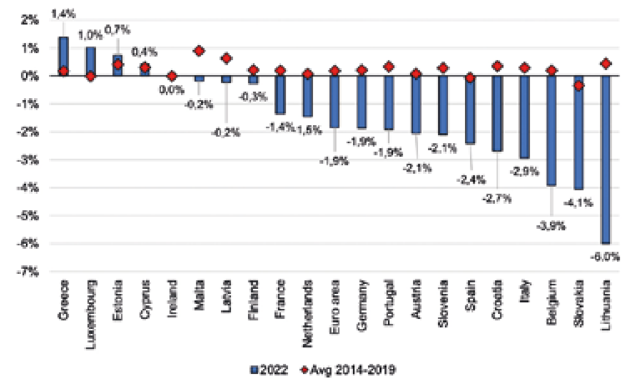
The heterogeneity across European countries is significant. As shown in Chart 22.b, the average terms of trade shock for the full year of 2022 amounted to 1.4% in France, 1.9% in Germany, 2.4% in Spain and 2.9% in Italy.

CHART 22.
Terms-of-trade shock across Euro area Member States

22a. Terms-of-trade shock, quarterly data



22b. Average loss recorded in 2022



Source: Eurostat
The income effect of terms of trade is calculated by weighting export and import price changes by their respective past values (one-year lag) and is expressed as a percentage share of GDP. Chart 22.b illustrates the average terms-of-trade shock for the four quarters of 2022.

For France, this shock on the terms of trade could be the second largest since the first oil shock of 1974. It implies a decrease in real income for the eurozone economy of -2.3% of GDP year-on-year at the end of the third quarter of 2022.

As the Banque de France points out in its December 2022 macroeconomic forecasts, this shock is somewhat smaller for France than that experienced by the other major countries in the euro zone. France's lower dependence on fossil fuels and the lower weight of industry (compared to countries like Germany or Italy) mitigate the magnitude of import price shocks in France. In addition, France also benefits from dynamic export prices in the maritime transport and agricultural products sectors.

In Q4 2022, which coincided with the fall in energy prices, the trade-related loss declined sharply for the euro area Member States (*see Chart 22.a*).

3.3 High energy prices and lower exports to China have led to the disappearance of the euro area's external surplus in 2022

While the eurozone's trade surplus still reached € 116 billion in 2021, the deficit amounted to € 314 billion in 2022 due to rising energy prices. Indeed, EU energy imports jumped from € 390 billion in 2021 to 835 billion in 2022[12].

The energy bill in Europe has risen in a differentiated way according to the Member States' dependence on fossil fuels and their industrial specialization. Energy imports have increased in the euro area countries:

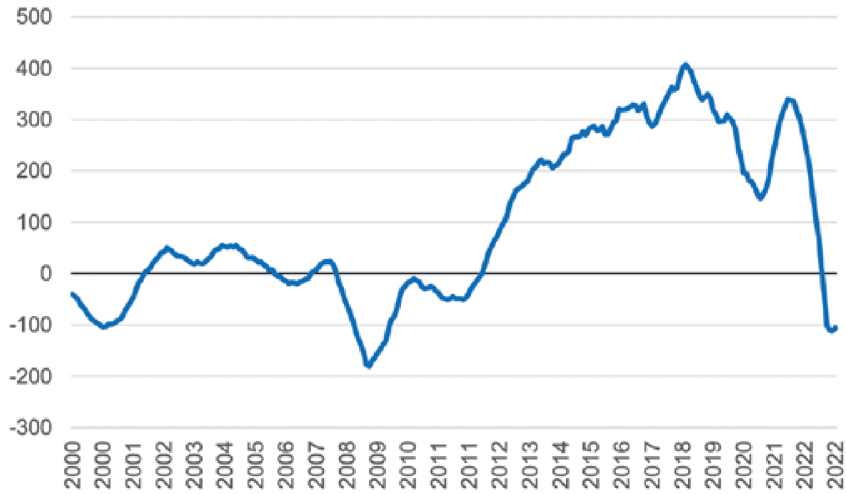
- From € 40 to 50 billion in France in the years 2019-2020 and 2021 (2% of GDP), it rose to € 100 billion in 2022 (*i.e.* 4% of GDP).
- In Italy and Spain, the cost of energy imports reached respectively € 100 billion (5.3% of GDP) and € 47 billion in 2022 (6% of GDP), compared with an average of € 30 billion in these two countries in the years before the war (*i.e.* 2% of GDP in these countries).

11. ECB, "Inflation developments in the euro area and the United States", Economic Bulletin, Issue 8/2022.
12. G. de Colignon, "Le commerce extérieur, nouveau talon d'Achille de la zone euro", Les Échos, 15 February 2023.

The current account deficit amounted to € 106 billion (0.8% of euro area GDP) in 2022, compared with a surplus of € 282 billion (2.3%) in 2021 (*see Chart 23*).

According to the ECB[13], this change in the current account balance was mainly driven by a switch from a surplus (€ 287 billion) to a deficit (€ 60 billion) for goods, and, to a lesser extent, by a reduction in the surplus for primary income (down from € 63 billion to € 7 billion) and a slightly larger deficit for secondary income (up from € 160 billion to € 166 billion). These developments were partly offset by a larger surplus for services (up from € 92 billion to € 114 billion).

CHART 23.
Current Account Balance in the euro area, € Billion (Cumulated figure for the 12 previous months)



Source: Eurostat
Last observation from December 2022

More generally, Germany, the Netherlands have lost most of their current account surplus due to the sharp increase in energy bill. Italy's current account balance turned into deficit while other countries have reached current account deficit, such as France and Belgium (*see Table 1*).

TABLE 1.
Current account balance, % of GDP

	Current Account Balance, % of GDP						
	2007	2011	2012	2019	2021	2022	2023
Germany	6,9%	6,2%	7,1%	7,6%	7,4%	3,6%	4,6%
France	-0,1%	-0,9%	-1,0%	0,5%	0,4%	-2,0%	-0,1%
Italy	-1,4%	-2,8%	-0,2%	3,3%	3,1%	-0,7%	-0,2%
Spain	-9,4%	-2,7%	0,1%	2,1%	1,0%	0,8%	0,8%
Netherlands	6,9%	8,6%	10,2%	6,9%	7,2%	5,7%	5,3%
Portugal	-9,6%	-6,0%	-1,6%	0,4%	-1,2%	-1,5%	-0,8%
Belgium	1,9%	-1,9%	-0,1%	0,1%	0,4%	-2,9%	-2,9%
Greece	-15,2%	-8,8%	-3,6%	-1,5%	-6,8%	-9,7%	-7,4%
Euro area	0,0%	-0,4%	1,0%	2,3%	2,3%	-0,8%	n.a

Source: Eurostat, data for 2023 are projections taken from the Automn Forecast of the EU Commission (November 2022); data for Austria & the Netherlands in 2022 are also projections taken from the same report

3.4 Governments have absorbed more than a third of the income loss in 2022

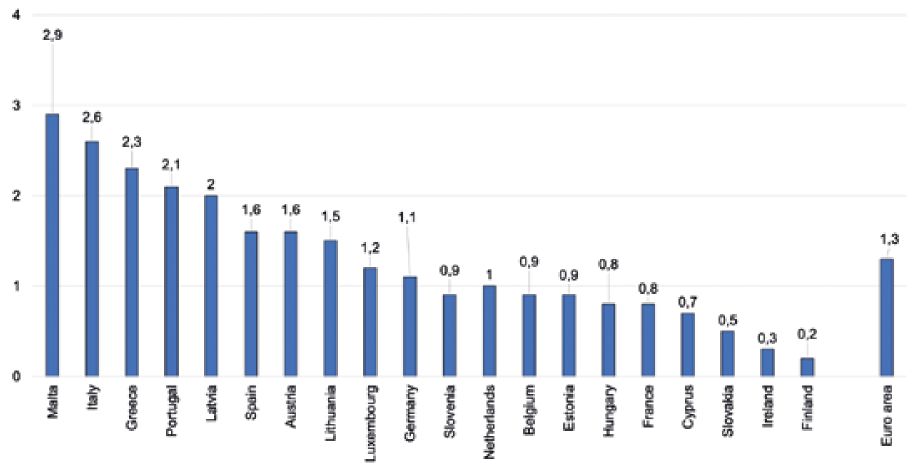
The increase in energy prices has prompted most Member States to implement several measures to mitigate the social and economic impact on households and firms, while fiscal policies were already expansionary.

According to the EU Commission[14], the net budgetary cost of these measures is estimated at 1.3% of GDP in 2022 and 0.9% in 2023 for the euro area, although there are large differences across Member States (*see Chart below*). But if all existing measures were extended through 2023, the total cost could reach around 2% of GDP, much higher than in 2022.

13. ECB, "Euro area monthly balance of payments: December 2022", 17 February 2023.

14. "Fiscal policy measures to mitigate the impact of high energy prices", EU Commission – Automn Forecast, November 2022.

CHART 24.
Estimated net budget cost of energy measures in 2022 (% of GDP)



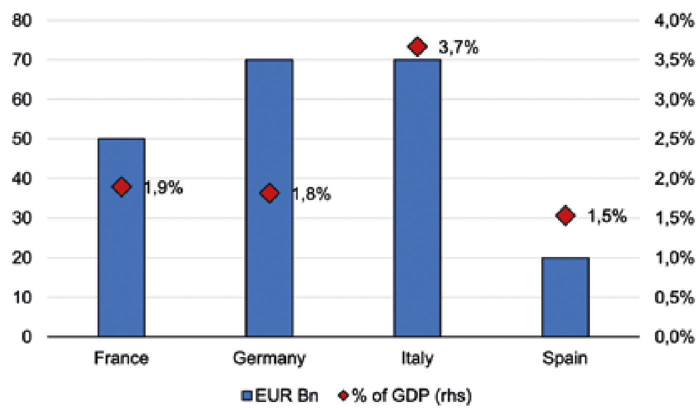
Source: EU Commission 2022 Automn Forecast
The measures are 'net' after considering revenues from new taxes or levies on windfall profits by energy companies

These energy-government measures take the form of broad-based tax cuts or subsidies, and outright energy price caps, either with the aims to temporally increase income ('**income measures**') or reduce the marginal cost of energy consumption for households and/or firms ('**price measures**'). The measures are adjusted for revenues from taxes or levies on windfall profits by energy companies.

The measures implemented in **France** in 2022 essentially consisted of limiting energy price increases through the tariff shield (gas and electricity) and a fuel price rebate. Support in **Germany** has been mainly conducted through transfers to households and a reduction in energy taxation. In **Italy**, measures included household income support, business subsidies and energy price regulation. In **Spain**, measures focused on consumer energy prices, including tax cuts and lower fuel prices at the pump.

Among the largest eurozone economies, the French government allocated € 50 billion (1.9% of GDP) to preserve households and firms' purchasing power, less than Italy (3.6% of GDP) and Germany (1.8% of GDP) for which spending accounted for € 70 billion, but more than Spain (€ 20 billion, or 1.5% of GDP) – *see Chart 25*.

CHART 25.
Total amount of Government measures implemented to offset rising energy prices in 2022



Source: Eurofi calculations, updated from the French Treasury's note "Répartition des pertes dues à la dégradation des termes de l'échange énergétiques", Trésor Eco, December 2022

These measures have contributed to partially offset the rise in energy prices for households and firms. Taking the case of France, where net energy measures accounted for 1.9% of GDP in 2022, the share for households decreases to around 5% of the overall burden, from 36% in the absence of offsetting measures, according to the Banque de France[15]. The share of companies goes down, but more moderately, just above 55%, from 63% before government's actions.

Compared to 2021, these measures have stabilized the households' purchasing power in 2022, which would have dropped by 3.5% in the absence of government support, according to the French Treasury[16].

15. "The magnitude and distribution of the energy and trade shocks in the euro area and in France" Speech by François Villeroy de Galhau, Banque de France, December 2022.

16. G. Claveres, "Répartition des pertes dues à la dégradation des termes de l'échange énergétiques", TresorEco n°318, French Treasury, December 2022.

3.5 The divergence in terms of fiscal deficits and public debt between Member States has not increased with the war in Ukraine but the public-debt-to-GDP ratio has stabilized at elevated levels in many EU countries

To mitigate the impact of skyrocketing energy prices on households and firms, governments of the EU have adopted in 2022 several fiscal measures in the form of temporary tax cuts, fiscal transfers or energy price caps. These different types of measures contributed to explain the divergences in inflation levels across countries (*see Part 3.7.1 above*).

However, public deficits in EU countries have been reduced due to the strong real GDP growth and the phasing out of the pandemic-related measures in 2022 (*see end-table*).

In this context, public debts compared to GDP in EU countries have stabilised at high levels. For 2022, the ratio reduced marginally in France from 112.8% of GDP in 2021 to 111.7% in 2022. It has fallen by 4.3 pp in Spain (from 118.3% to 114%) and by 5.7 pp in Italy (from 150.3% to 144.6%), according to the EU Commission. The public debt of these countries remains well above the levels of Germany and the Netherlands, which stood at respectively respect 67,4% and 50,3% in 2022.

Last year, the reduction in the public debt-to-GDP ratio was the most pronounced in countries with the highest inflation. In Italy, whose GDP deflator exceeded 3%, the ratio decreased by 5.4 percentage points (ppts) compared to 2021, the largest change among the major euro area economies, ahead of Spain (-4.2), France (-1.8) and Germany (-0.7). Indeed, although primary deficits are still very high in European countries in 2022, Italy has reduced its primary deficit from 3.7% of GDP to 1.1%, a reduction of 70% compared to 2021. Germany has reduced its primary deficit by 46%, while France's primary deficit has only been reduced by 37% between 2021 and 2022 (*see Table 2*).

As we shall see below, the differences in measures to fight inflation also explain the slight differences in the decline in public debt compared to GDP across the EU Member States.

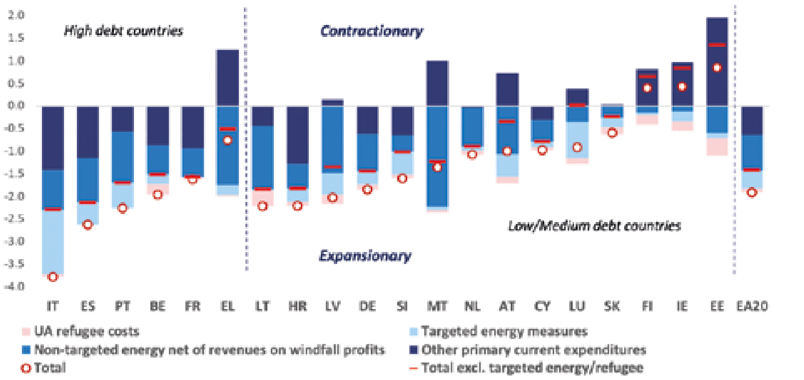
Despite offsetting some of the burden, these non-targeted measures weaken incentives to lower energy consumption and weigh on the public finances of the most indebted Member States.

Only a small share of the temporary fiscal measures implemented to alleviate the burden of rising energy prices target low-income households. The EU Commission estimates that only less than 30% of these measures have been targeted in 2022, ie from which only the most vulnerable strata of the population benefit. For 2023, around 90% of the budgetary impact is due to the measures that are not targeted, according to the EU Commission[17].

Moreover, many measures support short-run fossil fuel consumption, thereby working against efforts to move away from fossil energy sources. According to the EU Commission, roughly two-thirds of the energy measures are price measures. This may distort the price signal and reduce incentives to contain energy consumption and increase energy efficiency. In terms of budgetary impact, only 1% of the total measures contribute directly to the green transition, according to I. Schnabel[18].

Another side-effect of these measures concerns their fiscal cost for public finances. Mainly financed by borrowing, government-measures adds to the historically high public debt burden across countries.

CHART 26.
Nationally financed net primary current expenditure – contribution to fiscal stance and drivers (ppts of GDP)



Source: EU Commission Automn Forecast, November 2022

17. Idem footnote n°2.

18. I. Schnabel, "Finding the right mix: monetary-fiscal interaction at times of high inflation", ECB Speech (November 2022).

As noted by the EU Commission[19], energy-related measures have been an important driver behind the expansionary developments in net primary current spending in most Member States in 2022 (*see Chart 26*).

For 2023, the net budgetary cost of energy measures is currently forecast at 0.9% of GDP in the euro area. This projection is largely driven by the significant full-year policy packages that were announced by a few large Member States.

For 2022, fifteen Member States have experienced a deficit greater than 3% of GDP. Spain experienced a fiscal deficit of 4.6% in 2022 while it exceeded 5% of GDP in France (-5%), Italy (-5.1%), and Belgium (-5.2%). By contrast, fiscal deficits in Germany (-2.5%) and the Netherlands (-2.7%) should remain below 3% of GDP (*see end-table*).

In this context, public debts compared to GDP in EU countries have stabilised at high levels. For 2022, the ratio reduced marginally in France from 112.8% of GDP in 2021 to 111.7% in 2022. It has fallen by 4.3 pp in Spain (from 118.3% to 114%) and by 5.7 pp in Italy (from 150.3% to 144.6%), according to the EU Commission. The public debt of these countries remains well above the levels of Germany and the Netherlands, which stood at respectively respect 67,4% and 50,3% in 2022 (*see Table 2*).

TABLE 2.
General Government Total and Primary Budget Balances, and Gross Public Debt's Forecasts for 2022 and 2023, % of GDP

	Budget Balance			Primary Budget Balance			Gross Public Debt		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Germany	-3,7	-2,3	-3,1	-3,2	-1,7	-2,4	68,6	67,4	66,3
France	-6,5	-5,0	-5,3	-5,1	-3,2	-2,8	112,8	111,7	110,8
Italy	-7,2	-5,1	-3,6	-3,7	-1,1	0,4	150,3	144,6	143,6
Spain	-6,9	-4,6	-4,3	-4,7	-2,4	-2,0	118,3	114,0	112,5
Netherlands	-2,6	-1,1	-4,0	-2,0	-0,5	-3,4	52,4	50,3	52,4
Portugal	-2,9	-1,9	-1,2	-0,5	0,2	1,4	125,5	115,9	109,1
Austria	-5,9	-3,4	-2,8	-4,8	-2,3	-1,8	82,3	78,5	76,6

Source: EU Commission Automn Forecast, November 2022

3.6 A sizeable hit to EU growth

Russia's war Ukraine and a resurgence of Covid 19 in China weighted on global activity in 2022. The January 2023 World Economic Outlook Update of the IMF projects that global growth will fall from an estimated 3,4% in 2022 to 2.9% in 2023 but rise to 3.1% in 2024. The 2023 forecast is 0.2 percentage point higher than predicted in the October 2022 World Economic Outlook but below the historical (2000-19) average of 3.8%.

EU GDP growth for 2022 is now estimated at 3.5%. For 2023, the EU economy is forecast to expand by 0.8% by the EU Commission.

3.6.1 European economic growth in 2022 was more resilient than expected in the face of the large negative terms-of-trade shock from the war in Ukraine

According to the IMF[20], "this resilience – which is visible in consumption and investment data for the third quarter – partly reflects government support of about 1.2% of European Union GDP (net budgetary cost) to households and firms hit by the energy crisis, as well as dynamism from economies reopening. Gas prices have declined by more than expected amid higher non-Russian pipeline and liquefied natural gas flows, compression of demand for gas, and a warmer-than-usual winter.

However, the boost from reopening appears to be fading. High-frequency indicators for the fourth quarter suggest that the manufacturing and services sectors are contracting. Consumer confidence and business sentiment have worsened".

In December 2022, the unemployment rate was at 6,1% in the EU (since April) and 6,6% in the euro area – unchanged since October.

3.6.2 Within the EU, Germany, and some countries in Eastern Europe are particularly affected economically

Among the main EU Member States, Germany is the hardest-hit due to relatively large manufacturing sectors and greater dependence on energy imports from Russia. For 2022, German real GDP grew by 1.8%, nearly twice as less as the eurozone average (+3.5%), according to the EU Commission forecast of February 2023.

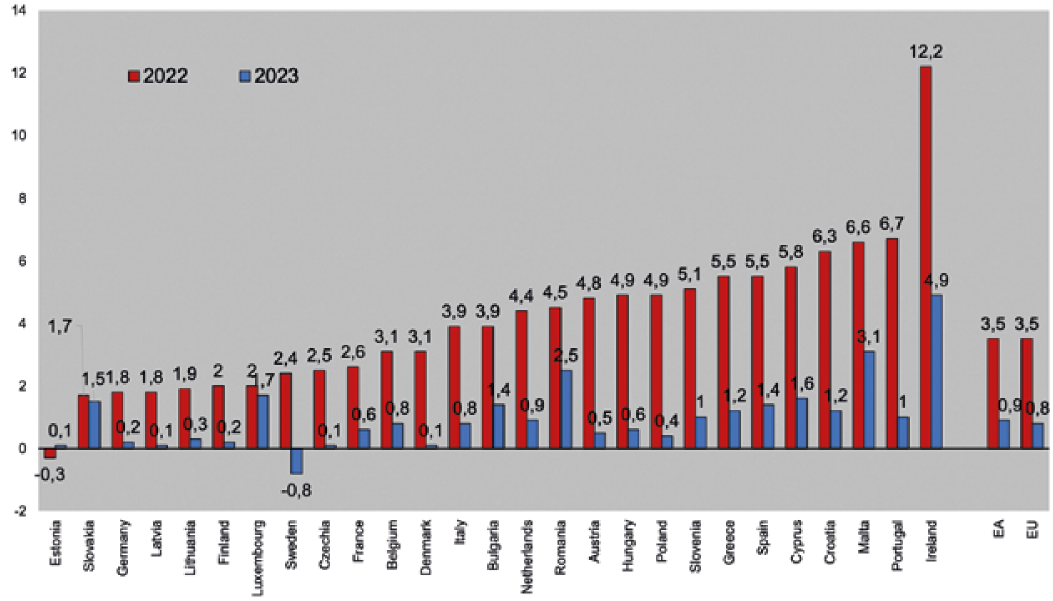
19. "Communication from the commission to the European Parliament, the Council and the European Central Bank on the 2023 Draft Budgetary Plans: Overall Assessment", European Commission, November 2022.

20. IMF, "World Economic Outlook Update", January 2023.

Relatively less exposed to Russian commodity imports and more service-oriented, France (+2,6%),the Netherlands (+4,4%) Spain (+5,5%) have been least affected by the shock in terms of output shortfall. Portugal delivered the second highest growth performance in Europe, with its real GDP increasing by 6.7% in 2022. Italy's real GDP grew by 3.9% in 2022.

According to the EU Commission Winter Forecast (February 2023), real GDP is set to slow in 2023, growing by 0.8% in 2023, against 3.5% last year. Heterogeneity across Member States remains elevated. In Spain (1.4%) and Portugal (1%), real GDP is projected to grow above 1% in 2023, above Italy (0.8%) and France (0.6%). Germany (0.2%) should experience the lowest change among the large EU member states in 2023.

CHART 27.
Real GDP Growth rate across EU Member States in 2022 and 2023 (%)



Source: AMECO Automn Forecast, February 2023

3.7 While headline inflation is likely to have peaked in both sides of the Atlantic, core inflation could prove stickier in Europe than in the US

Since the fourth quarter of 2022, headline inflation appears to have peaked, largely driven by lower energy prices notably in the United States, the euro area, and Latin America. However, core inflation has not yet peaked in most economies and remains well above pre-pandemic levels. Furthermore, it is noticeable that wage pressures have been gradually building up as workers have sought compensation for high inflation in tight labor markets.

3.7.1 Inflation remains a central concern in OECD economies

As K. Knot reminds us[21] "the decade of below-target inflation swiftly came to an end in the course of 2021. Our economies rebounded from the pandemic with households disturbing their growing deposit balances, but also with supply still severely constrained after a long period of pandemic contagion measures".

The Russian invasion in Ukraine has intensified some of these pre-existing pressures, putting more upward pressure on energy prices, raising the energy input costs of other products and creating additional distortions of supply chains.

But the inflation problem may also be explained by monetary causes (*see Eurofi monetary Scoreboard*). Indeed the excessive monetary growth of the previous years emanating from aggressive central banks' quantitative easing policies (in particular in 2020 and 2021) may have exacerbated supply chain issues by inflating overall spending and demand, reflecting a policy failure and not just the "teething problems of an economy recovering from the pandemic slump".[22]

21. K. Knot, "Staying the course", 8 February 2023.

22. P. Krugman, "The year of inflation infamy", the New-York Times, 16 December 2021.

Even prior the war in Ukraine, inflation was already an issue for OECD countries.

Between March 2021 and February 2022, consumer price index inflation (CPI) has been running above 2% in many advanced economies.

At the OECD level, inflation increased from 2.4% in March 2021, to 4% in June 2021 and 7.8% in February 2022 (*see Chart 28*).

In the euro area, the HICP growth rate exceeded 2% for the first time in July 2021. Since November 2021, the headline inflation has been greater than 2% in all eurozone Member States and kept rising until February 2022. In the United States, inflation has been exceeding 2% annually since March 2021, and increased to 7.9% until February 2022.

Lasting supply chain bottlenecks and supply and demand imbalances have continued to contribute to elevated levels of inflation.

In a speech delivered in August 2022, the President of the Bundesbank[23] explained this return of inflation: "One major factor driving this momentum was the global economy's unexpectedly swift recovery from the pandemic-induced recession. The fiscal and monetary policy support measures taken around the globe to limit the economic damage caused by the pandemic played a part in this. The rapid revival of economic activity then sent commodity prices soaring.

Another contributing factor was the shift in consumer demand away from services and towards goods during the pandemic – instead of heading to the cinema or the gym, people were ordering laptops and exercise bikes. That left industry struggling to produce enough to keep up in some cases. This has further exacerbated price inflation, both for final products and at upstream stages.

In addition, the pandemic disrupted global supply chains and transport routes. Some of these supply disruptions have proved to be more persistent than initially expected. This, too, has had a hand in pushing up prices. And, with demand robust, energy prices were already on the rise before the war began."

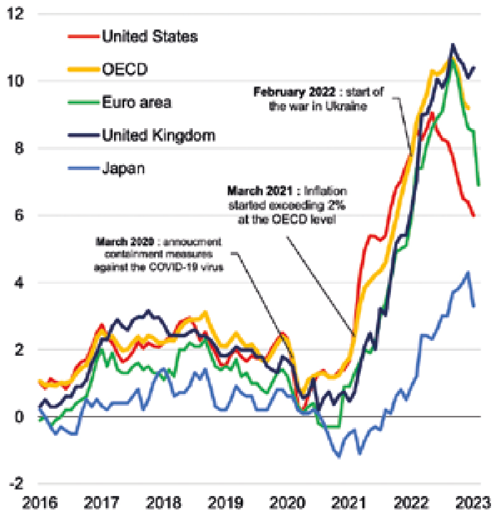
Inflation has reached levels not seen in decade in many countries in 2022.

Inflationary pressures have intensified last year. The reasons behind this rise are manifold. They combine supply and demand side factors, whose weights differ depending on the geographical area in question.

At the OECD level, the aggregated consumer price index rose by 9.6% for the full year of 2022 compared to 2021, the highest level since 1988. Although it has fallen since its peak of October 2022 (10.7%), headline inflation remained above 9.2% as of January 2023.

In the US, year-on-year headline inflation averaged 8.1% for the full year of 2022. As of February 2023, it fell to 6% from its peak of 9.1% recorded in June 2022. In the euro area, consumer prices were up by 8.3% in 2022 compared to 2021, the highest level recorded since the creation of the monetary union in 1999. It peaked at 10.6% in October 2022, before slowly decreasing since, to reach 8.5% as of February 2023, and 6.9% in March 2023.

CHART 28.
Consumer Price Index growth in key advanced economies, % annual change



Sources: OECD, Eurostat
Latest data from January 2023 for the OECD, from February 2023 for the UK, US and Japan, and March 2023 for the euro area

23. J. Nagel, "Monetary policy in times of geopolitical crises and high inflation", 30 August 2022.

In the UK, inflation averaged 9% for the full year of 2022, a level not recorded since 1982. Although it fell from its peak of 11.1% recorded in October 2022, headline inflation remained above double-digit levels (10.4%) as of February 2023.

As in Japan, headline inflation reached 2.5% in 2022, a level low by international standards but uncommon in a country that has battled deflation for decades. After peaking at 4.3% in January 2023, headline inflation declined to 3.3% in February.

In the euro area, inflation also remains far too high.

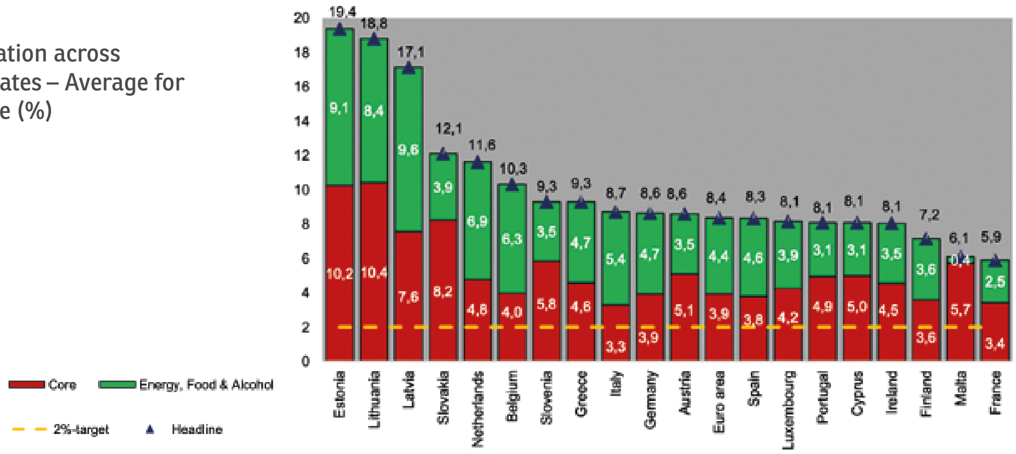
The war in Ukraine, and the associated pressures in energy and food supply pushed the euro area headline inflation into unprecedented double-digit territory in October (10,6%) and November (10.1%) last year, and to 8,4% for 2022 overall.

As explained by P. Hernandez de Cos[24], "in the case of the euro area, higher energy and food prices have added to the effect of other supply-side factors related in particular to supply – chain disruptions. Yet demand side factors, linked, above all, to the reopening of the economy after the pandemic and the depreciation of the euro, have also played a role in the increase in inflation".

The large import price shock has led to the highest inflation rates in the Baltics among euro area countries. In Estonia, headline inflation doubled from 11.6% in February to peak at 25.2% in August 2022. It jumped to 22.5% in Lithuania, and 22% in Latvia, both in September 2022.

Headline inflation also jumped significantly in Germany, which peaked to 11.6% in October 2022. It also exceeded 10% in Spain (10.7% in July 2022), Italy (12.6% in October 2022) and the Netherlands (16.8% in October 2022).

CHART 29.
Headline & Core Inflation across Eurozone Member States – Average for 2022 – annual change (%)



Source: Eurostat

Last year, France experienced relatively smaller changes compared to other key EU Member states due to the magnitude of energy-related measures taken by governments to offset the rise in energy prices.

As result of the recent decline in energy prices, headline inflation has decreased in many Member States from its peak of October 2022. As of March 2023, it fell to 3.1% in Spain and 4.9% in Belgium. In Germany, headline inflation declined to 7.8% in March 2023. It decreased to 8.2% in Italy, and 6.6% in France as of March 2023.

3.7.2 Well below the US level in the first half of 2022, core inflation in the euro area increased to 5,6% in February 2023 and is still trending up

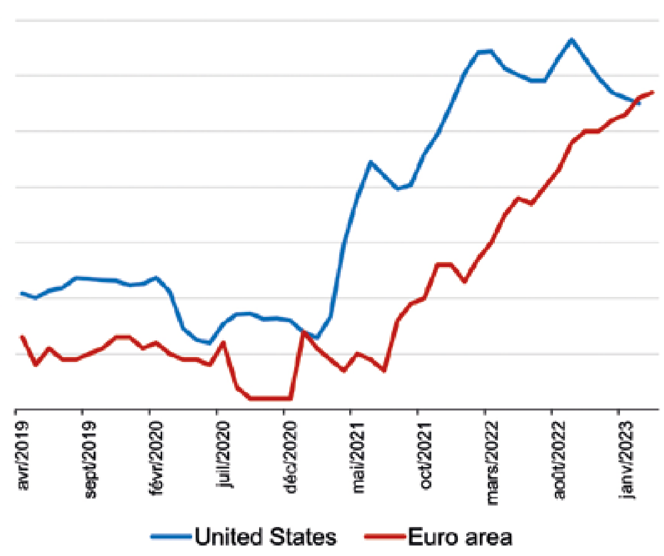
Inflation has broadened over the course of last year. Costlier energy inputs and higher wage demands have translated in increasing underlying inflation as measures by core inflation.

Core inflation, which excludes energy and food prices, was 3.7% in the eurozone in June 2022, nearly half the US level of 5.9%. Now the situation in the euro area is different than the one in the United States. Over there, core inflation is on a decreasing path, which started somewhere last summer. On the contrary core inflation is still increasing in the euro area (*see Chart 30*).

In February 2023, core inflation stood at 5,6% (versus 5,3% in January) in the euro area which was above the US where core inflation moved to 5,5% in February (from 5,6% in January).

24. P. Hernandez de Cos, "Consistent economic policies – a prerequiste for macroeconomic stability", Madrid, 16 January 2023.

CHART 30.
Core inflation, annual change (%)



Sources: Eurostat, BLS
Latest data from February 2023 for the US and March 2023 for the euro area

According to K. Knot[25], the largest upward risk to core inflation is a further increase in wage growth. While inflation expectations on the whole have remained quite well-anchored, labour unions have (understandably so) been pushing for higher wage growth to make up for the loss in purchasing power.

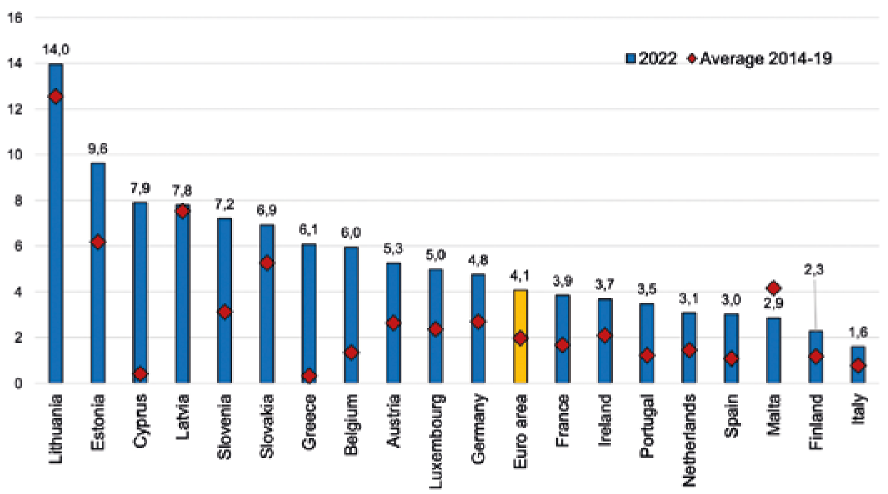
3.7.3 Recent wage dynamics in the euro area

The ECB underlined that "wages are growing faster, supported by robust labour markets, with some catch-up to high inflation becoming the main theme in wage negotiations[26]."

The latest available information on wage agreements since the start of 2022 points to a further strengthening of wage growth. At the euro area level, negotiated wages have risen by 2.9% in Q4-2022, compared to last year.

In 2022, wage growth exceeded its 2014-19 average in most eurozone member states (see Chart 31). At the euro area level, wages grew by 4.1% in 2022, above their 2014-19 average of 2%. It increased by 3% in Spain, and 3.9% in France, more than twice as their normal pace, respectively at 1.1% and 1.7%. For France, granular data collected by the Banque de France[27] suggest that average increase in industry level wage floors was close to 5% at the end of 2022.

CHART 31.
Nominal wage growth, total economy, average for 2022

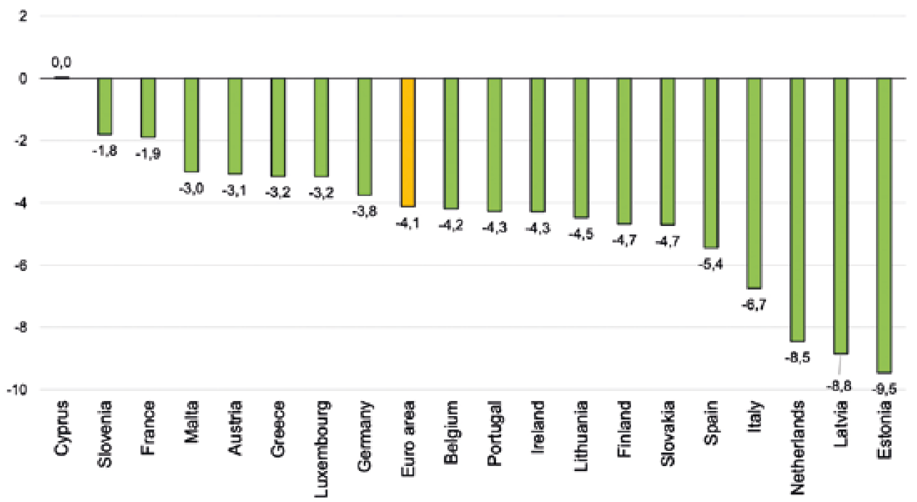


Source: Eurostat

25. Idem footnote 16.
26. ECB Economic Bulletin Issue 1, January 2023.
27. E. Gautier, "Negotiated wage increases: what is the picture for 2022?", Banque de France blog post n°301, January 2023.

Still, wage increases have not kept up with price inflation, weakening real incomes despite the actions taken by governments to cushion the impact of higher food and energy prices on households and businesses. Except for Cyprus, real wages were negative for all euro area member states in average over the first three quarters of 2022. Germany (-5.9 pp), Italy (-5.9), Spain (-6), Latvia (-6.8), the Netherlands (-8.2) and Estonia (-9.1) experienced the largest fall in real wages in the euro area (*see Chart 32*).

CHART 32.
Real wages, total economy, average for 2022 – percentage points



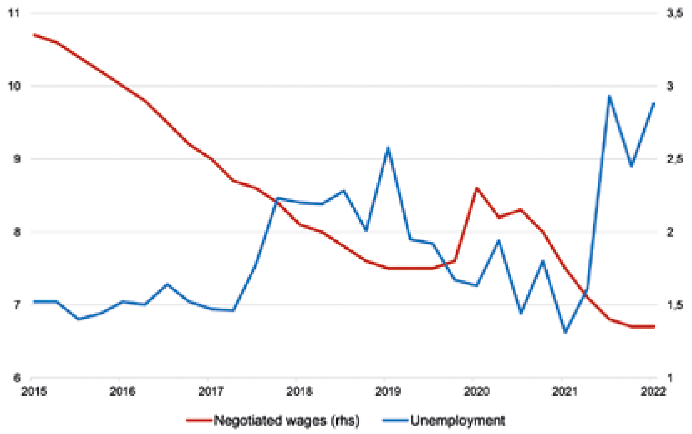
Source: Eurostat
Notes: calculated as annual nominal wage growth minus inflation

Wages in the 20-country bloc have been growing at close to 5% in recent months, according to a tracker published by the Irish Central Bank and jobs website[28].

Unions are responding to last year's record inflation by demanding even higher pay rises. FNV, the biggest **Dutch** union, is calling for a 16.9% wage rise for transport workers, while **Germany's** Verdi union wants 10% pay rises for 2.5mn public sector workers[29].

K. Knot recently stressed that "One would expect that the historically tight labour market gives employees a strong bargaining position for further wage increases. The staggered nature of wage contracting in the euro area leads both to an underestimation of current wage pressures as well as a likely more persistent wage drift. Forward-looking wage indicators confirm that wage growth will increase further in 2023. For example, in the Netherlands, the forward-looking wage indicator published by employer organisation AWVN shows 5.5% wage increase in January, based on newly signed contracts only. But the longer core inflation stays high, the more plausible it becomes that employees will base their wage demand on past inflation and will attempt to get full compensation for their loss in purchasing power."

CHART 33.
Unemployment rate and negociated wages in the euro area



Source: ECB – taken from the speech of Klaas Knot – 'Staying on the course', February 2023
Unemployment is expressed as % of active population; negociated wage is expressed on year-on-year change basis

28. Central Bank of Ireland, "Central Bank and Indeed research indicates wage growth increased sharply in early 2022", November 2022.
29. M. Arnold, "Investors increase bets on ECB lifting rates to all-time high", Financial times, 22 February 2023.

3.8 Stagflation is the most likely scenario in Europe for the coming months

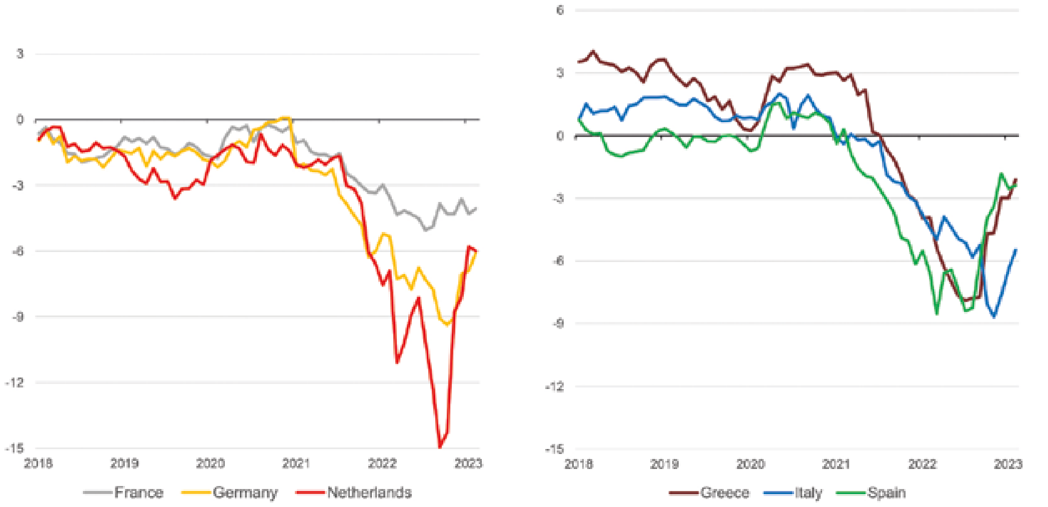
Inflation is expected to exceed the ECB's inflation target in the coming months and weak growth in Europe is expected to continue due to the decline in labour productivity.

3.8.1 Inflation should continue to exceed the ECB inflation target in the coming months for a number of reasons

Real interest rates (calculated with using year on year head inflation) are very negative in the countries of the euro area (*see Chart 34*) although the ECB has raised interest rates by 3 percentage points since July 2022.

This is a kind of subsidy to borrowers which encourages inflation. In addition, negative real interest rates undermine productive investment, as the preference for liquidity prevails over investment in Europe and companies are encouraged to buy back their shares rather than invest in long-term projects (*see Eurofi Monetary scoreboard*).

CHART 34.
Real 10-Year Government Bond Yields of Selected Eurozone Member States, percentage points



Source: OECD
Calculated as the difference between 10-year nominal interest rates and year-on-year headline inflation of the corresponding period
As of 28 February 2023

- The energy transition is inflationary, due to the costs associated with the intermittency of renewable energy production, the costs associated with capital depreciation for the additional investments made, the price increase in metals needed to produce the equipment that ensures the transition (electric batteries, poser grids, etc).
- The determination to relocate strategic industries to EU countries is generating additional inflation, as production costs are higher in these countries than in emerging countries.
- The longer inflation is very high the larger the risk of a wage-price spiral

3.8.2 Potential growth in the euro area is expected to remain very low

Productivity gains are declining, due to corporate under investment, research shortfall, insufficient technological progress and labour force ageing (*see 1.*).

Whereas per capita labour productivity continues to grow in the United States, it has stagnated completely in the euro zone since 2019[30] (*see Chart 35*). This is not due to a weakening of hourly labour productivity, but to a decline in working time per wage earner.

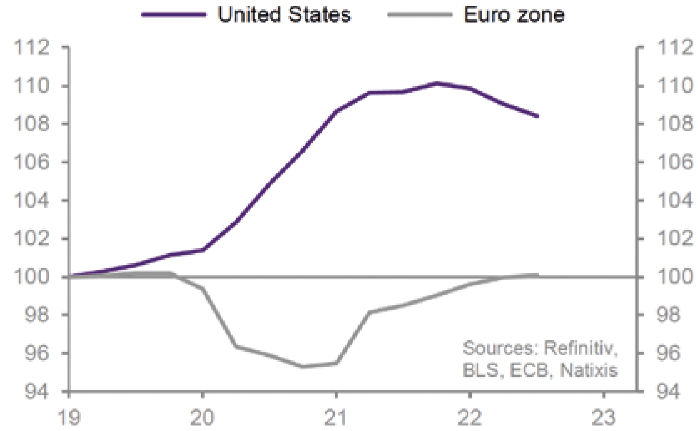
Since the Covid-19, the countries most affected by the decline in labour productivity are France and Spain (*see Chart 36*). The decline in productivity is significant in France.

According to the Rexecode Institute, the productivity of an hour of work in French industry, *i.e.*, the value added produced by an hour of work, has declined by 5% since 2019 while it has increased by 2% in Germany. The cost of labor to produce 100 euros of value added in industry has climbed faster in France than in other European economies such as Germany, and Italy[31].

According to P. Artus, this decline is due to the following factors: a reduction in working hours per employee (1/3); a decline in hourly labour productivity (2/3).[32] in total, France's potential GDP grew by only 1% between the fourth quarter of 2019 and the third quarter of 2022.

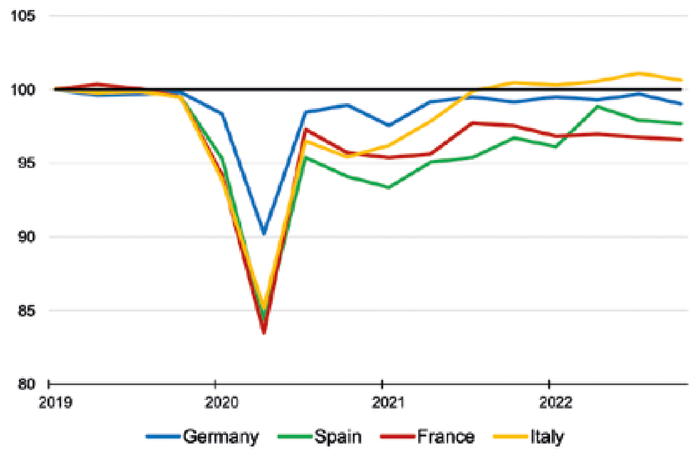
30. P. Artus, "The decline of the euro zone", Flash Economics, 23 November 2022.
31. G. de Calignon, "Prix de l'énergie et coût du travail : la compétitivité diverge au sein de la zone euro", 11 February 2023.
32. P. Artus, "France's current key problem: Declining labour productivity", Flash Economics, 11 January 2023.

CHART 35.
Per capita productivity (2019:1 = 100)



Source: taken from P. Artus "Productivity gains in the euro zone are consumed by declining working time", Flash Economics Natixis, December 2022

CHART 36.
Real labour productivity per person, 2019-Q1 = 100



Source: Eurostat
Last observation from 2022-Q4

•

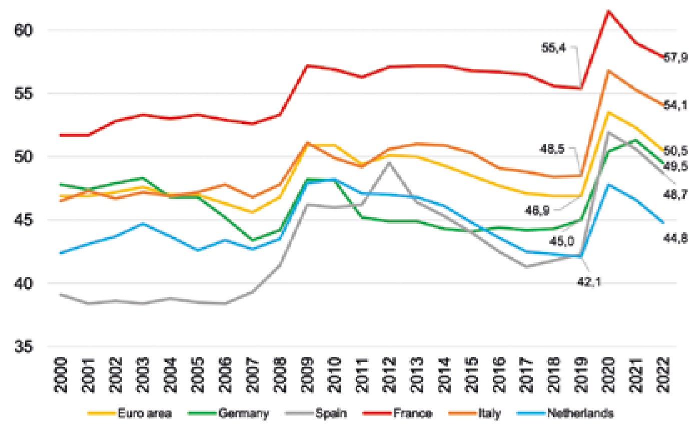
A decline in labour productivity in the major euro area countries is a worrying development: it leads to a decline in corporate profits or a decline in real wages; it implies a decline in production capacity, even when employment is rising. It raises core inflation (excluding energy and food) in the euro area and complicates the situation for the ECB.

4. EU countries with the highest level of government expenditure as percentage of GDP are those with the least competitive firms

4.1 With 57.9% of its GDP in 2022 France holds the record high in terms of level of public spending in the EU

France already had the highest level of public spending in Europe before the Covid-19 crisis, with 55.4% of GDP in 2019. Finland (53.3%) and Belgium (51.9%) were the only two other countries in the Union whose public expenditures-to-GDP ratio exceeded 50% of GDP in 2019. By contrast, the level of public spending in Germany, the Netherlands, Spain and 17 other EU members remained below the European Union average of 47% of GDP in 2019 (*see Chart 37*).

CHART 37.
Total Public Expenditure, as % of GDP



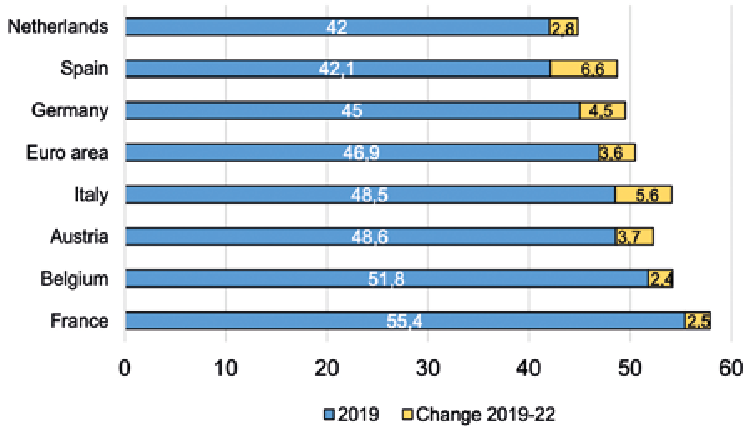
Source: EU Commission Automn Forecast, November 2022

Following the Covid-19 crisis, public spending increased by 2.5 pp in France from 2019 to 2022, compared with 3.6 pp in the euro zone (*see Chart 38*). France is among countries whose increase in spending as a percentage of GDP was the lowest: it was 4.5 percentage points in Germany, 5.6 pp in Italy, 3.7 pp in Austria, 6.6pp in Spain and 2.8 pp in the Netherlands. Among the large countries, only Belgium shows a lower increase (2.4 pp).

The recent decline in public spending between 2020 and 2022 in EU Member States reflects the phasing out of pandemic-related measures. However overall public spending to GDP ratios remain above their pre-pandemic levels.

Starting from a much higher level of spending than the other countries in 2019, France nevertheless remained at the top of the eurozone and the European Union, with public spending equal to 57.9% of GDP in 2022. This is more than seven points above the eurozone average of 50.5% of GDP, 8.4 pp above the German's level of 49.5% of GDP and 13.1 pp above the Dutch's level of 44.9%. In Italy, public expenditures still exceeded 50% of GDP in 2022.

CHART 38.
Total Public Expenditure before and after the Covid-19 crisis, as % of GDP

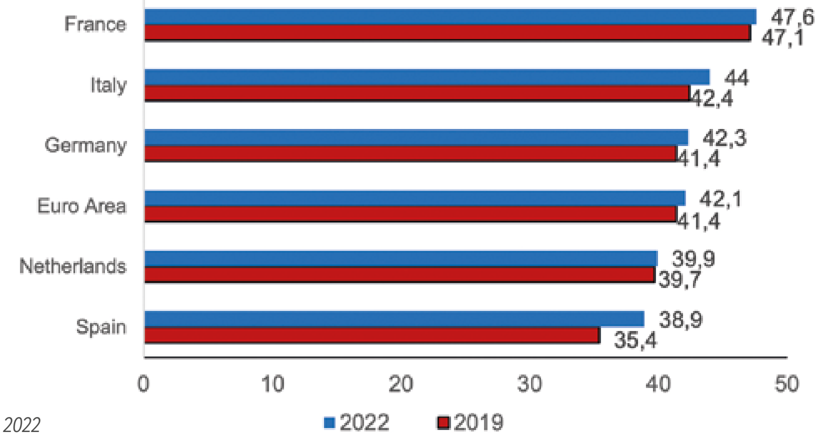


Source: EU Commission Automn Forecast, November 2022

4.2 High levels of public expenditures imply high tax pressures on firms, lifting their production costs and so deteriorating their competitiveness

In this field, France is leading with Denmark in the European Union. Its current tax burden – or amount of tax collected on firms and households[33] – accounted for 47.1% of GDP in 2019. That was nearly six percentage points above the euro area average of 41.4% (*see Chart 39*).

CHART 39.
Current tax burden in 2019 and 2022, % of GDP



Source: EU Commission Automn Forecast, November 2022

Between 2019 and 2022, the level of current tax burden rose by 0.5 pp in France, less than the euro area average (+0.7 pp), Germany (+0.9 pp), Italy (+1.6 pp) and Spain (+3.5 pp). However, the level of taxation remained the highest in France, reaching 47.1% of GDP in 2022, and more than 3 pp above Belgium (44.7%) and Denmark (44.6%), which are the second and third countries with the highest taxation rate in the Union. In 2022, France's level was more than 5 pp above the euro area of 42.1% of GDP, Germany (42.3%), the Netherlands (39.9%) and Spain (38.9%), according to the EU Commission.

Too high taxation contributes to erode the competitiveness of domestic firms. With a level of taxes on production and imports exceeding the euro area average by 3.4 points in 2019 (*see Table 3*), France has been suffering of a permanent deficit of its trade balance and more broadly of its current account balance since 2007 (*see Chart 40*). Within the EU, eight other members experienced a negative current account balance on average, between 2014 and 2019. Among them, Cyprus has the highest deficit (-3.9% of GDP), followed by Romania (-2.5%) and Greece (-1.6%).

TABLE 3.
Breakdown of tax revenue by country and by detailed tax categories in 2021, % of GDP

	Taxes on production and imports	Current taxes on income, wealth, etc	Capital taxes	Net social contributions	Total
Germany	10,9	13,5	0,3	17,6	42,3
France	16,6	12,9	0,7	16,8	47
Italy	14,5	15	0,1	13,7	43,3
Spain	12,2	11,9	0,5	14,2	38,8
Netherlands	12,3	13,5	0,3	13,6	39,7
Euro Area (20)	13,2	13,2	0,4	15,2	42

Source: Eurostat

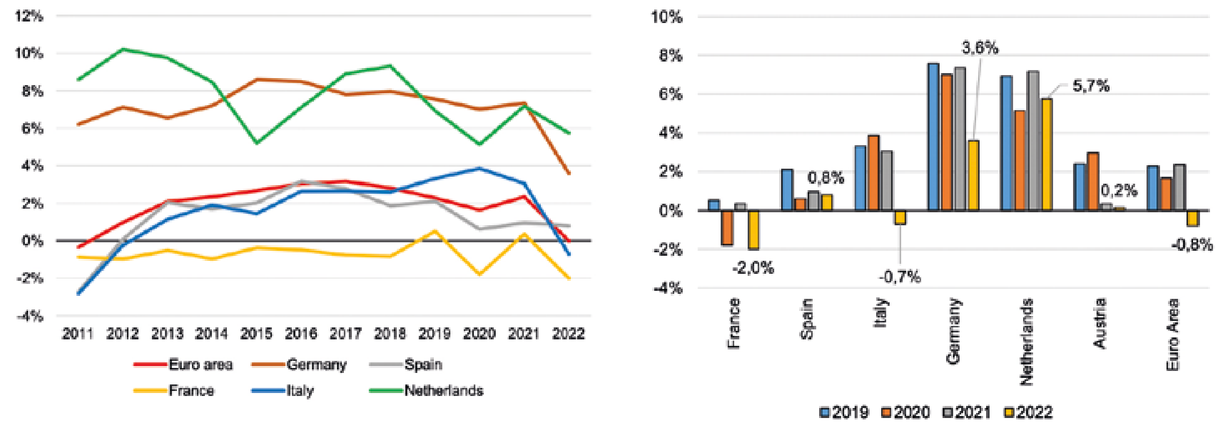
By contrast, countries with a level of taxation below the euro area average present the most competitive firms of the area. With tax revenue on production and imports accounting for 10.9% of GDP in 2021 (*see Table 3*), Germany delivered the second highest current account surplus, behind the Netherlands; that is also characterised by a relatively low level of tax burden (12.3% of GDP).

33. The current tax burden of total economy is the sum of Indirect taxes (VAT, imports production), direct taxes (income and wealth, and capital) and social security contributions (actual and imputed), according to the AMECO definition.

CHART 40.
Current Account Balance in main EU Member States, % of GDP

40a. Over the past decade

40b. Recent trend

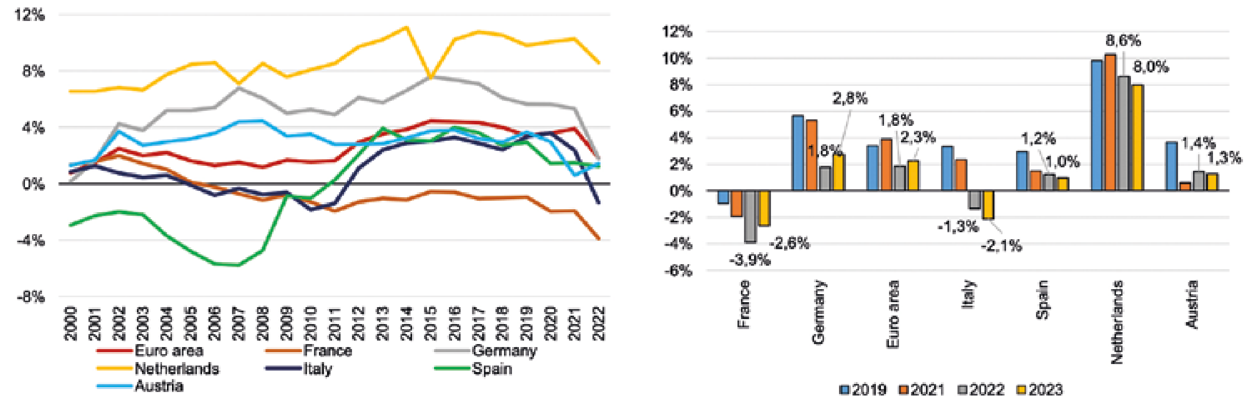


Source: Eurostat, AMECO
Data for 2023 are projections taken from the Automn Forecast of the EU Commission (November 2022) ; data for Austria & the Netherlands in 2022 are also projections taken from the same report

TABLE 4.
Current Account Balance in main EU Member States, % of GDP and EUR bn
Source: Eurostat, AMECO
Data for 2023 are projections taken from the Automn Forecast of the EU Commission, November 2022 ; data for Austria & the Netherlands in 2022 are also projections taken from the same report

	2019		2020		2021		2022		2023	
	EUR bn	% of GDP	EUR bn	% of GDP	EUR bn	% of GDP	EUR bn	% of GDP	EUR bn	% of GDP
France	12,5	0,0	-41,5	-1,8%	9,0	0,4%	-53,8	-2,0%	-2,6	-0,1%
Spain	26,2	2,1%	6,8	0,6%	11,5	1,0%	10,0	0,8%	11,5	0,8%
Italy	59,5	3,3%	64,0	3,9%	54,4	3,1%	-13,8	-0,7%	-3,7	-0,2%
Germany	262,9	7,6%	238,7	7,0%	265,0	7,4%	140,9	3,6%	188,4	4,6%
Netherlands	56,3	6,9%	41,0	5,1%	61,5	7,2%	53,3	5,7%	52,3	5,3%
Austria	9,5	2,4%	11,3	3,0%	1,4	0,3%	0,7	0,2%	-0,4	-0,1%
Euro Area	274,1	2,3%	188,7	1,6%	288,7	2,3%	-105,9	-0,8%	-	-

CHART 41.
Net Exports of Goods and Services, % of GDP



Source: AMECO Automn Forecast, November 2022

France's trade balance deficit of € 48.5 bn in 2021 was mainly due to the negative trade balance of goods, which amounted to € 74.5 bn, a record-high figure. This deficit was partly offset by the surplus in the services balance (+€ 23.1 bn in 2021) – rising thanks to the recovery of global tourism after the pandemic – resulting in a trade deficit of € 53 bn in 2021.

In the same year, Germany recorded a trade surplus of € 191.6 bn, of which € 183.5 bn came from trade in goods (*see Chart 42*). The German trade balance in goods has always been in surplus over the past two decades, while it has gradually fallen to negative territory in France since 2004. Such performance reflects the process of deindustrialisation and the expansion of the less export-driven service sector, starting in the late 1980s (*see Part 5 & 6*).

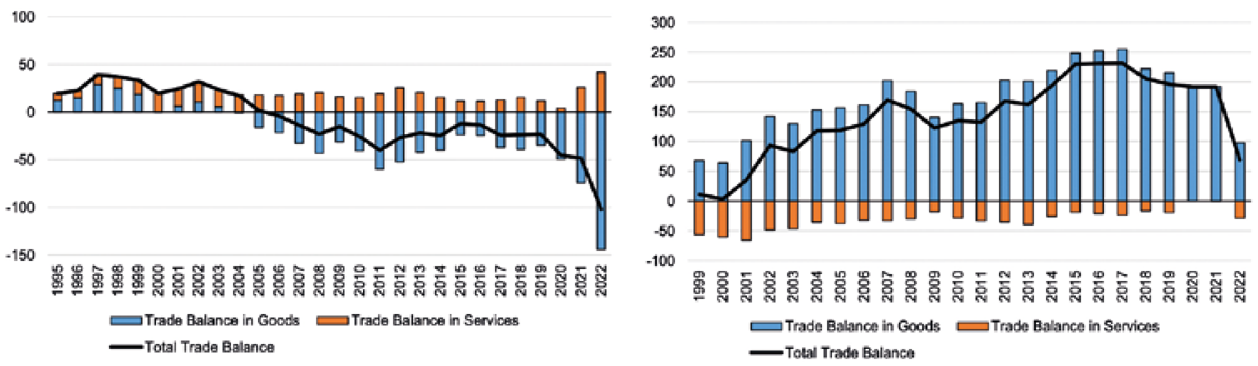
As described in part 3, the energy crisis has strongly deteriorated the external balance of EU member States in 2022. Higher energy imports coupled with lower exports to China, in particular, pushed the German's trade balance to € 69 bn, three times less than in 2021. In France, the trade deficit doubled compared to 2021, to € 102.2 bn in 2022.

Table 3 also illustrates the divergent current account positions of France and Germany. While Germany still had a current account surplus of 3.6% of GDP in 2022 (compared to 7.4% in 2021), France had a deficit of 2% in 2022 (compared to a surplus of 0.4% in 2021).

CHART 42.
Trade Balance in France and Germany, EUR bn

42a. France

42b. Germany



Source: AMECO Automn Forecast, November 2022

4.3 Most of public expenditures are allocated to social protection, health and public services instead of productive investment

On average, euro area members allocated 40.5% of their public expenditures to social protection, corresponding to 21.2% of GDP in 2021 (*see Table 5*). As percent of GDP, France presents the second highest share, with 24.8%, behind Finland (24%). It is followed by Finland (24.6%) and Italy (23.4%). Health is another most prominent function of public spending in the euro area (15.8% of total expenditure in 2021), then followed by general public services (11.7%).

TABLE 5.
Major Functions of Public Expenditures of Selected EU Member States, % of GDP (2021)

	General public services	Health	Education	Social protection	Other	Total
Euro Area	6,1	8,3	4,7	21,2	12,0	52,3
Italy	8,1	7,6	4,1	23,4	12,1	55,3
France	5,8	9,2	5,2	24,8	14,0	59,0
Germany	6,2	8,6	4,5	20,9	11,0	51,3
Spain	5,9	7,3	4,6	20,6	12,2	50,6
Netherlands	3,9	8,7	5,1	16,6	12,2	46,6
Austria	5,8	10,1	4,9	21,9	13,2	56,0

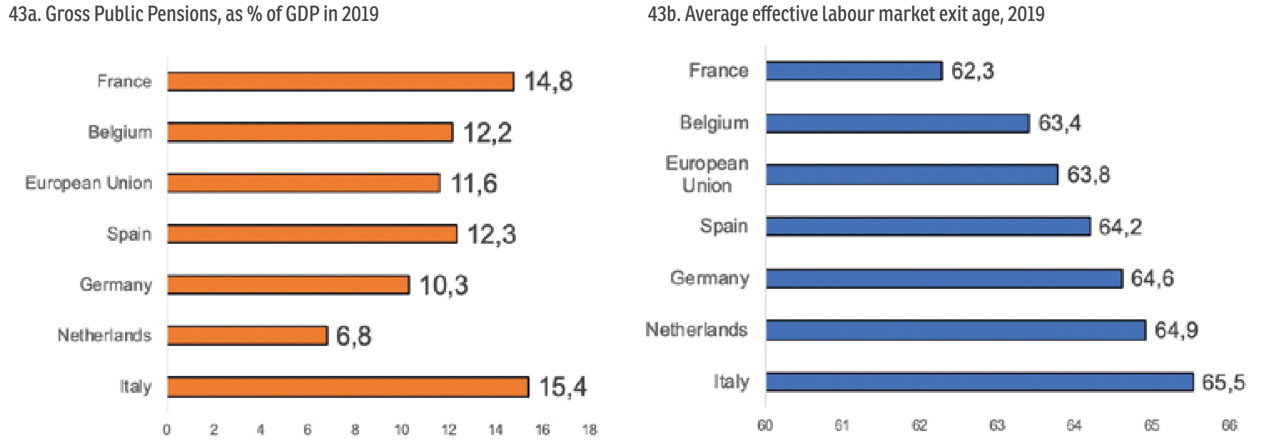
Source: Eurostat
Notes: 'Other' includes Defence, Public Order and Safety, Economic Affairs, Environmental protection, Housing and community amenities; Recreation, culture and religion

Considering the determinants of social protection, public pensions account for the highest proportion. At 11.6% of GDP in the EU in 2019, its level is mainly linked to the average effective labour market exit age (*see Chart 30*). Excluding Italy and in most EU countries, the earlier working-age people retire, the higher is the total cost of pensions. Having one of the lowest average labour market exit age in the EU (62.3), France spends the most on pensions schemes – representing 14.8% of its GDP in 2019, compared with 11.6% for the EU average. The issue is even more worrying in the context of ageing demographics, at which a growing number of elderlies will face a declining working-age population. By 2025, the share of 65+ in total population is projected to increase by 2 points to 22.3% in France, while the prime-age population ratio (aged 25-64) will fall to 36%, from 37.5% in 2019.

Considering the case of Italy, the pension system remains one the most onerous for the government in terms of GDP, despite the relatively high average effective labour exit age in the EU. There are three key reasons for this situation for the country:

- **The generosity of the system.** The replacement rate – or percentage of an individual's annual employment income that is replaced by retirement income – was 20 pp higher than the EU average in 2019 (66.9% in Italy against 46.2% in the EU).
- **The persistent low level of employment rate.** In 2019, 59.1% of people aged 15-64 were employed. This is the second lowest employment rate in the EU, just 2.8 pp above Greece (56.3%), and 9.3 pp below the EU average (68.4%).
- **The ageing population problem.** The Italian downward demographic trend is one the most salient in the EU. In 2019, 23% of the Italian population was aged 65 or over. This is the highest level in the EU (whose average is 20.4%). This figure contributes to further deteriorate the old-age dependency ratio; that is the number of dependents aged over 65, compared with the total population. At 58.5% in 2019, the ratio is projected to reach 70% by 2030.

CHART 43.
Public Pensions Spending and Labour Market exit age in selected EU Member States

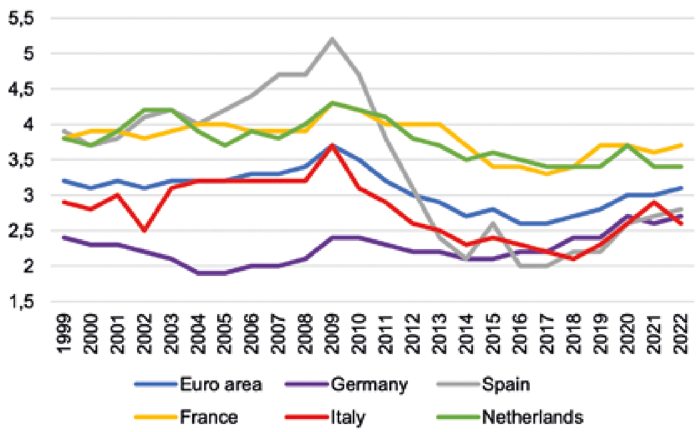


Source: Eurostat

4.4 Such levels of public expenditures have been reached at the expense of productive investment, hence weakly contributing to gross capital formation[34]

As share of GDP, public investment has never exceeded 3.5% in the euro area since 1996, (the first available year recorded by Eurostat). Moreover, against the backdrop of rising public expenditures, the share of public investment in total public spending fell between 2007 and 2019 (*see Chart 44*).

CHART 44.
Gross Fixed Capital Formation of Public Sector, % of GDP



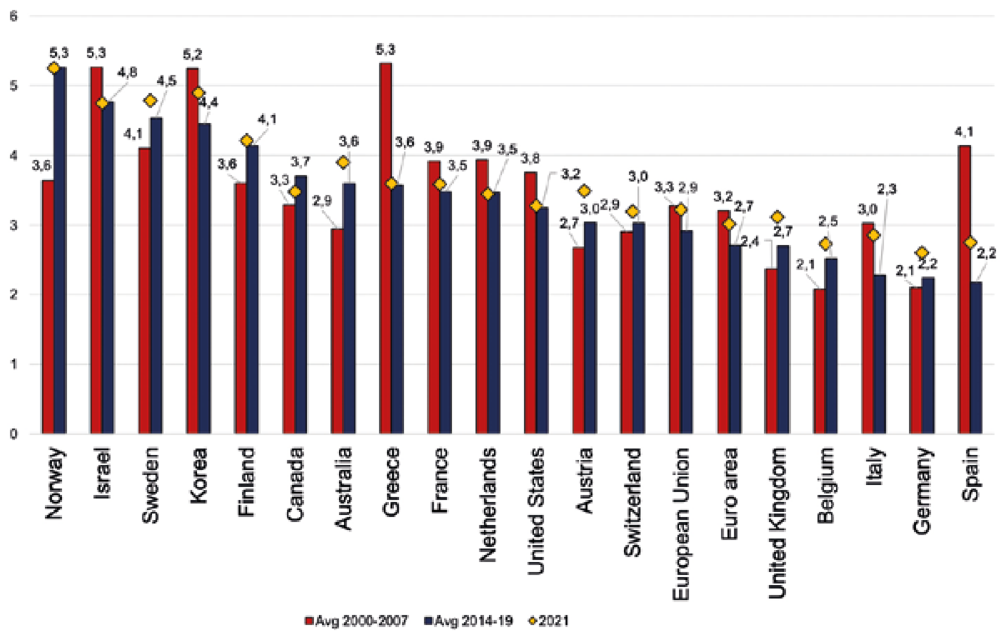
Source: AMECO Automn Forecast, November 2022

34. For government, gross fixed capital formation includes transport, office buildings, housing, school and hospital infrastructures.

After reaching 3.3% of GDP in 2007 – its highest level outside the crisis period the level of public investment in the euro area gradually declined to 2.4% of GDP in 2017 (*see Chart 31*). It then increased slightly to 2.8% in 2019. At an average of 2.7% of GDP between 2014 and 2019, public investment in the euro area remains below the level of most non-European economies (*see Chart 45*), including the United States (3.2%), Canada (3.7%), Australia (3.6%) and South Korea (4.4%) according to the OECD.

Such a period of under-investment at the EU level was notably attributable to Germany, where gross capital formation from the public sector never exceeded 2.6% of GDP between 1995 and 2019 (*see Chart 44*). Spanish and Italian governments also contributed to this decline, both investing less than 2.5% of GDP between 2012 and 2018. In the two countries, public investment was still below its pre-2008 level in 2021.

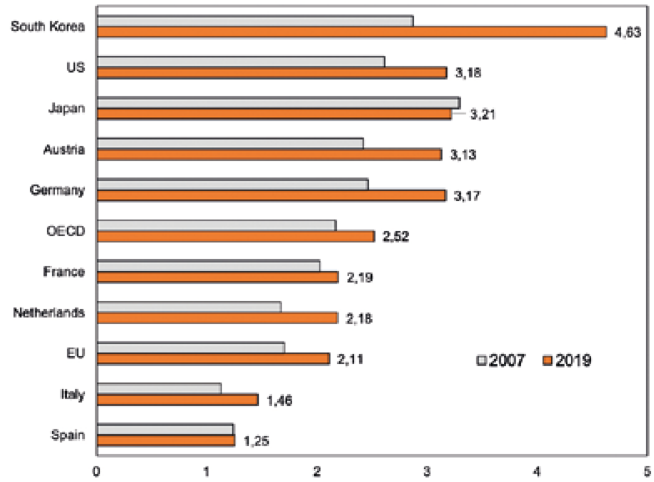
CHART 45.
Government Investment across OECD economies, as % of GDP



Source: OECD

Research and Development (R&D) – a measure of immaterial investment – is also a concern. On this issue, most of EU members dedicate less of their spending than the OECD average (of 2.5% of GDP in 2019). Only Germany and Austria stand out, with levels close to the US and Japan (*see Chart 46*).

CHART 46.
Gross domestic spending on R&D, % of GDP



Source: OECD
Notes: Gross domestic spending on R&D is defined as the total expenditure (current and capital) on R&D carried out by all resident companies, research institutes, university and government laboratories

Although public expenditures rose in some key EU Member States, the share of public investments in total public expenditures globally shrank between 2007 and 2021 by 1 pp at the EU level, from 7.2% in 2007 to 6.3% in 2021. At an average of 6.8% between 2014 and 2019, the share of public investment in the euro area is one of the lowest among other advanced economies, such as the UK (6.5%), the US (8.5%) and Canada (9%) according to the OECD (*see Chart 47*).

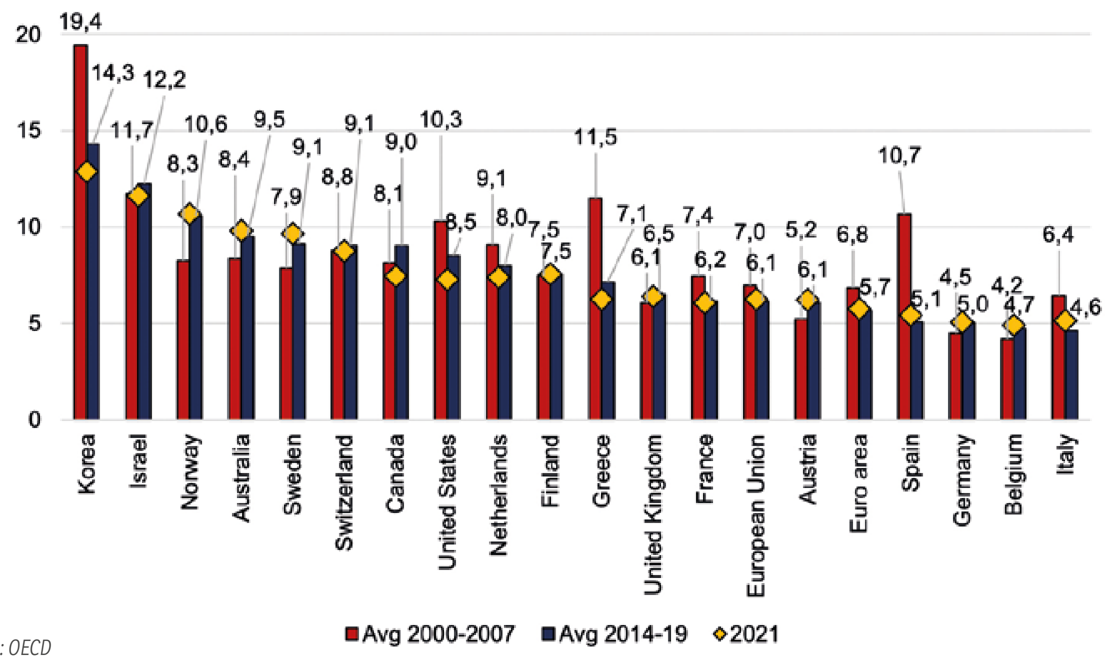
Among the largest EU Member States, only Germany and Belgium have seen an increase in the share of public investment in total expenditure, although their level of gross fixed capital formation remains among the lowest in Europe (*see Chart 45*).

The most indebted Member States have experienced the largest decline in the share of expenditure devoted to public investment over the last two decades. While France spent an average of 7.4% of its public expenditure on investment between 2000 and 2007, this figure fell to an average of 6.2% between 2014 and 2019, a drop of 1.3 percentage points. It fell by 1.8 pp in Italy, 4.3 pp in Greece and 5.6 pp in Spain.

In other words, these figures show that the states with the highest public debts are those that invest the least to increase their potential growth and thus prepare for the future. As stated by the EU Commission, such decline among high-debt countries suggests that "the accumulation of public debt has not been reflected in a higher capital stock, indicating that deficit spending has not been channeled towards capital expenditure but financed consumption"[35].

In 2021, the share of public investment in total expenditure has exceeded its pre-pandemic level in most European economies, although it remains lower than in most non-European economies.

CHART 47.
Share of Public Investment in Total Government Expenditure, %



Source: OECD

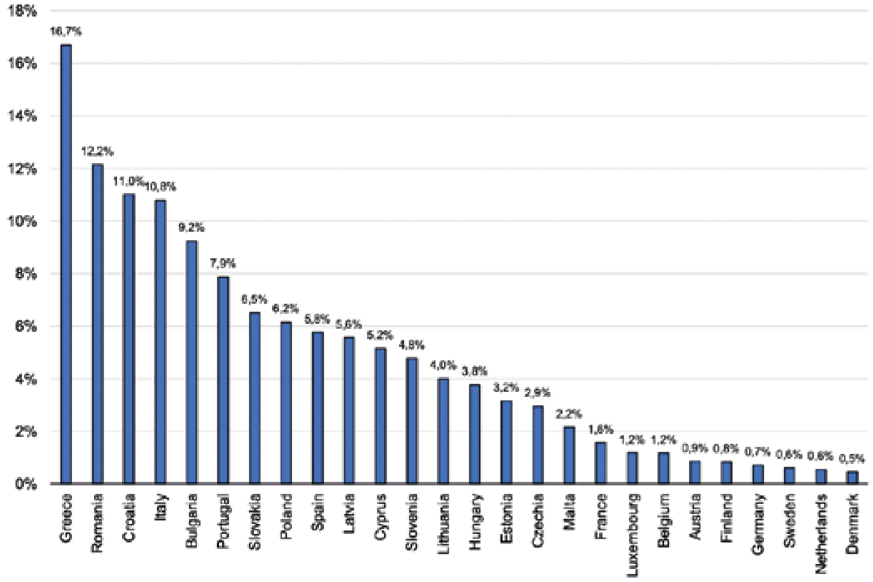
According to the EU Commission, the EU aggregated public investment-to-GDP ratio is projected to increase from 3% of GDP in 2019 to 3.5% in 2024, as almost all Member States are expected to spend more on public investment than they did before the pandemic (*see Chart 49.a*). Half of the increase in public investment is related to investment financed by the EU, particularly by the Recovery and Resilience Facility (RRF).

Introduced in February 2021, the RRF aims to help repair the immediate economic and social damage of the coronavirus pandemic, by disbursing up to € 723.8 bn (in current prices), of which €338 billion will be paid in the form of grants and the rest in the form of loans for the period 2021–2026[36]. A quarter of the fund (26%) is currently estimated to be absorbed by Italy, amounting to € 191.5 bn in grants and loans, or 10.8% of Italy's 2021 GDP (*see Chart 48*). Spain will absorb 9.6% of the requested RRF funding, which represents € 69.5 billion in grants or 5.8% of its 2020 GDP. France will receive 5.4% of the RRF funding, corresponding to € 39.4 billion or 1.6% of its GDP.

35. S. Langedijk et al "The role of the fiscal framework to foster public investment, including in light of the green and digital transitions" Quaterly report on the euro area, vol 21 n°4 (2022), February 2023.

36. See "Recovery and Resilience Scoreboard (europa.eu)".

CHART 48.
RRF funding (loans & grants) to be received by EU Member States, % of GDP



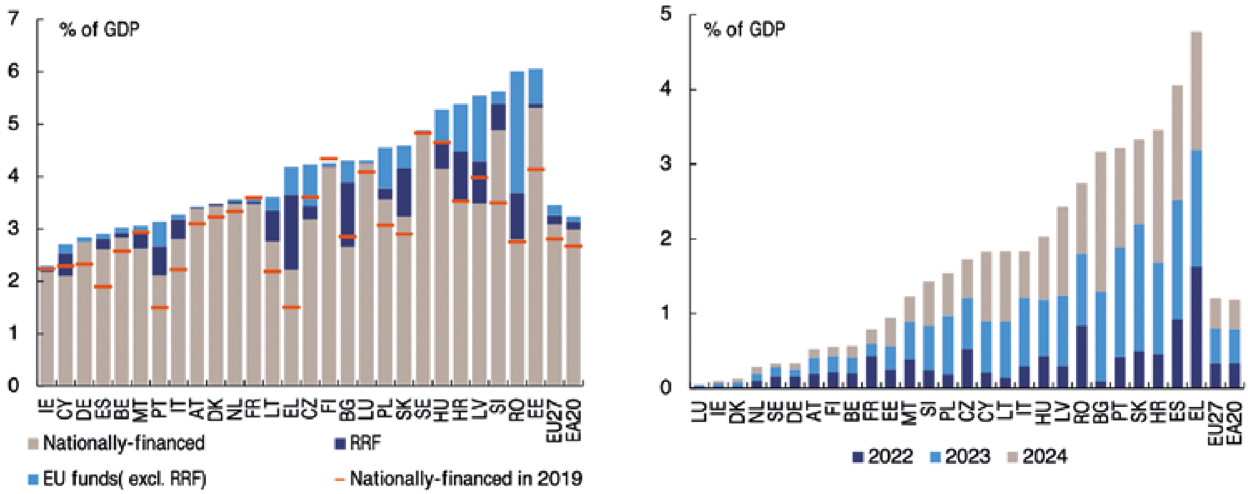
Source: EU Commission

As stated by the EU Commission[37], the absorption of RRF grants is set to increase over the forecast horizon. For the EU as a whole, the absorption of RRF grants is projected to increase to 0.3% of GDP in 2022 (from 0.2% in 2021), and to 0.5% of GDP in 2023 (*see Chart 35.b*). Over the 2022-2024 forecast horizon, expenditure financed by RRF grants is expected to be more than 4% of GDP in Spain and Greece, more than 3% in Croatia, Slovakia, Portugal and Bulgaria, more than 2% in Hungary, Latvia and Romania, and more than 1% of GDP in Malta, Slovenia, Poland, Lithuania, Cyprus, Czechia and Italy.

CHART 49.
Public investment and contribution of RRF across EU Member States

49a. Public investments in the EUEA and Member States and source of financing in 2019 and 2024, %of GDP)

49b. RRF grants absorption, 2022-2024 (% of GDP)



Source: AMECO Automn Forecast, November 2022

37. Automn Forecast (November 2022).

5. Excessive level of public debt does not fuel productivity growth and employment

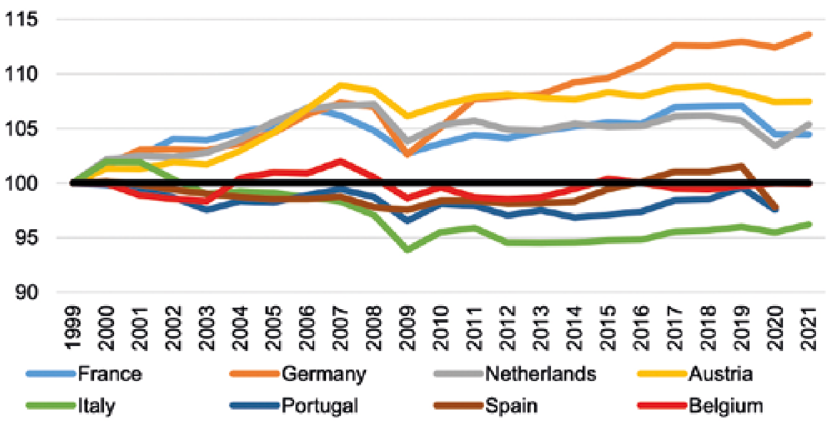
5.1 The most indebted countries of the eurozone have achieved the lowest productivity growth performance in the past two decades

Since 1999, the five EU Member States whose public debt to GDP have continuously risen to reach the highest levels among the eurozone Member States have achieved the lowest performances in terms of total factor productivity growth[38]. Indeed, productivity growth paths in France, Spain, Belgium, Portugal and Italy, have been declining or stagnating to low levels since 1999. Moreover, these economies have been diverging from the dynamic trend of the Netherlands, Germany and Austria, characterised by relatively lower levels of public debt to GDP ratio and steadily higher productivity growth trends (*see Chart 36*).

As shown in Chart 50, total factor productivity growth in the euro area has diverged across EU Member States since the start of the EMU. That has translated into diverging growth paths. The Covid-19 crisis has worsened this problem because some of the economies that have exhibited the slowest pace over the past ten years, are also the ones that were hit the hardest by the pandemic-related crisis.

K. Knot, Governor of the *De Nederlandsche Bank* (DNB) stated that this issue is concerning[39], "because it threatens the coherence of the Economic and Monetary Union [...]. Resilience is about balance [...]. If you put more pressure on one leg than the other, you are bound to get some serious health problems at some point. That is not what the patient needs [...]. What the patient needs is some care to wean it from its dependence on debt and to bring back balance in economic growth".

CHART 50.
Multifactor Productivity Growth, 1999=100



Source: OECD
Notes: last data from 2021 for all the countries in the chart except for Greece which date from 2019, and Portugal and Spain which date from 2020

5.2 The most indebted EU Members have experienced the highest unemployment rates in the EU since 2007, as Spain (12.9% in 2022), Italy (8.1%) and France (7.3%)

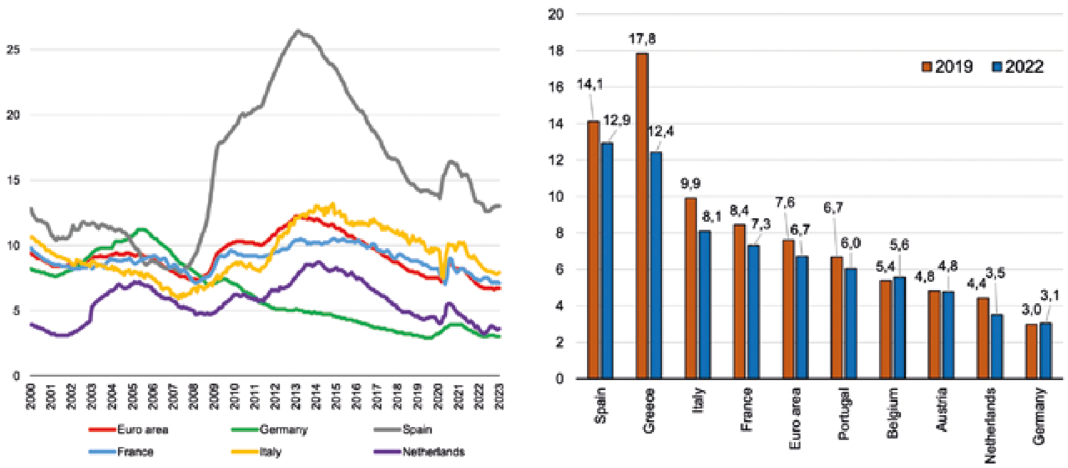
Although French unemployment rate declined slowly below 8% in 2022, massive unemployment reveals a key structural labour market problem.

More generally, Spain, Italy and France are among the countries with the highest long-term and youth unemployment rates (*see Figure 52*). In the third quarter of 2022, Spain and Greece had the highest ratio of unemployed people aged 15-29 to the total labour force in Europe (23.6% and 24.1% respectively), followed by Italy (18.7%). Despite the record share of spending allocated on education and job training (5.2% of GDP in 2021, compared to 4.7% in the euro area), France is also the most affected (14.1% for the youth unemployment rate, compared to 12.3% for the euro area), while the figure does not exceed 10% in Austria (8.4%), the Netherlands (6.7%) and Germany (5.3%) also in the third quarter of 2022.

38. According to the OECD, the indicator reflects the *"overall efficiency with which labour and capital inputs are used together in the production process. Changes in Multifactor Productivity Growth reflect the effects of changes in management practices, brand names, organisational change, general knowledge, network effects, spillovers from production factors, adjustment costs, economies of scale, the effects of imperfect competition and measurement errors."*

39. K. Knot, "Rebuilding resilience: meeting the challenges beyond Covid-19", Eurofi Forum, 11 September 2021.

CHART 51.
Unemployment rate, as % of Active Population



Source: Eurostat
Notes: data on left-chart are taken on a monthly-frequency – last observation from January 2023

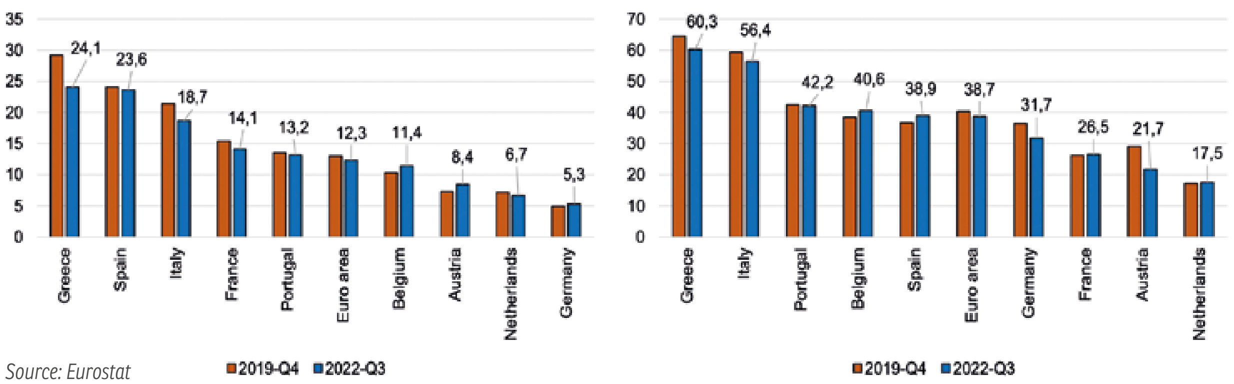
Such high levels in public expenditure highlights the ineffectiveness of education and job training policies, as well as the lack of domestic structural reforms.

As of 2022-Q3, 56.4% of the Italian unemployed people were in a situation of long-term unemployment[40]. France and Spain followed, with 26.5% and 38.9% respectively (*see Chart 52.b*).

CHART 52.
Youth and long-term umployment rates across main EU Member States before and after the Covid-19 crisis

52a. Youth Unemployment rate (Unemployed 15-29 years-old as % of total population in the labour force)

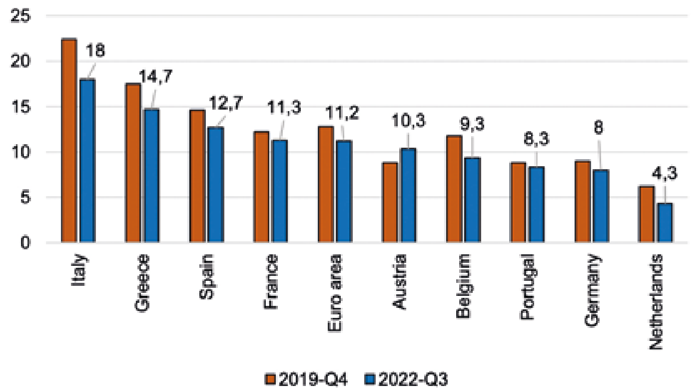
52b. Long-term unemployment, as % of total unemployed



Source: Eurostat

The significant share of youth unemployment rate in some EU countries reveals the existing difficulties in joining the labour market. Such failures favour the proliferation of Youth 'NEET' (youth that are Neither in Employment, Education or Training). In Italy, 18% of young people aged between 15 and 29 were in this situation as of 2022-Q3, the highest share among European Union countries (*see Chart 53*).

CHART 53.
Young People Neither Employed, in education or Training, as % of 15-29 population



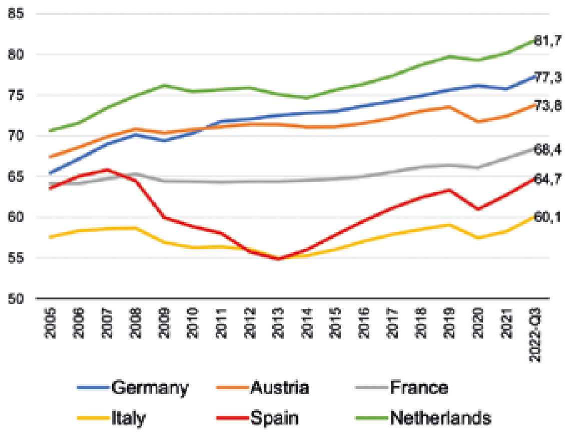
Source: Eurostat

40. People staying unemployed for at least twelve consecutive months (OECD definition).

5.3 The employment rate in France, Spain and Italy is close to 10 percentage points lower than in Germany and the Netherlands

When looking at Member States individually, two groups stand out: countries with a share of people employed exceeding 70% of the population, as the Netherlands, Germany and Austria notably, and countries whose number is hovering below 65-68%, including Italy and Spain (*see Chart 54*).

CHART 54.
Employment rate of the 15-64, as share of total active population



Source: OECD

As of 2022-Q3, 68.4% of the people aged 15-64 were employed in France, compared to 77.3% in Germany, according to the OECD.

One reason for the employment gap between France and Germany is due to the fact that the employment rate of the 60–64 is 35% in France, compared with 62% in Germany in 2021. As the effective retirement age is lower in France (*see section 4.3*), workers leave the labour market earlier than in Germany.

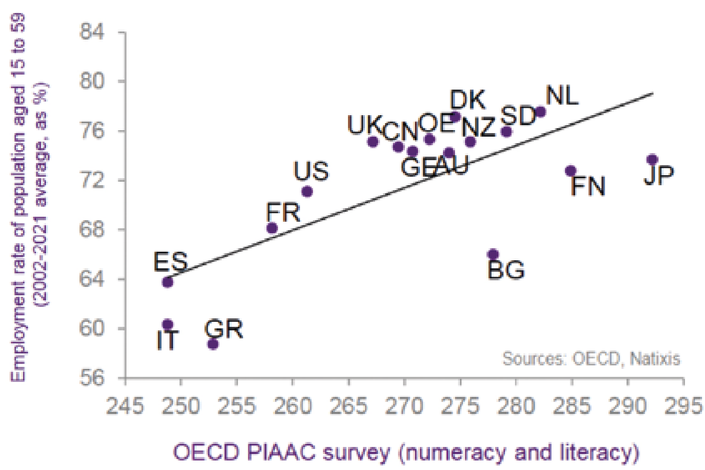
In addition to the nature of the pension system, the reasons behind the remaining gap between France and German's employment rates stem from (i) the lack of appropriate skills in the workforce, and (ii) the burden of taxes on companies, which force them to make trade-offs as offshoring their activities, at the expense of domestic employment and investment.

According to P. Artus, the skills of the labour force explain 53% of the gap between the employment rate of OECD countries, while the weight of corporate contributions and production taxes explains 35%.

As highlighted by P. Artus[41], the employment rate is the weakest in countries where labour skills are low (*see Chart 55*).

Yet France stands in the bottom quarter of the OECD countries in terms of adult skills and ranks in the last place when it comes to young people's skills in science. France also has, after Sweden, the highest production tax burden in Europe (16.6% of GDP versus 13.2% in the euro area in 2021, *see Part 4*). This overall weakness in skills and this heavy tax burden largely explain the low employment rate in France.

CHART 55.
Employment rate and OECD PIAAC survey



Source: P. Artus, "The effects of skills, corporate taxes and the employment rate of those aged 60 to 64 on the employment rate of people aged 15 to 59", Natixis Economic Research, February 2023

41. "France: is public spending the answer ?", Flash Economics, Natixis, 09 May 2022.

Persistent low employment rate is closely linked to public finances and inequalities. Because fewer people are employed and thus paid and less firms produce domestically, public revenues – a source from which the government can draw to finance long-term public investments – is reduced. As tax revenues are linked to potential production, which in turn is linked to the employment rate, increasing the employment rate would therefore increase tax revenues and so create fiscal space.

There is a negative correlation between income inequalities (before redistribution) and employment rate. The relation is even more pronounced for countries in the path of deindustrialisation, where the quality and the remuneration of the employment has deteriorated. Indeed, workers are suffering a decline of living standards since productivity per capita, and so wages are relatively higher in the manufacturing sector than in the rest of the economy (*see next section*).

5.4 "Bad jobs" are more prevalent in deindustrialising economies and are concentrated in low-skilled and precarious activities

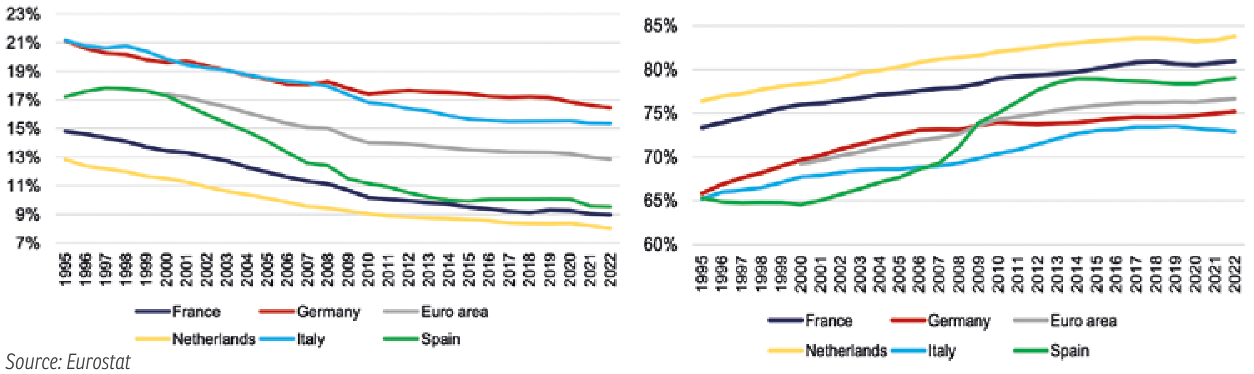
Although it employment rates have increased over the past decade, the quality of employment has deteriorated over the same period in some EU Member States. This deterioration is due in particular to the sectoral shift of these economies in favour of services and at the expense of manufacturing activities.

Since the 1980s, manufacturing employment in France, for example, has declined by more than 35%, while jobs in services increased by more than 60%%. This pushed employment in the service sector to account for 81% of total employment in 2022, far above the euro area level of 76.7% according to Eurostat (*see Chart 56 below*). Reversely, the share of employment in manufacturing dropped significantly in France, from 18.5% in 1985 to 9% in 2022, below the euro area of 12.9%. Among other major EU Member States, the tertiarisation has been particularly pronounced in Spain and the Netherlands, where respectively 79% and 83.8% of the workforce was employed in the service sector in 2022, from 65.4% and 76.4% in 1995.

CHART 56.
Employment in manufacturing and services activities, as % of total employment

56a. Share of employment in manufacturing activities

56b. Share of employment in services activities



Source: Eurostat

The bulk of job creation in the service sector is concentrated between well-qualified jobs (finance, information and technology, complex business services, etc.) and low-skilled or unskilled jobs (hotel, catering, distribution, transport, leisure, personal services). This labour market polarisation has led to the fall in the share of medium-skilled workers (*see Chart 57 below*) – formerly prominent in manufacturing-based activities – and the rise in the number of low-skilled, or "bad jobs". The latter are poorly remunerated and characterised by a high degree of precariousness and hardship.

The proportion of temporary employment is highest in countries where employment is mainly concentrated in the service sector, such as Spain or the Netherlands. France, which gradually became a service-based economy over the past three decades, saw the share of temporary employment rising fivefold, from 3.3% of dependent employment in 1983 to 15.1% in 2021 (*see Chart 58*). Although this phenomenon has been widespread across advanced economies through the development of automation notably, it has been even more pronounced in countries experiencing the process of deindustrialisation, according to the OECD[42].

42. "Perspectives de l'emploi : l'avenir du travail", OECD (2019) https://www.oecd-ilibrary.org/sites/b7e9e205-fr/1/2/2/index.html?itemId=/content/publication/b7e9e205-fr&_csp_=2a079d50bcd66cec314da33d3c16ff87&itemIGO=oecd&itemContentType=book#figure-d1e4389

CHART 57.
Change in the share of qualifications in total employment, in percentage points, 1995-2015

Source: OECD (2017), OECD Employment Outlook 2017, based on European, U.S., Canadian, Japanese, and Swiss Employment Surveys
Note: High-skill occupations include jobs classified under the ISCO major groups 1, 2, and 3. That is, legislators, senior officials, and managers (Group 1), professionals (Group 2), and technicians and associate professionals ((Group 3). Medium-skilled occupations include jobs classified under the ISCO major groups 4, 7 and 8. That is, clerks (Group 4), craft and related trades workers (Group 7), plant and machine operators and assemblers (Group 8). The low-skilled occupations include jobs classified under the ISCO major group 5 and 9. That is, service workers and shop and market sales workers (Group 5), elementary occupations (Group 9)

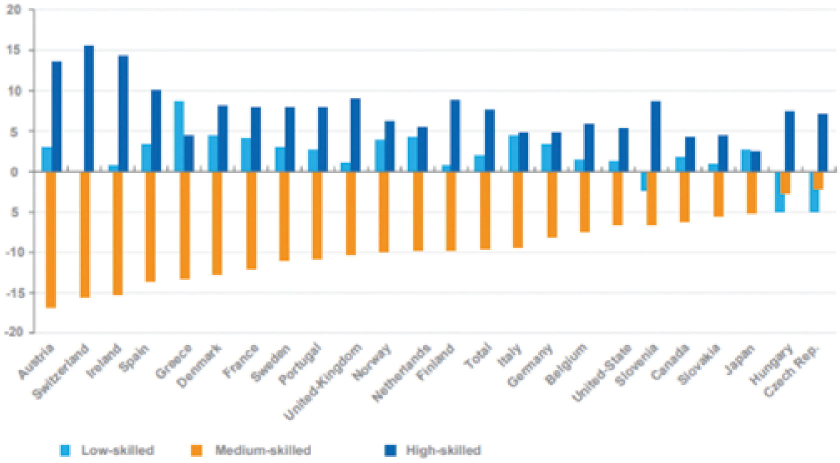
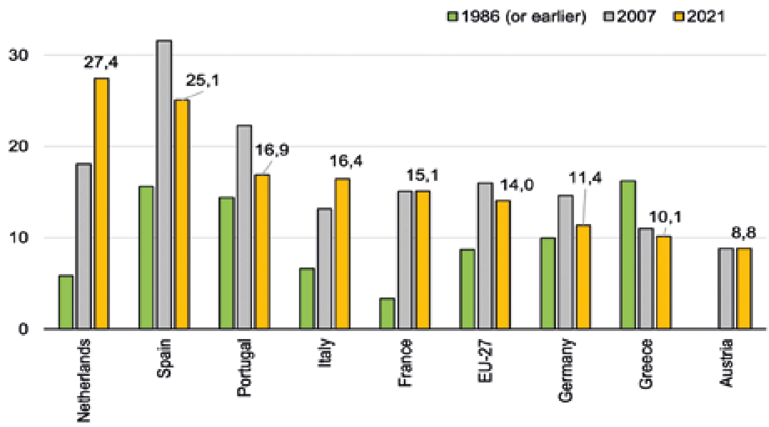


CHART 58.
Temporary employment, as % of total dependent employment

Source: OECD
Notes: Temporary employment includes wage and salary workers whose job has a pre-determined termination date, according to the OECD. This indicator is broken down by age group and it is measured as percentage of dependent employees (i.e. wage and salary workers); data labelled "1986 or earlier" date from 1983 for France, Italy, the Netherlands, Greece, the EU-27; It dates from 1984 for Germany, and from 1986 for Spain and Portugal; The first available data for Austria dates from 1995

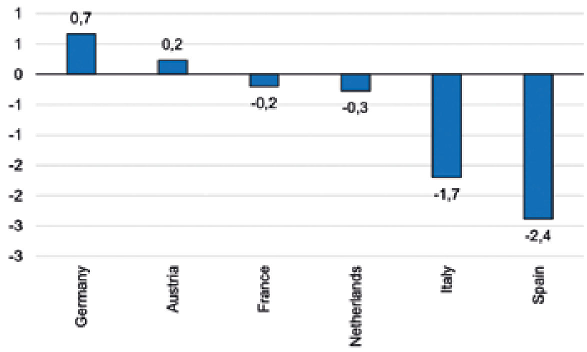


5.5 The combination of low employment rate and low productivity growth leads to higher output gaps

The combination of low employment rate and low productivity growth – as the result of a lack of productive investments and the persistence of structural rigidities – results in negative output gaps. The output gap indicator is the difference between the realized GDP and GDP potential[43] levels.

Between 2014 and 2019, countries with low employment rates, Italy and Spain especially, have never registered any positive output gap. With a slightly higher employment rate, France is in better place as it was slightly above the level of Netherlands, but remains below the levels Austria and Germany. The three latter countries have all experienced a positive output gap during the two years predating the Covid 19 crisis (*see Chart 59 and Table 5*).

CHART 59.
Average Output Gap between 2014 and 2019, as percent of potential GDP



Source: EU Commission

43. The maximum level of output if production factors were fully used.

TABLE 6.
Output gap in selected EU Member States, % of potential GDP

	France	Germany	Italy	Spain	Austria	Netherlands	Belgium
2014	-1,9	-0,2	-4,5	-8,4	-1,2	-2,3	-0,7
2015	-1,6	-0,4	-3,7	-5,3	-1,3	-1,7	0,1
2016	-1,3	0,2	-2,2	-2,8	-0,6	-0,8	0
2017	0,2	1,6	-0,7	-0,7	0,5	0,5	0,4
2018	1,2	1,3	0,2	0,9	1,8	1,3	0,9
2019	2,2	1,5	0,7	2	2,2	1,4	1,7
Avg 2014-19	-0,2	0,7	-1,7	-2,4	0,2	-0,3	0,4
2020	-6,5	-2,9	-8,3	-9,6	-5,3	-4	-4,9
2021	-1,2	-0,9	-1,9	-4,8	-2,3	-1	-0,4
2022	0,2	-0,1	0,8	-1,5	1,1	1,7	0,6
2023	-0,5	-1,4	0,6	-1,3	0,1	0,5	-0,8
2024	-0,1	-0,8	0,6	-0,4	-0,1	0	-0,9

Source: EU Commission ; data for 2022-2024 are projections taken from the AMECO Automn Forecast, November 2022

6. The European economy suffers from several structural imbalances

Beyond the increasing fiscal and productivity growth rates and labour market characteristics heterogeneities across the Monetary Union (*see Part 2*), the Monetary Union is suffering from two additional structural vulnerabilities: a growing heterogeneity in productive specialisation and current account imbalances.

The euro has contributed to strengthen some EU countries' economies and to weaken others. Indeed, the elimination of currency risks is enabling those countries to fully exploit – and even over-exploit – their comparative advantages. This exploitation of comparative advantages leads economies' productive specialisations and sector structures divergence (*see Charts 46 and 47*). The result is divergent living standards between euro area countries (*see Charts 48 and 49*).

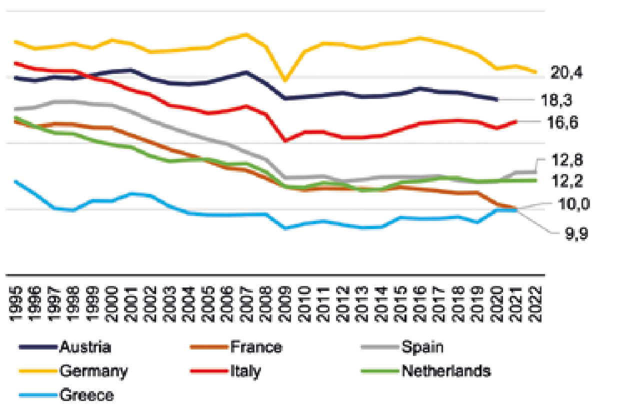
6.1 Growing heterogeneity in productive specialisation

As it is common in a currency area, Member States of the eurozone have divergent productive specialisations with consequences on relative productivity and potential growth rates. The elimination of foreign exchange risks normally encourages productive specialisation within the Monetary Union because it mainly benefits net exporting countries.

Moreover, the position of the best performing and most productive countries tends to both further improve as a result of the Monetary Union. Indeed, the economies of the best performing countries benefit from the fact that the external value of the euro represents an average for the entire economic area and appears undervalued in relation to their economic performance, resulting in an additional competitive advantage. For example, it is estimated that Germany's exchange rate is 20% undervalued, in terms of a real effective exchange rate towards the euro area. Its correction would imply, arithmetically, a 2% annual inflation rate in Germany and a 0% inflation in the other countries for a decade – which would be unrealistic and probably misconceived.

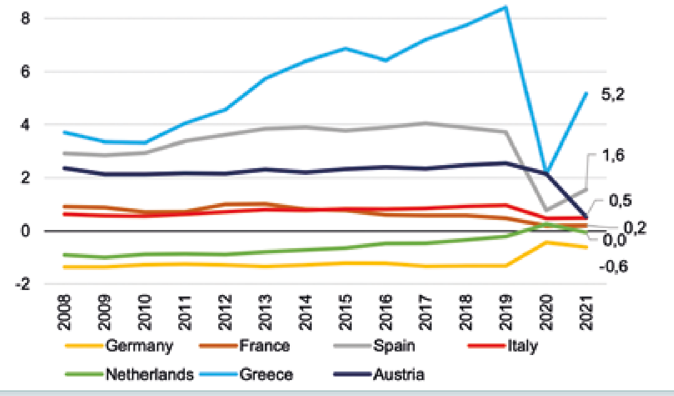
In such a context, since the creation of the euro, the northern countries of the Monetary Union (Germany and the Netherlands in particular) have been able to maintain a competitive industry, while the southern countries (Greece, France and Spain in particular) have progressively experienced deindustrialisation. EU Northern countries have gained market share in world trade, while those of the South have lost market share. Charts 46 and 47 highlight the divergence of industry and tourism across EU Member States.

CHART 60.
Share of manufacturing in total value added



Source: OECD
Last observation is from 2021, except for Spain, Germany and the Netherlands which dates from 2022

CHART 61.
Balance of payments in travel, % of GDP

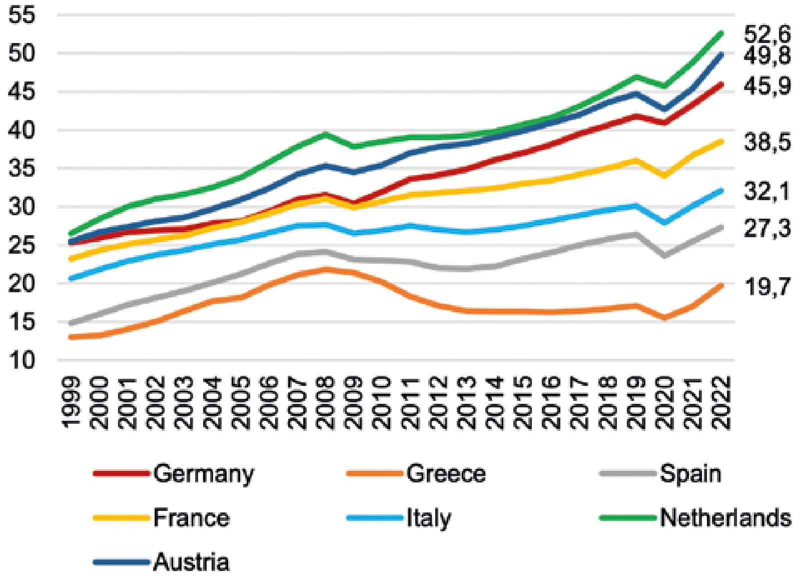


Source: Eurostat

This chart illustrates in particular the de-industrialisation of France over the last two decades, unlike Germany, Austria and Italy, for all the reasons mentioned above: the level of tax burden and the labour cost are too high due to the excessive weight of public expenditure as proportion of GDP as well as the insufficient level of productive investment.

This process also leads to a divergence of per capita GDP levels between eurozone countries. Hence, the Netherlands per capita GDP (current Local Currency Unit) was in 2022 almost three times greater than the Greek one, with € 52.600 per capita against € 19.700 for the latter (*see Chart 62*). In 2000 it was only twice more (€ 28.380 for the Netherlands and € 13.230 for Greece).

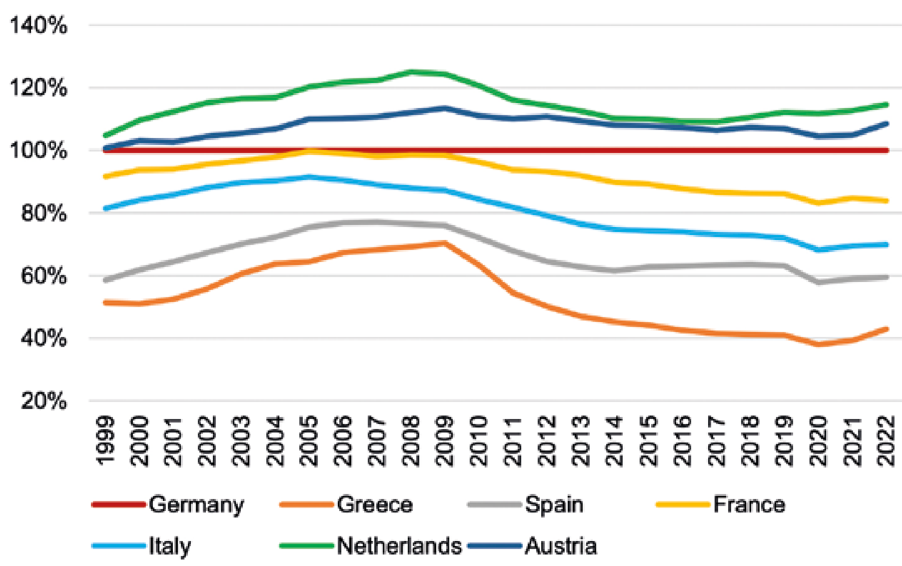
CHART 62.
Per Capita GDP, thousands current euros



Source: AMECO Automn Forecast, November 2022

Another illustration of the growing economic heterogeneity across EU Member States is the gap between per capita GDP of a given country and the German one (*see Chart 63*). Over the past two decades two groups of countries stand out: those having systematically exceeded the level of German GDP per capita, as the Netherlands and Austria have, and those that have constantly remained below, such as Italy, Spain, Portugal or Greece. Once close to the first group, since the 2008 Great Financial Crisis, the French per capita GDP has gradually fallen behind, towards the EU low-income countries.

CHART 63.
Per Capita GDP, as % of German Per Capita GDP



Source: AMECO Automn Forecast, November 2022

6.2 The existence in the euro area of countries with large current account surpluses and countries with persistent current account deficits threatens the coherence, and eventually the existence, of the Economic and Monetary Union (EMU)

Table 7 and Chart 64 underline the existence of significant discrepancies between Member States.

Current account surpluses in Germany and the Netherlands averaged 7.9% and 7.7% respectively, over the 2014-2019 period, while French deficit reached 0.5% (*see Chart 64*).

In 2021, Germany and the Netherlands recorded a current account surplus of, respectively 7.4% of GDP and 7.2%, compared to +0.4% in France.

In 2022, the external position (*see Part 3*) deteriorated significantly in the context of the energy crisis. High energy prices led the current account surplus to decline to 3.6% of GDP in Germany and 5.7% in the Netherlands. In France, the current account deficit reached 2% of GDP.

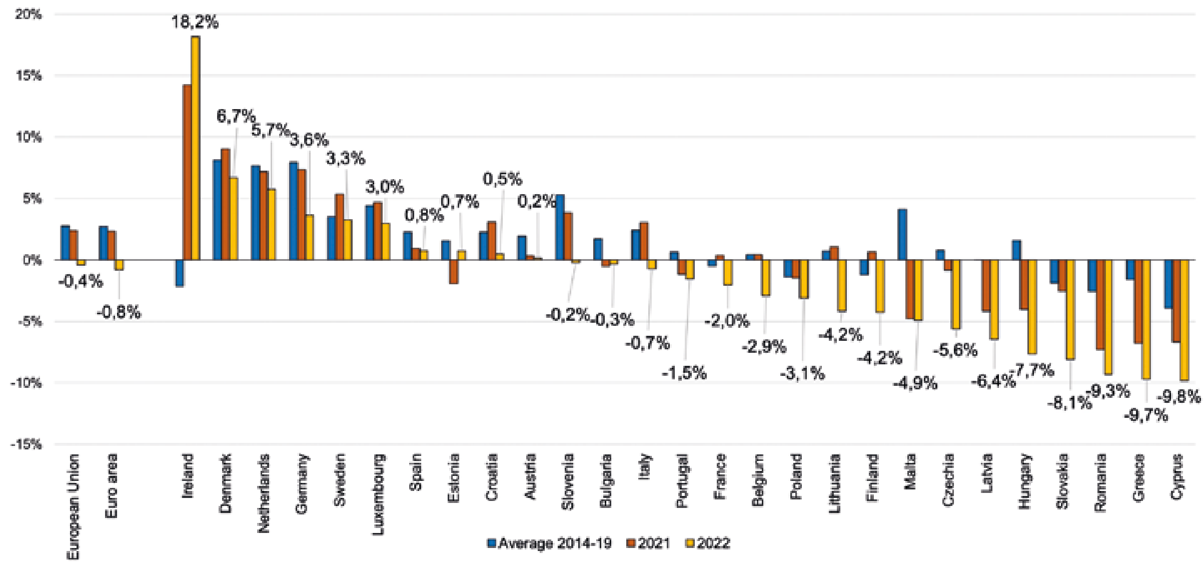
TABLE 7.
Current Account Balance, % of GDP

	2007	Avg 2014-19	2019	2020	2021	2022	2023
France	-0,1%	-0,5%	0,5%	-1,8%	0,4%	-2,0%	-0,1%
Spain	-9,4%	2,3%	2,1%	0,6%	1,0%	0,8%	0,8%
Italy	-1,4%	2,4%	3,3%	3,9%	3,1%	-0,7%	-0,2%
Germany	6,9%	7,9%	7,6%	7,0%	7,4%	3,6%	4,6%
Netherlands	6,9%	7,7%	6,9%	5,1%	7,2%	5,7%	5,3%
Austria	3,8%	1,9%	2,4%	3,0%	0,3%	0,2%	-0,1%
Euro Area	0,0%	2,7%	2,3%	1,6%	2,3%	-0,8%	N.A
European Union	-0,2%	2,8%	2,4%	2,1%	2,4%	-0,4%	N.A

Source: Eurostat, AMECO
Data for 2023 are projections taken from the Automn Forecast of the EU Commission (November 2022) ; data for Austria & the Netherlands in 2022 are also projections taken from the same report

In principle, imbalances in a Union are not in themselves a source of concern. But, as it is the case today, these figures are of a durable and structural nature.

CHART 64.
Current account balance across EU Member States, % of GDP



Sources: Eurostat, AMECO
For 2022, data for Denmark, Cyprus, Luxembourg, Malta, the Netherlands and Austria are projections taken from the Automn Forecast of the EU Commission, November 2022

If the eurozone were the equivalent of a nation, such discrepancies in current accounts would not be an issue.

Indeed, since there would only be one balance of payments for the entire zone, as in the US for example, rebalancing adjustments would take place automatically through the mobility of capital and labour.

Subregions with high current deficits (and therefore overvalued "currencies") would be winning because they could "import" cheap goods from surplus generating subregions, the latter contributing through this implicit subsidy to the adjustment of the deficit zone.

But in fact, the EMU is composed of national balances of payments and national budgets.

Macro-economic imbalances relative to the "highest performing economy" are not a matter to be corrected by the Union. They are issues exclusively dependent on national economic policies.

Since countries cannot adjust their exchange rates to their competitive positions, it is up to the domestic competitive position to adjust to the exchange rate. Devaluations can only be internal and lead to a reduction of domestic demands and revenues.

The problem raised by these imbalances.

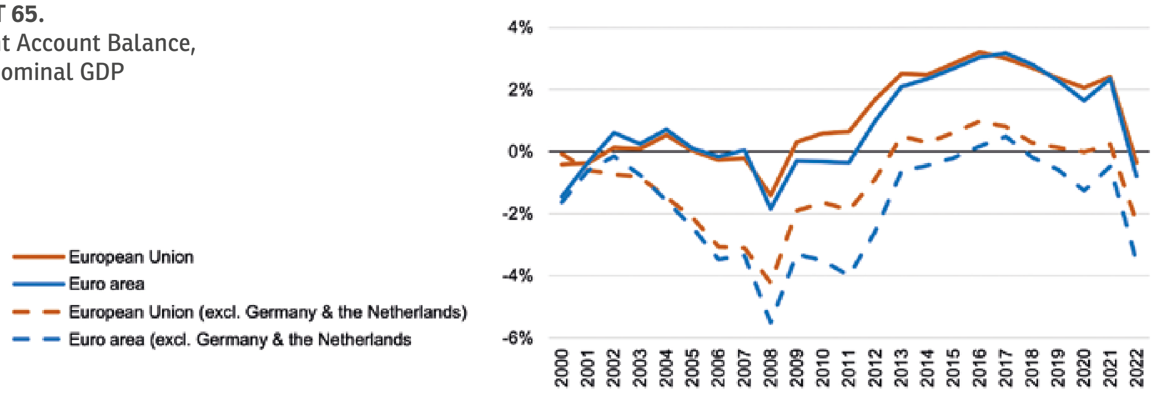
Of course, the objective is not unifying all balances of payments within the EU. Some countries have to catch up from very low standards of living and this necessarily incurs some deficits of balance of payment. However, the dynamics should not compound this heterogeneity but reduce it.

Since the EU sovereign debt crisis (2011-2012), Member States with excess savings (Germany and the Netherlands in particular) no longer finance investment projects in lower per capita GDP countries (Spain, Italy, Portugal, Greece). This is notably due to the interest rate differential between the US and Europe (risk is better remunerated in the US than in Europe), the limited financial flows between eurozone countries and the insufficient number of investment projects. These limited cross-border capital flows in the euro area reflect the persistent doubts of investors in Northern Europe about the solvency of states and companies in other countries, as well as the lack of a genuine Banking Union and integrated financial market.

The fact that Germany's and the Netherlands' external surpluses are no longer lent to other Member States reduces the capacity of peripheral countries to invest as well as their potential growth and contribute to increase the per capita income heterogeneity in the euro area (*see Charts 62 and 63*).

Consequently, the euro area exhibits a savings surplus of € 273.9 billion (or 2.3% of GDP in 2019), which is no longer being lent to other euro area countries but lent to the rest of the world excluding the euro area.

CHART 65.
Current Account Balance,
% of Nominal GDP

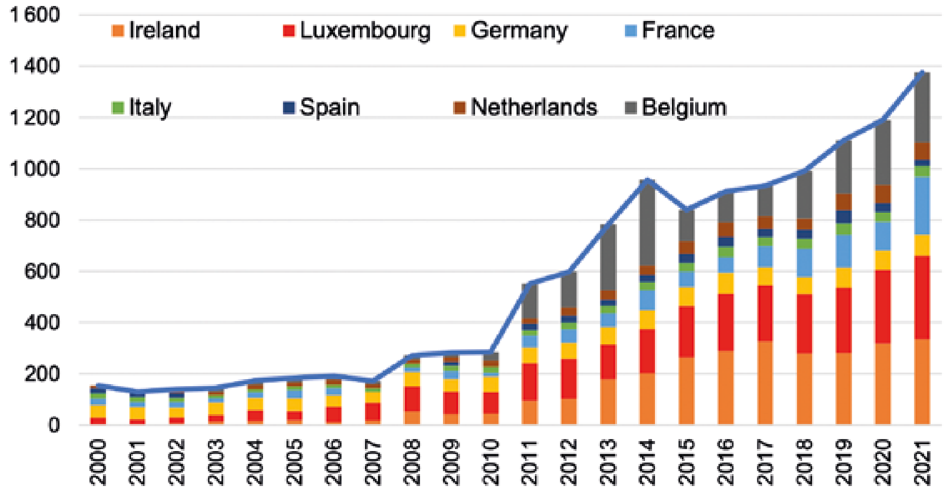


Source: AMECO

The eurozone's external surplus has largely been used to buy bonds in the rest of the world, in particular for US Treasuries (*see Chart 66*).

Between 2000 and 2021, the volume of US federal debt held by eurozone residents was multiplied by more than ten, increasing from USD 106.3 bn to USD 1 375.3 bn. Within the area, all countries that registered a positive current account balance are lending to the United States (*see Chart 59*) and therefore finance the US external and fiscal deficits. These include Germany (USD 83.4 bn in 2021), the Netherlands (USD 68.1 bn), Luxembourg (USD 325.6 bn), Spain (USD 24.9 bn), Belgium (USD 271.7 bn) and Italy (USD 42.4 bn). Although achieving an average current account deficit, France and Ireland also hold a significant amount of US federal debt, lending respectively USD 224.9 bn and USD 334.3 bn to the US Treasury in 2021.

CHART 66.
Outstanding Treasuries held (USD bn)



Source: US Department of the Treasury

Developing cross-border financial flows within the euro area is essential. The true objective of a currency area is that savings should flow to finance the most productive investments throughout the currency area. Indeed, in a monetary union, the elimination of currency risk allows savings from the countries that have a high level of per capita capital (Germany, the Netherlands, France) to finance investment in the countries with lower per capita capital and higher marginal productivity of capital (for example Spain, Italy, Portugal). Income convergence therefore normally stems from the transfer of savings from high per-capita-income countries to low per-capita-income countries. But, as mentioned above, these transfers disappeared after the 2008-2010 period.

The phenomenon is there to stay. Indeed, we need to take into account a structural feature, which is the increasing specialisation, industry wise, of surplus countries. Success breeds success. Helped by the implicit devaluation stemming from the favourable cost evolution, exports of surplus countries become more profitable.

It would be illusory to believe that the structural advantages of German exports could be transmitted to and copied by southern or eastern European countries which have a different industrial story and cannot become little Ruhr (while *the Ruhr* can become and is becoming stronger).

Conclusion

A monetary union does not by itself create economic convergence. This Scoreboard underlines that the eurozone is a currency area comprising heterogeneous countries with a low level of federalism (their productivity levels, productive specialisation, level of fiscal deficits and indebtedness, and level of labour force skills being very different).

As we have observed, many Member States have relaxed their macroeconomic discipline over the last twenty years and those who played the card of fiscal vigilance turned out to be the winners. The Covid-19 crisis has exacerbated these existing heterogeneities across EU Member States. In this context, it is important that the implementation of Next Generation EU is a success.

It is an illusion to try to solve the structural problems of our economies by prolonged increases in public or private debt or by using money creation. Yet this is what has been too often tried by pursuing lax fiscal, monetary and political policies that inevitably pose systemic risks to financial stability and therefore to future growth. It is not because budget deficits are monetised that they disappear. In addition, the quality of a state's signature is an essential element of confidence that shall be preserved at all costs for the country's future.

But as long as it is not sufficiently understood, especially in highly indebted countries, that over extended debt is a source of under-competitiveness, the economic situation in these countries will continue to deteriorate and it will be all the more difficult to make progress in the construction of an economic and financial Europe. Indeed, the intensity of fiscal and economic divergences between EU countries makes it more difficult to define in Europe a common interest, encourages a policy of "every man for himself", creates a climate of mistrust between Member States which hinders any progress in terms of public and private risk sharing and weakens the euro zone.

It is economic growth that eventually solves indebtedness issues. The only way of promoting robust growth in the EU is to implement ambitious structural reforms in all Member States.

If Europe and the euro zone are to correct their growth disadvantage in relation to the United States and China and not be relegated to the rank of second-rate powers, a considerable investment effort in research and development, in industrial equipment, in decarbonisation, in digital technology, in improving equity financing, the education system and the skills of the population, in promoting selective immigration of "people" who can occupy sufficiently skilled jobs, will therefore be necessary

We must understand that our future – noninflationary – depends on the elasticity of supply, and thus on sufficient investment and a well-trained force. Anything that encourages savings to into liquid investments at the expense of long-term choices must be fought.

As explained by Jacques de Larosière in his latest book, "one day we will have to understand that the narrowing of the output gap between potential and observed growth cannot be reduced to the mere fight against the restoration of production chains, but requires the activation of all the sources that ultimately constitute our eco system: productive investment – penalized for 20 years by lasting very low interest rates – , the development of training, the recovery of the share of wages in income, the revitalization of competition... To revive productive investment, refrain from administratively setting ("or guiding" the market) long term interest rates and accept to let the market remunerate savings in the medium and long term according to supply and demand without which there can be neither productive investment nor productivity gains".

Monetary policy can erase spread differentials but cannot address structural issues and notably the lack of confidence and the persistence of structural discrepancies, which explains the limited capital flows from North to South. Europe benefits from a large pool of savings which could contribute to finance long term investments and especially those related to the green and digital transition, provided that such savings are not taxed but remunerated. However, these savings leave the EU and finance the rest of the world (in particular the United States).

This is notably due to the interest rate differential between the US and Europe (risk taking is more rewarded in the US than in Europe), the limited financial flows between the eurozone countries and the insufficient number of investment projects. These limited cross-border capital flows in the euro area highlights the lack of a genuine Banking Union and integrated financial markets as well as persistent doubts of some investors in Northern Europe about the solvency of states and companies in other countries.

If the divergence of interest rates between the two sides of the Atlantic continues to increase in favour of the United States, the problem of transfer savings to higher interest rate areas could have very negative consequences for Europe.

The result of a too slow monetary normalisation in the euro area, in a context of persistent and very high inflation – HICP inflation is above 2% in the euro zone since April 2021 and increased to 6.9% in March 2023 and core inflation has continued to increase, reaching 5.7% in March – would be an acceleration of inflation and low growth (productive investment would continue to fall as we have seen over the past 20 years in periods of very low interest rates).

Consequently, the eurozone has to embark on the right course: fighting inflation, which requires vision and courage, more fiscal responsibility and more supply reforms geared to increase productivity, as well as steps to complete the Banking Union and implement the Capital Market Union. But this move can only be envisaged if sufficient discipline starts reversing the trend of ever-growing economic heterogeneities across Member States.

Ultimately, the paradox of the Euro is that a single currency and national economic policies coexist without a strong cement of coordination. Ultra-accommodating and asymmetric monetary policy have been used to overcome the contradictions of this paradox, but the price of this permanent rescue is costly. It is essential to ensure convergence of fiscal and structural policies. An intelligent revision of the Stability and Growth Pact should help to resolve these contradictions and thus make the euro sustainable.

To be viable, the eurozone needs:

- **To combat very high and persistent inflation without further delay by gradually returning to positive real interest rates.** As the 2022 annual economic BIS report reminds us, the most pressing monetary policy task is to restore low and stable inflation and to sustainably rebuild monetary buffers. Higher rates will also reduce central banks remittances to the governments. The reappearance of spreads should not dominate the decision-making process.
  It is usual in times of high inflation to increase nominal and real interest rates to avoid further increases in demand. The recommendation is therefore to continue to raise interest rates and gradually move to positive real interest rates. This would only not be the case if the economy were in a deep economic crisis with rising unemployment or a risk of deflation, which is not the current situation (nor the one that has prevailed since the beginning of the second quarter of 2021, when inflation returned strongly). Real interest rates in the euro zone are much more negative than they were before the war in Ukraine. It seems difficult to fight inflation with such a debt premium.
  We must not allow ourselves to fall into the trap of schizophrenia, *i.e.*, to believe that if we fight inflation, we will worsen the financial crisis by introducing less growth. On the contrary, we can continue to curb inflation by raising interest rates and at the same time provide liquidity to banks that need it. The money creation that would result from this injection of liquidity is not of the same nature as QE because it would not contribute to the credit dynamic.

- **National budgets under control in all parts of the Union.** No responsible state can be expected financing durably current public deficits generated by other eurozone members of the Union that do not follow the rules of the Union. The future – and notably the solution to market fragmentation – depends on a consolidation of present weak fiscal positions (primary surpluses) and a shift towards quality of expenditure and investment. We do not need more redistributive expenses. We must rein them in and allow adequate space for public investment.
  We have to recognize that the shift towards more productive investment will require substantial political effort because presently public investment only accounts for some 4% of GDP while current – non-productive expenditure – represent almost all public expenditure. As much as we need to fight against unproductive spending, we can encourage the financing of infrastructure spending (including research) that can be financed by debt. The revision of the Stability and Growth Pact is of paramount importance in this respect. Postponing discussions on the revision of the Pact delays the solution, exacerbates tensions within the market (due to the lack of benchmarks) and only complicates the resolution of problems that are likely to become even more acute.

- **Domestic structural measures towards enhancing business dynamism increasing growth potential should be encouraged and monitored.** We have seen that the economic and financial model based on monetary abundance, the non-remuneration (taxation) of savings, the financialization in response to structural insufficiencies, the systematic short-termism, and the increase in the – essentially speculative – valuations of financial assets, does not meet the needs of our society. These needs require long-term investments, a response to climate and digital challenges, an adequate return on savings and salaries. Without such a reorientation of our policies, it seems difficult to achieve the "common good" and to correct the major current imbalances.
  Reducing output gaps cannot be ensured just by subsidies to the labour markets. This requires more substantially to increase the productivity of the system, which necessitates more competition and long-term investment. Making Next Generation EU a success is therefore essential and should contribute to boost potential growth.
  Last but not least, it is necessary to refrain from fixing administratively ("or directing" the market) long-term interest rates and to accept to let the market remunerate medium – and long-term savings – according to supply and demand – without which there can be no productive investment or productivity gains.
- **An active banking and integrated capital market in Europe.** In sum, members of the Monetary Union must act together to make it work, and not behave as passive individual bystanders hoping that things will turn out fine. Ultimately, the fate of euro will depend on the political will to achieve genuine cooperation within the euro area.

Notes

eurofi

www.eurofi.net