

Perspectives for the global and Spanish economy in 2023

WHAT MATTERS

The **global economy** in times of polycrisis

Outlook for the **Spanish economy** in the face of falling energy prices

Managing the risks of **quantitative tightening** in the euro area

Monetary policy 2023 and interest rate increases: Outlook and impact

Corporate finance: Banks *versus* capital markets

Importance and characteristics of the **bancassurance** business in Spain

Spain's **trade competitiveness** relative to the eurozone

Digitalisation of Spanish companies: An EU comparison

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SEFO

SPANISH AND INTERNATIONAL
ECONOMIC & FINANCIAL OUTLOOK

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Letter from the Editors

The international context has improved somewhat in Europe and beyond since the previous November issue of *Spanish and International Economic & Financial Outlook (SEFO)*. While the global landscape remains highly uncertain, some of the factors behind the surge in inflation and the current phase of economic weakness seem to have receded in recent months. First, energy prices – the main source of the “stagflation” shock – have moderated significantly to price levels present before the outbreak of the war in Ukraine, facilitating the de-escalation of energy inflation. This, combined with the unusually mild winter in Europe so far, has helped to reduce the risks emanating from the spectre of a gas supply cut. While geopolitical risks remain high, the worst-case scenarios that were weighing on business and consumer confidence over the past year (spillovers from the war, nuclear threat, *etc.*) are now looking less likely. Indeed, in its latest forecast for 2023, the ECB predicts positive growth in the eurozone of 0.5%.

Within this overall macroeconomic context, we start off by examining the outlook for the global economy in 2023. The global economy is heading into the new year trying to digest the nasty surprises ensuing since the beginning of 2020, which have ushered in the biggest imbalance between supply and demand of recent decades. The pandemic, the bottlenecks in international shipping, the war in Ukraine and the surge in energy prices have

altered the dynamics that have driven business cycle patterns since the financial crisis of 2008. That accumulation of shocks is proving a challenge for economic policy response in the short-term and threatening to alter the ecosystem in which the global economy has been moving since the end of the 1970s, characterised by flexibility and maximisation of production efficiency via global value chains. Although there are more questions still than answers about how this process will play out and a good number of fronts are still open, 2023 should shed some more light on key future international economic trends. While it is too soon to rule out the odd quarter of contraction in one of the major economic blocs, current signs point more to a relatively soft economic landing, without traumatic effects on employment, rather than to a full-scale recession. Indeed, the global economy could grow by around 2.5% in 2023, although with a significant slowdown in growth in both advanced economies and emerging economies. In the near-term, the key lies with the trend in inflation, the real barometer for the instability sustained by the economy in recent years. The search for new equilibriums in prices, economic policy and geopolitics will be among the main variables to watch in 2023.

We then drill down on economic perspectives for Spain, presenting our latest economic forecasts. After upward revisions in the first and second quarter GDP figures, growth in the first half of last year stood

at 7.3% year-on-year, up from the initially published 6.7%, while GDP rose just 0.1% in the third quarter of 2022. The combination of labour market resilience and an easing of inflationary pressures arising from lower energy prices, coupled with higher than anticipated natural gas storage levels in Europe, means that the economy is likely to have performed better towards the end of the year than initially thought. Meanwhile, the public deficit continues to beat expectations, once again thanks to higher than forecast tax revenue. As of September, the overall deficit was running at 2.3% of GDP, compared to 6.3% in 9M21. The adjustments made by the National Statistics Office to the initially reported GDP figures, coupled with the let-up in energy prices, have prompted an upward revision to our growth forecasts. In 2022, we are now expecting GDP growth of 5.2%, up 0.7pp from the last forecast, as a result of the new official figures. Growth is expected to fall back to 1% in 2023, mainly because Spanish households no longer have a savings buffer to prop up their consumer spending. With the broader European economy gradually rebounding, growth is forecast at 1.8% in 2024, which would finally put the Spanish economy back at pre-pandemic levels. The government deficit is forecast at 4.3% of GDP in 2023, with public debt at 110%. Those readings should improve in 2024 in tandem with the economic recovery. These forecasts remain subject to a significant level of global uncertainty. But fiscal sustainability will depend on the credibility of the targets set for correcting current imbalances and the transformational nature of the investments financed using the NGEU funds.

Subsequently, we shift our focus to monetary policy, first looking at the challenges and implications of the unwinding of QE at the EU level. And then specifically to the perspectives of monetary policy for the year ahead, and what this means for banks.

The Governing Council of the European Central Bank (ECB) agreed on October 27th, 2022, to encourage early repayment of loans given out to banks through targeted long-term refinancing operations during the COVID-19 pandemic. On

December 15th, the Governing Council announced that it would slow down the reinvestment of the maturing principal on assets held within the large-scale asset purchase programme to shrink those holdings by roughly €15 billion per month starting in March 2023. These two decisions are important to reduce surplus liquidity in the euro area and to improve the functioning of the ECB's monetary transmission mechanism. Nevertheless, they pose important risks for commercial banks, central banks, government finances, and the ECB itself. Managing those risks will progressively dominate concerns in the Governing Council as the pace of interest rate rises that started in July 2022 begins to slow in the second quarter of 2023.

In 2023, the effort to fight inflation will go beyond the battle for economic and financial stability, with the institutional credibility of monetary policy itself in play. The roadmap looks set, marked by successive official rate increases for at least much of the year. Pricing in monetary policy changes, EURIBOR has traded significantly higher since July 2022. That said, the average rates effectively applied by the Spanish banks have increased more gradually. After initial sharp upward movements, the benchmark rate appears to have largely discounted the monetary policy shift and the outlook for further official rate hikes, so that it should sustain lower growth in 2023. Within this context, just as the banks have played a crucial role in providing credit during the pandemic, they will remain key in the prevailing uncertain climate. It is important, however, to consider their situation from a broad perspective. Several recent studies by supervisory bodies suggest that, although the banks' income could increase on the back of higher rates, they face a number of challenges, some bigger than others, including higher funding costs, shrinking lending volumes and an uptick in non-performance due to economic weakness.

The changing interest rate dynamics are also having an important impact on corporate financing in Europe, with the role of the banks increasing its significance once again relative to

the capital markets. It has long been assumed that corporate financing in Spain (and Europe) was overly reliant on bank lending to the detriment of the capital markets, in contrast to the US model, where corporates tapped the markets far more intensely. To that end, in 2015, the European Commission launched its Capital Markets Union (CMU) initiative with the clear aim of correcting that bias, prompting a significant number of Spanish and European companies to debut as bond market issuers. Tension in the corporate bond market since the start of the inflationary spiral towards the end of last year has driven a sharp increase in secondary market rates, as well as a sharp contraction in primary market issuance, making it impossible for many of those companies to tap the markets, forcing them back to the bank channel they had previously abandoned. That has led to a rebound in lending volumes to large enterprises, which are taking advantage of the fact that although the banks have increased the interest rates they charge for those loans, the increase has been less intense than the spike in market funding costs. As an example, activity in the Spanish corporate bond market, which had been registering strong growth since the middle of the last decade, in terms of both issuance volume and number of issuers, totally collapsed in 2022, accompanied by a very sharp increase in average yields on that market to over 4%. That said, indeed, bank and market corporate finance are compliments, rather than substitutes, with the banks acting as a back-up option when the bond markets are temporarily unable to finance the productive apparatus. The banks' role is all the more noteworthy considering the fact that they themselves have also seen their ability to issue affected by the bond market crisis.

Lastly, as regards the banking sector, this *SEFO* assesses the relevance and recent performance of the bancassurance sector in Spain. Of the 199 insurance providers doing business in Spain, 33 have ties to the main banking groups. Their weight in the country's insurance business, especially the life insurance segment, and their contribution to their parent banks' domestic earnings are very significant.

As a result, the bancassurance business has been key to propping up the banks' earnings during periods of significant loan loss provisioning. That is true of the banking crisis of the last decade and, more recently, the COVID-19 crisis. Even during more normal times, the relative contribution of the bancassurance business to the banking sector's earnings is very substantial, lending earnings stability and solidity to the banks with the most developed such businesses.

We close this *SEFO* with two articles related to Spanish corporates. First, we analyse the recent external competitiveness of the Spanish economy. Second, we explore the level of digitalisation of Spanish companies in a European context.

The piece on external competitiveness explores whether there are any signs that the prevailing inflationary dynamics could be undermining the competitiveness of Spanish goods exports. The analysis encompasses the euro area's five largest economies: Germany, France, Italy, Spain and the Netherlands. Spanish exports registered nominal growth of 40% between 2012 and 2021, the highest rate among the five benchmark economies. The data corresponding to the first three quarters of 2022 suggest that momentum has continued, with Spain ranking as the country with the second-highest export growth compared to the same period of 2019. Analysis of the cost-competitiveness data suggest that the Spanish export sector has been competitive on the cost side, both before and since the pandemic-induced crisis. Thus, the Spanish economy is capable of improving its internal cost competitiveness and transforming those gains into export growth. In addition to this, it is likely that some Spanish firms are positively affected by the current reorganization of globalization, leaning towards shorter and safer supply chains. Nevertheless, Spain's export intensity remains below its weight as an economy within the universe of benchmark economies.

The European Company Survey (ECS) 2019 data show that business digitalisation is a multidimensional phenomenon marked

by heterogeneous patterns. Differences in digitalisation at the firm level across Europe are attributable to country factors (productivity differences), sector-market factors (technology and demand) and company factors (size, competitive advantage, organisational capital). Public policies designed to support digitalisation across Europe need to take these factors into consideration. In contrast to the Spanish economy's relatively low productivity levels, overall, Spanish companies are relatively highly digitalised. In fact, they rank among the highest in the EU. However, a high percentage of Spanish companies use digital technology to control worker performance (relative to alternative uses in companies in more productive countries) and have relatively low levels of organisational capital (complementary to digital capital). This, together with the lower incidence of delegation among the Spanish companies, could mean that they are missing out on the opportunity created by their investments in digitalisation to lift productivity.

What's Ahead (Next Month)

Month	Day	Indicator / Event
February	2	Social Security registrants and official unemployment (January)
	2	Tourist arrivals (December)
	2	ECB monetary policy meeting
	7	Industrial production index (December)
	9-10	Special European Council
	13	Eurogroup meeting
	15	CPI (January)
	16	Foreign trade report (December)
	28	Balance of payments monthly (December)
	28	Preliminary CPI (February)
March	2	Social Security registrants and official unemployment (February)
	3	Tourist arrivals (January)
	7	Industrial production index (January)
	10	Retail trade (January)
	13	Eurogroup meeting
	14	CPI (February)
	16	ECB monetary policy meeting
	16	Foreign trade report (January)
	23-24	European Council
	24	Balance of payments quarterly (4 th quarter 2020)
	24	Quarterly National Accounts (4 th quarter 2020, 2 nd estimate)
	30	Retail trade (February)
	30	Preliminary CPI (March)
	31	Institutional Sectors Non-financial quarterly accounts (4 th quarter 2020)
	31	Non-financial accounts, State (Dec., Jan. and Feb.)
	31	Non-financial accounts: Central Government, Regional Governments and Social Security (Dec. and Jan.)
31	Non-financial accounts, Total Government (4 th quarter 2020)	
31	Balance of payments monthly (January)	

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What Matters



5 **The global economy in times of polycrisis**

2022 was characterised by uncertainty, economic and financial markets volatility, and most importantly, an acceleration in the regime shift in which the global economy is immersed. Although many questions remain unanswered, 2023 should shed some more light on key future international economic trends, with the search for a new equilibrium in prices, economic policy and geopolitics the main variables to watch.

José Ramón Díez Guijarro



13 **Outlook for the Spanish economy in the face of falling energy prices**

The combination of labour market resilience and an easing of inflationary pressures arising from lower energy prices, coupled with higher than anticipated natural gas storage levels in Europe, means that the economy is likely to perform better than initially thought. Albeit economic uncertainty weighs heavily on forecasting, in 2024, the Spanish economy is expected to reach pre-pandemic growth levels, with fiscal indicators improving in tandem with recovery; however, fiscal sustainability will depend on the credibility of the targets set for correcting current imbalances and the transformational nature of the investments financed using the NGEU funds.

Raymond Torres and María Jesús Fernández



23 **Managing the risks of quantitative tightening in the euro area**

Recent quantitative tightening decisions undertaken by the ECB are important to reduce surplus liquidity and improve the functioning of the monetary transmission mechanism in the euro area. Nevertheless, they pose important risks for commercial banks, central banks, government finances, and the ECB itself.

Erik Jones



33 **Monetary policy 2023 and interest rate increases: Outlook and impact**

The monetary policy roadmap for 2023 will continue to prioritize the fight against inflation, with successive official rate increases at least for much of the year, although accompanied by a slower increase in EURIBOR. Within this context, the banks will continue to play a key role in credit provision to the economy, yet while they could face improved income prospects, notable challenges exist within the prevailing uncertain climate.

Santiago Carbó Valverde and Francisco Rodríguez Fernández



41 **Corporate finance: Banks versus capital markets**

Tension in the corporate bond market since the start of the inflationary spiral towards the end of last year has driven a sharp increase in secondary market rates, as well as a sharp contraction in primary market issuance, forcing many corporates back to the bank financing channel they had previously abandoned. Nonetheless, rather than seeing this development as a setback, it reflects the complimentary rather than substitutive nature of bank and market corporate financing, with the banks acting as a back-up option when the bond markets are temporarily unable to finance the productive apparatus.

Marta Alberni, Ángel Berges and María Rodríguez, Afi



49 **Importance and characteristics of the bancassurance business in Spain**

The weight of bancassurance in Spain's insurance business and its contribution to parent banks' domestic earnings are very significant. As a result, as evidenced by the recent COVID-19 crisis, as well as in normal times, the relatively substantial contribution of the bancassurance business lends earnings stability and solidity to the banks with the most developed such businesses.

Daniel Manzano, Afi



55 **Spain's trade competitiveness relative to the eurozone**

Spanish exports registered nominal growth of 40% between 2012 and 2021, the highest rate among the euro area's five largest economies. While the Spanish economy is capable of improving its internal cost competitiveness and transforming those gains into export growth, Spain's export intensity remains below its weight as an economy within the universe of benchmark economies.

Ramon Xifré



65 **Digitalisation of Spanish companies: An EU comparison**

In contrast to the Spanish economy's relatively low productivity levels, overall, Spanish companies are relatively highly digitalised. However, a high percentage of Spanish companies use digital technology to control worker performance (relative to alternative uses in companies in more productive countries) and have relatively low levels of organisational capital (complementary to digital capital).

Pilar Rivera-Torres and Vicente Salas-Fumás

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The global economy in times of polycrisis

2022 was characterised by uncertainty, economic and financial markets volatility, and most importantly, an acceleration in the regime shift in which the global economy is immersed. Although many questions remain unanswered, 2023 should shed some more light on key future international economic trends, with the search for a new equilibrium in prices, economic policy and geopolitics the main variables to watch.

José Ramón Díez Guijarro

Abstract: The global economy is heading into the new year trying to digest the nasty surprises ensuing since the beginning of 2020, which have ushered in the biggest imbalance between supply and demand of recent decades. The pandemic, the bottlenecks in international shipping, the war in Ukraine and the surge in energy prices have altered the dynamics that have driven business cycle patterns since the financial crisis of 2008. That accumulation of shocks is proving a challenge for economic policy response in the short-term and threatening to alter the ecosystem in which the global economy has been moving since the end of the 1970s, characterised by flexibility and maximisation

of production efficiency via global value chains. Although there are more questions still than answers about how this process will play out and a good number of fronts are still open, 2023 should shed some more light on key future international economic trends. While it is too soon to rule out the odd quarter of contraction in one of the major economic blocs, current signs point more to a relatively soft economic landing, without traumatic effects on employment, rather than to a full-scale recession. Indeed, the global economy could grow by around 2.5% in 2023, although with a significant slowdown in growth in both advanced economies and emerging economies. In the near-term, the

key lies with the trend in inflation, the real barometer for the instability sustained by the economy in recent years. The search for new equilibriums in prices, economic policy and geopolitics will be among the main variables to watch in 2023.

Times of change for the international economy

2022 marked another twist in the plot that has been jolting the global economy since the onset of the pandemic. In early 2022, the economic climate continued to be marked by limited global supply on account of bottlenecks in transportation and logistics and demand whetted by both the recovery in mobility and the savings set aside during the pandemic. Although that mismatch started to push prices higher in the spring of 2021, the central banks initially opted not to respond to the spike in inflation, trusting that it would prove transitory and that supply would catch up with consumers' new preferences. Indeed, as late as in December 2021, the financial markets were not really discounting interest rate increases in the following 12 months. [1] Despite the complex environment, there was faith that things would return gradually to normal once the most virulent stage of the pandemic was behind us.

Everything changed on February 24th, when Russian troops invaded Ukraine. The new supply side shock caused by the ensuing surge in energy prices and the uncertainty caused by the first major armed conflict on European soil in the twenty-first century threatened to unleash a process of global stagflation, particularly when natural gas prices approached €350/MWh at the end of August, following the announced closure of the main gas pipelines bringing gas from Russia to north-eastern Europe. For much of last year, therefore, the feeling was that the

international economy was facing its biggest challenge in recent decades due to the existence of multiple, disparate and overlapping shocks which threaten to alter dynamics across the main economic variables. In the words of the historian, Adam Tooze, we are facing a polycrisis, a diversity of simultaneous shocks which interact with each other, in which the "whole is more overwhelming than the sum of the parts". [2]

That sensation of exceptional economic conditions was borne out in surprising trends in a good number of economic and financial variables. In 2022, we saw inflation in the OECD reach its highest levels in nearly four decades (topping 10% towards the end of the summer), Germany report its first trade deficit since 1981 and the dollar appreciate to levels not seen in recent decades against currencies of the calibre of the sterling (37-year high) and the yen (32-year high).

In short, the changes engulfing the international economy since 2020 only intensified last year. The key characteristics of that process of change include:

- *The biggest gap between global supply and demand since the end of the 1970s.* The disruption caused by the pandemic has coincided with the effects of the expansionary fiscal programmes set in motion in the spring of 2020, creating significant imbalances in the goods and services markets. Although those imbalances narrowed over the course of 2022 thanks to economic cooling and gradual resolution of the bottlenecks, their effects will take time to dissipate.
- *Transformation of the globalisation process due to factors such as increased political risk and the value chain fragility exposed.* Although the first symptoms

“ The global economy is facing a polycrisis, a diversity of simultaneous shocks which interact with each other, in which the ‘whole is more overwhelming than the sum of the parts.’ ”

“ There is a risk therefore, that we could go from a phase of strategic autonomy to one of all-out strategic competition between economic blocs. ”

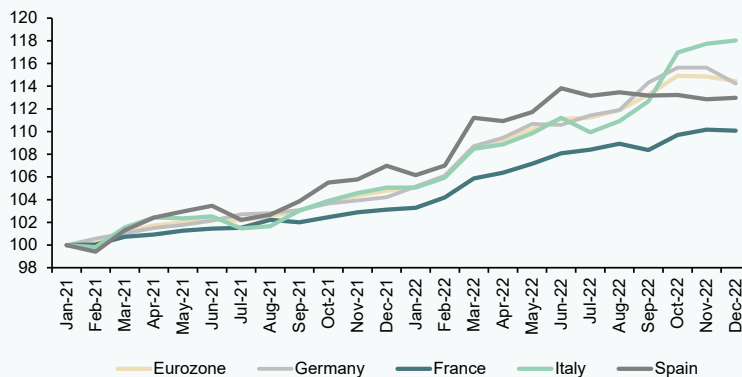
emerged at the beginning of the financial crisis, when the percentage of GDP accounted for by goods and service exports peaked (2008), the events of the past three years have triggered a boom in concepts such as “strategic autonomy”, “friendshoring” and “nearshoring”. That search for supply security at the cost of efficiency and, as a result, the attempt to bring some production back home, is beginning to be seen in the economic policy programmes being devised on both sides of the Atlantic since the onset of the pandemic. The risk is the potential for the abuse of aid and benefits for national companies in the process, with legitimate medium-term objectives such as digitalisation and energy transition masking protectionism. The biggest exponent of that new economic policy thrust was the last plan passed by the Biden Administration (US Inflation Act)

last summer, which sets aside \$80 billion of aid for production on American soil—a move that is bound to trigger a response by the European Commission in the form of an updated aid framework for regional companies. The risk is, therefore, that we could go from a phase of strategic autonomy to one of all-out strategic competition between economic blocs.

- *A regime change in inflation.* After nearly 15 years of prices trending below central bank targets, in 2022, inflation hit a decades-long high due to the cumulative impact of: production bottlenecks; rising energy and food prices; an accelerating energy transition (greenflation); and, the effects of several years of largely unchecked monetary and fiscal expansion. Moreover, core inflation is already running at around 5% or 6% and showing scant signs of

Exhibit 1 **Eurozone: Headline CPI**

Rebased: 100 = January 2021



Source: Eurostat.

“ The big question is how long it will take for inflation to return to 2% and, therefore, affect central bank decision-making and, more importantly, how will inflation trend after the impact of the various shocks has been digested. ”

coming down in the near-term, evidencing how the more volatile components of CPI are beginning to have a very considerable impact on the other components. That drastic shift in the inflation trend threatens to erode household purchasing power, increase inequality, trigger sharp financial market corrections and/or increase the risk of financial instability, among other risks.

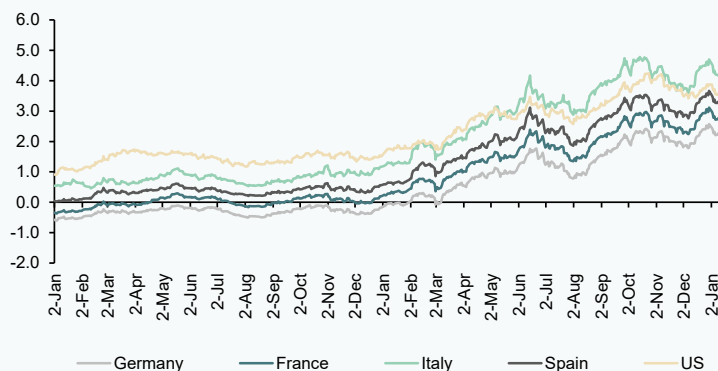
The positive reading is that the root of all these problems – bottlenecks at the earliest stages of the production process – is beginning to show signs of normalisation, which, coupled with a reduction in energy prices, has been pushing headline inflation lower in recent months. The big question is how long it will take for inflation to return to 2% and, therefore, affect central bank

decision-making. And, more importantly, how will inflation trend after the impact of the various shocks has been digested. That will determine the fit for purpose of targets that have been in use for nearly four decades and of the strategy designed right before the pandemic, when the central banks’ problems were exactly the opposite of those faced today.

■ *The most intense monetary policy normalisation effort of recent decades, with the central banks jumping from denial to action (or even overreaction). The monetary authorities’ response across both developed and emerging economies has implied a cumulative increase in interest rates since the end of 2021 of close to four percentage points. According to the Bank*

Exhibit 2 **Sovereign bond yields**

10Y



Source: Bloomberg.

“ According to the Bank of International Settlements in Basel, 2022 marked a record for rate increases (200 increases of 25 basis points), smashing the last record which dated back to 2006 (120 increases). ”

of International Settlements in Basel, 2022 marked a record for rate increases (200 increases of 25 basis points), smashing the last record which dated back to 2006 (120 increases). That means monetary policy is contractionary in a large swath of countries. The good news is that financial tightening has taken place in the absence of worrying episodes of financial stability (with the exception of the mini crisis in the UK), despite a sharp correction all year long in the bond and equities markets. [3]

- *Marked labour market resilience.* In nearly all major economies, employment levels are above those of 2019 and in many cases unemployment rates are near record lows (3% in Germany). Indeed, the biggest miscalculation in the forecasts published towards the start of the pandemic was the prediction of significant job losses in the short- and medium-term. The snapshot three years on is very different from that anticipated. In fact, the problem in many areas of the OECD labour market is a significant number of vacancies and (once again) the inability of supply to react to demand. It seems clear that the healthy employment dynamics are largely underpinned by the various furlough schemes in Europe (emulating Germany's *Kurzarbeit* scheme) which preserved ties between companies and employees throughout the crisis. However, we are beginning to see structural changes related with the pandemic (working from home), demographics (the

baby boomers are beginning to retire and the pool of newcomers is much smaller) and even sociological factors (the Great Resignation).

- *The end of the economic policy measures applied during the pandemic.* The combo of ultra-lax monetary and fiscal policies is over. The very nature of the supply shocks, which are affecting inflation differently from growth (fuelling the former and weighing on the latter) is driving divergence between fiscal and monetary policy. In times such as these, neglecting budget discipline by pursuing unchecked fiscal policies would make it harder for the monetary authorities to attain their goals and increase the risk of financial accidents. The free bar is closed and the markets will not tolerate stepping on the accelerator and break at the same time, as was made clear during the crisis in the UK last September.

In sum, 2022 was once again characterised by unpleasant surprises of all kinds, uncertainty and volatile economic and financial variables. Above all, however, it was marked by an acceleration in the regime shift in which the global economy is immersed.

2023: In search of a new equilibrium

Although the international economy has rung in the new year with weak vital signs, there are symptoms of improvement in the various macroeconomic imbalances, pending the outcome of the economic cooling underway in

“ Indeed, the biggest miscalculation in the forecasts published towards the start of the pandemic was the prediction of significant job losses in the short- and medium-term. ”

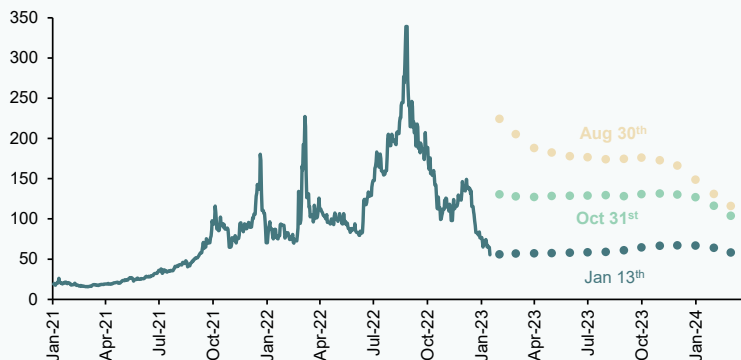
“ In times such as these, neglecting budget discipline by pursuing unchecked fiscal policies would make it harder for the monetary authorities to attain their goals and increase the risk of financial accidents. ”

the three major economic regions (US, China and the eurozone). For now, it looks as if the scale of economic deterioration feared towards the end of 2022 has not materialised thanks to labour market resilience, favourable energy price trends in the last quarter, stabilising expectations following their collapse when the war broke out and the delayed effects of the expansionary fiscal measures rolled out at the height of the pandemic (pent-up savings, NGEU funds, etc.).

The good news, therefore, is that the probability that the sharp slowdown in GDP growth will end in a global recession in the first half, as was feared at the end of the summer, is diminishing. The sense is that the economy is absorbing the effects of the supply shocks, heightened geopolitical risk and interest rate hikes much better than expected. Meanwhile,

concern over the energy scenario has abated because at this stage of the winter the spectre of gas rationing in Europe can be virtually ruled out because: current gas reserve levels are high (over 85%), gas consumption is falling considerably (by 10% between January and November by comparison with long-run levels) and LNG is flowing into Europe at a dynamic pace. In fact, gas futures for 2023 have plummeted from nearly €190/MWh at the end of August to €70 euros/MWh as of the first half of January, with the spot price hovering around €50/MWh during some trading sessions. In parallel, oil prices have largely stabilised at around €80-90/bbl, implying a substantial improvement in the energy price assumptions used in economic forecasting exercises undertaken barely three months ago (more than offsetting the impact of the unexpected increase in rates).

Exhibit 3 Gas prices. TTF and futures



Source: Bloomberg.

“ The sense is that the economy is absorbing the effects of the supply shocks, heightened geopolitical risk and interest rate hikes much better than expected. ”

Therefore, although it is too soon to rule out the odd quarter of contraction in one of the major economic blocs, current signs point more to a relatively soft economic landing, without traumatic effects on employment, than to a full-scale recession. Indeed, the global economy could grow by around 2.5% in 2023, shaped by a significant slowdown in growth in both advanced economies (1% vs. 2.4% in 2022) and emerging economies (4% vs. 7% in 2022). Given the scant visibility at present, it is hard to extrapolate the business cycle profile but logic would dictate that this quarter will be the weakest in Europe, whereas in the US the effects of the Fed’s rate increases are likely to be felt more towards the spring and summer. That being said, the current forecasts are framed by significant volatility as they are conditioned by a range of disparate factors including the reopening of China, events in Ukraine and the sensitivity of financial stability to the central banks’ last movements until they reach their terminal rates given that public and private borrowing levels are so high.

In the short-term, the key lies with the trend in inflation and, by extension, the speed with which the current imbalances correct. The number of pleasant surprises in the latest inflation readings mark a shift with respect to the panorama just a few months ago. All signs suggest that the initial phase of price correction could be complete by this summer, with inflation closing in on 4% in the US and EMU alike. That will not necessarily be

sufficient for the central banks, especially if the news about the trend in the key components is not good. The doubts being voiced by the monetary authorities (especially the ECB) about the second phase of the disinflationary process to reach the targeted 2% will shape the entire economic scenario in 2023 and 2024. It is not the same if the central banks complete their rate tightening in the first half of this year at levels close to those currently being discounted by the market (3.25%-3.5% in the EMU and 4.75%-5% in the US) as if there is another acceleration of tightening. By the same token, monetary stability requires governments and central banks to coordinate more intensely. It is not easy to move from a situation akin to fiscal dominance to one in which short-term macroeconomic stability is once again a priority.

As a result, the search for new equilibriums in prices, economic policy and geopolitics will be key in 2023 – a year which should start to paint a picture of what the new economic normal will look like once the recent instability is a thing of the past. During the transitory phase, in which the old is dying and the new cannot be born, we will continue to witness major debates, such as China’s role over the coming decade, the limits to global indebtedness, the future of globalisation and the implications of the energy transition process.

Notes

- [1] Christine Lagarde herself virtually ruled out the possibility of interest rate increases in 2022

“ The doubts being voiced by the monetary authorities (especially the ECB) about the second phase of the disinflationary process to reach the targeted 2% will shape the entire economic scenario in 2023 and 2024. ”

at her press conference following the ECB Governing Council meeting of December 2021.

[2] “Welcome to the world of polycrisis” – *Financial Times* (October 28th, 2022).

[3] Losses on 60/40 portfolios topped 15%.

José Ramón Díez Guijarro. CUNEF



Outlook for the Spanish economy in the face of falling energy prices

The combination of labour market resilience and an easing of inflationary pressures arising from lower energy prices, coupled with higher than anticipated natural gas storage levels in Europe, means that the economy is likely to perform better than initially thought. Albeit economic uncertainty weighs heavily on forecasting, in 2024, the Spanish economy is expected to reach pre-pandemic growth levels, with fiscal indicators improving in tandem with recovery; however, fiscal sustainability will depend on the credibility of the targets set for correcting current imbalances and the transformational nature of the investments financed using the NGEU funds.

Raymond Torres and María Jesús Fernández

Abstract: After upward revisions in the first and second quarter GDP figures, growth in the first half of last year stood at 7.3% year-on-year, up from the initially published 6.7%, while GDP rose just 0.1% in the third quarter of 2022. The combination of labour market resilience and an easing of inflationary pressures arising from lower energy prices, coupled with higher than anticipated natural

gas storage levels in Europe, means that the economy is likely to have performed better towards the end of the year than initially thought. Meanwhile, the public deficit continues to beat expectations, once again thanks to higher than forecast tax revenue. As of September, the overall deficit was running at 2.3% of GDP, compared to 6.3% in 9M21. The adjustments made by the National

“ The savings buffer built up between 2020 and 2021, together with healthy employment dynamics, is what propped up consumption in spite of the loss of household purchasing power. ”

Statistics Office to the initially reported GDP figures, coupled with the let-up in energy prices, have prompted an upward revision to our growth forecasts. In 2022, we are now expecting GDP growth of 5.2%, up 0.7pp from the last forecast, as a result of the new official figures. Growth is expected to fall back to 1% in 2023, mainly because Spanish households no longer have a savings buffer to prop up their consumer spending. With the broader European economy gradually rebounding, growth is forecast at 1.8% in 2024, which would finally put the Spanish economy back at pre-pandemic levels. The government deficit is forecast at 4.3% of GDP in 2023, with public debt at 110%. Those readings should improve in 2024 in tandem with the economic recovery. These forecasts remain subject to a significant level of global uncertainty. But fiscal sustainability will depend on the credibility of the targets set for correcting

current imbalances and the transformational nature of the investments financed using the NGEU funds.

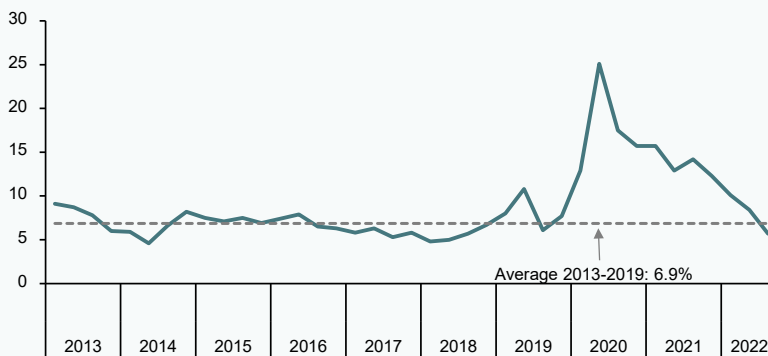
Recent economic performance in Spain

According to the revised quarterly national accounts, GDP rose by a mere 0.1% in the third quarter of 2022. However, the first and second quarter figures were revised considerably higher to put GDP growth in the first half at 7.3% year-on-year, up from the initially published 6.7%.

Consumer spending was virtually stagnant in real terms, albeit rising 1.8% in current terms. In other words, the volume of goods and services purchased by households was stable despite the growth in prices, which translated into higher expenditure in current

Exhibit 1 **Household savings rate**

Percentage of gross disposable income

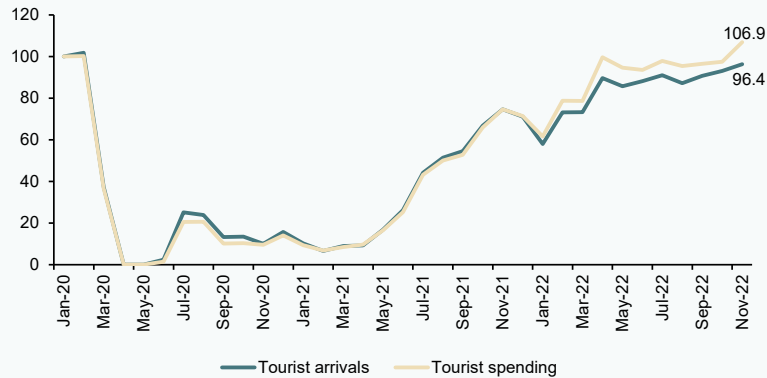


Source: INE.

Exhibit 2

Tourism

Rebased to Jan. 2020 = 100



Source: INE.

terms. That, coupled with a 1.1% drop in gross disposable household income, drove the savings rate considerably lower, to 5.7%, which is below the average of 6.9% observed between 2013 and 2019 (Exhibit 1). Growth in the buffer built up between 2020 and 2021 has, therefore, ceased, although it is likely that its existence, together with healthy employment dynamics, is what propped up consumption in spite of the loss of household purchasing power, to the detriment of the savings rate.

Investment in capital goods increased slightly but it was the government spending component of domestic demand that made the biggest contribution to third-quarter GDP growth. Foreign trade detracted from growth: real tourist spending barely budged, having normalised and even topped pre-pandemic levels in previous quarters (Exhibit 2), while the modest growth in exports was insufficient to offset the bigger increase in imports.

As for the fourth quarter, the manufacturing PMI points to a sector contraction, albeit smaller than expected. Indeed, the manufacturing industrial production index to November deteriorated just a little –it was worse in the energy-intensive segments. The confidence indicators also lost ground and capacity utilisation fell back. In services, however, the PMI reading remained in growth territory, albeit just barely. Overnight stays in hotels rose, as did air and rail passenger numbers.

The number of Social Security contributors increased by 0.6% in the fourth quarter, which is very close to prior-quarter levels, pointing to continued labour market resilience. Although seasonally-adjusted employment fell in December, the contraction is not, for now, significant, as it came on the heels of an exceptionally strong November result. Something similar took place in June and

“ The labour market is showing signs of a slowdown, but it is too soon to talk about a change in employment dynamics. ”

“ All of the above, coupled with higher than anticipated natural gas storage levels in Europe (which, together with seasonably mild weather, has allayed the spectre of supply cuts this winter), means that the economy is likely to have performed better towards the end of the year than initially thought. ”

July, possibly suggesting a mere change in seasonal patterns. Private sector non-farming employment increased by 0.6% in the fourth quarter, down from growth of 0.8% in the third quarter. There are signs of a slowdown, therefore, but it is too soon to talk about a change in the employment trend. Overall in 2022, Social Security contributors increased by 3.8% from 2021, with the private non-farming sector registering growth of 4.8%.

Headline inflation peaked at 10.8% in July. Since then, the downward trend in energy product prices has pushed that indicator down to 5.7% as of December. Core inflation, on the other hand, having stabilised at around 6.3% between August and November, unexpectedly jumped to 7% in December. The biggest concern is the sustained growth in processed food prices, where inflation stood at 16.4% in December.

On the cost side, inflationary pressures have eased considerably. For example, against expectations, oil prices have corrected from an average of \$117.5 per barrel in July to \$81.5 in December. Gas prices, meanwhile, which peaked in August, at over €200/MWh, dropped to €60 in October and November before going on to head back to almost €100 in December, which is still considerably above pre-war and pre-pandemic levels. Industrial commodity prices have also come down but remain at relatively high levels, while shipping costs are nearly back at pre-pandemic registers and the global supply chain bottlenecks seem close to resolution.

All of which is beginning to trickle through to the industrial price index. Excluding energy prices, the index has virtually stopped rising, suggesting that industrial prices are stabilising

all along the production chain, albeit marked by certain differences from one product to the next. The prices of intermediate goods are actually falling but food product prices continue their upward trend, suggesting that the pressure being exerted by food prices on CPI still has a way to go.

All of the above, coupled with higher than anticipated natural gas storage levels in Europe (which, together with seasonably mild weather, has allayed the spectre of supply cuts this winter), means that the economy is likely to have performed better towards the end of the year than initially thought.

Spain reported a current account surplus of 0.2% of GDP in the first nine months of 2022. The trade surplus in tourist services has fully recovered to pre-pandemic levels but the goods deficit has deteriorated sharply, to its highest level since 2008. That development is the result of a burgeoning energy deficit and a shift in the non-energy goods balance of payments from surplus to deficit.

Meanwhile, the public deficit continues to record better than expected figures, once again thanks to higher than forecast tax revenue. As of September, the overall deficit was running at 2.3% of GDP, compared to 6.3% in 9M21.

Forecasts for 2022-2024

The adjustments made by the National Statistics Office to the initially reported GDP figures, coupled with the let-up in energy prices, have prompted us to revise our growth forecasts upwards. In 2022, we are now expecting GDP growth of 5.2%, up 0.7pp from our last forecast.

“ Investment, also revised upwards, is expected to be the main driver of demand over the projection period with the impetus generated by the NGEU funds more than compensating for the negative impact of higher interest rates.” ”

Growth is expected to fall back to 1% in 2023, mainly because Spanish households no longer have a savings buffer to prop up their consumer spending. That figure is, however, up 0.3pp from our October forecast, shaped by lower energy price assumptions than we were using before. We are now forecasting gas prices at €90/MWh (a conservative assumption, as it is higher than the Mibgas forward price), down from our last estimate of €120. That scenario is conducive to a continued reduction in CPI, alleviating the loss of households’ purchasing power and the impact of energy costs on the business sector. The resulting expansionary impact should offset the contractionary shift in monetary policy, becoming more apparent from the spring.

We have revised all components of internal demand upwards, most particularly private

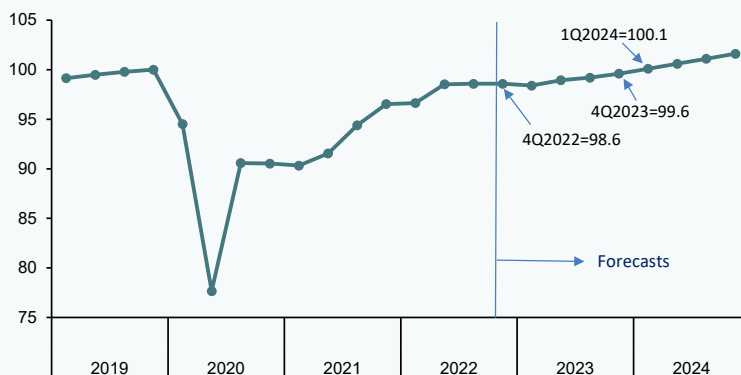
consumption, which is now expected to register slight growth (and not the stagnation previously foreseen). Investment, also revised upwards, is expected to be the main driver of demand over the projection period with the impetus generated by the NGEU funds more than compensating for the negative impact of higher interest rates. Foreign trade, however, is expected to detract from growth as a result of the outlook for weak growth across Europe (the eurozone economy as a whole is expected to register zero growth this year, with some important export markets like Germany expected to contract).

The quarterly growth pattern forecast for this year is markedly heterogeneous. After a small contraction in the first quarter, the economy is expected to expand at a quarterly pace of close

Exhibit 3

GDP

Rebased, 4Q19 = 100



Source: INE and Funcas.

“ Inflation is expected to come down further in 2024, yet still above the ECB’s target. ”

to 0.4% the rest of the year. Carrying over from there, and with the broader European economy gradually rebounding, growth is forecast at 1.8% in 2024, which would finally put the Spanish economy back at pre-pandemic levels (Exhibit 3). All components of both domestic and external demand are expected to make a positive contribution next year.

The downtrend in consumer inflation initiated towards the end of 2022 is expected to continue, despite the stickiness of core inflation (*i.e.*, controlling for volatile energy and unprocessed food prices). The private consumption deflator is currently forecast at 4.4%, down 0.8pp from our last set of forecasts, shaped by the reduction in energy prices. The GDP deflator, which best reflects the underlying dynamic, is forecast at 4.1% (down 0.3pp). That forecast assumes containment of potential second-round effects. Indeed, we are forecasting moderate growth in average

wage-earner pay and corporate profits per unit produced of 3.5% and 3.9%, respectively. Inflation is expected to come down further in 2024. We are forecasting consumption and GDP deflators of 3.5% and 3.2%, respectively, the former still above the ECB’s target, however.

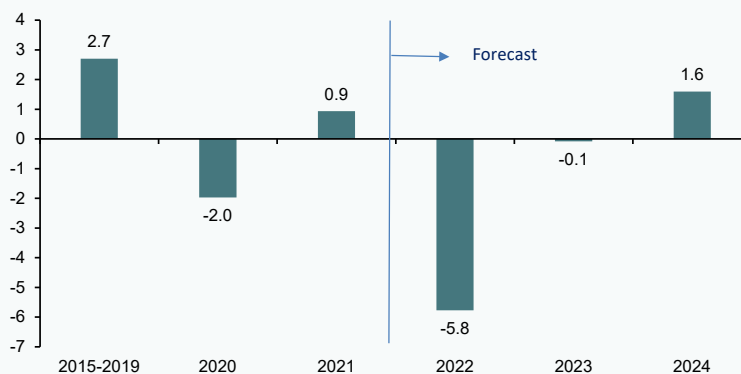
The anticipated slowdown in global growth, particularly in Europe, will undermine Spain’s trade deficit, eroding the current account in 2023. On the flip side, the global recovery forecast in 2024 by the IMF should turn that tide, helped by the Spanish companies’ strong competitive position. Overall, thanks to the Next Generation EU funds, the external balance is expected to remain in surplus territory (net lending position) throughout the entire forecast horizon.

The labour market is likely to feel the slowdown but not to give back the gains notched up in recent months. We are forecasting net job

Exhibit 4

Gross real disposable income of households

Growth rate



Source: INE and Funcas.

“ We are forecasting EURIBOR at close to 3.75% over the coming months, before starting to drop slightly as market expectations for additional ECB rate hikes dissipate. ”

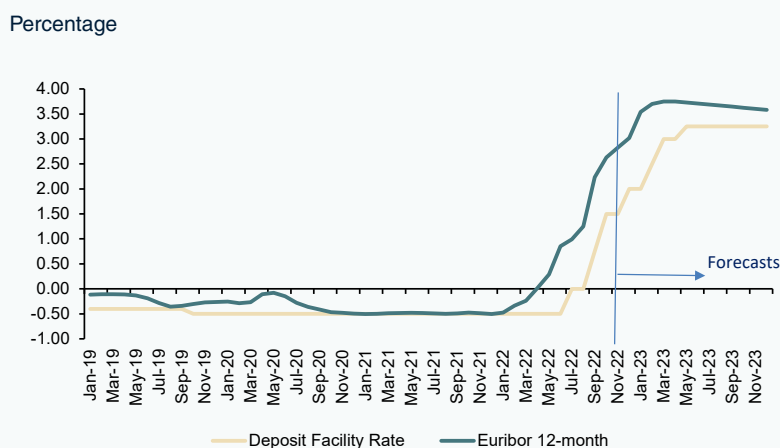
creation of 100,000 in 2023 and another 250,000 in 2024 (in FTE terms). If so, unemployment would come down to 11.5% by the end of the projection horizon, which would still be the worst figure in the EU.

The public deficit has come down significantly thanks to the interplay of the automatic stabilisers, coupled with inflation dynamics. However, little progress is expected on addressing prevailing imbalances in 2023 on account of the economic cooling and indexation of pensions. The deficit is forecast at around 4.3% of GDP in 2023, with public debt at 110%. Those readings should improve in 2024 in tandem with the economic recovery.

Lastly, in light of the inflation dynamics, the main central banks have embarked on a path of rate tightening with the aim of cooling demand

and thereby mitigating the risk of second-round effects. Our forecasts contemplate additional increases in the ECB’s Deposit Facility Rate up to a terminal rate of 3.25% in the second quarter of 2023, from which point we expect rates to be largely stable until early 2024, when they could start to come down (Exhibit 5). Monetary policy will be echoed in market interest rates. We are forecasting EURIBOR at close to 3.75% over the coming months, before starting to drop slightly as market expectations for additional ECB rate hikes dissipate. As a result, mortgaged households with floating-rate loans could see their debt service burden increase by a total of 6.3 billion euros over the next two years. The trend in public bond yields is expected to be similar, increasing the country’s interest payments by around 9 billion euros in total between now and 2024.

Exhibit 5 Interest rates



Source: Bank of Spain and Funcas.

Table 1 **Economic forecasts for Spain, 2022-2024**

Annual growth rates of change in %, unless otherwise indicated

	Observed data				Funcas forecasts			Change of forecasts (a)	
	Average 2008-2013	Average 2014-2019	2020	2021	2022	2023	2024	2022	2023
1. GDP and aggregates, constant prices									
GDP	-1.3	2.6	-11.3	5.5	5.2	1.0	1.8	0.7	0.3
Final consumption households and NPISHs	-2.1	2.2	-12.2	6.0	2.6	1.2	1.5	1.3	1.1
Final consumption general government	0.9	1.3	3.5	2.9	-1.4	1.4	0.7	0.5	0.5
Gross fixed capital formation	-7.6	4.8	-9.7	0.9	5.6	2.5	2.5	0.5	0.8
Construction	-10.7	4.9	-10.2	-3.7	5.1	3.6	1.3	0.5	0.4
Capital goods and other products	-2.7	4.8	-9.2	5.8	6.2	1.4	3.8	0.7	1.3
Exports goods and services	1.8	3.9	-19.9	14.4	18.1	2.4	3.8	0.7	1.0
Imports goods and services	-4.0	4.4	-14.9	13.9	9.4	3.8	3.1	1.8	2.7
National demand (b)	-3.1	2.6	-9.1	5.2	2.1	1.5	1.5	1.1	1.0
External balance (b)	1.8	0.0	-2.2	0.3	3.2	-0.5	0.3	-0.3	-0.7
GDP, current prices: - € billion	--	--	1,118.0	1,206.8	1,329.0	1,397.4	1,468.1	--	--
- % change	-0.8	3.4	-10.2	7.9	10.1	5.1	5.1	1.6	0.0
2. Inflation, employment and unemployment									
GDP deflator	0.5	0.8	1.2	2.3	4.6	4.1	3.2	0.8	-0.3
Household consumption deflator	1.7	0.7	0.0	2.1	8.2	4.4	3.5	0.0	-0.8
Total employment (National Accounts, FTEJ)	-3.4	2.6	-6.8	6.6	3.8	0.5	1.3	0.5	0.1
Remuneration per worker	2.4	0.9	2.4	-0.7	2.5	3.5	3.2	0.5	0.0
Unemployment rate (LFS)	20.2	18.8	15.5	14.8	12.8	12.3	11.5	0.4	0.3
3. Financial balances (% of GDP)									
National saving rate	18.8	21.7	21.0	21.8	21.5	20.9	21.5	-0.3	-0.2
- of which, private saving	22.9	23.6	28.2	25.3	22.7	22.9	23.3	-0.8	0.0
National investment rate	21.7	19.4	20.4	20.8	21.2	21.5	21.5	0.2	0.5
- of which, private investment	17.7	17.2	17.7	18.1	18.2	18.5	18.7	0.2	0.4
Current account balance with RoW	-2.9	2.3	0.6	1.0	0.3	-0.6	0.0	-0.6	-0.8
National net lending (+) / net borrowing (-)	-2.4	2.7	1.1	1.9	1.0	0.5	0.9	-1.1	-0.8
- Private sector	6.6	6.8	11.2	8.7	4.8	4.8	5.0	-1.6	-0.9
- General gov. deficit exc. financial instit. bailouts	-8.1	-3.9	-9.9	-6.8	-3.8	-4.3	-3.9	0.4	0.1
Public debt according to EDP	69.0	101.9	120.4	118.3	111.2	110.1	108.8	-2.0	-1.9
4. Other variables									
Eurozone GDP	-0.2	1.9	-6.4	5.3	3.2	0.0	1.0	0.1	0.2
Household saving rate (% of GDI)	8.8	6.7	17.6	13.7	6.0	4.8	4.9	-2.7	-2.9
Household gross debt (% of GDI)	128.5	101.6	91.5	89.3	88.2	85.2	81.4	1.4	2.5
Non-financial corporations gross debt (% of GDP)	133.4	103.0	108.4	104.0	94.5	89.5	84.9	-1.4	-0.9
12-month EURIBOR (annual average %)	1.90	0.01	-0.30	-0.49	1.09	3.50	3.25	0.25	0.99
10-year government bond yield (annual average %)	4.74	1.58	0.38	0.35	2.19	3.75	3.50	-0.11	0.25

(a) Change in percentage points between previous and current forecasts.

(b) Contribution to GDP growth, in percentage points.

Sources: 2008-2021: INE and Bank of Spain; Forecasts 2022-2024: Funcas.

Risks

These forecasts remains subject to a significant level of global uncertainty. Energy prices could conceivably collapse by more than currently forecast judging by the forward markets, which would accelerate the reversal of inflation and boost growth considerably. Conversely, having done away with its zero-COVID policies, China could embark on rapid recovery, tightening markets for oil and liquid gas prices. Elsewhere, geopolitical risks appear to have waned (the most pessimistic scenarios for the war in Ukraine are looking less probable at the time of writing) but have not gone away.

On the economic front, the pace of rate hikes by the ECB poses a challenge to the most indebted agents. Financial risks look moderate today, thanks to private sector deleveraging and healthy labour market dynamics (essential to avoiding a prolonged recession). However, overly aggressive monetary tightening could complicate that scenario.

Lastly, the persistence of a significant structural public deficit is a threat at a time when the ECB is rolling back its support via lax rates and public debt repurchases. The state will have to place massive amounts of debt securities on the market. Fiscal sustainability will depend, therefore, on the credibility of the targets set for correcting current imbalances and the transformational nature of the investments financed using the NGEU funds.

**Raymond Torres and María Jesús
Fernández.** Funcas

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Managing the risks of quantitative tightening in the euro area

Recent quantitative tightening decisions undertaken by the ECB are important to reduce surplus liquidity and improve the functioning of the monetary transmission mechanism in the euro area. Nevertheless, they pose important risks for commercial banks, central banks, government finances, and the ECB itself.

Erik Jones

Abstract: The Governing Council of the European Central Bank (ECB) agreed on October 27th, 2022, to encourage early repayment of loans given out to banks through targeted long-term refinancing operations during the COVID-19 pandemic. On December 15th, the Governing Council announced that it would slow down the reinvestment of the maturing principal on assets held within the large-scale asset purchase programme to shrink those holdings by roughly €15 billion per month starting in March 2023. These two decisions are important to reduce surplus liquidity in the euro area and to improve

the functioning of the ECB's monetary transmission mechanism. Nevertheless, they pose important risks for commercial banks, central banks, government finances, and the ECB itself. Managing those risks will progressively dominate concerns in the Governing Council as the pace of interest rate rises that started in July 2022 begins to slow in the second quarter of 2023.

Introduction

The Governing Council of the European Central Bank (ECB) began raising interest

Table 1 **Liquidity conditions in the euro area**

Maintenance period, 21 December 2022 to 7 February 2023	Euro billions
Current Account Holdings	202.29
(less) Average Reserve Requirements	168.09
Deposits in the Deposit Facility	4,085.32
Surplus Liquidity	4,119.52

Note: Surplus liquidity is the existing current account holdings of the banking system less their average reserve requirements over the maintenance period plus any funds held in the deposit facility. In the current context, there is no use of the marginal lending facility.

Source: European Central Bank.

rates in July 2022. By December of that year, the main policy rates had increased by 250 basis points, or 2.5 percent, taking the deposit rate paid on deposits held at the central banks that make up the euro area (the Eurosystem) from negative 0.50 percent to positive 2.0 percent in just six months. Along the way, monetary policy makers noted that they need to match this increase in policy rates with a reduction of other accommodative measures to strengthen the impact of policy changes on credit conditions in the economy and to reduce the volume of surplus liquidity in the European banking system. [1] By end December, the ECB estimated that the euro

area contained approximately €4 trillion in surplus liquidity (Table 1). This surplus liquidity existed as a result of the more than €6 trillion expansion in the Eurosystem's cumulative balance sheet since 2010 through a combination of asset purchase programmes and long-term refinancing operations (Table 2).

Therefore, on October 27th, the Governing Council decided to change the terms on loans given to commercial banks during the pandemic through targeted long-term refinancing operations (TLTROs) to encourage early repayment. The Governing Council followed with another decision on

Table 2 **Unconventional measures on the ECB balance sheet**

30 December 2022	Euro millions
Securities Markets Program	2.86
Asset Purchase Program (of which)	3,253.67
• Covered Bonds	301.97
• Asset Backed Securities	22.92
• Corporate Sector Assets	344.12
• Public Sector Assets	2,584.67
Pandemic Emergency Purchase Program	1,680.67
Targeted Long Term Refinancing Operations (outstanding)	1,317.65
Total	6,254.85

Note: These figures are not identical to those reported in Table 3 because of differences in the reporting periods and accounting measures (amortized costs are lower than cumulative net monthly purchases). PEPP data include covered bonds and corporate securities purchased in the programme.

Source: European Central Bank.

“ Lagarde announced that there would be a series of further interest rate adjustments to run alongside the early repayment of the TLTROs and the slowdown of reinvestment on the asset purchase programme. ”

December 15th to slow down the reinvestment of the maturing principal of asset holdings accumulated through its large-scale asset purchase programme.

The purpose of this second decision is to begin shrinking the collective balance sheet of the Eurosystem by roughly €15 billion per month starting in March 2023. Moreover, ECB President Christine Lagarde emphasized in her December monetary press conference, this shrinkage of the Eurosystem balance sheet is not a substitute for further increases in the ECB’s policy rates, but rather “to complement” or “to align with” interest rate rises as “the primary tool to fight inflation”. Therefore, Lagarde announced that there would be a series of further interest rate adjustments to run alongside the early repayment of the TLTROs and the slowdown of reinvestment on the asset purchase programme. [2]

Lagarde also noted that there were significant risks associated with the process of balance sheet reduction or quantitative tightening (QT). “The reduction of the balance sheet – QT – is a new experience for us,” she observed. [3] And while she did not go through the risks in detail either in her opening statement or in her response to questions, it is clear that those risks apply to commercial banks, central banks, government finances, and the ECB itself.

Lagarde explained that the Governing Council would agree the operational details for implementing quantitative tightening in February 2023 and that they would “continuously assess the impact this measure is having on financing conditions, on the monetary situation, and on the monetary policy stance” looking ahead. [4] By implication, managing the risks associated with balance sheet reduction efforts are likely to predominate concerns within the Governing Council as the pace of interest rate increases starts to slow and the cumulative withdrawal of surplus liquidity rises. Those risks exist for commercial banks, central banks, government finances, and the ECB itself. Given that more than half of the €1.3 trillion in outstanding TLTROs will mature by June 2023, that shift in attention could happen before the end of the second quarter.

Banks and central banks

The decision to reduce the balance sheet of the Eurosystem brings opportunities and risks for commercial banks (including other monetary financial institutions) and central banks in the euro area. The opportunities centre on the strengthening of interbank lending markets and the release of collateral for securitized lending. The introduction of large-scale asset purchases in 2015 and the dramatic expansion of the large-scale asset purchase programme at the onset of the pandemic has removed a significant amount

“ Managing the risks associated with balance sheet reduction efforts are likely to predominate concerns within the Governing Council as the pace of interest rate increases starts to slow and the cumulative withdrawal of surplus liquidity rises. ”

“ By encouraging the banks to pay back the money they received through TLTRO III, the ECB will both reduce the volume of central bank liquidity and release the collateral held against those loans back into the market. ”

of high-quality liquid assets from the market that could otherwise be used as collateral for securitized borrowing. So have the collateral requirements for banks to access long-term refinancing operations, including the third round of TLTROs announced shortly before the start of the pandemic in September 2019. As a result, commercial banks have relied on their own liquidity to meet regulatory requirements for liquidity maintenance and for “own funds and eligible liabilities” (MREL) – and the redistribution of central bank liquidity among banks in the euro area has declined. [5]

By encouraging the banks to pay back the money they received through TLTRO III, the ECB will both reduce the volume of central bank liquidity and release the collateral held against those loans back into the market. This should make it easier and more attractive for banks to redistribute liquidity in both unsecured and collateralized interbank lending markets. Indeed, as Nicou Asgari and Martin Arnold reported in the *Financial Times* on the eve of the October 27th Governing Council decision, that is the goal. [6] That reporting rested on the findings of an International Capital Market Association *Repo Market Survey* conducted in June and published in October. Banks were complaining about the collateral shortage before the ECB started increasing interest rates: “the securities most in demand were German, French, and Italian

government securities.” [7] Many of those same banks indicated that they would face few challenges if the ECB were to wind up the TLTRO programme early. [8]

Few if any of those banks foresaw the speed with which the Governing Council would increase interest rates or the pressure that would place on government bond prices. The widespread expectation in early July was that the Governing Council’s first move would be only 25 basis points, or 0.25 percent. Instead, the Governing Council surprised the markets with a rate increase that was twice as large and followed that with rises of 75 basis points in September and October, plus a fourth increase of 50 basis points in December. The effect of these rate rises has been to lower the value of the collateral that will be returned to the markets. This is true particularly for the assets used to acquire TLTRO funds under relaxed collateral requirements – with important implications for the cost of funds available to the smaller Italian banks, for example. [9]

The cumulative shrinkage of assets held within the asset purchase programme will only add to this pressure. That slowdown in the reinvestment of maturing principle will reduce demand for government bonds and so leave greater supply for use as collateral. But it will also put downward pressure on bond prices and therefore the mark-to-market value of bank assets and so indirectly put

“ Slowdown in the reinvestment of maturing principle will also put downward pressure on government bond prices and therefore the mark-to-market value of bank assets and so indirectly put upward pressure on the cost of funding for those banks most affected. ”

“ The goal is to remove excess liquidity from the financial system without destabilizing sovereign debt markets at the same time. ”

upward pressure on the cost of funding for those banks most affected. This downside risk will be greatest for those banks that relied most heavily on their TLTRO loans to meet regulatory liquidity requirements. This explains why the actual early repayment of TLTROs has undershot market estimates since the Governing Council’s October 2022 policy announcement. [10] Despite the fact that the terms on the loans are less attractive now, many banks are holding onto that liquidity so long as they can. It also explains why those European banks that can access the market are seeking to issue bonds before interest rates go up further. [11]

The opportunity for central banks is that a strengthening of interbank lending markets will strengthen the transmission of monetary policy. The risk is that the transition for banks from relying on their own liquidity to meet regulatory requirements to relying on liquidity redistributed through the markets will take place too quickly and so leave some banks without adequate resources. This was a concern when the Governing Council started planning to wind up the second series of TLTROs in 2018. What national central banks discovered was that too many institutions would come under stress due to the change in central bank lending policy. The challenge was greatest for the smallest banks. [12]

The third series of TLTROs announced in September 2019 was designed as a transitional measure to create more time for adjustment. The rapid expansion of

that programme during the pandemic was unexpected, as was the novel pricing structure that the Governing Council used to ensure that commercial banks would take full advantage of the programme. This modified programme was a success in terms of distributing liquidity across financial institutions in the euro area. [13] Nevertheless, the challenge remains to ensure those institutions have sufficient time to make the transition. Alternatively, central banks may need to reverse this policy and launch a fourth round of long-term refinancing operations as they did in 2019.

Government finances and the ECB

So far there is no discussion of a fourth round of TLTROs. Instead, the focus within the Governing Council is on quantitative tightening. The goal is to remove excess liquidity from the financial system. The challenge is to avoid destabilizing sovereign debt markets at the same time. [14] This explains why the creation of a transmission protection instrument (TPI) last July was a necessary precursor to the decision to run down the TLTRO programme quickly and to withhold reinvesting part of the maturing principal on the asset purchase programme. If such actions were to destabilize European sovereign debt markets, the Governing Council could deploy the TPI to restore stability. [15]

The need to ensure stability in sovereign debt markets also explains why there is currently no discussion of withholding maturing principal on assets held under the Pandemic

“ Specifically, it is that those governments with the most bonds held by the Eurosystem will be most at risk of funding challenges as an increasing share of those bonds are effectively released onto the market when the central banks do not roll them over on maturity. ”

Emergency Purchase Programme (PEPP). That programme has a legal basis that is subtly different from the large-scale purchase programme that started in 2015. Purchases of government securities in the large-scale asset purchase programme – called the “public sector purchase programme” or PSPP – should roughly follow the same proportions that euro area Member States pay into the capital of the European Central Bank. By contrast, purchases under the PEPP are allowed to depart from the “capital key”, and so can be made more flexibly. Hence, the Governing Council announced last June that it would use the reinvestment of maturing principal on assets held under the PEPP programme

as a first line of defence against instability in sovereign debt markets. [16]

The combination of reinvestment of PEPP holdings and the possible deployment of the TPI has succeeded in maintaining stability in European sovereign debt markets. So long as that stability remains in place, the ECB has space not only to raise interest rates but also to shrink the Eurosystem’s collective balance sheet. The risk for government finances, however, is that any quantitative tightening will have a disproportionate impact on government financing in specific member states. Specifically, it is that those governments with the most bonds held by the Eurosystem

Table 3 Public sector securities held by country or organization

Euro billions

	PSPP	PEPP	Total	Percentage share
Austria	75.14	43.45	118.59	2.69
Belgium	94.35	56.18	150.52	3.42
Cyprus	4.51	2.49	6.99	0.16
Germany	665.59	397.70	1,063.30	24.15
Estonia	0.56	0.26	0.82	0.02
Spain	316.32	194.76	511.08	11.61
Finland	44.37	26.21	70.58	1.60
France	533.98	299.75	833.73	18.93
Greece	0.00	39.61	39.61	0.90
Ireland	42.93	25.83	68.75	1.56
Italy	443.56	287.03	730.59	16.59
Lithuania	6.02	3.22	9.24	0.21
Luxembourg	3.95	1.90	5.85	0.13
Latvia	3.93	1.89	5.82	0.13
Malta	1.44	0.61	2.04	0.05
Netherlands	134.57	84.56	219.13	4.98
Portugal	53.69	34.43	88.12	2.00
Slovenia	11.23	6.59	17.81	0.40
Slovakia	18.65	7.97	26.61	0.60
Supranational	288.03	145.92	433.94	9.86
Total	2,742.80	1,660.31	4,403.11	100.00

Note: These data are for cumulative net monthly purchases, which is the difference between the acquisition cost and nominal redemptions. These figures differ from amounts expressed in Table 2 as amortized costs. Public Sector Purchase Programme (PSPP) data is for end December 2022; Pandemic Emergency Purchase Programme (PEPP) data is for 22 November 2022. PEPP data exclude covered bonds and corporate securities purchased in the programme.

Source: European Central Bank.

“ The more the Governing Council succeeds in winding down the PSPP, the more pronounced the disproportionality of its PEPP holding will rise to the surface. ”

will be most at risk of funding challenges as an increasing share of those bonds are effectively released onto the market when the central banks do not roll them over on maturity. Here the focus is primarily on Italy because Greek government bonds have never been eligible for purchase under the PSPP (see Table 3).

The Italian government is well-aware of the risk it faces. It is also aware that the ECB would not intervene to support Italian sovereign debt prices if the government chose to defy European macroeconomic policy coordination or to challenge European fiscal rules directly. As a result, the government that came to power in September 2022 has followed a conservative economic policy agenda even when doing so contradicts electoral commitments made by the right-wing coalition partners in previous elections. Indeed, during the most recent electoral campaign, the new prime minister, Giorgia Meloni, ran on a platform of fiscal responsibility and openly clashed with her own coalition partners. Her party emerged as the strongest within the coalition at the ballot box and since forming the government her position has only strengthened. In that sense, the political risk has been mitigated. [17]

The complicating factor is that governments across Europe need to tap into the markets to blunt the impact of high energy prices on households and to fund their transition to new energy resources. This borrowing comes on top of funds that the European Commission has raised and will raise to fund the pandemic recovery programme, Next Generation EU,

and the new energy investment initiative, REPowerEU. As a result, government and supranational demand for credit will reach new highs even as European central banks begin to withdraw from the markets. According to reporting by Marcus Ashworth at Bloomberg, “the 10 largest euro nations are expected to sell some €1.3 trillion” in 2023, of which “around €340 billion” will be net new supply of debt. [18] Importantly, the German government will be the largest issuer of new debt. This new German demand for credit could put further downward pressure on bond prices at a time of relatively weak demand from investors, and so raise the cost of borrowing across the euro area.

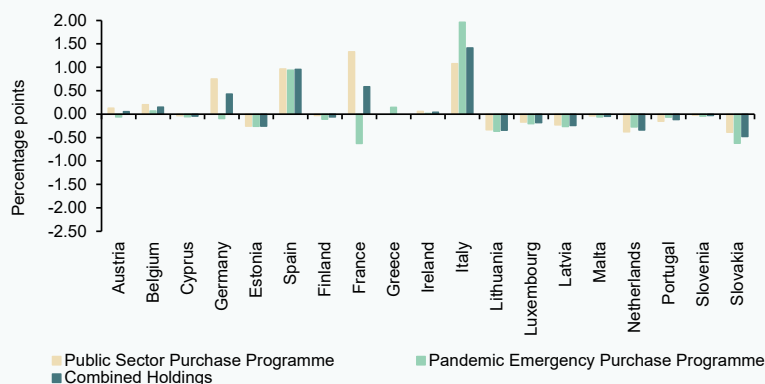
This combination of factors creates two different risks for the ECB, both of which are political. The first risk is that the Italian government will lay blame for any high cost of government borrowing on the ECB’s interest rate rises. This criticism works domestically because it allows the new Italian government to deflect blame for tight fiscal circumstance without raising concerns among investors that it challenges European macroeconomic policy coordination. The second risk is that German Eurosceptics will complain that the ECB is not only failing to tackle inflation but also underwriting Italian public finances. They will base this argument on the disproportionality in PEPP holdings, even though this tends to favour Germany as well, given the large volume of government debt that country has in circulation. The point to note is that the more the Governing Council succeeds in winding

“ Central banks have shown over the past two decades that new instruments or new uses of existing instruments can always be invented. ”

Exhibit 1

Deviations in Eurosystem public sector asset holdings from the ECB capital key

As of December 2022



Note: Greece is not eligible to participate in the public-sector purchase programme.

Source: European Central Bank.

down the PSPP, the more pronounced the disproportionality of its PEPP holding will rise to the surface (see Exhibit 1).

Such criticism of the ECB is already easy to find in the press of both Italy and Germany. In many ways that should be of little concern. The ECB's political independence is not at risk and so long as such criticism is tied to events it will also whither away. The concern arises because of the possibility of an exogenous shock to European sovereign debt markets that might force the Governing Council to trigger the transmission protection instrument or, as a last resort, the programme for outright monetary transactions created by Mario Draghi in 2012. That kind of support might not be available for Italy so long as the Meloni government refuses to complete the ratification of the new treaty for the European Stability Mechanism (ESM) or, in extremis, to sign up for an ESM support programme. [19] So far Meloni has dragged her feet on ratifying the new ESM treaty – even though most observers believe her government will take that step – and ruled out asking for ESM support. That leaves the Governing Council to

rely on reinvestment of maturing principal on the PEPP holdings within the Eurosystem to stabilize Italian sovereign debt markets. The only alternative would be to create some new instrument. That is always possible. Central banks have shown over the past two decades that new instruments or new uses of existing instruments can always be invented. [20] Nevertheless, doing so would raise additional risks as well as opportunities.

The coming debate

The risks associated with the ECB's quantitative tightening run alongside the opportunities that policy change brings to normalize monetary conditions across the euro area. Identifying those risks is not the same as criticizing the new policy. Rather, it suggests the new agenda for conversation. As Governing Council members identify opportunities to slow the pace of interest rates rises or even pause in their monetary tightening, they will necessarily turn to focus on those issues that arise around the retirement of targeted long-term refinancing operations and the shrinking of the collective balance sheet of the Eurosystem. Those issues

focus primarily on the impact that this will have on the cost of funding or MREL liquidity requirements in the banking system and government finances for those governments in the euro area. They will also focus on the instruments available for crisis management if there is some external shock to European sovereign debt markets. These will not be easy conversations because the distribution of costs and benefits will not be even or perceived as equitable. Nevertheless, there is no alternative to confronting those risks. The ECB must pair its monetary tightening with a quantitative tightening if it is to succeed in tackling inflation in the euro area.

Notes

- [1] See, for example, the monetary accounts of the Governing Council meeting held on 27 October 2022, which are available here: <https://www.ecb.europa.eu/press/accounts/2022/html/ecb.mg221124~3527764024.en.html>
- [2] This press conference was held on 15 December 2022. President Lagarde's remarks were made during the question-and-answer period. The transcript can be found here: <https://www.ecb.europa.eu/press/pressconf/2022/html/ecb.is221215~197ac630ae.en.html>
- [3] Lagarde ECB press conference from 15 December 2022.
- [4] Lagarde ECB press conference from 15 December 2022.
- [5] See Francesca Barbiero, Miguel Boucinha, and Lorenzo Burlon, "TLTRO III and Bank Lending Conditions," *ECB Economic Bulletin*, 6 (Frankfurt: European Central Bank, 2021) pp. 104-127.
- [6] Nikou Asgari and Martin Arnold, "Traders Urge ECB to Ease Collateral Shortage in the Market," *Financial Times* (26 October 2022). <https://www.ft.com/content/0eea1ae8-acfe-401a-bff3-88e8c6382a32>
- [7] See *European Repo Market Survey 2022* (Zurich: International Capital Market Association, 2022) p. 35.
- [8] Cathal McElroy, "Eurozone Banks Unfazed as ECB Mulls Closing Cheap Funding Loophole," *S&P Global Market Intelligence* (13 July 2022).
- [9] For the use of weak collateral to access TLTRO funding in Italy, see Annino Agnes, Paola Antilici, and Gianluca Mosconi, "Le TLTRO e la disponibilità di garanzie in Italia," *Mercati, infrastrutture, sistemi di pagamento: Approfondimenti* 12 (Roma: Banca d'Italia, 2021).
- [10] Alexander Weber, "ECB's Cheap-Loan Repayments Slow to €63 Billion in Latest Round," *Bloomberg Government* (13 January 2023).
- [11] Priscila Azevedo Rocha, Paul Cohen and Colin Keatinge, "Banks Flood Europe's Bond Market as Cheap ECB Loan Program Fades," *Bloomberg Government* (13 January 2023).
- [12] See, for example, Steve Hussey, "Eurozone Banks: Is There Life After TLTRO?" (21 November 2018). <https://www.alliancebernstein.com/it/en-gb/institutions/insights/investment-insights/eurozone-banks-is-there-life-after-tltro.html>
- [13] See Barbiero, Boucinha, and Burlon, "TLTRO III and Bank Lending Conditions."
- [14] See Erik Jones, "The ECB's Policy Conundrum." *SEFO – Spanish Economic and Financial Outlook*, 11(4) (2022) pp. 47-54.
- [15] See "The Transmission Protection Instrument," (Frankfurt: ECB Press Release, 21 July 2022).
- [16] See "Statement After the Ad Hoc Meeting of the ECB Governing Council," (Frankfurt: ECB Press Release, 15 June 2022).
- [17] See Erik Jones, "Italy's Hard Truths." *Journal of Democracy*, 34(1) (2023) pp. 21-35.
- [18] See Marcus Ashworth, "Europe's Coming Bond Avalanche Will Test ECB." *Bloomberg Government* (6 January 2023).
- [19] There was an interesting exchange between Lagarde and journalists on this point in the December press conference.
- [20] See Jagjit S. Chadha, *The Money Minders: The Parables, Trade-Offs, and Lags of Central Banking* (Cambridge: Cambridge University Press, 2022).

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Monetary policy 2023 and interest rate increases: Outlook and impact

The monetary policy roadmap for 2023 will continue to prioritize the fight against inflation, with successive official rate increases at least for much of the year, although accompanied by a slower increase in EURIBOR. Within this context, the banks will continue to play a key role in credit provision to the economy, yet while they could face improved income prospects, notable challenges exist within the prevailing uncertain climate.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Abstract: In 2023, the effort to fight inflation will go beyond the battle for economic and financial stability, with the institutional credibility of monetary policy itself in play. The roadmap looks set, marked by successive official rate increases for at least much of the year. Pricing in monetary policy changes, EURIBOR has traded significantly higher since July 2022. That said, the average rates effectively applied by the Spanish banks have increased more gradually. After initial sharp upward movements, the benchmark rate appears to have largely discounted the

monetary policy shift and the outlook for further official rate hikes, so that it should sustain lower growth in 2023. Within this context, just as the banks have played a crucial role in providing credit during the pandemic, they will remain key in the prevailing uncertain climate. It is important, however, to consider their situation from a broader perspective. Several recent studies by supervisory bodies suggest that, although the banks' income could increase on the back of higher rates, they face a number of challenges, some bigger than others, including higher funding costs,

“ Clearly, the trend in prices in the eurozone has sustained a quantitative and qualitative step change in recent months, one that has been particularly pronounced in certain countries, including Spain. ”

shrinking lending volumes and an uptick in non-performance due to economic weakness.

Introduction: Latest decisions and what could be next

Monetary policy faces major challenges in 2023. The eurozone is set to increase in size: Croatia will become the twentieth country to use the single currency. However, that looks like a small challenge by comparison with others, specifically the effort to tame inflation, which will go beyond a battle for economic and financial stability, testing the institutional credibility of monetary policy itself. Although the roadmap looks set, 2023 will be marked by numerous uncertainties. On December 15th, 2022, the ECB's Governing Council decided to increase its three official interest rates by 50 basis points and, more importantly, underlined that: “based on the substantial upward revision to the inflation outlook, [it] expects to raise them further. In particular, the Governing Council judges that interest rates will still have to rise significantly at a steady pace to reach levels that are sufficiently restrictive to ensure a timely return of inflation to the 2% medium-term target.”

The ECB trusts that keeping interest rates at restrictive levels will reduce inflation by dampening demand, while guarding against the risk of a persistent upward shift in inflation expectations. It continues to insist, however, that it is taking a contingent approach given the level of uncertainty and the component

of the increase in prices that does not depend specifically on its actions (mainly, energy prices). Clearly, the trend in prices in the eurozone has sustained a quantitative and qualitative step change in recent months, one that has been particularly pronounced in certain countries, including Spain. As the Bank of Spain noted in its *Economic Bulletin* for the first quarter of 2023, which talks about the crossover of the inflationary phenomenon from energy to the other index components, inflation started to spike in Spain in December 2020. The initial uptick was limited to energy prices but later spread to food and the other components of consumer price inflation. The Bank of Spain's report underlines the importance of understanding the extent to which that generalisation of inflation is attributable to the increase in energy prices, stressing that the increase in inflation is partly due to the bigger scale of the recent shocks but also more intense transmission of movements in energy prices to all other consumer prices.

It therefore no longer makes sense to talk about cost inflation but rather a widespread – and somewhat ‘sticky’ – increase in the prices of nearly every item in the consumer basket. The ECB expects to be able to control that phenomenon. It notes in the policy statement outlining its outlook in conjunction with the decisions taken on December 15th that although monetary policy tightening is making business and household borrowing increasingly expensive, “bank lending to firms

“ The ECB acknowledged in its monetary policy statement of December 15th that the ‘euro area banks have comfortable levels of capital, which helps to reduce the side effects of tighter monetary policy on financial stability.’ ”

“ The ECB is targeting a path of gradual adjustment and interest rate projections themselves are tantamount to explicit acknowledgement of the difficulty in reining in inflation over a short period of time, as shown by the empirical evidence. ”

remains robust, as firms replace bonds with bank loans and use credit to finance the higher costs of production and investment”. However, “households are borrowing less, because of tighter credit standards, rising interest rates, worsening prospects for the housing market and lower consumer confidence.”

In this paper, we look back at the trend in the key monetary policy tool for curbing inflation – interest rate hikes – and the potential impacts for the banks and their activity, along with the outlook for interest rates in 2023. Note that the ECB’s strategy includes reviewing the connection between its monetary policy and financial stability. The last such review took place in December 2022 and revealed a deterioration in financial stability, a development primarily attributed to economic weakening and the attendant increase in credit risk. It is also worth keeping an eye on sovereign debt vulnerabilities in a context of increasing issuance and borrowing costs. Nevertheless, the ECB acknowledged in its monetary policy statement of December 15th that the “euro area banks have comfortable levels of capital, which helps to reduce the side

effects of tighter monetary policy on financial stability.”

Outlook for interest rates

Table 1 provides the ECB’s macroeconomic projections for the eurozone as of December 2022. They show that the monetary authority does not expect inflation to approach its target of 2% until 2025. It is therefore targeting a path of gradual adjustment and the projections themselves are tantamount to explicit acknowledgement of the difficulty in reining in inflation over a short period of time, as shown by the empirical evidence. As for GDP, 2023 is expected to be a year of transition marked by meagre growth of around 0.5%, followed by stronger yet moderate growth of under 2% in 2024 and 2025.

Table 2 provides the Bank of Spain’s interest rates projections, likewise published in December. Two key observations. Firstly, short-term interest rates are expected to continue to increase until 2024 and long-term rates, until 2025. Secondly, and relatedly, short- and long-term rates are expected to

Table 1

ECB’s eurozone macroeconomic projections (published in December 2022)

Percentage

	2021	2022	2023	2024	2025
Harmonised consumer price index (HCPi)	2.6	8.4	6.3	3.4	2.3
Chg. in Real GDP	5.2	3.4	0.5	1.9	1.8

Source: ECB.

Table 2 Bank of Spain’s interest rate projections (December 2022)

In percentage

	2021	2022	2023	2024	2025
Short-term interest rates (3M EURIBOR)	-0.5	0.3	2.9	2.7	2.5
Long-term interest rates (yield on 10Y Treasury bond)	0.3	2.2	2.9	3.1	3.2

Source: Bank of Spain.

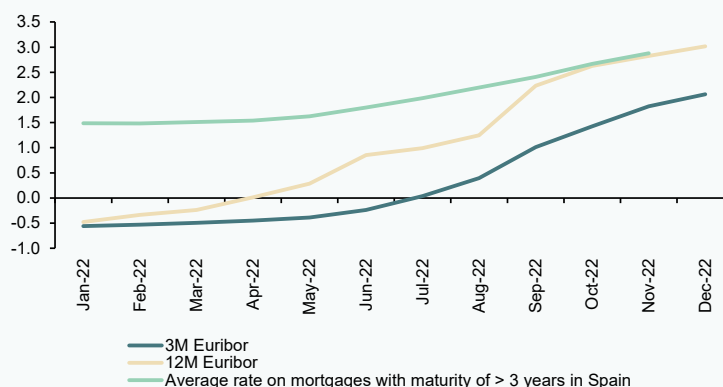
cross over this year, foreshadowing yield curve flattening and significant perceived uncertainty around 2023.

The monthly trend in interest rates in 2022 is shown in Exhibit 1. It is important to underline the fact that inflation remains subdued by historical standards. However, the recent run-up has been intense and taken place over a relatively short period of time. Short- and long-term rates (using 3- and 12-month

EURIBOR as proxies, respectively) have risen sharply since July 2022. The average rates effectively applied by the Spanish banks have increased more gradually, however, and remained at 2.8% as of November 2022 (last figure available). Exhibit 1 also reveals how EURIBOR has anticipated the changes in monetary policy and, following the initial sharp increases, currently appears to have digested most of the expected remaining official rate increases.

Exhibit 1 Trend in EURIBOR and mortgage rates in Spain in 2022

Percentage



Source: Bank of Spain.

“ Short- and long-term rates have risen sharply since July 2022, however, the average rates effectively applied by the Spanish banks have increased more gradually. ”

The role of banks: The need for perspective

Just as the banks played a crucial role in providing credit during the pandemic, they remain key in the prevailing uncertain climate. However, it is important to put the situation in perspective. It would be mistaken to already claim victory for the banks in the wake of the recent rate increases. Indeed, they are part of the financial normalisation process that implies being able to charge for lending and remunerate savings, which had been largely lost while rates were in negative territory. However, the looming period of scant growth and fears of recession spells numerous risks for the banks and warrants prudence. For further insight, it is worth taking a look at the paper published by Luis de Guindos (Vice-President of the ECB) and Andrea Enria (Chair of the ECB’s Supervisory Board) on the monetary authority’s blog on December 20th, 2022, under the heading, “Are banks ready to weather rising interest rates?” Their analysis gauges bank resilience to interest rate shocks under two different macroeconomic scenarios. In the first, yield curve flattening, specifically a 300bp increase in short-term rates and a 100bp increase in 10-year long-term rates. That is what they describe as a “scenario consistent with the need to bring down inflation more decisively in the short-term, and an expectation of success in the medium-term.” Their second scenario contemplates a steepening of the yield curve, specifically an increase of 100 basis points in the short-term rate and an increase of 300 basis points in the long-term rate. That scenario is “consistent with a fast decrease in inflation, accompanied

by medium-term concerns about the world economy.”

The results suggest that the European banks are well prepared for a variety of interest rate shocks and should see growth in net interest income; however, in the curve flattening scenario in particular, certain banks would face a significant increase in their funding costs that would be even larger than the projected increase in their earnings. The banks could also face higher credit losses as firms and households could struggle to service their debts in an environment of rising rates. Asset quality deterioration could require higher provisions, and would have a negative impact on banks’ capital, particularly under the sharp steepening scenario.

It is similarly interesting to analyse some of the data and observations provided by the Bank of Spain in its last *Financial Stability Report* (Autumn 2022), which are very much in line with the ECB’s analysis. That report notes that “were the macroeconomic risks [...] to materialise, the adverse impact on banks’ profitability and solvency could be significant. Rising interest rates will foreseeably boost banks’ income, but they will also put upward pressure on their funding costs. In particular, the pass-through of higher market rates to the cost of deposits may increase going forward. Moreover, higher borrowing costs for households and firms, together with a drop in their real income owing to higher inflation, will reduce their ability to pay, which in turn could trigger a significant increase in impairment provision costs.”

“ The looming period of scant growth and fears of recession spells numerous risks for the banks and warrants prudence. ”

“ ECB analysis shows that European banks are well prepared for a variety of interest rate shocks and should see growth in net interest income; however, under some scenarios, certain banks would face a significant increase in their funding costs that would be even larger than the projected increase in their earnings. ”

The Bank of Spain considers that its stress tests reflect high aggregate resilience in the banking sector to “an adverse scenario of materialisation of macro-financial risks, even though this would entail a certain degree of capital charge...”.

Even though loan non-performance in Spain remains below 4%, there are still carryover effects from the pandemic. The Bank of Spain notes that in the business sectors most affected by the pandemic (which accounted for 17.9% of total credit extended to non-financial corporations as of June 2022), non-performance has continued to rise, albeit slowly, to 6.1%. Although non-performance in Stage-2 and forborne loans decreased during the first half of 2022 (latest information available), that segment’s NPL ratio still stood at 7.2% as of June.

Lastly, the economic environment could affect the volume of credit and not just its cost. The Bank of Spain itself maintains that “net interest income is also expected to grow in Spain in the coming quarters as a result of the repricing of variable rate loans (and new lending at higher rates) due to the increase in the EURIBOR in recent months. However, this growth may be partially offset by a fall in volumes in the event of an economic slowdown.”

Conclusions

In sum, 2023 is set to be a year of adaptation, not exempt from risk, with rates continuing

to rise, for at least the first half, albeit with market rates (EURIBOR) requiring smaller adjustments for official price-of-money expectations. Broadly speaking, we can highlight four major challenges:

- **Credibility:** The monetary authorities are trying to anchor private agents’ inflation expectations so that they factor the prevailing inflation problems into their spending and financing decisions and, thereby, correct them. If inflation persists, it will be extremely hard for the monetary authorities to preserve their credibility.
- Related to the credibility challenge, the central banks will strive to make their transmission mechanism work. That implies keeping growth in credit at moderate levels, something the most recent figures for 2022 appear to be beginning to confirm.
- Elsewhere, and despite not being relevant to this paper, it is worth noting the European fiscal coordination challenge. If the region’s monetary measures are contractionary while its fiscal measures are overly lax, widespread and insufficiently targeted, the battle to control inflation and attain monetary normalisation will be harder.
- Lastly, there are exogenous constraints. The effects of the war in Ukraine will continue to reverberate, as will the uptick in the

“ Even though loan non-performance in Spain remains below 4%, there are still carryover effects from the pandemic. ”

“ Lastly, the economic environment could affect the volume of credit and not just its cost. ”

pandemic in China. In general, anything that affects provisioning mechanisms and the cost of energy will continue to pose a serious risk in 2023.

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Corporate finance: Banks *versus* capital markets

Tension in the corporate bond market since the start of the inflationary spiral towards the end of last year has driven a sharp increase in secondary market rates, as well as a sharp contraction in primary market issuance, forcing many corporates back to the bank financing channel they had previously abandoned. Nonetheless, rather than seeing this development as a setback, it reflects the complimentary rather than substitutive nature of bank and market corporate financing, with the banks acting as a back-up option when the bond markets are temporarily unable to finance the productive apparatus.

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Abstract: It has long been assumed that corporate financing in Spain (and Europe) was overly reliant on bank lending to the detriment of the capital markets, in contrast to the US model, where corporates tapped the markets far more intensely. To that end, in 2015, the European Commission launched its Capital Markets Union (CMU) initiative with the clear aim of correcting that bias, prompting a significant number of Spanish and European companies to debut as bond market issuers. Tension in the corporate bond market since the start of the inflationary spiral towards the end

of last year has driven a sharp increase in secondary market rates, as well as a sharp contraction in primary market issuance, making it impossible for many of those companies to tap the markets, forcing them back to the bank channel they had previously abandoned. That has led to a rebound in lending volumes to large enterprises, which are taking advantage of the fact that although the banks have increased the interest rates they charge for those loans, the increase has been less intense than the spike in market funding costs. As an example, activity in the Spanish corporate

“ Thanks to their intermediation function, the banks are better positioned than the capital markets to solve agency issues between borrowers and lenders and build the relationships of trust needed to underpin a bank loan. ”

bond market, which had been registering strong growth since the middle of the last decade, in terms of both issuance volume and number of issuers, totally collapsed in 2022, accompanied by a very sharp increase in average yields on that market to over 4%. That said, indeed, bank and market corporate finance are compliments, rather than substitutes, with the banks acting as a back-up option when the bond markets are temporarily unable to finance the productive apparatus. The banks' role is all the more noteworthy considering the fact that they themselves have also seen their ability to issue affected by the bond market crisis.

Banking versus market oriented financial systems: Theoretical considerations

The banking system and capital markets constitute two core components of the financial system with each complementing the other. In the former, the financial intermediation function performed by the banks enables the aggregation of savings (deposits) of small amounts, placed for short periods of time, so as to extend loans of greater size and for longer terms. By means of that intermediation, the banks do the work of constantly monitoring borrowers on behalf of the lenders. Thanks to that function, the banks are better positioned than the capital markets to solve agency issues between borrowers and lenders and build the relationships of trust needed to underpin a bank loan.

Compared to those advantages, bank financing is less appropriate when borrowers do not have assets to pledge as security or a sufficient credit record or stable and predictable flow of income. That is the case of start-ups and companies that are looking to innovate or grow quickly. For them it is obvious that financing based on a range of capital markets instruments is more effective than bank financing.

In the literature on comparative banking systems, it is commonplace to distinguish between systems in which the banking channel is the dominant mechanism for financing the economy (banking-oriented) and systems in which, in contrast, funds are channelled directly through the securities markets (market-oriented).

Banks provide somewhat different financial services than the markets and a mix of both is needed to improve economic growth. The proportionate mix may vary as a function of the level of economic development, as well as aspects related with the legal framework. The response to which of the two models is most appropriate should be sought in the evidence obtained from international comparative studies. The most far-reaching of those studies is probably that conducted by Demirguc-Kunt, Feyen and Levine (2012) in which they analyse over 100 countries over a span of more than 30 years, controlling for spurious effects. That study concludes that as economies become more developed, they increase their use of the services provided

“ Banks provide somewhat different financial services than the markets and a mix of both is needed to improve economic growth. ”

by the securities markets, to the detriment of those furnished by the bank system.

Nevertheless, the influence of the financing structure on economic growth is markedly different during times of crisis compared to 'normal' situations. As underlined by Allen, Gu and Kowalewski (2017), market-oriented systems tend to deliver benefits for companies more reliant on financing during good times but disadvantage them during hard times. A good example is the so-called shadow banking system, which boosts economic growth but generates evident risks for the financial system and real economy.

That is evident in the analysis of the European experience during the last 15 years, a period marked by several crises, which have affected the mix of banking and market financing.

Market financing thrust in Europe: Capital Markets Union (CMU)

Traditionally, the Anglo-Saxon economies (US and UK, mainly) have been associated with greater market orientation, while the continental European economies are known for the weight of their banking systems. It

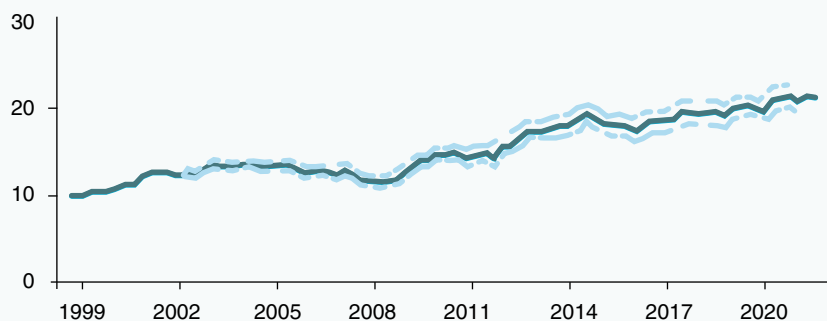
was precisely to correct that bias and move the European financial system closer to the Anglo-Saxon pattern that the European Commission launched its Capital Markets Union (CMU) initiative in 2015, essentially an attempt to stimulate diversification of sources of financing at the SME level in order to reduce their excessive dependence on bank financing, as well as to spur the development of sources of long-term financing for infrastructure projects, of particular importance to the Juncker Plan, launched virtually in parallel with the CMU.

Regardless of whether attributable to the securities market impetus provided by the CMU initiative or to an element of contention in bank lending as the entities worked to shore up their asset quality in the wake of the Global Financial Crisis, the weight of financing raised by non-financial corporates in the capital markets has increased significantly since the financial crisis. Exhibit 1, adapted from one published by the European Central Bank (2022), shows how the weight of capital markets financing has doubled in the fifteen years since the financial crisis, from 10% to almost 20%.

Exhibit 1

Corporate financing in the eurozone - weight of market issues in borrowings

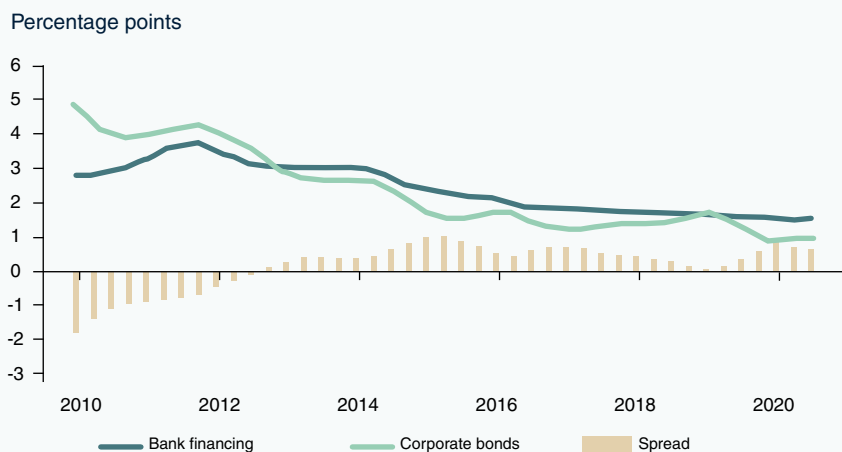
Percentage



Source: ECB (2022).

Exhibit 2

Interest rates on bank loans and corporate bonds - Eurozone



Source: ECB (2021).

The ECB itself, in its interpretation of that trend, argues that companies resorted to the securities markets by way of “spare tyre” in response to the reduced supply of bank credit in the wake of the financial crisis, as the banks worked to provision for non-performing assets and shore up their capitalisation. Paradoxically, as we explain below, during the recent bond market crisis, the roles have reversed and now it is really the banks that are performing that “spare tyre” function.

In addition to increasing the aggregate weight of market financing, another objective was to boost the universe of companies tapping those markets by bringing in smaller-sized issuers for the first time, as noted by Darmouni-Paputsi (ECB, 2022). According to that study, between 2014 and 2018, more than 10% of the issues completed each year were undertaken by companies making their début on the bond markets.

That growing use of the securities markets by European companies was accompanied in parallel by borrowing terms that trended lower in both absolute terms and in relation to the cost of bank loans, as illustrated in exhibit 2, taken from an ECB publication (2021). That exhibit likewise evidences how the spread between the cost of market financing and bank loans went from being negative (cheaper loans) during the initial years after the financial crisis to becoming systematically positive during the entire second half of the decade.

Bank financing as a plug for capital markets failures: The recent experience in Europe and Spain

That structural trend towards greater reliance on the markets, to the detriment of bank financing, is not exempt from risk, particularly during times of crisis, as acknowledged by

“ Between 2014 and 2018, more than 10% of the eurozone issues completed each year were undertaken by companies making their début on the bond markets ”

“ The banks’ presence as investors in the bonds issued by smaller-sized companies and companies with shorter trajectories constitutes a source of stability insofar as the banks tend to be more patient, buy and hold investors. ”

the ECB, with the banks’ role as back-up becoming more patent than ever when the markets dry up.

It is worth noting that the use of the capital markets does not necessarily leave the banks less exposed to corporate financing, but rather forges a shift in the vehicle through which that exposure materialises. In fact, it is very common for bond issues by first-timers to be placed by banks, which tend to keep a sizeable chunk of the issues in their portfolios.

One ECB study (2022) reveals how at companies tapping the markets for the first time and unrated issuers, the banks emerge as the largest holders of their bonds, at over 20%. The banks’ presence as investors in the bonds issued by smaller-sized companies and companies with shorter trajectories constitutes a source of stability insofar as the banks are more patient investors that tend to hold on to their investments for longer periods of time.

That same ECB study shows how, in times of crisis and significant bond market volatility (for which it analysed the months of sharpest correction during the pandemic), the prices of the bonds of more established and liquid issuers tend to correct by more than those of smaller, less liquid companies. That effect is known as a ‘reverse flight to quality’, in the sense that the more active investors (mutual funds, asset managers) rush to sell off the

bonds for which there is more liquidity and market depth, while the bonds issued by smaller companies are partially protected by the presence of more patient investors, especially the banks that helped them tap the markets in the first place.

That role played by the banks during times of crisis has been particularly evident during the past year in the context of the bond market crisis triggered by the surge in inflation, accelerated by the war in Ukraine. With bond yields rising sharply and issuer activity contracting severely, the banks have resumed their role as dominant corporate financier, particularly in the segments (large enterprises) where the issuers’ steady market presence may have suggested they no longer needed the banks.

That resurgence in bank financing (“back to basics”) is observable fairly generally across the various geographies but is particularly noteworthy in the US, the country where market financing has traditionally outweighed bank financing by the widest margins. As noted by the Federal Reserve in its last *Financial Stability Report*, bank financing for corporates has registered growth of 19% in the past year, compared to a meagre 1.5% in corporate bond issuance, so reversing the trend observed during the previous two decades.

Turning to the eurozone, the sharp spike in interest rates sustained at the longer ends of

“ The role played by the banks during times of crisis has been particularly evident during the past year in the context of the bond market crisis. ”

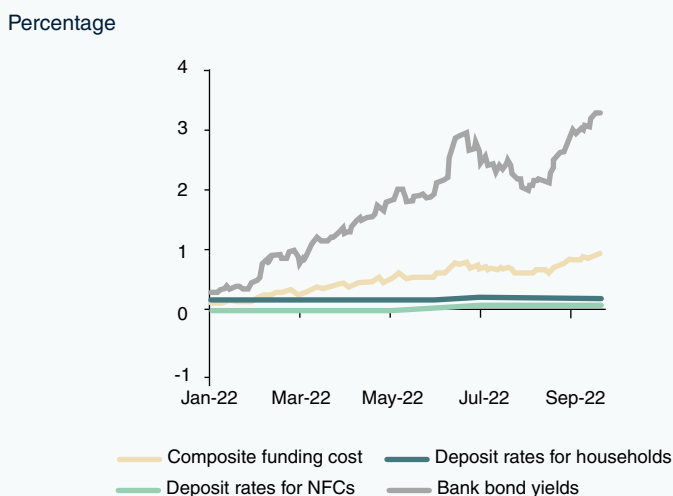
“ The sharp spike in interest rates sustained at the longer ends of the euro yield curve has translated speedily into higher corporate bond costs. ”

the euro yield curve has translated speedily into higher corporate bond costs, as illustrated by the accompanying exhibit (Exhibit 3), while the cost of corporate bank loans has increased by far less.

The fact that the cost of bank loans has remained relatively lower, certainly well below the cost of market bonds, is all the more noteworthy considering the fact that the banks

themselves have seen the cost of their own market funding rise sharply, indeed by nearly the same magnitude as the cost of corporate bonds, as illustrated in Exhibit 4. The less volatile funding cost associated with bank deposits has enabled the banks to offer their corporate clients loans on terms that have tightened by less than market rates of interest, making bank financing look attractive to the corporate segment.

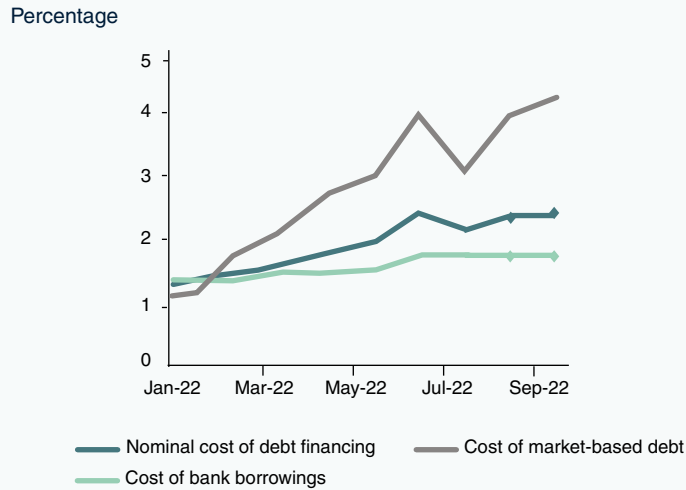
Exhibit 3 **Cost of financing for corporates in the eurozone**



Source: Schnabel (ECB, 2022).

“ The Spanish corporate bond market, which had been registering strong growth since the middle of the last decade, in terms of both issuance volume and number of issuers, totally collapsed in 2022, accompanied by a very sharp increase in average yields on that market to over 4%. ”

Exhibit 4 Cost of financing for the banks

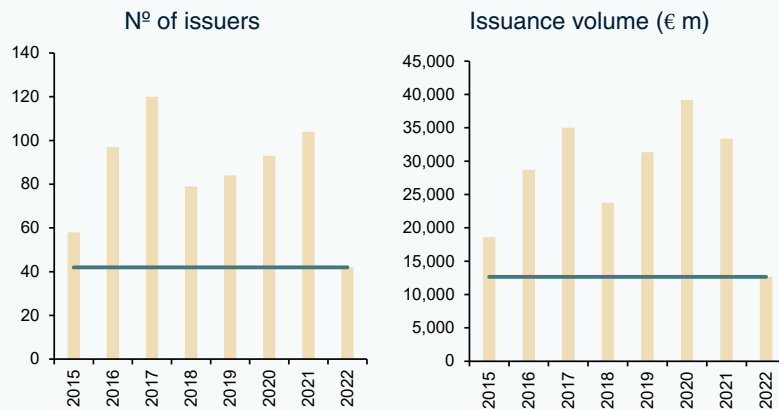


Source: Schnabel (ECB, 2022).

Lastly, turning to the Spanish experience, the dynamics etched out in the corporate bond and bank financing markets in 2022 lead to similar conclusions in terms of the vulnerability of the capital markets and the presence of the banks as mitigating, back-up mechanisms.

The next exhibits illustrate how activity in the Spanish corporate bond market, which had been registering strong growth since the middle of the last decade, in terms of both issuance volume and number of issuers, totally collapsed in 2022, accompanied by a

Exhibit 5 and 6 Corporate bonds in Spain



Source: Afi, based on Bloomberg data.

very sharp increase in average yields on that market to over 4%.

Compared to that rout in capital markets corporate financing, in terms of volume and cost, net corporate bank lending has increased, with greater intensity in the case of the larger companies, clearly hurt disproportionately by the above-mentioned reverse flight to quality triggered by the pronounced crisis sustained by the bond market throughout 2022.

Conclusions

In light of European and Spanish traditional reliance on bank financing compared to the more market-oriented Anglo-Saxon model, policy has focused clearly on increasing reliance on the capital markets, as best embodied by the Capital Markets Union initiative, thanks to which, the weight of market financing has increased considerably (from 10% to 20%) for the European corporates as a whole (by somewhat less in the case of Spain).

Notwithstanding that broad trend, the recent crisis in the bond market, triggered by the spike in inflation and aggravated by the energy crisis and war in Ukraine, has highlighted the vulnerability of that source of financing, whose cost has shot up, sparking an issuance drought. It is precisely during times of capital markets crisis such as these when the complementary back-up or “spare tyre” role of bank financing comes to the fore, as illustrated in this paper, in Spain, Europe and even in the US, the greatest exponent of the market-oriented approach.

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Importance and characteristics of the bancassurance business in Spain

The weight of bancassurance in Spain's insurance business and its contribution to parent banks' domestic earnings are very significant. As a result, as evidenced by the recent COVID-19 crisis, as well as in normal times, the relatively substantial contribution of the bancassurance business lends earnings stability and solidity to the banks with the most developed such businesses.

Daniel Manzano

Abstract: Of the 199 insurance providers doing business in Spain, 33 have ties to the main banking groups. Their weight in the country's insurance business, especially the life insurance segment, and their contribution to their parent banks' domestic earnings are very significant. As a result, the bancassurance business has been key to propping up the banks' earnings during periods of significant loan loss provisioning. That is true of the banking crisis of the last decade and, more recently, the COVID-19 crisis. Even during more normal times, the relative contribution

of the bancassurance business to the banking sector's earnings is very substantial, lending earnings stability and solidity to the banks with the most developed such businesses.

Introduction

Of the 199 insurance companies doing business in Spain as of the end of 2021, 33 had ties to institutions or banking groups covering almost the entire market. The links with those insurers, whose key metrics and ratios are provided in Table 1, come in many different forms: wholly- or majority-owned

“ The 33 insurers with bank ties account for 50% of the insurance business in Spain measured in terms of assets, technical provisions managed or earnings. ”

subsidiaries of banking groups; substantial interests associated with bancassurance agreements with benchmark providers; or, lastly, significant minority interests in insurance companies.

Consistent with the fact that the banks are the main channel for the distribution of life insurance in Spain (savings and life insurance), the majority of them - 19 - operate in the life insurance segment, while the remaining 14 are active in non-life insurance. That being said, the banks are increasingly displaying interest in the non-life segment.

The 33 insurers with bank ties account for 50% of the insurance business in Spain measured in terms of assets, technical provisions managed or earnings, as shown in Table 1. Those entities' heavyweight status in the Spanish insurance sector is, nevertheless, clearly concentrated in the life business (with a significant financial component). In 2021, they were responsible for 77% of the aggregate

income generated by that business line in Spain. In contrast, the entities associated with banking groups generated 'only' just over 26% of the non-life business line's earnings.

The second important trait of the insurers associated with the banks, as noted in previous reports, is their greater earnings generation capacity. In contrast, their use of own funds (their capitalisation) is relatively smaller than the rest of the sector. By way of illustration, in 2021, those companies generated 45% of the insurance sector's earnings, while their equity accounted for a lower 31% of the total of the players operating in Spain. Here there are two factors at play: (i) relatively lower capitalisation levels at the entities associated with banking groups as a result of the preference to place 'surplus' capital at the parent (a bank); and, in parallel (ii) relatively greater business efficiency (compared to the universe of entities not associated with banks), with a positive impact on earnings.

Table 1 **Key metrics for the Spanish bancassurance business, 2021**

Millions of euros

	No. of players	Assets	Technical provisions	Gross premiums written	Equity	"Earnings (Net profit)"	ROE (%)	Under-writing profit - Life	Under-writing profit - Non-life
Total	33	174,523	130,101	22,674	15,598	2,215	14.2	1,871	881
Of which:									
Life	19	159,151	120,817	14,663	11,564	1,563	13.5	1,864	63
Non-life	14	15,372	9,284	8,011	4,034	653	16.2	7	818
Sector total	217	351,925	247,962	68,616	49,806	4,907	9.9	2,428	3,351
% associated with banks	15	49.6	52.5	33.0	31.3	45.1		77.0	26.3

Sources: Afi, insurers, DGSFP.

“ Specifically, the average ROE of the 33 insurers related to banking groups topped 14.2% in 2021, compared to under 8% across the rest of insurers. ”

The combination, in relative terms, of higher earnings and reduced use of own funds for accounting purposes translates into a third noteworthy characteristic: considerably higher profitability compared to the rest of insurance providers. Specifically, the average ROE of the 33 insurers related to banking groups topped 14.2% in 2021, compared to under 8% across the rest of insurers. [1] As a result, the Spanish insurance sector would have reported an average ROE of virtually 10% in 2021 [2] (11.2% in 2020).

Although the sector as a whole has historically stood out for its double-digit returns, as shown in Exhibit 1, those returns have declined of late. Last year, the Spanish insurance sector was marked by a ‘return to normal’ following the exceptionally-high returns obtained during the pandemic (see Manzano and Milner, 2022), shaped largely by the reduction in mobility and claims during the lockdown.

By comparison, the Spanish banking business’ earnings and profitability rose sharply in 2021 as a result of the significant provisioning effort undertaken in 2020 (the year of the pandemic) and the buoyant subsequent business recovery.

Banks, leader in life segment

The insurers with ties to the banking industry continue to present a mix of organisational structures in both the life and non-life segments. In life, half of the banking groups have opted for autonomous operation of the insurance business; however, very few banks operate in the segment independently, with most sharing ownership with specialist partners.

The fact that the banks are the predominant distribution channel in the life insurance business (for both savings and risk products) is the key determinant of the banks’

Exhibit 1

Trend in ROE in the insurance business in Spain

Percentage



Source: Afi.

“ Albeit much smaller than in life insurance, the banks’ share of 20%-30% of the non-life insurance business is not insignificant and is particularly relevant at certain specific institutions. ”

supremacy in this segment (a little over 75% in terms of the underwriting profit of the insurers with ties to the banks in the life segment). Contributing factors include the reach of the Spanish banks’ branch networks, the proximity between savings insurance and the financial business and the importance of mortgages in the sale of life insurance products (an area that has registered growth in the wake of the pandemic).

The relative importance of each business varies from one bank to the next. Overall, the seven biggest banking groups account for over 90% of the life bancassurance business in Spain, which generated 1.56 billion euros of profits in 2021. [3] A very substantial portion of that figure (90% of the total, derived from each of the banks’ percentage interests in their insurance investees) translated into profits for the banks last year.

Albeit much smaller than in life insurance, the banks’ share of 20%-30% of the non-life insurance business is not insignificant and is particularly relevant at certain specific institutions. The non-life insurers associated with the banks generated a little over 650 million euros of profits in 2021, of which close to 50% made a direct contribution to their shareholding banks’ P&Ls. [4]

In other words, the bancassurance business makes a significant direct contribution to the banks’ profits. Indeed, their interest in the domestic insurance business contributed 1.69 billion euros to the universe of Spanish banks’ aggregate earnings in 2021. That figure is significantly lower than in 2020.

Conclusions

Overall, the following conclusions can be drawn:

- The importance of the insurance business for the banks’ businesses in Spain - its direct

contribution alone (profit attributable to their interests in their insurance subsidiaries) represented around 15% of the banks’ reported earnings in 2021.

- In addition to that direct contribution in their capacity as shareholders of their insurance investees, the banks earn fee and commission income from the distribution of those policies via their branch networks. [5] Although the public information available is not sufficiently detailed to make an accurate estimate, it is reasonable to assume that layering in that indirect contribution, the insurance business (direct and indirect contribution) accounts for around 25%-30% of the banks’ earnings in Spain.
- That contribution declined considerably from 2020, converging towards that of prior years. That year (the year of the pandemic), the combination of: (i) growth in the profitability of the insurance business; coupled with (ii) a very considerable drop in the banks’ income due to the sizeable provisions recognised in anticipation of credit impairment in the context of the pandemic, drove the relative contribution by the insurance business to the banks’ overall income sharply higher. So much so that the direct contribution that year represented as much as 56% of the banks’ overall income, a figure that would rise to around 75% if the indirect contribution were layered in.

Notes

[1] That universe of firms includes a host of mutual societies. Although their relative weight as a cohort is small, their non-profit status tends to lead to very low returns.

[2] Measured as the ratio of earnings over equity at year-end as per their separate financial statements.

- [3] That figure of 1.56 billion euros is the aggregate profit of the 19 bank subsidiaries active in the life insurance segment. Of that total, the bulk, nearly 1.38 billion euros, trickles through to the banks' P&Ls thanks to their generally majority interests in their life insurers.
- [4] That figure of a little over 650 million euros is the aggregate profit of the 14 bank subsidiaries active in the non-life insurance segment. On the basis of their ownership interests and resulting consolidation methods, the banks recognise 313 million euros in their statements of profit or loss.
- [5] The insurers owned by the banks recognised over 2.5 billion euros of policy acquisition costs in their financial statements in 2021, a substantial percentage of which are fees and commissions paid to market and sell their policies through banking networks.

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Daniel Manzano. Partner at Afi

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Spain’s trade competitiveness relative to the eurozone

Spanish exports registered nominal growth of 40% between 2012 and 2021, the highest rate among the euro area’s five largest economies. While the Spanish economy is capable of improving its internal cost competitiveness and transforming those gains into export growth, Spain’s export intensity remains below its weight as an economy within the universe of benchmark economies.

Ramon Xifré

Abstract: Spanish exports registered nominal growth of 40% between 2012 and 2021, the highest rate among the five benchmark economies. The data corresponding to the first three quarters of 2022 suggest that momentum has continued, with Spain ranking as the country with the second-highest export growth compared to the same period of 2019. Analysis of the cost-competitiveness data suggest that the Spanish export sector has been competitive on the cost side, both before and since the pandemic-induced crisis. Thus, the Spanish economy is capable of improving its internal cost competitiveness and transforming those gains into export

growth. In addition to this, it is likely that some Spanish firms are positively affected by the current reorganization of globalization, leaning towards shorter and safer supply chains. Nevertheless, Spain’s export intensity remains below its weight as an economy within the universe of benchmark economies.

Introduction

The recent surge in inflation could become a threat to the competitiveness of Spanish trade, which, to date, has demonstrated resilience, proving a source of growth for the economy as a whole. This paper performs a

“ Although the COVID-19 crisis triggered a contraction in exports across all five economies in 2020, the speed of post-pandemic recovery has varied. ”

combined analysis of Spanish goods exports and cost-competitiveness terms in recent times. To do that, we look at the underlying trends from 2012 to 2019, the post-pandemic recovery between 2019 and 2021 and, lastly, the most recent data, which span the first nine months of 2022. The aim is to explore whether there are signs that the prevailing inflationary dynamics could be undermining the competitiveness of Spanish exports. The analysis encompasses the euro area’s five largest economies: Germany, France, Italy, Spain and the Netherlands (EA5).

The paper leverages the work contained in recent studies looking at the Spanish economy and its foreign sector (Álvarez-López, 2022; Díez Guijarro, 2022; Torres and Fernández, 2022a, 2002b) and complements previous studies specifically analysing the Spanish

economy’s competitiveness (Xifré, 2014; Xifré, 2017; Xifré, 2020; Xifré, 2021).

Exports and competitiveness between 2012 and 2021

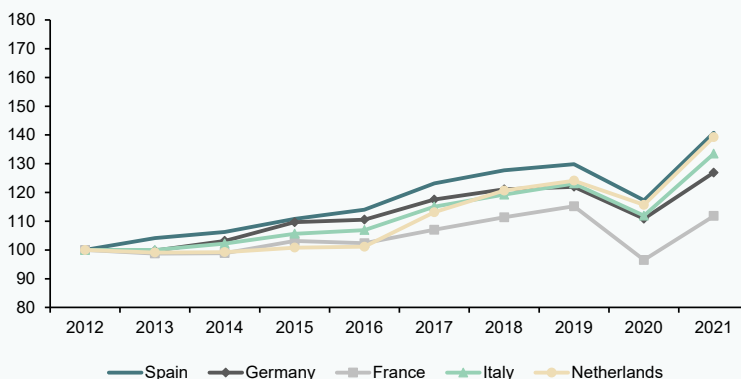
Exhibit 1 shows the volume of goods exported by the EA5 to the rest of the world between 2012 and 2021 in current prices, relative to their value in 2012 (rebased: 2012 = 100).

During the 10 years analysed, Spain and the Netherlands registered the highest growth in exports, reporting almost identical growth rates in nominal terms (Spain: 41%; Netherlands: 39%). The next most dynamic exporters were Italy (33%) and Germany (27%), with France lagging considerably behind (12%).

Although the COVID-19 crisis triggered a contraction in exports across all five economies

Exhibit 1 EA5 goods exports to the world

Rebased 2012 = 100



Source: Eurostat.

Table 1 **Change in goods exports across the EA5, by period and destination**

Percentage

	Between 2012 and 2021			Between 2019 and 2021		
	Global	Extra-EU	Intra-EU	Global	Extra-EU	Intra-EU
Spain	41	45	38	8	22	2
Germany	27	34	22	4	14	-3
France	12	23	4	-3	5	-9
Italy	33	37	31	8	17	1
Netherlands	39	75	28	12	29	6

Source: Eurostat.

in 2020, the speed of post-pandemic recovery has varied.

In four of the EA5, 2021 exports were already above 2019 levels by the following margins: Netherlands, 12%; Italy and Spain, 8%; and Germany, 4%. Once again, France was the outlier. In 2021, French exports were still 3% below those of 2019 (Exhibit 1 and Table 1).

It is interesting to analyse the difference in export growth dynamics between intra-EU and extra-EU markets. To that end, Exhibits 2 and 3 are analogous to Exhibit 1, showing goods exports across the EA5 in constant prices between 2012 and 2021 (rebased to 2012) for extra-EU and intra-EU markets, respectively.

The highest growth rate recorded in either exhibit is that in exports from the Netherlands to extra-EU markets, which increased by 75% over the decade. Spain registered the second-highest level of growth in exports to those markets (45%) (Exhibit 2 and Table 1).

Within the EU, the EA5 economies registered broadly similar export growth, other than

France, once again the laggard. Spain registered the highest export growth to those markets between 2012 and 2021 (38%). It is noteworthy that in the wake of the pandemic, EA5 exports to extra-EU markets rebounded faster than those to intra-EU markets. Both Germany and France exported less to the EU in 2021 than in 2019, Spain and Italy exported very similar levels both years and Dutch exports increased by 6% in 2021 (Exhibit 3 and Table 1).

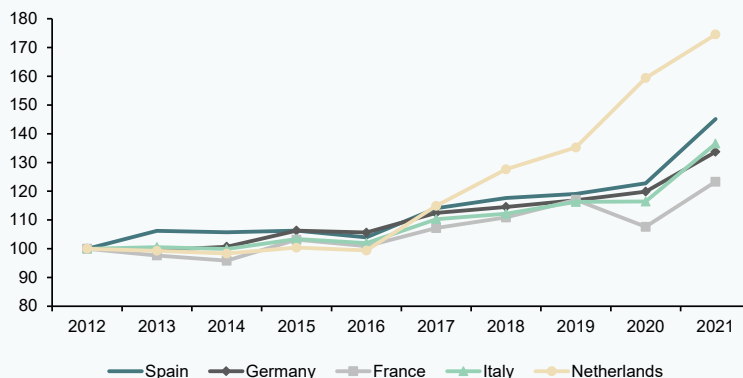
Next, we look at the trend in EA5 competitiveness between 2012 and 2021. To do so, as in earlier analyses (Xifré, 2017; Xifré, 2021), we rely on the price and cost competitiveness indicators tracked by Eurostat.

In that conceptual framework, the main indicator of an economy's competitiveness is its real effective exchange rate (REER), which is a generalisation of the nominal exchange rate. A country's REER is defined as the weighted average of the nominal exchange rates of that country's main trading partners, deflated by selected relative price or cost deflators. As a result, the REER is a proxy

“ It is noteworthy that in the wake of the pandemic, EA5 exports to extra-EU markets rebounded faster than those to intra-EU markets. ”

Exhibit 2 EA5 goods exports to extra-EU countries

Rebased 2012 = 100



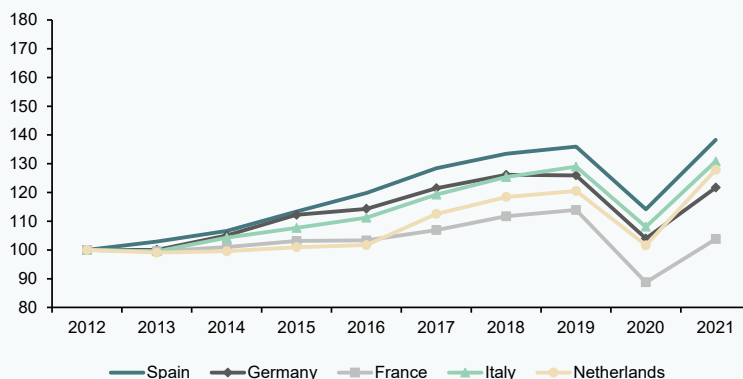
Source: Eurostat.

for the relative effective price of a country's exports in terms of the exports of its most important international competitors. Due to the manner in which it is calculated, an increase in a country's REER denotes a loss

of competitiveness: it means its goods have become more expensive relative to those of its trading partners. For our purposes, we take all euro area countries as our reference group.

Exhibit 3 EA5 goods exports to intra-EU countries

Rebased 2012 = 100



Source: Eurostat.

“ Analysis of the data suggests that the Spanish export sector has proven highly competitive on the cost side, potentially absorbing some of the growth in unit labour costs, not passing them through (or at least not in full) to export prices. ”

There are different versions of the REER depending on the deflator used to compare the exchange rates. The European Commission calculates REERs using four alternative deflators: (1) the (harmonised) consumer price index (CPI); (2) the GDP deflator; (3) the export price deflator; and, (4) the unit labour cost deflator for the economy as a whole. The first only considers consumer goods and services and does not factor in the prices of intermediate goods or capital. The second includes all goods and services produced but is not fully comparable across countries due to the different measurement (and weight) of the various service activities. The logic underpinning the third is similar but it only covers goods exports. The last deflator factors in the differences between countries

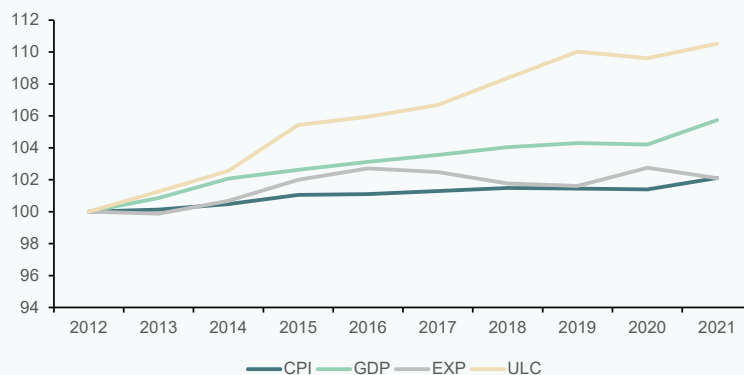
in productivity and labour remuneration but does not consider other production costs, such as the cost of intermediate goods or business margins. For further details, refer to Xifré (2017).

Exhibit 4 provides Spain's REER relative to the rest of the euro area countries for all four deflators between 2012 and 2021, rebasing the values to 2012 (2012 = 100). It shows how the Spanish economy's cost-competitiveness indicators have increased moderately over the 10 years analysed using the GDP deflator (growth of 6% relative to the euro area average) but have increased by a scant 2% in terms of CPI and export prices. The deflator showing the biggest loss of competitiveness, albeit still contained, is the unit labour cost

Exhibit 4

Annual real effective exchange rate (REER) for Spain relative to the euro area, by deflator

Rebased 2012 = 100



Source: Eurostat.

measure, which has increased by 10% more than in the euro area.

Analysis of the data suggests that the Spanish export sector has proven highly competitive on the cost side, potentially absorbing some of the growth in unit labour costs, not passing them through (or at least not in full) to export prices. That cautious approach by Spanish exporters vis-à-vis their customers and international markets may help explain the export boom documented above.

Exports and competitiveness in the first three quarters of 2022

Exhibit 5 shows the monthly change in EA5 goods exports to the rest of the world between 2019 and the same months of 2022. Rather than calculating the change year-on-year as usual we go back three years to analyse the extent to which exports had revisited pre-pandemic levels by 2022.

The exhibit shows how in each of the first nine months of 2022, the EA5 economies exported more than in the same month of 2019. Extending the trends first observed above,

exports registered the sharpest growth in the Netherlands and Spain during that period.

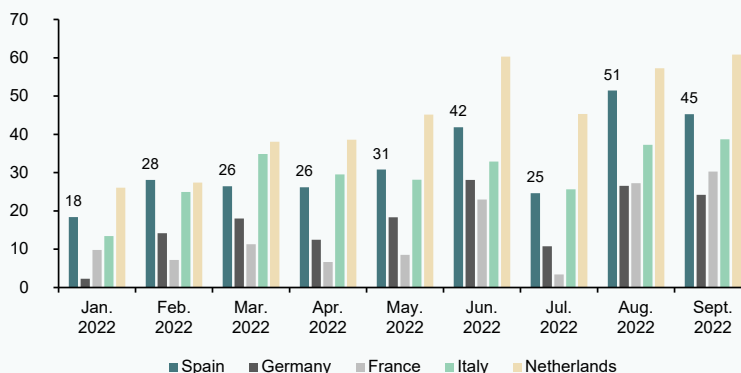
Another point of interest is the acceleration in export growth as the year unfolded. In Spain, for example, exports in January 2022 were 18% above January 2019 levels, a figure that had risen to 45% by September. One possible explanation for that acceleration may be the fact that resolution of the bottlenecks (Álvarez-López, 2022; Torres and Fernández, 2022) generated by the COVID-19 crisis requires an extensive period of time.

Exhibit 6 focuses on the growth in Spanish exports between 2019 and 2022, distinguishing between global, extra-EU and intra-EU exports. In five of the nine months analysed (January, February, April, May and July), Spanish exports to non-EU markets grew by twice as much as its exports to EU markets.

Exhibit 7 analyses the trend in monthly cost-competitiveness for the EA5 economies using the CPI deflator, which is the only one for which Eurostat provides a monthly breakdown. The data run to September 2022 and have been rebased to January 2019 levels.

Exhibit 5 Monthly change in EA5 exports to the world in 2022 vs. same months of 2019

Percentage, rebased 2012 = 100

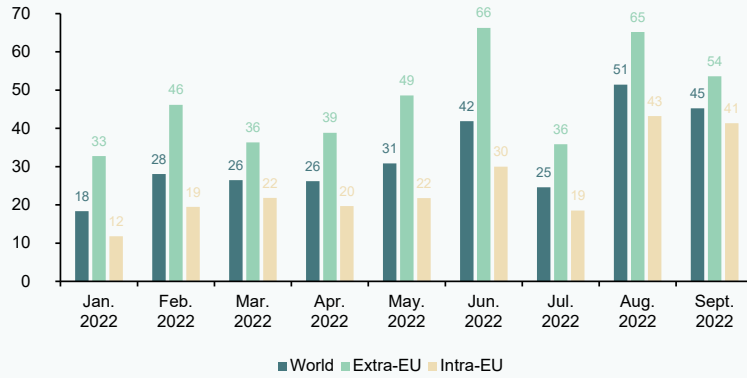


Source: Eurostat.

Exhibit 6

Change in Spanish exports between 2019 and 2022 by destination

Percentage



Source: Eurostat.

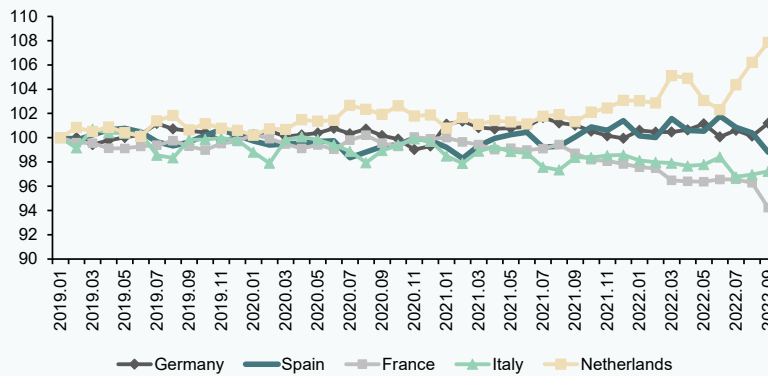
The exhibit shows how the Spanish economy has preserved its cost competitiveness, deflated by CPI and compared to the euro area,

at fairly constant levels between January 2019 and September 2022, showing only negligible fluctuations relative to the rest of the EA5.

Exhibit 7

Monthly real effective exchange rate (REER) for the EA5 countries relative to the euro area deflated by CPI

Rebased Jan. 2019 = 100



Source: Eurostat.

“ The favourable domestic conditions that underpinned part of the documented growth in Spanish exports between 2012 and 2019 remain in place. ”

That suggests, based on the data available to date, that the Spanish economy’s cost competitiveness has not eroded significantly in the first three quarters of 2022. It is fair to say, therefore, that the favourable domestic conditions that underpinned part of the documented growth in Spanish exports between 2012 and 2019 remain in place.

In an attempt to arrive at as impartial an assessment of the situation as possible, likewise singling out the continued upside for Spanish exports, Table 2 provides Spain’s share of goods exports within the EA5 for three different periods: 2012, 2019 and the first nine months of 2022. To provide a benchmark for comparison, the table also provides the breakdown of share of GDP by EA5 economy in 2012 and 2019. Table 2 shows how, despite the momentum in its exports in recent years, the Spanish economy’s share of EA5 exports remains below its weight of GDP, indicating considerable export growth upside.

Conclusions

Spanish goods exports registered dynamic growth between 2012 and 2021, of over 40%

in nominal terms, the highest level among the euro area’s five largest economies (EA5). This paper shows that the cost competitiveness of Spanish exports has remained propitious and has probably contributed to that momentum.

Average export costs in Spain relative to the other euro area economies increased a scant 2% between 2012 and 2021. During that same period, the Spanish economy’s labour costs increased by a little over 10%. That suggests that Spain’s exporters may have (partially) contained their export prices, by not fully passing on the growth in export costs they may have incurred with the aim of gaining (or maintaining) cost-price competitiveness abroad. Note that in addition to improving cost-price competitive positioning, it is important to remain mindful of the continuous improvement in non-cost competitiveness, which has also traditionally played a significant role in underpinning growth in Spanish exports (Xifré, 2021). These non-price factors (such as quality or post-sale services of export products) may help improve the positioning of Spanish exports in the current reorganization of globalization and supply chains. The

Table 2 **EA5: Share of exports and of GDP**

Percentage

	Share of EA5 exports			Share of EA5 GDP	
	2012	2019	2022(*)	2012	2019
Spain	8.6	9.2	9.7	12.7	12.8
Germany	40.9	40.9	38.6	33.7	35.6
France	16.6	15.7	14.2	25.7	25.0
Italy	14.7	14.8	15.2	19.9	18.4
Netherlands	19.2	19.5	22.3	8.0	8.3

(*) From January to September.

Source: Eurostat.

“ Despite the momentum in its exports in recent years, the Spanish economy's share of EA5 exports remains below its weight of GDP, indicating considerable export growth upside. ”

recent crises of COVID-19 and the invasion of Ukraine have tended to reshape outsourcing, prioritising shorter and more robust supply chains and it is likely that some Spanish firms are benefitting from this move.

The most recent figures, corresponding to the first three quarters of 2022, reveal ongoing momentum in Spanish exports, marked by three observations. Firstly, Spain is the EA5 economy to have registered the second-highest monthly growth in exports in 2022 by comparison with 2019 and that growth has been accelerating. Secondly, growth in Spanish exports to markets outside of the EU (which present higher growth potential in the long-term) was twice the growth in EU markets in five of the first nine months of last year. Thirdly, despite the inflationary pressures affecting the Spanish and the rest of the world's economies, so far there are no signs that they are significantly harming export competitiveness. Lastly, to arrive at a balanced diagnosis of the situation, it is worth recalling that Spanish exports continue to be under-represented within the EA5 block relative to GDP.

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Digitalisation of Spanish companies: An EU comparison

In contrast to the Spanish economy's relatively low productivity levels, overall, Spanish companies are relatively highly digitalised. However, a high percentage of Spanish companies use digital technology to control worker performance (relative to alternative uses in companies in more productive countries) and have relatively low levels of organisational capital (complementary to digital capital).

Pilar Rivera-Torres and Vicente Salas-Fumás

Abstract: The European Company Survey (ECS) 2019 data show that business digitalisation is a multidimensional phenomenon marked by heterogeneous patterns. Differences in digitalisation at the firm level across Europe are attributable to country factors (productivity differences), sector–market factors (technology and demand) and company factors (size, competitive advantage, organisational capital). Public policies designed to support digitalisation across Europe need to take these factors into consideration. In contrast to the Spanish economy's relatively low productivity levels, overall, Spanish companies are relatively highly digitalised. In fact, they rank among the highest in the EU. However, a high

percentage of Spanish companies use digital technology to control worker performance (relative to alternative uses in companies in more productive countries) and have relatively low levels of organisational capital (complementary to digital capital). This, together with the lower incidence of delegation among the Spanish companies, could mean that they are missing out on the opportunity created by their investments in digitalisation to lift productivity.

Introduction

The major inroads made in information and communication technology development

have not translated into the expected gains in productivity in developed economies (Andrews, Nicoletti and Timiliotis, 2018; Brynjolfsson, Hitt and Yang, 2018). One of the explanations proffered, coined the ‘productivity paradox’ (whereby productivity has proven relatively insensitive to the innovation embodied by investments in computers and analogous digital technology), shines the spotlight on differences in the adoption, use and application of information technology across companies. The ability to explain the differences observed in firm-level digitalisation would help identify barriers to pathways to innovation that could be alleviated via public policy (the European Union’s Next Generation – NGEU – investment programme includes digitalisation of the region’s economies, along with environmental sustainability and social inclusion, among its strategic goals for the coming decade).

This paper synthesises the results of a broader study (Rivera-Torres and Salas Fumás, 2022b) on firm-level digitalisation across the European Union (EU) and United Kingdom (UK) based on data gleaned from the *European Company Survey 2019*, ECS2019 (European Foundation for the Improvement of Living and Working Conditions, European Centre for the Development of Vocational Training, 2020). The ECS2019 sample includes close to 22,000 companies-establishments with 10 or more employees headquartered in the various EU member states and the UK. The information was gathered in 2019, *i.e.*, before Brexit and COVID-19.

The study equates the business decision as to whether or not to digitalise to an investment decision with costs and benefits. The general hypothesis is that if a company adopts or uses a specific digital technology, it is because that investment has a positive net present value and if it does not implement or use it, it is because the net present value of that investment is negative. The research selects observable variables from the ECS2019 which can be associated with differences in the cost and benefits of company digitalisation; each digitalisation variable is then explained using

a multivariate model with proxy cost and benefit variables as explanatory variables.

Brief overview of the study

The study variables are grouped into four categories: digitalisation indicators (explained variables), institutional-economic environment variables, sector-market variables and company variables (explanatory variables). The digitalisation category includes five indicators, four of which are taken directly from the ECS2019, with the fifth formulated by the authors. Specifically, they are: the percentage of employees who regularly use computers to do their jobs (*computers* or the digitalisation of people); whether or not the company has installed robots (robots or the digitalisation of machines); whether or not the company uses data analytics to control worker performance (*control*); whether or not the company uses an intranet for internal communication among employees and/or between the latter and the people they report to (*coordination*); and whether or not the company belongs to the latent high digitalisation class (*high digitalisation*), using the latent class classification defined by Rivera-Torres and Salas-Fumás (2022a). Table 1 summarizes comparative descriptive information about the level of digitalization across EU blocks of countries, including Spain, as well as descriptive information on the relevant explanatory variables.

In the EU as a whole and the UK, 48.9% of employees use computers to do their jobs; 10.8% of the companies have deployed at least one robot; 31.4% use data analytics to control employee performance; 23.1% use intranet to coordinate their employees; and 14.8% of all companies rank as ‘*high digitalisation*’ firms. The companies in Eastern Europe and Southern Europe other than Spain present lower levels of digitalisation, although the comparisons vary depending on the digitalisation variables used. For example, the people digitalisation yardstick (*computers*) is lower in Spain than in Central Europe, Scandinavia or the Anglo-Saxon markets, but Spain stands out for the percentage of companies that have digitalised their machines (*robots*). Spain presents relatively high digitalisation levels according to the synthetic indicator, with 21.3% of the pool of

Table 1 Average variable values | Comparison by blocks of countries

	Total	Central Europe	Scandinavia	Southern Europe	Eastern Europe	Anglo-Saxon	Spain	ANOVA
N	21,869	5,359	3,123	3,239	7,674	997	1,477	
Digitalisation								
Computers	48.9	55.0 [§]	59.6	44.9	41.1	54.4 [§]	49.4	174.3***
Robots	10.8	12.3 [€]	14.6 [¥]	10.7 [€]	7.8 [§]	6.8 [§]	15.5 [¥]	37.0***
Control	31.4	22.8	26.9 [§]	33.7 [€]	36.0 [€]	25.6 [§]	47.1	98.3***
Coordination	23.1	21.7 [¥]	32.6	20.2 [¥]	21.1 [¥]	26.0	22.7 [¥]	40.7***
High digitalisation	14.8	13.7 ^{§€}	24.0	15.1 [§]	10.7 [±]	12.2 ^{±€}	21.3	75.5***
Sector–Market								
Manufacturing	25.0	22.4	16.1 [§]	31.8	28.1 [¥]	18.1 [§]	26.9 [¥]	60.9***
Construction	10.4	10.3 [§]	11.4 [§]	7.3 [¥]	12.2 [§]	8.1 [¥]	7.2 [¥]	16.8***
Services	64.6	77.3 [§]	72.5 [§]	60.9 [§]	59.7 [§]	73.8 [§]	76.4	14.0***
Competition	35.0	33.4 [§]	39.3	42.4	31.1 ^{¥§}	46.5	28.8 [¥]	49.5***
Demand	31.5	35.0 [¥]	23.0 [§]	29.5	34.1 [¥]	22.2 [§]	34.5 [¥]	42.5***
Company								
Small	62.4	58.7 [¥]	62.8 [§]	66.2 [€]	64.5 [€]	61.4 [§]	56.7 [¥]	17.4***
Medium	28.6	27.5 [€]	30.4 [§]	26.2 ^{€§}	28.1 ^{€§}	28.2 ^{€§}	36.6	13.0***
Large	9.0	13.8	6.8 [¥]	7.5 [¥]	7.5 [¥]	10.4	6.6 [¥]	42.9***
More than 20 years	61.5	70.9 [§]	69.8 [§]	62.2 [¥]	50.8	68.0 [§]	59.9 [¥]	140.4***
Between 11 and 20 years	23.4	18.2 [€]	17.4 [€]	22.8 [§]	29.5	21.1 [§]	25.9	64.1***
10 years or less	15.1	10.9 [€]	12.9 [¥]	15.1 ^{¥§}	19.6	10.9 [€]	14.2 ^{¥§}	45.0***
Single establishment	72.8	68.6	51.7	74.8 [¥]	85.1	59.8	73.1 [¥]	304.4***
Parent	17.0	16.2 [§]	23.5 [¥]	21.0	12.0	17.0 [§]	23.3 [¥]	63.1***
Subsidiary	10.2	15.2	24.8 [§]	4.2 [¥]	2.9 [¥]	23.3 [§]	3.7 [¥]	367.2***
Value-added	43.9	43.3 [§]	42.2 [§]	48.6	41.3 [§]	37.6	57.3	36.0***
Exports	46.7	46.7 [§]	37.1	54.5	47.6 ^{¥§}	40.3	50.0 [¥]	44.4***
Growth	40.3	40.4 [§]	41.5 [§]	45.0	36.8 [€]	36.3 [€]	48.1	23.0***
Costs	35.2	27.6	24.5	36.0	45.3	33.0 [¥]	32.1 [¥]	132.8***
Radical Innovation	34.5	31.7 [§]	30.7 [§]	36.4 [¥]	37.8 [¥]	27.4	35.7 [¥]	20.8***
Innovation	44.6	41.2 [§]	45.4	56.2 [¥]	40.6 [§]	38.2 [§]	55.7 [¥]	69.2***
Delegation	70.0	76.2	89.5	68.8 [¥]	57.4	79.1	68.9 [¥]	272.5***
Training	34.6	32.9	49.8 [§]	38.4	24.2	51.6 [§]	43.6	186.0***
Productivity (N = 28)	55.1/18.4	73.5/12.4	68.9/6.8	47.8/10.8	40.0/4.0	81.1/30.1	52.4	

Average values in percentages, except for the productivity variable, which is expressed in thousands of dollars; standard deviations in italics.

Levels of statistical significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Duncan Test, failure to reject H_0 "xi=xj", $p < 0.01$ indicated via ±, €, § and ¥.

Sources: Authors' own elaboration based on the ECS2019, Rivera-Torres and Salas-Fumás (2022 b) and Eurostat 2019.

companies qualifying as *high-digitalisation* firms, surpassed only by Scandinavia (24%). That is partly attributable to the fact that the Spanish firms use data analytics to control their employees' performance far more frequently than those in the other countries in the sample.

Seventy per cent of respondents said that company management gave employees autonomy to do their jobs, with 30% reporting that work was done with little autonomy on the part of employees. At a little over one-third of the companies in the sample (34.6%), over 60% of employees had received on-

“ Spain presents relatively high digitalisation levels according to the synthetic indicator, with 21.3% of the pool of companies qualifying as high-digitalisation firms, surpassed only by Scandinavia (24%). ”

the-job training. The percentage of Spanish companies that ‘delegates’ decision-making is similar to that of the other Southern European countries and higher than the percentage reported in Eastern Europe. The more than 20-point difference between the percentage of companies that delegate in Scandinavia – 89.5% – relative to Spain is eye-catching. The percentage of Spanish companies where at least 60% of employees are receiving on-the-job training is lower than in Scandinavia and the Anglo-Saxon markets but higher than in the other regions identified.

Main findings

The results of the study suggest that corporate digitalisation is a multidimensional phenomenon and as such should be studied separately for each of the variables contemplated. Indeed, the digitalisation variables are scantily correlated among each other and the cost and benefit proxy variables have different impacts – quantitatively and qualitatively – on the various costs and benefits in question, varying, for example, between the digitalisation of people (computers) or machines (robots) or depending on the digital tools used to control job performance or coordinate their efforts.

Specifically, average national labour productivity is correlated significantly and positively with the use of computers

and robots, negatively with control over employees’ performance and insignificantly with work coordination. Therefore, in the more productive countries (Central Europe and Scandinavia in this study), leaving all other variables constant, all of the companies share conditions that favour, comparably, the return on their investments in computers and robots, whereas in the less productive countries (Southern Europe and especially Spain), conditions are relatively propitious to digitalisation of employee controls. Insofar as intensified use of computers and robots contributes to productivity gains (Gal *et al.*, 2019), the comparative advantage of the companies in the initially more productive countries in terms of investing in computers and robots is bound to further increase the productivity gap between Central Europe and Scandinavia and the rest of the continent.

The study also highlights how, controlling for the remaining explanatory variables, the manufacturing sector is at a comparative advantage in terms of digitalisation via robotisation (digitalising machines), while the services sector, especially the business services segment, presents a competitive advantage in terms of intensifying use of computers by employees (digitalising people). Apparently, the technology, machinery and equipment capital intensity and process

“ Per this study, in the more productive countries (Central Europe and Scandinavia), leaving all other variables constant, all of the companies share conditions that favour, comparably, the return on their investments in computers and robots, whereas in the less productive countries (Southern Europe and especially Spain), conditions are relatively propitious to digitalisation of employee controls. ”

“ The empirical results demonstrate that in explaining the differences in corporate digitalisation across countries, it is not sufficient to look at productivity levels and sector specialisation separately, but rather consideration should be given also to the interaction between economic sectors and country level productivity. ”

design involved in manufacturing activities, in comparison with the technology and processes used in the performance of services, given the current state of digital technology, determine the comparative advantages of each sector of the economy in terms of digitalising machines or people. In principle, both forms of digitalisation can help lift productivity.

Elsewhere, the numbers reveal that the differences in comparative advantage in the use of computers in the services sector relative to the manufacturing sector diminishes as a country's labour productivity increases, whereas the comparative advantage of industry relative to services in robotisation is apparently higher in the more productive countries than in their less productive counterparts. It is conceivable that the manufacturers perform relatively more service activities (R&D, design, marketing, *etc.*) in the more productive countries than in the less productive ones and that gives them more opportunities to drive the digitalisation of their people towards the levels reported by the service providers. Secondly, the relatively more intense use of tangible capital in production at industrial companies in more productive countries, by comparison with those in less productive countries, could lead to relatively propitious conditions for robotisation at companies located in the former relative to the latter

(*e.g.*, with companies more capital intensive due to bigger differences between the cost of labour *versus* capital). The empirical results demonstrate that in explaining the differences in corporate digitalisation across countries, it is not sufficient to look at productivity levels and sector specialisation separately. The differences among sectors vary according to national productivity.

They also reveal bigger differences in robotisation than in the use of computers between large and small companies (in favour of the former), controlling for all other variables. It is likely that the installation of robots requires investments and results in fixed costs that are much higher than the investments and fixed costs associated with investments in computers. Only the companies with relatively high turnover are in a position to generate a return on so big an investment and cover such high fixed costs. Exporting is another way of reaching larger markets and that would explain why the companies that export are relatively more digitalised than those that do not. Among the large companies, the return on using digital resources for personnel control and work coordination functions is higher than at smaller companies, probably because the need for formal control and coordination procedures increases in tandem with company size. More competitive

“ According to the results of the study, the gains from digitalisation do not stem from lowering costs but rather leveraging that digitalisation to innovate more and further differentiate companies from their competitors. ”

“ The comparison between the level of digitalisation of the Spanish companies and those from the other countries considered reveals comparatively strong positioning in terms of general digitalisation levels across the cohort of companies in Spain. ”

markets favour digitalisation of uses – control and coordination –, but the perceived intensity of competition does not influence the decision to invest in digital technology, controlling for all other variables. Elsewhere, the perception that demand for a company’s products or services is highly volatile does not on its own increase the return on digitalisation compared to the companies who see their demand as predictable. In contrast, the propensity to use digital technology in control and coordination tasks is lower among companies that see their demand as scanty or not at all predictable, by comparison with the rest of the sample.

Controlling for the other explanatory variables, the companies with more value-adding and innovating activities are more digitalised, in means and uses, than the companies with less value-adding activities and those whose competitive edge is predicated on keeping prices low. According to the results of the study, the gains from digitalisation do not stem from lowering costs but rather leveraging that digitalisation to innovate more and further differentiate companies from their competitors. Corporate digitalisation is clearly positively correlated with the companies’ levels of organisational capital, measured using the decision-making delegation and on-the-job employee training variables. That result lends support to the widespread hypothesis regarding the complementary

nature of digital and organisational capital (Brynjolfsson, Hitt and Yang, 2002): the return on investment in digitalisation increases with the volume of organisation capital, which is why it is more likely to find digitalised firms, in means and uses, among the companies that delegate onto their employees and those that train more employees during working hours (specific training) than at those that do not delegate or train fewer employees.

The comparison between the level of digitalisation of the Spanish companies and those from the other countries considered reveals comparatively strong positioning in terms of general digitalisation levels across the cohort of companies in Spain. In fact, they rank among the highest in the EU. That is attributable above all to the fact that the Spanish companies analyse data to control their employees’ performance far more frequently than the other companies, and also because the percentage using robots is relatively high. That comparatively high level of robots and worker performance control digitalisation offsets Spain’s relatively less intensive use of computers and of technology for coordination functions.

Elsewhere, among the Spanish companies, the correlation between organisational capital (delegation and training) and digitalisation levels is weaker than across the companies in

“ Considering both the lower incidence of delegation among the Spanish companies and the lower impact of organisational capital on digitalisation decisions, it looks as if the Spanish companies are missing out on the opportunity created by their investments in digitalisation to lift productivity. ”

Central Europe and Scandinavia. Considering both the lower incidence of delegation among the Spanish companies (perhaps due to lower returns by comparison with firms from other countries) and the lower impact of organisational capital on digitalisation decisions, it looks as if the Spanish companies are missing out on the opportunity created by their investments in digitalisation to lift productivity. In other words, the level of digitalisation via computers and robots could be 'excessive' for the low incidence of complementary resources. In the internal organisational model commonplace among the Spanish companies, the use of digital tools appears to be more profitable in employees' performance control functions than in the task of coordinating employees who do their jobs with relatively high levels of autonomy. In the more productive countries in Central Europe and Scandinavia, the pattern is just the opposite: lower use of digital technology to control employees' performance and more intense use in coordination and delegation tasks.

Conclusions and implications

The EU has embraced digitalisation in general and that of its companies in particular as a strategic objective. That decision needs to be underpinned by two premises: firstly, that digitalisation has a positive effect on social wellbeing (greater productivity, better work, *etc.*) and, secondly, that there are market failures whose ultimate outcome are levels of digitalisation shaped by the individual rationality of the agents that are below socially desirable levels (perhaps because within the EU, heterogeneity in technological and institutional conditions leads to multiple equilibriums).

As a result, public policy needs to differentiate between firm-level digitalisation that has a positive impact on productivity, employment and labour market inclusion and that which has no influence or a negative influence. Although the data at hand do not allow for cause-and-effect analysis, the study shows how the digitalisation variables most commonplace in companies from the more productive countries (computers and robots) are different to those most entrenched in the

less productive countries (data analytics for the control of worker performance). Elsewhere, the evidence shows that adoption of digital technology and its use is as or more prevalent at companies increasing their headcounts as at those not increasing in numbers (although the differences in digitalisation levels between the two groups diminishes as the average productivity of the countries increases). There is also evidence, particularly among the Scandinavian firms, that high levels of digitalisation are accompanied by more participative forms of working.

Regarding the multiplicity of equilibriums, digitalisation across the EU's firms could follow different patterns in the more productive countries of Central Europe and Scandinavia than in the less productive Southern European countries, without signs of potential convergence. According to the ECS2019, the companies in Central Europe and Scandinavia are digitalising in conjunction with relatively high levels of organisational capital (employee job autonomy and high levels of specific human capital). Companies from those countries are leveraging the complementary nature of digital and organisational capital to drive growth in productivity. In Southern Europe, including Spain, and Eastern Europe, digitalisation is taking hold in companies with low levels of organisational capital which are leveraging digitalisation to reinforce management's hierarchical control over their employees' performance. As a result, their digitalisation thrusts are not encountering the conditions most conducive to unlocking their full potential in terms of productivity gains. Public policies in support of digitalisation in the EU need to be designed to ensure that the companies from the south and east of the continent have the incentive to change their organisational design by delegating more and providing their employees with specific training in order to close the productivity gap via digitalisation.

In the sample as a whole, the digitalisation of people (use of computers in their day-to-day work) is higher or similar at small- and medium-sized companies as at their larger counterparts, whereas the percentage of firms using robots (digitalisation of machinery) is considerably higher at the larger companies than at smaller firms, providing yet another

example of the need to segment and target public policies in support of business digitalisation. It does not seem as if differences in employee knowledge and skills at large versus small companies are the reason for the gap in digitalisation levels by company size but rather their relative ability to absorb fixed costs (presumably higher in the case of robots) the higher their revenue.

The results indicate that, among the various types of companies represented in the sample, the highest levels of digitalisation, in means and uses, are located at subsidiaries. The digitalisation of Europe's companies is not only a question of market forces (prices, monetary incentives) but is also a matter of management arising from decisions about ownership, organisation and control within companies and, in particular, in dealings between parent undertakings and their subsidiaries. In light of the ease of relocating subsidiaries within the EU, business digitalisation support policies, among many others, need to be designed and coordinated across the various levels of community and national governance.

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Recent key developments in the area of Spanish financial regulation

Prepared by the Regulation and Research Department of the Spanish Confederation of Savings Banks (CECA)

Royal Decree-law 19/2022 establishing a new Code of Good Practices, amending Royal Decree-law 6/2012 and adopting other structural measures to enhance the mortgage lending market (published in the *Official State Journal* on November 23rd, 2022)

The measures addressed via this piece of legislation:

- New Code of Good Practices (the Code) for vulnerable mortgage holders.

The new Code is intended as a circumstantial and temporary tool to remain in effect for 24 months in order to facilitate the passage of urgent measures for vulnerable mortgage holders. The specific measures will be implemented by means of a Council of Ministers Agreement (see below).

They will apply to individual holders of loans secured by mortgages over the primary residence of the debtor or of the non-debtor mortgage holder with an acquisition price of no more than 300,000 euros, arranged up until December 31st, 2022.

Credit institutions can sign up to the Code voluntarily, as can other entities or individuals whose profession involves the concession of loans or mortgages. Adherence to the Code must be notified to the General Secretariat of the Treasury and International Financing. Adherence will be deemed in effect for the scheduled term of effectiveness of the Code unless a lender expressly renounces application of the Code.

The entities that sign up to the Code of Good Practices contemplated in Royal Decree-

law 6/2012 shall be deemed adherents of this new Code unless they expressly apply to the above General Secretariat to be removed within a deadline of two weeks. The Secretary of State for the Economy and Business Support will publish the list of bound entities and lenders.

As from adhesion, the contents of the Code will apply to the entire portfolio of loans of the bound party and will be binding on third parties. As a result, even if a debtor has not enjoyed the Code's measures, he or she will continue to be entitled to invoke them during its term of effectiveness. The bound parties are required to adopt the measures needed to safeguard debtor rights in the event they assign their loans to third parties.

The entities and lenders signed up to the Code must inform their mortgage-holding customers about the existence of the Code and the possibility of availing of it by means of an individualised and specific communication within a deadline of one month from adhesion to the Code. They must also provide information about the Code measures in a prominent place on their websites and via their branch networks.

The Control Committee set up under Royal Decree-law 6/2012 will oversee compliance by the bound parties with the Code and publish a report to that end. The bound parties must send the Bank of Spain the information required of them by the Control Committee in relation to the Code on a monthly basis.

Any debtors benefitting from the Code provisions without duly qualifying to do so will be liable for any damages caused, as well as for general expenses incurred.

- Modification of the Royal Decree-law 6/2012 Code.

Royal Decree-law 19/2022 amends the Code contemplated in Royal Decree-law 6/2012 as follows:

- It maintains the definition of the ‘threshold of exclusion’ but adds a new circumstance for consideration as an ‘especially vulnerable household’: the existence in the family unit of a victim of sexual exploitation or trafficking.
- It eliminates the multiplication factor associated with a ‘significant change in economic circumstances’ when the financial burden implied by mortgage servicing relative to household income has increased.
- The contents of the Code will apply to the entire portfolio of contracts of the bound entities and will be binding on third parties.
- The new legislation adds three representatives to the Control Committee tasked with supervising compliance with the Code corresponding to the sector associations upholding the interests of the banks, savings banks/banking foundations and credit cooperatives, respectively.
- It also adds that tariffs and other solicitor and registration fees derived from the formalisation and inscription of loan novation agreements concluded under the scope of the Code must be paid for by the creditor and may be settled as a function of the deed notarisation or other inscription practice.
- The new legislation adds a new circumstance to the measures contemplated prior to mortgage foreclosure: when a debtor is party to a restructuring plan and, at the end of the principal repayment grace period, meets the ‘threshold of exclusion’, that debtor may request a second restructuring plan, so long as the fact of coming out of the grace period is not the main reason for meeting that threshold.
- Amendment of the restructuring plan specifying foreclosure and the financial consequences for the debtor as follows:
 - In the event of a 5-year principal repayment grace period, if the increase in the burden implied by mortgage servicing over household income is less than 1.5 times and the family unit does not qualify as an ‘especially vulnerable household’, the grace period will be reduced to two years.
 - In the event of extension of the repayment period to 40 years in total from the loan grant date, if the increase in the burden implied by mortgage servicing over household income is less than 1.5 times and the family unit does not qualify as an ‘especially vulnerable household’, the increase in repayment period will be up to seven years, without exceeding 40 in total.
 - The reduction in the interest rate applicable during the grace period will be EURIBOR less 0.10. For fixed-rate loans, the prevailing fixed rate will apply throughout the grace period. If the increase in the burden implied by mortgage servicing over household income is less than 1.5 times and the family unit does not qualify as an ‘especially vulnerable household’, the interest rate applicable during the grace period will imply a reduction in the loan’s net present value of 0.5%.
 - Clauses limiting downward interest rate movements will not apply to the affected mortgage agreements.
- The timeframe for offering primary residence deeds in lieu of foreclosure has been extended to 24 months from application for restructuring.
- The scope for applying to rent one’s regular abode in the event of foreclosure has been extended to 12 months from entry into effect of the new legislation.

- The entities must duly inform all of their mortgage-holding customers about the existence of the Code and the possibility of availing of its benefits by means of an individualised and specific communication. They must also provide information about the Code measures in a prominent place on their websites and via their branch networks.
- Other measures addressed at mortgage debtors facing difficulties and to enhance the mortgage market
- Amendment of the requirements for mortgage subrogation under Law 5/1994.
- Amendment of Law 5/2019 to increase the financial loss a lender may incur to 0.05% of the principal prepaid in the event of notation of the applicable rate of interest or subrogation to a third party of the creditor's rights during the first three years of effectiveness of the loan agreement. If no principal is prepaid as part of the novation, no fee may be collected.
- The Bank of Spain will prepare a "Guide of tools for mortgage debtors struggling to pay" and develop simulation tools to educate citizens about their possible eligibility for the Code measures contemplated in Royal Decree-laws 6/2012 and 19/2022.
- No consideration, fees or commissions may be accrued for the prepayment of variable-rate mortgages from entry into effect of this Royal Decree-law until December 31st, 2023. Nor shall any fees or commissions accrue for the conversion of mortgage loans from variable to fixed-rate loans during that same timeframe.
- Extension of the surety line by which the state covers the financing extended by the banks to businesses and self-employed professionals under the scope of Royal Decree-Law 6/2022 until December 31st, 2023.

Resolution of November 23rd, 2022, approving the Code of Good Practices on urgent measures for vulnerable mortgage holders (published in the Official State Journal on November 24th, 2022)

The Council of Ministers has agreed that the entities or individuals whose portfolios include mortgages over individuals' homes can have up to four weeks to confirm their adhesion to the Code for vulnerable mortgage holders in writing. The bound parties must duly inform their customers as to whether or not they are signing up to the Code. The mortgages defined in Royal Decree-law 19/2022 will be eligible.

The criteria for eligibility for 'vulnerable mortgage holder' are:

- a) The aggregate income of the members of the household unit does not exceed the threshold of 3.5 times the so-called 14-payment annual multi-purpose income indicator (IPREM for its acronym in Spanish).

That threshold will be 4.5 times that same indicator in the event that a member of the family unit has a certified disability of a severity of over 33%, requires dependent care or has a permanently incapacitating illness, again duly certified.

Likewise, the threshold may be 5.5 times the above indicator in the event that the mortgage debtor has cerebral palsy, mental illness or an intellectual disability of a certified severity of 33% or more or is a person with a physical or sensory disability of a certified severity of 65% or more or has a serious incapacitating illness that certifiably prevents the mortgage holder or his or her carer from working.

- b) That, during the four years prior to the application, the family unit has sustained a 'significant change in economic circumstances' in housing affordability terms or has suffered circumstances leaving it particularly vulnerable. A 'significant change in economic circumstances' is understood to have taken place when the

financial burden implied by mortgage servicing relative to household income has multiplied by at least 1.2.

Especially vulnerable households are the following:

1. Family units in which at least one of its members has a certified disability of a severity of 33% or more, is dependent or has an illness that certifiably and permanently prevents him or her from working.
 2. Family units in which the following live in the same home: one or more people who are removed from the mortgage holder or his/her spouse by a kinship of up to the third degree of consanguinity or affinity and are disabled, dependent or seriously ill such that they are certifiably unable to work.
 3. Family units in which there is a victim of gender violence or a victim of trafficking or sexual exploitation.
- c) The mortgage instalments are equivalent to more than 30% of the after-tax income received by the members of the household unit on aggregate.

Debtors may invoke the novation of their mortgages under the scope of Royal Decree-law 19/2022 from when the list of Code adherents is published until December 31st, 2024. After applying for novation, they will have a fortnight to complete it.

Eligible debtors may opt to have their mortgages novated in any of the following ways:

- Extension of the total loan term by up to seven years, with the mortgage debtor having the option of setting the instalment at the amount prevailing as of June 1st, 2022, or at the amount of the first instalment charged to them after that date for a period of 12 months from completion of the novation via a full or partial principal repayment grace period.

The principal not repaid will accrue interest at a rate of interest that implies a reduction in the loan's net present value of 0.5%. Extension of the loan's maturity may not imply a reduction in the instalment amount to below that which was being paid as of June 1st, 2022.

- Conversion of the initial formula for calculating loan interest from a variable rate, reviewed periodically, to a fixed rate. The entities are free to set the fixed rate of interest offered in such cases.

Under no circumstances may a loan's novation extend the total term beyond 40 years from its date of arrangement.

Ministerial Order ETD/1217/2022 regulating payment method movements declarations under the scope of the prevention of money laundering and terrorist financing (published in the *Official State Journal* on December 8th, 2022)

The purpose of the Order is to establish the declaration forms and requirements applicable to those, acting on their own behalf or on behalf of third parties, who make any of the payment method movements contemplated in article 34 of Law 10/2010. Specifically, it stipulates the various kinds of payment movements entering or leaving EU member states or countries outside of the EU that are subject to prior declaration, and the applicable reporting templates.

It is worth highlighting the creation of a new template for declaring unaccompanied payment movements leaving or entering the national territory for or from an EU member state and for unaccompanied movements within the national territory. The template has been left in place for declaring payment movements carried on their person by an individual either within the national territory or when leaving or entering the national territory for or from an EU member state. All other movements subject to declaration must be filled out and presented using the templates approved via Commission Implementing Regulation (EU) 2021/776.

Other matters addressed by the Order:

- The requirements for filling out and presenting the declaration forms;
- The requirements specific to the various types of declarations depending on the movement involved;
- The possibility that, in certain instances, registered banks can perform due diligence on the declarations presented by their customers;
- Payment method intervention requirements;
- The information that must be provided to travellers at customs;
- Systematic transaction reporting; and,
- The obligation to collaborate with other competent authorities in this area.

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Spanish economic forecasts panel: January 2023*

Funcas Economic Trends and Statistics Department

GDP growth estimate increased by 5% in 2022

According to the panelists' forecasts, GDP grew by 5% in 2022, half a percentage point more than in the November forecast. The revision is primarily due to the upward adjustment by the INE of the National Accounts figures, which left cumulative growth during the first three quarters of the year at 6.3%, compared to 5.7% in the estimate included in the previous Panel. In addition, the consensus for the fourth quarter is for zero growth, compared to an anticipated 0.4pp decline in GDP in November.

Domestic demand should contribute 1.7pp to GDP growth (0.1pp more than in the previous Panel) and external demand 3.3pp (0.4pp more).

The forecast for growth in 2023 is 1.3%, two tenths pp higher than the previous Panel

The panelists forecast for GDP growth in 2023 increased to 1.3%, 0.2pp higher than the previous Panel. Zero growth is expected in the first quarter, followed by gains of 0.5%-0.6% for the remaining quarters (Table 2).

The increase in activity for the year as a whole will come from domestic demand, while the foreign sector will not make any contribution (compared to a detraction of two tenths of a percentage point in the previous Panel). Compared to 2022, the slowdown will be felt in private consumption, investment and foreign trade, while public consumption will return to positive rates after the declines recorded last year (Table 1).

Downward revision of the overall CPI forecast in 2023, and upward revision of core CPI

Overall CPI has continued its moderation, which started in September, in the last months of 2022, due to a more favorable performance of energy prices coupled with base effects. However, the core inflation rate rose to a 30-year high in December of 7%. On average for the year as a whole, overall CPI rose by 8.4%, and core inflation by 5.2% (forecasts

were compiled before the publication of the final December figures, which is why the panel estimates do not coincide with the final result).

The analysts' forecast for average annual inflation in 2023 declined by one tenth of a percentage point with respect to the last Panel, to 4%. The projected year-on-year rate of the overall index for December is 3.7% (Table 3). As for core inflation, the annual average rose to 4.5%, 0.5pp more than the previous forecast.

According to Social Security enrollment figures, job creation in the fourth quarter was similar to that from previous quarters. For the year as a whole, the average enrollment numbers increased by 3.9%, 750,000 more when compared to 2021.

Employment will grow by 1% in 2023 and the unemployment rate will rise slightly to 13%

The forecast for employment growth is 3.7% for 2022 and 1% for 2023, increasing by two tenths and one tenth, respectively, compared to the November Panel. Based on growth expectations in GDP, employment and salaries, the forecast implicitly predicts an increase in productivity and unit labor cost (ULC). Productivity per full-time equivalent job will increase by 1.3% in 2022 and is forecast to grow by 0.3% this year. ULCs are expected to increase by 0.6% in 2022 and by 3.1% in 2023.

The average annual unemployment rate will remain at 12.9% in 2022, according to analysts, then rise to 13% in 2023 (Table 1).

Downward revision of the trade surplus for 2023

The balance of payments of the current account showed a surplus of 4.44 billion euros up to October 2022, compared to 9.76 billion euros in the same period of the previous year. This worsening mainly reflects higher energy costs. The panelists expect a surplus of 0.6% of GDP in 2022,

as per the last Panel, and a surplus of 0.3% for 2023 -0.2pp less than in the last Panel (Table 1).

Public deficit forecast continues to improve

Public administrations, excluding local authorities, recorded a deficit of 15.17 million euros up to October, compared to 53.28 million euros in the same period of the previous year. This improvement was due to a larger than expected increase in revenue of 48.284 billion euros, much greater than the increase of 10.067 billion euros in expenditures.

The analysts expect a public deficit of 4.5% of GDP for 2022, 0.3pp less than in the last Panel. This estimate is lower than that contemplated by the government, which places the deficit at 5%. For 2023, the Panel expects a deficit of 4.3% of GDP, which, in this case, is more pessimistic than the government's estimates.

The international landscape is gloomier than in the last Panel

While the global landscape remains highly uncertain, some of the factors behind the inflation outbreak and the current phase of economic weakness seem to have lost steam in recent months. First, energy prices – the main source of the “stagflation” shock – have moderated markedly. Brent crude is trading at around \$85 a barrel, almost \$10 less than in November, and gas has fallen even more sharply since mid-December, to around \$55 per MWh. They are reminiscent of price levels present before the outbreak of the war in Ukraine, facilitating the de-escalation of energy inflation. This, combined with the unusually mild winter in Europe so far, has helped reduce the risks emanating from the spectre of a hydrocarbon supply cut. While geopolitical risks remain high, the worst-case scenarios that were weighing on business and consumer confidence over the past year (spillovers from the war, nuclear threat, etc.) are now looking less likely.

The result is a slight improvement in the global PMI index at the end of the year (which is still in contractionary territory) and in business expectations (as attested by the rise in the global PMI of anticipated orders in the coming months). In its latest forecast for 2023, the ECB predicts positive growth in the eurozone of 0.5%.

Thus, the panelists are somewhat less pessimistic about the international environment, both in Europe and beyond. While the majority continue to believe that the current situation is unfavorable, fewer now

believe that the outlook could worsen in the coming months both in the EU (with 5 analysts forecasting a deterioration, compared to 9 in the November Panel) and outside Europe (2, compared to 6 in the previous Panel).

Interest rates will continue to rise

Although inflationary pressures seem to be easing, monetary policy continues to tighten. In the US, there is some sign of a turnaround. The Fed has slowed the pace of hikes of its main interest rate, which now stands at 4.25-4.50%, 50 basis points more than in the previous Panel. But the signs are less clear on this side of the Atlantic. The ECB has increased its deposit facility by the same amount as the Fed, to 2%, while also suggesting that similar rate hikes will follow. On the other hand, as part of the quantitative tightening (QT) process, the incentives for repayment of targeted long-term refinancing operations (the so-called TLTROs) to support bank lending to the private sector continue, while the central bank confirms its intention to reduce the outstanding amount of government bonds in its portfolio.

The prospect of further adjustments by the ECB in the short-term has continued to put upward pressure on the one-year Euribor, the main benchmark for mortgages. It is above 3.3%, half a point higher than in November. On the other hand, the Spanish 10-year bond yield has hovered around 3.1% with no discernable trend – possibly reflecting the markets' anticipation of a turning point in monetary policy in the coming year, in line with the evolution of inflation. The risk premium remains stable at around 100 basis points, a number indicative of the absence of financial tensions in the public debt markets.

In their assessments, the panelists are betting on a slower pace of interest rate hikes. The ECB's deposit facility is expected to reach close to 3% at the end of the forecast period, half a point higher than in the previous consensus (Table 2). Euribor has been revised by a similar magnitude to around 3.5%, while the 10-year bond yield would evolve without major changes compared to the last Panel (flattening of the yield curve).

The euro appreciates against the dollar

In recent months, the euro has tended to recover some of the ground lost against the dollar, as a result of the ECB's interest rate hikes, so markets

expect a narrower spread in financial yields between the two sides of the Atlantic. Analysts anticipate a slight appreciation in the coming months (Table 2), compared to the stability predicted in the previous consensus.

Macroeconomic policy should continue to focus on fighting inflation

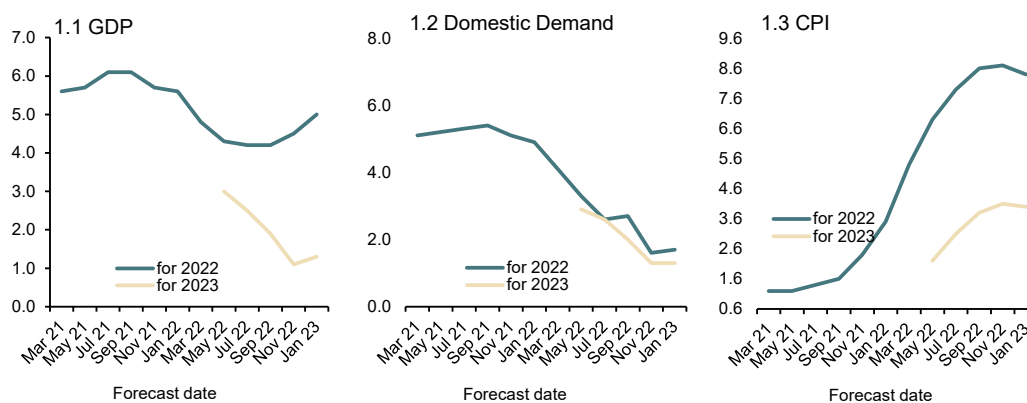
Concerns about inflation and its costs to the economy are reflected in analysts' views on economic policy.

The majority of panelists agree on the expansionary nature of fiscal policy at present (Table 4), but the number of panelists who believe that fiscal policy should be more neutral or even more restrictive in relation to the economic cycle is growing. Likewise, all panelists believe that monetary policy should not be expansionary, but rather neutral or restrictive, without major changes in relation to the November Panel.

Exhibit 1

Change in forecasts (Consensus values)

Annual rates in %



Source: Funcas Panel of Forecasts.

* The Spanish Economic Forecasts Panel is a survey run by Funcas which consults the 19 research departments listed in Table 1. The survey, which dates back to 1999, is published bi-monthly in the months of January, March, May, July, September and November. The responses to the survey are used to produce a "consensus" forecast, which is calculated as the arithmetic mean of the 19 individual contributions. The forecasts of the Spanish Government, the Bank of Spain, and the main international organisations are also included for comparison, but do not form part of the consensus forecast.

Spanish economic forecasts panel: January 2023*

Funcas Economic Trends and Statistics Department

Table 1

Economic Forecasts for Spain – January 2023

Average year-on-year change, as a percentage, unless otherwise stated

	GDP ¹		Household consumption		Public consumption		Gross fixed capital formation		GFCF machinery and capital goods		GFCF construction		Domestic demand ³	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Analistas Financieros Internacionales (AFI)	5.4	1.3	3.0	1.2	-1.2	0.4	4.8	3.1	6.6	3.0	2.6	3.0	2.4	1.4
BBVA Research	5.3	1.4	2.4	1.0	-1.4	1.7	5.1	5.2	5.2	3.7	4.6	4.9	1.8	2.0
CaixaBank Research	4.5	1.0	1.9	0.7	-1.8	0.7	5.2	1.7	6.2	0.5	4.3	2.5	1.6	0.9
Cámara de Comercio de España	4.8	1.9	1.7	1.3	-1.5	0.8	4.4	2.5	5.5	4.0	3.3	1.6	1.5	1.6
Centro de Estudios Economía de Madrid (CEEM-URJC)	4.6	1.2	1.9	1.3	-1.6	1.0	4.5	1.5	4.3	1.5	4.0	1.0	1.6	1.2
Centro de Predicción Económica (CEPREDE-UAM)	4.5	1.5	2.0	1.7	-1.7	1.7	5.4	2.9	6.5	2.6	4.3	3.3	1.4	1.7
CEOE	5.2	0.8	2.5	0.8	-1.6	-0.2	5.0	2.8	5.3	2.8	4.3	2.7	1.9	1.3
Equipo Económico (Ee)	5.2	2.1	2.2	1.4	-1.2	0.7	5.5	5.0	6.3	2.5	4.6	7.7	2.0	2.0
EthiFinance Ratings	4.6	1.1	2.5	1.3	-1.5	1.0	5.1	2.2	6.2	2.8	3.8	3.1	--	--
Funcas	5.2	1.0	2.6	1.2	-1.4	1.4	5.6	2.5	8.0	1.5	5.1	3.6	2.1	1.5
Instituto Complutense de Análisis Económico (ICAE-UCM)	5.2	1.8	2.4	1.3	-1.4	1.3	5.2	1.7	5.5	0.7	4.7	1.8	2.3	1.2
Instituto de Estudios Económicos (IEE)	5.3	1.2	2.6	1.9	-1.6	-0.1	5.0	4.3	5.4	5.2	4.3	4.4	2.0	1.5
Intermoney	4.3	1.4	1.3	1.0	-1.5	0.8	4.5	1.2	4.9	0.9	4.0	1.5	1.3	1.1
Mapfre Economics	4.6	1.0	1.9	0.5	-1.8	2.0	5.0	3.0	--	--	--	--	1.5	1.1
Oxford Economics	5.3	1.1	2.4	1.0	-1.4	1.8	5.1	2.3	4.8	0.5	2.9	1.0	2.0	1.5
Repsol	5.2	1.3	2.3	0.2	-1.1	2.1	5.7	3.4	5.4	0.8	5.7	5.0	1.8	0.7
Santander	5.3	1.0	2.6	0.9	-1.5	1.0	4.9	2.7	5.1	1.3	4.5	3.5	1.9	1.3
Metysis	5.2	1.1	2.9	1.4	-1.0	0.1	5.3	2.0	6.4	2.0	4.2	1.5	1.3	1.3
Universidad Loyola Andalucía	4.5	1.0	1.8	2.2	-2.7	-1.5	6.4	4.2	3.8	2.8	4.9	4.3	1.0	0.9
CONSENSUS (AVERAGE)	5.0	1.3	2.3	1.2	-1.5	0.9	5.1	2.9	5.6	2.2	4.2	3.1	1.7	1.3
Maximum	5.4	2.1	3.0	2.2	-1.0	2.1	6.4	5.2	8.0	5.2	5.7	7.7	2.4	2.0
Minimum	4.3	0.8	1.3	0.2	-2.7	-1.5	4.4	1.2	3.8	0.5	2.6	1.0	1.0	0.7
Change on 2 months earlier ¹	0.5	0.2	0.6	0.2	-0.1	0.0	-0.1	-0.2	-0.6	-0.3	0.2	0.1	0.1	0.0
- Rise ²	14	10	14	9	8	7	7	7	4	4	9	7	12	10
- Drop ²	0	2	3	5	6	5	5	7	8	9	3	6	4	5
Change on 6 months earlier ¹	0.8	-1.2	0.3	-1.4	-2.5	-0.3	-1.6	-1.7	-5.1	-2.5	1.2	-1.1	-0.9	-1.3
Memorandum items:														
Government (October 2022)	4.4	2.1	1.2	1.3	-1.0	0.4	5.1	7.9	--	--	--	--	1.5	2.4
Bank of Spain (December 2022)	4.5	1.4	1.6	1.3	-1.5	0.0	4.7	1.7	--	--	--	--	1.1	0.9
EC (November 2022)	4.5	1.0	1.5	0.6	-1.6	1.0	4.8	1.9	5.6	1.0	4.2	2.9	1.5	1.0
IMF (October 2022)	4.3	1.2	3.0	1.7	-0.2	1.2	7.5	2.2	--	--	--	--	--	--
OECD (November 2022)	4.7	1.3	2.0	1.3	-1.8	0.9	5.4	2.3	--	--	--	--	--	--

¹ Difference in percentage points between the current month's average and that of two months earlier (or six months earlier).

² Number of panellists revising their forecast upwards (or downwards) since two months earlier.

³ Contribution to GDP growth, in percentage points.

Table 1 (Continued)

Economic Forecasts for Spain – January 2023

Average year-on-year change, as a percentage, unless otherwise stated

	Exports of goods & services		Imports of goods & services		CPI (annual av.)		Core CPI (annual av.)		Wage earnings ³		Jobs ⁴		Unempl. (% labour force)		C/A bal. of payments (% of GDP) ⁵		Gen. gov. bal. (% of GDP) ⁶	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Analistas Financieros Internacionales (AFI)	19.6	3.5	11.5	4.0	8.5	4.0	5.1	5.0	--	--	3.1	0.5	12.8	13.0	0.6	-0.5	-4.5	-3.7
BBVA Research	18.3	0.8	8.8	2.5	8.4	3.5	5.1	5.0	1.5	3.8	3.9	1.1	12.8	12.8	1.5	-0.4	-3.9	-3.9
CaixaBank Research	17.9	2.3	9.3	2.4	8.4	4.6	5.1	4.8	1.6	3.5	3.7	0.6	12.8	13.1	0.5	0.5	-4.5	-4.3
Cámara de Comercio de España	18.4	5.2	8.7	4.2	8.9	4.7	5.2	4.5	--	--	3.4	1.1	12.8	13.2	1.0	0.4	-4.8	-4.6
Centro de Estudios Economía de Madrid (CEEM-URJC)	17.7	3.8	9.5	2.8	8.4	4.6	5.1	4.3	--	--	3.0	0.2	12.8	12.6	1.0	0.0	-4.1	-4.1
Centro de Predicción Económica (CEPREDE-UAM)	18.3	3.9	9.9	4.4	8.4	3.4	--	--	1.4	3.6	3.4	0.4	13.1	13.0	0.6	0.8	-5.9	-5.2
CEOE	18.4	3.9	9.0	4.8	8.4	4.2	5.1	5.4	1.7	2.9	3.8	0.7	12.8	12.8	0.6	0.0	-4.5	-4.0
Equipo Económico (Ee)	18.0	3.7	8.9	3.9	8.4	3.9	5.1	3.6	2.8	3.6	3.9	2.7	13.0	12.8	0.7	0.4	-4.2	-4.0
EthiFinance Ratings	16.1	2.2	9.4	2.6	8.6	3.9	4.2	5.5	--	--	--	--	13.0	13.2	0.5	0.8	-4.9	-4.1
Funcas	18.1	2.4	9.4	3.8	8.4	3.8	5.2	5.6	2.5	3.5	3.8	0.5	12.8	12.3	0.3	-0.6	-3.8	-4.2
Instituto Complutense de Análisis Económico (ICAE-UCM)	18.6	4.2	9.2	2.7	8.4	3.8	5.1	3.6	--	--	3.9	1.0	12.9	13.0	0.7	0.5	-4.3	-4.3
Instituto de Estudios Económicos (IEE)	18.5	5.0	9.1	5.8	8.4	3.9	5.0	3.5	2.0	2.9	3.8	0.5	12.8	13.0	0.5	0.2	-4.6	-4.0
Intermoney	17.2	4.2	9.3	3.1	8.4	4.5	5.1	3.3	--	--	3.8	1.7	12.8	13.5	0.6	--	-5.0	-4.8
Mapfre Economics	17.5	-0.1	8.9	1.0	8.4	4.3	3.8	3.0	--	--	4.0	0.1	12.6	13.6	0.5	1.2	-4.1	-4.8
Oxford Economics	18.0	0.6	8.6	1.6	8.4	3.7	5.1	4.5	--	--	--	--	12.8	13.4	0.4	0.6	-4.0	-4.7
Repsol	18.2	3.3	8.9	2.1	8.4	3.8	5.1	4.3	2.0	3.3	3.7	1.4	12.9	12.6	-0.1	0.5	-3.9	-4.4
Santander	18.5	2.0	9.2	3.0	8.4	4.1	5.2	4.4	--	--	--	--	13.0	13.3	--	--	--	--
Metyis	20.1	3.7	8.6	3.2	8.4	4.5	4.1	3.6	--	--	4.1	1.0	12.8	12.8	0.5	0.3	-4.0	-4.0
Universidad Loyola Andalucía	18.5	4.3	9.4	4.5	8.4	2.0	5.3	6.7	--	--	3.6	2.0	13.0	13.3	0.6	0.5	-6.0	-5.0
CONSENSUS (AVERAGE)	18.2	3.1	9.2	3.3	8.4	4.0	4.9	4.5	1.9	3.4	3.7	1.0	12.9	13.0	0.6	0.3	-4.5	-4.3
Maximum	20.1	5.2	11.5	5.8	8.9	4.7	5.3	6.7	2.8	3.8	4.1	2.7	13.1	13.6	1.5	1.2	-3.8	-3.7
Minimum	16.1	-0.1	8.6	1.0	8.4	2.0	3.8	3.0	1.4	2.9	3.0	0.1	12.6	12.3	-0.1	-0.6	-6.0	-5.2
Change on 2 months earlier ¹	1.1	0.2	0.5	0.2	-0.3	-0.1	-0.1	0.5	-0.2	0.1	0.2	0.1	-0.1	0.0	0.0	-0.2	0.3	0.2
- Rise ²	14	6	8	7	1	8	10	8	2	4	9	8	1	5	4	2	13	9
- Drop ²	1	9	8	6	16	8	5	4	3	2	1	3	10	6	6	6	1	2
Change on 6 months earlier ¹	6.2	-0.8	1.6	-1.1	0.5	0.9	0.3	1.2	-0.7	0.8	0.3	-1.4	-0.6	-0.1	0.1	-0.6	0.7	0.4
Memorandum items:																		
Government (October 2022)	17.9	7.3	9.9	8.2	--	--	--	--	--	--	2.9	0.6	12.8	12.2	1.0	0.9	-5.0	-3.9
Bank of Spain (December 2022)	17.5	4.0	8.2	3.1	8.7 ⁽⁷⁾	5.6 ⁽⁷⁾	3.9 ⁽⁸⁾	3.5 ⁽⁸⁾	--	--	4.0 ⁽⁹⁾	0.8 ⁽⁹⁾	12.8	12.9	--	--	-4.3	-4.0
EC (November 2022)	17.2	2.7	8.8	2.8	8.5 ⁽⁷⁾	4.8 ⁽⁷⁾	5.1	4	2.6	4.9	3.3	0.9	12.7	12.7	0.9	0.8	-4.6	-4.3
IMF (October 2022)	12.1	2.4	8.6	3.2	8.8	4.9	--	--	--	--	--	--	12.7	12.3	-0.2	-0.2	-6.9	-4.9
OECD (November 2022)	18.1	3.5	9.7	4.2	8.6 ⁽⁷⁾	4.8 ⁽⁷⁾	4.0 ⁽⁸⁾	4.8 ⁽⁸⁾	--	--	--	--	12.9	12.9	0.7	0.6	-4.9	-4.2

¹ Difference in percentage points between the current month's average and that of two months earlier (or six months earlier).² Number of panellists revising their forecast upwards (or downwards) since two months earlier.³ Average earnings per full-time equivalent job.⁴ In National Accounts terms: Full-time equivalent jobs.⁵ Current account balance, according to Bank of Spain estimates.⁶ Excluding financial entities bail-out expenditures.⁷ Harmonized Index of Consumer Prices (HICP).⁸ Harmonized Index excluding energy and food.⁹ Hours worked.

Table 2

Quarterly Forecasts – January 2023

	22-I Q	22-II Q	22-III Q	22-IV Q	23-I Q	23-II Q	23-III Q	23-IV Q
GDP ¹	0.1	2.0	0.1	0.0	0.0	0.5	0.6	0.6
Euribor 1 yr ²	-0.24	0.85	2.23	3.02	3.33	3.48	3.54	3.51
Government bond yield 10 yr ²	1.22	2.63	2.92	3.10	3.43	3.54	3.52	3.50
ECB main refinancing operations interest rate ³	0.00	0.00	1.25	2.50	3.07	3.35	3.42	3.42
ECB deposit rates ³	-0.50	-0.50	0.75	2.00	2.55	2.85	2.93	2.95
Dollar / Euro exchange rate ²	1.10	1.06	0.99	1.06	1.05	1.06	1.06	1.07

Forecasts in yellow.

¹ Qr-on-qr growth rates.

² End of period.

³ Last day of the quarter.

Table 3

CPI Forecasts – January 2023

Year-on-year change (%)				
Dec-22	Jan-23	Feb-23	Mar-23	Dec-23
5.7	6.1	5.6	4.1	3.7

Table 4

Opinions – January 2023

Number of responses

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	0	3	16	3	11	5
International context: Non-EU	0	4	15	4	13	2
	Is being			Should be		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment ¹	2	2	15	4	12	3
Monetary policy assessment ¹	14	4	1	10	9	0

¹ In relation to the current state of the Spanish economy.

Key Facts

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Economic Indicators

Table 1

National accounts: GDP and main expenditure components SWDA*

Forecasts in yellow

	GDP	Private consumption	Public consumption	Gross fixed capital formation			Exports	Imports	Domestic demand (a)	Net exports (a)	
				Total	Construction	Equipment & others products					
Chain-linked volumes, annual percentage changes											
2015	3.8	2.9	2.0	4.9	1.5	8.2	4.3	5.1	3.9	-0.1	
2016	3.0	2.7	1.0	2.4	1.6	3.1	5.4	2.6	2.0	1.0	
2017	3.0	3.0	1.0	6.8	6.7	6.9	5.5	6.8	3.1	-0.2	
2018	2.3	1.7	2.3	6.3	9.5	3.4	1.7	3.9	2.9	-0.6	
2019	2.0	1.1	1.9	4.5	7.2	1.8	2.2	1.3	1.6	0.4	
2020	-11.3	-12.2	3.5	-9.7	-10.2	-9.2	-19.9	-14.9	-9.1	-2.2	
2021	5.5	6.0	2.9	0.9	-3.7	5.8	14.4	13.9	5.2	0.3	
2022	5.2	2.6	-1.4	5.6	5.1	6.2	18.1	9.4	2.1	3.2	
2023	1.0	1.2	1.4	2.5	3.6	1.4	2.4	3.8	1.5	-0.5	
2021	I	-4.4	-4.5	4.4	-6.1	-11.5	-0.3	-6.0	-3.7	-3.6	-0.8
	II	17.9	23.3	4.1	17.5	9.5	26.6	40.5	40.8	17.6	0.3
	III	4.2	4.0	3.1	-3.0	-6.7	0.8	15.2	14.3	3.8	0.4
	IV	6.6	4.5	-0.1	-1.7	-3.9	0.5	16.4	11.6	4.9	1.7
2022	I	7.0	3.8	-0.9	3.4	0.0	6.8	19.9	11.9	4.1	2.9
	II	7.6	3.3	-2.9	5.2	5.4	5.0	23.7	8.7	2.5	5.1
	III	4.4	1.3	-2.0	5.9	6.3	5.5	18.8	9.0	0.9	3.6
	IV	2.1	2.0	0.2	8.1	8.8	7.4	10.7	8.0	0.9	1.2
2023	I	1.9	2.8	0.7	4.4	8.9	0.0	5.2	7.1	2.5	-0.6
	II	0.4	1.2	2.4	2.1	1.9	2.2	0.6	4.4	1.9	-1.4
	III	0.6	1.3	1.3	2.5	2.7	2.3	-0.2	2.0	1.6	-1.0
	IV	1.0	0.7	1.2	1.3	1.3	1.3	2.6	2.1	0.9	0.1
Chain-linked volumes, quarter-on-quarter percentage changes											
2021	I	-0.2	-0.1	0.6	-1.9	-3.7	0.0	2.2	0.5	-0.8	0.6
	II	1.4	2.2	0.7	1.1	1.8	0.4	2.2	6.0	2.5	-1.1
	III	3.1	2.1	0.5	-0.8	-1.4	-0.2	5.7	2.7	2.1	1.0
	IV	2.3	0.3	-1.8	-0.1	-0.5	0.3	5.5	1.9	1.0	1.2
2022	I	0.1	-0.8	-0.2	3.2	0.1	6.3	5.3	0.8	-1.6	1.7
	II	2.0	1.7	-1.4	2.9	7.3	-1.3	5.4	3.0	0.9	1.0
	III	0.1	0.1	1.4	-0.1	-0.6	0.4	1.5	3.0	0.5	-0.5
	IV	0.0	0.9	0.4	1.9	1.8	2.0	-1.7	1.0	1.0	-1.0
2023	I	-0.1	0.0	0.3	-0.4	0.3	-1.0	0.0	-0.1	0.0	-0.1
	II	0.4	0.2	0.3	0.6	0.4	0.8	0.9	0.5	0.3	0.2
	III	0.3	0.2	0.3	0.4	0.3	0.5	0.6	0.6	0.3	0.0
	IV	0.4	0.3	0.3	0.7	0.4	1.0	1.1	1.0	0.4	0.0
	Current prices (EUR billions)	Percentage of GDP at current prices									
2015	1,078	58.5	19.5	18.0	8.7	9.3	33.6	30.6	97.0	3.0	
2016	1,114	58.2	19.1	18.0	8.6	9.4	33.9	29.9	96.0	4.0	
2017	1,162	58.3	18.7	18.7	9.0	9.7	35.1	31.5	96.4	3.6	
2018	1,204	58.1	18.7	19.4	9.7	9.7	35.1	32.4	97.3	2.7	
2019	1,246	57.4	18.9	20.0	10.4	9.7	34.9	32.0	97.1	2.9	
2020	1,118	56.1	22.0	20.4	10.5	9.8	30.8	29.3	98.5	1.5	
2021	1,207	56.2	21.4	19.8	10.0	9.8	34.9	33.4	98.5	1.5	
2022	1,329	56.7	20.3	20.4	10.5	10.0	41.5	39.7	98.2	1.8	
2023	1,397	57.0	20.3	20.7	10.7	10.0	42.2	41.0	98.8	1.2	

*Seasonally and Working Day Adjusted.

(a) Contribution to GDP growth.

Source: INE and Funcas (Forecasts).

Chart 1.1 - GDP

Percentage change

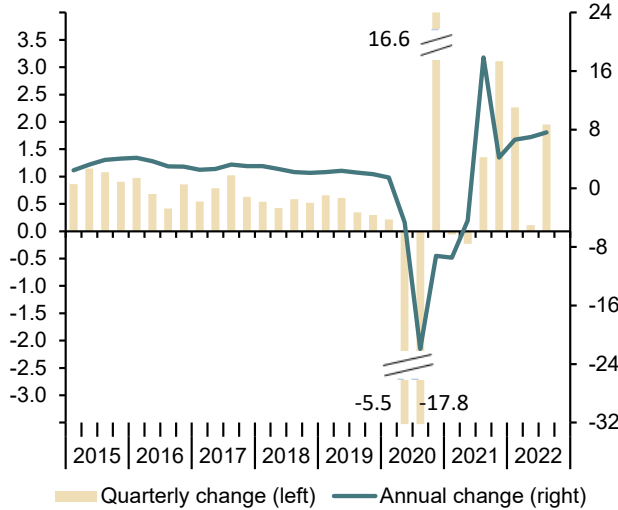


Chart 1.2 - Contribution to GDP annual growth

Percentage points

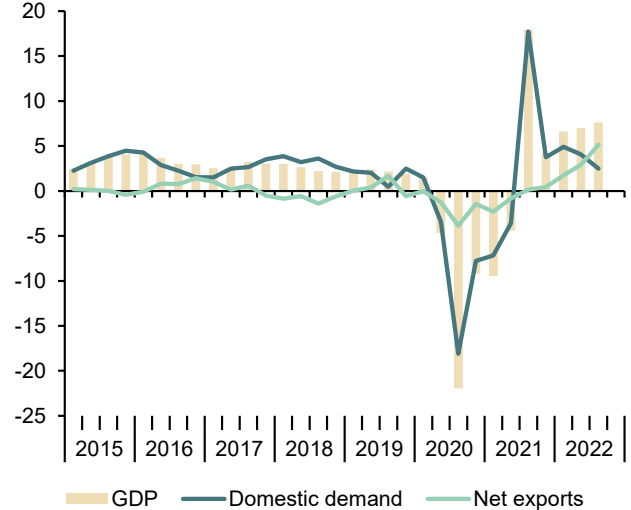


Chart 1.3 - Final consumption

Annual percentage change

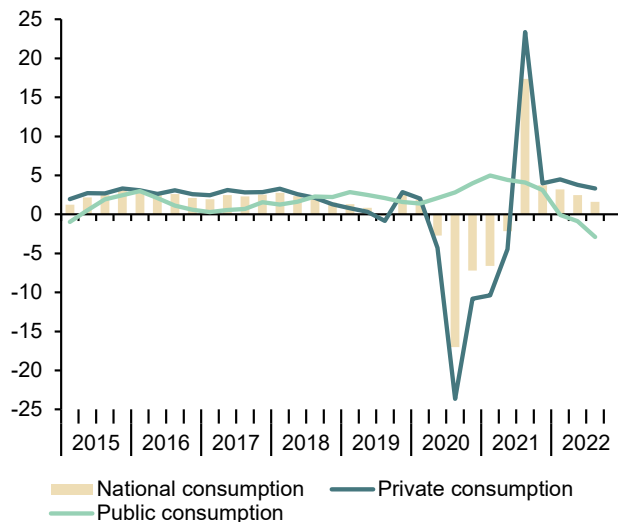


Chart 1.4 - Gross fixed capital formation

Annual percentage change

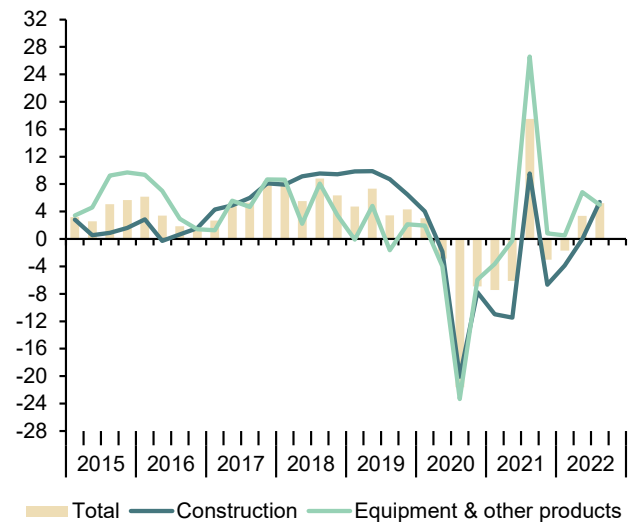


Table 2

National accounts: Gross value added by economic activity SWDA*

		Gross value added at basic prices								
		Total	Agriculture, forestry and fishing	Industry			Services			Taxes less subsidies on products
				Total	Manufacturing	Construction	Total	Public administration, health, education	Other services	
Chain-linked volumes, annual percentage changes										
2015		3.3	4.7	3.0	4.6	5.5	3.1	1.1	3.8	9.6
2016		2.8	4.8	4.1	2.3	3.9	2.4	1.4	2.7	5.2
2017		3.1	-3.7	4.0	5.7	2.0	3.3	2.5	3.5	1.9
2018		2.3	7.5	0.0	-1.1	2.3	2.6	1.6	2.9	2.1
2019		2.1	-5.9	1.5	0.5	4.3	2.3	1.5	2.6	1.0
2020		-11.4	4.5	-13.1	-15.4	-13.2	-11.4	-1.4	-14.6	-10.8
2021		5.4	2.1	6.6	8.9	-3.0	6.0	1.1	7.8	6.7
2020	IV	-9.5	9.1	-7.4	-8.3	-11.9	-10.4	-0.8	-13.5	-9.1
2021	I	-4.6	4.1	-0.2	-0.2	-9.6	-5.4	1.6	-7.7	-3.1
	II	17.9	0.0	27.5	36.1	13.3	17.3	3.2	23.4	17.6
	III	4.1	2.5	0.4	3.0	-8.2	6.0	1.2	7.7	5.3
	IV	6.4	1.8	3.2	4.0	-4.1	8.2	-1.3	11.7	8.7
2022	I	6.7	4.2	3.0	5.2	0.6	8.2	-1.9	11.9	9.4
	II	7.7	-3.3	4.8	6.1	5.3	9.0	-2.6	13.2	6.5
	III	4.5	-3.0	3.3	2.9	5.6	5.0	-2.1	7.4	3.6
Chain-linked volumes, quarter-on-quarter percentage changes										
2020	IV	0.0	4.8	0.5	1.1	-3.3	0.0	2.0	-0.8	-0.5
2021	I	-0.3	-3.7	-1.4	-2.3	-3.0	0.3	-0.2	0.4	0.6
	II	1.2	1.2	0.0	0.7	-1.9	1.7	0.1	2.2	3.4
	III	3.2	0.4	1.4	3.6	-0.2	4.0	-0.7	5.7	1.7
	IV	2.2	4.1	3.3	2.0	0.9	2.0	-0.5	2.9	2.7
2022	I	0.0	-1.4	-1.6	-1.1	1.8	0.3	-0.7	0.6	1.3
	II	2.1	-6.1	1.8	1.5	2.7	2.4	-0.6	3.4	0.7
	III	0.2	0.7	-0.1	0.5	0.1	0.2	-0.2	0.3	-1.0
		Current prices EUR billions)	Percentage of value added at basic prices							
2015		979	3.0	16.3	12.4	5.8	74.9	18.5	56.4	10.1
2016		1,011	3.1	16.2	12.4	5.9	74.9	18.4	56.5	10.2
2017		1,054	3.1	16.2	12.5	5.9	74.8	18.1	56.7	10.3
2018		1,089	3.0	16.0	12.2	5.9	75.0	18.1	56.9	10.5
2019		1,130	2.7	15.8	12.0	6.3	75.2	18.2	57.0	10.3
2020		1,020	3.1	16.0	12.1	6.1	74.8	20.3	54.5	9.6
2021		1,091	2.9	16.9	12.8	5.6	74.6	19.2	55.4	10.6

* Seasonally and Working Day Adjusted.

Source: INE.

Chart 2.1 - GVA by sectors

Annual percentage change

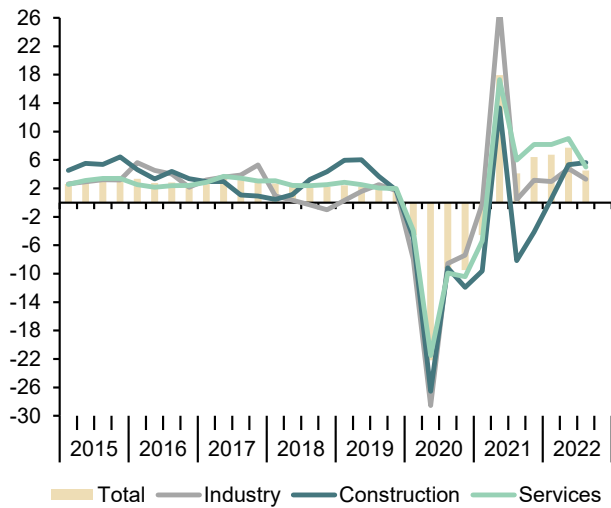


Chart 2.2 - GVA. Industry

Annual percentage change

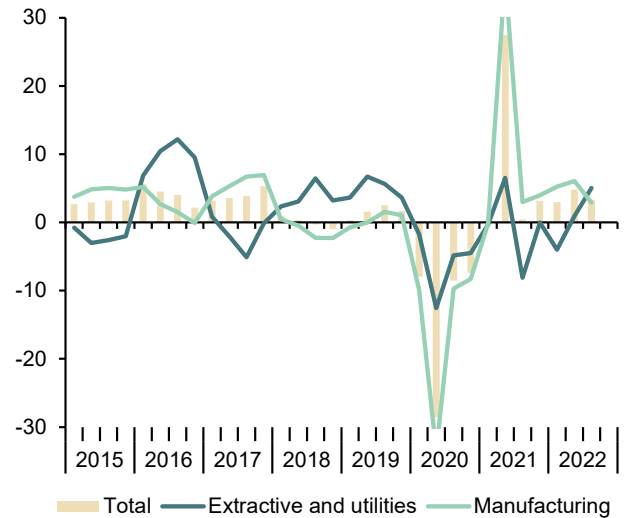


Chart 2.3 - GVA. services

Annual percentage change

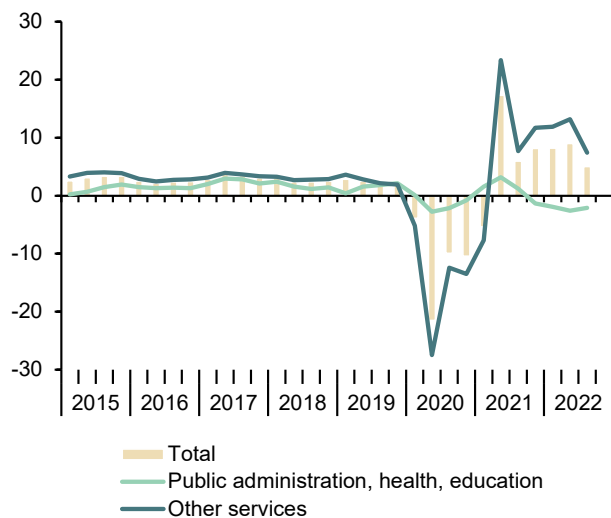


Chart 2.4 - GVA. structure by sectors

Percentage of value added at basic prices

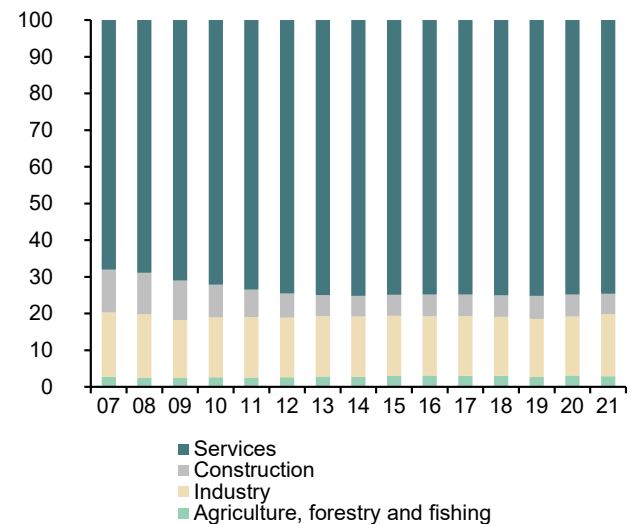


Table 3

National accounts: Productivity and labour costs

Forecasts in yellow

	Total economy						Manufacturing Industry						
	GDP constant prices	Employment (jobs. full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	Gross value added constant prices	Employment (jobs. full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	
	1	2	3=1/2	4	5=4/3	6	7	8	9=7/8	10	11=10/9	12	
Indexes. 2015 = 100. SWDA													
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
2016	103.0	102.8	100.2	99.4	99.2	98.8	102.3	103.5	98.9	100.1	101.3	100.5	
2017	106.1	105.8	100.3	100.1	99.8	98.2	108.1	106.6	101.4	101.5	100.1	100.1	
2018	108.5	108.1	100.4	101.9	101.5	98.6	106.9	108.7	98.3	102.7	104.5	102.4	
2019	110.7	111.7	99.1	104.4	105.3	100.9	107.4	110.6	97.1	104.3	107.4	103.3	
2020	98.1	104.0	94.3	106.9	113.3	107.2	90.8	105.7	85.9	105.3	122.6	109.7	
2021	103.6	110.9	93.4	106.2	113.7	105.2	98.9	107.7	91.8	105.7	115.1	99.6	
2022	109.0	115.1	94.7	108.8	114.9	101.6	--	--	--	--	--	--	
2023	110.1	115.7	95.2	112.7	118.4	100.6	--	--	--	--	--	--	
2020	IV	100.6	107.3	93.7	106.7	113.8	106.9	98.4	108.0	91.2	105.9	116.2	103.9
2021	I	100.4	108.0	92.9	106.4	114.5	107.1	96.2	105.7	91.0	102.3	112.4	98.5
	II	101.7	109.1	93.2	105.4	113.1	105.9	96.9	107.9	89.8	105.2	117.2	102.6
	III	104.9	112.7	93.0	106.5	114.5	105.9	100.3	107.4	93.4	109.5	117.2	100.6
	IV	107.3	113.8	94.3	106.3	112.7	102.1	102.4	110.0	93.0	105.8	113.8	96.9
2022	I	107.4	113.7	94.4	106.3	112.6	101.9	101.2	108.0	93.7	102.5	109.3	92.1
	II	109.5	114.8	95.4	107.3	112.5	101.4	102.7	111.9	91.8	106.2	115.7	95.2
	III	109.5	116.0	94.4	108.9	115.3	102.5	103.2	111.0	93.0	110.9	119.3	95.7
Annual percentage changes													
2015		3.8	3.2	0.7	0.6	-0.1	-0.6	4.6	2.4	2.2	-0.7	-2.9	-2.6
2016		3.0	2.8	0.2	-0.6	-0.8	-1.2	2.3	3.5	-1.1	0.1	1.3	0.5
2017		3.0	2.9	0.1	0.7	0.6	-0.7	5.7	3.0	2.6	1.4	-1.1	-0.4
2018		2.3	2.2	0.1	1.8	1.7	0.5	-1.1	2.0	-3.1	1.1	4.3	2.3
2019		2.0	3.3	-1.3	2.4	3.8	2.3	0.5	1.7	-1.2	1.6	2.8	0.8
2020		-11.3	-6.8	-4.8	2.4	7.6	6.3	-15.4	-4.4	-11.5	1.0	14.1	6.2
2021		5.5	6.6	-1.0	-0.7	0.3	-1.9	8.9	1.9	6.9	0.4	-6.1	-9.2
2022		5.2	3.8	1.4	2.5	1.1	-3.4	--	--	--	--	--	--
2023		1.0	0.5	0.5	3.5	3.0	-1.0	--	--	--	--	--	--
2020	IV	-9.5	-4.7	-5.0	1.9	7.3	6.0	-8.3	-2.7	-5.8	1.3	7.5	1.5
2021	I	-4.4	-2.7	-1.7	1.6	3.3	1.5	-0.2	-6.0	6.2	-1.7	-7.5	-14.0
	II	17.9	18.9	-0.9	-3.7	-2.8	-4.1	36.1	11.3	22.2	1.0	-17.4	-14.7
	III	4.2	6.4	-2.0	-0.5	1.5	-0.6	3.0	1.6	1.3	2.2	0.8	-3.6
	IV	6.6	6.0	0.6	-0.3	-0.9	-4.5	4.0	1.9	2.0	-0.1	-2.1	-6.8
2022	I	7.0	5.3	1.6	0.0	-1.7	-4.8	5.2	2.2	3.0	0.2	-2.8	-6.5
	II	7.6	5.2	2.3	1.8	-0.5	-4.3	6.1	3.8	2.2	0.9	-1.3	-7.3
	III	4.4	2.9	1.5	2.2	0.7	-3.2	2.9	3.4	-0.5	1.3	1.8	-4.9

(a) Nominal ULC deflated by GDP/GVA deflator.

Source: INE and Funcas (Forecasts).

Chart 3.1 - Nominal ULC, total economy

Index. 2000=100

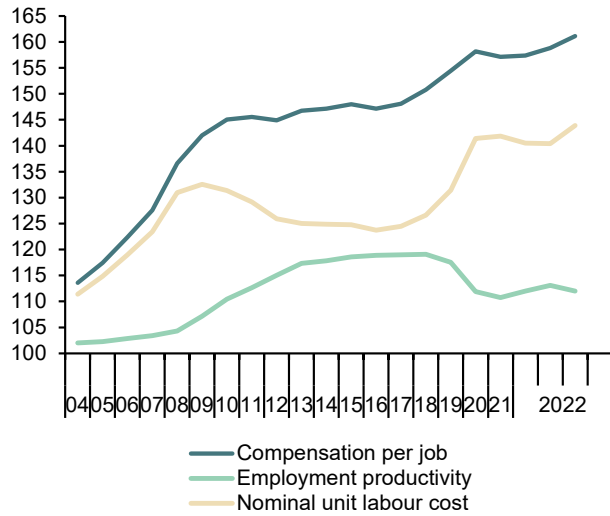
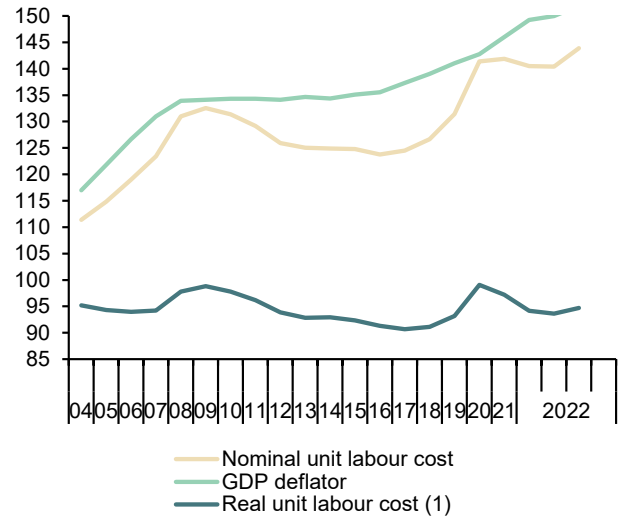


Chart 3.2 - Real ULC, total economy

Index. 2000=100



(1) Nominal ULC deflated by GDP deflator.

Chart 3.3 - Nominal ULC, manufacturing industry

Index. 2000=100

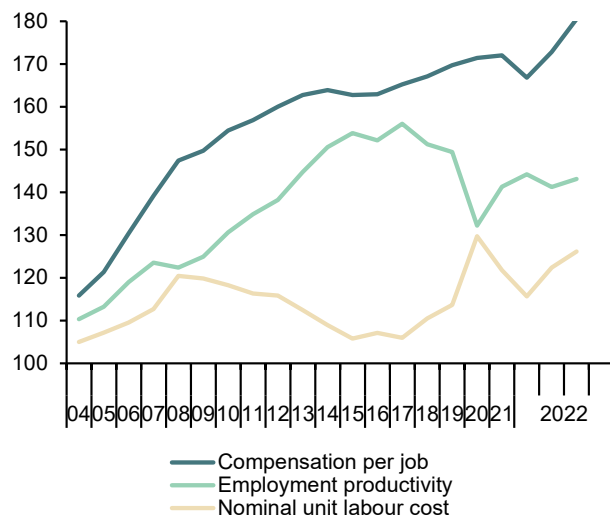
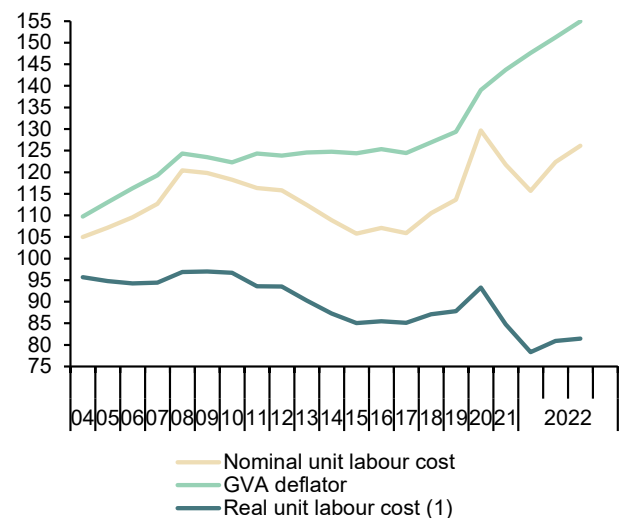


Chart 3.4 - Real ULC, manufacturing industry

Index. 2000=100



(1) Nominal ULC deflated by manufacturing GVA deflator.

Table 4

National accounts: National income, distribution and disposition
 Forecasts in yellow

	Gross domestic product	Compensation of employees	Gross operating surplus	Gross national disposable income	Final national consumption	Gross national saving (a)	Gross capital formation	Compensation of employees	Gross operating surplus	Saving rate	Investment rate	Current account balance	Net lending or borrowing	
	EUR Billions, 4-quarter cumulated transactions							Percentage of GDP						
2015	1,078.1	492.9	473.1	1,067.2	840.6	226.5	204.7	45.7	43.9	21.0	19.0	2.0	2.7	
2016	1,114.4	503.7	496.4	1,105.4	861.1	244.2	208.9	45.2	44.5	21.9	18.7	3.2	3.4	
2017	1,162.5	523.7	519.0	1,152.8	895.1	257.7	225.5	45.0	44.6	22.2	19.4	2.8	3.0	
2018	1,203.9	545.7	532.0	1,193.8	924.8	269.0	246.4	45.3	44.2	22.3	20.5	1.9	2.4	
2019	1,245.5	579.4	538.5	1,235.1	949.5	285.7	259.4	46.5	43.2	22.9	20.8	2.1	2.4	
2020	1,118.0	555.7	460.4	1,108.5	873.6	234.8	228.1	49.7	41.2	21.0	20.4	0.6	1.1	
2021	1,206.8	585.0	496.3	1,200.5	937.4	263.1	251.5	48.5	41.1	21.8	20.8	1.0	1.9	
2022	1,329.0	618.9	551.8	1,292.4	1,006.4	286.0	274.5	46.6	41.5	21.5	20.7	0.9	2.1	
2023	1,397.4	643.3	580.0	1,353.2	1,062.0	291.1	288.9	46.0	41.5	20.8	20.7	0.2	1.3	
2020	IV	1,118.0	555.7	460.4	1,108.5	873.6	234.8	228.1	49.7	41.2	21.0	20.4	0.6	1.1
2021	I	1,109.9	553.1	456.0	1,099.3	870.0	229.3	226.8	49.8	41.1	20.7	20.4	0.2	1.1
	II	1,157.6	568.8	473.9	1,149.0	906.7	242.4	237.0	49.1	40.9	20.9	20.5	0.5	1.3
	III	1,176.1	577.0	477.9	1,168.1	919.8	248.3	240.9	49.1	40.6	21.1	20.5	0.6	1.7
	IV	1,206.8	585.0	496.3	1,200.4	937.4	263.0	251.5	48.5	41.1	21.8	20.8	1.0	1.9
2022	I	1,237.4	593.9	511.5	1,233.0	957.0	276.0	258.7	48.0	41.3	22.3	20.9	1.4	1.6
	II	1,272.1	604.8	530.2	1,264.0	978.0	286.1	266.8	47.5	41.7	22.5	21.0	1.5	1.7
	III	1,298.6	612.7	547.0	1,292.7	997.7	295.0	273.2	47.2	42.1	22.7	21.0	1.7	1.5
	Annual percentage changes							Difference from one year ago						
2015		4.4	4.1	3.8	4.8	3.0	12.0	10.8	-0.1	-0.3	1.4	1.1	0.3	-1.8
2016		3.4	2.2	4.9	3.6	2.4	7.8	2.0	-0.5	0.7	0.9	-0.2	1.1	0.7
2017		4.3	4.0	4.6	4.3	3.9	5.5	8.0	-0.2	0.1	0.3	0.7	-0.4	-0.4
2018		3.6	4.2	2.5	3.6	3.3	4.4	9.3	0.3	-0.5	0.2	1.1	-0.9	-0.7
2019		3.5	6.2	1.2	3.5	2.7	6.2	5.3	1.2	-1.0	0.6	0.4	0.2	0.1
2020		-10.2	-4.1	-14.5	-10.3	-8.0	-17.8	-12.1	3.2	-2.1	-1.9	-0.4	-1.5	-1.4
2021		7.9	5.3	7.8	8.3	7.3	12.0	10.3	-1.2	-0.1	0.8	0.4	0.3	0.8
2022		10.1	5.8	11.2	7.7	7.4	8.7	9.2	-1.9	0.4	-0.3	-0.2	-0.1	0.3
2023		5.1	3.9	5.1	4.7	5.5	1.8	5.2	-0.5	0.0	-0.7	0.0	-0.7	-0.9
2020	IV	-10.2	-4.1	-14.5	1.1	-8.0	60.1	9.5	3.2	-2.1	9.2	3.7	5.5	-1.7
2021	I	-10.0	-5.1	-13.3	-10.3	-8.0	-17.8	-11.8	2.6	-1.5	-1.9	-0.4	-1.5	-1.4
	II	-1.0	0.6	-4.0	-0.9	0.0	-4.2	-1.8	0.8	-1.3	-0.7	-0.2	-0.5	-0.5
	III	2.8	3.0	-0.4	3.0	3.4	1.5	2.3	0.1	-1.3	-0.3	-0.1	-0.2	0.6
	IV	7.9	5.3	7.8	8.3	7.3	12.0	10.3	-1.2	-0.1	0.8	0.4	0.3	0.8
2022	I	11.5	7.4	12.2	12.2	10.0	20.4	14.1	-1.8	0.3	1.6	0.5	1.2	0.5
	II	9.9	6.3	11.9	10.0	7.9	18.0	12.6	-1.6	0.7	1.5	0.5	1.1	0.4
	III	10.4	6.2	14.5	10.7	8.5	18.8	13.4	-1.9	1.5	1.6	0.6	1.1	-0.2

(a) Including change in net equity in pension funds reserves.

Source: INE and Funcas (Forecasts).

Chart 4.1 - National income, consumption and saving

EUR Billions. 4-quarter cumulated

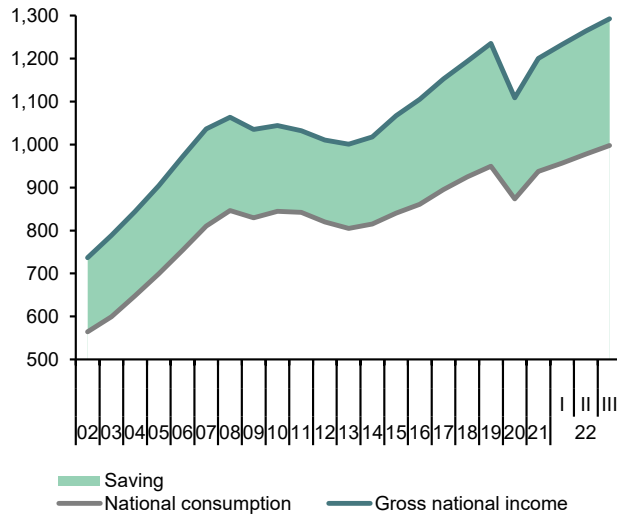


Chart 4.2 - National income, consumption and saving rate

Annual percentage change and percentage of GDP. 4-quarter moving averages



Chart 4.3 - Components of National Income

Percentage of GDP, 4-quarter moving averages

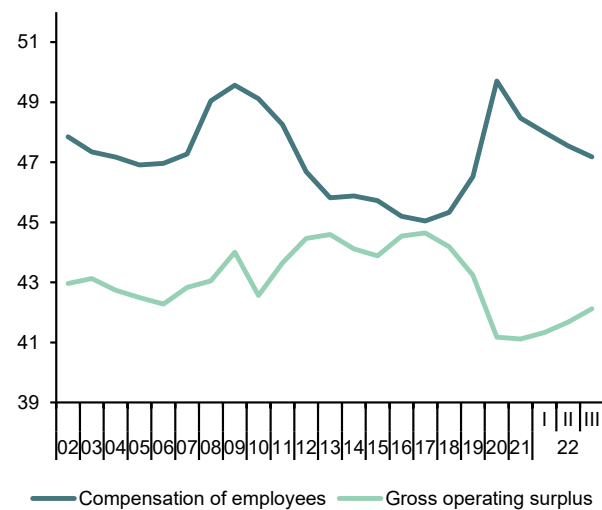


Chart 4.4 - Saving, Investment and Current Account Balance

Percentage of GDP, 4-quarter moving averages

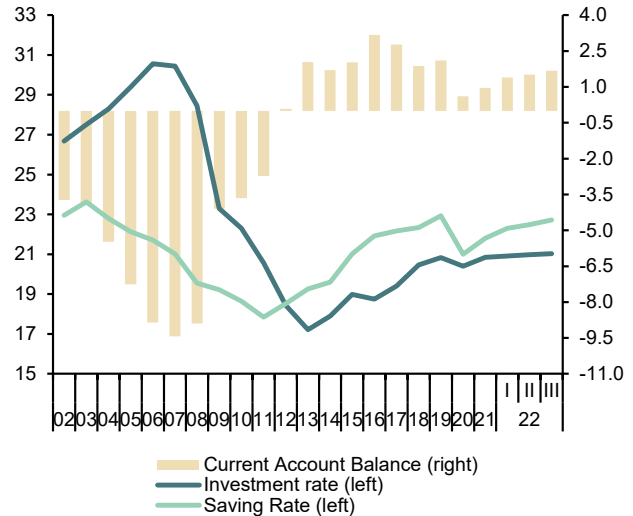


Table 5

National accounts: Household and non-financial corporations accounts

Forecasts in yellow

	Households							Non-financial corporations						
	Gross disposable income (GDI)	Final consumption expenditure	Gross saving	Gross capital formation	Saving rate	Gross capital formation	Net lending or borrowing	Gross operating surplus	Gross saving	Gross capital formation	Saving rate	Gross capital formation	Net lending or borrowing	
	EUR Billions. 4-quarter cumulated operations				Percentage of GDI	Percentage of GDP			EUR Billions. 4-quarter cumulated operations				Percentage of GDP	
2015	682.2	630.2	49.0	30.5	7.2	2.8	1.7	241.5	185.4	140.5	17.2	13.0	4.5	
2016	700.6	648.3	49.2	31.8	7.0	2.9	1.4	255.0	195.8	149.0	17.6	13.4	4.4	
2017	723.0	678.1	41.8	36.8	5.8	3.2	0.2	267.0	200.4	160.4	17.2	13.8	3.7	
2018	743.6	699.5	41.2	40.7	5.5	3.4	-0.1	271.1	199.7	176.7	16.6	14.7	2.2	
2019	780.9	714.5	63.6	43.4	8.1	3.5	1.5	275.7	202.8	186.2	16.3	15.0	1.6	
2020	765.7	627.3	134.5	40.8	17.6	3.6	8.4	214.2	148.6	150.1	13.3	13.4	0.2	
2021	789.3	678.8	108.3	52.2	13.7	4.3	4.8	236.6	163.1	161.2	13.5	13.4	0.8	
2022	804.7	753.4	48.3	55.8	6.0	4.2	-0.6	283.4	191.9	179.6	14.4	13.5	1.2	
2023	839.6	796.0	40.6	51.3	4.8	3.7	-0.8	297.5	207.8	200.9	14.9	14.4	0.8	
2020	IV	765.7	627.3	134.5	40.8	17.6	3.6	8.4	214.2	148.6	150.1	13.3	13.4	0.2
2021	I	764.1	616.2	144.1	43.0	18.9	3.9	9.1	210.7	146.2	149.4	13.2	13.5	0.2
	II	776.6	650.6	122.0	44.4	15.7	3.8	6.6	223.1	152.8	156.4	13.2	13.5	0.1
	III	779.7	659.6	117.5	45.6	15.1	3.9	6.2	224.0	155.7	155.5	13.2	13.2	0.5
	IV	789.3	678.8	108.3	52.2	13.7	4.3	4.8	236.6	163.1	161.2	13.5	13.4	0.8
2022	I	794.6	704.4	87.7	57.0	11.0	4.6	2.6	249.1	174.8	161.0	14.1	13.0	1.7
	II	805.6	724.6	79.0	63.1	9.8	5.0	1.4	260.8	178.1	162.4	14.0	12.8	1.8
	III	808.6	746.3	60.0	62.7	7.4	4.8	-0.2	277.4	192.9	170.4	14.8	13.1	2.3
		Annual percentage changes				Difference from one year ago			Annual percentage changes				Difference from one year ago	
2015		4.0	2.9	18.1	1.1	0.9	-0.1	0.7	5.4	7.8	10.0	0.5	0.7	-0.3
2016		2.7	2.9	0.5	4.2	-0.2	0.0	-0.3	5.6	5.6	6.1	0.4	0.3	-0.1
2017		3.2	4.6	-15.2	15.7	-1.2	0.3	-1.2	4.7	2.4	7.6	-0.3	0.4	-0.7
2018		2.8	3.2	-1.3	10.6	-0.2	0.2	-0.3	1.5	-0.3	10.2	-0.7	0.9	-1.5
2019		5.0	2.2	54.2	6.8	2.6	0.1	1.7	1.7	1.5	5.4	-0.3	0.3	-0.6
2020		-2.0	-12.2	111.5	-6.1	9.4	0.2	6.9	-22.3	-26.7	-19.4	-3.0	-1.5	-1.3
2021		3.1	8.2	-19.5	28.0	-3.8	0.7	-3.6	10.5	9.8	7.4	0.2	-0.1	0.6
2022		2.0	11.0	-55.4	7.0	-7.7	-0.1	-5.4	19.8	17.6	11.4	0.9	0.2	0.4
2023		4.3	5.7	-16.0	-8.0	-1.2	-0.5	-0.1	5.0	8.3	11.8	0.4	0.9	-0.5
2020	IV	-2.0	-12.2	111.5	-6.1	9.4	0.2	6.9	-22.3	-26.7	-19.4	-3.0	-1.5	-1.3
2021	I	-2.8	-12.5	83.5	-3.3	8.9	0.3	6.5	-20.0	-22.5	-17.0	-2.1	-1.1	-0.7
	II	1.2	-1.8	19.2	5.2	2.4	0.2	1.6	-6.8	-14.7	-5.2	-2.1	-0.6	-1.2
	III	1.2	1.8	-1.2	6.2	-0.4	0.1	-0.4	-1.7	-3.5	-0.8	-0.8	-0.5	-0.1
	IV	3.1	8.2	-19.5	28.0	-3.8	0.7	-3.6	10.5	9.8	7.4	0.2	-0.1	0.6
2022	I	4.0	14.3	-39.1	32.6	-7.8	0.7	-6.5	18.2	19.6	7.8	0.9	-0.5	1.6
	II	3.7	11.4	-35.2	42.2	-5.9	1.1	-5.3	16.9	16.6	3.8	0.8	-0.7	1.8
	III	3.7	13.1	-48.9	37.5	-7.7	0.9	-6.3	23.8	23.9	9.6	1.6	-0.1	1.8

Source: INE and Funcas (Forecasts).

Chart 5.1 - Households: Net lending or borrowing

Percentage of GDP, 4-quarter moving averages

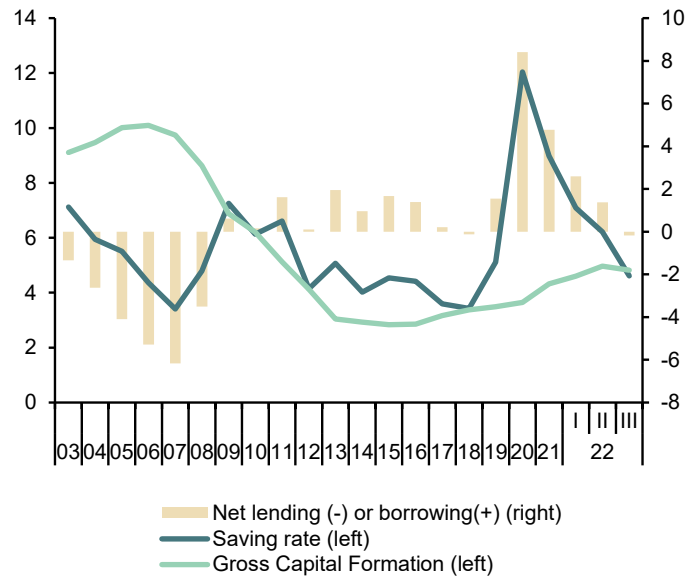


Chart 5.2 - Non-financial corporations: Net lending or borrowing

Percentage of GDP, 4-quarter moving averages

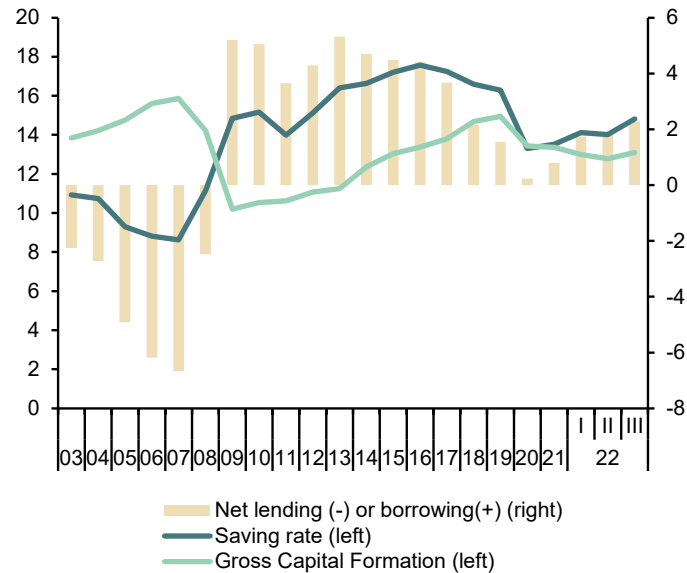


Table 6

National accounts: Public revenue, expenditure and deficit

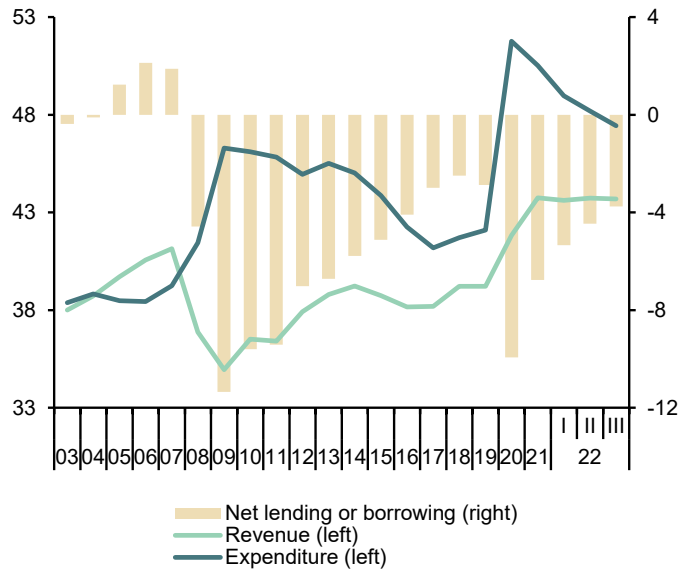
Forecasts in yellow

	Non financial revenue					Non financial expenditures							Net lending(+)/ net borrowing(-)	Net lending(+)/ net borrowing(-) excluding financial entities bail-out expenditures	
	Taxes on production and imports	Taxes on income and wealth	Social contributions	Capital and other revenue	Total	Compensation of employees	Intermediate consumption	Interests	Social benefits and social transfers in kind	Gross capital formation and other capital expenditure	Other expenditure	Total			
	1	2	3	4	5=1+2+3+4	6	7	8	9	10	11	12=6+7+8+9+10+11	13=5-12	14	
EUR Billions. 4-quarter cumulated operations															
2015	126.4	107.1	131.5	52.6	417.6	119.3	59.5	32.8	198.6	36.5	28.3	474.9	-57.2	-55.2	
2016	128.9	110.0	135.6	50.9	425.3	121.5	59.2	30.7	203.0	30.3	28.4	473.2	-47.9	-45.6	
2017	135.1	116.9	142.4	49.6	444.0	123.5	60.5	29.3	207.4	31.5	28.1	480.3	-36.2	-34.8	
2018	141.2	127.3	149.5	54.2	472.1	127.7	62.6	29.3	216.6	37.4	29.8	503.4	-31.2	-30.0	
2019	143.0	129.1	160.7	55.7	488.5	134.8	65.2	28.4	229.6	37.2	31.6	526.7	-38.1	-35.7	
2020	126.7	125.3	162.2	53.3	467.6	140.6	67.0	25.1	262.2	44.3	41.5	580.8	-113.2	-111.1	
2021	146.7	143.4	171.7	66.2	527.9	147.6	71.8	26.1	263.6	59.9	42.0	610.9	-82.9	-81.7	
2022	167.8	161.8	178.8	64.9	573.4	152.4	76.9	31.4	267.7	49.9	45.6	623.9	-50.5	-50.5	
2023	179.1	161.1	184.4	62.5	587.1	157.0	80.5	36.4	288.7	45.7	38.8	647.1	-60.0	-60.0	
2020	IV	126.7	125.3	162.2	53.3	467.6	140.6	67.0	25.1	262.2	44.3	41.5	580.8	-113.2	-111.1
2021	I	126.7	126.1	164.1	52.5	469.4	142.5	68.2	25.3	267.4	46.6	43.0	593.1	-123.7	-121.5
	II	136.7	132.2	166.4	56.1	491.5	144.9	69.5	25.4	260.8	47.2	40.0	587.8	-96.3	-94.5
	III	142.2	133.7	169.6	61.3	506.8	146.5	70.6	25.3	261.5	53.2	40.5	597.5	-90.7	-89.4
	IV	146.7	143.4	171.7	66.2	527.9	147.6	71.8	26.1	263.6	59.9	42.0	610.9	-82.9	-81.7
2022	I	153.3	147.2	173.4	66.5	540.3	148.8	72.9	26.3	263.1	55.1	41.2	607.5	-67.2	-66.2
	II	158.2	151.8	176.0	69.7	555.7	149.6	73.7	27.9	263.8	55.6	42.9	613.4	-57.7	-56.7
	III	161.6	160.4	177.6	68.9	568.6	151.0	75.4	29.3	265.6	51.4	45.9	618.6	-50.0	-48.8
Percentage of GDP. 4-quarter cumulated operations															
2015	11.7	9.9	12.2	4.9	38.7	11.1	5.5	3.0	18.4	3.4	2.6	44.0	-5.3	-5.1	
2016	11.6	9.9	12.2	4.6	38.2	10.9	5.3	2.8	18.2	2.7	2.6	42.5	-4.3	-4.1	
2017	11.6	10.1	12.3	4.3	38.2	10.6	5.2	2.5	17.8	2.7	2.4	41.3	-3.1	-3.0	
2018	11.7	10.6	12.4	4.5	39.2	10.6	5.2	2.4	18.0	3.1	2.5	41.8	-2.6	-2.5	
2019	11.5	10.4	12.9	4.5	39.2	10.8	5.2	2.3	18.4	3.0	2.5	42.3	-3.1	-2.9	
2020	11.3	11.2	14.5	4.8	41.8	12.6	6.0	2.2	23.5	4.0	3.7	51.9	-10.1	-9.9	
2021	12.2	11.9	14.2	5.5	43.7	12.2	6.0	2.2	21.8	5.0	3.5	50.6	-6.9	-6.8	
2022	12.6	12.2	13.5	4.9	43.1	11.5	5.8	2.4	20.1	3.8	3.4	46.9	-3.8	-3.8	
2023	12.8	11.5	13.2	4.5	42.0	11.2	5.8	2.6	20.7	3.3	2.8	46.3	-4.3	-4.3	
2020	IV	11.3	11.2	14.5	4.8	41.8	12.6	6.0	2.2	23.5	4.0	3.7	51.9	-10.1	-9.9
2021	I	11.4	11.4	14.8	4.7	42.4	12.9	6.2	2.3	24.1	4.2	3.9	53.5	-11.2	-11.0
	II	11.8	11.4	14.4	4.9	42.5	12.5	6.0	2.2	22.5	4.1	3.5	50.8	-8.3	-8.2
	III	12.1	11.4	14.4	5.2	43.1	12.5	6.0	2.1	22.2	4.5	3.4	50.8	-7.7	-7.6
	IV	12.2	11.9	14.2	5.5	43.7	12.2	6.0	2.2	21.8	5.0	3.5	50.6	-6.9	-6.8
2022	I	12.4	11.9	14.0	5.4	43.6	12.0	5.9	2.1	21.2	4.5	3.3	49.0	-5.4	-5.3
	II	12.5	11.9	13.8	5.5	43.7	11.8	5.8	2.2	20.8	4.4	3.4	48.3	-4.5	-4.5
	III	12.4	12.3	13.7	5.3	43.7	11.6	5.8	2.3	20.4	3.9	3.5	47.5	-3.8	-3.8

Source: IGAE and Funcas (Forecasts).

Chart 6.1 - Public sector: Revenue, expenditure and deficit (a)

Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures.

Chart 6.2 - Public sector: Main expenditures

Percentage of GDP, 4-quarter moving averages

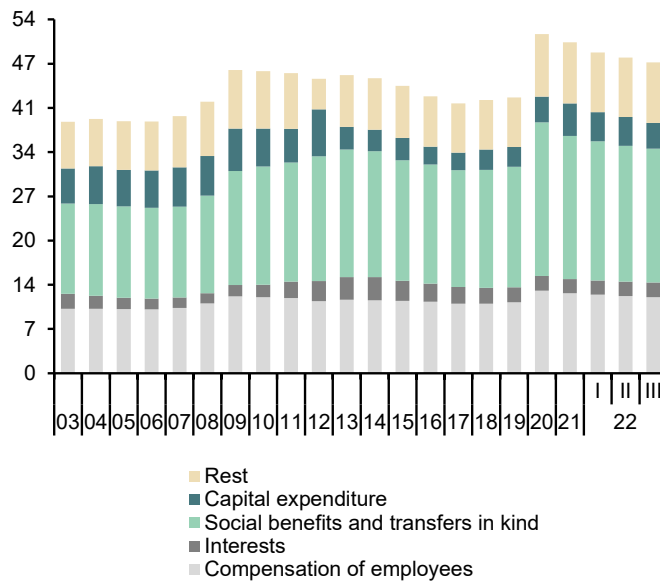


Table 7

Public sector balances. by level of Government

Forecasts in yellow

	Net lending (+)/ net borrowing (-) (a)					Debt					
	Central Government	Regional Governments	Local Governments	Social Security	TOTAL Government	Central Government	Regional Governments	Local Governments	Social Security	Total Government (consolidated)	
	EUR Billions. 4-quarter cumulated operations					EUR Billions. end of period					
2015	-28.2	-18.9	4.6	-12.9	-55.2	982.9	263.3	35.1	17.2	1,113.7	
2016	-25.7	-9.5	7.0	-17.4	-45.6	1,008.9	277.0	32.2	17.2	1,145.1	
2017	-20.6	-4.2	6.7	-16.8	-34.8	1,049.8	288.1	29.0	27.4	1,183.4	
2018	-15.7	-3.3	6.3	-17.3	-30.0	1,082.8	293.4	25.8	41.2	1,208.9	
2019	-16.4	-7.3	3.8	-15.9	-35.7	1,095.8	295.1	23.2	55.0	1,223.4	
2020	-83.6	-2.0	2.8	-28.3	-111.1	1,206.6	304.0	22.0	85.4	1,345.8	
2021	-72.5	-0.6	3.5	-12.0	-81.7	1,280.0	312.6	22.1	97.2	1,427.2	
2022	--	--	--	--	-50.5	--	--	--	--	1,477.7	
2023	--	--	--	--	-60.0	--	--	--	--	1,538.2	
2020	IV	-83.6	-2.0	2.8	-28.3	-111.1	1,206.6	304.0	22.0	85.4	1,345.8
2021	I	-93.4	-3.0	3.1	-28.2	-121.5	1,247.8	307.7	22.1	85.4	1,393.1
	II	-73.0	-3.1	3.8	-22.1	-94.5	1,273.4	312.0	22.7	91.9	1,424.7
	III	-84.1	4.7	3.6	-13.6	-89.4	1,281.4	312.3	22.3	91.9	1,432.3
	IV	-72.5	-0.6	3.5	-12.0	-81.7	1,280.0	312.6	22.1	97.2	1,427.2
2022	I	-61.2	3.1	3.2	-11.3	-66.2	1,306.7	309.7	22.4	99.2	1,453.9
	II	-56.5	0.2	3.6	-4.2	-56.9	1,326.1	316.7	22.8	99.2	1,475.4
	III	-28.3	-14.8	-0.2	-5.5	-48.8	1,359.1	314.8	22.3	99.2	1,503.8
		Percentage of GDP. 4-quarter cumulated operations					Percentage of GDP				
2015		-2.6	-1.7	0.4	-1.2	-5.1	91.2	24.4	3.3	1.6	103.3
2016		-2.3	-0.9	0.6	-1.6	-4.1	90.5	24.9	2.9	1.5	102.7
2017		-1.8	-0.4	0.6	-1.4	-3.0	90.3	24.8	2.5	2.4	101.8
2018		-1.3	-0.3	0.5	-1.4	-2.5	89.9	24.4	2.1	3.4	100.4
2019		-1.3	-0.6	0.3	-1.3	-2.9	88.0	23.7	1.9	4.4	98.2
2020		-7.5	-0.2	0.2	-2.5	-9.9	107.9	27.2	2.0	7.6	120.4
2021		-6.0	-0.1	0.3	-1.0	-6.8	106.1	25.9	1.8	8.1	118.3
2022		--	--	--	--	-3.8	--	--	--	--	111.2
2023		--	--	--	--	-4.3	--	--	--	--	110.1
2020	IV	-7.5	-0.2	0.2	-2.5	-9.9	107.9	27.2	2.0	7.6	120.4
2021	I	-8.4	-0.3	0.3	-2.5	-10.9	112.4	27.7	2.0	7.7	125.5
	II	-6.3	-0.3	0.3	-1.9	-8.2	110.0	27.0	2.0	7.9	123.1
	III	-7.1	0.4	0.3	-1.2	-7.6	108.9	26.6	1.9	7.8	121.8
	IV	-6.0	-0.1	0.3	-1.0	-6.8	106.1	25.9	1.8	8.1	118.3
2022	I	-4.9	0.2	0.3	-0.9	-5.3	105.6	25.0	1.8	8.0	117.5
	II	-4.4	0.0	0.3	-0.3	-4.5	104.2	24.9	1.8	7.8	116.0
	III	-2.2	-1.1	0.0	-0.4	-3.8	104.7	24.2	1.7	7.6	115.8

(a) Excluding financial entities bail-out expenditures.

Sources: National Statistics Institute. Bank of Spain (Financial Accounts of the Spanish Economy). and Funcas (Forecasts).

Chart 7.1 - Government deficit

Percent of GDP, 4-quarter cumulated operations

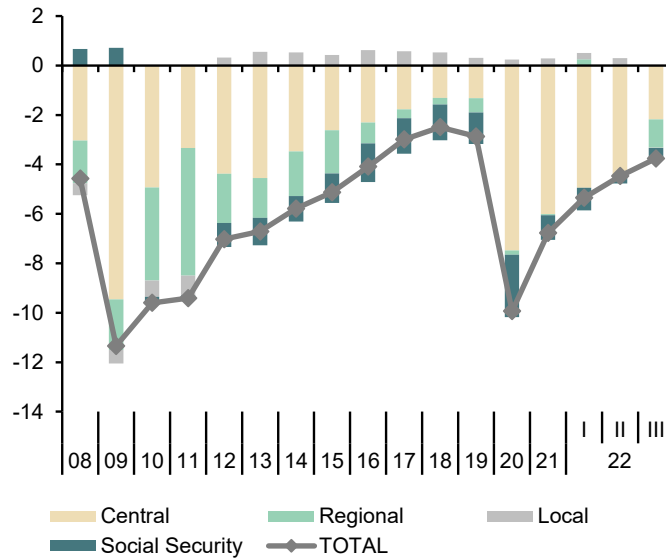


Chart 7.2 - Government debt

Percent of GDP

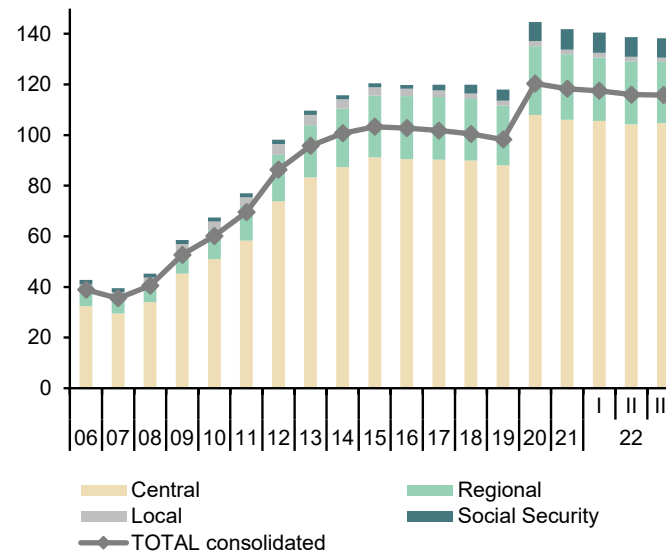


Table 8

General activity and industrial sector indicators (a)

	General activity indicators				Industrial sector indicators					
	Economic Sentiment Index	Composite PMI index	Social Security Affiliates (f)	Electricity consumption (temperature adjusted)	Industrial production index	Social Security Affiliates in industry	Manufacturing PMI index	Industrial confidence index	Manufacturing Turnover index deflated	Industrial orders
	Index	Index	Thousands	1.000 GWH	2015=100	Thousands	Index	Balance of responses	2015=100 (smoothed)	Balance of responses
2014	100.0	55.1	16,111.1	247.2	96.8	2,022.8	53.2	-7.5	95.3	-16.3
2015	107.7	56.7	16,641.8	251.4	100.0	2,067.3	53.6	-0.6	100.0	-5.4
2016	106.0	54.9	17,157.5	252.1	101.8	2,124.7	53.1	-2.1	102.7	-5.4
2017	109.1	56.2	17,789.6	256.4	105.1	2,191.0	54.8	1.4	107.1	2.2
2018	107.9	54.6	18,364.5	257.9	105.3	2,250.9	53.3	-0.5	108.4	-0.2
2019	104.7	52.7	18,844.1	251.2	106.1	2,283.2	49.1	-3.6	108.9	-5.1
2020	90.0	41.5	18,440.5	239.1	95.9	2,239.3	47.5	-13.6	98.8	-30.0
2021	105.1	55.3	18,910.0	244.4	102.9	2,270.4	57.0	0.6	104.2	-1.8
2022 (b)	101.2	51.8	19,663.0	235.2	106.5	2,324.3	51.0	-0.9	104.0	1.5
2021 I	97.3	46.1	18,627.2	61.4	103.5	2,244.7	53.1	-4.7	104.1	-12.7
II	105.0	58.9	18,672.7	61.3	102.1	2,256.8	59.2	-0.4	102.8	-0.9
III	109.0	59.6	19,026.3	60.2	101.5	2,281.3	58.8	2.6	103.8	-0.5
IV	109.3	56.6	19,311.9	61.1	104.9	2,300.5	56.9	5.0	106.4	7.0
2022 I	108.3	52.5	19,485.4	59.8	105.2	2,310.0	55.8	6.8	101.9	11.6
II	101.9	55.0	19,593.9	59.8	106.7	2,316.4	53.2	0.4	105.2	7.2
III	97.1	50.5	19,721.6	58.4	106.2	2,332.2	49.2	-5.2	104.9	-4.4
IV (b)	97.7	49.2	19,849.0	56.8	105.1	2,340.6	45.6	-5.4	102.8	-8.3
2022 Oct	98.2	48.0	19,798.6	18.9	105.4	2,335.8	44.7	-3.9	101.3	-6.5
Nov	96.5	49.6	19,878.1	18.8	104.7	2,341.7	45.7	-7.6	104.3	-9.9
Dec	98.4	49.9	19,870.2	19.0	--	2,344.1	46.4	-4.8	--	-8.6
Percentage changes (c)										
2014	--	--	1.6	-0.1	1.3	0.1	--	--	2.3	--
2015	--	--	3.3	1.7	3.4	2.2	--	--	4.9	--
2016	--	--	3.1	0.3	1.8	2.8	--	--	2.8	--
2017	--	--	3.7	1.7	3.2	3.1	--	--	4.2	--
2018	--	--	3.2	0.6	0.2	2.7	--	--	1.2	--
2019	--	--	2.6	-2.6	0.7	1.4	--	--	0.5	--
2020	--	--	-2.1	-4.8	-9.6	-1.9	--	--	-9.3	--
2021	--	--	2.5	2.2	7.3	1.4	--	--	5.4	--
2022 (d)	--	--	4.0	-3.8	3.0	2.4	--	--	-0.4	--
2021 I	--	--	0.2	-0.6	0.4	-0.1	--	--	-2.8	--
II	--	--	0.2	-0.2	-1.4	0.5	--	--	-1.3	--
III	--	--	1.9	-1.8	-0.5	1.1	--	--	1.1	--
IV	--	--	1.5	1.6	3.3	0.8	--	--	2.4	--
2022 I	--	--	0.9	-2.1	0.2	0.4	--	--	-4.2	--
II	--	--	0.6	-0.1	1.4	0.3	--	--	3.2	--
III	--	--	0.7	-2.4	-0.5	0.7	--	--	-0.3	--
IV (e)	--	--	0.6	-2.7	-1.0	0.4	--	--	-2.1	--
2022 Oct	--	--	0.1	-2.1	-0.6	0.0	--	--	-3.5	--
Nov	--	--	0.4	-0.6	-0.7	0.3	--	--	2.9	--
Dec	--	--	0.0	1.1	--	0.1	--	--	--	--

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Percent change from the previous quarter for quarterly data, from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Growth of the average of available months over the monthly average of the previous quarter. (f) Excluding domestic service workers and non-professional caregivers.

Sources: European Commission, S&P Global, M. of Labour, M. of Industry, National Statistics Institute, REE and Funcas.

Chart 8.1 - General activity indicators (I)

Annual percentage changes

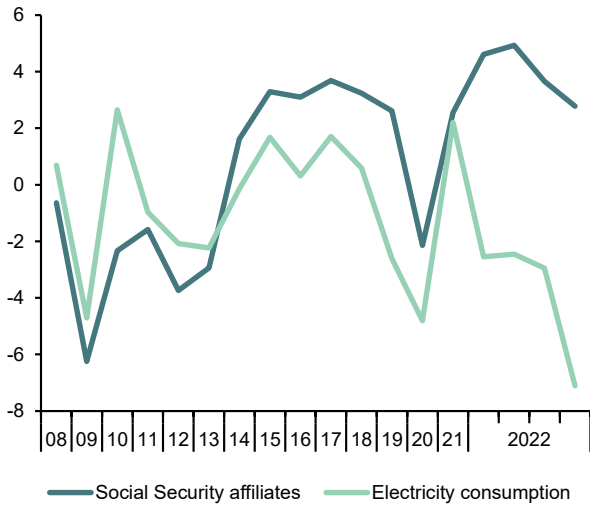


Chart 8.2 - General activity indicators (II)

Index

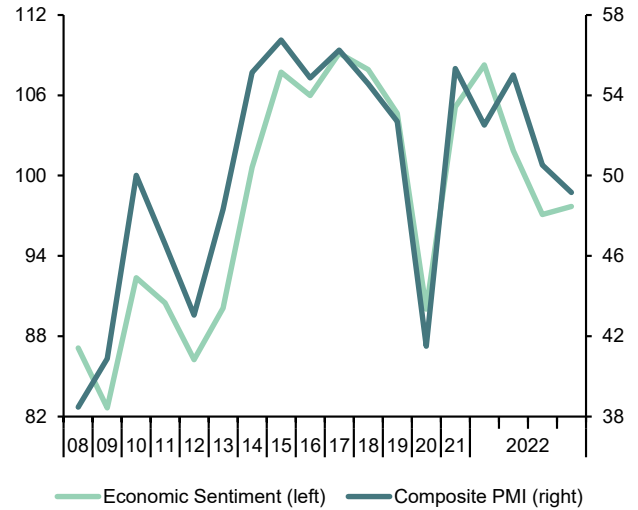


Chart 8.3 - Industrial sector indicators (I)

Annual percentage changes

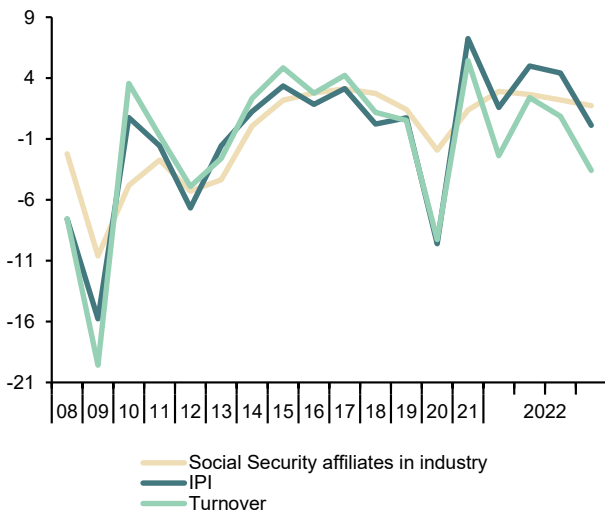


Chart 8.4 - Industrial sector indicators (II)

Index

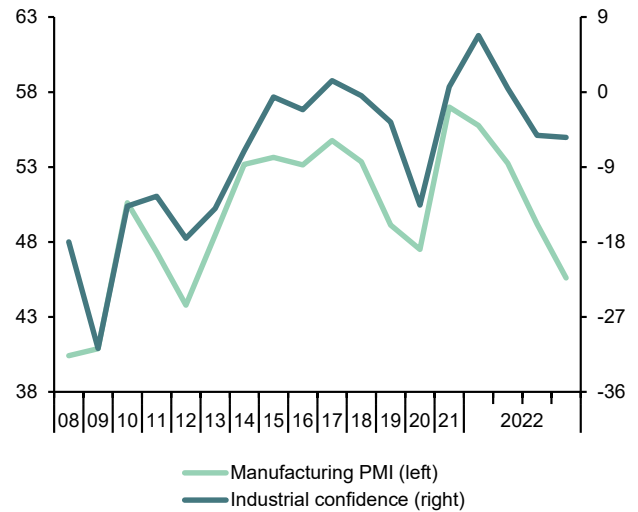


Table 9

Construction and services sector indicators (a)

	Construction indicators					Service sector indicators						
	Social Security Affiliates in construction	Industrial production index construction materials	Construction confidence index	Official tenders (f)	Housing permits (f)	Social Security Affiliates in services (g)	Turnover index (nominal)	Services PMI index	Hotel overnight stays	Passenger air transport	Services confidence index	
	Thousands	2015=100 (smoothed)	Balance of responses	EUR Billions (smoothed)	Million m ²	Thousands	2015=100 (smoothed)	Index	Million (smoothed)	Million (smoothed)	Balance of responses	
2014	980.3	92.8	-40.8	13.1	6.9	11,995.5	95.3	55.2	295.3	194.9	8.8	
2015	1,026.7	100.0	-26.7	9.4	9.9	12,432.3	100.0	57.3	308.2	206.6	18.9	
2016	1,053.9	102.6	-39.1	9.2	12.7	12,851.6	104.2	55.0	331.2	229.4	18.2	
2017	1,118.8	111.5	-25.1	12.7	15.9	13,338.2	111.1	56.4	340.6	248.4	22.9	
2018	1,194.1	114.2	-6.0	16.6	19.8	13,781.3	117.5	54.8	340.0	262.9	21.2	
2019	1,254.9	124.8	-7.7	18.1	20.0	14,169.1	122.2	53.9	343.0	276.9	14.0	
2020	1,233.1	110.7	-17.4	14.0	16.1	13,849.2	102.9	40.3	92.2	75.6	-25.6	
2021	1,288.6	124.2	-1.9	23.6	19.7	14,235.1	119.2	55.0	172.8	119.4	8.4	
2022 (b)	1,333.8	128.1	8.9	26.4	16.4	14,926.3	142.1	52.5	304.1	242.9	12.3	
2021	I	1,257.3	120.9	-7.0	4.1	4.5	13,999.0	111.2	44.3	13.0	10.6	-16.0
	II	1,281.0	124.9	0.9	6.3	5.0	14,019.0	115.7	58.8	23.1	16.4	8.1
	III	1,304.2	124.9	-2.2	6.3	5.1	14,332.1	119.9	59.6	57.8	39.4	19.4
	IV	1,315.8	125.5	0.9	6.8	5.2	14,585.3	129.8	57.4	69.1	49.4	22.1
2022	I	1,317.4	125.7	4.0	5.4	5.4	14,766.4	134.9	52.2	66.6	48.7	15.9
	II	1,318.0	130.1	10.6	7.2	4.4	14,878.2	144.8	55.9	80.0	59.1	16.5
	III	1,341.9	122.9	6.3	7.6	4.6	14,974.4	145.2	51.0	83.5	63.1	11.5
	IV (b)	1,361.8	127.9	14.6	6.1	2.0	15,080.2	149.0	50.8	56.6	67.6	5.3
2022	Oct	1,353.0	125.7	13.6	2.9	2.0	15,039.5	147.0	49.7	28.3	22.3	4.7
	Nov	1,360.4	130.1	12.6	3.2	--	15,102.8	151.0	51.2	28.4	22.3	7.3
	Dec	1,372.1	--	17.5	--	--	15,098.5	--	51.6	--	23.0	4.0
Percentage changes (c)												
2014	-1.7	-0.9	--	42.6	2.2	2.3	2.6	--	3.2	4.6	--	
2015	4.7	7.8	--	-28.2	42.6	3.6	4.9	--	4.4	6.0	--	
2016	2.6	2.6	--	-1.7	29.0	3.4	4.2	--	7.4	11.0	--	
2017	6.2	8.6	--	37.1	24.8	3.8	6.6	--	2.8	8.3	--	
2018	6.7	2.5	--	30.8	24.5	3.3	5.8	--	-0.2	5.8	--	
2019	5.1	9.2	--	9.3	1.3	2.8	4.0	--	0.9	5.3	--	
2020	-1.7	-11.3	--	-22.4	-19.8	-2.3	-15.8	--	-73.1	-72.7	--	
2021	4.5	12.2	--	67.9	22.7	2.8	15.9	--	87.4	57.8	--	
2022 (d)	3.5	2.0	--	26.5	0.9	4.9	21.0	--	90.6	103.4	--	
2021	I	-0.8	1.3	--	24.1	-4.1	0.4	2.1	--	-13.0	-16.6	--
	II	1.9	3.3	--	117.2	48.9	0.1	4.0	--	78.3	54.5	--
	III	1.8	0.1	--	118.3	31.4	2.2	3.6	--	149.8	140.6	--
	IV	0.9	0.5	--	38.6	23.8	1.8	8.3	--	19.7	25.5	--
2022	I	0.1	0.1	--	30.7	20.1	1.2	3.9	--	-3.7	-1.5	--
	II	0.0	3.5	--	13.9	-10.9	0.8	7.4	--	20.2	21.5	--
	III	1.8	-5.5	--	20.0	-10.4	0.6	0.3	--	4.4	6.7	--
	IV (e)	1.5	4.1	--	55.2	18.4	0.7	2.6	--	1.7	7.2	--
2022	Oct	0.3	2.8	--	30.3	18.4	0.1	0.0	--	3.2	5.9	--
	Nov	0.5	3.5	--	80.2	--	0.4	2.7	--	0.2	-0.2	--
	Dec	0.9	--	--	--	--	0.0	--	--	--	3.5	--

(a) Seasonally adjusted, except for annual data and (f). (b) Period with available data. (c) Percent change from the previous quarter for quarterly data, from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Growth of the average of available months over the monthly average of the previous quarter. (f) Percent changes are over the same period of the previous year. (g) Excluding domestic service workers and non-professional caregivers.

Sources: European Commission, S&P Global, M. of Labour, M. of Public Works, National Statistics Institute, AENA, OFICEMEN, SEOPAN and Funcas.

Chart 9.1 - Construction indicators (I)

Annual percentage changes and index

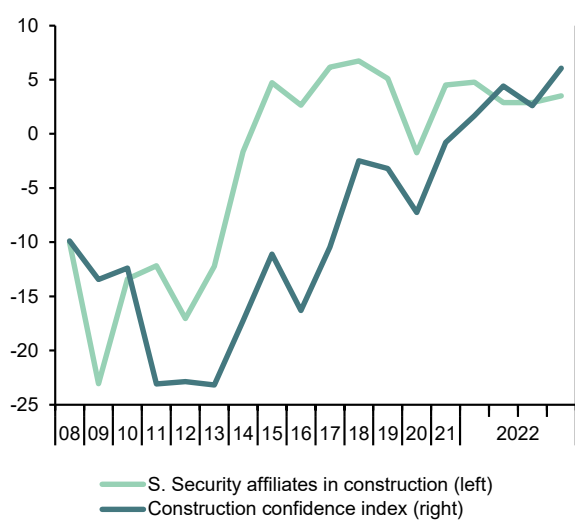


Chart 9.2 - Construction indicators (II)

Annual percentage changes

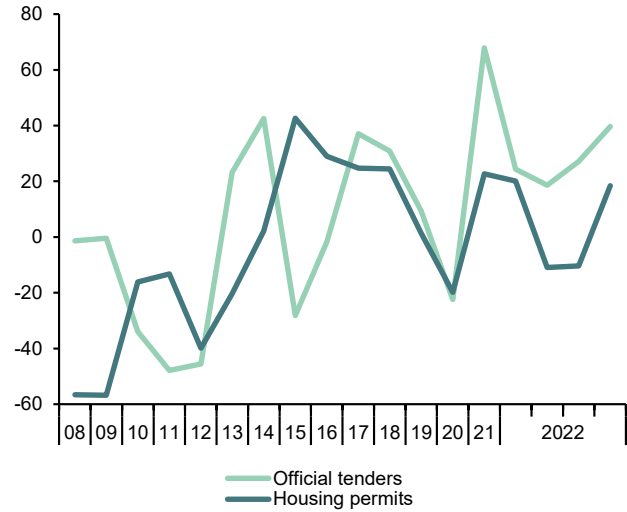


Chart 9.3 - Services indicators (I)

Annual percentage changes

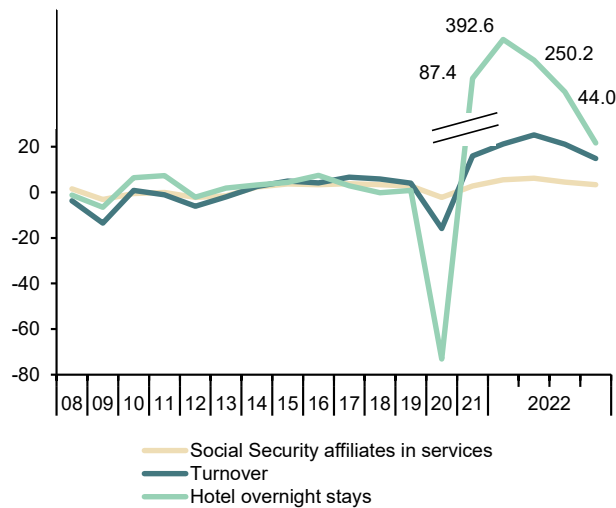


Chart 9.4 - Services indicators (II)

Index

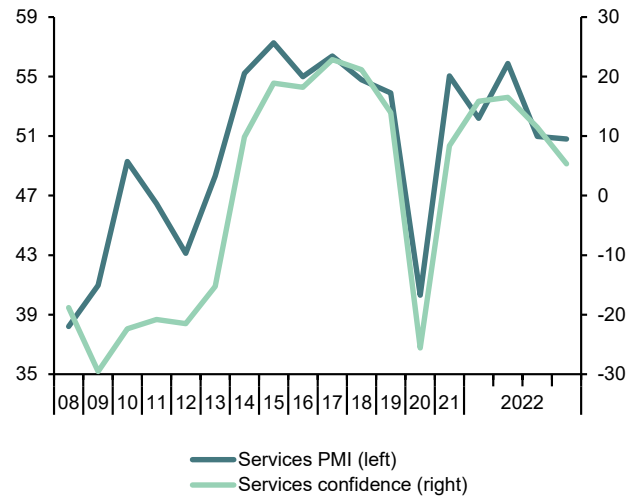


Table 10

Consumption and investment indicators (a)

	Consumption indicators					Investment in equipment indicators			
	Retail sales deflated	Car registrations	Consumer confidence index	Hotel overnight stays by residents in Spain	Industrial orders for consumer goods	Cargo vehicles registrations	Industrial orders for investment goods	Imports of capital goods (volume)	
	2015=100	Thousands	Balance of responses	Million (smoothed)	Balance of responses	Thousands	Balance of responses	2005=100	
2014	96.0	890.1	-15.5	104.7	-9.1	137.5	-16.5	81.6	
2015	100.0	1,094.0	-4.9	110.3	-3.1	180.3	0.2	93.3	
2016	103.9	1,230.1	-6.2	114.2	-1.4	191.3	-0.2	97.2	
2017	104.7	1,341.6	-2.8	115.8	2.2	207.6	4.9	103.3	
2018	105.4	1,424.0	-4.4	116.5	-5.6	230.0	12.4	105.4	
2019	107.8	1,375.6	-6.4	119.6	-2.9	220.9	8.8	105.6	
2020	100.4	939.1	-22.7	51.2	-25.5	170.8	-22.7	100.0	
2021	103.9	953.7	-12.8	90.7	-11.1	186.9	4.7	110.3	
2022 (b)	102.8	914.9	-26.4	112.7	-2.9	166.7	28.2	121.6	
2021	I	102.2	199.0	-19.0	8.8	-18.4	50.4	-13.7	110.4
	II	103.7	250.7	-10.2	15.7	-15.2	49.2	11.4	110.9
	III	104.3	244.3	-8.6	30.6	-9.4	43.6	6.4	111.8
	IV	105.8	256.6	-13.1	28.0	-1.5	43.1	14.7	115.4
2022	I	102.5	188.6	-17.8	25.8	0.9	38.2	33.8	121.1
	II	104.9	229.9	-26.4	31.5	2.3	40.0	29.9	125.5
	III	104.4	255.6	-33.0	30.6	-8.6	43.0	21.8	126.6
	IV (b)	107.2	255.8	-28.6	20.6	-6.1	46.9	27.5	126.1
2022	Oct	105.2	90.5	-31.5	10.6	-1.8	13.4	20.1	126.1
	Nov	109.1	90.4	-28.5	10.0	-7.9	15.5	27.2	--
	Dec	--	74.9	-25.9	--	-8.5	17.6	35.1	--
Percentage changes (c)									
2014		1.1	19.9	--	4.1	--	27.8	--	18.4
2015		4.2	22.9	--	5.3	--	31.1	--	14.4
2016		3.9	12.4	--	3.6	--	6.1	--	4.1
2017		0.8	9.1	--	1.4	--	8.5	--	6.4
2018		0.7	6.1	--	0.6	--	10.8	--	2.0
2019		2.3	-3.4	--	2.7	--	-4.0	--	0.2
2020		-6.9	-31.7	--	-57.2	--	-22.6	--	-5.3
2021		3.5	1.6	--	77.3	--	9.4	--	10.3
2022 (d)		0.4	-4.1	--	33.5	--	-10.8	--	13.1
2021	I	-2.9	-34.0	--	-7.3	--	-4.2	--	10.6
	II	1.5	26.0	--	77.8	--	-2.4	--	1.7
	III	0.6	-2.6	--	94.8	--	-11.4	--	3.4
	IV	1.4	5.0	--	-8.4	--	-1.2	--	13.6
2022	I	-3.2	-26.5	--	-8.1	--	-11.2	--	21.1
	II	2.4	21.9	--	22.1	--	4.6	--	15.3
	III	-0.5	11.2	--	-2.9	--	7.5	--	3.6
	IV (e)	2.7	0.1	--	0.9	--	8.0	--	-1.4
2022	Oct	0.4	-6.2	--	3.1	--	-14.9	--	-0.3
	Nov	3.8	0.0	--	-5.6	--	15.7	--	--
	Dec	--	-17.2	--	--	--	13.9	--	--

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Percent change from the previous quarter for quarterly data, from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Growth of the average of available months over the monthly average of the previous quarter.

Sources: European Commission, M. of Economy, M. of Industry, National Statistics Institute, DGT, ANFAC and Funcas.

Chart 10.1 - Consumption indicators

Annual percentage changes and balance of responses

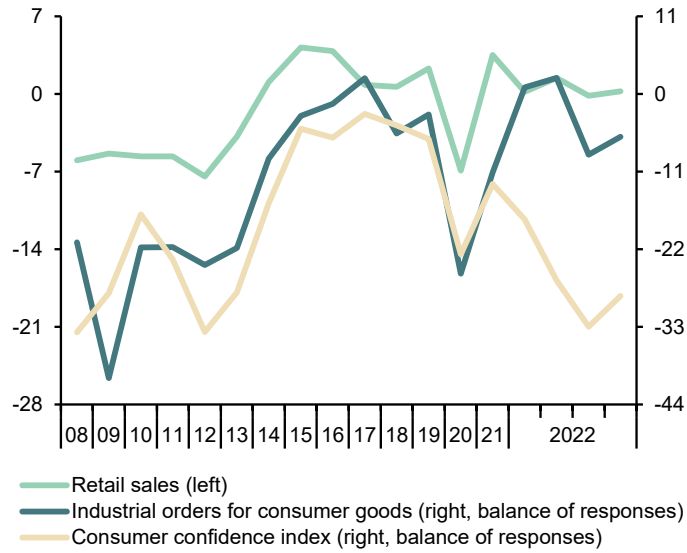


Chart 10.2 - Investment indicators

Annual percentage changes and balance of responses

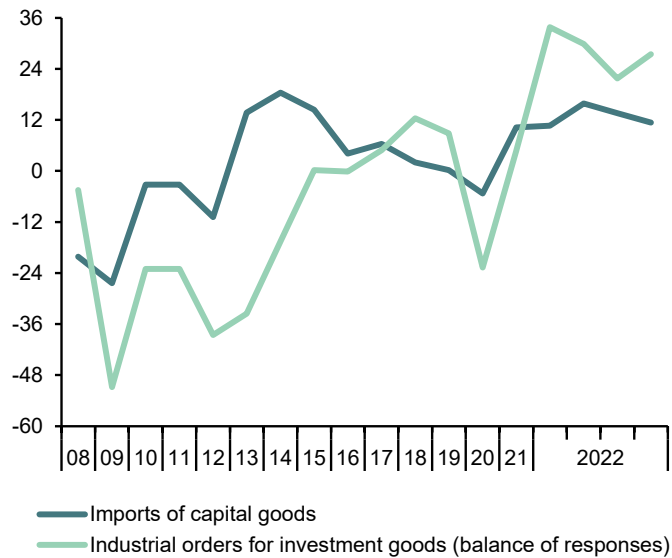


Table 11a

Labour market (I)

Forecasts in yellow

	Population aged 16 or more	Labour force		Employment		Unemployment		Participation rate aged 16 or more (a)	Employment rate aged 16 or more (b)	Unemployment rate (c)					
		Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted			Total	Aged 16-24	Spanish	Foreign		
		I	2=4+6	3=5+7	4	5	6			7	8	9	10=7/3	11	12
								Seasonally adjusted					Original		
								Percentage							
2015	38.5	22.9	--	17.9	--	5.1	--	59.5	46.4	22.1	48.3	20.9	30.5		
2016	38.5	22.8	--	18.3	--	4.5	--	59.2	47.6	19.6	44.4	18.7	26.6		
2017	38.7	22.7	--	18.8	--	3.9	--	58.8	48.7	17.2	38.6	16.3	23.8		
2018	38.9	22.8	--	19.3	--	3.5	--	58.6	49.7	15.2	34.4	14.3	21.9		
2019	39.3	23.0	--	19.8	--	3.2	--	58.6	50.4	14.1	32.6	13.2	20.1		
2020	39.6	22.7	--	19.2	--	3.5	--	57.4	48.5	15.5	38.3	14.1	24.6		
2021	39.7	23.2	--	19.8	--	3.4	--	58.5	49.9	14.8	34.9	13.5	23.1		
2022	39.9	23.4	--	20.4	--	3.0	--	58.6	51.1	12.8	--	--	--		
2023	40.0	23.4	--	20.5	--	2.9	--	58.5	51.3	12.3	--	--	--		
2020	IV	39.6	23.1	23.0	19.3	19.3	3.7	3.8	58.1	48.7	16.3	41.1	14.5	26.6	
2021	I	39.6	22.9	23.0	19.2	19.4	3.7	3.6	58.1	49.0	15.6	38.3	14.4	26.2	
	II	39.6	23.2	23.2	19.7	19.6	3.5	3.6	58.5	49.5	15.4	37.6	13.9	23.8	
	III	39.6	23.4	23.3	20.0	19.9	3.4	3.4	58.8	50.2	14.6	31.7	13.5	21.7	
	IV	39.7	23.3	23.3	20.2	20.1	3.1	3.1	58.6	50.7	13.5	31.7	12.2	20.9	
2022	I	39.8	23.3	23.4	20.1	20.3	3.2	3.1	58.9	51.1	13.3	29.0	12.5	21.3	
	II	39.8	23.4	23.4	20.5	20.4	2.9	3.0	58.7	51.3	12.6	28.0	11.5	18.9	
	III	40.0	23.5	23.4	20.5	20.4	3.0	3.0	58.5	51.1	12.7	31.6	11.8	18.4	
		Percentage changes (d)							Difference from one year ago						
2015	0.0	-0.2	--	3.0	--	-9.9	--	-0.1	1.4	-2.4	-4.9	-2.1	-4.0		
2016	0.1	-0.4	--	2.7	--	-11.4	--	-0.3	1.2	-2.4	-3.9	-2.2	-3.8		
2017	0.3	-0.4	--	2.6	--	-12.6	--	-0.4	1.1	-2.4	-5.9	-2.4	-2.8		
2018	0.6	0.3	--	2.7	--	-11.2	--	-0.2	1.0	-2.0	-4.2	-2.0	-1.9		
2019	1.0	1.0	--	2.3	--	-6.7	--	0.0	0.7	-1.2	-1.8	-1.1	-1.8		
2020	0.8	-1.3	--	-2.9	--	8.8	--	-1.2	-1.9	1.4	5.7	0.9	4.5		
2021	0.2	2.1	--	3.0	--	-2.8	--	1.1	1.3	-0.7	-3.4	-0.6	-1.5		
2022	0.5	0.8	--	3.1	--	-12.8	--	0.1	1.3	-2.0	--	--	--		
2023	0.4	0.0	--	0.6	--	-3.9	--	-0.2	0.1	-0.5	--	--	--		
2020	IV	0.5	-0.4	-0.4	-3.1	-3.1	16.5	16.6	-0.5	-1.8	2.4	9.7	1.6	6.6	
2021	I	0.3	-0.6	-0.6	-2.4	-2.4	10.3	10.6	-0.5	-1.3	1.6	6.5	1.1	5.0	
	II	0.2	5.6	5.7	5.7	5.7	5.2	5.3	3.0	2.6	0.0	-1.2	0.1	-1.2	
	III	0.1	2.4	2.3	4.5	4.5	-8.2	-8.6	1.3	2.1	-1.7	-9.5	-1.3	-3.9	
	IV	0.2	1.0	1.0	4.3	4.3	-16.6	-16.1	0.5	2.0	-2.8	-9.4	-2.3	-5.7	
2022	I	0.3	1.7	1.7	4.6	4.6	-13.1	-13.5	0.8	2.1	-2.3	-9.3	-2.0	-4.9	
	II	0.5	0.7	0.8	4.0	4.0	-17.6	-17.2	0.2	1.7	-2.7	-9.6	-2.5	-4.8	
	III	0.8	0.3	0.3	2.6	2.6	-12.8	-13.0	-0.3	0.9	-1.9	-0.2	-1.7	-3.3	

(a) Labour force aged 16 or more over population aged 16 or more. (b) Employed aged 16 or more over population aged 16 or more. (c) Unemployed in each group over labour force in that group. (d) Annual percentage changes for original data; quarterly percentage changes for S.A. data.

Source: INE (Labour Force Survey) and Funcas.

Chart 11a.1 - Labour force, employment and unemployment. SA

Annual growth rates and percentage of active population

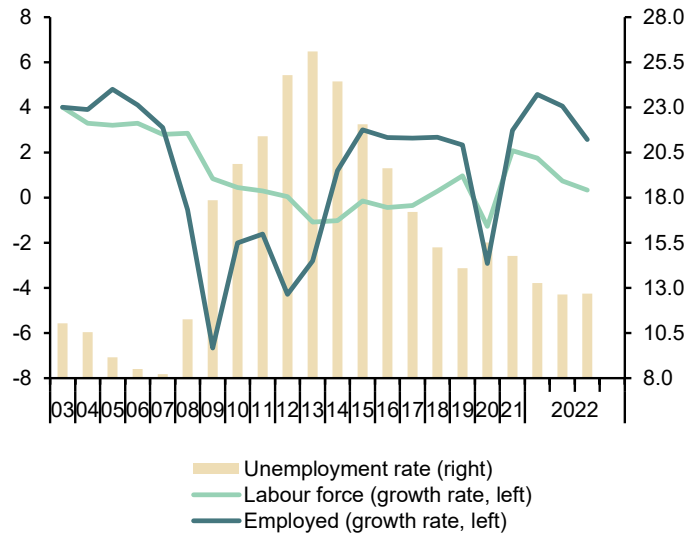


Chart 11a.2 - Unemployment rates

Percentage

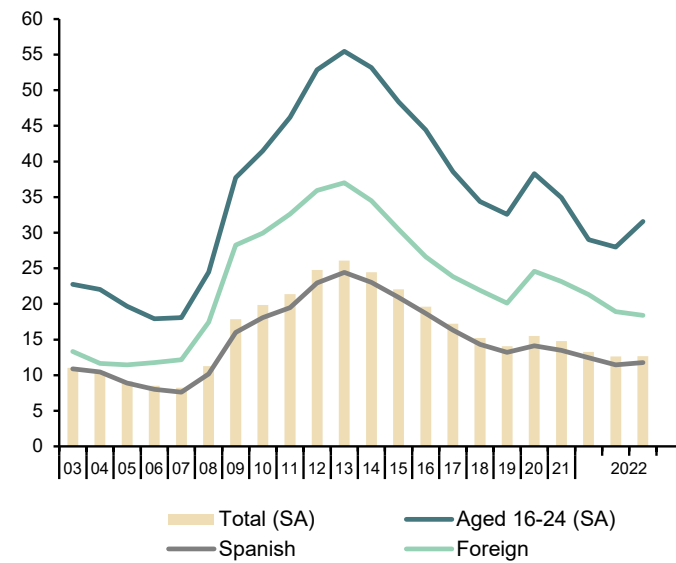


Table 11b

Labour market (II)

	Employed by sector				Employed by professional situation				Employed by duration of the working-day				
	Agriculture	Industry	Construction	Services	Employees			Self employed	Full-time	Part-time	Part-time employment rate (b)		
					Total	By type of contract							
						Temporary	Indefinite					Temporary employment rate (a)	
1	2	3	4	5=6+7	6	7	8=6/5	9	10	11	12		
Million (original data)													
2014	0.74	2.38	0.99	13.23	14.29	3.43	10.86	24.0	3.06	14.59	2.76	15.91	
2015	0.74	2.48	1.07	13.57	14.77	3.71	11.06	25.1	3.09	15.05	2.81	15.74	
2016	0.77	2.52	1.07	13.97	15.23	3.97	11.26	26.1	3.11	15.55	2.79	15.21	
2017	0.82	2.65	1.13	14.23	15.72	4.19	11.52	26.7	3.11	16.01	2.82	14.97	
2018	0.81	2.71	1.22	14.59	16.23	4.35	11.88	26.8	3.09	16.56	2.76	14.31	
2019	0.80	2.76	1.28	14.94	16.67	4.38	12.29	26.3	3.11	16.95	2.83	14.30	
2020	0.77	2.70	1.24	14.49	16.11	3.88	12.23	24.1	3.09	16.51	2.70	14.05	
2021	0.80	2.70	1.29	14.98	16.63	4.17	12.46	25.1	3.15	17.03	2.74	13.87	
2022 (c)	0.78	2.76	1.33	15.50	17.21	3.82	13.39	22.2	3.15	17.62	2.75	13.50	
2020	IV	0.78	2.69	1.28	14.59	16.24	4.00	12.24	24.6	3.10	16.55	2.80	14.47
2021	I	0.80	2.64	1.26	14.50	16.10	3.83	12.27	23.8	3.10	16.51	2.70	14.04
	II	0.81	2.67	1.32	14.87	16.51	4.14	12.37	25.1	3.16	16.84	2.84	14.41
	III	0.76	2.73	1.29	15.25	16.92	4.40	12.52	26.0	3.11	17.33	2.70	13.46
	IV	0.84	2.77	1.29	15.29	16.97	4.31	12.67	25.4	3.21	17.45	2.74	13.56
2022	I	0.83	2.70	1.32	15.24	16.93	4.10	12.83	24.2	3.16	17.28	2.81	13.99
	II	0.79	2.78	1.34	15.56	17.30	3.86	13.45	22.3	3.16	17.65	2.82	13.77
	III	0.73	2.81	1.33	15.68	17.40	3.51	13.89	20.2	3.14	17.92	2.62	12.76
Annual percentage changes								Difference from one year ago	Annual percentage changes			Difference from one year ago	
2014		-0.1	1.0	-3.5	1.7	1.5	5.3	0.4	0.9	-0.4	1.1	1.9	0.1
2015		0.1	4.3	8.1	2.6	3.4	8.3	1.9	1.1	1.1	3.2	1.9	-0.2
2016		5.1	1.6	0.0	2.9	3.1	6.8	1.8	0.9	0.7	3.3	-0.8	-0.5
2017		5.8	5.0	5.1	1.9	3.2	5.6	2.3	0.6	-0.1	2.9	1.0	-0.2
2018		-0.8	2.3	8.3	2.5	3.3	3.8	3.1	0.1	-0.5	3.5	-1.9	-0.7
2019		-1.9	2.0	4.6	2.4	2.7	0.6	3.5	-0.6	0.5	2.3	2.3	0.0
2020		-4.0	-2.3	-2.6	-3.0	-3.4	-11.4	-0.5	-2.2	-0.5	-2.6	-4.6	-0.3
2021		4.9	0.1	3.8	3.3	3.2	7.6	1.8	1.0	1.8	3.2	1.7	-0.2
2022 (d)		-1.0	3.1	2.7	4.2	4.3	-7.3	8.1	-2.7	0.9	4.3	0.3	-0.5
2020	IV	-1.5	-2.5	-0.3	-3.6	-3.6	-9.0	-1.7	-1.5	-0.6	-4.3	4.8	1.1
2021	I	1.7	-4.6	-1.3	-2.3	-2.8	-7.5	-1.2	-1.2	-0.6	-1.9	-5.3	-0.4
	II	6.2	0.9	13.3	6.0	6.3	19.2	2.6	2.7	2.7	4.4	14.1	1.1
	III	4.2	1.5	3.5	5.1	5.0	13.0	2.5	1.8	1.5	4.9	1.6	-0.4
	IV	7.4	2.7	0.4	4.8	4.5	7.7	3.5	0.8	3.5	5.5	-2.2	-0.9
2022	I	3.7	2.1	4.3	5.1	5.1	7.0	4.5	0.4	1.7	4.6	4.2	0.0
	II	-2.7	4.2	1.0	4.7	4.8	-6.8	8.7	-2.8	0.0	4.8	-0.6	-0.6
	III	-4.3	3.0	2.7	2.8	2.9	-20.2	11.0	-5.8	0.9	3.4	-2.8	-0.7

(a) Percentage of employees with temporary contract over total employees. (b) Percentage of part-time employed over total employed. (c) Average of available data. (d) Change of existing data over the same period last year.

Source: INE (Labour Force Survey).

Chart 11b.1 - Employment by sector

Annual percentage changes

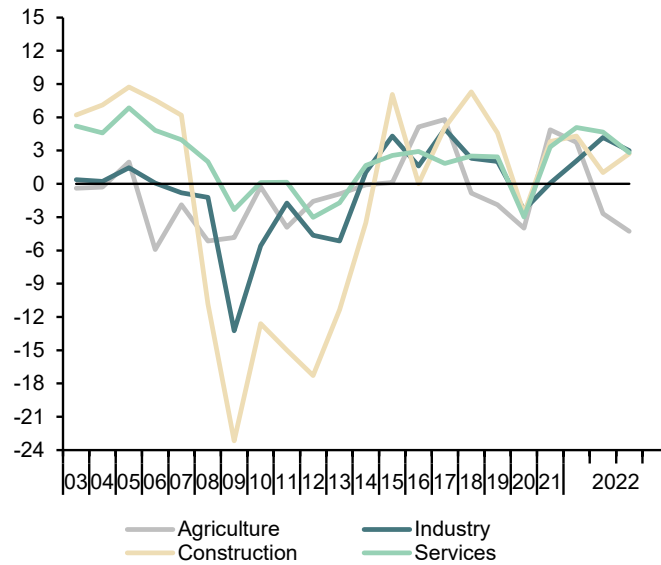


Chart 11b.2 - Employment by type of contract

Annual percentage changes and percentage over total employees

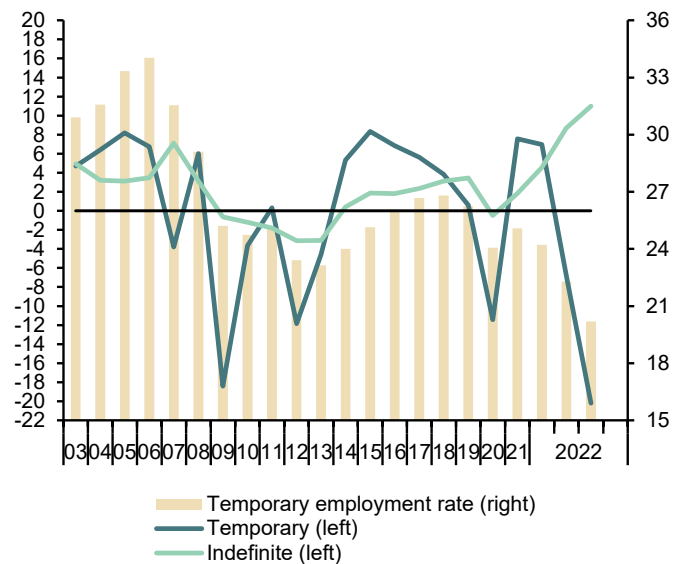


Table 12

Index of Consumer Prices

Forecasts in yellow

	Total	Total excluding food and energy	Excluding unprocessed food and energy				Unprocessed food	Energy	Food	
			Total	Non-energy industrial goods	Services	Processed food				
% of total in 2021	100.00	62.28	79.09	23.28	39.01	16.81	8.92	11.98	25.73	
Indexes, 2021 = 100										
2016	93.2	96.0	95.8	98.7	94.4	95.3	87.4	80.6	92.6	
2017	95.0	97.0	96.8	98.9	95.9	96.0	89.6	87.1	93.8	
2018	96.6	97.9	97.7	98.9	97.3	96.9	92.4	92.4	95.5	
2019	97.3	98.9	98.5	99.2	98.7	97.5	94.2	91.3	96.3	
2020	97.0	99.4	99.2	99.4	99.4	98.7	97.7	82.5	98.4	
2021	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
2022	108.4	103.7	105.2	104.2	103.3	110.6	110.9	127.9	110.7	
2023	112.5	107.3	111.1	107.7	107.0	125.6	120.6	113.3	123.8	
Annual percentage changes										
2016	-0.2	0.8	0.8	0.5	1.1	0.8	2.3	-8.6	1.3	
2017	2.0	1.1	1.1	0.2	1.6	0.7	2.6	8.0	1.3	
2018	1.7	0.9	0.9	0.0	1.5	1.0	3.1	6.1	1.8	
2019	0.7	1.0	0.9	0.3	1.4	0.5	1.9	-1.2	0.9	
2020	-0.3	0.6	0.7	0.2	0.8	1.3	3.7	-9.6	2.1	
2021	3.1	0.6	0.8	0.6	0.6	1.3	2.4	21.2	1.7	
2022	8.4	3.7	5.2	4.2	3.3	10.6	10.9	27.9	10.7	
2023	3.8	3.5	5.6	3.3	3.6	13.5	8.8	-11.5	11.9	
2022	Jan	6.1	2.0	2.4	2.4	1.7	4.0	5.2	33.0	4.4
	Feb	7.6	2.4	3.0	3.0	2.0	5.3	5.0	44.3	5.2
	Mar	9.8	2.7	3.4	3.2	2.4	6.2	6.7	60.9	6.4
	Apr	8.3	3.3	4.4	3.3	3.3	8.7	10.5	33.7	9.3
	May	8.7	3.5	4.9	3.6	3.4	10.0	10.1	34.2	10.1
	Jun	10.2	4.0	5.5	4.2	3.8	11.0	13.6	40.8	11.9
	Jul	10.8	4.5	6.1	5.3	3.9	11.9	13.4	41.4	12.4
	Aug	10.5	4.7	6.4	5.6	4.1	12.5	12.9	37.4	12.7
	Sep	8.9	4.4	6.2	5.3	3.8	12.8	13.8	22.4	13.1
	Oct	7.3	4.2	6.2	4.8	3.9	13.4	15.3	8.0	14.0
	Nov	6.8	4.1	6.3	4.6	3.8	14.7	12.6	4.5	14.0
	Dec	5.7	4.4	7.0	5.2	4.0	16.4	11.4	-6.9	14.7
2023	Jan	5.3	4.0	6.9	4.1	3.9	17.7	12.3	-9.9	15.8
	Feb	5.1	4.0	6.8	3.9	4.0	17.1	13.3	-10.9	15.8
	Mar	2.8	4.0	6.7	3.9	4.1	17.0	11.5	-24.0	15.1
	Apr	4.2	3.7	6.1	3.9	3.6	14.9	8.3	-10.9	12.6
	May	3.8	3.6	5.8	3.8	3.5	13.9	8.9	-12.5	12.2
	Jun	2.3	3.4	5.5	3.5	3.3	13.4	6.8	-19.5	11.1
	Jul	2.2	3.3	5.3	2.6	3.7	12.9	7.0	-19.4	10.8
	Aug	2.2	3.3	5.3	2.5	3.8	12.7	7.2	-19.2	10.8
	Sep	3.1	3.3	5.3	2.6	3.6	12.7	7.6	-13.4	10.9
	Oct	4.2	3.2	5.1	3.1	3.3	12.1	7.2	-4.4	10.4
	Nov	5.1	3.2	4.8	3.3	3.2	10.8	8.3	3.8	9.9
	Dec	5.4	2.9	4.1	2.6	3.1	8.6	7.6	11.9	8.3

Source: INE and Funcas (Forecasts).

Chart 12.1 - Inflation rate (I)

Annual percentage changes

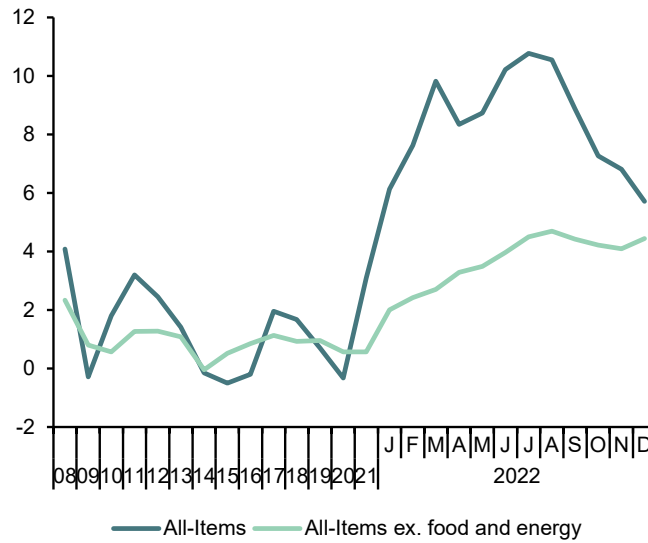


Chart 12.2 - Inflation rate (II)

Annual percentage changes

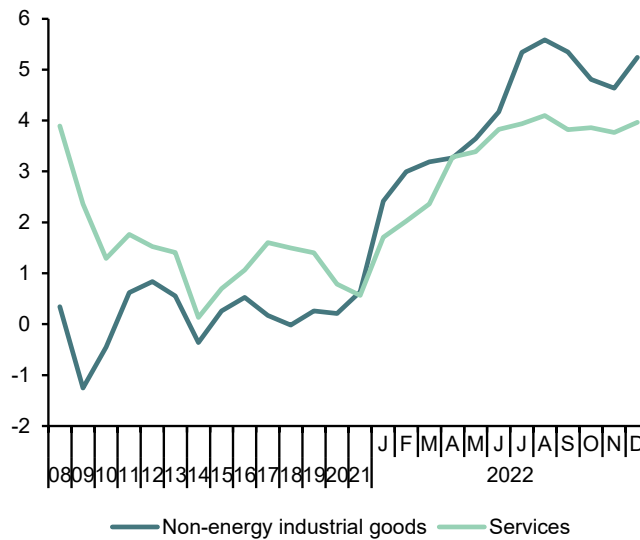


Table 13

Other prices and costs indicators

	GDP deflator (a)	Industrial producer prices		Housing prices		Urban land prices (M. Public Works)	Labour Costs Survey				Wage increase agreed in collective bargaining	
		Total	Excluding energy	Housing Price Index (INE)	m ² average price (M. Public Works)		Total labour costs per worker	Wage costs per worker	Other cost per worker	Total labour costs per hour worked		
		2015=100	2015=100	2007=100			2000=100					
2014	99.5	102.1	99.7	64.5	71.0	52.6	143.3	140.9	150.7	155.4	--	
2015	100.0	100.0	100.0	66.8	71.7	54.9	144.2	142.5	149.6	156.5	--	
2016	100.3	96.9	99.6	70.0	73.1	57.8	143.6	142.1	148.4	156.2	--	
2017	101.6	101.1	101.9	74.3	74.8	58.2	144.0	142.3	149.1	156.2	--	
2018	102.9	104.1	103.0	79.3	77.4	57.3	145.4	143.8	150.6	158.5	--	
2019	104.4	103.6	103.2	83.3	79.8	57.7	148.7	146.4	155.7	162.7	--	
2020	105.7	99.2	103.1	85.0	78.9	52.3	145.4	142.6	154.1	173.4	--	
2021	108.1	116.4	110.4	88.2	80.6	54.3	153.9	151.5	161.5	172.3	--	
2022 (b)	111.3	157.8	125.1	94.5	84.5	56.9	157.4	154.6	166.0	172.2	--	
2021	I	106.9	104.0	106.2	85.4	79.0	49.0	147.3	142.9	160.7	163.4	--
	II	106.8	110.3	109.5	87.5	80.2	58.3	156.4	154.6	161.8	170.8	--
	III	108.1	118.2	111.4	89.3	80.8	52.4	149.7	146.2	160.3	175.2	--
	IV	110.5	132.9	114.4	90.4	82.4	57.5	162.5	162.2	163.3	179.6	--
2022	I	110.5	147.1	119.6	92.7	84.3	58.3	154.2	150.3	166.2	165.5	--
	II	111.0	158.7	126.4	94.5	84.6	58.4	162.3	161.3	165.3	172.8	--
	III	112.5	165.4	127.4	96.2	84.6	53.9	155.7	152.2	166.5	178.3	--
	IV (b)	--	161.2	128.2	--	--	--	--	--	--	--	--
2022	Sep	--	166.9	127.6	--	--	--	--	--	--	--	--
	Oct	--	163.0	128.1	--	--	--	--	--	--	--	--
	Nov	--	159.4	128.4	--	--	--	--	--	--	--	--
Annual percent changes (c)												
2014	-0.2	-1.3	-0.8	0.3	-2.4	-4.6	-0.3	-0.1	-1.0	0.1	0.5	
2015	0.5	-2.1	0.3	3.6	1.1	4.3	0.6	1.1	-0.7	0.6	0.7	
2016	0.3	-3.1	-0.4	4.7	1.9	5.3	-0.4	-0.3	-0.8	-0.1	1.0	
2017	1.3	4.4	2.3	6.2	2.4	0.8	0.2	0.1	0.5	0.0	1.4	
2018	1.2	3.0	1.1	6.7	3.4	-1.6	1.0	1.0	1.0	1.5	1.8	
2019	1.4	-0.4	0.1	5.1	3.2	0.7	2.2	1.9	3.4	2.6	2.3	
2020	1.2	-4.3	0.0	2.1	-1.1	-9.4	-2.2	-2.6	-1.0	6.6	1.9	
2021	2.3	17.3	7.0	3.7	2.1	3.7	5.9	6.3	4.8	-0.6	1.5	
2022 (d)	3.8	37.8	13.9	8.1	5.6	6.9	4.2	4.5	3.2	1.4	2.8	
2021	I	1.8	2.6	2.6	0.9	-0.9	-16.9	1.4	1.0	2.6	3.1	1.6
	II	1.4	14.5	6.7	3.3	2.4	16.3	13.2	14.4	9.9	-5.3	1.6
	III	2.2	19.1	8.4	4.2	2.6	6.2	4.9	5.0	4.4	0.6	1.5
	IV	3.8	33.1	10.4	6.4	4.4	12.7	4.5	5.1	2.7	-0.5	1.5
2022	I	3.3	41.5	12.7	8.5	6.7	19.1	4.7	5.2	3.4	1.3	2.4
	II	3.9	43.9	15.4	8.0	5.5	0.2	3.8	4.3	2.2	1.2	2.5
	III	4.1	40.0	14.3	7.6	4.7	2.9	4.0	4.1	3.9	1.8	2.6
	IV (e)	--	21.3	12.1	--	--	--	--	--	--	--	2.8
2022	Oct	--	35.6	13.9	--	--	--	--	--	--	--	2.6
	Nov	--	25.0	13.2	--	--	--	--	--	--	--	2.7
	Dec	--	20.7	12.1	--	--	--	--	--	--	--	2.8

(a) Seasonally adjusted. (b) Period with available data. (c) Percent change from the previous quarter for quarterly data, from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Growth of the average of available months over the monthly average of the previous quarter.

Sources: M. of Public Works, M. of Labour and INE (National Statistics Institute).

Chart 13.1 - Housing and urban land prices

Index (2007=100)

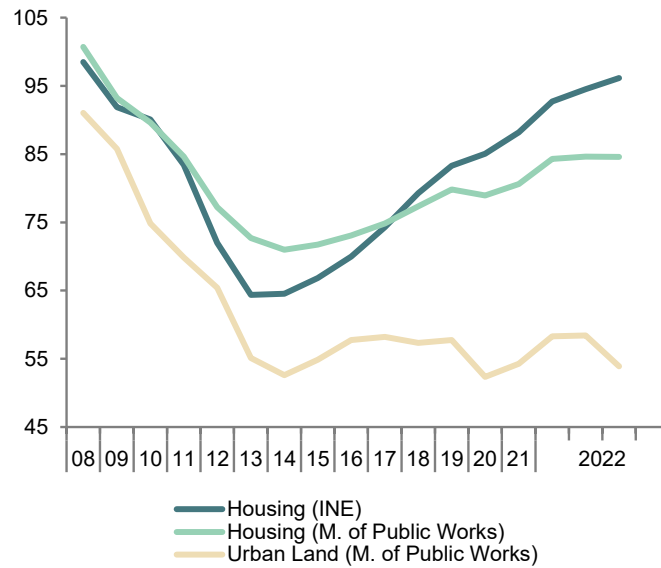


Chart 13.2 - Wage costs

Annual percent change

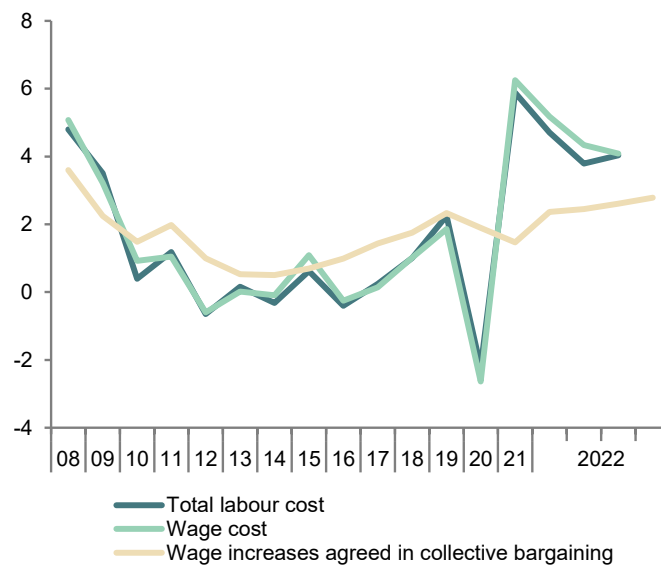


Table 14

External trade (a)

	Exports of goods			Imports of goods			Exports to EU countries (monthly average)	Exports to non-EU countries (monthly average)	Total Balance of goods (monthly average)	Balance of goods excluding energy (monthly average)	Balance of goods with EU countries (monthly average)	
	Nominal	Prices	Real	Nominal	Prices	Real						
	2005=100			2005=100								EUR Billions
2015	161.2	110.1	146.5	118.0	104.6	112.9	12.0	8.9	-2.1	0.2	0.2	
2016	165.4	108.2	153.0	117.5	101.3	116.1	12.5	8.8	-1.4	0.3	0.4	
2017	178.2	108.9	163.7	129.8	106.1	122.4	13.6	9.5	-2.2	0.0	0.6	
2018	184.0	112.1	164.2	137.2	110.9	123.8	14.1	9.7	-2.9	-0.3	0.7	
2019	187.7	112.9	166.3	138.4	110.8	125.0	14.3	9.9	-2.6	-0.3	0.8	
2020	170.1	112.1	151.8	118.9	107.4	110.8	13.2	8.8	-1.1	0.3	1.3	
2021	204.3	120.9	168.9	147.6	118.1	125.0	16.3	10.1	-2.2	0.1	2.1	
2022 (b)	251.6	143.3	175.6	198.7	149.3	133.1	19.9	12.0	-6.0	-1.3	3.1	
2022	IV	180.9	112.5	160.8	123.8	107.4	14.0	9.2	-0.7	0.5	1.2	
2021	I	187.3	115.2	162.6	129.9	110.6	14.8	9.2	-1.1	0.7	1.8	
	II	208.8	119.4	174.9	145.8	115.8	16.4	10.3	-1.4	0.5	1.9	
	III	210.6	122.4	172.0	150.4	119.6	16.7	10.3	-2.1	0.3	2.4	
	IV	215.6	126.2	170.9	164.4	124.1	17.1	10.6	-4.1	-0.9	2.2	
2022	I	232.9	136.7	170.4	181.0	140.5	19.1	10.8	-5.1	-1.2	3.1	
	II	262.1	144.6	181.2	207.3	146.8	20.4	13.2	-6.5	-1.2	2.8	
	III	262.9	145.3	180.9	208.2	155.3	21.1	12.6	-6.5	-1.4	3.4	
2020	Aug	275.8	142.1	194.1	219.6	155.8	22.1	13.2	-7.1	-2.2	3.5	
	Sep	264.2	142.8	185.0	203.7	156.2	21.3	12.6	-5.5	-0.7	3.8	
	Oct	242.1	153.1	158.1	197.1	165.5	19.3	11.7	-7.0	-2.9	2.4	
Percentage changes (c)									Percentage of GDP			
2015		3.8	0.6	3.2	3.5	-2.5	6.1	5.3	1.8	-2.3	0.2	0.2
2016		2.6	-1.7	4.4	-0.4	-3.1	2.8	4.7	-0.1	-1.6	0.3	0.4
2017		7.7	0.7	7.0	10.5	4.7	5.5	8.3	6.9	-2.3	0.0	0.7
2018		3.3	3.0	0.3	5.7	4.5	1.2	3.9	2.5	-2.9	-0.3	0.7
2019		2.0	0.7	1.3	0.9	-0.1	0.9	1.8	2.2	-2.5	-0.3	0.8
2020		-9.4	-0.7	-8.8	-14.1	-3.1	-11.4	-8.2	-11.1	-1.2	0.3	1.4
2021		20.1	7.9	11.3	24.2	10.0	12.8	23.8	14.5	-2.2	0.1	2.0
2022 (d)		23.6	18.7	4.2	38.0	25.9	9.7	20.4	21.9	--	--	--
2022	IV	2.6	1.8	0.7	3.0	1.8	1.1	1.1	4.9	-0.8	0.5	1.3
2021	I	3.5	2.4	1.1	5.0	3.0	1.9	6.4	-0.8	-1.1	0.7	1.8
	II	11.5	3.6	7.6	12.3	4.7	7.2	10.8	12.6	-1.5	0.5	1.9
	III	0.9	2.6	-1.6	3.2	3.2	-0.1	1.6	-0.2	-2.0	0.2	2.3
	IV	2.4	3.0	-0.7	9.3	3.8	5.3	2.2	2.5	-3.9	-0.8	2.1
2022	I	8.0	8.4	-0.3	10.1	13.2	-2.8	11.8	1.8	-4.8	-1.1	2.9
	II	12.5	5.8	6.4	14.6	4.5	9.7	6.8	22.8	-5.9	-1.1	2.6
	III	0.3	0.5	-0.2	0.4	5.8	-5.1	3.3	-4.3	-5.9	-1.3	3.1
2020	Aug	10.9	-6.5	18.6	9.1	1.4	7.6	11.9	9.3	--	--	--
	Sep	-4.2	0.5	-4.7	-7.3	0.2	-7.5	-3.7	-5.0	--	--	--
	Oct	-8.4	7.2	-14.5	-3.2	6.0	-8.7	-9.5	-6.5	--	--	--

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Percent change from the previous quarter for quarterly data, from the previous month for monthly data. (d) Growth of available period over the same period of the previous year.

Source: Ministry of Economy.

Chart 14.1 - External trade (real)

Year on year percent change

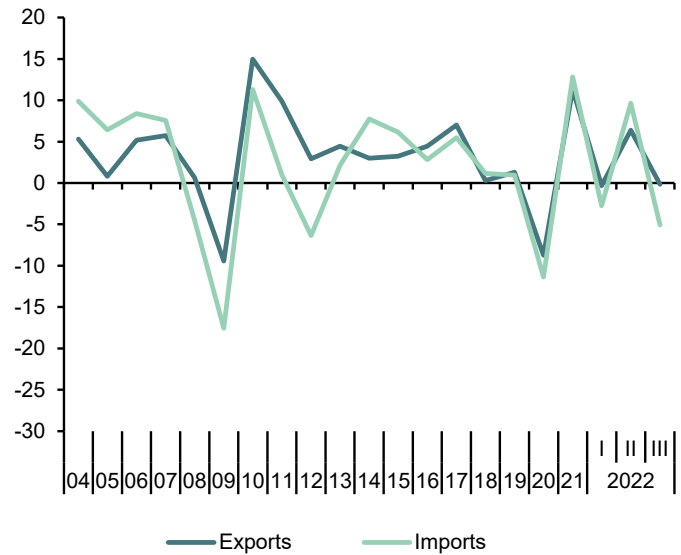


Chart 14.2 - Trade balance

EUR Billions, moving sum of 12 months

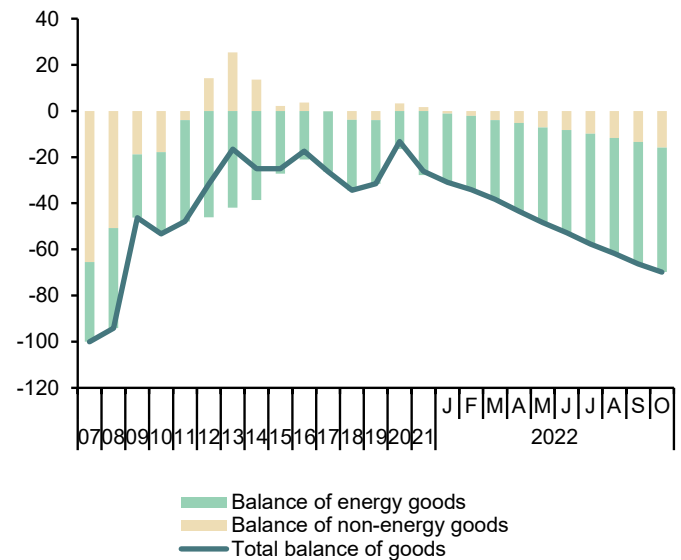


Table 15

Balance of Payments (according to IMF manual)
 (Net transactions)

	Current account					Capital account	Current and capital accounts	Financial account						Errors and omissions	
	Total	Goods	Services	Primary Income	Secondary Income			Financial account, excluding Bank of Spain					Bank of Spain		
								Total	Direct investment	Portfolio investment	Other investment	Financial derivatives			
	1=2+3+4+5	2	3	4	5	6	7=1+6	8=9+10+11+12	9	10	11	12	13	14	
EUR billions															
2015	21.83	-20.68	53.44	-0.24	-10.69	6.98	28.80	69.47	30.07	-5.16	40.75	3.81	-40.79	-0.12	
2016	35.37	-14.28	58.70	2.75	-11.80	2.43	37.80	89.49	11.19	46.65	29.09	2.57	-54.02	-2.34	
2017	32.21	-22.04	63.93	0.44	-10.13	2.84	35.05	68.01	12.46	25.08	22.74	7.72	-32.63	0.33	
2018	22.61	-29.31	62.00	1.73	-11.81	5.81	28.42	46.64	-16.87	15.13	49.43	-1.05	-14.25	3.98	
2019	26.24	-26.63	63.24	2.20	-12.58	4.22	30.45	10.07	7.95	-49.96	59.17	-7.09	15.76	-4.63	
2020	6.79	-8.63	24.92	2.74	-12.24	5.13	11.93	90.94	17.66	48.60	31.58	-6.91	-81.88	-2.87	
2021	11.52	-19.71	37.63	6.34	-12.74	10.91	22.44	7.48	-16.92	2.42	19.00	2.97	16.03	1.07	
2022 (a)	1.73	-46.72	58.76	1.72	-12.02	7.73	9.46	-1.27	10.04	-55.87	49.78	-5.21	22.28	11.56	
2020	IV	5.43	-0.69	5.30	3.96	-3.15	2.78	8.20	6.23	2.14	-7.38	11.19	0.28	5.70	3.73
2021	I	-0.52	-1.27	3.36	1.29	-3.90	1.06	0.54	2.10	-4.56	3.66	1.33	1.67	-3.00	-1.44
	II	2.26	-1.11	6.27	0.78	-3.68	1.78	4.04	24.11	-16.20	15.43	24.71	0.16	-14.40	5.66
	III	4.48	-6.96	13.93	0.40	-2.89	3.00	7.48	7.05	-2.24	2.20	6.41	0.68	6.88	6.45
	IV	5.30	-10.37	14.07	3.87	-2.27	5.07	10.37	13.38	6.14	-6.16	16.97	-3.57	-3.72	-0.71
2022	I	-3.56	-13.67	12.03	1.61	-3.53	1.49	-2.07	-2.06	-2.01	-24.60	24.33	0.22	2.66	2.68
	II	2.25	-14.52	20.76	0.00	-4.00	3.47	5.72	22.09	9.93	-10.68	23.46	-0.62	-3.87	12.50
	III	3.04	-18.54	25.96	0.12	-4.50	2.78	5.82	-21.30	2.12	-20.59	1.99	-4.82	23.49	-3.62
			Goods and Services		Primary and Secondary Income										
2022	Aug	0.61	1.84		-1.23	0.53	1.14	9.18	-3.47	-2.42	17.03	-1.95	-4.38	3.66	
	Sep	0.68	1.77		-1.08	1.09	1.77	-11.26	-1.46	-8.82	-1.80	0.81	12.80	-0.23	
	Oct	2.70	3.67		-0.97	0.81	3.51	-6.09	1.97	12.58	-19.05	-1.59	4.06	-5.54	
Percentage of GDP															
2015		2.0	-1.9	5.0	0.0	-1.0	0.6	2.7	6.4	2.8	-0.5	3.8	0.4	-3.8	0.0
2016		3.2	-1.3	5.3	0.2	-1.1	0.2	3.4	8.0	1.0	4.2	2.6	0.2	-4.8	-0.2
2017		2.8	-1.9	5.5	0.0	-0.9	0.2	3.0	5.9	1.1	2.2	2.0	0.7	-2.8	0.0
2018		1.9	-2.4	5.2	0.1	-1.0	0.5	2.4	3.9	-1.4	1.3	4.1	-0.1	-1.2	0.3
2019		2.1	-2.1	5.1	0.2	-1.0	0.3	2.4	0.8	0.6	-4.0	4.8	-0.6	1.3	-0.4
2020		0.6	-0.8	2.2	0.2	-1.1	0.5	1.1	8.1	1.6	4.3	2.8	-0.6	-7.3	-0.3
2021		1.0	-1.6	3.1	0.5	-1.1	0.9	1.9	0.6	-1.4	0.2	1.6	0.2	1.3	0.1
2022 (a)		0.2	-4.8	6.0	0.2	-1.2	0.8	1.0	-0.1	1.0	-5.7	5.1	-0.5	2.3	1.2
2020	IV	1.8	-0.2	1.8	1.3	-1.1	0.9	2.8	2.1	0.7	-2.5	3.8	0.1	1.9	1.3
2021	I	-0.2	-0.5	1.2	0.5	-1.4	0.4	0.2	0.8	-1.6	1.3	0.5	0.6	-1.1	-0.5
	II	0.8	-0.4	2.1	0.3	-1.2	0.6	1.3	8.0	-5.4	5.2	8.2	0.1	-4.8	1.9
	III	1.5	-2.3	4.7	0.1	-1.0	1.0	2.5	2.4	-0.7	0.7	2.1	0.2	2.3	2.2
	IV	1.6	-3.2	4.3	1.2	-0.7	1.5	3.1	4.1	1.9	-1.9	5.2	-1.1	-1.1	-0.2
2022	I	-1.1	-4.4	3.9	0.5	-1.1	0.5	-0.7	-0.7	-0.6	-7.9	7.8	0.1	0.9	0.9
	II	0.7	-4.4	6.3	0.0	-1.2	1.0	1.7	6.7	3.0	-3.2	7.1	-0.2	-1.2	3.8
	III	0.9	-5.6	7.9	0.0	-1.4	0.8	1.8	-6.5	0.6	-6.3	0.6	-1.5	7.1	-1.1

(a) Period with available data.

Source: Bank of Spain.

Chart 15.1 - Balance of payments: Current and capital accounts

EUR Billions, 12-month cumulated

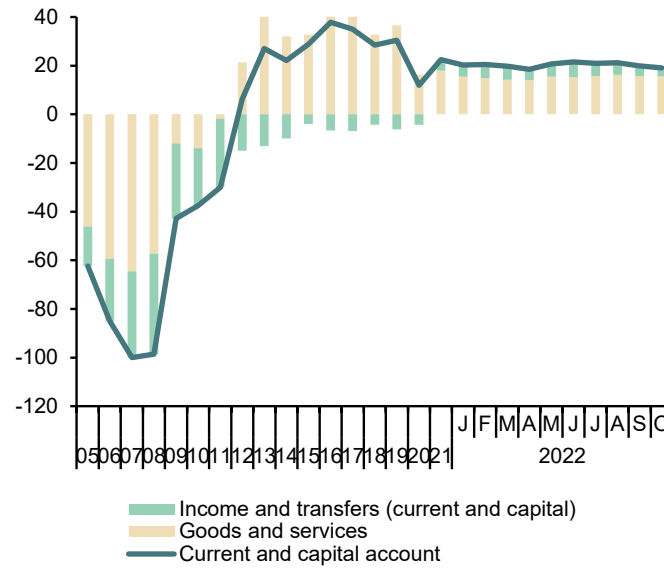


Chart 15.2 - Balance of payments: Financial account

EUR Billions, 12-month cumulated

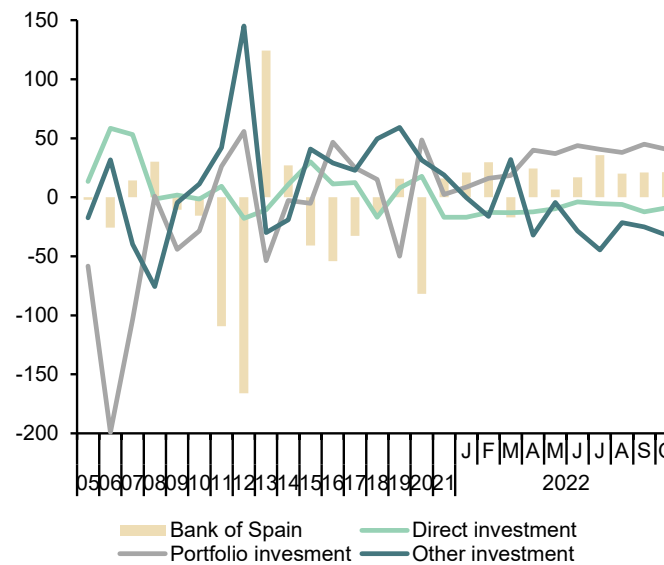


Table 16

Competitiveness indicators in relation to EMU

	Relative Unit Labour Costs in manufacturing (Spain/Rest of EMU) (a)			Harmonized Consumer Prices			Producer prices			Real Effective Exchange Rate in relation to developed countries 1999 I = 100
	Relative hourly wages	Relative hourly productivity	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	
	1998=100			2015=100			2015=100			
2014	102.2	99.7	102.6	100.6	100.0	100.7	102.1	102.8	99.3	112.2
2015	99.4	99.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	107.8
2016	98.1	96.7	101.4	99.7	100.3	99.4	96.9	97.9	98.9	108.0
2017	97.7	96.4	101.4	101.7	101.8	99.9	101.2	100.7	100.5	109.7
2018	97.4	93.3	104.4	103.5	103.6	99.9	103.8	103.3	100.4	110.5
2019	97.6	94.0	103.9	104.3	104.8	99.5	103.4	103.7	99.8	109.1
2020	95.4	93.3	102.2	103.9	105.1	98.9	99.8	101.2	98.6	108.5
2021	97.1	94.9	102.4	107.0	107.8	99.3	114.6	111.0	106.2	108.9
2022 (b)	--	--	--	115.9	116.8	99.3	148.6	140.2	106.0	108.7
2020	IV	--	--	104.1	105.0	99.1	100.4	101.4	99.0	109.3
2021	I	--	--	104.1	105.8	98.4	104.1	104.1	100.1	108.2
	II	--	--	106.9	107.4	99.5	109.5	107.2	102.2	109.5
	III	--	--	106.9	108.0	99.0	116.3	112.2	103.7	108.3
	IV	--	--	110.2	109.9	100.3	128.3	120.4	106.6	109.4
2022	I	--	--	112.3	112.3	100.0	139.8	130.5	107.2	108.9
	II	--	--	116.5	116.1	100.4	149.7	138.1	108.4	109.2
	III	--	--	117.6	118.1	99.6	154.5	147.7	104.6	107.8
2020	Oct	--	--	117.6	121.0	97.2	152.6	147.4	103.5	105.6
	Nov	--	--	117.2	121.0	96.9	150.0	145.9	102.8	105.7
	Dec	--	--	117.2	120.5	97.3	--	--	--	--
	Annual percentage changes			Differential	Annual percentage changes			Differential	Annual percentage changes	
2014	-1.7	0.2	-1.9	-0.2	0.4	-0.6	-1.3	-1.5	0.2	13.0
2015	-2.8	0.2	-3.0	-0.6	0.0	-0.6	-2.0	-2.8	0.8	-3.9
2016	-1.3	-3.2	2.0	-0.3	0.3	-0.6	-3.1	-2.1	-1.0	0.2
2017	-0.4	-0.4	0.0	2.0	1.5	0.5	4.5	2.8	1.7	1.5
2018	-0.3	-3.2	2.9	1.7	1.7	0.0	2.5	2.6	-0.1	0.8
2019	0.2	0.7	-0.5	0.8	1.2	-0.4	-0.3	0.4	-0.6	-1.3
2020	-2.3	-0.7	-1.6	-0.3	0.3	-0.6	-3.6	-2.5	-0.8	-0.6
2021	1.8	1.6	0.1	3.0	2.6	0.4	14.8	9.7	5.1	0.4
2022 (c)	--	--	--	8.3	8.4	-0.1	38.8	30.1	8.7	0.2
2020	IV	--	--	-0.8	-0.3	-0.5	-0.8	-0.3	-0.5	0.4
2021	I	--	--	0.5	1.1	-0.6	2.5	1.2	1.3	0.4
	II	--	--	2.3	1.8	0.5	12.5	7.3	5.2	0.9
	III	--	--	3.4	2.8	0.6	16.6	11.5	5.1	0.1
	IV	--	--	5.8	4.6	1.2	27.8	18.8	9.0	0.1
2022	I	--	--	7.9	6.1	1.8	34.3	25.4	8.9	0.7
	II	--	--	8.9	8.0	0.9	36.7	28.9	7.8	-0.3
	III	--	--	10.0	9.3	0.7	32.9	31.6	1.3	-0.4
2020	Oct	--	--	7.3	10.6	-3.3	20.9	24.5	-3.6	-3.5
	Nov	--	--	6.7	10.1	-3.4	17.6	21.4	-3.8	-3.0
	Dec	--	--	5.5	9.2	-3.7	--	--	--	--

(a) EMU excluding Ireland and Spain. (b) Period with available data. (c) Growth of available period over the same period of the previous year.

Sources: Eurostat. Bank of Spain and Funcas.

Chart 16.1 - Relative Unit Labour Costs in manufacturing (Spain/Rest of EMU)

1998=100

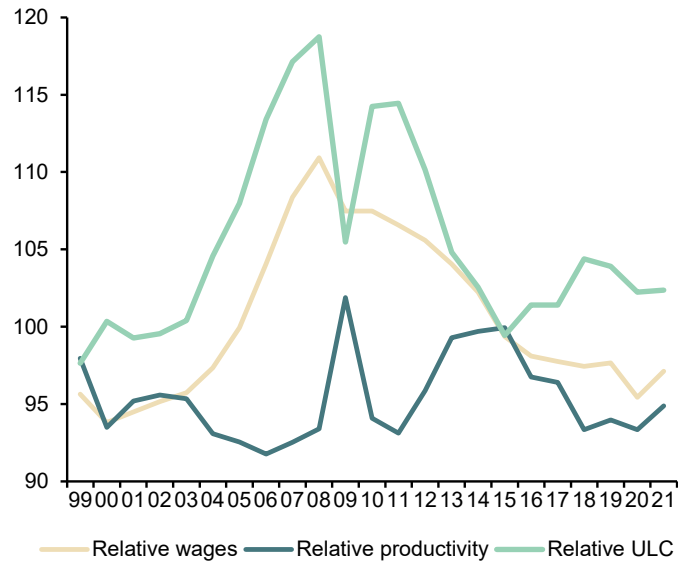


Chart 16.2 - Harmonized Consumer Prices

Annual growth in % and percentage points

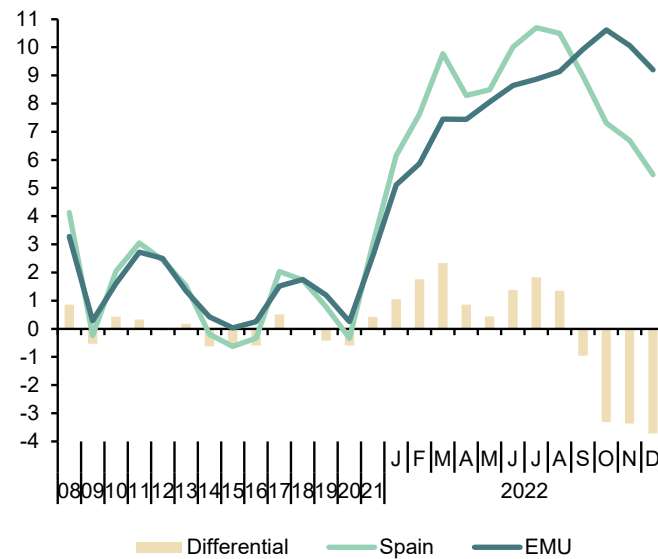


Table 17a

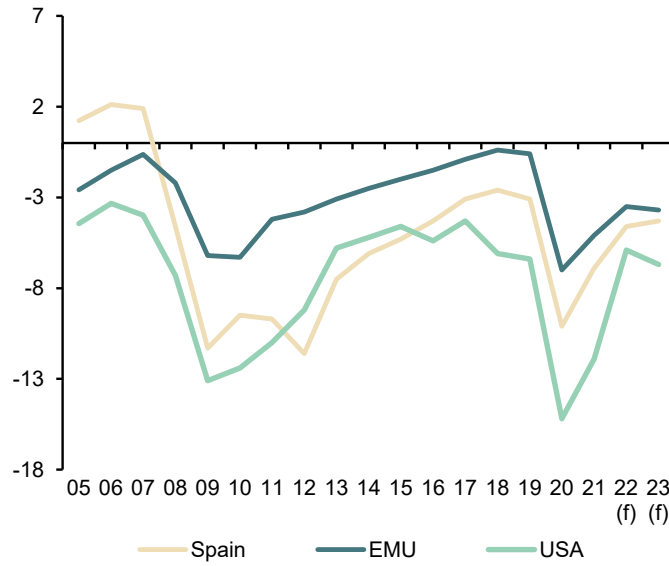
Imbalances: International comparison (I)
(In yellow: European Commission Forecasts)

	Government net lending (+) or borrowing (-)			Government consolidated gross debt			Current Account Balance of Payments (National Accounts)		
	Spain	EMU	USA	Spain	EMU	USA	Spain	EMU	USA
Billions of national currency									
2008	-50.7	-207.9	-1,084.5	440.6	6,723.6	10,699.8	-98.8	-62.2	-704.2
2009	-120.6	-578.8	-1,896.6	569.5	7,466.8	12,311.3	-43.7	47.3	-383.1
2010	-102.2	-598.7	-1,863.1	649.2	8,215.0	14,025.2	-39.2	51.6	-439.8
2011	-103.6	-416.0	-1,709.1	743.0	8,677.1	15,222.9	-29.0	77.2	-460.3
2012	-119.1	-374.0	-1,493.3	927.8	9,172.9	16,432.7	0.9	211.5	-423.9
2013	-76.8	-305.1	-977.3	1,025.7	9,502.3	17,352.0	20.8	271.4	-352.1
2014	-63.1	-253.1	-910.4	1,084.8	9,745.8	18,141.4	17.5	314.9	-376.2
2015	-57.2	-209.1	-837.2	1,113.7	9,866.3	18,922.2	21.8	351.6	-424.7
2016	-47.9	-159.0	-1,010.1	1,145.1	10,041.3	19,976.8	35.4	383.7	-403.7
2017	-36.2	-105.0	-833.7	1,183.4	10,127.9	20,492.7	32.2	400.3	-371.4
2018	-31.2	-49.8	-1,261.8	1,208.9	10,239.8	21,974.1	22.6	408.1	-441.2
2019	-38.1	-76.2	-1,363.9	1,223.4	10,325.8	23,201.4	26.2	328.5	-452.6
2020	-113.2	-807.2	-3,198.8	1,345.8	11,388.6	27,747.8	6.8	295.2	-592.5
2021	-82.9	-629.8	-2,772.4	1,427.2	12,012.1	29,617.2	11.5	425.0	-861.4
2022	-60.5	-460.1	-1,494.9	1,487.7	12,498.8	31,153.7	11.2	200.7	-966.5
2023	-59.5	-518.1	-1,761.8	1,546.2	13,019.9	32,925.6	11.5	264.2	-848.8
Percentage of GDP									
2008	-4.6	-2.2	-7.3	39.7	69.5	72.4	-8.9	-0.6	-4.8
2009	-11.3	-6.2	-13.1	53.3	80.1	85.0	-4.1	0.5	-2.6
2010	-9.5	-6.3	-12.4	60.5	85.7	93.2	-3.7	0.5	-2.9
2011	-9.7	-4.2	-11.0	69.9	88.2	97.6	-2.7	0.8	-3.0
2012	-11.6	-3.8	-9.2	90.0	92.8	101.1	0.1	2.2	-2.6
2013	-7.5	-3.1	-5.8	100.5	95.2	103.0	2.0	2.7	-2.1
2014	-6.1	-2.5	-5.2	105.1	95.4	103.4	1.7	3.1	-2.1
2015	-5.3	-2.0	-4.6	103.3	93.4	103.9	2.0	3.3	-2.3
2016	-4.3	-1.5	-5.4	102.7	92.4	106.9	3.2	3.5	-2.2
2017	-3.1	-0.9	-4.3	101.8	89.8	105.2	2.8	3.6	-1.9
2018	-2.6	-0.4	-6.1	100.4	87.9	107.0	1.9	3.5	-2.1
2019	-3.1	-0.6	-6.4	98.2	85.7	108.5	2.1	2.7	-2.1
2020	-10.1	-7.0	-15.2	120.4	99.0	131.8	0.6	2.6	-2.8
2021	-6.9	-5.1	-11.9	118.3	97.1	127.0	1.0	3.5	-3.7
2022	-4.6	-3.5	-5.9	114.0	93.6	122.8	0.9	1.5	-3.8
2023	-4.3	-3.7	-6.7	112.5	92.3	124.7	0.8	1.9	-3.2

Source: European Commission Forecasts, Autumn 2022.

Chart 17a.1 - Government deficit

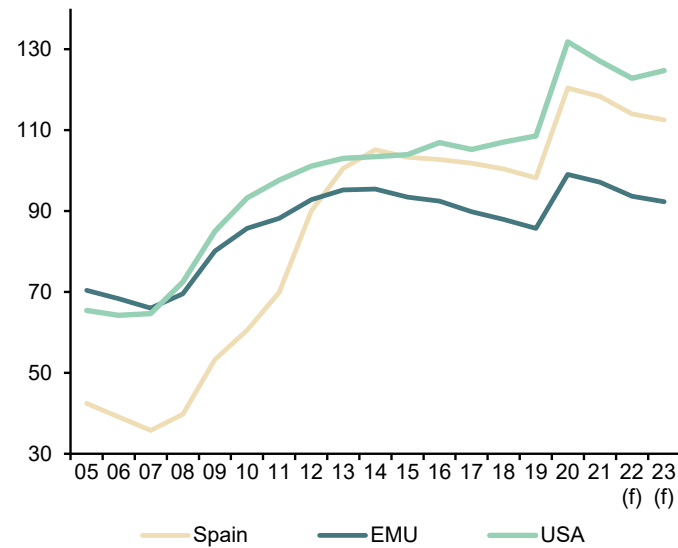
Percentage of GDP



(f) European Commission forecast.

Chart 17a.2 - Government gross debt

Percentage of GDP



(f) European Commission forecast.

Table 17b

Imbalances: International comparison (II)

	Household debt (a)			Non-financial corporations debt (a)		
	Spain	EMU	USA	Spain	EMU	USA
Billions of national currency						
2005	656.2	4,771.1	12,115.6	954.1	7,223.7	8,187.1
2006	783.5	5,192.8	13,420.8	1,171.9	7,814.9	9,007.4
2007	879.3	5,560.9	14,350.6	1,371.6	8,718.6	10,141.9
2008	916.7	5,773.7	14,218.6	1,460.0	9,277.1	10,715.2
2009	908.9	5,880.4	14,056.7	1,473.5	9,305.3	10,197.5
2010	905.2	6,021.2	13,865.1	1,498.0	9,590.4	10,065.7
2011	877.9	6,104.2	13,734.6	1,458.3	10,035.5	10,302.9
2012	840.7	6,096.5	13,666.9	1,340.4	10,140.7	10,849.2
2013	793.4	6,057.5	13,899.1	1,268.5	10,119.6	11,363.0
2014	757.5	6,064.0	14,017.6	1,202.1	10,612.6	12,132.4
2015	733.1	6,127.4	14,190.1	1,183.8	11,352.5	12,944.7
2016	718.3	6,232.4	14,600.4	1,166.6	11,696.8	13,598.3
2017	710.8	6,394.5	15,145.3	1,147.0	11,853.7	14,562.6
2018	709.4	6,582.4	15,600.5	1,144.6	12,150.3	15,546.3
2019	707.5	6,811.0	16,090.6	1,160.9	12,573.0	16,306.3
2020	700.8	7,000.8	16,705.6	1,212.1	13,064.8	17,805.1
2021	704.6	7,294.1	17,942.9	1,255.3	13,693.9	18,649.3
Percentage of GDP						
2005	70.8	56.5	92.9	102.9	85.6	62.8
2006	78.0	58.4	97.1	116.7	87.9	65.2
2007	81.8	59.2	99.1	127.5	92.9	70.1
2008	82.6	60.0	96.3	131.6	96.5	72.5
2009	85.0	63.4	97.1	137.8	100.4	70.4
2010	84.4	63.2	92.1	139.6	100.6	66.9
2011	82.5	62.3	88.0	137.1	102.4	66.0
2012	81.5	62.0	84.1	130.0	103.1	66.7
2013	77.7	61.0	82.5	124.3	101.8	67.5
2014	73.4	59.6	79.9	116.4	104.3	69.1
2015	68.0	58.2	77.9	109.8	107.9	71.1
2016	64.5	57.6	78.1	104.7	108.2	72.7
2017	61.1	57.0	77.7	98.7	105.6	74.8
2018	58.9	56.7	76.0	95.1	104.7	75.7
2019	56.8	56.8	75.3	93.2	104.9	76.3
2020	62.7	61.1	80.0	108.4	114.0	85.2
2021	58.4	59.2	78.0	104.0	111.2	81.1

(a) Loans and debt securities.

Sources: Eurostat and Federal Reserve.

Chart 17b.1 - Household debt

Percentage of GDP

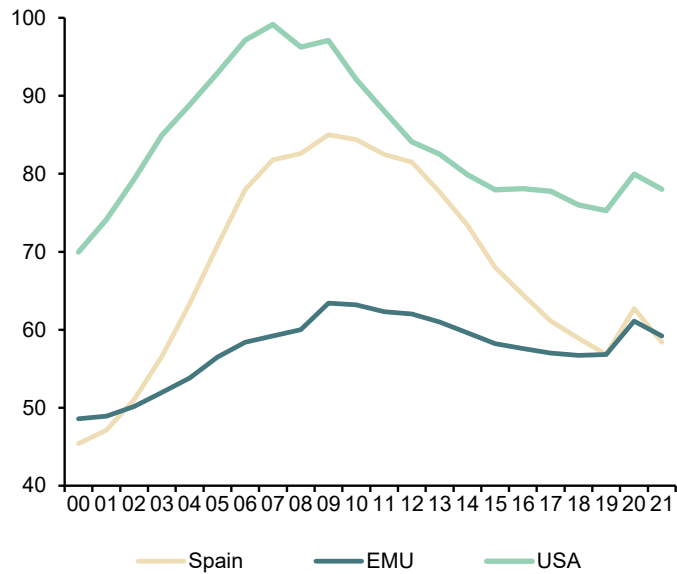
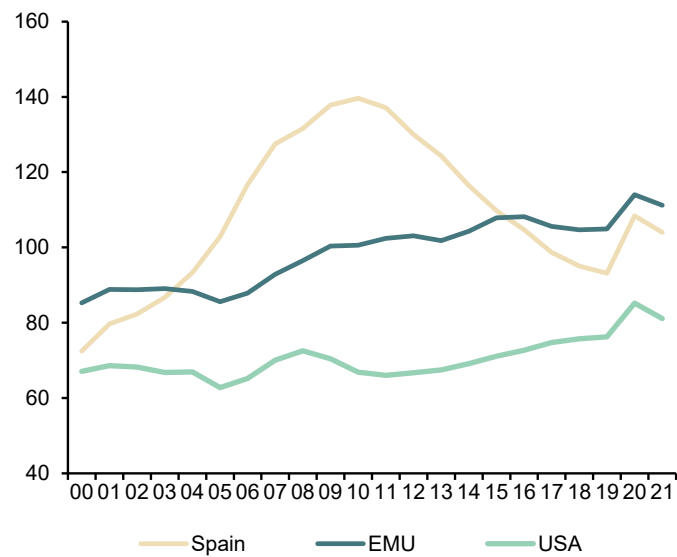


Chart 17b.2 - Non-financial corporations debt

Percentage of GDP



50 Financial System Indicators

Updated: January 15th, 2023

Highlights		
Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	-0.05	October 2022
Other resident sectors' deposits in credit institutions (monthly average % var.)	1	October 2022
Doubtful loans (monthly % var.)	-0.5	October 2022
Recourse to the Eurosystem L/T (Eurozone financial institutions, million euros)	1,638,831	December 2022
Recourse to the Eurosystem L/T (Spanish financial institutions, million euros)	192,970	December 2022
Recourse to the Eurosystem (Spanish financial institutions million euros) - Main refinancing operations	5	December 2022
"Operating expenses/gross operating income" ratio (%)	43.55	September 2022
"Customer deposits/employees" ratio (thousand euros)	13,518.25	September 2022
"Customer deposits/branches" ratio (thousand euros)	124,535.95	September 2022
"Branches/institutions" ratio	92.77	September 2022

A. Money and Interest Rates

Indicator	Source	Average 2001-2019	2020	2021	2022 December	2023 15 January	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.1	12.3	6.9	-	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	1.4	-0.545	-0.572	2.132	2.288	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	1.8	-0.499	-0.501	3.291	3.325	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	3.4	0.03	0.5	3.4	3.2	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	3.8	1.3	-	-	-	End-of-month straight bonds average interest rate (> 2 years) in the AIAF market

Comment on "Money and Interest Rates": Monetary authorities have shown increased concerns over inflation and maintain restrictive monetary policies. They have reacted by increasing interest rates, but markets seem to anticipate this policy may change in the medium-term. The 1-year interbank rate went from 3.291% in December to 3.325% in mid-January and the 3-month Euribor increased from 2.132% to 2.288% over the same period. As for the Spanish 10-year bond yield, it fell to 3.2%.

B. Financial Markets

Indicator	Source	Average 2001-2019	2020	2021	2022 October	2022 November	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	36.1	28.8	27.9	33.67	33.35	(Traded amount/outstanding balance) ×100 in the market (not exclusively between account holders)
7. Outright spot government bonds transactions trade ratio	Bank of Spain	23.3	18.5	14.1	12.53	10.46	(Traded amount/outstanding balance) ×100 in the market (not exclusively between account holders)
8. Outright forward treasury bills transactions trade ratio	Bank of Spain	0.4	0.34	0.04	0.78	0.80	(Traded amount/outstanding balance) ×100 in the market (not exclusively between account holders)
9. Outright forward government bonds transactions trade ratio	Bank of Spain	0.6	0.63	0.52	0.19	0.30	(Traded amount/outstanding balance) in the market (not exclusively between account holders)
10. Three-month maturity treasury bills interest rate	Bank of Spain	0.4	-0.54	-0.62	0.85	1.36	Outright transactions in the market (not exclusively between account holders)
11. Ten-year maturity treasury bonds interest rate	BE	3.44	0.42	0.39	3.23	2.90	Average rate in 10-year bond auctions
12. Madrid Stock Exchange Capitalization (monthly average % chg.)	Bank of Spain and Madrid Stock Exchange	0.1	-0.6	1.3	6.4	4.2	Change in the total number of resident companies
13. Stock market trading volume. Stock trading volume (monthly average % var.)	Bank of Spain and Madrid Stock Exchange	2.1	10.7	0.5	-1.21	17.3	Stock market trading volume. Stock trading volume: change in total trading volume
14. Madrid Stock Exchange general index (Dec 1985=100)	Bank of Spain and Madrid Stock Exchange	1,000.5	718.9	861.3	792.16	877.22 (a)	Base 1985=100
15. IBEX-35 (Dec 1989=3000)	Bank of Spain and Madrid Stock Exchange	9,656.7	7,347.3	8,771.5	7,956.5	8,881.7 (a)	Base dec1989=3000
16. Nasdaq Index	Nasdaq	3,452.8	12,888.2	15,644.9	10,988.1	11,079.16 (a)	Nadaq composite index
17. Madrid Stock Exchange PER ratio (share value/profitability)	Bank of Spain and Madrid Stock Exchange	15.4	15.1	21.1	10,988.1	11,079.16 (a)	Madrid Stock Exchange Ratio "share value/ capital profitability"

B. Financial Markets (continued)

Indicator	Source	Average 2001-2019	2020	2021	2022 October	2022 November	Definition and calculation
18. Short-term private debt. Outstanding amounts (% chg.)	BE	0.8	0.6	2.4	-11.05	11.1	Change in the outstanding short-term debt of non-financial firms
19. Short-term private debt. Outstanding amounts	BE	1.0	1.1	0.9	-0.15	0.45	Change in the outstanding long-term debt of non-financial firms
20. IBEX-35 financial futures concluded transactions (% chg.)	Bank of Spain	0.1	5.1	2.1	2.3	-15.7	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (% chg.)	Bank of Spain	13.8	35.4	21.1	0	-44.4	IBEX-35 shares concluded transactions

(a) Last data published: January 15th, 2023.

Comment on "Financial Markets": The stock market performed positively in the first fortnight of the year, advancing 8% and compensating the losses of the previous year. The IBEX-35 increased to 8,882 points, and the General Index of the Madrid Stock Exchange to 877. During November (last month available), there was a decrease in transactions of outright spot T-bills to 33.35 and of spot government bonds transactions to 10.46. There was a decrease in IBEX-35 futures of 15.7% and of options of 44.4%.

C. Financial Saving and Debt

Indicator	Source	Average 2008-2019	2020	2021	2022 Q2	2022 Q3	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-1.1	1.2	1.9	1.7	1.5	Difference between financial assets and financial liabilities flows over GDP
23. Net Financial Savings/GDP (Households and non-profit institutions)	Bank of Spain	1.7	7.2	4.4	1.5	1.0	Difference between financial assets and financial liabilities flows over GDP
24. Debt in securities (other than shares) and loans/GDP (National Economy)	Bank of Spain	271.1	335.3	319.9	296.5	287.4	Public debt, non-financial companies debt and households and non-profit institutions debt over GDP
25. Debt in securities (other than shares) and loans/GDP (Households and non-profit institutions)	Bank of Spain	63.1	62.5	58.4	56.5	54.4	Households and non-profit institutions debt over GDP
26. Households and non-profit institutions balance: financial assets (quarterly average % chg.)	Bank of Spain	0.9	1.8	2.7	-0.2	-2.0	Total assets percentage change (financial balance)
27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.)	Bank of Spain	-1.1	0.3	0.8	1.8	-1.7	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt": During 2022Q3, the financial savings to GDP in the overall economy decreased to a rate of 1.5% of GDP. There was also a decrease in the financial savings rate of households to 1%. The debt to GDP ratio of the economy fell to 287.4%. Finally, there was a decrease in the stock of financial assets on households' balance sheets of 2% and of 1.7% in the stock of financial liabilities.

D. Credit institutions. Business Development

Indicator	Source	Average 2001-2019	2020	2021	2022 September	2022 October	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	5.2	-0.1	0.2	-0.2	-0.05	Lending to the private sector percentage change for the sum of banks, savings banks and credit unions.
29. Other resident sectors' deposits in credit institutions (monthly average % var.)	Bank of Spain	6.3	0.6	0.3	0.2	-1.0	Deposits percentage change for the sum of banks, savings banks and credit unions.
30. Debt securities (monthly average % var.)	Bank of Spain	8.8	0.8	-0.7	2.2	0.8	Asset-side debt securities percentage change for the sum of banks, savings banks and credit unions.
31. Shares and equity (monthly average % var.)	Bank of Spain	7.9	-0.2	0.1	-0.7	0.7	Asset-side equity and shares percentage change for the sum of banks, savings banks and credit unions.
32. Credit institutions. Net position (difference between assets from credit institutions and liabilities with credit institutions) (% of total assets)	Bank of Spain	-2.0	-1.9	0.5	2.5	2.4	Difference between the asset-side and liability-side "Credit System" item as a proxy of the net position in the interbank market (month-end).
33. Doubtful loans (monthly average % var.)	Bank of Spain	-0.4	-0.8	-0.4	-2.0	-0.5	Doubtful loans. Percentage change for the sum of banks, savings banks and credit unions.
34. Assets sold under repurchase (monthly average % var.)	Bank of Spain	2.2	-0.4	0.6	22.2	-4.2	Liability-side assets sold under repurchase. Percentage change for the sum of banks, savings banks and credit unions.
35. Equity capital (monthly average % var.)	Bank of Spain	6.7	-0.3	-0.1	0.3	0.3	Equity percentage change for the sum of banks, savings banks and credit unions.

Comment on "Credit institutions. Business Development": The latest available data as of October show a decrease in bank credit to the private sector of 0.05%. Data also show a fall in financial institutions' deposit-taking of 1%. Holdings of debt securities increased 0.8%. Doubtful loans decreased 0.5% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source	Average 2000-2019	2020	2021	2021 June	2022 September	Definition and calculation
36. Number of Spanish credit institutions	Bank of Spain	176	113	110	111	111	Total number of banks, savings banks and credit unions operating in Spanish territory
37. Number of foreign credit institutions operating in Spain	Bank of Spain	76	78	84	81	81	Total number of foreign credit institutions operating in Spanish territory
38. Number of employees	Bank of Spain	229,219	175,185	164,101	164,101 (a)	164,101 (a)	Total number of employees in the banking sector
39. Number of branches	Bank of Spain	36,919	22,589	19,015	18,025	17,813	Total number of branches in the banking sector
40. Recourse to the Eurosystem: long term (total Eurozone financial institutions) (Euro millions)	Bank of Spain	385,079	1,774,798	2,206,332	2,192,111	1,638,831 (b)	Open market operations and ECB standing facilities. Eurozone total
41. Recourse to the Eurosystem: long term (total Spanish financial institutions) (Euro millions)	Bank of Spain	82,081	260,971	289,545	289,689	192,970 (b)	Open market operations and ECB standing facilities. Spain total
42. Recourse to the Eurosystem (total Spanish financial institutions): main refinancing operations (Euro millions)	Bank of Spain	24,751	3	16	16	5 (b)	Open market operations: main long term refinancing operations. Spain total

(a) Last data published: December 2021.

(b) Last data published: December 31st, 2022.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing": In December 2022, recourse to Eurosystem funding by Spanish credit institutions reached 192.97 billion euros.

MEMO ITEM: From January 2015 the ECB also offers information on the asset purchase programs. The amount borrowed by Spanish banks in these programs reached 624 billion euros in December 2022 and 4.9 trillion euros for the entire Eurozone banking system.

F. Credit institutions. Efficiency and Productivity, Risk and Profitability

Indicator	Source	Average 2000-2019	2020	2021	2022 Q2	2022 Q3	Definition and calculation
43. "Operating expenses/gross operating income" ratio	Bank of Spain	46.86	54.90	54.18	46.74	43.55	Operational efficiency indicator. Numerator and denominator are obtained directly from credit institutions' P&L accounts
44. "Customer deposits/employees" ratio (Euro thousands)	Bank of Spain	4,276.15	11,173.92	12,137.18	13,574.33	13,518.25	Productivity indicator (business by employee)
45. "Customer deposits/branches" ratio (Euro thousands)	Bank of Spain	28,156.84	89,952.10	111,819.77	123,229.69	124,535.95	Productivity indicator (business by branch)

F. Credit institutions. Efficiency and Productivity, Risk and Profitability (continued)

Indicator	Source	Average 2000-2019	2020	2021	2022 Q2	2022 Q3	Definition and calculation
46. "Branches/institutions" ratio	Bank of Spain	181.61	116.74	98.01	93.88	92.77	Network expansion indicator
47. "Employees/branches" ratio	Bank of Spain	6.01	8.1	9.2	9.1	9.2	Branch size indicator
48. "Equity capital" (monthly average % var.)	Bank of Spain	0.04	-2.4	0.6	0.5	0.3	Credit institutions equity capital variation indicator
49. ROA	Bank of Spain	0.41	0.4	0.5	0.5	0.6	Profitability indicator, defined as the "pre-tax profit/average total assets"
50. ROE	Bank of Spain	5.55	-0.7	6.9	7.7	8.9	Profitability indicator, defined as the "pre-tax profit/equity capital"

Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability": During 2022Q3, there was a relative increase in the profitability of Spanish banks.

Social Indicators

Table 1

Population

Population										
	Total population	Average age	65 and older (%)	Life expectancy at birth (men)	Life expectancy at birth (women)	Dependency rate	Dependency rate (older than 64)	Foreign-born population (%)	New entries (foreign-born)	New exits (born in Spain)
2008	46,157,822	40.8	16.5	78.2	84.3	47.5	24.5	13.1	701,997	33,053
2010	47,021,031	41.1	16.9	79.1	85.1	48.6	25.0	14.0	441,051	39,211
2012	47,265,321	41.6	17.4	79.4	85.1	50.4	26.1	14.3	344,992	51,666
2014	46,771,341	42.1	18.1	80.1	85.7	51.6	27.4	13.4	368,170	66,803
2015	46,624,382	42.4	18.4	79.9	85.4	52.4	28.0	13.2	417,655	74,873
2016	46,557,008	42.7	18.6	80.3	85.8	52.9	28.4	13.2	492,600	71,508
2017	46,572,132	42.9	18.8	80.4	85.7	53.2	28.8	13.3	592,604	63,754
2018	46,722,980	43.1	19.1	80.5	85.9	53.6	29.3	13.7	715,255	56,745
2019	47,026,208	43.3	19.3	80.9	86.2	53.7	29.6	14.4	827,052	61,338
2020	47,450,795	43.6	19.4	79.6	85.1	53.5	29.8	15.2	523,618	41,708
2021	47,385,107	43.8	19.6	80.2	85.8	53.4	30.1	15.5	621,216	56,098
2022●	47,435,597	44.1	20.0			53.5	30.7	15.8		
Sources	EPC	EPC	EPC	ID INE	ID INE	EPC	EPC	EPC	EVR	EVR

ID INE: Indicadores Demográficos INE.

EPC: Estadística del Padrón Continuo.

EVR: Estadística de Variaciones Residenciales.

Dependency rate: (15 or less years old population + 65 or more years old population)/ 16-64 years old population, as a percentage.

Dependency rate (older than 64): 65 or more years old population/ 16-64 years old population, as a percentage.

● Provisional data.

Table 2

Households and families

	Households				Nuptiality					
	Households (thousands)	Average household size	Households with one person younger than 65 (%)	Households with one person older than 65 (%)	Marriage rate (Spanish)	Marriage rate (foreign population)	Divorce rate	Mean age at first marriage, men	Mean age at first marriage, women	Same sex marriages (%)
2008	16,742	2.71	12.0	10.2	8.5	8.4	2.39	32.4	30.2	1.6
2010	17,174	2.67	12.8	9.9	7.2	7.9	2.21	33.2	31.0	1.9
2012	17,434	2.63	13.7	9.9	7.2	6.7	2.23	33.8	31.7	2.0
2014	18,329	2.51	14.2	10.6	6.9	6.5	2.17	34.4	32.3	2.1
2015	18,376	2.54	14.6	10.7	7.3	6.5	2.08	34.8	32.7	2.3
2016	18,444	2.52	14.6	10.9	7.5	6.8	2.08	35.0	32.9	2.5
2017	18,512	2.52	14.2	11.4	7.4	7.0	2.11	35.3	33.2	2.7
2018	18,581	2.51	14.3	11.5	7.1	6.6	2.04	35.6	33.4	2.9
2019	18,697	2.52	14.9	11.2	7.1	6.7	1.95	36.0	33.9	3.1
2020	18,794	2.52	15.0	11.4	3.8	4.1	1.63	37.1	34.9	3.5
2021	18,919	2.50	15.6	11.0	6.3	5.6	1.83	36.8	34.6	3.4
2022■	19,083	2.49								
Sources	LFS	LFS	EPF	EPF	ID INE	ID INE	ID INE	ID INE	ID INE	MNP

Table 2 (Continued)

Households and families

	Fertility					
	Median age at first child, women	Total fertility rate (Spanish women)	Total fertility rate (Foreign women)	Births to single mothers (%)	Abortion rate	Abortion by Spanish-born women (%)
2008	29.3	1.36	1.83	33.2	11.8	55.6
2010	29.8	1.30	1.68	35.5	11.5	58.3
2012	30.3	1.27	1.56	39.0	12.0	61.5
2014	30.6	1.27	1.62	42.5	10.5	63.3
2015	30.7	1.28	1.66	44.4	10.4	65.3
2016	30.8	1.27	1.72	45.8	10.4	65.8
2017	30.9	1.25	1.71	46.8	10.5	66.1
2018	31.0	1.20	1.65	47.3	11.1	65.3
2019	31.1	1.17	1.59	48.4	11.5	64.1
2020	31.2	1.13	1.47	47.6	10.3	65.8
2021	31.6	1.16	1.38	49.3	10.7	67.2
Sources	ID INE	ID INE	ID INE	ID INE	MSAN	MSAN

LFS: Labour Force Survey. EPF: Encuesta de Presupuestos Familiares. ID INE: Indicadores Demográficos INE. MNP: Movimiento Natural de la Población. MSAN: Ministerio de Sanidad, Servicios Sociales e Igualdad.

Marriage rate: Number of marriages per thousand population.

Total fertility rate: The average number of children that would be born per woman living in Spain if all women lived to the end of their childbearing years and bore children according to a given fertility rate at each age.

Divorce rate: Number of divorces per thousand population.

Abortion rate: Number of abortions per thousand women (15-44 years).

■ Data refer to January-September.

Table 3

Education

	Educational attainment				Students involved in non-compulsory education					Education expenditure	
	Population 16 years and older with primary education (%)	Population 30-34 with primary education (%)	Population 16 years and older with tertiary education (%)	Population 30-34 with tertiary education (%)	Pre-primary education	Secondary education	Vocational training	Under-graduate students	Post-graduate studies (except doctorate)	Public expenditure (millions of €)	Public expenditure (% GDP)
2008	32.1	9.2	16.1	26.9	1,763,019	629,247	472,604	1,377,228	50,421	51,716	4.63
2010	30.6	8.6	17.0	27.7	1,872,829	672,213	555,580	1,445,392	104,844	53,099	4.91
2012	28.5	7.5	17.8	26.6	1,912,324	692,098	617,686	1,450,036	113,805	46,476	4.47
2014	24.4	6.1	27.2	42.3	1,840,008	690,738	652,846	1,364,023	142,156	44,846	4.32
2015	23.3	6.6	27.5	40.9	1,808,322	695,557	641,741	1,321,698	171,043	46,598	4.31
2016	22.4	6.6	28.1	40.7	1,780,377	687,595	652,471	1,303,252	190,143	47,579	4.25
2017	21.4	6.6	28.5	41.2	1,767,179	676,311	667,984	1,287,791	209,754	49,458	4.24
2018	20.5	6.4	29.2	42.4	1,750,579	667,287	675,971	1,290,455	217,840	50,807	4.23
2019	19.3	6.3	30.3	44.7	1,749,597	673,740	706,533	1,296,379	237,118	53,053	4.26
2020	17.7	6.1	31.3	44.8	1,622,098	687,084	772,417	1,336,009	247,251	55,184	4.94
2021	16.4	5.8	32.3	46.7	1,622,919●	691,437●	776,664●	1,338,304	258,991		
2022■	16.1	5.7	32.6	49.3							
Sources	LFS	LFS	LFS	LFS	MECD	MECD	MECD	MECD	MECD	MECD	MECD

LFS: Labor Force Survey.

MECD: Ministerio de Educación, Cultura y Deporte.

● Provisional data.

■ Data refer to January-September.

Table 4

Social protection: Benefits

	Contributory benefits*							Non-contributory benefits			
	Unemployment total	Retirement		Permanent disability		Widowhood		Unemployment	Social Security		
		Total	Average amount (€)	Total	Average amount (€)	Total	Average amount (€)		Retirement	Disability	Other
2008	1,100,879	4,936,839	814	906,835	801	2,249,904	529	646,186	265,314	199,410	63,626
2010	1,471,826	5,140,554	884	933,730	850	2,290,090	572	1,445,228	257,136	196,159	49,535
2012	1,381,261	5,330,195	946	943,296	887	2,322,938	602	1,327,027	251,549	194,876	36,310
2014	1,059,799	5,558,964	1,000	929,484	916	2,348,388	624	1,221,390	252,328	197,303	26,842
2015	838,392	5,641,908	1,021	931,668	923	2,353,257	631	1,102,529	253,838	198,891	23,643
2016	763,697	5,731,952	1,043	938,344	930	2,364,388	638	997,192	254,741	199,762	21,350
2017	726,575	5,826,123	1,063	947,130	936	2,360,395	646	902,193	256,187	199,120	19,019
2018	751,172	5,929,471	1,091	951,838	946	2,359,931	664	853,437	256,842	196,375	16,472
2019	807,614	6,038,326	1,138	957,500	975	2,361,620	712	912,384	259,570	193,122	14,997
2020	1,828,489	6,094,447	1,162	952,704	985	2,352,680	725	1,017,429	261,325	188,670	13,373
2021	922,856	6,165,349	1,190	949,765	994	2,353,987	740	969,412	262,177	184,378	11,892
2022	765,874■	6,253,797	1,254	951,067	1,035	2,351,703	778	882,293■	265,716■	180,197■	10,677■
Sources	INEM	INSS	INSS	INSS	INSS	INSS	INSS	INEM	IMSERSO	IMSERSO	IMSERSO

INEM: Instituto Nacional de Empleo.

INSS: Instituto Nacional de la Seguridad Social.

IMSERSO: Instituto de Mayores y Servicios Sociales.

* Benefits for orphans and dependent family members of deceased Social Security affiliates are excluded.

■ Data refer to January-September.

Table 5

Social protection: Health care

	Expenditure		Resources				Satisfaction*		Time on waiting list (days)	
	Public expenditure (% GDP)	Public expenditure (millions of €)	Medical specialists per 1,000 inhabitants	Primary care doctors per 1,000 people assigned	Specialist nurses per 1,000 inhabitants	Primary care nurses per 1,000 people assigned	With the working of the health system	With medical history and tracing by family doctor or pediatrician	Non-urgent surgical procedures	First specialist consultations per 1,000 inhabitants
2008	6.1	67,344	1.8	0.8	3.0	0.6	6.4	7.0	71	59
2010	6.6	71,136	1.8	0.8	3.2	0.6	6.6	7.3	65	53
2012	6.3	64,734	1.8	0.8	3.1	0.6	6.6	7.5	76	53
2014	6.2	63,507	1.8	0.8	3.1	0.7	6.3	7.5	87	65
2015	6.2	66,489	1.9	0.8	3.2	0.7	6.4	7.5	89	58
2016	6.1	67,724	1.9	0.8	3.3	0.6	6.6	7.6	115	72
2017	6.0	69,312	1.9	0.8	3.4	0.6	6.7	7.5	106	66
2018	6.0	72,157	2.0	0.8	3.5	0.7	6.6	7.5	129	96
2019	6.1	75,929	2.0	0.8	3.5	0.7	6.7	7.6	115	81
2020	7.6●	85,383●	2.0	0.8	3.7	0.7			148	99
2021									121	75
Sources	EUROSTAT	EUROSTAT	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS	INCLASNS

INCLASNS: Indicadores clave del Sistema Nacional del Salud.

* Average of population satisfaction measured on a scale of 1 to 10, where 1 means "totally unsatisfactory" and 10 "totally satisfactory".

● Provisional data.

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Notes

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