Assessing the far-reaching implications of a rising Euribor

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Letter from the Editors

The March *Spanish and International Economic & Financial Outlook (SEFO)* comes out at a time of global uncertainty. On the positive front, for the time being, the global economy is holding up better than expected against the impact of inflation. Since the beginning of the year, economic indicators have picked up. The energy markets have continued to moderate, while geopolitical risk is perceived to be lower, giving the economy some breathing space. The resilience of labour markets is another favourable factor. In its latest outlook for 2023, the OECD revised its projection for global growth to 2.6% (0.4 points higher than in the November outlook) and to 0.8% in the case of the eurozone (0.3 points higher).

Nonetheless, several factors cloud the economic outlook. The first is the persistence of inflation and its potential impact on consumption and GDP once surplus savings have been exhausted. As well, the tightening of monetary policy has brought vulnerabilities in the financial system to the surface. The bankruptcy of SVB was followed by a liquidity crisis at Credit Suisse, unleashing severe turbulence in the financial markets, the full consequences of which remain to be seen.

We note that the bulk of the analysis contained in this issue of *SEFO* was performed prior to the collapse of SVB, thus may not reflect recent volatility in financial markets, in particular within the banking sector.

Within this context, we first look at the recent evolution of the Euribor, the key reference rate for the European financial markets, in terms of its impact on banking sector profitability. Long-term interest rates are a function of three major factors: real interest rates, the structure of supply and demand, taking into consideration the central bank's balance sheet, and long-term inflation expectations. Thus, based on the information provided by the nominal yield curves (spot and forward rates), inflation expectations, gleaned from the market and surveys, and estimated real rates, the new interest rate levels are etched out in the eurozone. Results show that there is a possibility that following the significant upward shift in short-term rates observed since the summer of 2021, long-term rates may have stabilised in real terms such that, going forward, the curve will pivot around them. Under this scenario, as short-term rates keep increasing, the stabilisation of longer-term rates could generate a downward sloping yield curve.

An interesting dimension of the impact of these increases in benchmark rates is the differentiated way in which they are affecting banks across regions. In the context of extraordinary market volatility, triggered by the war in Ukraine and its consequences in terms of exacerbating the energy crisis and inflationary pressures, we have seen significant shifts in relative valuations across different asset classes and/or sectors,

some of which breaking from patterns that had become entrenched for many years. After years of US outperformance, last year marked an inflexion point in the relative performances of the European and US banks in terms of both their market values and earnings, particularly in the second half. The search for a factor that explains the banks' outperformance relative to other sectors and within the banking sector the European sector's outperformance relative to that of the US yields one obvious answer: the recent trend in interest rates against the backdrop of monetary policy tightening. The scant sensitivity of the US banks to the increase in dollar rates contrasts sharply with the high correlation observed in Europe and Spain, largely explaining the stock market performances of the European and Spanish banking sectors relative to the remaining sectors and by comparison with the US banks. But there are also structural factors underpinning EU banks' outperformance. Indeed, the improvement registered in the Spanish and European banks' ROEs is being driven by a more stable provisioning profile. There is still a profitability and valuation gap between the two systems but the distance has narrowed considerably by comparison with that prevailing systematically for nearly a decade. [1]

Some of the impacts of the aforementioned increases in Euribor are already being reflected in banks' results. Indeed, the Spanish banks announced record earnings growth in 2022, in tandem with the ongoing process of financial normalisation, in which interest rates increased, after years in negative territory. Spain's top three banks reported aggregate net profit of 19.17 billion euros last year, up 6.1%. Looking at the six largest banks, that figure rises to 20.85 billion euros. Although the absolute figures are eye-catching, it is important to note that they remain below 2007 levels. More importantly, this solid performance comes a time when the Spanish banks, along with their European peers, continue to face difficulties in increasing their earnings per share. The European Stoxx Bank Index contracted by 7% in 2022 with the vast majority of the banks trading at P/BV multiples of under 1x. Moreover, the banking

business is facing challenges on the demand side. Household borrowings increased by just 0.3% year-on-year in January 2023, while corporate borrowings contracted by 0.7%. Fundamentals for 2023 do not point to significantly higher credit growth. Going forward, it will be key to consider a broader spectrum of factors in order to bring more perspective to the interpretation of banks' profitability. Those factors include the considerable structural changes unfolding in recent years, such as complex mergers, sometimes taking place over a brief time span. As well, the balance between the volume of financing extended and deposits captured has improved relative to during the financial crisis, with the loan-to-deposit ratio at around 1x today, compared to 1.6x in 2007. Finally, solvency too has improved, with capitalisation substantially higher than prior to the financial crisis. Within this context, it is important to highlight the essential role banks play in underpinning a country's business and social fabric. They must remain profitable and solvent on account of their systemic importance and relevance at critical times, such as during the pandemic, while pushing ahead with the necessary cost-cutting and transformational digitalisation.

As well, the next article in the section on Euribor and banks focuses on an area sometimes overlooked but with a high degree of significance for financial stability, the shadow banking sector. Since the onset of the financial crisis in the US in 2007, what has become known as the shadow banking system has attracted the attention of analysts, sparking growing concern about its role as a destabilising force. In the meantime, international financial system globalisation and innovation, coupled with regulatory trends across the world's main regions, particularly in the area of bank solvency, have only increased the relative importance of the shadow banking system, particularly in the US and eurozone. Yet, it is noteworthy to examine the diverse factors underpinning the extension of shadow banking within these two regions. In the eurozone, although there are limitations given the lack of available financial literature on

this topic, according to empirical analysis, the expansion of shadow banking is mainly being driven by regulatory pressure, whereas in the US, the profitability of financial intermediation more broadly is the main impetus for shadow banking growth. Going forward, ongoing interest rate tightening, coupled with restrictive monetary policies, will drain financial system liquidity. At the same time, modified capital requirements for private equity and investment funds will entail high capital requirements for these types of vehicles. The combination of these two factors will foreseeably slow shadow banking growth.

Relatedly, we look at how changes in the Euribor have impacted the mortgage market in Spain. The impact of the rise in Euribor on mortgage payments depends primarily on households' outstanding principal. Although the average size of a new mortgage stands at close to 145,000 euros, the average balance on outstanding mortgages is lower, at 82,700 euros. Circumstances therefore vary significantly depending on the age of the loan, just as a household's vulnerability depends on its income levels. Overall, the rise in Euribor has cooled the housing market –transaction volumes have slowed and the price curve is beginning to bend. For now, however, the situation cannot be said to pose a major recessionary risk to the Spanish economy. Longer-term, the key will lie with the trend in employment, the main determinant of households' ability to service their debts. Nevertheless, households that have taken out floating-rate mortgages more recently with low- or medium-low income levels are set to face a sharp increase in financial burden relative to their disposable income, highlighting the importance of policy measures targeted at those most at-risk.

Furthermore, as mentioned, one of the key determinants of the capacity of households to service outstanding mortgages as interest rate pressures increase will be the employment market. For this reason, the next article focuses on the resilience of the Spanish labour market. The recent performance of the Spanish labour market has been favourable as regards employment (in both *Labour Force Survey* -*LFS*- and contributor terms), which has already surpassed pre-pandemic levels and continued to grow in 2022 despite a challenging economic and geopolitical context. The reduction in temporary contracts since the passage of the most recent labour reforms is another positive development. Indeed, the incidence of temporary workers in total contributors stood at 15% (the lowest level in the historical series) by the end of 2022, compared to 27% in previous years, evidencing the favourable impact of labour reforms in terms of job quality. However, the rationale behind the evolution of some labour market data remains uncertain and the performance of other indicators remains mixed, complicating a straightforward interpretation. Firstly, it is not clear why Social Security contributor growth has been so intense, outpacing both GDP and *LFS* employment growth. Part of the explanation could be attributable to the formalisation of the informal economy, a testament to labour market resilience in the context of extreme economic uncertainty. Lastly, despite some of these favourable trends, there was a sharp drop in actual hours worked per job holder, in line with the trend across the eurozone, adding to the mixed picture. Given the somewhat ambiguous nature of recent trends, it may simply be too early to come to a definitive conclusion over the evolution of Spain´s labour market and the extent to which it may have undergone structural changes.

Lastly, in the context of rising rates, we analyse a key area of vulnerability for the Spanish economy, the regional debt market. Following nearly two decades of legislative action, Spain's fiscal rule framework is among the most advanced and rigid within Europe, systematically placing the country among the top quartile of the EU-27 in terms of fiscal governance. Nevertheless, data on regional governments' deficit and indebtedness reveal a significantly weaker commitment to budget stability. Strong regional debt growth has largely been underpinned by collapsing revenues and high, rigid public spending in key public services, such as healthcare and education. Yet, debt levels differ significantly across regions,

with just two regions, Catalonia and Valencia, accounting for 44.1% of the growth in regional debt stock between 2007 and 2022. Beyond the debate about exit strategies for the extraordinary financing mechanisms implemented since 2012, it is important to think about adapting the current fiscal stability framework to layer in the requirements that will come into force under the new European rules and the need to address identified shortcomings.

Notes

[1] All of the analyses contained in this article refer to financial developments in 2022 and stock market valuations up to mid-February. Valuations have been greatly affected by events at some regional American banks and a large Swiss bank.

What´s Ahead (Next Month)

Month	Day	Indicator / Event
April	3	Tourists arrivals (February)
	4	Social Security registrants and official unemployment (March)
	5	Industrial production index (February)
	12	Financial Accounts Spanish Economy (4th. quarter)
	14	CPI (March)
	20	Foreign trade report (February)
	27	Labour Force Survey (1st. quarter)
	27	Retail trade (March)
	28	Preliminary CPI (April)
	28	Eurogroup meeting
	28	Non-financial accounts, State (March)
	28	Non-financial accounts: Central Government, Regional Governments and Social Security (February)
	28	Preliminary GDP (1st. quarter)
	28	Balance of payments monthly (February)
May	4	Social Security registrants and official unemployment (April)
	4	Tourists arrivals (March)
	4	ECB monetary policy meeting
	5	Industrial production index (March)
	12	CPI (April)
	15	Eurogroup meeting
	18	Foreign trade report (March)
	30	Retail sales (April)
	30	Preliminary CPI (May)
	31	Non-financial accounts, State (April)
	31	Non-financial accounts: Central Government, Regional Governments and Social Security (March)
	31	Balance of payments monthly (March)

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What Matters

5 Euro yield curve evolution and real long-term rates

Assessing the recent evolution of euro interest rates reveals that following the significant upward shift in short-term rates since the summer of 2021, long-term rates may have already stabilised at restrictive levels. Under this scenario, as short-term rates keep increasing, longer-term rates could gradually stabilise, generating a downward sloping yield curve.

Ignacio Ezquiaga and José Manuel Amor, Afi
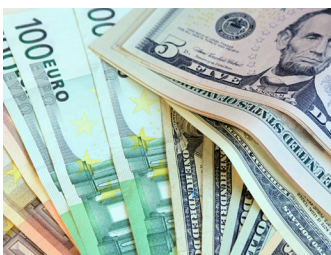
13 European and US banks: Inflexion point in their relative performance

After years of US outperformance, last year marked an inflexion point in the relative performances of the European and US banks in terms of both their market values and earnings. The relative outperformance by the European banks went a long way to close the sizeable profitability and valuation gaps opened up between the two systems more than a decade ago.

Marta Alberni, Ángel Berges and María Rodríguez, Afi

21 Bank profitability in Spain: A debate in need of perspective

Spanish banks announced record earnings growth in 2022, in tandem with the ongoing process of financial normalisation, in which interest rates increased, after years in negative territory. Despite strong performance, challenges remain, and banks must stay profitable and solvent on account of their systemic importance to a country's business and social fabric, while pushing ahead with necessary cost-cutting and digitalisation.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

53 Regional government debt: Recent trends and outlook

Despite having one of the most advanced fiscal rule frameworks in Europe, Spain remains the OECD country where regional governments' debt has grown the most since the Great Recession. Even in the context of more difficult financing conditions at present, it will be important to address existing challenges to the extraordinary regional financing mechanisms, while adapting the current fiscal stability framework to the new European rules.

Santiago Lago Peñas

Regulation and Economic Outlook

Key Facts

Euro yield curve evolution and real long-term rates

Assessing the recent evolution of euro interest rates reveals that following the significant upward shift in short-term rates since the summer of 2021, long-term rates may have already stabilised at restrictive levels. Under this scenario, as short-term rates keep increasing, longer-term rates could gradually stabilise, generating a downward sloping yield curve.

Ignacio Ezquiaga and José Manuel Amor

Abstract: Long-term interest rates are a function of three major factors: real interest rates, the structure of supply and demand, taking into consideration the central bank's balance sheet, and long-term inflation expectations. Thus, based on the information provided by the nominal yield curves (spot and forward rates), inflation expectations, gleaned from the market and surveys, and estimated real rates, we assess the new interest rate levels etched out in the eurozone. Our results show that there is a possibility that following the significant upward shift in short-term rates observed since the summer of 2021, long-term rates may have stabilised in real terms such that, going forward, the curve will pivot around them. Under this scenario, as short-term rates keep increasing, the stabilisation of longer-term rates could generate a downward sloping yield curve.

Introduction

In early 2022, Germany's 10-year Federal bonds abandoned negative territory for the first time in over three years. One year on, the yield on those bonds is trading at 2.5%. Day after day the papers and social media are full of news about the rise in the eurozone's benchmark monetary policy rates but they rarely stop to analyse the profound change that is taking place in real interest rates along the so-called yield curves, which map out the

relationship between rates and their tenors in a specific market at any point in time, their meaning and the implicit message they are sending about where they are headed.

Long-term rates, the curve and implied rates

Yield curves move over time changing their slope, following a fairly predictable pattern according to the empirical evidence. When rates are high or restrictive, the curve slope tends to be negative, discounting future cuts in the short-term rates controlled by the central banks. When rates are low or expansionary, the slope tends to be positive, pricing in rate increases in the future. In other words, long-term rates are "averages" of implicit or discounted future rates. Looking at the shift in the euro curve between 2013 and 2023, we observe an exceptional period during which the curve has only turned negative of late, as short-term rates have moved into restrictive territory.

Are the forward rates implied by the yield curve therefore the rates the market expects to materialise? That is the big question financial literature has been trying to resolve. Here we limit our analysis to presenting the implied rates and interpreting them as the future rates discounted by the market at a given point in time, reminding the reader that those rates do not necessarily "only" reflect expectations. Expectations do not always have a "free rein" over the curve: the market participants –issuers, buyers, sellers– have to take decisions framed by regulations, management styles and structural changes in supply and demand over the long-term.

It is beyond the scope of this paper to perform an empirical analysis of the recent data but it is

Exhibit 1 **The euro yield curve on different dates (via the €STR overnight index swap –OIS)**

€STR OIS curve as of different dates
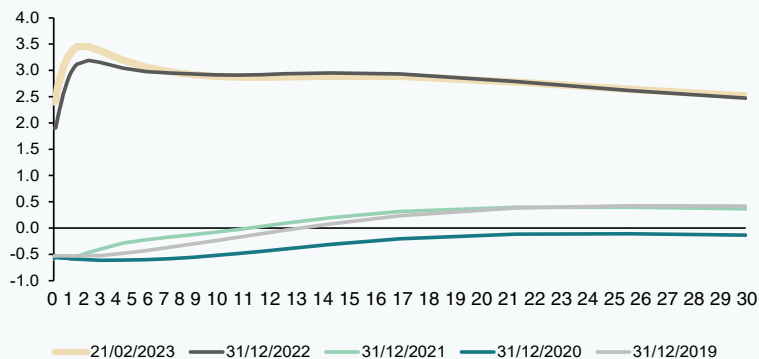
Source: Authors' own elaboration based on Bloomberg figures.

Exhibit 2   **ECB asset purchases and approximation of the term premium for 10-year German bonds**

APP + PEPP balance   Bund - Eonia swap / €STR 10Y (pp, RH axis)
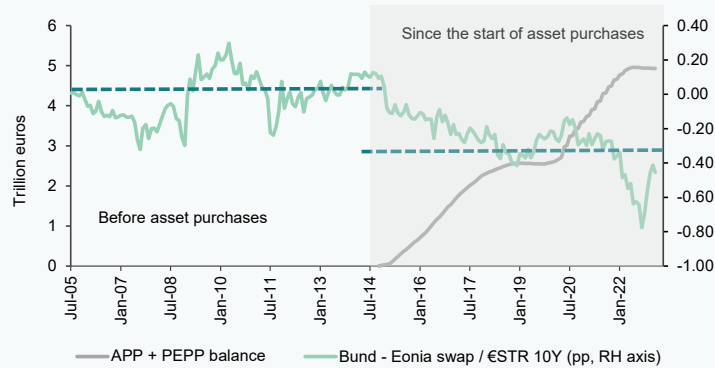
Sources: Authors' own elaboration, based on ECB and Bloomberg data (last date as of February 21st, 2023).

safe to say that bond purchasing by the central banks since 2008 appears to have impacted rates in the middle and long ends of the yield curves. Eurozone monetary policy has used non-traditional instruments since the onset of the Global Financial Crisis in 2007-2008, with its balance sheet becoming a mirror for the complex forces that have shaped liquidity management –massive liquidity injections– and yield curve formation (quantitative easing or QE), long-term rates being more and more focused, as noted by Gulati and Smith (2022).

As a result, it is probable long-term rates included a negative premium during the QE period, partially reversed since its end (Exhibit 2). The ECB itself has acknowledged that the phenomenon has affected the bond markets (traded public debt) far more than the interest rate swap markets.

Rapid reduction of its balance sheet by not reinvesting principle repaid and/or heavily selling off debt holdings would help "normalise" that distortion and lift long-term rates (for given expectations for the outlook for short-term rates) but would unleash a series of consequences, affecting sovereign

bond risk premiums in the euro debt market, for example, that are not currently desirable for or desired by the central bank.

Real long-term rates and the natural rate of interest, r*

Long-term interest rates reveal the paths short-term rates are expected to follow but they can also be approached as the result of adding expected annual inflation over the time horizon analysed and a premium for real interest. Breaking long-term rates down into those two components helps understand their level by sparking an important element of the monetary policy debate: that of comparing the real rate with the natural (or equilibrium) rate.

To do that, we need to look not at real past inflation but rather the "expected" inflation priced in by the markets (the compensation demanded by bondholders, captured, for example, using the breakeven inflation rates for bonds indexed to that variable) or forecast at specific points of time by economic agents as gleaned from surveys. The difference between the nominal rate of interest at a given maturity and those measurements of future inflation

yield the real rate of interest comparable with the corresponding natural rate.

Expected long-term inflation

In a context such as this of abrupt swings in relative prices and high volatility in observed and traded inflation –the main input for forming inflation expectations–, it is particularly hard to estimate the level of inflation that really is expected to prevail in the long-term because the transitory component of observed inflation is currently so high. That is why there is so much volatility and uncertainty. The current high levels of inflation are a global phenomenon, shaped partly by sector-specific (or supply side) factors and partly by demand factors. On the supply side it is worth highlighting the energy, commodity and fresh food price shocks derived from the war in Ukraine and sanctions against Russia. Supply chain friction is another relevant albeit waning factor. As for the demand factors, the sharp recovery in the consumption of services related with the resumption of mobility and tourism and the sudden growth in spending, fuelled by the savings pent up during the years of restrictions, are the main sources of inflationary pressure.

Other important factors in the formation of expectations include the expected effectiveness of monetary policy and the central bank's credibility in terms of formulating a symmetric target –2% in the case of both the Fed and the ECB–, the independence of the central bank and the evidence of its persistence in fighting inflation in prior episodes. Labour market dynamics, competition, other economic policies and the international context are equally important aspects.

The crisis of 2008 gave way to the Great Recession. As already noted, during those years the central banks had to tackle deflationary pressures. That affected long-term inflation expectations, which dipped below 2%, alerting of the possible decoupling of expectations for that variable over that time horizon. It is worth recalling, however, that before that long recessionary period, which unquestionably kept inflation low, the global economy went through the Great Moderation, which started in the mid-1980s and generated a credit bubble that burst in 2007, a period of growth but also of moderate inflation in which other deflationary factors, such as technological change, globalisation and the decline in workers' bargaining power, came into play (Schnabel, 2022).

What are current expectations for inflation in the long term? The answer can be found in the following.

■ Market agent surveys, specifically of professional economic forecasters (the SPF, published quarterly by the ECB), point to medium-term inflation slightly above the ECB's target of 2%. Those forecasts therefore do not foreshadow decoupling of inflation expectations. The responses provided by the forecasters surveyed regarding the probability associated with the various scenarios reveal a shift in the right-hand tale of the inflation distribution over the past two years.

■ Elsewhere, the compensation for inflation traded in the zero-coupon inflation swaps market (from 1 to 10 years) allows us to etch out the annual inflation path (each year) over that time horizon. The path discounted today points to inflation easing towards 2.5%-2.6% within 2-3 years, with inflation remaining at around 2.45% in the medium- and long-term, in other words, above the ECB's target of 2% at all times.

It is fair to say, therefore, that both the surveys and, especially, the market are discounting a

> " It is particularly hard to estimate the level of inflation that really is expected to prevail in the long-term because the transitory component of observed inflation is currently so high. "

Exhibit 3   **Probability of different inflation scenarios in 5 years' time derived from the inflation-linked swaps market**

Percentage
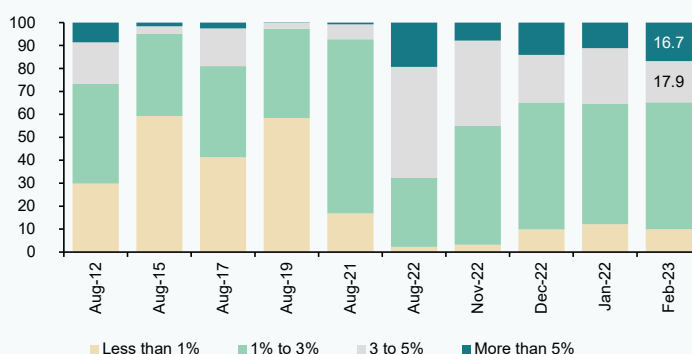
Source: Authors' own elaboration based on Bloomberg data.

medium-term inflation scenario of average rates slightly above the ECB's target, with the probability assigned to a scenario of higher inflation still sufficiently high, in our opinion, to spark unease in the corridors of the ECB.

Real long-term rates

The significant decline in long-term interest rates observed across the leading economies between 2008 and 2021 was not only attributable to the decline in observed inflation but also a pronounced decrease in real rates of interest and their natural equilibrium rate. Now, following the surge in inflation in 2022 and 2023, real rates have risen sharply from negative levels, but remain low.

According to the classic definition, the real natural or neutral rate, r*, is that corresponding to an economy with full employment. Fisher (2017) suggests a pragmatic approach to its estimation: the real natural long-term rate of interest is that which balances the supply of savings with demand for investment in the long-term when an economy is at full employment. Low real rates by historical standards are indicative of either a surplus of savings or a slump in demand for investment, or both things at once. Low real rates are a common characteristic of all industrialised economies and a cause for concern for several reasons: they can increase the risk of falling into a liquidity trap of the kind detected by Keynes; they can be the result of secular stagnation of the kind described by Summers (2016); they could cause financial instability by encouraging investors to take on higher risks in search of returns; or they could be sending us a very clear message about the economy's potential output.

> " Both the surveys and, especially, the market are discounting a medium-term inflation scenario of average rates slightly above the ECB's target, with the probability assigned to a scenario of higher inflation still sufficiently high to spark unease within the ECB. "

Indeed, the factors explaining low real rates in a global world can be mapped out, following Fisher and Lane (2019), as follows:

- Low potential output reduces profitable investment opportunities for an economy's businesses and leads its households to expect lower growth in their income, prompting them to spend less and save more. In the US, it was estimated in 2017 that the economy's potential output was 1.7% compared to twice that on average during the 20 years prior to the financial crisis of 2008.

- Smaller imbalances in the current account balances of the various monetary areas. The fact that low real rates are a global phenomenon suggests that the reduction in the US current account deficit since 2008 has been the manifestation of lower net demand for overseas savings.

- Population pyramid. As populations age, the weight of the retired population increases so that borrowings fall and savings increase.

- Lower investment. Greater political or economic uncertainty, the impact of technological change on the viability of business models or on obsolescence, reduced competition, the replacement of riskier assets with higher quality assets and increased concentration among enterprises are some of the factors that could be delaying business investments.

All those factors have driven a reduction in the real natural rate of interest and there are reasons to believe they remain at play today. The real natural long-term interest rate is not directly observable. However, it has been estimated that in the US it has fallen from an average of 2% before the crisis of 2008 to 0.5%. In the eurozone, in 2019, Lane (2019) calculated the long-term natural rate at close to or even below zero, specifically in a range of between -1.5% and 0.5%, in contrast to a positive range from 0.5% to 2% in 2008. The drop in natural long-term rates had reduced the space for conventional policy around these interest rates. Expansionary monetary policy attempts to place benchmark money market rates sufficiently low to induce a reduction in long-term rates, to below their natural rates, in order to contribute to economic growth. If natural levels are already very low or even negative, how can this be done? That has been the major challenge for expansionary monetary policy for most of the last decade and the origin of the authorities' use of asset purchases (QE) and other unconventional measures.

According to our estimations for the period from 2004-2023 (Exhibit 4), the real long-term rate of interest in the eurozone stood at around 2% until 2008. After that, it dipped sharply, even turning negative, a trend exacerbated during the pandemic, when it ranged between −1% and zero, as shown in the Exhibit we have built over 10-year IRSs. More recently, following the reopening of the economy in 2021 and the inflationary shock caused by the war, real rates have climbed back into positive territory, to around 1%.

That level remains low by historic standards and that is because most of the factors responsible for the low natural rates of interest remain at play. It is conceivable that we are currently close, but still above, the natural rates. In other words, the benchmark rate increases discounted by the euro yield curve, to 3.5% by June 2023, appear to have put long-term real rates at restrictive levels, somewhat above their correspondent natural real rates, albeit still low in historical terms.

Exhibit 4 **2004-2023 historical trend in 10-year nominal and real rates and 10-year inflation breakevens**

Euro IRS
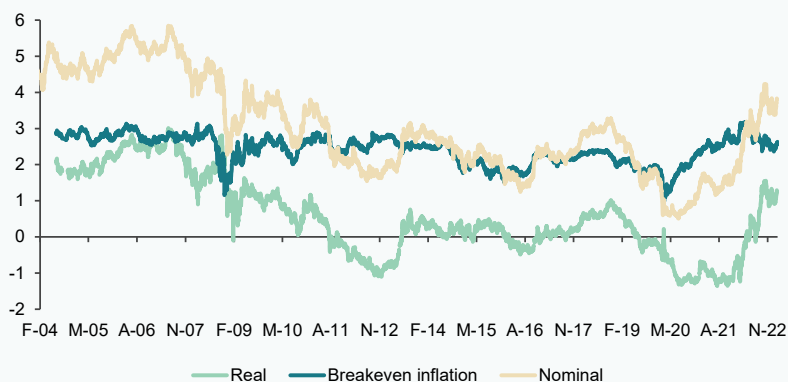
Sources: Authors' own elaboration based on Bloomberg figures (last data as of February 21st, 2023).

Conclusions: Are long-term rates already at stable levels?

Long-term nominal rates, as we have seen in this paper, depend on three major factors. The first, real rates. Although the real natural long-term rate of interest will remain low by historical standards for the structural reasons recapped here, several factors recommend caution before concluding that current real long-term rates are sufficiently stable so that future shifts in the yield curve, in either direction, will pivot around those anchors.

The second factor relates to the structure of supply and demand, in which the central bank's balance sheet is playing a key role. The fact that the ECB has not reduced its bond portfolio more aggressively, its prior debt purchases having had a significant impact on lowering long-term rates while in place, suggests significant upside as the rest of those positions are gradually unwound. A lot will depend on the speed with which the ECB reduces its bond portfolio after it revisits its pace in June.

Lastly, long-term inflation expectations. Although they are relatively well anchored around 2%, the perceived risk of higher inflation in the long term is not negligible. If that were to materialise, monetary policy would have to be tightened further to quell inflation. In that event, in addition to raising benchmark rates further, it is more likely that the ECB would use its debt portfolio to exert pressure on real rates, pushing them above their neutral level, so reinforcing the impact of more contractionary short-term rates and nudging nominal rates higher all along the rest of the curve.

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European and US banks: Inflexion point in their relative performance

After years of US outperformance, last year marked an inflexion point in the relative performances of the European and US banks in terms of both their market values and earnings. The relative outperformance by the European banks went a long way to close the sizeable profitability and valuation gaps opened up between the two systems more than a decade ago. [1]

Marta Alberni, Ángel Berges and María Rodríguez

Abstract: In the context of extraordinary market volatility, triggered by the war in Ukraine and its consequences in terms of exacerbating the energy crisis and inflationary pressures, we have seen significant shifts in relative valuations across different asset classes and/or sectors, some of which breaking from patterns that had become entrenched for many years. After years of US outperformance, last year marked an inflexion point in the relative performances of the European and US banks in terms of both their market values and earnings, particularly in the second half. The search for a factor that explains the banks' outperformance relative to other sectors and within the banking sector the European sector's outperformance relative to that of the US yields one obvious answer: the recent trend in interest rates against the backdrop of monetary policy tightening. The scant sensitivity of the US banks to the increase in dollar rates contrasts sharply with the high correlation observed in Europe and Spain, largely explaining the stock market performances of the European and Spanish banking sectors relative to the

> " In line with the trend in public debt markets, private fixed income markets have also reeled and with the drop in issuance volumes, their ability to channel financing to numerous companies that had embraced those markets as a preferred source of financing dried up. "

remaining sectors and by comparison with the US banks. But there are also structural factors underpinning EU banks' outperformance. Indeed, the improvement registered in the Spanish and European banks' ROEs is being driven by a more stable provisioning profile. There is still a profitability and valuation gap between the two systems but the distance has narrowed considerably by comparison with that prevailing systematically for nearly a decade. [2]

Inflation and interest rates shift market equilibriums

In the context of extraordinary market volatility, triggered by the war in Ukraine and its consequences in terms of exacerbating the energy crisis and inflationary pressures, some of which are proving stubborn, we have seen significant shifts in relative valuations across different asset classes and/or sectors, some of which breaking from patterns that had become entrenched for many years. It is against that backdrop that we have decided to analyse the resurgence of the banks relative to other sectors and the resurgence of Europe (and Spain) relative to the US' long-standing dominance.

The biggest break from a convention that has held for nearly a decade materialised in the sovereign debt markets. The sharp increases (over 3 percentage points) observed at the long ends of the yield curves in nearly every country generated significant corrections (over 10%) for the main holders of those assets. Among those holders, it is worth highlighting the central banks themselves, which have been sustaining heavy losses on the public debt portfolios accumulated as a result of their various asset purchase programmes (Quantitative Easing) throughout the years of ultra-lax monetary policy now abandoned. At any rate, as the BIS (2023) acknowledges,

the losses notched up by the central banks are not relevant and do not tarnish the work done by those institutions to attain the monetary policy objectives framing those purchases in the first place.

The banks are in a similar situation with respect to their public debt holdings. Indeed, we flagged the potential for losses on those investments in an earlier piece for this same publication (refer to Alberni, Berges and Rodríguez (2022)). As we argued in that paper, those losses will only be realised on a small fraction of those portfolios (those held for trading in the near-term), with the bulk held as part of a comprehensive balance sheet management strategy, the effects of which will crystallise together with the other effects associated with the new rate scenario, as we will outline later on.

The public debt markets were not the only markets adversely affected by the crisis. The private fixed income markets have also reeled and with the drop in volumes, their ability to feed financing to numerous companies that had embraced those markets as a preferred source of financing dried up. Cooling in those markets forced companies to resort to bank financing once again, as detailed in our most recent paper (refer to Alberni, Berges and Rodríguez (2023) and later corroborated by the European Central Bank (2023)).

The equity markets have also undergone sea changes, with sector rotations that dispute some of the most entrenched assumptions of the past decade or so. Firstly, for obvious reasons, it is worth highlighting the reawakening of the sectors benefitting most directly from the energy and commodity crisis, borne out in significant rallies across the sector players and revaluations of the currencies of the countries –mostly emerging markets– more exposed to those sectors.

> " The most remarkable development has been the loss of appetite for the technology sector, which has been the star performer for a decade, coinciding with the rally in bank stocks. "

However, the most remarkable development has been the loss of appetite for the technology sector, which has been the star performer for a decade, as gleaned from the gain notched up by its most representative index, Nasdaq, of over 30%.

The European banks have taken the baton from their US counterparts as a result of sector and geographical rotation

Those changes, especially the technology sector's loss of lustre after a decade in the spotlight, coincided with the rally in bank stocks, especially the European banks, which spearheaded the rally underway since the second half of 2022.

Exhibits 1 and 2, which illustrate the performance of the main stock market indices in the US (S&P), Europe (Eurostoxx) and Spain (Ibex), on aggregate (Exhibit 1) and for their banking sectors (Exhibit 2), speak volumes about the scale of the revaluation of the banks relative to the other traded sectors, especially in Europe and Spain.

The search for a factor that explains the banks' outperformance relative to other sectors and within the banking sector the European sector's outperformance relative to that of the US yields one obvious answer: the recent trend in interest rates against the backdrop of monetary policy tightening.

That thesis is sufficiently borne out in Exhibits 3a, 3b and 3c, which map, for each of the three regions analysed (Europe, Spain, and the US), their general and banking stock indices against the benchmark rate of greatest relevance for their banking industries, namely 12-month Euribor in Europe and Spain and 12-month T-Bills in the US. The scant sensitivity of the US banks to the increase in dollar rates contrasts sharply with the high correlation observed in Europe and Spain, largely explaining the stock market performances of the European and Spanish banking sectors relative to the remaining sectors and by comparison with the US banks.

The European and Spanish banks' outperformance has put their market

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Exhibit 1   **Main stock market indices in the US, Europe and Spain: General**

100 = 31/12/2020

Source: Bloomberg.

Exhibit 2

Main stock market indices in the US, Europe and Spain: Banks

100 = 31/12/2020
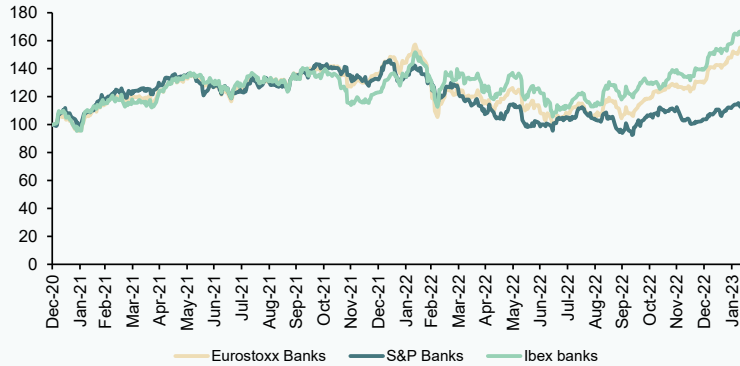
Source: Bloomberg.

valuations back at the levels observed prior to Russia's invasion of Ukraine, which is not the case in the US. As a result, the valuations of the banks on either side of the Atlantic have converged somewhat. However, the US banks still fetch a premium. The European and Spanish banks presented weighted average price-to-book (P/B) ratios of 0.69 and 0.72, respectively, at year-end 2022. The good news is that those levels are well above

Exhibit 3

General and bank stock indices: Correlation with interest rates

100 = 31/12/2020

3a. Europe
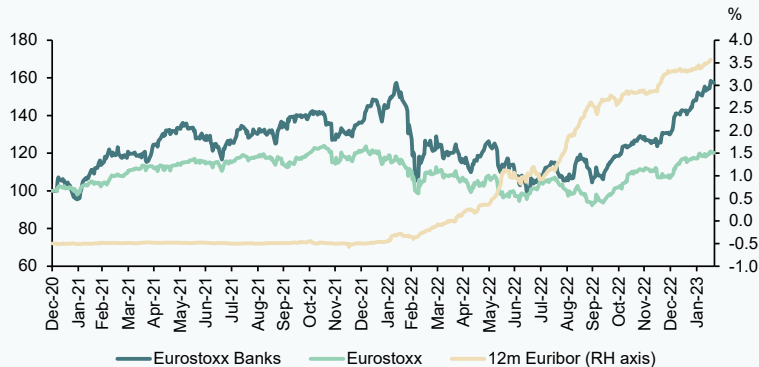
Source: Bloomberg.

Exhibit 3

General and bank stock indices: Correlation with interest rates

100 = 31/12/2020

Continued

3b. Spain

Ibex banks — Ibex35 — 12m Euribor (RH axis)

3c.US
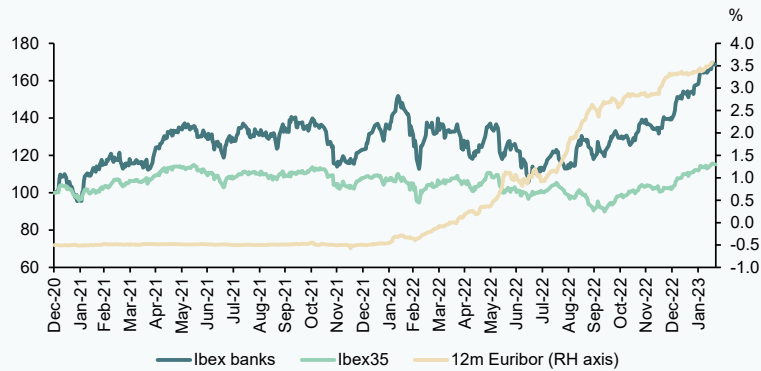
S&P Banks — S&P — 12m T-Bills (RH axis)
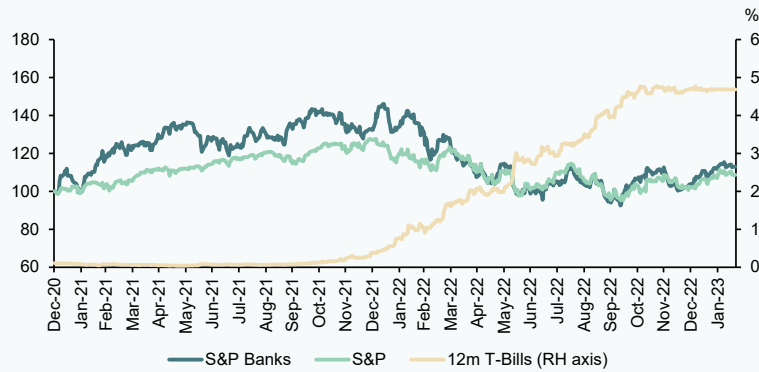
Source: Bloomberg.

> " The scant sensitivity of the US banks to the increase in dollar rates contrasts sharply with the high correlation observed in Europe and Spain, largely explaining the stock market performances of the European and Spanish banking sectors relative to the remaining sectors and by comparison with the US banks. "

those of recent years and indeed higher than at nearly any time since the financial crisis of 2010-2012.

However, the banks' multiple rerating does not mask the fact that those ratios are still considerably below 1x and below the US banks' valuations which, despite a meeker stock market performance last year, ended 2022 with an average P/B ratio of 1.3x, albeit well below the 1.6x recorded in 2021, which was a record year for the American banks.

Structural elements of outperformance

Having taken stock of the clearcut inflexion point in the European banks' valuations relative to their US counterparts, the next step is to analyse the trend in the main business metrics on both sides of the Atlantic in an attempt to determine whether the convergence has been structurally driven.

In the past, the valuation premium commanded by the US banks relative to their European peers stemmed from their ability to generate a much higher return on equity (ROE). To that end we will centre our analysis on that metric in order to detect whether there has also been a profitability tide change in favour of the European banks and, if so, whether it is likely to prove structural or transient.

Although only a few banks have reported their 2022 earnings, Exhibit 4 estimates the weighted average ROEs for the year for each of the regions analysed, comparing them with three milestone years: 2019, a proxy for the pre-pandemic business; 2020, a year of extraordinary adjustments and provisions; and 2021, the year of recovery from those provisions.

Beyond the clearcut trend of convergence between Europe and the US, what jumps out is the different lengths of time taken for ROE to bounce back after the sharp contraction induced by the pandemic in both regions. In the wake of that shock, the European and Spanish banks have recorded a sustained strong recovery, while the US banks have been more volatile, experiencing a pronounced increase in returns in 2021, followed by a dip in 2022.

Indeed, the correct reading of the numbers is not so much that the US banks posted a low return in 2022, although aggregate profits fell by close to 10%, but rather that the high return achieved in 2021 was unsustainable. We arrive at that conclusion by analysing the banks' impairment provisions in 2021. That year, the US banks reversed a significant percentage of the loan-loss provisions recognised in 2020 in the midst of the pandemic, recognising them as a gain in their statements of profit or loss in 2021.

Exhibit 4   **Return on equity (ROE): US, Europe and Spain**

Percentage
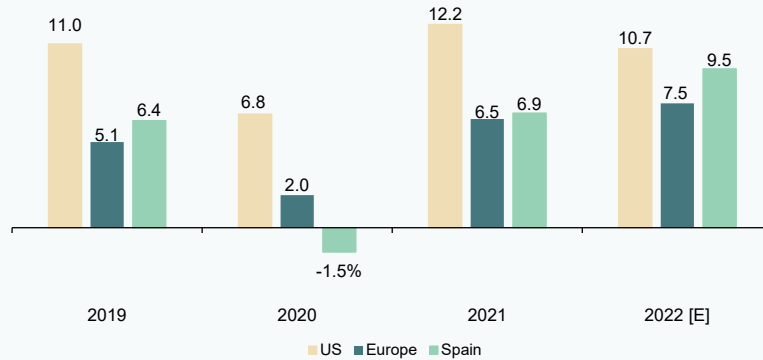
Sources: FDIC, SSM and Bank of Spain.

The reversal of those provisions in 2021 and the attendant reduction of the buffer set aside during the worst year of the pandemic obliged the US banks to recognise new provisions in 2022, triggered by uncertainty about the economic cycle, the US banks' riskier profiles and the toll taken by the adverse performance of the capital markets on their investment banking business.

Compared to the US banks' more volatile profile, making the most of their surplus provisions in the good years, like 2021, only to be forced to recognise new provisions in years of heightened uncertainty (2022), the European and Spanish banks present a more conservative profile characterised by relative stability in terms of the volume of provisions recognised and released through profit and

loss. In 2021, the European banks did not reverse the heavy provisions recognised in 2020 in conjunction with the pandemic, enabling them to reach cruising speed in 2022 without having to record new provisions against their earnings that year.

Thanks to that strategy, the European banks have been able to fully capitalise on the favourable effect of the new interest rate scenario on their net interest margin. The latter metric is registering double-digit growth in the US, Europe and Spain alike but, unlike in Europe, in the US, the adverse effect of the new provisioning effort in the US has fully wiped out the bump in margin.

In other words, the improvement registered in the Spanish and European banks' ROEs is being driven by structural factors which

> " Compared to the US banks' more volatile profile, the European and Spanish banks present a more conservative profile characterised by relative stability in terms of the volume of provisions recognised and released through profit and loss. "

Exhibit 5   Cost of risk

Percentage of ATA
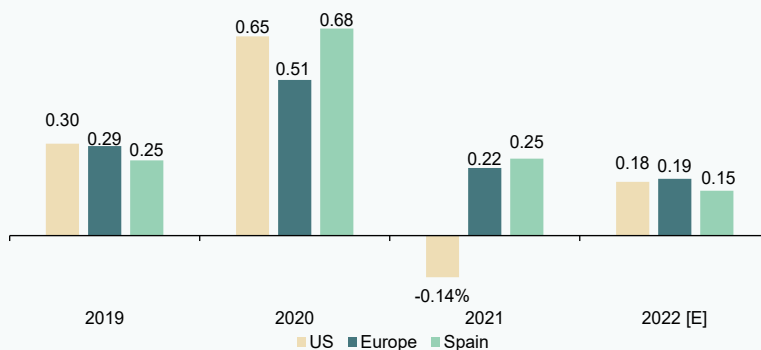
Note: The cost of risk is calculated as the volume of impairment losses recognised in the statement of profit or loss (against financial and non-financial assets) over average total assets.

Sources: FDIC, SSM and Bank of Spain.

substantiate the inflexion in their valuations relative to the American counterparts. There is still a profitability and valuation gap between the two systems but the distance has narrowed considerably by comparison with that prevailing systematically for nearly a decade.

Notes

[1] This article was written prior to the events that have taken place in the US and Swiss banking sectors, which brought about adverse effects for global banks, but in particular for US regional banks.

[2] All of the analyses contained in this article refer to financial developments in 2022 and stock market valuations up to mid-February. Valuations have been greatly affected by events at some regional American banks and a large Swiss bank.

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Bank profitability in Spain:
A debate in need of perspective

Spanish banks announced record earnings growth in 2022, in tandem with the ongoing process of financial normalisation, in which interest rates increased, after years in negative territory. Despite strong performance, challenges remain, and banks must stay profitable and solvent on account of their systemic importance to a country's business and social fabric, while pushing ahead with necessary cost-cutting and digitalisation.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Abstract: The Spanish banks announced record earnings growth in 2022, in tandem with the ongoing process of financial normalisation, in which interest rates increased, after years in negative territory. Spain's top three banks reported aggregate net profit of 19.17 billion euros last year, up 6.1%. Looking at the six largest banks, that figure rises to 20.85 billion euros. Although the absolute figures are eye-catching, it is important to note that they remain below 2007 levels. More importantly, this solid performance comes a time when the Spanish banks, along with their European peers, continue to face difficulties in increasing their earnings per share. The European Stoxx Bank Index contracted by 7% in 2022 with the vast majority of the banks trading at P/BV multiples of under 1x. Moreover, the banking business is facing challenges on the demand side. Household borrowings increased by just 0.3% year-on-year in January 2023, while corporate borrowings contracted by 0.7%. Fundamentals for 2023 do not point to significantly higher credit growth. Going forward, it will be key to consider a broader spectrum of factors in order to bring more perspective to the interpretation of banks'

profitability. Those factors include the considerable structural changes unfolding in recent years, such as complex mergers, sometimes taking place over a brief time span. As well, the balance between the volume of financing extended and deposits captured has improved relative to during the financial crisis, with the loan-to-deposit ratio at around 1x today, compared to 1.6x in 2007. Finally, solvency too has improved, with capitalisation substantially higher than prior to the financial crisis. Within this context, it is important to highlight the essential role banks play in underpinning a country's business and social fabric. They must remain profitable and solvent on account of their systemic importance and relevance at critical times, such as during the pandemic, while pushing ahead with the necessary cost-cutting and transformational digitalisation.

Introduction: The earnings debate

2023 ushered in new debates about economic challenges. Somewhat surprisingly, the banks' earnings became part of that debate. Some have said that the banks' earnings are "excessive" at a challenging time of rampant inflation and economic slowdown. However, one thing has little to do with the other. The confusion may stem from a number of associations at different levels. For example, at the global level, there has been debate around the tax contribution made by certain companies, specifically the tech players. There has also been debate around the extent to which competition really exists, with the information handled by the tech sector again at the heart of that topic. However, the scrutiny has recently spread to other companies, including the banks and energy companies, associating their profits with the increase in costs derived from the war in Ukraine, issues in various supply chains and the increase in interest rates. In the US, where the oil companies have significant market power and clout, the government has moved to demand lower profits or a higher tax contribution. However, there are no signs of that happening in Europe and certainly not in Spain. Much less in the banking sector.

Elsewhere, methodological confusion abounds and makes its way into public discourse all too easily. One such misguided notion is that concentration (market share) and market power are directly related. Academic research into industrial organisation has been disproving that relationship for years; in fact, the evidence shows that often such a relationship does not even exist. More specifically, there are many industries in which there are few competitors yet intense competitive rivalry, and others in which there is a large number of participants but the level of competition around prices and/or volumes appears weaker. In the case of the banks, and the Spanish system is no exception, competition has remained intense even though the number of competitors has declined. Indeed, the sector consolidation that has taken place was driven precisely by the need to build scale in order to survive in a market that now requires less physical infrastructure than in the past but a bigger digital footprint (the "platformisation" of banking). The "traditional" banks, whose population has decreased, not only need to compete more intensely with each other, they

have to develop or bring in services offered by other financial and non-financial players and compete with companies of all kinds in an increasingly broad number of segments.

Moreover, since the financial crisis, the banking sector has been plagued by profitability issues with most entities around the world trading at less than their book values.

In this paper, we take a look at the Spanish banks' earnings in that context, noting how their growth in the post-pandemic era is not only attributable to the increase in interest rates but also a change of circumstances. There is sufficient evidence to state that the growth in earnings is far less significant than the absolute figures might indicate, and that further upside is limited by a number of uncertainties and conditioning factors. The banks will have to continue to shrink their physical structures and evolve their business models in order to deliver the profitability demanded by the market, which is none other than that which guarantees their viability.

The backdrop for our analysis is the 2022 earnings reported by the banks at the start of this year. Last year's business environment was marked by rising interest rates, with the markets anticipating the monetary authorities. Having started 2022 in negative territory, in February 2023, 12-month Euribor traded at a monthly average of 3.534%.

However, the business environment is uncertain, precisely on account of that tightening and other economic unknowns. According to the Bank of Spain, household borrowings increased by just 0.3% year-on-year in January, while corporate borrowings actually contracted by 0.7%. It is also important to look at the impact of interest rates on the banks' liabilities (and not just their assets). It is possible that the banks in Spain and other countries will have to increase the remuneration offered on their deposits (although they never penalised deposits when official and market rates were negative, they did increase their commissions). Note that there has been a significant shift in the composition of savings that takes time to unwind. Whereas 15 years ago term deposits vastly outweighed current accounts, that

situation has inverted today. As of January 2023, private sector demand deposits amounted to 1.49 trillion euros in Spain, more than six times the amount held in term deposits (231 billion euros).

As for the monetary environment, official rates in the eurozone are expected to rise further. On February 2nd, 2023, the ECB signalled its intention to "stay the course in raising interest rates significantly at a steady pace and in keeping them at levels that are sufficiently restrictive to ensure a timely return of inflation to its 2% medium-term target". As a result, the Governing Council raised interest rates by another 50 basis points at its last monetary policy meeting in March.

Likewise, in its capacity as supervisor, on February 8th, 2023, the ECB decided to keep its capital requirements steady this year, signalling that the "banks remain resilient", framed by the results of its Supervisory Review and Evaluation Process (SREP) for 2022. The SREP was conducted amid deteriorating economic conditions and financial market dynamics following Russia's invasion of Ukraine. The ECB observed that "on average, banks maintained solid capital and liquidity positions, with the vast majority holding more capital than the levels dictated by capital requirements and guidance stemming from the previous SREP cycle."

The banks' earnings: The need for perspective

In 2022, pending publication by the Bank of Spain of the official aggregate figures, the top three Spanish banks reported net profit of 19.17 billion euros (Exhibit 1), growth of 6.1%. Taking the six largest banks, that figure rises to 20.85 billion euros. While the absolute figures may be eye-catching, several factors should be borne in mind. Firstly, again looking at the three largest banks, over two-thirds of total net profit was generated outside Spain, evidencing the international competitiveness of the Spanish banking sector. That geographic diversification reduces their risk and earnings volatility, thereby shoring up their financial stability. Secondly, those profits are still lower than those reported in 2007, right before the financial crisis. More importantly, they

Exhibit 1

Bank earnings in 2022

Top 3 banks' profits = €19.17 billion		YoY change: 6.1%
Perspective	Spanish business contribution to total profits = 31.2%	Profits lower than in 2007
Europe	Stoxx Banks Index 2022: -7% / Record capitalisation levels	Price to book value <1x
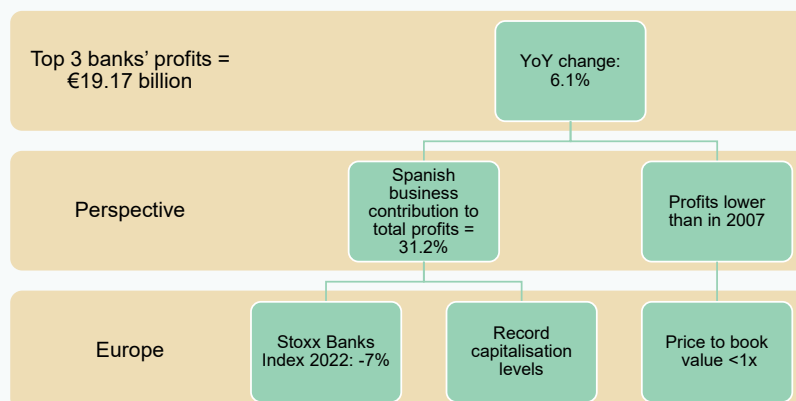
Sources: Authors' own elaboration and the figures reported by the individual banks.

come at time when the Spanish banks, along with their European peers, continue to find it hard to increase their earnings per share. The European Stoxx Bank Index contracted by 7% in 2022, with the vast majority of the banks trading at P/BV multiples of under 1x. In tandem, shaped by stringent regulatory requirements, the banks also reported record levels of capitalisation.

It is possible that the banks' earnings growth will slow going forward due to stagnating demand for credit, similarly, related with the increase in interest rates and prospect of an economic slowdown. In addition to the flow data outlined in the introduction, note that, as shown in Exhibit 2, the stock of private sector credit in Spain has contracted from 1.22 trillion euros in 2016 to 1.16 trillion euros in 2022. Lending volumes increased, however, by 39.36 billion euros in 2020, thanks to the banks' role providing the need for additional funding sparked by the health pandemic.

That additional financing entailed risks but also allowed many Spanish companies to survive. Despite that development, and the new risks posed by inflation and the economic slowdown, non-performance, far from increasing, has fallen from 9.18% in 2016 to 3.45% in 2022.

In the business environment described, one might think that the rise in interest rates would have unlocked significant growth in net interest income. However, the banks' net interest margins were steady at around 0.8%-0.9% of average total assets (Exhibit 3) as of September (it is conceivable that the December figures will reveal a degree of growth). Profit before tax has increased since collapsing in the year of the pandemic, gradually climbing back to 0.9%. Nevertheless, the banks' aggregate market capitalisation at year-end 2022 was still lower than at the end of 2019, before the pandemic, having digested three very challenging years.

" It is possible that the banks' earnings growth will slow going forward due to stagnating demand for credit. "

> " Profit before tax has increased since collapsing in the year of the pandemic, gradually climbing back to 0.9%; however, the banks' aggregate market capitalisation at year-end 2022 was still lower than at the end of 2019, before the pandemic, having digested three very challenging years. "

Exhibit 2 **Stock of credit and non-performance in Spain**
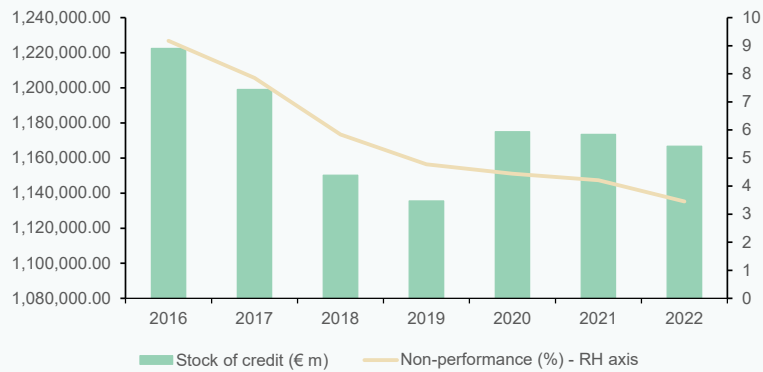
Source: Bank of Spain and authors' own elaboration.

Exhibit 3 **Margins, profits and market value**
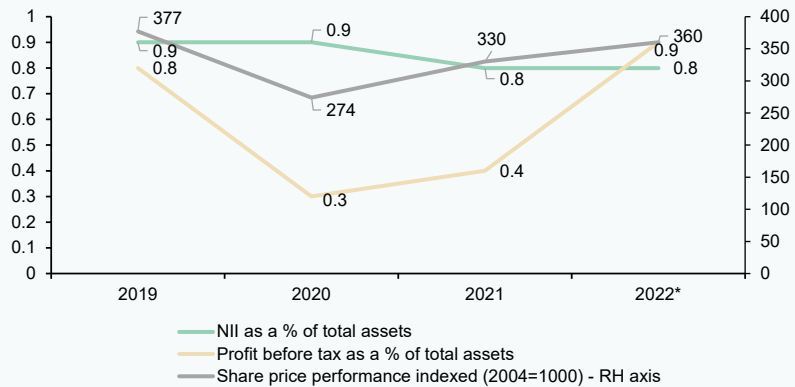
*September 2022 for net interest margin and profit for tax figures.

Sources: Bank of Spain, BME and authors' own elaboration.

Conclusions: Interpretations and social value

The analysis presented in this paper suggests that in 2022, the Spanish banks recorded earnings growth in tandem with the ongoing financial normalisation process in which rates increased and abandoned their negative terrain. It also points to further room for recovery as the banks' share prices and earnings per share metrics (as with all relative measures which should be studied to analyse earnings performance) remain below both their pre-pandemic and pre-financial crisis levels, even though circumstances were very different then.

Elsewhere, the balance between the volume of financing extended and deposits captured is better today than during the financial crisis. The loan-to-deposit ratio stands at around 1x today, compared to 1.6x in 2007. Solvency has also improved: Capitalisation levels are substantially higher than before the financial crisis.

It is important to recall that the banks are essential to underpinning a country's business and social fabric. It is important that they remain profitable and solvent on account of their systemic importance and relevance at critical times, such as during the pandemic.

Exhibit 4 — **Other interpretations muddying the earnings debate**
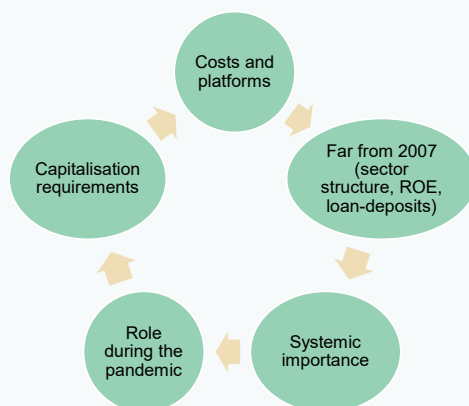
Source: Authors' own elaboration.

The financial business has unquestionably been affected by demand factors. 2022 was by no means a buoyant year in terms of growth in private sector credit nor do current fundamentals point to significantly higher growth in 2023. As shown in Exhibit 4, it is important to consider a broader spectrum of factors in order to bring more perspective to interpretation of the banks' earnings. Those factors specifically include the considerable structural changes unfolding in recent years, which have materialised in complex mergers, sometimes several in a short span of time.

Lastly, the banks are currently in the midst of necessary transformational cost-cutting and digitalisation processes.

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Shadow banking: A distortion of the banking business

Since the great recession, shadow banking has been growing worldwide, especially in the US and the Eurozone. However, monetary tightening and new capital requirements for private equity will likely slow down shadow banking growth.

Francisco del Olmo, Diego Aires, Fernando Rojas and Antonio Mota

Abstract: Since the onset of the financial crisis in the US in 2007, what has become known as the shadow banking system has attracted the attention of analysts, sparking growing concern about its role as a destabilising force. In the meantime, international financial system globalisation and innovation, coupled with regulatory trends across the world's main regions, particularly in the area of bank solvency, have only increased the relative importance of the shadow banking system, particularly in the US and eurozone. Yet, it is noteworthy to examine the diverse factors underpinning the extension of shadow banking within these two regions. In the eurozone, although there are limitations given the lack of available financial literature on this topic, according to our empirical analysis, the expansion of shadow banking is mainly being driven by regulatory pressure, whereas in the US, the profitability of financial intermediation more broadly is the main impetus for shadow banking growth. Going forward, ongoing interest rate tightening, coupled with restrictive monetary policies, will drain financial system liquidity. At the same time, modified capital requirements for private equity and investment funds will entail high capital requirements for these types of vehicles. The combination of these two factors will foreseeably slow shadow banking growth.

What do we mean by shadow banking?

The first thing we need to do is define what is meant by shadow banking. The term 'shadow banking' is attributed to Paul McCulley,

former CEO of PIMCO and professor at Cornell Law School and the Georgetown McDonough School of Business, who coined the term back in 2007 to refer to all financial intermediation activity taking place outside of the banking system.

The best-known study of the phenomenon is that undertaken by the Financial Stability Board (FSB), which brings together the national authorities responsible for financial stability all around the world. That institution defines shadow banking as

"credit intermediation involving entities and activities outside the regular banking system". In other words, all entities that undertake the activities performed by the banks on the credit side but which, by not directly taking deposits and, thereby, not taking household or business savings, are not regulated in the same way as traditional commercial banks.

Until 2018, the FSB's reports used to be called the *Global Shadow Banking Monitoring Report*. Subsequently, however, in a sign of the sector's diversity, the FSB decided to

Table 1 **Interconnectedness between the NBFIs and the rest of the economy and financial sector**
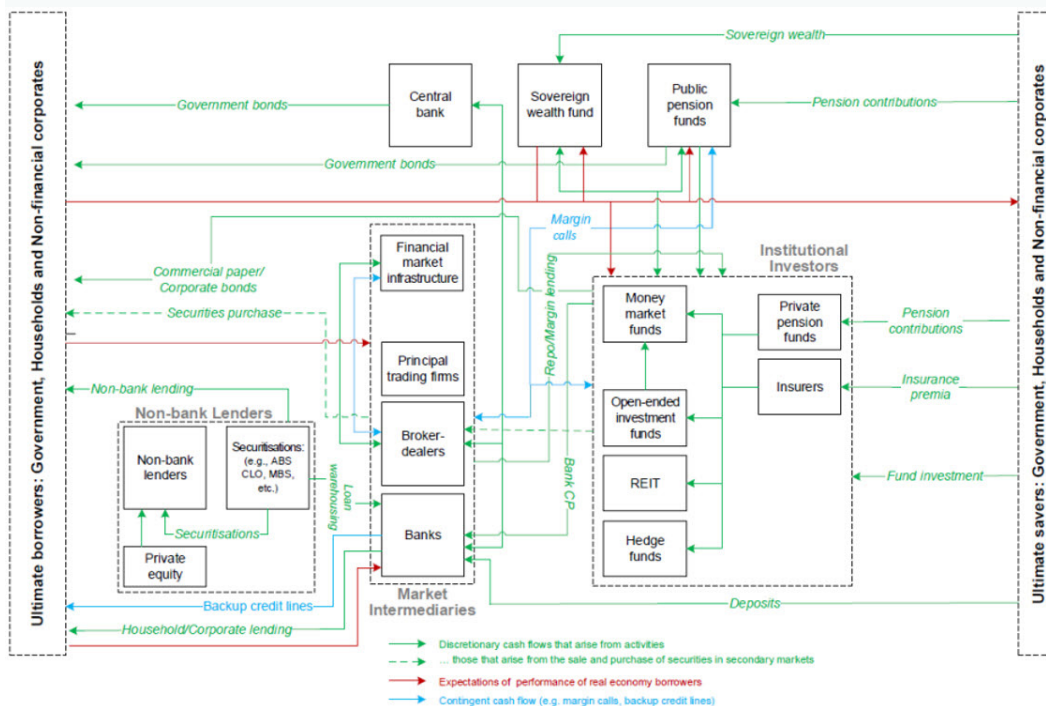
Source: Enhancing the Resilience of Non-Bank Financial Intermediation, Financial Stability Board 2022.

> **" Banks continue to account for the biggest share of financial assets, specifically 37.6% of total global financial assets and 52% of financial assets in Spain. "**

switch from shadow banking to 'non-banking financial institutions (NBFIs), which is the term it continues to use today to refer to these entities, as it better depicts their varied nature.

The NBFI ecosystem is increasingly complex and strongly interrelated with the rest of the financial system (Fan and Pan (2020) and Grillet-Aubert *et. al.* (2016)), where it goes for the financing it needs to carry on its business activities. Within the universe of NBFIs there are insurers, which are governed by their own set of regulations, pension funds, also under the umbrella of a specific regulatory framework, and a host of other entities the FSB dubs other financial institutions (OFIs). Some of those entities fall under the umbrella of a bank or other regulated entity on account of their business model or nature so that they do carry on regulated activities. There are other types of entities that are not under that umbrella, however.

In order to better understand the nature of those entities, Table 1 depicts the connection between the NBFIs and the rest of the financial and economic system.

Description of a reality in the shadows

In light of the foregoing, it is vital to describe and contextualise the shadow banking phenomenon in order to understand its significance.

As noted by the FSB in its most recent *Global Monitoring Report on Non-Bank Financial Intermediation,* published in December 2022, the sector has been registering almost double-digit growth in recent years, specifically by 8.9% in terms of total assets in 2021, according to the latest figures available.

As noted earlier, the main types of entities included under the NBFI definition are insurance corporations, pension funds, other auxiliary financial institutions, and 'other financial institutions' or OFIs, a catch-all category that mainly includes investment funds of all kinds (FSB, 2022).

Despite the fact that the NBFIs' total share of assets has increased, Table 2 shows how the

Table 2   **Breakdown of the global financial system by assets**

	Total global financial assets	Central banks	Banks	Public Financial Institutions	NBFI sector
Size at end-2021 (USD tn)	486.6	44.1	182.9	20.3	239.3
Share of total global financial assets (%)	100.0	9.1	37.6	4.2	49.2
Growth in 2021 (*i.a., %*)	7.7	12.0	5.5	4.5	8.9
Growth 2016-20 (anualized, %)	6.5	11.1	5.5	5.0	6.6

Source: Authors' own elaboration based on FSB data.

banks, as standalone institutions, continue to account for the biggest share of financial assets, specifically 37.6% of total global financial assets. The banks are followed by the OFIs, which command 31.2% of total global financial assets, pension funds, at 9.2%, and insurance corporations, at 8.3%.

Exhibit 1 shows the weight of assets for each category of firms as a percentage of each country's total financial assets. In Spain, the banking sector garners 52% of all financial assets and is followed by the Bank of Spain, which holds almost 22%. OFIs account for nearly 16% of the total, equivalent to nearly 73% of GDP, with the remainder of the pie made up of insurance companies (6%) and pension funds (approximately 3%). Albeit with some differences, that pattern is broadly similar in the main European countries, with the banks continuing to dominate.

Turning to the US, the picture changes. There, where the financial markets are more developed and businesses and society are more accustomed to tapping them for financing, the weight of the banks in the financial sector is significantly lower, at around 22.5% of total assets. In contrast, the OFIs and pension funds account, between them, for over half of the total (33.0% and 20.4%, respectively), indicating the scale of those sectors in the US economy.

In emerging economies with less developed financial markets, the weight of the banks is considerably higher than in advanced economies, where investment funds account for a substantial weight of total assets.

As already noted, the FSB includes a plethora of different types of entities in the OFI category, notable among which: money market funds; other investment funds; hedge funds; REITs; finance companies (FinCos); broker-dealers; structured finance vehicles; trust companies; captive financial institutions and money lenders; and central counterparties.

Although they do not all fit into the shadow banking concept (with the FSB itself having moved away from that term to categorise them), some are channelling credit to the economy beyond the reach of bank regulations. Indeed, their monitoring by the FSB and global credit supervisors and regulators is all

Exhibit 1   **Percentage weight of each financial sector in total home market financial assets**
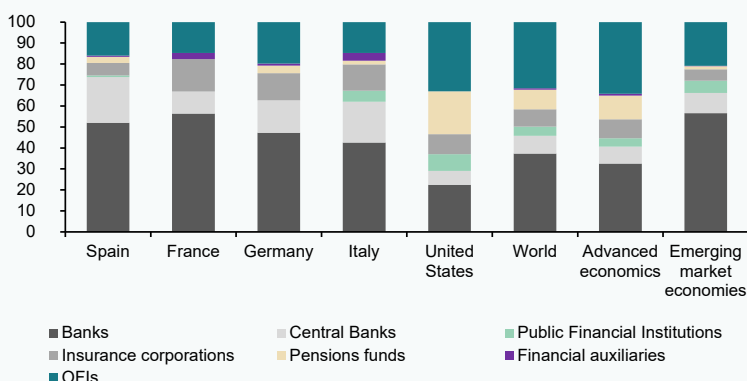
Source: Authors' own elaboration based on FSB data.

Table 3 — **Breakdown of credit asset and loan holdings by type of NBFI**

USD Tn

	Insurance corporations	Pensions funds	OFIs	Banks
2008 credit assets	10.1	4.8	30.2	83.5
2012 credit assets	13.4	6.3	33.5	98.4
2016 credit assets	17.1	7.9	39.5	112.8
2021 credit assets	20.7	10.9	52.9	151.8
2008 loan assets	1.6	0.2	13.0	54.7
2012 loan assets	1.6	0.2	11.8	61.4
2016 loan assets	2.2	0.2	13.8	72.8
2021 loan assets	2.5	0.3	15.4	98.9

Source: Authors' own elaboration based on FSB data.

the more prescient in the current context on account of their relevance to the economy.

According to the data published by the FSB, presented in Table 3, the NBFIs' credit asset holdings have been growing over the past 14 years.

Loans held by NBFIs have also increased in volume since 2008 to stand at around 18 trillion dollars worldwide. Although the weight of their loan holdings has declined by comparison with 2008 (to 15.5% from 21.5%), their volume has increased. Hence the keen interest in analysing, supervising, and monitoring them.

Delving deeper into the composition of those holdings by entity type reveals that the OFIs have increased their share of both credit and loan holdings. Within that category, investment funds held the biggest volume of credit assets as of year-end 2021.

In the current environment of high inflation, financing conditions are changing considerably, a development that is affecting NBFIs and their customers' contributions.

Firstly, market volatility drove assets under fund management around 7% lower last year. Over 90% of the drop in assets under management is attributable to asset devaluation, with the upward trend in interest rates sparking a significant correction in financial asset prices. The remaining decrease, while not significant, was shaped by a drop in customer capital contributions and financial institution funding, with prevailing uncertainty and tighter bank regulations playing a key role in the decrease in contributions by households and businesses to these kinds of vehicles.

Given these entities' weight in the economy, in the next section, we attempt to estimate the factors that determine the size of shadow banking systems.

> " In the current environment of high inflation, financing conditions are changing because of the new monetary policy context, negatively affecting NBFIs. "

Factors determining the size of shadow banking systems in the eurozone

In this section, we take a look at the factors that determine the size of the shadow banking systems in the countries comprising the eurozone. There is an obvious shortage of data. The FSB (2022) only provides the size of those systems for Spain, Belgium, France, Germany, Ireland, Italy, Luxembourg and the Netherlands.

Nevertheless, that block of countries represents 89% of the eurozone GDP, [1] so an analysis of those figures is sufficiently representative of the European reality.

Elsewhere, in line with previous shadow banking studies (Kim, 2016), we use the FSB's OFI segment as our proxy for this part of the financial sector (2022). That segment includes all financial intermediaries other than banks, insurance corporations, and pension funds.

Having determined the estimation sample and the variable to be explained (value/size of the OFI segment, using the natural logarithm), we came up with a range of assessments in order to understand which factors best explain the importance of this segment of the financial intermediation sector.

The variables analysed are: The value of the OFI segment, Regulatory capital ratio, return on equity (ROE), GDP per capita, creation of the Single Supervisory Mechanism (SSM), NPL ratio, changes in NPLs, financial development index, Net profit over RWA and Net Interest Margin over total assets.

From a methodological standpoint, we used panel data analysis since we have information for several countries over a given period of time. That approach is consistent with pre-existing literature (Kim, 2016).

The first analyses performed indicated a lack of statistical significance around the following variables: ROE, NPLs/total assets, financial development index, net profit/RWAs, relative and absolute change in NPLs, and NII/total assets.

Table 4 accordingly provides the final model [2] with the statistically significant variables selected so as to yield valid conclusions.

The results yield some interesting conclusions about the factors that are correlated with the size of shadow banking systems in the eurozone.

Firstly, they indicate the importance of regulations in the weight of shadow banking in

| Table 4 | **Estimated model** |

Variable	Coefficient	P-value
Constant	-9.33195 (1.47283)	2.36e-010 ***
Total capital ratio	0.0434675 (0.00693865)	3.74e-010 ***
Dummy SSM	0.134571 (0.0411900)	0.0011 ***
GDP per capita Ln	0.869099 (0.138914)	3.94e-010 ***

Note: Standard deviations between brackets. (*p < 0.10; **p < 0.05; ***p < 0.01).
Source: Authors' own elaboration.

> " Together with higher national wealth, analytical results highlight the importance of regulations in the weight of shadow banking in the eurozone. "

Europe, a conclusion underpinned by the sign of the total capital ratio and SSM variables. Without a doubt, therefore, the existence of more stringent bank regulations (an intense thrust since the creation of the second pillar of the Banking Union, the Single Supervisory Mechanism) encourages entities subject to less intense regulations to corner segments of the market where the banks are more reluctant to lend on account of more stringent capital limits. This enhances resilience and financial stability of the financial system (Gebauer and Mazelis (2020)).

Secondly, higher national wealth also implies growth in the incidence of shadow banking in the eurozone as, logically, an increase in wealth leads to growth in investment activities, some of which are tapped by this segment of the financial intermediation spectrum by offering higher returns.

Analytical comparison between the eurozone and the US

Having analysed the key determinants of the size of the shadow banking system in the eurozone, we looked at whether those conclusions can be extrapolated to the world's largest international banking system, that of the US. To do that we conducted variance decomposition analysis [3] in the two regions to analyse the relative importance of each explanatory variable in determining the size of their shadow banking segments.

The databases used to perform that analysis in each geography are those described in the previous section. The specific variables used in the analysis are the size of the OFI segment (natural log), GDP per capita (natural log), the bank system capital ratio, and the NPL ratio.

We also include the ROE in the US analysis and the 12-month Euribor in the eurozone

analysis. Let us explain the difference in variables. In the eurozone, the shadow banking sector has been increasing in size significantly since 2013 as a result of the creation of a number of investment institutions in response to the ECB's implementation of expansionary monetary policy and the attendant reduction in interest rates (which eventually turned negative), which ultimately prompted the financial institutions to become commercially active, urging customers to move their funds to off-balance sheet products (such as investment funds, which are part of the shadow banking system) in order to improve their funding costs. Moreover, in the case of the eurozone, the banks' profitability is significantly determined by their net interest margins, in turn, dependent on the interest rate curve, implying that the 12-month Euribor is also a good proxy for ROE in that specific market.

Table 5 provides the variance decomposition for the eurozone. It shows how, consistent with the results obtained in the previous section, the variable that makes the biggest relative contribution to determining the size of the shadow banking segment in the eurozone is that related to solvency requirements, measured using the capital ratio (with a contribution of approximately 35% in the medium- and long-terms). 12-month Euribor makes a relatively meaningful contribution in the medium- and long-terms of approximately 23%, which is consistent with the thesis presented in the paragraph above. [4] The GDP per capita and NPL variables play a smaller role in the eurozone, with contributions of under 20%.

It is important to highlight their importance in matters of financial stability. An increase in interest rates, together with the start of the withdrawal of the extraordinary expansionary measures (liquidity) as we are seeing at

Variance decomposition for the size of the OFI sector (natural log) in the eurozone

Period	Standard error	GDP per capita Ln	12m Euribor	Total capital ratio	NPL ratio	Other financial institutions (OFIs) (Ln)
1	0.04	8.16	0.60	5.41	23.15	62.68
2	0.06	10.31	11.40	20.01	19.37	38.91
3	0.08	9.96	21.26	27.56	15.41	25.81
4	0.09	9.91	22.36	30.71	15.32	21.70
5	0.09	10.18	22.84	32.43	15.51	19.04
6	0.10	10.52	23.19	33.60	15.66	17.03
7	0.11	10.86	23.23	34.37	15.92	15.61
8	0.11	11.20	23.13	34.89	16.22	14.56
9	0.12	11.52	22.96	35.22	16.52	13.78
10	0.12	11.81	22.77	35.43	16.79	13.20

Source: Authors' own elaboration.

present, 'quantitative tapering' in other words, in which savers will increasingly be interested in deposits, could give rise to tensions in the financial markets. Those liquidity tensions could cause turbulence in the markets derived from the withdrawal of monetary stimuli. However, the impact on the bank channel should be limited as the financial institutions are currently less dependent on the financial markets for funding than in the past.

Table 6 provides the variance decomposition for the US. It reveals that the results obtained for the eurozone do not hold for the North American banking system – the regulatory burden, measured using the capital ratio, which plays a prominent role in determining the size of the shadow banking system in the eurozone, plays a secondary role in the US, making a relative contribution of just under 15%. In contrast, in the US, the banking system's ROE is the most important variable in determining the size of the country's shadow banking system, with a relative contribution of over 50%.

These results lead us to the conclusion that in the eurozone, shadow banking emerges as an alternative to the provision of financing in an attempt to circumvent the regulatory

> " The results obtained for the eurozone do not hold for the North American banking system, where the regulatory burden plays a secondary role. "

Table 6   **Variance decomposition for the size of the OFI sector (natural log) in the US**

Period	Standard error	GDP per capita Ln	ROE	Total capital ratio	NPL ratio	Other financial institutions (OFIs) (Ln)
1	0.06	12.34	59.57	10.85	2.43	14.80
2	0.08	22.71	50.30	13.57	1.46	11.97
3	0.09	18.50	53.55	17.80	1.22	8.93
4	0.11	16.08	59.58	16.83	1.03	6.47
5	0.13	14.74	63.60	15.97	0.93	4.76
6	0.16	13.80	66.65	15.19	0.80	3.56
7	0.19	13.54	68.51	14.54	0.64	2.77
8	0.23	13.64	69.42	14.18	0.49	2.27
9	0.27	13.92	69.73	14.03	0.37	1.95
10	0.32	14.26	69.67	14.03	0.28	1.77

Source: Authors' own elaboration.

burden, whereas in the US, the size of the shadow banking system increases, in general, when the business of extending financing is more profitable, irrespective of the regulatory burden. As for GDP per capita, the relative contribution of this variable is similar in the US and eurozone, at around 10%-15%.

Conclusions

Since the dawn of the Great Recession, and most particularly since the start of the last decade, shadow banking has grown significantly worldwide, including in two of the world's most important financial systems, those of the US and the eurozone, as analysed in this paper. However, the factors driving this phenomenon differ between the two regions. Our results suggest that in the eurozone it is regulatory pressure that is chiefly responsible for the growth in the size of its shadow banking system, whereas in the US, it is the profitability of financial intermediation in general that primarily determines its size. The trend in interest rates also plays a meaningful role in the eurozone. Having turned negative in 2014, the entities had an incentive to deviate some of their customers' funds to off-balance sheet structures which ultimately constitute part of the shadow banking system. Looking to the

> " In the eurozone, shadow banking emerges as an alternative to financing in an attempt to circumvent the regulatory burden, whereas in the US, the size of the shadow banking system increases when extending financing is more profitable. "

future, we are facing interest rate tightening, coupled with the withdrawal of extraordinary monetary policy measures as far as financial system liquidity is concerned. Also, modified capital requirements for private equity and investment funds are due to take effect, on a staggered basis, in the coming months, [5] so that the institutional investors subject to the Basel III prudential regulations will have to set aside significantly more capital. As a result of those two factors, it is foreseeable that the intense growth observed in shadow banking over the past decade will slow. We will see if we are right in upcoming publications by the FSB.

Concerning our study, it must be borne in mind that the conclusions derived from our empirical analysis depend on the specific sample used to build our econometric models. Thus, our analysis faces the limitation that the conclusions obtained are based on the specific sample, the time period and the OFI's definition considered.

In addition, the limitations regarding the availability of information of the FSB database both at the country and time period level led us to analyze a great part of the eurozone's financial system (but not the whole of it) from 2014. Although it is from that year that the Single Supervisory Mechanism was adopted, a broader sample period could have brought us a deeper understanding of the OFI's main determinants, especially prior to the 2008 financial crisis.

However, although there is a lack of literature on the subject and it is under constant investigation, the conclusions obtained shed light into the importance of banking regulation and supervision concerning the solvency, stability and resilience of the financial system. In fact, our results suggest that, while increased regulation may increase the prevalence of shadow banking in some regions, broadly speaking, more developed regulatory and supervisory frameworks are an entry barrier for banks' undertaking certain (and riskier) funding activities which ultimately promotes financial stability.

Notes

[1] Eurostat data from the third quarter of 2022.

[2] Specifically, a random effects panel data model. We opted for the random effects approach over the fixed effects approach in light of the result of the Hausman Test as it was not possible to reject the null hypothesis that the GLS estimators are consistent. Elsewhere, given the existence of autocorrelation and heteroskedasticity, the model was estimated using Beck-Katz standard deviations. Lastly, the model yields results in which cross-sectional dependence is not observed and the model's residuals follow a normal distribution.

[3] The VAR model built for each geography in order to perform the variance decomposition analysis was estimated using a constant and lag interval of 1. In addition, the selected ordering of the Cholesky decomposition assumes that the size of the shadow banking segment has no impact on the rest of the explanatory variables but that the variables do impact the size.

[4] Note, as gleaned from the analysis, the correlation between 12-month Euribor and the size of the shadow banking sector is negative. Specifically, in our time sample, the linear correlation coefficient is -0.88.

[5] According to the Proposal for a Regulation of the European Parliament and of the Council, amending Regulation (EU) No. 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor.

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Increases in Euribor and potential impact on mortgages and the Spanish economy

The rise in Euribor has cooled the housing market –transaction volumes have slowed and the price curve is beginning to bend. While at present the situation does not seem to pose a risk of a crisis for the Spanish economy, going forward, the evolution of employment will be key, as this is the main variable underpinning households' ability to service their debts.

Raymond Torres

Abstract: The impact of the rise in Euribor on mortgage payments depends primarily on households' outstanding principal. Although the average size of a new mortgage stands at close to 145,000 euros, the average balance on outstanding mortgages is lower, at 82,700 euros. Circumstances therefore vary significantly depending on the age of the loan, just as a household's vulnerability depends on its income levels. Overall, the rise in Euribor has cooled the housing market –transaction volumes have slowed and the price curve is beginning to bend.

For now, however, the situation cannot be said to pose a major recessionary risk to the Spanish economy. Longer-term, the key will lie with the trend in employment, the main determinant of households' ability to service their debts. Nevertheless, households that have taken out floating-rate mortgages more recently with low- or medium-low income levels are set to face a sharp increase in financial burden relative to their disposable income, highlighting the importance of policy measures targeted at those most at-risk.

Introduction

The surge in Euribor has caused great concern over mortgage costs and families' ability to absorb them. The prospect of further rate increases by the European Central Bank (ECB), with inflation still running far above its target, is fuelling those worries. [1]

Often, however, the debate centres on estimates of the impact of the increase in interest rates at the aggregate level without sufficiently layering in the diversity of relevant additional circumstances or the structure of the mortgage market, which impedes assessment of the level of monetary policy restrictiveness. The purpose of this paper is, firstly, to quantify the impact by looking at disaggregated figures gleaned from official sources. And secondly, to examine the macroeconomic implications.

Impact of the increase in interest rates on mortgage costs

One of the consequences of the current bout of inflation in the wake of the energy shock and supply chain disruptions is the contractionary shift in monetary policy. In July of last year, the deposit facility rate (the ECB's main interest rate) was increased by half a point to 0%, leaving behind a period of eight years in negative territory. Since then, the ECB has tightened rates another four times, with additional increases expected. Those moves have been reflected in market interest rates.

Indeed, 12-month Euribor, the most common benchmark for floating-rate mortgages, has increased from close to -0.5% at the start of last year to over 3.5% today (Exhibit 1). That is the biggest increase since the creation of the euro. In absolute terms, however, Euribor remains below the peak observed during the financial crisis, especially if we factor in inflation, as real rates are close to zero. [2]

To analyse the impact of the increase in Euribor on mortgage costs, it is crucial to assess the size of outstanding household debt. For example, while the average size of a new mortgage is running at close to 145,000 euros (according to the Spanish mortgage association, AHE, for 3Q22, the latest figures available [3]), previously conceded mortgages have been partly repaid, leaving an average outstanding balance of around 82,700 euros, in other words, a little over half of that sum. With those figures in hand, we estimate that

Exhibit 1   **Trend in Euribor, 1999-2022**

Percentage
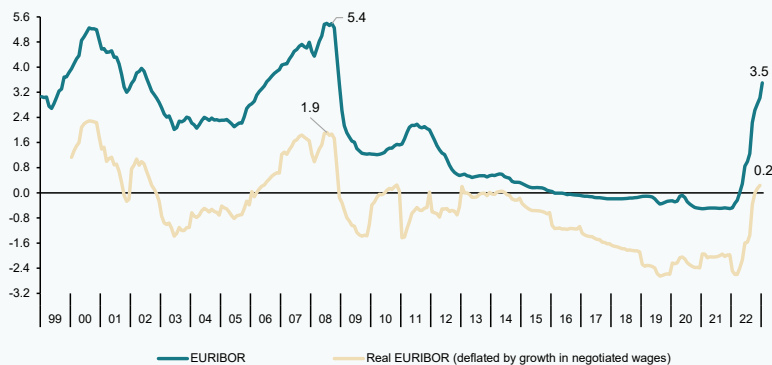
Sources: Bank of Spain, Ministry of Labour and Social Economy and Funcas.

> " Factoring in the average outstanding mortgage balance of 82,700 euros, every one-point increase in Euribor translates into an increase in the monthly payment of 43 euros for a 25-year mortgage; however, this sensitivity increases to 73 euros for mortgages issued recently, whose repayment has barely begun. "

for every percentage point increase in Euribor, the monthly payment on an average mortgage of 25 years (the most common maturity) will increase by almost 43 euros. That estimate differs from those based on the cost borne on mortgages issued recently (*i.e.,* those whose repayment has barely begun). For those mortgages, a one-point increase in Euribor translates into a monthly payment increase of 73 euros.

However, those are average values that fail to take stock of the disparity of circumstances. The rise in Euribor does not influence the cost of loans secured at fixed rates–even though, of course, it does push up the cost of new loans of that nature. It is indeed a fact that, discounting inflation, in other words, the factor prompting the restrictive policy, fixed-rate borrowers are benefitting from a reduction in interest burdens in real terms and in relation to their disposable income.

Circumstances likewise vary significantly depending on the age of the loan: individuals with older loans and little outstanding debt will barely feel the increased price of money, unlike those that have taken out loans far more recently. Specifically, of the 5.7 million mortgages currently outstanding, we estimate that 56.8% –those issued over five years ago–

will be relatively unaffected. The impact of higher rates will be bigger on the remaining mortgages (those issued less than five years ago), which constitute close to 2.6 million, almost half of which carry floating or mixed-formula interest rates. [4]

Lastly, the level of household income is another key factor to consider in assessing the impact of the rising price of money. According to the *Survey of Household Finances 2020* [5] (the most recent available), indebted households with low- and medium-low income levels bear disproportionate financial burdens (relative to their disposable income) than average indebted households. In the first income quintile, the weight of the financial burden is 75% above the average and in the second quintile, the difference is still 25%. Given the percentage of indebted households within these two quintiles, and assuming a debt age distribution similar to that of the general population, we arrive at a number of households disproportionately vulnerable to the increase in Euribor of 260,000.

In short, the increase in interest rates has had a very uneven impact. Based on the assumptions outlined above, we estimate that as a result of the four percentage point increase sustained by Euribor over the past year, the monthly

> " Of the 5.7 million mortgages outstanding, we estimate that 56.8% –those issued over five years ago– will be relatively unaffected, while the impact of higher rates will be bigger on the remaining close to 2.6 million mortgages, almost half of which carry floating or mixed-formula interest rates. "

payment on an average floating-rate mortgage has gone up by 171 euros (Table 1). However, that figure masks different impacts depending on how long ago the mortgage was issued. For mortgages signed in early 2022, for example, the monthly instalment will have increased by 291 euros (in terms of the average new mortgage size as of one year ago).

Macroeconomic effects

The above analysis suggests that the housing market will feel the pinch from higher rates. [6] As a result of the run-up in Euribor, home purchase affordability metrics have deteriorated considerably; that, coupled with tighter lending terms and conditions, is suggestive of a slowdown in demand. [7]

Under present conditions, considering the floating-rate formulas currently predominating, a household with average income of 30,000 euros (the average according to the National Statistics Office) would have to earmark 36.6% of its income to servicing a new mortgage at the average size of 145,000 euros. If Euribor were to climb another point (a hypothesis that is by no means farfetched judging by recent statements by ECB executives), that percentage would rise above the long-run average –though still remaining below the peak of the property bubble (Exhibit 2). Borrowers looking to lock in fixed rates would assume an even greater burden due to the higher spread with respect to floating-rate loans.

It is therefore not surprising that home purchases have already slowed: the number of home sales contracted by 10.6% quarter over-quarter in the fourth quarter of last year, in contrast with the growth recorded at the start of the year. The price curve is also beginning to bend (with a decline of 0.4% in 4Q22 according the School of Registrars). In line with other analysts, Funcas expects the market to stabilise in the course of this year.

> " Given the percentage of indebted households within the two lowest income quintiles, and assuming a debt age distribution similar to that of the general population, we arrive at a number of households disproportionately vulnerable to the increase in Euribor of 260,000. "

Exhibit 2   **Housing affordability**

Share of housing costs in gross disposable income
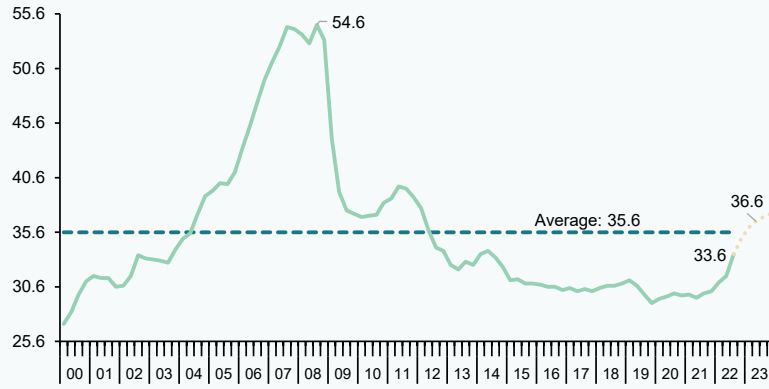
Source: Bank of Spain and Funcas forecasts.

The market is, however, not expected to collapse. The fact that housing serves as a safe haven asset should act as a floor for demand, particularly in the current environment of high inflation, quasi-zero remuneration on bank deposits and price volatility across financial assets. The boom in foreign investment in the property sector is also likely to prop up the market. According to the registry figures, foreign demand is verging on 15% of total transactions, which is close to the series high.

In addition to cooling the housing market, the rise in Euribor impacts the broader economic outlook. Firstly, via lower demand for credit to finance investment and consumption. Secondly, and more directly, as a result of the loss of purchasing power induced by the higher rates. Considering the volume of outstanding mortgage debt at floating interest rates (excluding loans extended to developers), the nearly four point increase in Euribor since early 2022 has pushed up the household debt service burden by around 13 billion euros, translating into gross disposable income erosion of 1.6%.

However, several factors offset that increase, particularly the repayment of loans issued at fixed rates in years in which interest rates were still relatively higher and when the size of the loans tended to be bigger than of late (composition effect). Despite those mitigating factors, however, households will lose purchasing power as a result of the rise in rates. They will also be affected directly by inflation and depletion of the pool of savings built up in prior years. Indeed, we are predicting a sharp slowdown in private consumption this year (Torres and Fernández, 2023).

" Considering the volume of outstanding mortgage debt at floating interest rates, the nearly four point increase in Euribor since early 2022 has pushed up the household debt service burden by around 13 billion euros, translating into gross disposable income erosion of 1.6%. "

It is also important to consider the impact of higher rates on the solvency of the more at-risk households, *i.e.,* those with lower-income and floating-rate loans issued more recently. Their plight is undoubtedly a major social issue. From the point of view of the banks, however, the cost of potential defaults looks manageable in light of current provisions and other liquidity buffers. Longer-term, the key lies with the labour market as a household's ability to service its debt depends largely on its employment status.

In sum, the rise in Euribor does not, for now, imply an excessive risk for the economy. Nevertheless, some households, especially those that have taken out floating-rate mortgages more recently with low- or medium-low income levels face a sharp increase in financial burden relative to their disposable income. All of which signals the importance of measures targeted at those most at-risk.

Notes

[1] In a recent interview, Isabel Schnabel emphasised the need to continue to increase rates until there is robust evidence that inflation is going back to its target of 2% (https://www.ecb.europa.eu/press/inter/date/2023/html/in230217~936be841f2.en.html).

[2] To estimate Euribor in real terms, we used the average increase in wages negotiated via collective bargaining as our deflator. That is because the trend in wages is a good proxy for household income. Also, the negotiated wage figures are updated monthly, making it possible to deflate Euribor with that frequency.

[3] Refer to the *AHE's Quarterly Bulletin* for the third quarter of 2022, at www.ahe.es

[4] The AHE's bulletin includes mixed-formula loans within the floating-rate category.

[5] Survey of Household Finances (EFF) 2020: methods, results and changes since 2017. Analytical Articles. *Economic Bulletin,* 3/2022 (bde.es).

[6] For an analysis of the correlation between interest rates and the Spanish property market, refer to Torres (2022). The ECB has come up with a recent estimate for the eurozone (2022).

[7] For further details about the market's performance, refer to Montoriol Garriga (2022).

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Raymond Torres. Funcas
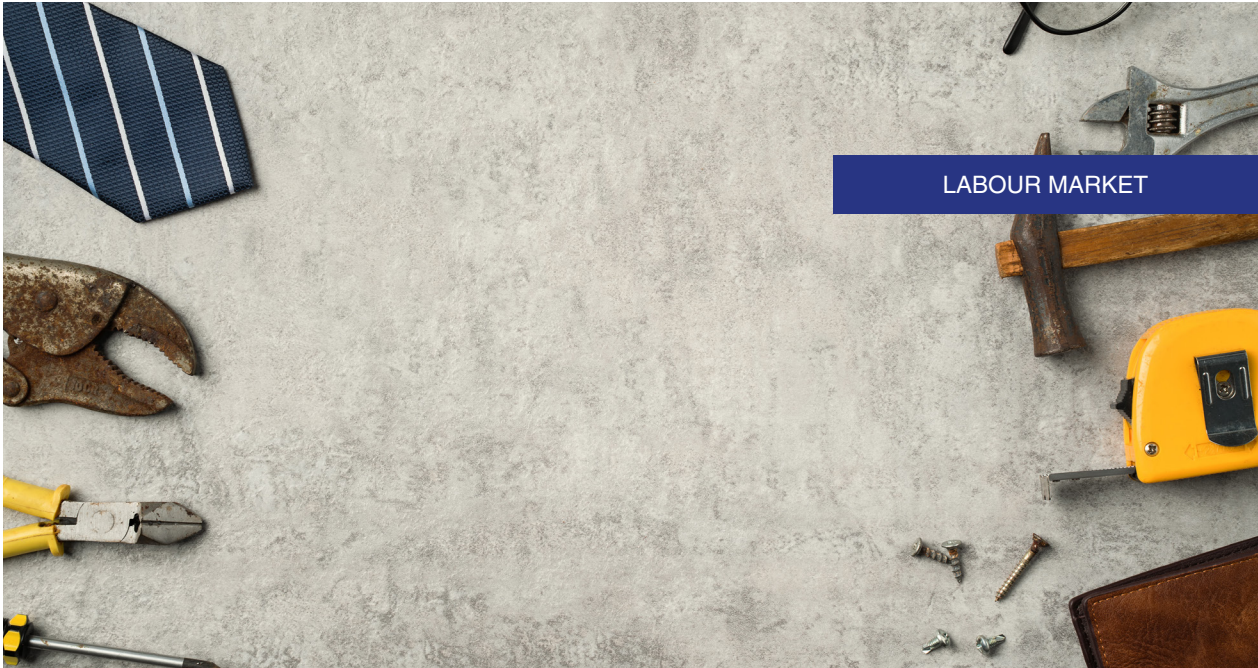
Spanish employment data in 2022: Resilience in the context of a conundrum

The recent trends in the Spanish labour market have been seemingly positive, insofar as employment is already above pre-pandemic levels and continued to grow in 2022 despite the complex environment. Nevertheless, on the whole, Spanish labour market data remain mixed, impeding a clear picture of its possible structural changes.

María Jesús Fernández

Abstract: The recent performance of the Spanish labour market has been favourable as regards employment (in both *Labour Force Survey - LFS -* and contributor terms), which has already surpassed pre-pandemic levels and continued to grow in 2022 despite a challenging economic and geopolitical context. The reduction in temporary contracts since the passage of the most recent labour reforms is another positive development. Indeed, the incidence of temporary workers in total contributors stood at 15% (the lowest level in the historical series) by the end of 2022, compared to 27% in previous years, evidencing the favourable impact of labour reforms in terms of job quality. However, the rationale behind the evolution of some labour market data remains uncertain and the performance of other indicators remains mixed, complicating a straightforward interpretation. Firstly, it is not clear why Social Security contributor growth has been so intense, outpacing both GDP and *LFS* employment growth. Part of the explanation could be attributable to the formalisation of the informal economy, a testament to labour market resilience in the context of extreme economic uncertainty. Lastly, despite some of these favourable

trends, there was a sharp drop in actual hours worked per job holder, in line with the trend across the eurozone, adding to the mixed picture. Given the somewhat ambiguous nature of recent trends, it may simply be too early to come to a definitive conclusion over the evolution of Spain´s labour market and the extent to which it may have undergone structural changes.

Trend in Social Security contributors

The number of Social Security contributors stood at 20,296,271 as of December 2022, evidencing a growth of 471,000 from a year earlier. Due to seasonal factors, however, the December figure was not the highest for the year: contributors peaked at 20,348,330 in June. The pace of year-on-year growth in contributor numbers halved towards the end of the year by comparison with the first half, shaped to a degree by lower monthly growth rates but more significantly by the fact that

the bulk of the post-pandemic job recovery was concentrated in the second half of 2021, distorting the comparison. In the first half, we accordingly saw year-on-year increases of around 890,000 contributors, compared to the above-mentioned 471,000 by December (Exhibit 1). To obtain a truer picture of the annual trend, it makes more sense to compare the annual averages. By that measure, the annual average number of contributors was 750,000, or 3.9%, higher in 2022 than in 2021.

By sector, contributors fell in agriculture and rose in industry, construction, and services. Within the latter, growth was higher in market services than in government services. Stripping out the agricultural and public sectors, shaped by forces exogenous to the economic climate, the results reveal that the non-farm, private sector payroll increased by 4.8% in 2022 (still using annual averages), equivalent to 724,000 contributors.

Exhibit 1   **Social Security contributors**

'000
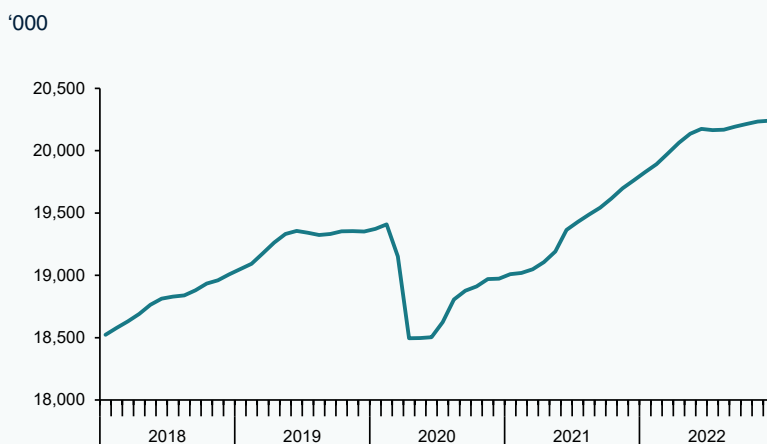
Sources: Spanish Ministry of Inclusion, Social Security and Migration and Funcas.

> " The dynamism in contributors relative to GDP growth is one of the most noteworthy aspects of Spain's economic performance in the wake of the pandemic, possibly attributable to the formalisation of undeclared jobs. "

Average contributors last year were also 4.3% higher than in 2019 (with non-farm private sector contributors 3.9% above 2019 levels). Indeed, the number of contributors topped pre-pandemic levels as early as autumn 2021, even though GDP was still well below 2019 levels. In 2022, after sharp growth in the first semester, contributor growth slowed in the second semester but continued to outpace GDP (which rose a scant 0.2% quarter-on-quarter in the third and fourth quarters), despite a very adverse backdrop marked by high uncertainty and the energy crisis. That dynamism in contributors relative to GDP growth is one of the most noteworthy aspects of Spain's economic performance in the wake of the pandemic. It is conceivable that at least some of that trend is attributable to the formalisation of undeclared jobs, which would mean that some of the growth in contributor numbers did not stem from the creation of new jobs.

At the start of 2022, there were still around 120,000 people on furlough. After the spring, spurred by regulatory changes to that scheme and with the economy fully reopened, that figure fell to around 25,000, where it stayed throughout the second half, punctuated by the odd spike due to stoppages at automotive factories when supplies ran out.

It can be said, therefore, that the employees furloughed, a significant 3.5 million at the start of the pandemic, have been virtually fully reabsorbed by the economy without any perceptible loss of work at the aggregate level. The payroll in the hospitality sector, the area hit the hardest by the health crisis, topped pre-pandemic levels in May 2022. However, the number of self-employed contributors has yet to revisit those levels. In general, the trend in non-employed contributors has been weak by comparison with that in employees: their population grew by 0.8% in 2022, topping 2019 levels by 2%.

Implementation in March 2022 of the labour reforms passed in December 2021 sparked intense flows from temporary to permanent contracts. As of December 2022, Spain had 1.8 million fewer contributors on temporary contracts than a year earlier and 2.3 million more on permanent contracts; within the latter category, the ranks of fixed-discontinuous employees swelled by 450,000. As a result, the incidence of temporary workers in total contributors stood at 15% by the end of 2022, compared to 27% in previous years. That is the lowest level in the historical series, evidencing the favourable impact of labour reforms in terms of job quality. Elsewhere, growth in full-time employment was higher than in part-time work, so that the incidence of part-time work fell to 19%, extending the downtrend underway since 2017.

> " It can be said, therefore, that the employees furloughed, a significant 3.5 million at the start of the pandemic, have been virtually fully reabsorbed by the economy without any perceptible loss of work at the aggregate level. "

" The incidence of temporary workers in total contributors stood at 15% (the lowest level in the historical series) by the end of 2022, compared to 27% in previous years, evidencing the favourable impact of labour reforms in terms of job quality. "

Results of the *Labour Force Survey*

Growth in employment in 2022 according to the *Labour Force Survey (LFS)* was somewhat less vigorous than signalled by the Social Security contributor numbers. The average number of job holders by that measure was 617,000 higher in 2022 than in 2021 (compared to an average of 750,000 more contributors). Moreover, in the last two quarters, growth ground to a halt, with non-farm private sector employment contracting slightly in both periods. Nevertheless, the *LFS* figures likewise point to more people in work than before the pandemic, albeit by a smaller margin than indicated by the contributor reports (Exhibit 2).

The slower pace of growth in *Labour Force Survey* terms compared to the number of

Social Security contributors is not an isolated phenomenon in the historical series for those two statistics, although the scale of the divergence on this occasion is unusual. Only in 2017 was a difference of similar magnitude observed. As noted earlier, the rationale may lie, at least in part, in the above-mentioned formalisation of informal employment, jobs which are captured in the *LFS* figures but not so in the contributor ranks. It is tricky, however, to calibrate the extent to which that phenomenon may be at play, as the volume of informal employment is not directly observable and the differences between the two statistics can also be the result of other factors.

Like the Social Security contributor reports, the *LFS* also reveals a drop in the incidence

Exhibit 2   **Employment (non-farm private sector)**

Numbers rebased to 4Q19 = 100
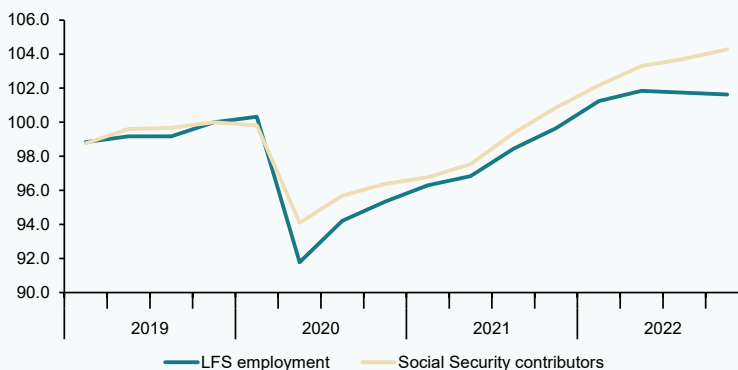
Sources: Funcas based on INE and Ministry of Inclusion, Social Security and Migration data.

> " Although employment measured by job holders is back above pre-pandemic levels, the same does not hold for the number of hours worked, which implies a reduction in the average number of hours worked per job holder. "

of temporary work to a record low of 17.9% by the end of the year. Another interesting takeaway from the *LFS* relates to the trend in the participation rate. In Spain, there has been nothing like the so-called great resignation observed in the US, where labour force participation dropped sharply at the onset of the pandemic and had only partially recovered in 2022. Following an initial drop, the participation rate in Spain revisited 2019 levels in 2022 (58.6%). By age groups, it has dropped in the youngest bracket and among those aged between 30 and 39, and increased among those aged 45 and over, doing so particularly intensely in the 60 to 64 (from 47.2% in 2019 to 53.8% in 2022) and 65 to 69 age brackets (from 6.9% to 10.1%), essentially accelerating the upward trend already being observed in those categories. Lastly, the annual average

unemployment rate dipped to 12.9%, its lowest level since 2011.

Mismatch between job holders and the number of hours worked

One of the most remarkable aspects of recent labour market trends is the fact that although employment measured by job holders (whether using the *LFS* or the Social Security contributor reports) is back above pre-pandemic levels, the same does not hold for the number of hours worked: at year-end 2022, that metric was still 1% below the level observed before the health crisis, according to the national accounts. That implies a reduction in the average number of hours worked per job holder, a trend corroborated by the *LFS* statistics. As a result, although productivity per job holder was still 1.8% below year-end

Exhibit 3 **Usual weekly work hours *vs.* actual weekly work hours**

3.1. Eurozone (hours)
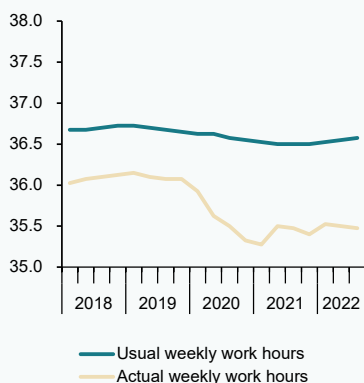
3.2. Spain (hours)
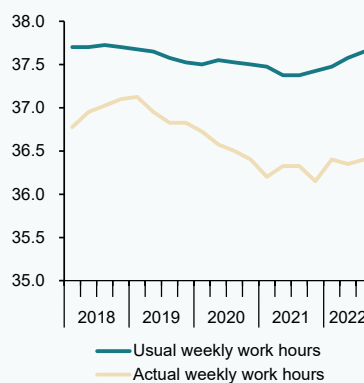
Source: Eurostat.

Exhibit 4

Job holders who did not work during the reference week due to own illness, injury, health problems or temporary disability

As a % of total job holders
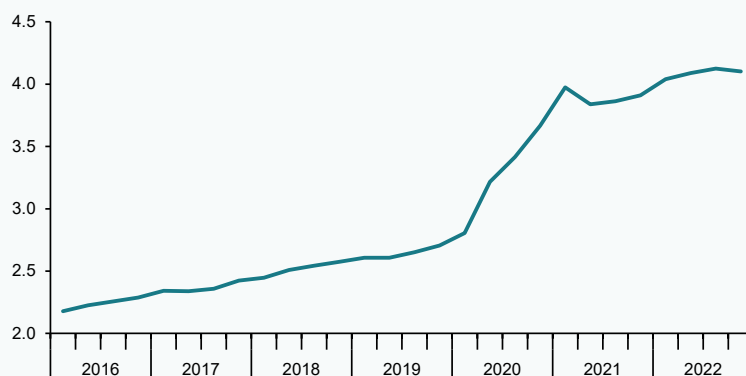
2019 levels at the end of last year, productivity per hour worked was the same.

The reasons for the drop in the actual number of hours worked per person does not lie with growth in part-time employment, which, as already noted, has fallen as a percentage of total employment. Moreover, according to the *LFS*, the length of the usual workweek was virtually unchanged in comparison with 2019. That phenomenon (barely any change in usual weekly hours worked but a drop in actual hours worked) is also observed in the eurozone (Exhibit 3).

The decline in the number of actual work hours is, therefore, attributable to an increase in absenteeism by job holders. According to the *LFS,* the percentage of jobs holders that did not work in the week in which the survey was conducted increased from 8.5% before the health crisis to 11.5% in 2021 and 2022.

One of the reasons tracked in the *LFS* for absence from work is illness, injury, and temporary disability. The percentage of jobholders absent from work for that reason increased with the onset of the pandemic and, in 2022, despite the end of the health crisis, far from coming back down, had increased (Exhibit 4). Another reason given for the increase in the number of job holders absent from work during the reference week, albeit less decisive, is holidays or leave.

Conclusions

The recent trend in the Spanish labour market yields some – apparently – good news, insofar as employment (in both *LFS* and contributor terms) is already above pre-pandemic levels and continued to grow in 2022 despite the complex environment. The reduction in temporary contracts since the passage of the most recent labour reforms is

" The decline in the number of actual work hours is, therefore, attributable to an increase in absenteeism by job holders. "

another positive takeaway. However, there are trends that are hard to interpret. Firstly, it is unclear why Social Security contributors have registered such intense growth since the pandemic, considerably outpacing GDP and *LFS* employment growth. The reason could lie with the formalisation of informal jobs. Even during the second half of 2022, amidst an energy crisis, intense uncertainty and meagre GDP growth, contributor numbers continued to rise, while *LFS* employment stagnated. If indeed the reason for that lies with the ongoing formalisation of underground jobs, the fact that that process continued throughout a period of such uncertainty and complexity is likewise remarkable and a sign of economic and labour market resilience. Lastly, the above trends took place against the backdrop of a sharp drop in actual hours worked per job holder, a phenomenon likewise observed in the eurozone, further clouding the interpretation of what is happening in the labour market. It may simply be a matter of letting more time go by to gain better insight into the structural changes that may be taking hold.

María Jesús Fernández. Senior Economist at Funcas

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Regional government debt: Recent trends and outlook

Despite having one of the most advanced fiscal rule frameworks in Europe, Spain remains the OECD country where regional governments' debt has grown the most since the Great Recession. Even in the context of more difficult financing conditions at present, it will be important to address existing challenges to the extraordinary regional financing mechanisms, while adapting the current fiscal stability framework to the new European rules.

Santiago Lago Peñas

Abstract: Following nearly two decades of legislative action, Spain's fiscal rule framework is among the most advanced and rigid within Europe, systematically placing the country among the top quartile of the EU-27 in terms of fiscal governance. Nevertheless, data on regional governments' deficit and indebtedness reveal a significantly weaker commitment to budget stability. Strong regional debt growth has largely been underpinned by collapsing revenues and high, rigid public spending in key public services, such as healthcare and education. Yet, debt levels differ significantly across regions, with just two regions, Catalonia and Valencia, accounting for 44.1% of the growth in regional debt stock between 2007 and 2022. Beyond the debate about exit strategies for the extraordinary financing mechanisms implemented since 2012, it is important to think about adapting the current fiscal stability framework to layer in the requirements that will come into force under the new European rules and the need to address identified shortcomings.

Regional Government Debt: The institutional framework [1]

Spain's regional governments (*Comunidades Autónomas*) have always been entitled to borrow. However, that ability has also always

been subject to controls and limits beyond the market discipline imposed by investors. Article 14 of Spain's Regional Government Financing Organic Law, passed in 1980, introduced restrictions on their ability to borrow. Essentially it established a 'golden rule' whereby the governments are obliged to use the proceeds to fund capital investments. In the following decade, the so-called budget consolidation scenarios came into play as part of a larger strategy pursued in the public sector to tackle the country's adoption of the euro. The rollout of the common currency was accompanied by a raft of budget stability laws which articulated a comprehensive stability framework. Following a succession of reforms, the benchmark text today is the Budget Stability and Financial Sustainability Organic Law of 2012 (the Financial Sustainability Act), under which all the subcentral treasuries are bound by a structural budget balance rule, a debt limit (13% of GDP, applied homogeneously) and a spending rule. That legislation contemplated a long transition period that ended in 2020, which is when the first two rules took effect. Until then, at the regional level, those matters were addressed by fiscal targets set by the central government (specifically by the Fiscal and Financial Policy Council [*CPFF* for its acronym in Spanish]), and at the local level by the requirement to keep budgets balanced or in surplus. Those deficit targets were defined in nominal terms, relative to GDP, and, generally, in the same manner for all the regional governments. The spending rule has been in operation. The 'definitive period', which started in January 2020, proved short-lived on account of the pandemic: the regulatory framework was suspended in March when the escape clause was activated across Europe. And that is how things remain in 2023, pending redefinition of the European fiscal rules and deactivation of the escape clause, foreseeably

in 2024. In short, Spain has done what it had to in terms of legislation and rule-setting, especially in the last 20 years. The country's formal fiscal rule framework is among the most advanced and rigid in Europe. The European Commission's calculations systematically rank Spain among the top quartile of the EU-27 in terms of fiscal governance (European Commission, 2023). And that assessment is not much different looking at the data for subnational governments under the umbrella of the OECD (Vammalle and Bambalaite, 2021). Nevertheless, data on regional fiscal deficit and debt reveal a significantly weaker commitment to budget stability.

Recent trend in regional government debt

Exhibit 1 compares the trend in the financial liabilities of the regional governments of Spain with those of intermediate governments in the OECD with federal structures over the past 15 years. In 2007, right before the Great Recession, Spain's indebtedness was similar to that of Austria, Australia and Belgium. The Great Recession turned that situation on its head. Spain is the country where regional public debt has increased most intensely, ranking second by 2019, behind only Canada. In fact, considering the Canadian provinces'and other intermediate governments' long history compared to the relatively short life of Spain's regional governments, the stock of debt piled up in Spain should prompt reflection over the institutional framework intended to ensure budget stability and the incentives around the subcentral governments.

Exhibit 2 sheds light on the chief cause of the current stock of debt. The regional governments' deficit breached the 5% mark in 2011, after four straight years (2009-2012) of deficits of 2% or more. The explanation lies

> " The explanation for the strong growth in Spanish regional debt lies with a combination of collapsing revenue, together with relatively non-discretional spending concentrated in fundamental public services such as education, healthcare and social services. "

Exhibit 1   **Intermediate government debt in OECD countries in 2007, 2019 and 2020**

Percentage of GDP
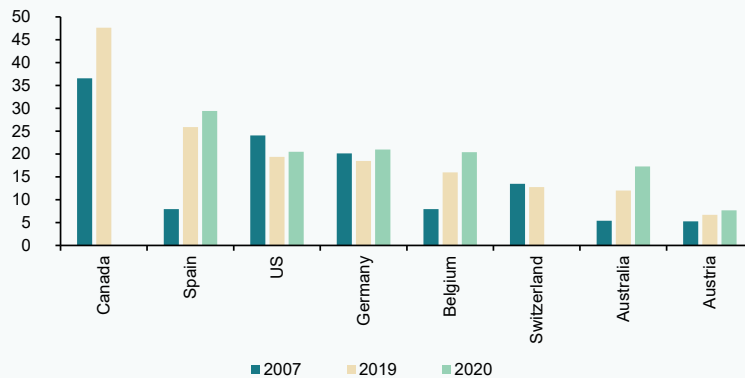
Note: Data for 2020 for Canada and Switzerland not available.
Source: Author's own elaboration based on OECD statistics (2021).

with a combination of collapsing revenue, especially that most closely related to the real estate bubble, and spending hard to pare back by virtue of being concentrated in fundamental public services such as education, healthcare, and social services. The contrast provided by developments during the pandemic is stark. When the pandemic came along, the central government provided the regional governments with financial shelter, supplying them with funding as if their tax revenue was not going to change by comparison with initial forecasts and setting up extraordinary and well-endowed financing funds (Lago Peñas, 2021). Indeed, their aggregate finance income in 2020 and 2021 looks more like the boom years prior to the Great Recession.

Nevertheless, the aggregate trend depicted in the exhibits above masks the existence of sharp differences from one region to the next. Exhibit 3 shows how, in terms of regional GDP, financial liabilities in Valencia have reached nearly 45%, tripling the leverage ratios

> " Spain is the OECD country where regional public debt has increased most intensely, ranking second by 2019, behind only Canada. "

Exhibit 2

Trend in the regional governments' fiscal deficit/surplus

Percentage of GDP
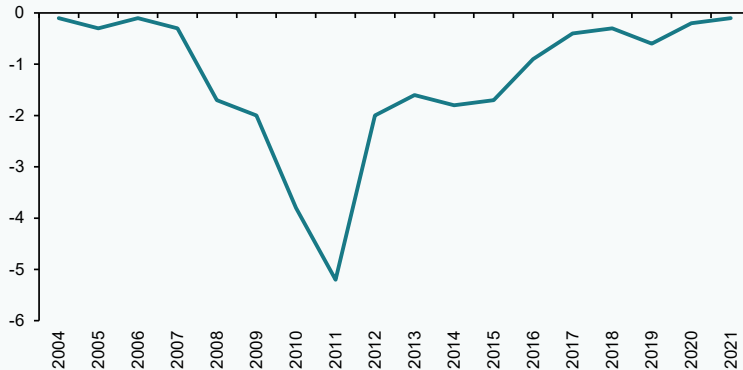
Source: Author's own elaboration based on Bank of Spain statistics (2023).

presented by the Canary Islands, Madrid, Basque region, Asturias and Navarre, while another three regions (Catalonia, Castile-La Mancha and Murcia) registered levels well above 30%. Exhibit 4 reinforces this idea. An analysis of individual accountability for the growth in regional government debt between 2007 and 2022 shows that nearly half of the increase (44.1%) is attributable to just two regions: Catalonia and Valencia.

Exhibit 3 **Regional government debt**

Percentage of GDP as of the end of 3Q22
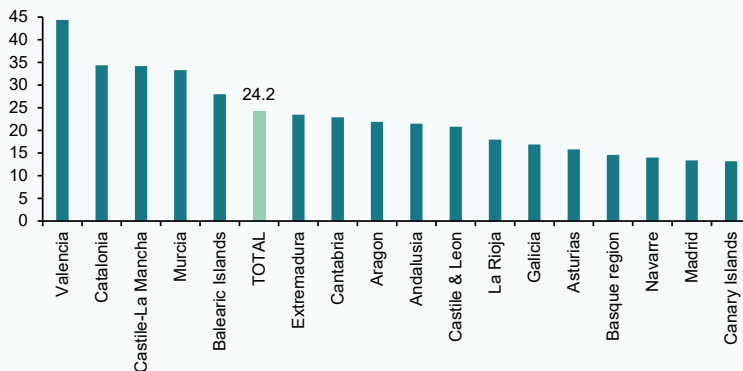
Source: Author's own elaboration based on Bank of Spain statistics (2023).

Exhibit 4   **Contributions to the increase in regional debt relative to GDP between 2007 and 2022**

Total=100%
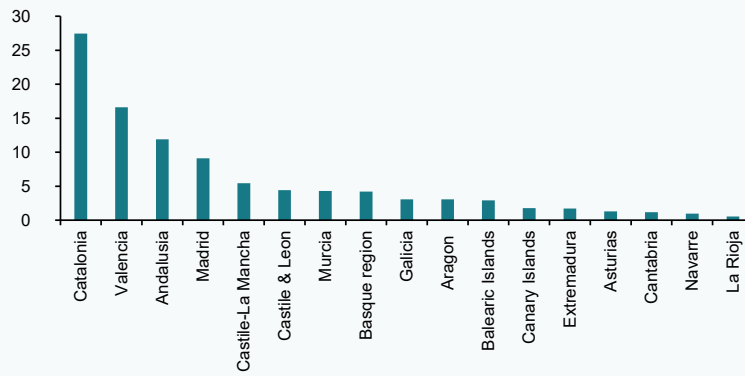
Source: Author's own elaboration based on Bank of Spain statistics (2023).

Extraordinary financing mechanism
The difficulty in accessing the financial markets triggered the need for additional funding that was ultimately channelled via "extraordinary financing mechanisms" set in motion by the central government starting in 2012. [2] The immediate result was a significant change in the roster of creditors (Exhibit 5). While in 2011 the sum borrowed by the regional governments from the central government was

Exhibit 5   **Regional government debt by creditor**

Percentage of GDP
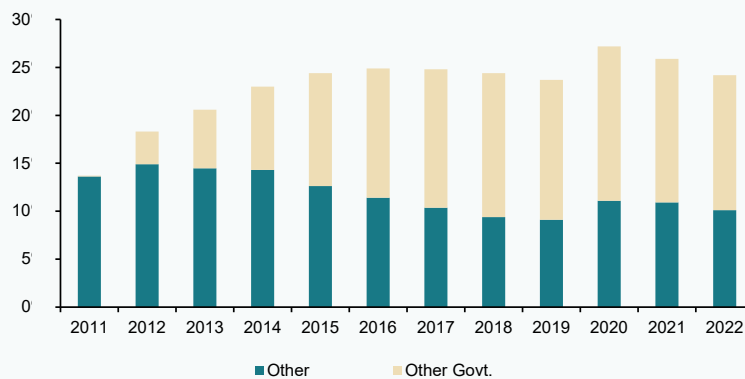
Source: Author's own elaboration based on Bank of Spain statistics (2023).

" The difficulty in accessing the financial markets triggered the need for additional funding that was ultimately channelled via extraordinary financing mechanisms set in motion by the central government starting in 2012. "

residual (a scant 0.1% of Spanish GDP), by the third quarter of 2022, that ratio had increased to 14.1%, implying that 57.8% of regional government debt is currently in the hands of the Ministry of Finance. In fact, the rest of the regional governments' debt has decreased in absolute terms from 145 to 132 trillion over the same period, and as a percentage of GDP, from 13.6% to 10.1%.

Delving into the regional breakdown of the extraordinary mechanisms availed of, we see a repeat of the above-mentioned asymmetries. Exhibit 6 shows the regions' share of the Spanish population and, by comparison, their shares of extraordinary financing schemes. Valencia and Catalonia account for around 27% of the population but absorb 57% of

that funding. The other regions which have garnered disproportionate extraordinary funding relative to the populations are Castile-La Mancha, Murcia and the Balearics. Between them, those five regional governments have received 72% of the extraordinary mechanism funds while only representing 37% of the population. Madrid is the total opposite. Ranking third in population size, the region has barely used the extraordinary mechanisms.

Despite the enormous differences in leverage ratios, the range in which the regions' credit ratings move is relatively narrow (Table 1). Those ratings are no doubt influenced by the existence of a state guarantee.

Exhibit 6   **Relationship between the regional governments' share of the population as of 2021 and their use of the extraordinary financing mechanisms (2012-2023)**
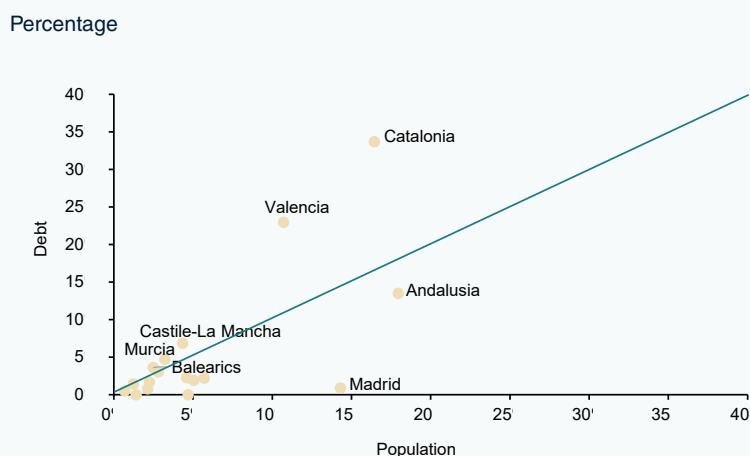
Percentage

Sources: Author's own elaboration based on Ministry of Finance and Civil Service figures (2023) and the INE's website.

Table 1 **Regional government credit ratings**

Percentage

Reg. government	Fitch	Moodys	S&P
Regions overall	A-	Baa1	A
Andalusia	BBB-	Baa2	BBB+
Aragon			BBB+
Asturias		Baa1	
Balearics			BBB+
Canaries	BBB-		A
Cantabria	BBB-		
Castile & Leon		Baa1	
Castile-La Mancha	BBB-	Ba1	
Catalonia	BBB-	Ba1	
Extremadura		Baa2	BBB
Galicia		Baa1	A
Madrid	BBB	Baa1	A-
Murcia	BBB-	Ba1	
Navarre			AA-
Basque region	A	A3	AA-
La Rioja	BBB-		
Valencia	BBB-		BB

Source: AIReF (2023).

Challenges posed by public debt at the regional level

The favourable borrowing terms of recent years are fast becoming a thing of the past. The extraordinary bond repurchase programmes, suspension of the fiscal rules and negative interest rates made what was nothing like normal feel like normal. As regards the regional governments, it is now time to think about a horizon without extraordinary financing mechanisms. The problem is that not all pathways are feasible.

If some of the regional governments were to suddenly return to the market, the risk premiums would be prohibitive. Indeed, the interest burden forecast for the end of the year on Treasury bonds would imply regions such as Catalonia and Valencia having to earmark 10% or more of their ordinary budgets to debt service (although it is true that the increase in interest spending could take time to kick in depending on the average life of the outstanding debt and the spreads demanded on new issues).

" Despite differences in leverage ratios, the narrow divergence in credit spreads across regions is no doubt influenced by the existence of a state guarantee. "

In addition, sharp asymmetry in the use of the extraordinary financing mechanisms from one region to the next complicates the possible solutions regarding accumulated debt up until the present enormously. Symmetric debt forgiveness would be insufficient. However, asymmetric forgiveness would most likely run up against strong political and social opposition in the regions that have tapped those channels to a lesser degree. It is true that in some cases, there is an element of underfinancing relative to the levels the regional financing model itself recognises and is supposed to guarantee. But that argument does not hold across the board. Moreover, formulas that imply forgiveness may send negative messages about the probability of future bailouts and the credibility of the Spanish fiscal stability framework.

Some analysts have proposed an alternative solution, which would entail leaving aside the debate about the principal outstanding and concentrating on its cost and maturity, to ensure that the debt burden is sustainable for all. It is true that, in this case, the most indebted communities would continue to be supported in a similar way to how they are being supported today, as the Treasury would have to borrow at much higher rates throughout the life of that debt. It would, however, most certainly be more politically acceptable and, ultimately, would ensure that the interest burden does not become an unbearable burden for anyone. Moreover, if a reform of the autonomous regions' financing regime is undertaken which leads to its improvement, the regional governments' financial projections would spark renewed investor interest, allowing them to return to the markets without having to pay significant premiums in respect of future deficits, so refinancing the debt that is not in the hands of other public administrations. A decision needs to be taken in 2023.

Beyond the debate about the extraordinary financing mechanisms, it is important to think about adapting the current fiscal stability framework to layer in the requirements that will come in under the new European rules and the need to address the identified shortcomings.

With respect to the European dimension, in light of the draft proposals by the European Commission, there is a range of possibilities, including the following three alternatives (Lago Peñas, 2023): Firstly, replicating the European regime, with a spending rule calibrated for each region as a function of its distance to the anchor ultimately established in terms of debt-to-GDP. Secondly, preserving the essence of the transitional regime in place until 2020, continuing to articulate fiscal stability around a deficit target expressed as a percentage of GDP. The Fiscal and Financial Policy Council would have to debate and determine the vertical distribution of the deficit across the different levels of government and its horizontal allocation across the regional governments. The third route would be to do away with deficit and debt targets, instead applying the spending rule calculated for the public administrations as a whole at the regional level. Both solutions based on application of a spending rule and those that continue to orbit around a deficit target would have to be combined with the creation of individual regional stabilisation funds designed to enable the generation of financial buffers during periods of growth in order to ensure the financing of essential public services when spending has to be cut.

As for the solutions to the shortcomings detected, it is worth highlighting three. It is imperative to reform the financing system to give the regional governments more

> " It is important to think about adapting the current fiscal stability framework to layer in the requirements that will come in under the new European rules and the need to address the identified shortcomings. "

room to borrow so that they align their spending and ordinary revenue decisions better. International experience shows that decentralisation of fiscal capacity is a fundamental factor in delivering effective compliance with fiscal rules. Secondly, it is time to revisit the preventive, corrective and coercive measures stipulated in chapter IV of the Financial Sustainability Act as experience has proven that they are not applicable for economic policy reasons: in their stead, it is important to create credible expectations around the existing or new measures to be applied at the regional level. Lastly, it would be strongly advisable to reinforce the multilevel governance structures articulating the federal system (particularly the committee of regional government presidents and the Fiscal and Financial Policy Council). Such reforms would not require amending the Constitution but would require broad political consensus, making them hard to achieve in the short- or medium-term. The goal of reforming the committee would be to have it meet more regulatory and become the central axis for high-level policy debate about matters with regional implications. The Council, meanwhile, needs more physical and human assets to handle all of the technical work required to underpin that multilevel governance thrust, while the internal rules should be changed so that votes are carried out with higher levels of consensus than at present.

Notes

[1] The author would like to provide an acknowledgement to Diego Martínez López for his feedback on an earlier version of this paper.

[2] Implementation of those mechanisms additionally implied the partial suspension of the so-called 'golden rule'. As per item 9 of additional provision 1 of the Financial Sustainability Act, introduced on December 21st, 2013: "Credit transactions arranged by the regional governments with a charge against the additional financing mechanisms whose financial terms and conditions have been previously approved by the central government's Steering Committee for Economic Affairs shall be exempted from the mandatory state authorisation and shall not be subject to the restrictions contemplated in article 14 of Organic Law 8/1980 on Regional Government

Financing and transitional arrangement three of this Act."

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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)

Law 2/2023 regulating the protection of whistleblowers (published in the *Official State Journal* on February 21st, 2023)

This new piece of legislation transposes Directive (EU) 2019/1937 into Spanish law with the following objectives: (i) providing individuals reporting certain actions or omissions with adequate protection from reprisals by means of specific procedures; and (ii) fortifying a culture and infrastructure of information and integrity across organisations and fostering a culture of information and communication to prevent and detect risks to the public interest. It became effective 20 days after its publication.

By way of summary, the new legislation regulates the following:

1. Protected communications. The legislation protects communication of the following information:

    ● Acts or omissions that could constitute breaches of EU law, so long as they: (i) fall within the scope of the Whistleblower Directive; (ii) affect the EU's financial interests; or (iii) relate to the internal market, including breaches of EU competition and State aid rules and practices whose purpose is to obtain a tax advantage in relation to corporate tax.

    ● Acts or omissions that could constitute serious or very serious criminal or administrative offences, including those implying a financial loss for the Spanish Treasury or Social Security.

    The protection contemplated under this legislation does not apply to reports that affect classified information or reports resulting from the protection of professional privilege, non-disclosure obligations or the secrecy of court deliberations.

2. Scope of application. The legislation applies to reporting persons who work in the private or public sector who have obtained information about breaches in a labour or professional context, thereby encompassing: (i) workers, including civil servants; (ii) self-employed persons; (iii) shareholders and persons belonging to the administrative, management or supervisory body of an undertaking, including non-executive members; and (iv) any persons working under the supervision and direction of contractors, subcontractors and suppliers.

    It also applies to reporting persons who report breaches acquired in a work-based relationship which has since ended, volunteers and paid or unpaid trainees and persons whose work-based relationship is yet to begin in cases where information on breaches has been acquired during the recruitment process or other pre-contractual negotiations.

3. Reporting channels. The legislation establishes two reporting channels: the internal reporting channel and the external reporting channel.

    ● Reporting through internal reporting channels is encouraged before reporting through external reporting channels, where the breach can be addressed effectively internally and where the reporting person considers that there is no risk of retaliation.

Internal channels must accept written and/or oral communications and the anonymous presentation and subsequent processing of communications.

It is up to the administrative or governance body of each undertaking bound by this legislation to implement the internal reporting channel, designate the person responsible for managing the channel and approve the communication reporting channel. The internal reporting channel can be managed internally by the undertaking itself or by an external third party.

Undertakings from both the private and public sectors are obliged to set up an internal reporting channel. The bound parties specifically include: (i) natural persons and legal entities with 50 or more workers; (ii) legal entities that fall under the scope of application of EU acts that concern certain areas (including financial services, products and markets, and prevention of money laundering and terrorist financing); (iii) political parties, unions, business organisations and their foundations, to the extent they receive or manage public funds; (iv) the state, regional and local governments; (v) public bodies and entities related to or dependent on any public administration; (vi) the independent administrative authorities, the Bank of Spain, and the Social Security managers and service providers, *etc.*

- Communications may also be reported through the external reporting channel of Spain's competent authority, the Independent Reporting Person Protection Authority (hereinafter, the Authority) or the regional equivalents, either directly or after having first reported through internal reporting channels. Communications may be reported anonymously or the identity of the reporting person protected and the communications may be presented

in writing or orally, including via an in-person meeting.

Findings issued by the Authority cannot be appealed, notwithstanding the right to challenge a resolution that closes the disciplinary proceedings.

4. Independent Reporting Person Protection Authority. This competent authority is a public-law entity with full legal personality and full public and private capacity to act. It will act autonomously and independently, organically and functionally, of the government, the entities comprising the public sector and the public powers in the course of carrying out its duties. It is associated with the Ministry of Justice.

5. Protection procedures. The legislation contemplates the following measures:

- Persons who report or disclose breaches will qualify for protection so long as they had reasonable grounds to believe that the information on breaches reported was true at the time of reporting, even if they do not provide conclusive evidence.

- All forms of retaliation, including threats of retaliation and attempts of retaliation against reporting persons, are prohibited.

- Provision of support measures, specifically comprehensive information and advice, accessible and free of charge, effective assistance against retaliation, legal aid, financial assistance and psychological support.

- Reporting persons will not be considered to have breached any restriction on the disclosure of information provided that they had reasonable grounds to believe that the reporting or public disclosure of

such information was necessary for revealing a breach pursuant to this Law.

- Throughout the handling of a case, the persons concerned will enjoy the presumption of innocence, the rights of defence, including the right to access their file, along with the same safeguards as are afforded informants, protecting their identity and guaranteeing the confidentiality of the case facts and developments.

- Personal data protection under Regulation (EU) 2016/679 (GDPR).

6. Penalties. It is up to the Authority and the competent authorities at the regional level to apply the contemplated penalties, without prejudice to each organisation's own internal disciplinary measures.

7. Execution timing. The authorities, bodies, companies and other undertakings obliged to set up an internal reporting channel must do so within three months of effectiveness of this Law. In the case of legal entities in the private sector with 249 or fewer workers, and towns with fewer than 10,000 inhabitants, that deadline is longer: December 1st, 2023.

The existing external reporting channels and procedures will be governed by specific regulations, which must be adapted within six months of effectiveness of this Law.

8. Amendment of other laws. It has the effect of amending the following pieces of legislation, among others:

- Law 10/2014 (supervision and solvency): introduction of the role of the Authority for reporting person protection purposes.

- Law 10/2010 (AML/CFT): amendments to allow persons exposed to threats,

hostilities or adverse labour conditions as a result of reporting internally or to the SEPBLAC (executive branch) on activities related with money laundering or the financing of terrorism to present a claim before the Authority.

Royal Decree-Law 20/2022 on measures in response to the economic and social consequences of the war in Ukraine and providing support for the reconstruction of La Palma and other situations of vulnerability (published in the *Official State Journal* on December 28th, 2023)

The measures enacted via this piece of legislation have the effect of amending the following laws, among others:

- Royal Decree-Law 11/2020: extension of the suspension of eviction proceedings and foreclosures for vulnerable households without alternative living arrangements (in the instances and in the manner already stipulated) until June 30th, 2023.

- Royal Decree-Law 37/2020: extension of the period for calculating compensation for the owners and landlords of the affected houses until June 30th, 2023, and of the deadline for applying for that compensation until July 31st, 2023.

- Royal Decree 401/2021: extension of the period for calculating compensation until June 30th, 2023, and of the deadline for landlords and owners to apply for that compensation until July 31st, 2023.

- Royal Decree 164/2019: increase in the gross income threshold for qualifying as a 'vulnerable' or 'at risk of financial exclusion' customer as follows:

  ➢ three times (formerly two times) the so-called 12-payment multi-purpose income indicator prevailing at the time of the application in the case of persons that do not belong to any household unit;

> three and a half times (formerly two and half times) that same indicator in the case of persons belonging to a household unit with less than four members;

> four times (formerly three times) that same indicator in the case of household units made up of four or more members or families officially qualifying as 'large families'; and

> four times (formerly three times) that same indicator in the case of household units where one of the members has a certified disability of a severity of 33% or more.

- Royal Decree-Law 20/2021: extension, until January 30ᵗʰ, 2023, of the deadline for applying for an additional six-month moratorium on payment obligations under secured or unsecured loan or credit agreements affected by the seismic movements and volcanoes affecting La Palma Island on September 19ᵗʰ, 2021.

- Law 16/2022: update of the regime for collecting the guarantees contemplated in article 16 of Royal Decree-Law 5/2021 and in the Cabinet Resolution of May 11ᵗʰ, 2021.

Royal Decree-Law 1/2023 on urgent matters around hiring incentives and social protection for artists (published in the *Official State Journal* on January 11ᵗʰ, 2023)

Among other measures, the new legislation amends Royal Decree-Law 11/2020 in relation to situations of economic vulnerability. Those changes do not modify the situations qualifying for economic vulnerability for the purposes of obtaining moratoria, aid or other measures related with rent on a regular abode but rather eliminate the reference to the COVID-19 pandemic as a cause of vulnerability. That allows extension of the vulnerability concept to new situations unfolding since the pandemic, such as the economic and social consequences of the war in Ukraine.

CNMV Circular 4/2022 on the accounting standards and annual and interim financial statements of the Spanish securities market infrastructure providers (published in the *Official State Journal* on December 31ˢᵗ, 2022)

The purpose of this Circular is to regulate the specific accounting standards, the interim and annual financial statement templates disclosed to the public and those provided to the CNMV applicable to the following companies and entities: the bodies governing regulated markets, the entities governing multilateral trading facilities and organised trading facilities, central counterparties and central securities depositories and Sociedad de Bolsas, as well as to the undertakings holding all of the shares or a stake giving them control, directly or indirectly, of the aforementioned entities.

It took effect on January 1ˢᵗ, 2023, and will apply to audited interim and annual financial statements issued in reporting periods beginning on or after that date. As a result, it will apply to the annual financial statements audited in respect of 2023, to be submitted for the pertinent shareholder approval in 2024.

In broad terms, the Circular introduces the following changes:

- It eliminates sections that did not describe accounting criteria specific to these entities which are adequately addressed in the General Accounting Plan.

- It modifies certain accounting standards and financial statements to include the novelties introduced via Royal Decree 1/2021.

- It reduces the number of interim financial statements with the aim of eliminating overlap between the confidential and public statements. It circumscribes the public disclosure requirement to the annual financial statements. Therefore the interim financial statements set down

in the Circular are: (i) the balance sheet; (ii) the statement of profit or loss; (iii) the supplementary segmented revenue and price information; (iv) other supplementary financial information; and (v) the statement of compliance with own funds requirements or the own funds information statement.

- It introduces a new analytical statement of profit or loss for central securities depositories which separates the costs and revenues associated with each of their basic services from those associated with auxiliary services.

- It includes templates for preparing separate and consolidated balance sheets and statements of profit or loss.

- It requires recognition of the assets and liabilities derived from the positions resulting from the interposition of the central counterparty in financial instrument purchase and sale transactions on the transaction date, classifying them "at amortised cost" for measurement purposes, as the positions to be offset are held with the objective of collecting the contractual cash flows derived from the sale-purchase price on a specified date.

- It contemplates requiring central counterparties and central securities depositories to present the minimum own funds requirement statement.

Circular 4/2022 repeals Circular 9/2008 and its subsequent amendments (Circulars 6/2011, 5/2016 and one provision of Circular 1/2021) and Circulars 1/1990 and 4/2009.

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Spanish economic forecasts panel: March 2023*

Funcas Economic Trends and Statistics Department

The GDP growth estimate for 2023 has been increased by two-tenths reaching 1.5%

In the last quarter of 2022, GDP grew, according to provisional figures, by 0.2%, above the panelists' forecasts, boosted by a positive foreign sector that more than offset negative domestic demand. GDP grew by 5.5% for the year as a whole.

Indicators for the first quarter of this year are generally positive for industry, construction and services.

Due to better-than-expected performance in recent months, the GDP growth estimate for 2023 has been revised upwards by 0.2pp to 1.5%. As for the quarterly profile, the panelists´ forecast for the first quarter is for a 0.1% growth in GDP, and for quarterly growth of around 0.4-0.5% for the rest of the year (Table 2).

The contribution of domestic demand will be 1.2 pp, which is 0.1pp less than the previous forecast, while the foreign sector will add 0.3pp, compared to the zero-contribution predicted by the last panel. The growth forecast in public consumption was revised upwards while household consumption and investment in all sectors was revised downwards. In foreign trade, import growth was revised downward and export growth upward (Table 1).

The forecast for growth in 2024 is 2.1%

For the first time, this panel requests projections for 2024. The consensus forecast for GDP growth is 2.1%, which would represent an acceleration of 0.6pp over 2023.

The contribution of domestic demand is expected to reach 2pp. Given this, public consumption is expected to moderate, while investment and private consumption are forecast to accelerate (Table 1). The foreign sector is expected contribute 0.1pp to GDP growth.

Upward revision of overall and core CPI forecast

The moderation of the overall CPI that began in September 2022 has been interrupted since the beginning of this year. As for core inflation, it continues to reach record highs, ending up at 7.6% in February.

Given the persistence of inflationary pressures, the forecast for the average annual rate has been raised by 0.2pp to 4.2%. By 2024, prices are expected to increase by 2.8%. As for core inflation, the forecast has also been raised to 5.5%, and is expected to moderate to 3.3% in 2024.

The expected year-on-year rates for December 2023 and December 2024 are 4.1% and 2.3%, respectively.

Employment will continue to grow and the unemployment rate will fall to 12.4% in 2024

According to Social Security enrollment figures, the labor market has continued its positive trend. In the first two months of the year, all sectors, except agriculture, have created employment, with the services sector being the main driving factor.

The panelists´ forecast for employment growth is 1.1% for 2023 and 1.6% for 2024. The implied forecast for productivity and unit labor cost (ULC) growth is derived from the forecasts for GDP, employment and wage growth. Productivity per full-time equivalent job is expected to grow by 0.4% this year —one tenth of a percent more than in the previous panel–, and by 0.5% in 2024. As for ULCs, they are expected to increase by 3.2% in 2023 and by 2.8% in 2024.

The unemployment rate is forecast to average 12.9% per year in 2023, falling to 12.4% in 2024 (Table 1).

The trade surplus remains positive

While figures are still provisional, the balance of payments account recorded a surplus of 11,775 million euros in 2022, 0.9% of GDP, slightly above the previous year's 11,524 million euros. Again, the forecast estimates points to a surplus

of 0.5% and 0.6% of GDP in 2023 and 2024, respectively (Table 1).

Public deficit lower than expected since the previous Panel

The consolidated balance of public administrations, excluding local authorities, amounted to -25.8 billion euros up since November, compared to -61.9 billion euros in the same period of the previous year. This improved result is due to a higher-than-expected increase of 49.515 billion euros in revenues, much greater than the 13.447 billion euros increase in expenditures.

The panelists foresee a reduction in the deficit of the general government sector over the next two years. In 2023 it is expected to reach 4.2% of GDP, which is 0.1pp less than in the previous panel, with a 3.7% result expected in 2024.

The international landscape remains uncertain

For the time being, the global economy is holding up better than expected against the impact of inflation. Since the beginning of the year, economic indicators have picked up: the PMI indicator for global purchasing managers rose above the 50 expansion threshold in February. Energy markets have continued to moderate, while geopolitical risk is perceived to be lower, giving the economy some breathing space. The resilience of labor markets is another favorable factor. In its latest outlook for 2023, the OECD revised its projection for global growth to 2.6% (0.4 points higher than in the November outlook) and to 0.8% in the case of the eurozone (0.3 points higher).

Despite these results, the environment remains very uncertain, firstly due to the persistence of inflation and its derivatives. The loss of purchasing power could begin to have an impact on household consumption figures once the savings surplus has been exhausted. Moreover, the tightening of monetary policy has brought vulnerabilities in the financial system to the surface. The bankruptcy of SVB was followed by a liquidity crisis at Credit Suisse, unleashing severe turbulence in the financial markets, the consequences of which have not been included in this Panel.

Within this context, the panelists maintain their pessimistic assessment of the external environment, both in Europe and beyond. Moreover, most believe that this environment will not change in the coming months, although fewer believe that the outlook could worsen in the EU (with 2 analysts forecasting a deterioration, compared to 5 in the January panel).

Interest rates will continue to rise

Since the publication of the January panel, the ECB raised benchmark rates by 50 basis points, while the Federal Reserve hiked rates by 25 bps. The recent failure of SVB bank –prior to the closing of this Panel– has immediately dampened the rise in Euribor and lowered expectations of discounted rate hikes in the futures markets, with the prospect of central banks slowing the pace of monetary policy tightening going forward for fear of further instability in the financial system.

The participants in this survey, who in January considered that the maximum interest rate in the eurozone would be around 3.5%, have raised their forecasts to 4%, a level that would be reached in the second quarter of this year and would remain as such until mid-2024. During the second half of next year, the monetary authority could cut interest rates by 50 basis points.

Consistent with the higher expected level of monetary policy intervention rates, expectations have also been raised with respect to the one-year Euribor, which is expected to peak in the second half of this year at 4%, and then decline to below 3.5% by the end of 2024. With respect to the Spanish 10-year government bond, it is projected to peak at 3.8% at the end of this year and then decline to 3.5% in the second half of 2024.

The Euro will appreciate 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 hike path, so markets anticipate a narrower financial yield differential between the two sides of the Atlantic. Analysts are forecasting a slight appreciation in the coming months (Table 2), following a slightly steeper slope than that predicted by the previous panel.

High inflation dictates macroeconomic policy

Concerns about inflation and its costs for the economy are reflected in panelists´ opinions about economic policy. The majority of the panel

members agree on the expansionary nature of fiscal policy (Table 4), but there is growing opinion that this policy should be more neutral or even restrictive in relation to the economic cycle.

Likewise, for all panelists, monetary policy should not be expansionary, and the number of opinions advocating a more restrictive stance is growing (14, compared to 10 in the previous panel).

Exhibit 1

Change in forecasts (Consensus values)

Annual rates in %
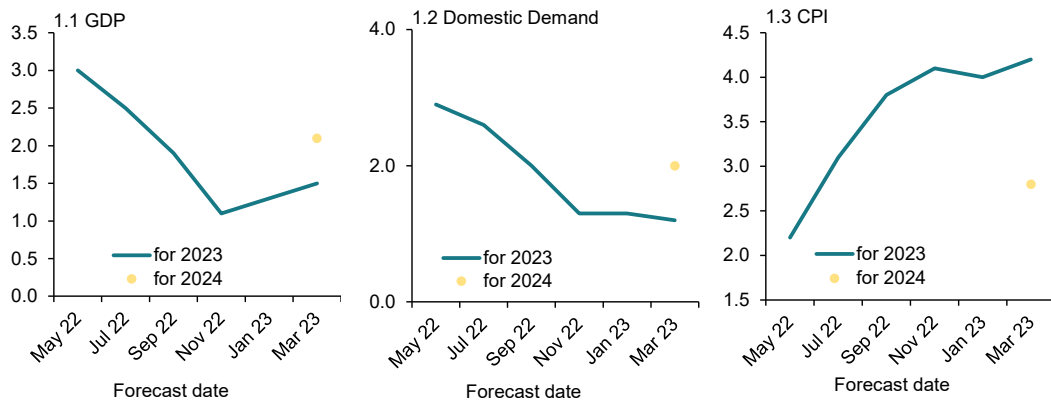
Source: Funcas Panel of Forecasts.

* 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.

This Panel has been prepared before the current episode of financial turbulence.

Spanish economic forecasts panel: March 2023*

Funcas Economic Trends and Statistics Department

Table 1

Economic Forecasts for Spain – March 2023

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

	GDP		Household consumption		Public consumption		Gross fixed capital formation		GFCF machinery and capital goods		GFCF construction		Domestic demand[3]	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Analistas Financieros Internacionales (AFI)	1.3	1.5	1.2	1.3	0.4	0.8	3.1	1.4	3.0	1.9	3.0	1.0	1.4	1.2
BBVA Research	1.6	2.6	1.0	2.8	2.0	2.4	3.0	10.5	0.9	9.9	3.3	11.1	1.9	4.2
CaixaBank Research	1.3	1.9	0.7	2.3	2.1	0.5	-1.8	2.6	-4.6	3.4	-0.5	2.2	1.0	1.9
Cámara de Comercio de España	1.9	2.8	1.3	2.8	0.8	1.3	2.5	3.0	4.0	2.6	1.6	3.3	1.6	2.5
Centro de Estudios Economía de Madrid (CEEM-URJC)	1.2	1.8	1.0	2.0	1.3	0.8	2.7	1.9	1.5	2.5	3.7	1.5	1.4	1.7
Centro de Predicción Económica (CEPREDE-UAM)	1.2	2.3	0.8	1.8	1.6	2.0	1.0	3.8	0.7	4.7	0.7	3.4	0.7	2.6
CEOE	1.3	2.0	0.9	2.0	0.0	1.0	2.0	2.4	1.8	3.5	2.4	1.8	1.6	1.8
Equipo Económico (Ee)	2.1	2.3	1.4	1.5	0.8	1.3	4.2	4.0	3.8	3.9	4.4	3.8	2.0	2.3
EthiFinance Ratings	1.3	2.0	1.4	2.0	1.1	0.9	2.2	2.9	--	--	--	--	--	--
Funcas	1.3	1.8	1.3	1.5	0.9	0.7	3.0	2.5	4.0	3.9	2.9	1.3	1.5	1.5
Instituto Complutense de Análisis Económico (ICAE-UCM)	1.9	2.2	1.4	1.5	1.3	1.0	1.7	2.7	0.7	3.5	1.8	1.7	1.3	1.6
Instituto de Estudios Económicos (IEE)	1.5	2.2	1.3	2.3	0.0	0.6	1.7	2.2	1.5	3.0	2.1	1.8	1.8	1.9
Intermoney	1.4	2.5	1.0	2.5	0.8	1.1	2.3	3.5	1.4	3.6	3.2	3.3	1.2	2.3
Mapfre Economics	1.0	2.1	0.5	2.0	2.0	2.0	3.0	4.7	2.5	3.5	3.2	4.9	1.1	2.3
Oxford Economics	1.6	1.4	1.5	1.7	1.9	1.5	-0.3	2.8	-2.6	5.4	-1.5	3.3	1.6	1.7
Repsol	1.5	2.2	-1.1	2.1	4.8	1.4	-4.4	2.2	-7.9	2.4	-3.6	2.0	-1.3	1.9
Santander	1.5	2.3	0.6	1.7	0.4	0.2	1.9	6.0	0.8	8.5	1.1	3.6	0.7	2.2
Metyis	1.2	2.4	2.0	2.4	0.8	0.5	2.7	3.2	2.8	3.2	2.2	2.5	1.0	2.1
Universidad Loyola Andalucía	1.5	1.5	1.3	2.0	2.8	2.3	1.3	1.2	2.0	1.6	3.2	2.1	0.6	0.5
CONSENSUS (AVERAGE)	1.5	2.1	1.0	2.0	1.4	1.2	1.7	3.3	0.9	3.9	1.8	3.0	1.2	2.0
Maximum	2.1	2.8	2.0	2.8	4.8	2.4	4.2	10.5	4.0	9.9	4.4	11.1	2.0	4.2
Minimum	1.0	1.4	-1.1	1.3	0.0	0.2	-4.4	1.2	-7.9	1.6	-3.6	1.0	-1.3	0.5
Change on 2 months earlier[1]	0.2	--	-0.2	--	0.5	--	-1.2	--	-1.3	--	-1.3	--	-0.1	--
- Rise[2]	12	--	6	--	11	--	4	--	4	--	3	--	7	--
- Drop[2]	1	--	6	--	3	--	10	--	9	--	11	--	6	--
Change on 6 months earlier[1]	-0.4	--	-1.0	--	0.4	--	-2.4	--	-2.7	--	-2.4	--	-0.8	--
Memorandum items:														
Government (October 2022)	2.1	--	1.3	--	0.4	--	7.9	--	--	--	--	--	2.4	--
Bank of Spain (December 2022)	1.3	2.7	1.9	2.8	0.3	0.9	1.6	3.0					1.4	2.4
EC (February 2023)	1.4	2.0	--	--	--	--	--	--	--	--	--	--	--	--
IMF (January 2023)	1.1	2.4	--	--	--	--	--	--	--	--	--	--	--	--
OECD (March 2023)	1.7	1.7	--	--	--	--	--	--	--	--	--	--	--	--

[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 – March 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]	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Analistas Financieros Internacionales (AFI)	3.5	4.0	4.0	3.4	4.3	3.1	6.2	3.5	4.3	4.0	0.5	0.7	13.0	12.4	-0.5	0.1	-3.7	-3.1
BBVA Research	3.2	5.3	3.8	9.4	3.9	2.8	5.6	2.9	4.7	4.2	1.1	1.7	12.6	11.5	0.4	-1.3	-3.9	-3.3
CaixaBank Research	1.1	2.0	-0.6	2.0	4.2	2.6	5.8	2.7	3.8	3.0	1.1	1.4	12.8	12.4	0.3	1.0	-4.0	-3.3
Cámara de Comercio de España	3.9	4.1	3.2	3.5	4.7	2.5	4.5	2.8	--	--	1.1	2.1	13.2	12.6	0.4	0.6	-4.6	-4.1
Centro de Estudios Economía de Madrid (CEEM-URJC)	3.3	3.4	3.8	3.2	4.6	3.3	5.3	3.2	--	--	0.2	1.0	12.6	12.0	1.2	1.0	-4.1	-3.4
Centro de Predicción Económica (CEPREDE-UAM)	3.6	4.1	2.5	4.9	3.5	2.8	--	--	3.5	3.6	0.4	1.5	13.0	12.4	0.3	0.6	-4.3	-4.0
CEOE	3.7	3.5	4.6	3.0	4.2	2.3	5.4	2.2	2.9	2.7	1.1	1.5	12.9	12.4	0.5	1.0	-4.0	-3.5
Equipo Económico (Ee)	4.2	4.0	4.3	3.7	4.4	3.1	4.9	3.4	3.6	3.5	2.7	2.3	12.8	12.5	0.4	0.5	-4.0	-4.0
EthiFinance Ratings	2.2	3.0	2.6	3.1	4.3	2.8	5.5	3.1	--	--	--	--	13.2	13.0	0.8	1.0	-4.1	-4.0
Funcas	2.5	3.8	3.3	3.1	4.5	3.3	6.5	3.3	3.5	3.2	0.8	1.3	12.3	11.5	-0.4	0.2	-3.8	-3.7
Instituto Complutense de Análisis Económico (ICAE-UCM)	4.2	4.9	2.7	3.8	4.1	3.2	5.1	3.3	--	--	1.0	1.5	12.7	12.0	0.5	0.6	-4.3	-4.0
Instituto de Estudios Económicos (IEE)	3.8	4.0	4.6	3.0	4.1	2.3	5.3	2.0	2.9	2.7	1.0	1.7	13.0	12.6	0.5	1.0	-4.0	-3.5
Intermoney	3.5	4.1	3.1	3.8	4.5	3.5	4.0	3.3	--	--	1.7	2.2	13.2	13.0	0.8	--	-4.2	-4.0
Mapfre Economics	-0.1	0.6	1.0	1.7	4.3	2.5	5.1	3.1	--	--	--	--	13.6	13.1	1.2	1.9	-4.8	-4.0
Oxford Economics	2.2	1.4	2.1	2.2	3.9	2.3	5.7	2.5	--	--	--	--	13.1	13.2	1.1	1.1	-4.6	-3.8
Repsol	7.5	9.6	0.0	10.3	3.5	2.5	5.6	3.0	3.0	3.0	1.6	2.2	12.8	12.3	0.9	0.5	-4.4	-3.5
Santander	0.9	2.1	-0.5	1.9	4.3	3.0	5.8	3.1	--	--	--	--	13.0	12.1	--	--	--	--
Metyis	4.2	3.6	3.8	3.0	5.3	3.8	5.6	3.5	--	--	1.0	1.8	12.7	12.4	0.9	0.8	-4.0	-3.8
Universidad Loyola Andalucía	3.0	4.8	1.0	3.0	3.5	2.3	7.9	7.8	--	--	1.7	1.3	12.8	12.5	0.2	0.2	-5.1	-4.5
CONSENSUS (AVERAGE)	3.2	3.8	2.6	3.8	4.2	2.8	5.5	3.3	3.6	3.3	1.1	1.6	12.9	12.4	0.5	0.6	-4.2	-3.7
Maximum	7.5	9.6	4.6	10.3	5.3	3.8	7.9	7.8	4.7	4.2	2.7	2.3	13.6	13.2	1.2	1.9	-3.7	-3.1
Minimum	-0.1	0.6	-0.6	1.7	3.5	2.3	4.0	2.0	2.9	2.7	0.2	0.7	12.3	11.5	-0.5	-1.3	-5.1	-4.5
Change on 2 months earlier[1]	0.1	--	-0.7	--	0.2	--	1.0	--	0.2	--	0.1	--	-0.1	--	0.2	--	0.1	--
- Rise[2]	6	--	5	--	12	--	15	--	2	--	5	--	2	--	8	--	5	--
- Drop[2]	9	--	9	--	2	--	0	--	2	--	1	--	8	--	3	--	1	--
Change on 6 months earlier[1]	-0.2	--	-1.5	--	0.4	--	1.7	--	0.7	--	-0.4	--	-0.1	--	-0.3	--	0.4	--
Memorandum items:																		
Government (October 2022)	7.3	--	8.2	--	--	--	--	--	--	--	0.6	--	12.2	--	0.9	--	-3.9	
Bank of Spain (December 2022)	3.8	3.0	4.3	2.5	4.9 [7]	3.6 [7]	3.4 [8]	2.2 [8]	--	--	0.5 [9]	1.6 [9]	12.9	12.2	--	--	-4.1	-3.7
EC (February 2023)	--	--	--	--	4.4 [7]	2.3 [7]	--	--	--	--	--	--	--	--	--	--	--	--
IMF (January 2023)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OECD (March 2023)	--	--	--	--	4.2 [7]	4.0 [7]	--	--	--	--	--	--	--	--	--	--	--	--

[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 – March 2023

	23-I Q	23-II Q	23-III Q	23-IV Q	24-I Q	24-II Q	24-III Q	24-IV Q
GDP[1]	0.1	0.4	0.5	0.4	0.5	0.5	0.6	0.5
Euribor 1 yr [2]	3.71	3.98	4.03	4.00	3.87	3.70	3.52	3.37
Government bond yield 10 yr [2]	3.62	3.73	3.77	3.80	3.70	3.61	3.52	3.44
ECB main refinancing operations interest rate [3]	3.41	3.95	4.05	4.05	3.96	3.81	3.60	3.42
ECB deposit rates [3]	2.84	3.39	3.52	3.52	3.43	3.28	3.10	2.91
Dollar / Euro exchange rate [2]	1.06	1.07	1.07	1.08	1.09	1.09	1.09	1.09

Forecasts in yellow.
[1] Qr-on-qr growth rates.
[2] End of period.
[3] Last day of the quarter.

Table 3

CPI Forecasts – March 2023

			Year-on-year change (%)			
Feb-23	Mar-23	Apr-23	May-23	Dec-23	Dec-24
6.1	4.0	4.6	4.2	4.1	2.3

Table 4

Opinions – March 2023
Number of responses

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	0	4	15	5	12	2
International context: Non-EU	1	4	14	6	11	2
	Is being			Should be		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment[1]	0	3	16	5	13	1
Monetary policy assessment[1]	18	0	1	14	5	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										
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	5.5	4.3	-0.9	4.3	4.2	4.3	14.9	7.7	2.8	2.6
2023	1.3	1.3	0.9	3.0	2.9	3.1	2.5	3.3	1.5	-0.3
2024	1.8	1.5	0.7	2.5	1.3	3.8	3.8	3.1	1.5	0.3
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	6.9	4.9	-1.1	3.6	0.3	6.9	17.7	12.1	4.8	2.1
II	7.8	5.0	-2.8	5.7	6.1	5.2	20.7	8.3	3.5	4.3
III	4.8	4.7	-1.8	5.9	6.4	5.3	14.7	8.7	2.6	2.2
IV	2.7	2.6	1.9	2.0	4.1	-0.1	7.6	2.2	0.6	2.0
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	0.0	0.3	-0.4	3.4	0.5	6.4	3.3	1.0	-0.9	0.9
II	2.2	2.3	-1.1	3.1	7.6	-1.2	4.8	2.5	1.3	0.9
III	0.2	1.7	1.6	-0.6	-1.1	-0.1	0.4	3.1	1.1	-0.9
IV	0.2	-1.7	1.9	-3.8	-2.6	-4.9	-1.1	-4.2	-0.8	1.1
	Current prices (EUR billions)	Percentage of GDP at current prices								
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	56.9	20.5	20.0	10.3	9.7	41.7	40.0	98.3	1.7
2023	1,401	57.1	20.3	20.3	10.4	9.9	42.4	41.0	98.6	1.4
2024	1,472	57.0	19.9	20.3	10.3	10.0	43.3	41.4	98.1	1.9

*Seasonally and Working Day Adjusted.

(a) Contribution to GDP growth.

Source: INE and Funcas (Forecasts).

Chart 1.1 - GDP

Percentage change

16.6

-5.5   -17.8

Quarterly change (left)   Annual change (right)
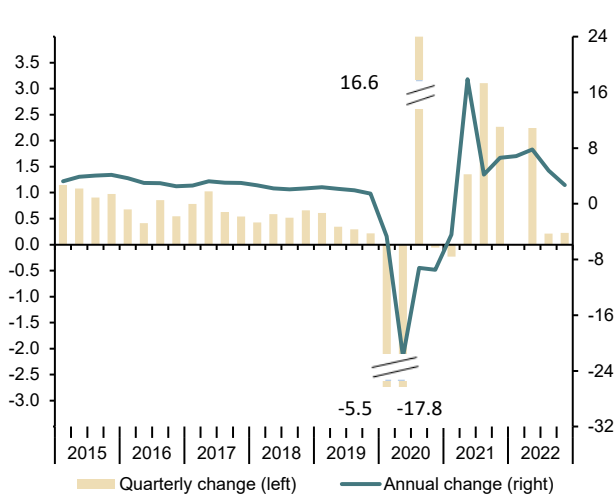
Chart 1.2 - Contribution to GDP annual growth

Percentage points

GDP   Domestic demand   Net exports
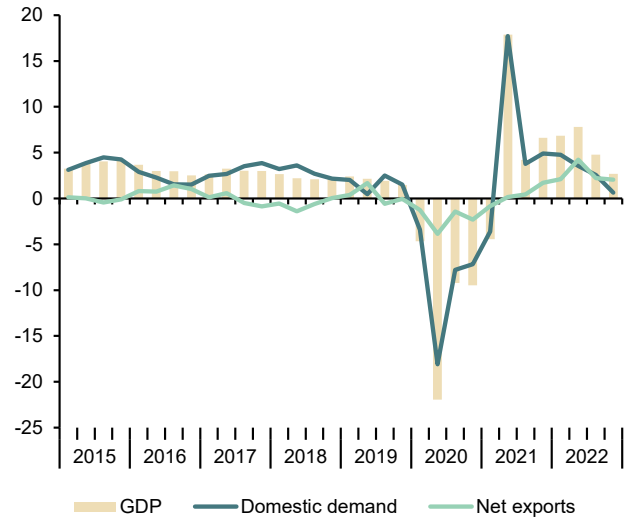
Chart 1.3 - Final consumption

Annual percentage change

National consumption   Private consumption
Public consumption
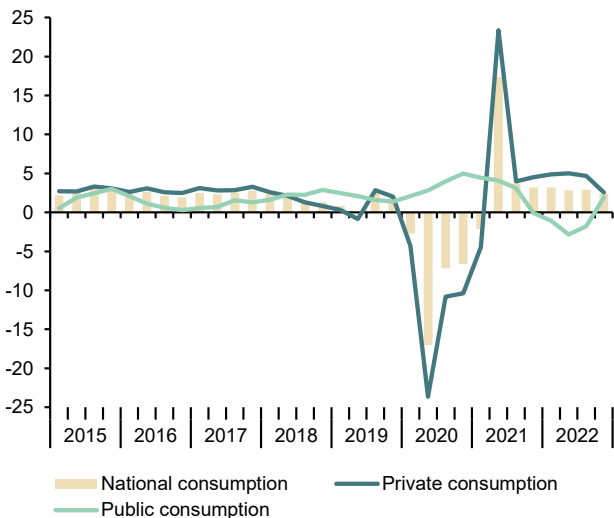
Chart 1.4 - Gross fixed capital formation

Annual percentage change

Total   Construction   Equipment & other products
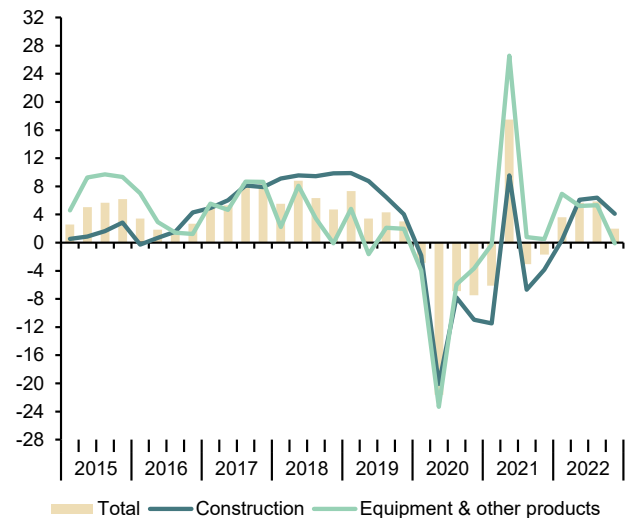
Table 2

National accounts: Gross value added by economic activity SWDA*

| | | Gross value added at basic prices | | | | | | | | |
| | | | | Industry | | | Services | | | |
		Total	Agriculture. forestry and fishing	Total	Manufacturing	Construction	Total	Public administration. health. education	Other services	Taxes less subsidies on products
		Chain-linked volumes. annual percentage changes								
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
2022		5.5	-1.2	3.0	3.8	4.0	6.5	-1.5	9.3	4.8
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	6.6	4.2	2.8	4.9	0.4	8.1	-2.2	11.8	9.2
	II	7.9	-3.2	5.0	6.1	5.3	9.2	-2.5	13.4	6.6
	III	4.9	-2.9	3.7	3.1	5.7	5.4	-1.7	7.8	3.8
	IV	3.0	-2.6	0.5	1.4	4.5	3.6	0.4	4.7	0.1
		Chain-linked volumes. quarter-on-quarter percentage changes								
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	-0.1	-1.4	-1.8	-1.4	1.7	0.2	-1.1	0.6	1.1
	II	2.4	-6.0	2.1	1.8	2.9	2.7	-0.2	3.7	0.9
	III	0.3	0.7	0.1	0.7	0.2	0.4	0.0	0.5	-0.9
	IV	0.3	4.3	0.1	0.3	-0.3	0.3	1.6	-0.1	-0.9
		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

Legend: Total — Industry — Construction — Services
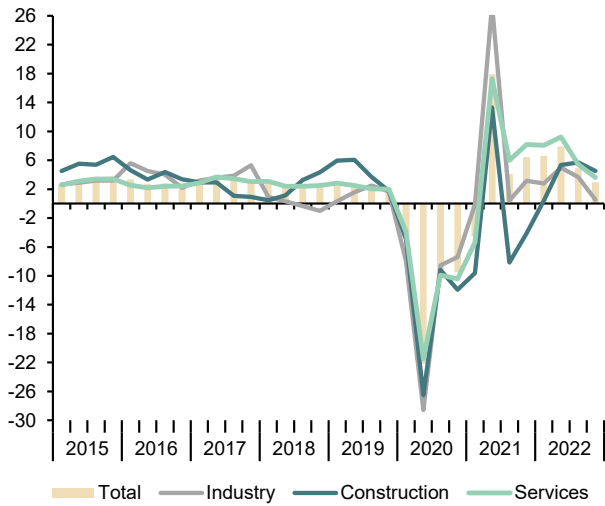
Chart 2.2 - GVA. Industry

Annual percentage change

Legend: Total — Extractive and utilities — Manufacturing
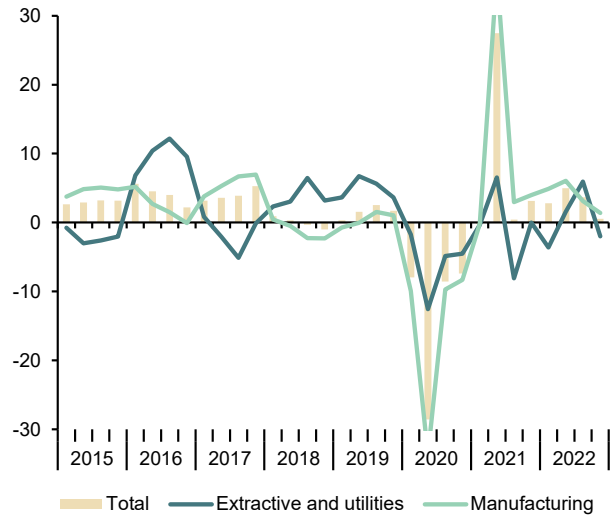
Chart 2.3 - GVA. services

Annual percentage change

Legend: Total — Public administration, health, education — Other services
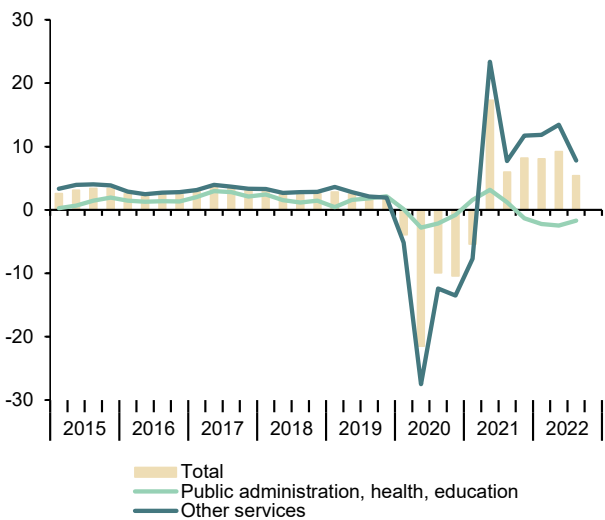
Chart 2.4 - GVA. structure by sectors

Percentage of value added at basic prices

Legend: Services — Construction — Industry — Agriculture, forestry and fishing

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													
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		109.2	115.1	94.9	108.3	114.1	101.1	102.7	110.7	92.8	107.0	115.3	93.3
2023		110.6	116.0	95.3	112.2	117.6	100.1	--	--	--	--	--	--
2024		112.7	117.6	95.8	115.7	120.8	99.7	--	--	--	--	--	--
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	107.3	113.7	94.3	106.5	112.9	101.9	100.9	107.9	93.5	103.0	110.2	92.4
	II	109.7	114.7	95.6	107.5	112.4	101.0	102.7	111.9	91.8	106.0	115.5	94.8
	III	109.9	115.9	94.8	108.9	114.9	101.7	103.5	111.0	93.2	110.2	118.2	94.8
	IV	110.1	116.1	94.9	110.3	116.3	100.0	103.8	112.2	92.6	108.6	117.3	91.2
Annual percentage changes													
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		5.5	3.8	1.6	2.0	0.4	-3.8	3.8	2.8	1.0	1.2	0.2	-6.4
2023		1.3	0.8	0.5	3.5	3.1	-1.0	--	--	--	--	--	--
2024		1.8	1.3	0.5	3.2	2.7	-0.5	--	--	--	--	--	--
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	6.9	5.3	1.5	0.1	-1.4	-4.9	4.9	2.1	2.7	0.6	-2.0	-6.2
	II	7.8	5.1	2.6	2.0	-0.6	-4.6	6.1	3.7	2.2	0.8	-1.4	-7.6
	III	4.8	2.8	1.9	2.2	0.3	-4.0	3.1	3.4	-0.2	0.7	0.9	-5.8
	IV	2.7	2.0	0.6	3.8	3.2	-2.0	1.4	1.9	-0.5	2.6	3.1	-5.9

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

Source: INE and Funcas (Forecasts).

Chart 3.1 - Nominal ULC, total economy

Index. 2000=100

- Compensation per job
- Employment productivity
- Nominal unit labour cost
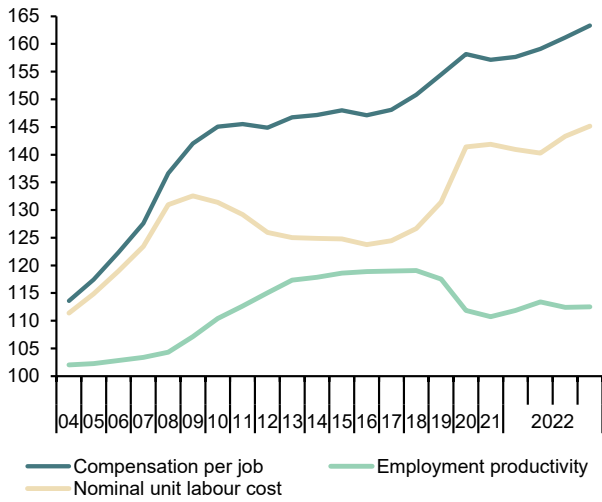
Chart 3.2 - Real ULC, total economy

Index. 2000=100

- Nominal unit labour cost
- GDP deflator
- Real unit labour cost (1)
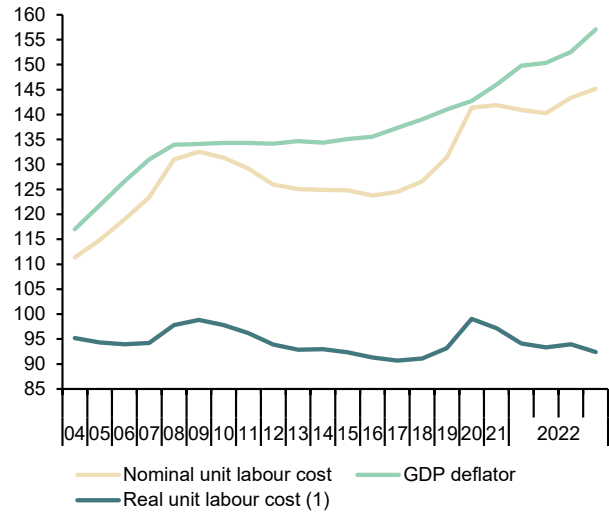
(1) Nominal ULC deflated by GDP deflator.

Chart 3.3 - Nominal ULC, manufacturing industry

Index. 2000=100

- Compensation per job
- Employment productivity
- Nominal unit labour cost
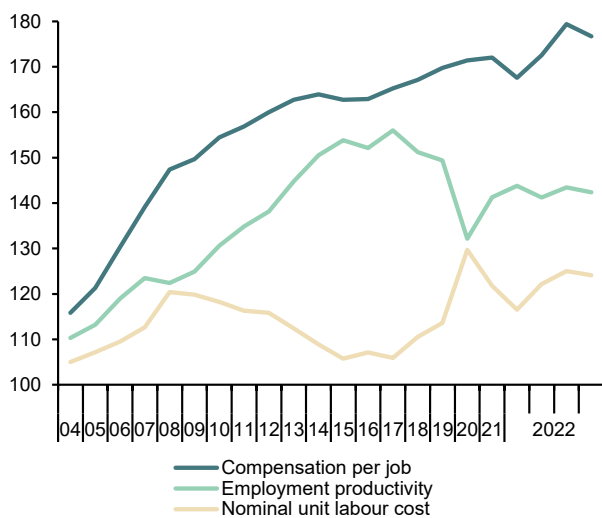
Chart 3.4 - Real ULC, manufacturing industry

Index. 2000=100

- Nominal unit labour cost
- GVA deflator
- Real unit labour cost (1)
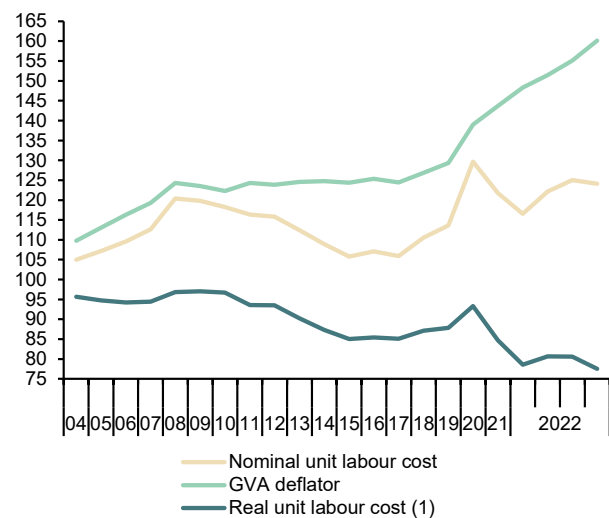
(1) Nominal ULC deflated by manufacturing GVA deflator.

Table 4

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

		Gross domestic product	Compen-sation of employees	Gross operating surplus	Gross national disposable income	Final national consum-ption	Gross national saving (a)	Gross capital formation	Compen-sation 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					
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		1,328.9	622.8	574.0	1,308.2	1,028.8	289.8	277.9	46.9	43.2	21.8	20.9	0.9	1.1
2023		1,401.2	650.4	602.0	1,372.8	1,084.5	291.1	296.7	46.4	43.0	20.8	21.2	-0.4	0.4
2024		1,472.0	681.3	631.9	1,447.3	1,132.6	314.8	311.3	46.3	42.9	21.4	21.1	0.2	1.0
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	1,238.1	594.0	512.2	1,233.0	958.9	274.1	258.7	48.0	41.4	22.1	20.9	1.2	1.6
	II	1,274.3	605.3	532.2	1,264.0	982.8	281.2	266.8	47.5	41.8	22.1	20.9	1.1	1.7
	III	1,303.2	613.3	551.2	1,292.7	1,008.2	284.5	273.2	47.1	42.3	21.8	21.0	0.9	1.5
	IV	1,328.9	622.8	574.0	--	1,028.8	--	277.9	46.9	43.2	--	20.9	--	--
		Annual percentage changes							Difference from one year ago					
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	6.5	15.7	9.0	9.8	10.2	10.5	-1.6	2.1	0.0	0.1	-0.1	-0.7
2023		5.4	4.4	4.9	4.9	5.4	0.4	6.8	-0.4	-0.2	-1.0	0.3	-1.3	-0.7
2024		5.0	4.7	5.0	5.4	4.4	8.1	4.9	-0.1	0.0	0.6	0.0	0.6	0.6
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	11.6	7.4	12.3	12.2	10.2	19.6	14.1	-1.9	0.3	1.5	0.5	1.0	0.5
	II	10.1	6.4	12.3	10.0	8.4	16.0	12.6	-1.6	0.8	1.1	0.5	0.7	0.4
	III	10.8	6.3	15.3	10.7	9.6	14.6	13.4	-2.0	1.7	0.7	0.5	0.2	-0.2
	IV	10.1	6.5	15.7	--	9.8	--	10.5	-1.6	2.1	--	0.1	--	--

(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

- Saving
- National consumption
- Gross national income
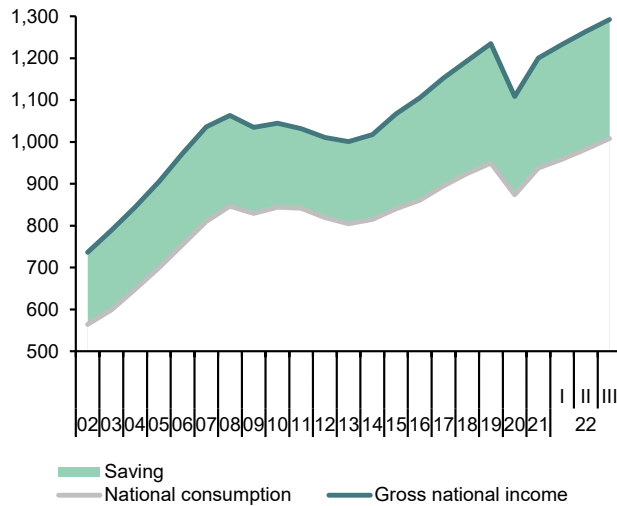
Chart 4.2 - National income, consumption and saving rate

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

- Saving rate (right)
- GNI (left)
- Consumption (left)
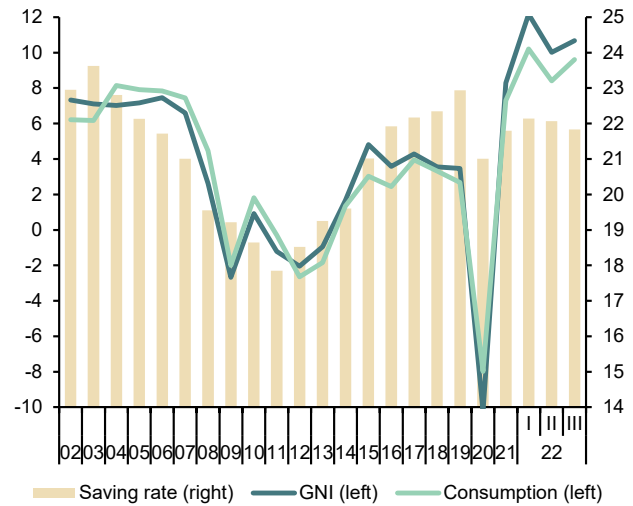
Chart 4.3 - Components of National Income

Percentage of GDP, 4-quarter moving averages

- Compensation of employees
- Gross operating surplus
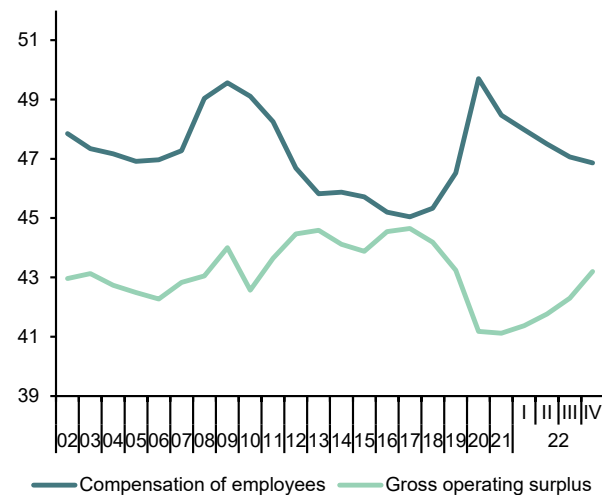
Chart 4.4 - Saving. Investment and Current Account Balance

Percentage of GDP, 4-quarter moving averages

- Current Account Balance (right)
- Investment rate (left)
- Saving Rate (left)
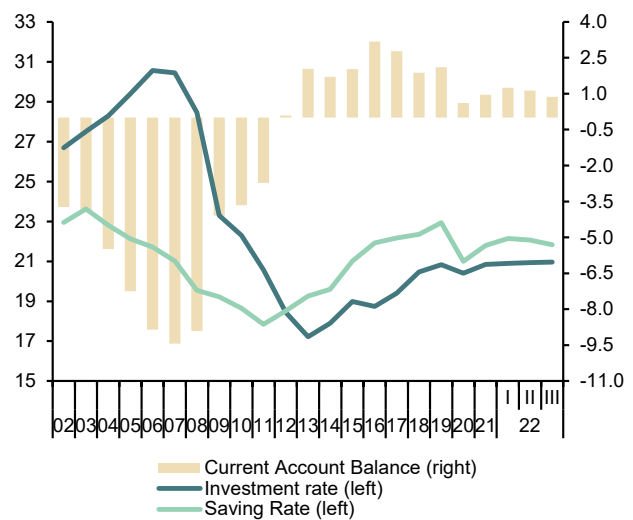
Table 5

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		
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		803.2	755.9	44.3	55.8	5.5	4.2	-0.9	283.4	191.9	176.8	14.4	13.3	1.4
2023		843.1	799.4	40.7	51.3	4.8	3.7	-0.8	300.2	209.7	198.9	15.0	14.2	1.0
2024		886.4	839.6	43.8	50.3	4.9	3.4	-0.4	316.1	233.7	215.8	15.9	14.7	1.4
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	794.7	704.4	87.8	57.0	11.0	4.6	2.6	249.1	174.9	161.0	14.1	13.0	1.7
	II	805.6	725.8	77.7	63.1	9.6	5.0	1.3	261.1	178.4	162.5	14.0	12.8	1.9
	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		
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		1.8	11.4	-59.1	7.0	-8.2	-0.1	-5.7	19.8	17.6	9.7	0.9	-0.1	0.7
2023		5.0	5.8	-8.1	-8.0	-0.7	-0.5	0.2	5.9	9.3	12.5	0.5	0.9	-0.4
2024		5.1	5.0	7.6	-2.0	0.1	-0.2	0.3	5.3	11.5	8.5	0.9	0.5	0.4
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	32.7	-7.8	0.7	-6.5	18.2	19.6	7.8	0.9	-0.5	1.6
	II	3.7	11.6	-36.3	42.1	-6.1	1.1	-5.4	17.0	16.8	3.9	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

Net lending (-) or borrowing(+) (right)
Saving rate (left)
Gross Capital Formation (left)
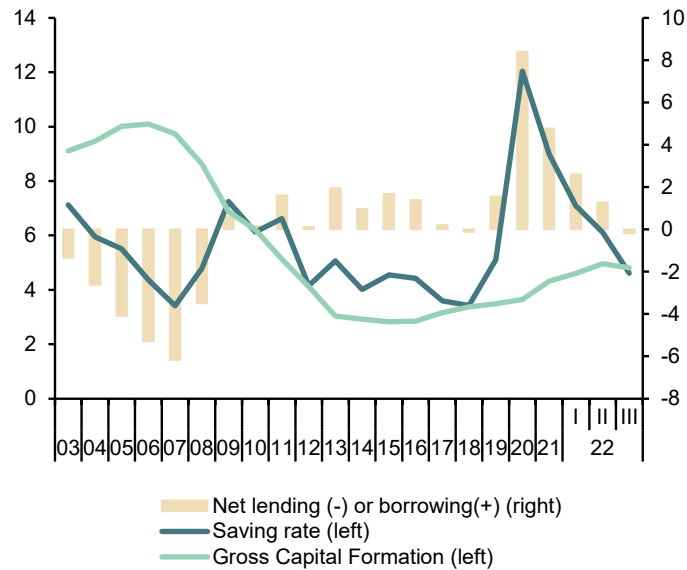
Chart 5.2 - Non-financial corporations: Net lending or borrowing

Percentage of GDP, 4-quarter moving averages

Net lending (-) or borrowing(+) (right)
Saving rate (left)
Gross Capital Formation (left)
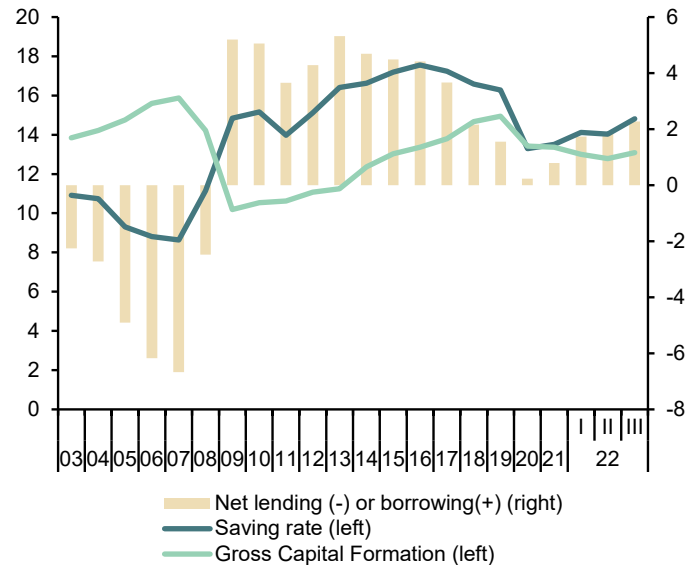
Table 6

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															
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		166.1	160.6	178.8	64.9	570.5	152.4	76.9	31.4	267.7	49.9	45.6	623.9	-53.3	-52.1
2023		181.1	161.1	186.0	62.5	590.6	156.7	81.3	36.4	286.1	46.2	37.7	644.4	-53.8	-52.6
2024		190.5	166.3	193.4	60.7	610.9	160.6	83.4	40.0	302.7	44.5	34.6	665.9	-55.0	-53.8
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															
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		12.5	12.1	13.5	4.9	42.9	11.5	5.8	2.4	20.1	3.8	3.4	46.9	-4.0	-3.9
2023		12.9	11.5	13.3	4.5	42.2	11.2	5.8	2.6	20.4	3.3	2.7	46.0	-3.8	-3.8
2024		12.9	11.3	13.1	4.1	41.5	10.9	5.7	2.7	20.6	3.0	2.3	45.2	-3.7	-3.7
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

- Net lending or borrowing (right)
- Revenue (left)
- Expenditure (left)
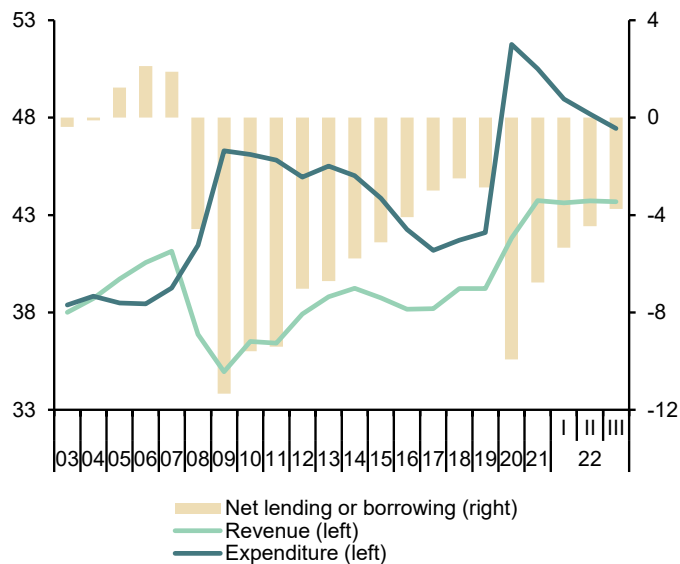
(a) Excluding financial entities bail-out expenditures.

Chart 6.2 - Public sector: Main expenditures

Percentage of GDP, 4-quarter moving averages

- Rest
- Capital expenditure
- Social benefits and transfers in kind
- Interests
- Compensation of employees
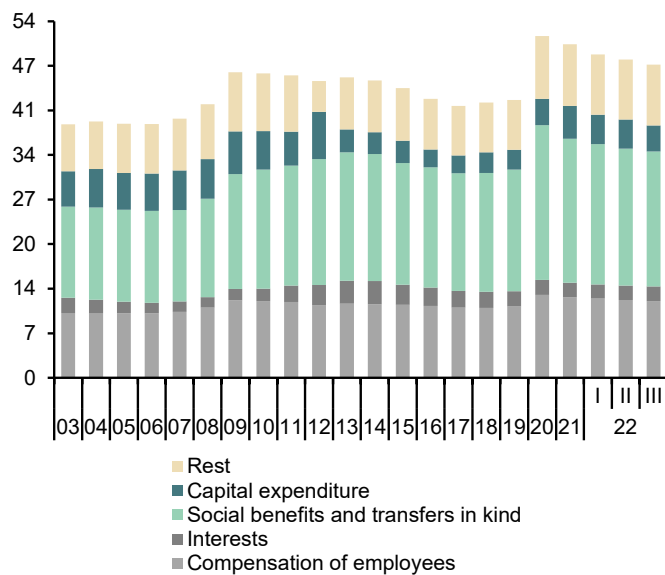
Table 7

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				
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		--	--	--	--	-52.1	--	--	--	--	1,502.5
2023		--	--	--	--	-52.6	--	--	--	--	1,556.8
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				
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		--	--	--	--	-3.9	--	--	--	--	113.1
2023		--	--	--	--	-3.8	--	--	--	--	111.1
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	105.5	25.0	1.8	8.0	117.4
	II	-4.4	0.0	0.3	-0.3	-4.5	104.1	24.9	1.8	7.8	115.8
	III	-2.2	-1.1	0.0	-0.4	-3.8	104.3	24.2	1.7	7.6	115.4

(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

Legend: Central, Regional, Local, Social Security, TOTAL
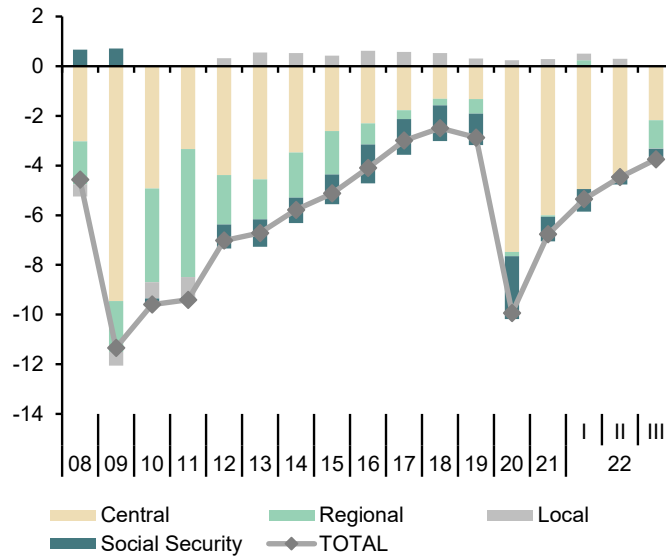
Chart 7.2 - Government debt

Percent of GDP

Legend: Central, Regional, Local, Social Security, TOTAL consolidated
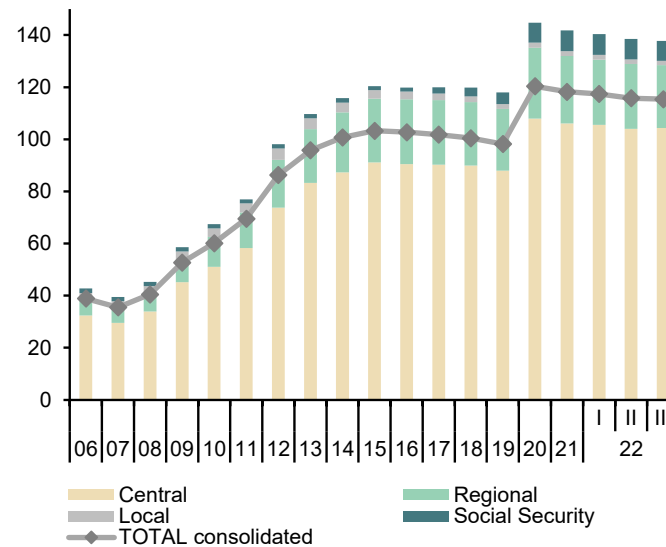
Table 8

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
2015	107.8	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	109.2	56.2	17,789.6	256.4	105.1	2,191.0	54.8	1.4	107.1	2.2
2018	108.0	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	89.8	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	101.3	51.8	19,663.0	235.0	105.9	2,324.3	51.0	-0.9	103.7	1.5
2023 (b)	100.5	53.7	19,678.7	44.5	100.8	2,327.8	49.6	-4.9	--	-11.3
2021 II	104.7	58.9	18,750.3	61.2	102.2	2,261.1	59.2	-0.4	103.6	-0.9
III	109.0	59.6	19,023.2	60.4	101.6	2,278.5	58.8	2.5	104.1	-0.5
IV	109.6	56.6	19,259.1	61.1	104.8	2,295.3	56.9	5.1	105.2	7.0
2022 I	108.4	52.5	19,470.2	59.7	105.3	2,311.5	55.8	6.8	101.8	11.6
II	101.8	55.0	19,654.7	59.5	106.7	2,320.2	53.2	0.4	105.7	7.2
III	97.1	50.5	19,717.9	58.6	106.2	2,329.5	49.2	-5.2	104.6	-4.4
IV	97.9	49.2	19,806.6	57.0	105.6	2,336.2	45.6	-5.4	103.0	-8.4
2023 I (b)	100.5	53.7	19,921.2	38.6	104.9	2,346.0	49.6	-4.9	--	-11.3
2022 Dec	98.8	49.9	19,835.4	18.9	105.9	2,339.3	46.4	-4.8	104.1	-8.7
2023 Jan	101.5	51.6	19,887.4	19.1	104.9	2,344.7	48.4	-3.8	--	-13.4
Feb	99.5	55.7	19,955.1	19.5	--	2,347.4	50.7	-6.0	--	-9.2
Percentage changes (c)										
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	--	--	4.0	-3.8	2.9	2.4	--	--	-0.5	--
2023 (d)	--	--	2.4	-3.0	-0.7	1.6	--	--	--	--
2021 II	--	--	0.7	-0.5	-1.3	0.6	--	--	-0.7	--
III	--	--	1.5	-1.2	-0.6	0.8	--	--	0.5	--
IV	--	--	1.2	1.1	3.1	0.7	--	--	1.1	--
2022 I	--	--	1.1	-2.3	0.5	0.7	--	--	-3.3	--
II	--	--	0.9	-0.3	1.3	0.4	--	--	3.8	--
III	--	--	0.3	-1.5	-0.4	0.4	--	--	-1.0	--
IV	--	--	0.4	-2.7	-0.6	0.3	--	--	-1.5	--
2023 I (e)	--	--	0.6	1.5	-0.6	0.4	--	--	--	--
2022 Dec	--	--	0.1	-0.5	0.8	0.1	--	--	1.9	--
2023 Jan	--	--	0.3	1.0	-0.9	0.2	--	--	--	--
Feb	--	--	0.3	2.0	--	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 Commision, 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

Social Security affiliates — Electricity consumption
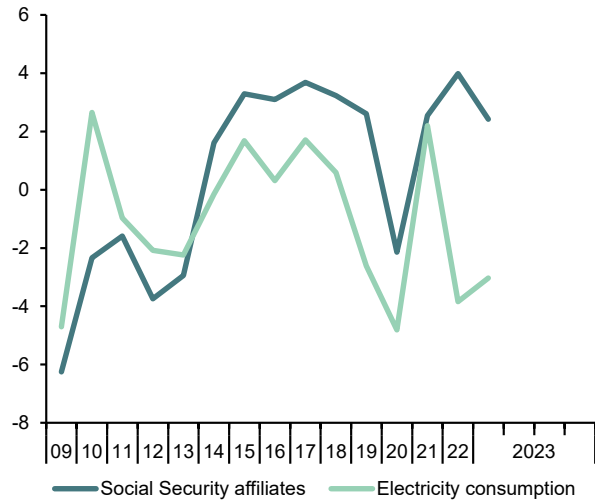
Chart 8.2 - General activity indicators (II)

Index

Economic Sentiment (left) — Composite PMI (right)
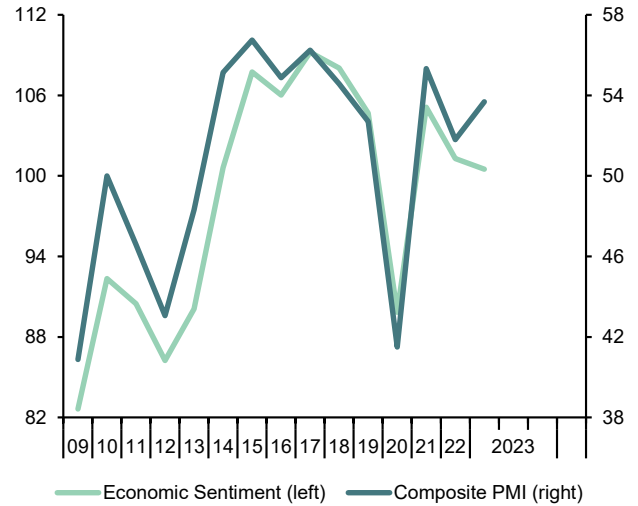
Chart 8.3 - Industrial sector indicators (I)

Annual percentage changes

Social Security affiliates in industry
IPI
Turnover
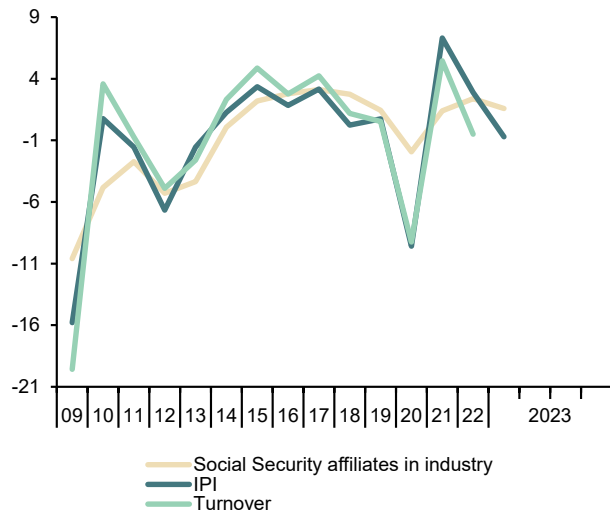
Chart 8.4 - Industrial sector indicators (II)

Index

Manufacturing PMI (left)
Industrial confidence (right)
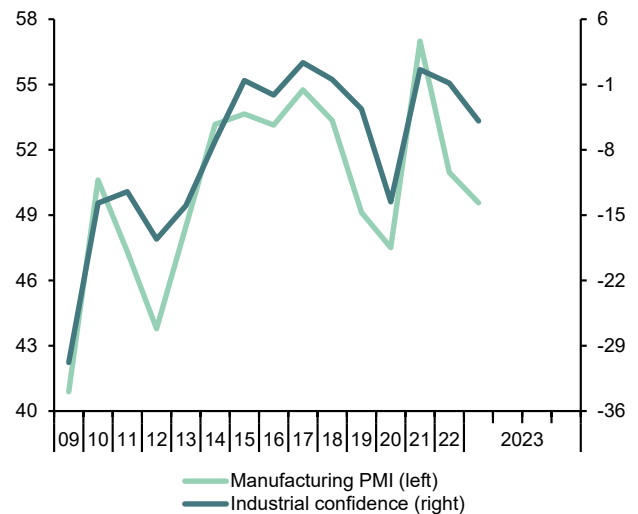
Table 9

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 m²	Thousands	2015=100 (smoothed)	Index	Million (smoothed)	Million (smoothed)	Balance of responses
2015	1,026.7	100.0	-26.6	9.4	9.9	12,432.3	103.5	57.3	308.2	206.6	18.9
2016	1,053.9	102.6	-39.1	9.2	12.7	12,851.6	109.2	55.0	331.2	229.4	18.2
2017	1,118.8	111.5	-25.1	12.7	15.9	13,338.2	114.5	56.4	340.6	248.4	22.9
2018	1,194.1	114.2	-6.0	16.6	19.8	13,781.3	119.2	54.8	340.0	262.9	21.2
2019	1,254.9	124.8	-7.7	16.7	20.0	14,169.1	122.8	53.9	343.0	276.9	13.9
2020	1,233.1	110.6	-17.4	13.1	16.1	13,849.2	102.7	40.3	92.2	75.6	-25.6
2021	1,288.6	124.3	-1.9	22.2	19.7	14,235.1	111.4	55.0	172.8	119.4	8.4
2022	1,333.8	126.1	8.9	29.4	20.0	14,926.3	120.0	52.5	320.7	242.9	12.4
2023 (b)	1,354.5	111.7	2.0	1.9	--	14,934.1	--	54.7	--	33.4	11.7
2021 II	1,283.6	124.9	0.3	5.6	5.0	14,086.8	110.0	58.8	23.1	16.4	7.7
III	1,295.0	124.5	-2.5	6.1	5.1	14,338.1	112.4	59.6	57.8	39.4	18.1
IV	1,309.7	125.5	1.1	6.6	5.2	14,549.0	116.5	57.4	69.1	49.4	22.2
2022 I	1,323.7	126.8	4.6	5.4	5.4	14,741.9	117.8	52.2	66.6	48.7	17.4
II	1,322.1	129.5	10.1	7.0	4.4	14,928.3	119.9	55.9	80.0	59.1	16.1
III	1,334.4	122.6	5.9	7.5	4.6	14,978.7	120.3	51.0	83.5	63.1	10.3
IV	1,355.6	125.7	14.8	9.5	5.5	15,053.1	122.4	50.8	84.9	67.6	5.9
2023 I (b)	1,376.4	129.6	2.0	1.9	--	15,145.5	--	54.7	--	46.1	11.7
2022 Dec	1,364.3	122.5	16.6	3.5	1.4	15,077.2	122.9	51.6	28.3	23.0	5.8
2023 Jan	1,375.0	129.6	-7.9	1.9	--	15,113.1	--	52.7	--	23.3	12.3
Feb	1,377.9	--	11.8	--	--	15,177.9	--	56.7	--	22.8	11.1
Percentage changes (c)											
2015	4.7	7.8	--	-28.2	42.6	3.6	6.9	--	4.4	6.0	--
2016	2.6	2.6	--	-1.7	29.0	3.4	5.5	--	7.4	11.0	--
2017	6.2	8.7	--	37.1	24.8	3.8	4.9	--	2.8	8.3	--
2018	6.7	2.4	--	30.8	24.5	3.3	4.1	--	-0.2	5.8	--
2019	5.1	9.2	--	1.1	1.3	2.8	3.0	--	0.9	5.3	--
2020	-1.7	-11.3	--	-22.0	-19.8	-2.3	-16.3	--	-73.1	-72.7	--
2021	4.5	12.3	--	70.2	22.7	2.8	8.5	--	87.4	57.8	--
2022	3.5	1.5	--	32.2	1.2	4.9	7.6	--	85.6	103.4	--
2023 (d)	4.1	-0.5	--	-16.2	--	2.9	--	--	--	50.5	--
2021 II	1.3	2.3	--	106.1	48.9	0.8	2.9	--	78.3	54.5	--
III	0.9	-0.3	--	112.3	31.4	1.8	2.2	--	149.8	140.6	--
IV	1.1	0.8	--	51.6	23.8	1.5	3.6	--	19.7	25.5	--
2022 I	1.1	1.0	--	35.9	20.1	1.3	1.1	--	-3.7	-1.5	--
II	-0.1	2.2	--	23.4	-10.9	1.3	1.8	--	20.2	21.5	--
III	0.9	-5.3	--	24.5	-9.7	0.3	0.3	--	4.4	6.7	--
IV	1.6	2.5	--	44.7	7.1	0.5	1.8	--	1.7	7.2	--
2023 I (e)	1.5	3.1	--	-16.2	--	0.6	--	--	--	2.3	--
2022 Dec	0.7	-4.7	--	35.6	-14.2	0.2	0.6	--	-0.3	3.5	--
2023 Jan	0.8	5.8	--	-16.2	--	0.2	--	--	--	1.1	--
Feb	0.2	--	--	--	--	0.4	--	--	--	-2.1	--

(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 Commision, 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

S. Security affiliates in construction (left)
Construction confidence index (right)
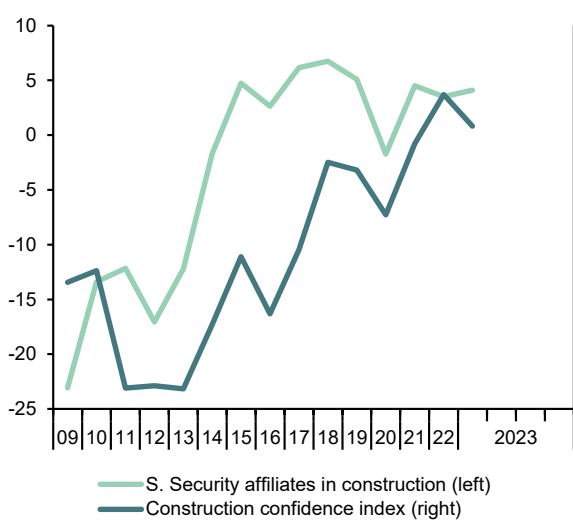
Chart 9.2 - Construction indicators (II)

Annual percentage changes

Official tenders
Housing permits
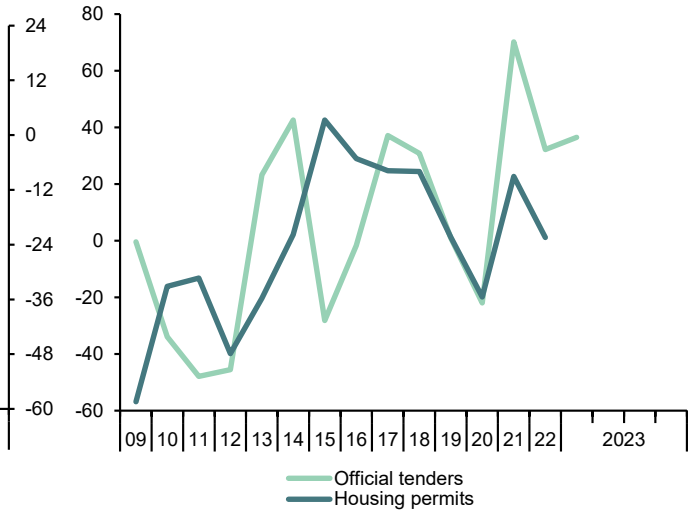
Chart 9.3 - Services indicators (I)

Annual percentage changes

Social Security affiliates in services
Turnover
Hotel overnight stays
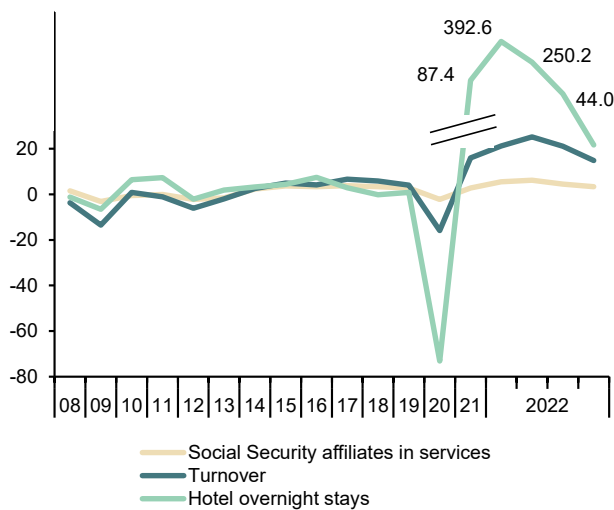
Chart 9.4 - Services indicators (II)

Index

Services PMI (left)
Services confidence (right)
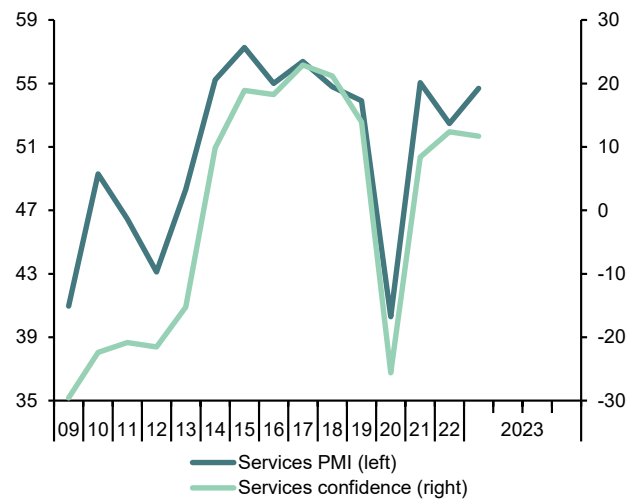
Table 10

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
2015		100.0	1,094.0	-4.9	110.3	-3.1	180.3	0.2	93.3
2016		103.9	1,230.1	-6.1	114.2	-1.4	191.3	-0.2	97.2
2017		104.7	1,341.6	-2.9	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	-22.5	51.2	-25.5	170.8	-22.7	100.0
2021		104.0	953.7	-12.9	90.7	-11.1	186.9	4.7	110.3
2022		104.9	914.9	-26.5	119.8	-2.9	166.7	28.2	124.6
2023 (b)		108.5	152.2	-22.5	--	-6.2	30.3	26.0	95.5
2021	II	103.8	250.7	-11.2	15.7	-15.2	49.2	11.4	110.9
	III	104.7	244.3	-8.3	30.6	-9.4	43.6	6.4	111.8
	IV	105.5	256.6	-12.4	28.0	-1.5	43.1	14.7	115.2
2022	I	102.2	188.6	-18.2	25.8	0.9	38.2	33.8	120.6
	II	105.1	229.9	-26.9	31.5	2.3	40.0	29.8	124.8
	III	104.9	255.6	-32.5	30.6	-8.6	43.0	21.7	127.1
	IV	107.4	255.8	-28.2	30.8	-6.1	46.5	27.5	130.7
2023	I (b)	108.6	170.1	-22.5	--	-6.2	34.0	26.0	103.4
2022	Dec	108.2	74.9	-25.3	10.2	-8.5	17.6	35.1	132.7
2023	Jan	108.6	86.6	-22.9	--	-8.0	16.8	23.5	--
	Feb	--	83.6	-22.1	--	-4.3	17.2	28.5	--
		Percentage changes (c)							
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		0.9	-4.1	--	32.1	--	-10.8	--	13.0
2023 (d)		5.8	26.6	--	--	--	28.7	--	18.4
2021	II	1.8	26.0	--	77.8	--	-2.4	--	1.7
	III	0.8	-2.6	--	94.8	--	-11.4	--	3.2
	IV	0.8	5.0	--	-8.4	--	-1.2	--	12.9
2022	I	-3.1	-26.5	--	-8.1	--	-11.2	--	19.9
	II	2.8	21.9	--	22.1	--	4.6	--	14.8
	III	-0.2	11.2	--	-2.9	--	7.5	--	7.6
	IV	2.4	0.1	--	0.8	--	8.0	--	11.9
2023	I (e)	1.1	-0.3	--	--	--	9.7	--	--
2022	Dec	0.5	-17.2	--	2.6	--	13.9	--	1.6
2023	Jan	0.4	15.5	--	--	--	-4.8	--	--
	Feb	--	-3.5	--	--	--	2.5	--	--

(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. 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 Commision. 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

- Retail sales (left)
- Industrial orders for consumer goods (right, balance of responses)
- Consumer confidence index (right, balance of responses)
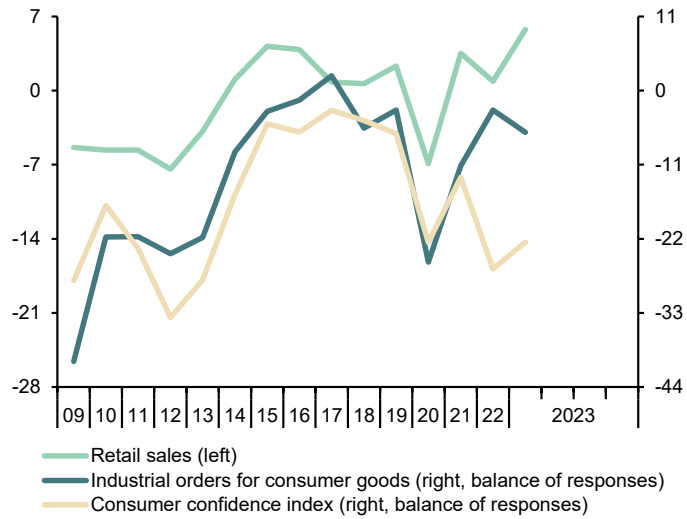
Chart 10.2 - Investment indicators

Annual percentage changes and balance of responses

- Imports of capital goods
- Industrial orders for investment goods (balance of responses)
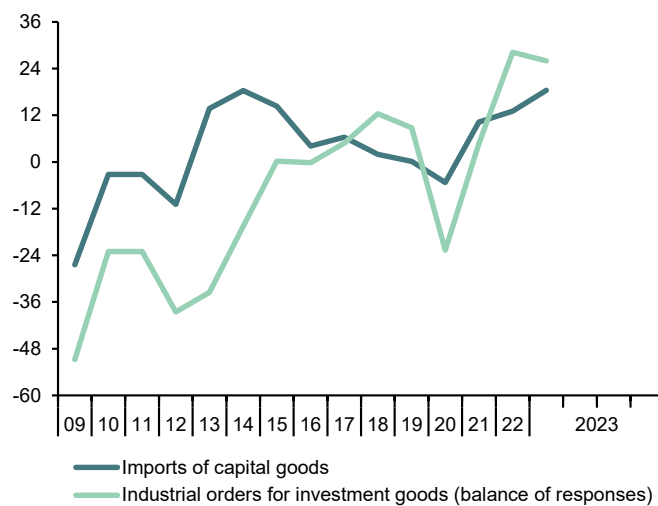
Table 11a

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
								Seasonally adjusted				Original	
	I	2=4+6	3=5+7	4	5	6	7	8	9	10=7/3	11	12	13
			Million							Percentage			
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	34.3	14.3	21.9
2019	39.3	23.0	--	19.8	--	3.2	--	58.6	50.4	14.1	32.5	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	34.8	13.5	23.1
2022	39.9	23.4	--	20.4	--	3.0	--	58.6	51.1	12.9	29.8	11.9	19.3
2023	40.1	23.5	--	20.6	--	2.9	--	58.6	51.4	12.3	--	--	--
2024	40.2	23.6	--	20.9	--	2.7	--	58.6	51.9	11.5	--	--	--
2021 I	39.6	22.9	23.0	19.2	19.4	3.7	3.6	58.1	49.0	15.6	38.2	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	14.7	31.9	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	31.6	12.2	20.9
2022 I	39.8	23.3	23.4	20.1	20.3	3.2	3.1	58.9	51.1	13.2	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	12.8	31.8	11.8	18.4
IV	40.1	23.5	23.5	20.5	20.4	3.0	3.1	58.5	50.8	13.0	30.1	11.9	18.6
			Percentage changes (d)							Difference from one year ago			
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	-2.0
2019	1.0	1.0	--	2.3	--	-6.7	--	0.0	0.7	-1.2	-1.8	-1.1	-1.8
2020	-1.9	-0.9	--	-7.3	--	38.0	--	0.6	-2.8	5.5	11.9	5.5	6.5
2021	2.9	1.7	--	7.8	--	-23.4	--	-0.7	2.3	-4.8	-9.6	-5.2	-3.5
2022	0.7	0.9	--	3.1	--	-11.8	--	0.1	1.2	-1.9	--	--	--
2023	0.4	0.3	--	1.0	--	-4.6	--	0.0	0.3	-0.6	--	--	--
2024	0.4	0.4	--	1.3	--	-6.2	--	0.0	0.5	-0.8	--	--	--
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	-0.1	-1.2	0.1	-1.2
III	0.1	2.4	2.3	4.5	4.5	-8.2	-8.4	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	-16.3	0.5	2.0	-2.8	-9.5	-2.3	-5.7
2022 I	0.3	1.7	1.7	4.6	4.5	-13.1	-13.5	0.8	2.1	-2.3	-9.3	-2.0	-4.9
II	0.5	0.7	0.7	4.0	4.0	-17.6	-17.3	0.1	1.7	-2.7	-9.7	-2.5	-4.8
III	0.8	0.3	0.3	2.6	2.6	-12.8	-12.8	-0.3	0.9	-1.9	-0.1	-1.7	-3.3
IV	1.1	0.9	0.9	1.4	1.4	-2.6	-2.6	-0.1	0.2	-0.5	-1.5	-0.2	-2.2

(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

Unemployment rate (right)
Labour force (growth rate, left)
Employed (growth rate, left)
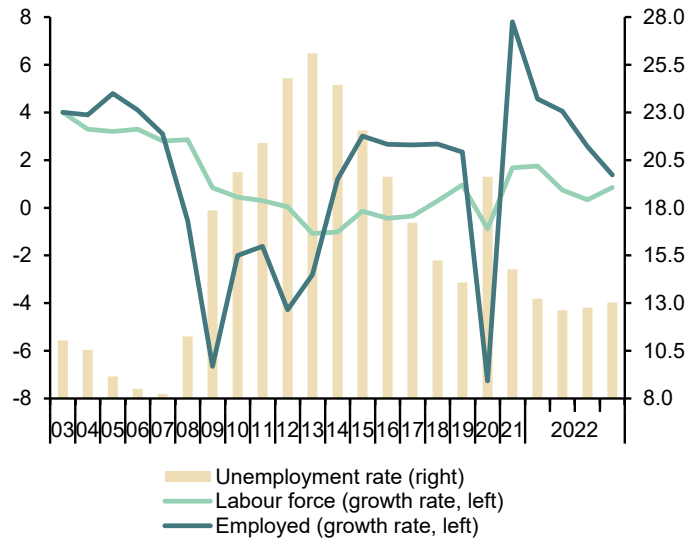
Chart 11a.2 - Unemployment rates

Percentage

Total (SA)   Aged 16-24 (SA)
Spanish   Foreign
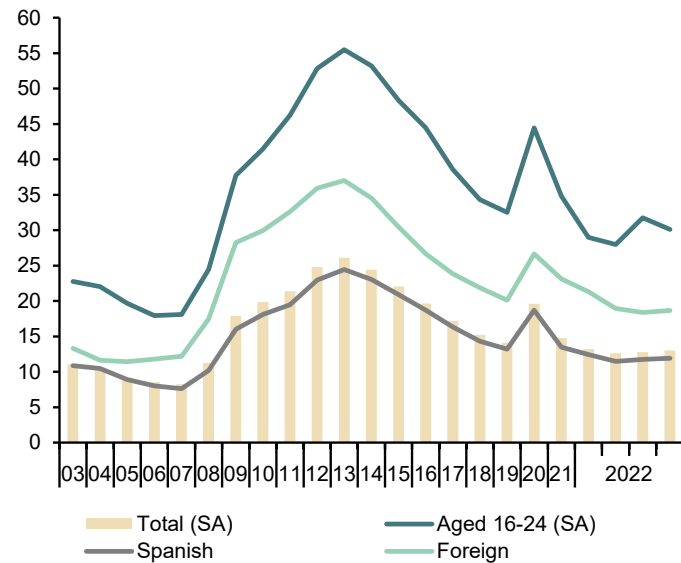
Table 11b

Labour market (II)

		Employed by sector				Employed by professional situation					Employed by duration of the working-day		
							Employees						
								By type of contract					Part-time
		Agriculture	Industry	Construction	Services	Total	Tempo-rary	Indefinite	Temporary employment rate (a)	Self employed	Full-time	Part-time	employment rate (b)
		1	2	3	4	5=6+7	6	7	8=6/5	9	10	11	12
						Million (original data)							
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)		0.77	2.77	1.32	15.52	17.25	3.65	13.61	21.1	3.14	17.63	2.76	13.52
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
	IV	0.75	2.80	1.30	15.61	17.37	3.11	14.26	17.9	3.09	17.68	2.78	13.59
		Annual percentage changes							Difference from one year ago	Annual percentage changes			Difference from one year ago
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)		-3.5	2.6	2.3	3.6	3.8	-12.6	9.2	-3.9	-0.3	3.5	0.6	-0.3
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
	IV	-10.3	1.3	1.2	2.1	2.3	-27.7	12.6	-7.5	-3.7	1.3	1.6	0.0

(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

Agriculture — Industry
Construction — Services

Chart 11b.2 - Employment by type of contract

Annual percentage changes and percentage over total employees

Temporary employment rate (right)
Temporary (left)
Indefinite (left)
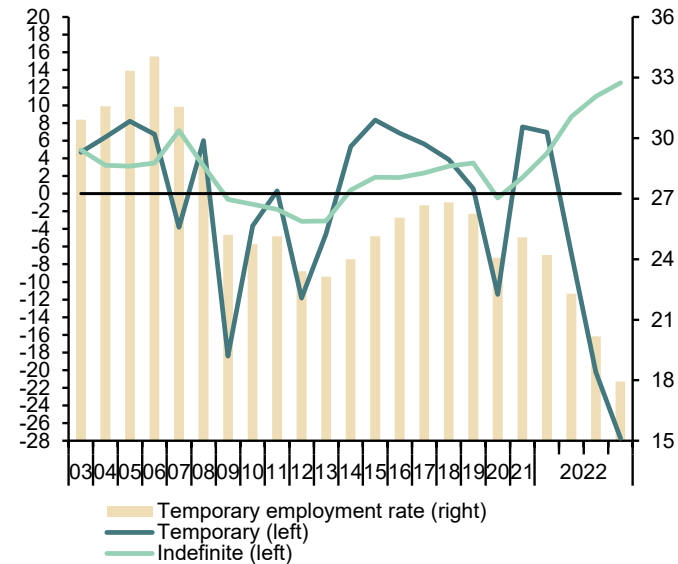
Table 12

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 2022		100.00	66.69	83.52	21.06	45.63	16.82	6.76	9.72	23.59
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		113.0	108.5	112.0	110.0	107.5	125.7	120.6	111.4	124.0
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		4.3	4.7	6.5	5.5	4.0	13.6	8.7	-12.9	12.0
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	5.9	5.1	7.5	6.5	4.1	16.5	10.7	-8.3	14.6
	Feb	6.0	5.2	7.6	6.5	4.2	16.8	13.4	-8.9	15.7
	Mar	3.4	5.1	7.5	6.3	4.3	16.6	11.6	-24.0	15.0
	Apr	4.5	4.5	6.6	5.7	3.8	14.4	8.4	-11.6	12.4
	May	4.1	4.4	6.4	5.5	3.8	13.7	9.0	-13.2	12.2
	Jun	2.7	4.3	6.2	5.3	3.7	13.3	6.9	-20.2	11.1
	Jul	3.0	4.7	6.5	5.3	4.1	13.0	7.1	-20.2	11.1
	Aug	3.2	5.0	6.7	5.3	4.3	13.1	7.3	-20.0	11.3
	Sep	4.1	4.8	6.6	5.4	4.2	13.4	7.8	-14.2	11.6
	Oct	4.5	4.4	6.2	5.2	4.0	12.8	7.4	-8.0	10.9
	Nov	5.0	4.3	5.8	5.1	3.9	11.5	8.4	-2.9	10.5
	Dec	5.2	4.1	5.2	4.7	3.9	9.4	7.7	3.4	8.9

Source: INE and Funcas (Forecasts).

Chart 12.1 - Inflation rate (I)

Annual percentage changes

All-Items ——— All-Items ex. food and energy
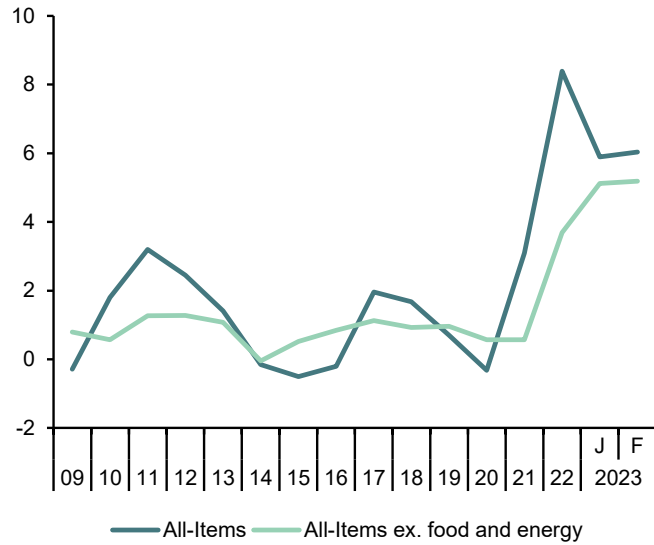
Chart 12.2 - Inflation rate (II)

Annual percentage changes

Non-energy industrial goods ——— Services
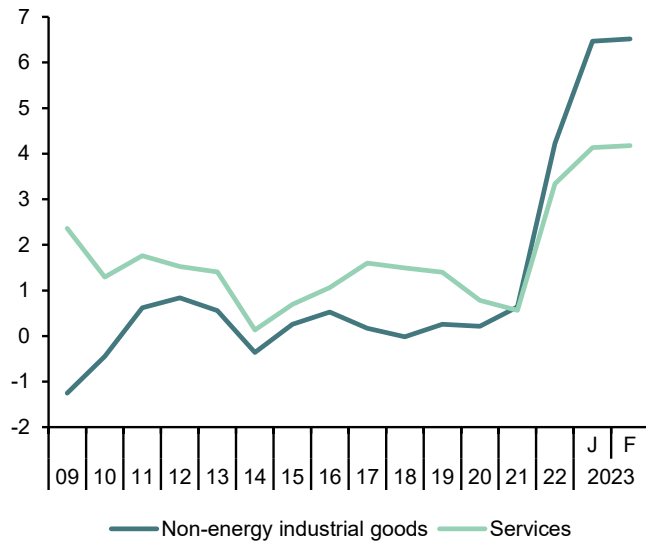
Table 13

Other prices and costs indicators

		Industrial producer prices		Housing prices		Urban land prices (M. Public Works)	Labour Costs Survey				Wage increase agreed in collective bargaining
	GDP deflator (a)	Total	Excluding energy	Housing Price Index (INE)	m² 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			
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	173.3	--
2021	108.1	116.4	110.4	88.2	80.6	54.3	153.9	151.5	161.5	172.3	--
2022	112.8	157.7	125.4	94.7	84.7	56.9	160.4	158.4	166.5	175.7	--
2023 (b)	--	153.4	130.2	--	--	--	--	--	--	--	--
2021 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	110.9	147.1	119.6	92.7	84.3	58.3	154.2	150.3	166.2	165.5	--
II	111.3	158.7	126.4	94.5	84.6	58.4	162.3	161.3	165.3	172.8	--
III	112.9	165.4	127.4	96.2	84.6	53.9	155.7	152.2	166.5	178.3	--
IV	116.3	159.6	128.3	95.4	85.1	--	169.4	169.9	167.9	186.2	--
2023 I (b)	--	153.4	130.2	--	--	--	--	--	--	--	--
2022 Nov	--	159.2	128.4	--	--	--	--	--	--	--	--
Dec	--	156.6	128.2	--	--	--	--	--	--	--	--
2023 Jan	--	153.4	130.2	--	--	--	--	--	--	--	--
Annual percent changes (c)											
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	6.5	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	4.4	35.5	13.6	7.4	5.0	6.9	4.2	4.6	3.1	2.0	2.8
2023 (d)	--	8.2	10.6	--	--	--	--	--	--	--	2.9
2021 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	3.7	41.5	12.7	8.5	6.7	19.1	4.7	5.2	3.4	1.3	2.4
II	4.2	43.9	15.4	8.0	5.5	0.2	3.8	4.3	2.2	1.2	2.5
III	4.5	40.0	14.3	7.6	4.7	2.9	4.0	4.1	3.9	1.8	2.6
IV	5.2	20.0	12.2	5.5	3.3	--	4.2	4.7	2.8	3.7	2.8
2023 I (e)	--	4.3	8.8	--	--	--	--	--	--	--	2.9
2022 Dec	--	14.9	11.1	--	--	--	--	--	--	--	2.8
2023 Jan	--	8.2	10.6	--	--	--	--	--	--	--	2.8
Feb	--	--	--	--	--	--	--	--	--	--	2.9

(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)

Housing (INE)
Housing (M. of Public Works)
Urban Land (M. of Public Works)
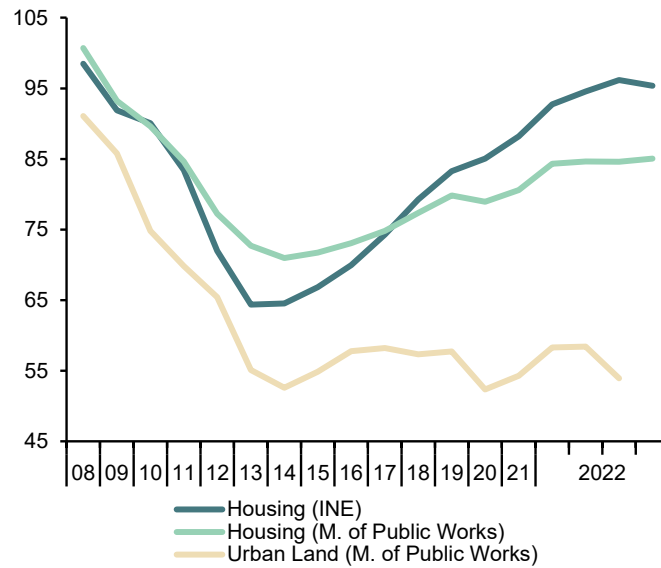
Chart 13.2 - Wage costs

Annual percent change

Total labour cost
Wage cost
Wage increases agreed in collective bargaining
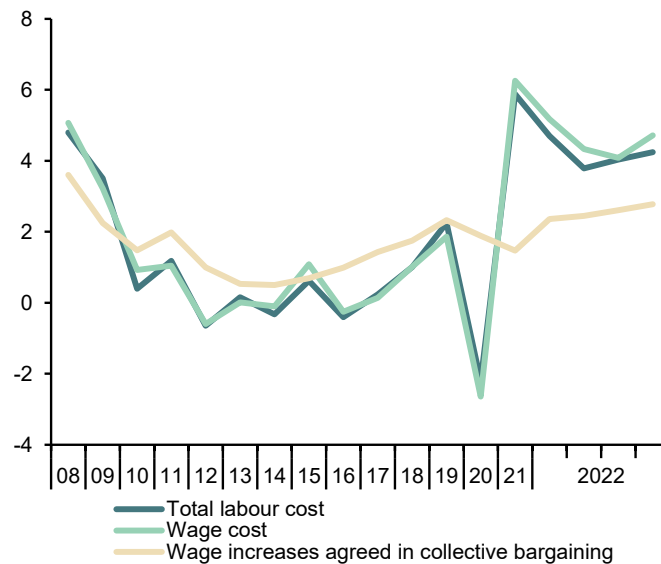
Table 14

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		
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	13.3	8.6	-1.1	0.3	1.3
2021		203.1	121.7	166.9	148.6	120.2	123.7	16.1	10.1	-2.6	-0.2	1.7
2022		251.1	144.0	174.4	196.3	149.3	131.6	20.4	12.1	-5.7	-1.0	3.3
2023 (b)		261.0	158.3	164.9	188.9	163.1	115.8	20.1	10.8	-4.0	-0.8	4.3
2021	I	187.3	115.2	162.6	129.9	110.6	117.4	14.8	9.2	-1.1	0.7	1.8
	II	208.8	119.4	174.9	145.8	115.8	125.9	16.4	10.3	-1.4	0.5	1.9
	III	210.6	122.4	172.0	150.4	119.6	125.8	16.7	10.3	-2.1	0.3	2.4
	IV	215.6	126.2	170.9	164.4	124.1	132.4	17.1	10.6	-4.1	-0.9	2.2
2022	I	232.9	136.7	170.4	181.0	140.5	128.8	19.1	10.8	-5.1	-1.2	3.1
	II	262.1	144.6	181.2	207.3	146.8	141.2	20.4	13.2	-6.5	-1.2	2.8
	III	262.9	145.3	180.9	208.2	155.3	134.1	21.1	12.6	-6.5	-1.4	3.4
	IV	254.9	148.4	171.8	193.4	155.1	124.7	20.9	11.8	-4.7	-0.2	3.9
2022	Nov	267.0	147.4	181.1	194.6	151.2	128.7	22.4	11.9	-3.4	1.2	5.0
	Dec	255.6	145.2	176.0	188.5	149.2	126.3	20.9	11.8	-3.7	1.0	4.2
2023	Jan	261.0	158.3	164.9	188.9	163.1	115.8	21.8	11.6	-3.0	0.1	5.0
				Percentage changes (c)							Percentage of GDP	
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	-7.0	-12.9	-1.2	0.3	1.4
2021		19.4	8.6	10.0	25.0	12.0	11.7	20.9	17.2	-2.6	-0.2	1.7
2022		23.6	18.3	4.5	32.1	24.2	6.3	26.2	19.4	-5.1	-0.9	3.0
2023 (d)		16.2	12.8	3.0	5.3	11.0	-5.2	18.8	11.8	--	--	--
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	2.5
	III	0.3	0.5	-0.2	0.4	5.8	-5.1	3.3	-4.3	-5.9	-1.3	3.1
	IV	-3.0	2.1	-5.1	-7.1	-0.1	-7.0	-1.0	-6.4	-4.1	-0.2	3.4
2022	Nov	10.3	-3.7	14.5	-1.3	-8.7	8.1	15.9	1.1	--	--	--
	Dec	-4.3	-1.5	-2.8	-3.1	-1.4	-1.8	-6.4	-0.3	--	--	--
2023	Jan	2.1	9.0	-6.3	0.2	9.4	-8.3	4.3	-1.8	--	--	--

(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

Exports ——— Imports ———
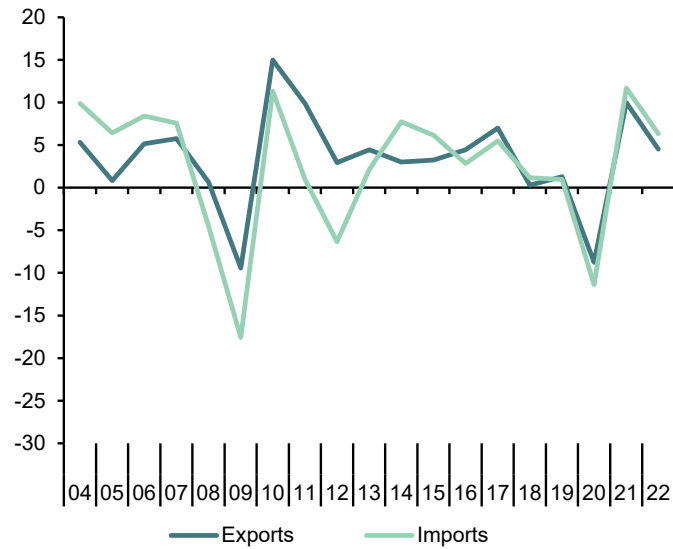
Chart 14.2 - Trade balance

EUR Billions, moving sum of 12 months

Balance of energy goods
Balance of non-energy goods
Total balance of goods
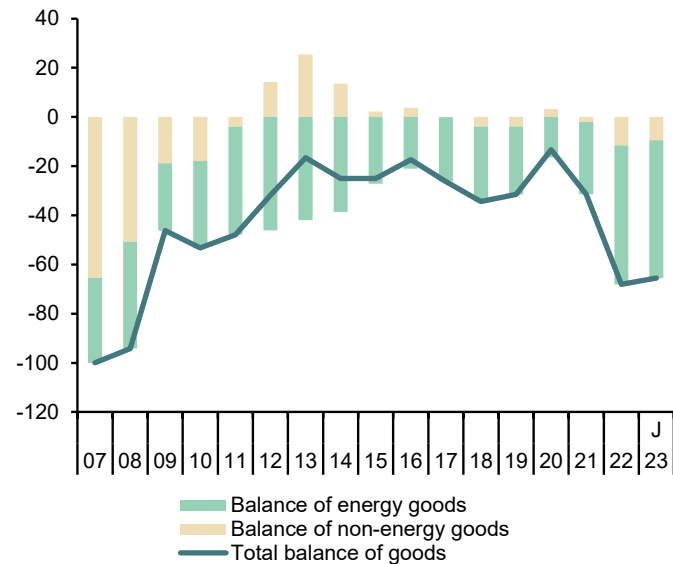
Table 15

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

		Current account					Capital account	Current and capital accounts	Financial account					Bank of Spain	Errors and omissions
		Total	Goods	Services	Primary Income	Secondary Income			Financial account. excluding Bank of Spain						
									Total	Direct investment	Porfolio 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															
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
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	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
	Nov	5.64	5.31		0.33		1.01	6.65	-16.17	4.21	-6.28	-17.07	2.98	17.57	-5.25
	Dic	1.70	1.43		0.27		3.69	5.39	40.68	-0.97	3.44	38.99	-0.78	-32.83	2.46
Percentage of GDP															
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
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

- Income and transfers (current and capital)
- Goods and services
- Current and capital account

Chart 15.2 - Balance of payments: Financial account

EUR Billions, 12-month cumulated

- Bank of Spain
- Portfolio invesment
- Direct investment
- Other investment

Table 16

Competitiveness indicators in relation to EMU

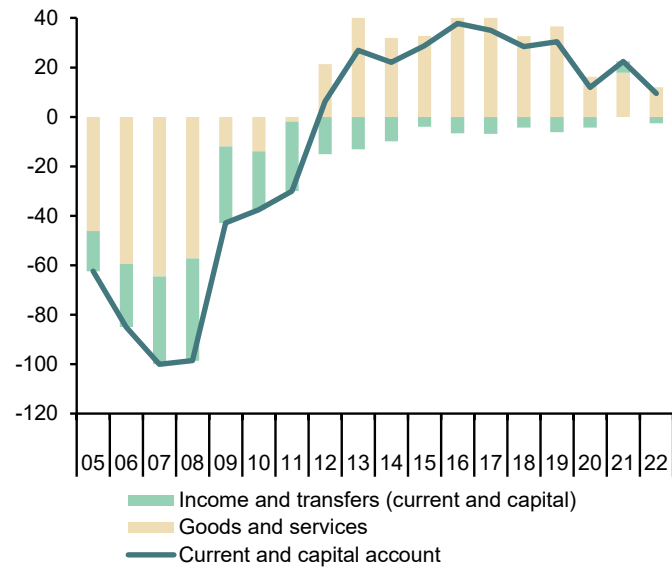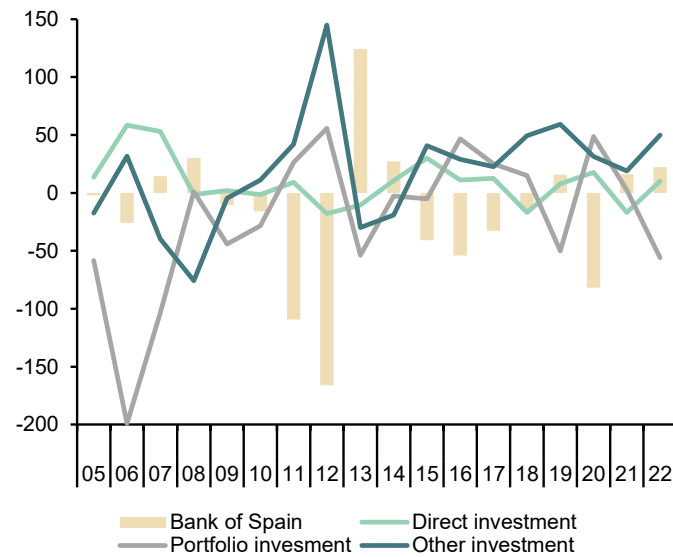|	Relative Unit Labour Costs in manufacturing (Spain/Rest of EMU) (a)			Harmonized Consumer Prices			Producer prices			Real Effective Exchange Rate in relation to developed countries
	Relative hourly wages	Relative hourly productivity	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	
	1998=100			2015=100			2015=100			1999 I=100
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	109.0
2020	95.4	93.3	102.2	103.9	105.1	98.9	99.8	101.2	98.6	108.4
2021	97.1	94.9	102.4	107.0	107.8	99.3	114.6	111.0	106.2	108.9
2022	--	--	--	115.9	116.8	99.3	148.5	140.7	105.6	108.0
2023 (b)	--	--	--	117.3	120.7	97.1	146.0	143.6	101.7	106.5
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
IV	--	--	--	117.4	120.8	97.1	150.1	146.4	102.5	105.9
2022 Dec	--	--	--	117.2	120.5	97.3	152.6	147.3	103.6	106.4
2023 Jan	--	--	--	116.7	120.3	97.1	149.8	145.8	102.7	106.5
Feb	--	--	--	117.8	121.2	97.2	--	--	--	--
	Annual percentage changes					Differential	Annual percentage changes		Differential	Annual percentage changes
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	--	--	--	8.3	8.4	-0.1	29.7	26.8	2.9	-0.8
2023 (c)	--	--	--	5.9	8.6	-2.7	7.7	12.5	-4.8	-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	-0.5
IV	--	--	--	6.5	10.0	-3.5	17.0	21.6	-4.6	-3.2
2022 Dec	--	--	--	5.5	9.2	-3.7	19.2	12.7	-6.5	-3.1
2023 Jan	--	--	--	5.9	8.6	-2.7	7.7	12.5	-4.8	-1.7
Feb	--	--	--	6.0	8.5	-2.5	--	--	--	--

(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)
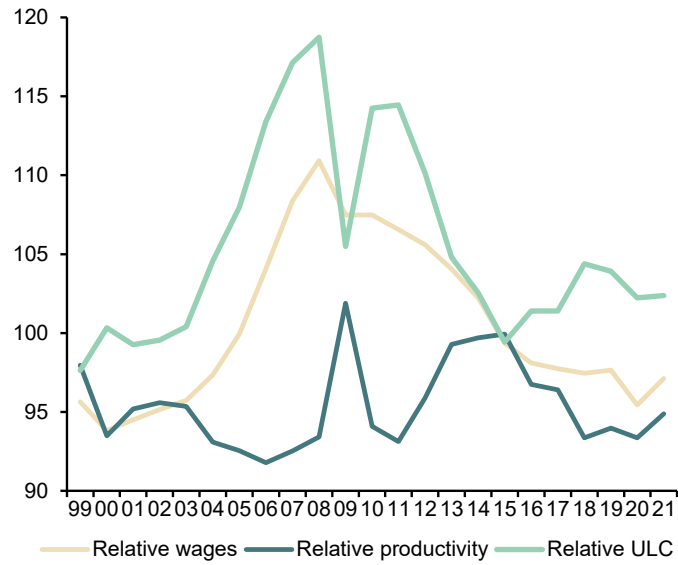
1998=100

Relative wages — Relative productivity — Relative ULC

Chart 16.2 - Harmonized Consumer Prices

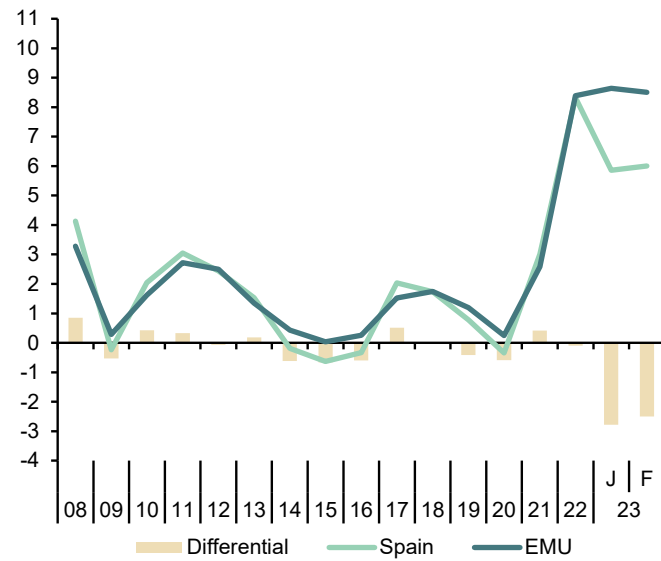Annual growth in % and percentage points

Differential — Spain — EMU

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.

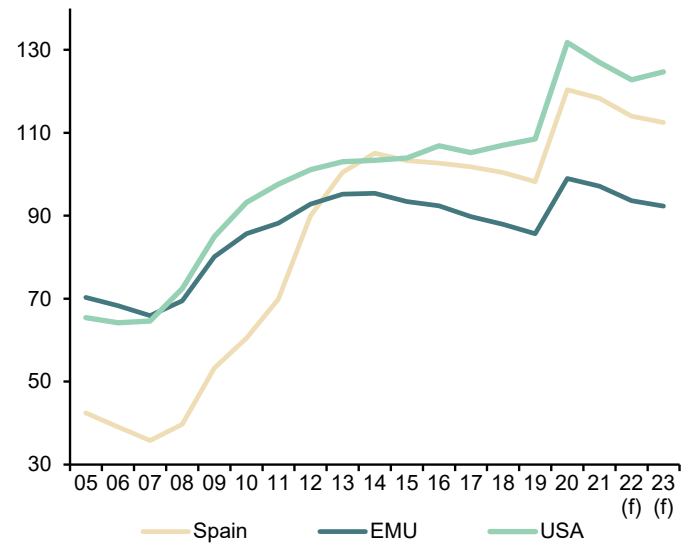**Chart 17a.1 - Government deficit**

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	8,187.2
2006	783.5	5,192.8	13,420.8	1,171.9	7,814.9	9,007.5
2007	879.3	5,560.9	14,350.6	1,371.6	8,718.6	10,141.9
2008	916.7	5,773.7	14,218.8	1,460.0	9,277.1	10,715.3
2009	908.9	5,880.4	14,056.7	1,473.5	9,305.3	10,197.4
2010	905.2	6,021.2	13,865.2	1,498.0	9,590.4	10,066.0
2011	877.9	6,104.2	13,734.6	1,458.3	10,035.5	10,303.2
2012	840.7	6,096.5	13,666.9	1,340.4	10,140.7	10,849.8
2013	793.4	6,057.5	13,899.2	1,268.5	10,119.6	11,363.5
2014	757.5	6,064.0	14,017.7	1,202.1	10,612.6	12,133.0
2015	733.1	6,127.4	14,190.2	1,183.8	11,352.5	12,945.7
2016	718.3	6,232.4	14,600.6	1,166.6	11,696.8	13,599.3
2017	710.8	6,394.5	15,145.5	1,147.0	11,853.7	14,562.7
2018	709.4	6,582.4	15,602.5	1,144.6	12,150.3	15,546.5
2019	707.5	6,811.0	16,094.8	1,160.9	12,573.0	16,306.1
2020	700.8	7,000.8	16,711.1	1,212.1	13,064.8	17,805.4
2021	704.6	7,294.1	17,939.7	1,255.3	13,693.9	18,673.5
2022	–	–	18,955.4	–	–	19,876.8
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	66.8
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	77.8	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	79.3	108.4	114.0	84.5
2021	58.4	59.2	76.9	104.0	111.2	80.1
2022	–	–	74.4	–	–	78.1

(a) Loans and debt securities.

Sources: Eurostat and Federal Reserve.
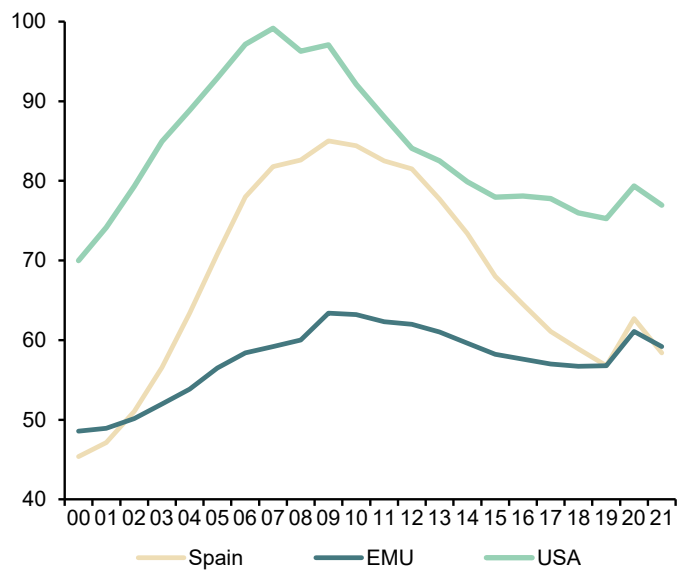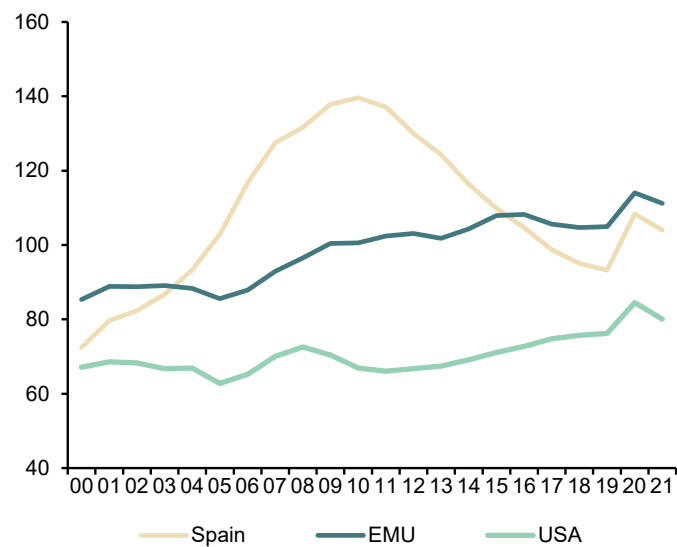
Chart 17b.1 - Household debt

Percentage of GDP

Chart 17b.2 - Non-financial corporations debt

Percentage of GDP

50 Financial System Indicators

Updated: March 15th, 2023

Highlights		
Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	-0.9	February 2023
Other resident sectors' deposits in credit institutions (monthly average % var.)	0.5	February 2023
Doubtful loans (monthly % var.)	-3.7	February 2023
Recourse to the Eurosystem L/T (Eurozone financial institutions, million euros)	1,248,718	February 2023
Recourse to the Eurosystem L/T (Spanish financial institutions, million euros)	118,502	February 2023
Recourse to the Eurosystem (Spanish financial institutions million euros) - Main refinancing operations	5	February 2023
"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	2023 February	2023 15 March	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	2.744	2.753	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	1.8	-0.499	-0.501	3.725	3.509	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	3.4	0.03	0.5	3.5	3.3	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": Upcoming meetings of central banks will take place in a situation of increased uncertainty between the persistence of inflation and sources of international financial instability. The bankruptcy of Silicon Valley Bank and the uncertainty associated with this event and rumors about Credit Suisse caused market interest rates to decrease in recent days. However, the 3-month Euribor has risen from 2.744% in February to 2.753% in mid-March, while the 12-month Euribor has decreased from 3.725% to 3.509% in the same period. In the first half of March, the yield on the 10-year government bond has gone from 3.5% in February to 3.3% in mid-March.

B. Financial Markets

Indicator	Source	Average 2001-2019	2020	2021	2022 December	2023 January	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	36.1	28.8	27.9	48.06	50.10	(Traded amount/outstanding balance) x100 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	9.88	12.27	(Traded amount/outstanding balance) x100 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	0.03	2.22	(Traded amount/outstanding balance) x100 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	0.33	0.57	(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	1.61	2.18	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	-	-	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	-1.8	8.2	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	0.01	-2.2	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	820.21	871.12 (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	8,229.10	8,759.10 (a)	Base dec1989=3000
16. Nasdaq Index	Nasdaq	3,452.8	12,888.2	15,644.9	10,466.48	11,428.15	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	15.8	15.4 (a)	Madrid Stock Exchange Ratio "share value/ capital profitability"

B. Financial Markets (continued)

Indicator	Source	Average 2001-2019	2020	2021	2022 December	2023 January	Definition and calculation
18. Short-term private debt. Outstanding amounts (% chg.)	BE	0.8	0.6	2.4	-7.48	-0.24	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	0.34	0.14	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	-5.3	0.25	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (% chg.)	Bank of Spain	13.8	35.4	21.1	320	-38.1	IBEX-35 shares concluded transactions

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

Comment on "Financial Markets": In the first half of March, stock market indices experienced significant drops due to a potential contagion risk following the bankruptcy of Silicon Valley Bank and rumours about Credit Suisse, losing part of the gains made in the first two months of the year. The IBEX-35 stands at 8,759.10 points. The General Index of the Madrid Stock Exchange is at 871.12 points. On the other hand, in January (the latest available data), there was an increase in the ratio of simple spot operations with Treasury bills (up to 50.10%). In addition, there was an increase in the ratio of operations with government bonds (up to 12.27%). Futures operations on IBEX-35 stocks increased by 0.25%, while financial options on the same index decreased by 38.1% compared to the previous month.

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 November	2022 December	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	5.2	-0.1	0.2	0.6	-0.9	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	0.4	0.5	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	0.9	-2.4	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	-0.03	-0.4	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	3.4	3.6	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	-1.5	-3.7	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	12.4	-24.3	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	0.1	1.4	Equity percentage change for the sum of banks, savings banks and credit unions.

Comment on "Credit institutions. Business Development": In December, the latest available data showed a decrease in credit to the private sector of 0.9%. Deposits increased by 0.5%. The weight of fixed income securities on balance sheets decreased by 2.4%, while the weight of stocks and shares decreased by 0.4%. Likewise, there was a reduction in the volume of non-performing loans by 3.7% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source	Average 2000-2019	2020	2021	2022 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	1,248,718 (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	118,502 (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: February 28th, 2023.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing": In February 2023, recourse to Eurosystem funding by Spanish credit institutions reached 118.50 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 620 billion euros in February 2023 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

	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	47,475,420	44.1	20.0			53.5	30.7	15.9		
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.

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	19,113	2.48								
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).

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	59,657	4.60●
2022	16.1	5.8	32.6	49.2							
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.

Table 4

Social protection: Benefits

		Contributory benefits*						Non-contributory benefits			
		Retirement		Permanent disability		Widowhood			Social Security		
	Unemployment total	Total	Average amount (€)	Total	Average amount (€)	Total	Average amount (€)	Unemployment	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	1000	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	773,227	6,253,797	1,254	951,067	1,035	2,351,703	778	882,585	265,830	179,967	10,633
2023	896,156■	6,324,746●	1,370●	946,694●	1,121●	2,351,647●	849●	907,796■	267,650●	177,250●	10,031●
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-February.

■ Data refer to January.

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 asigned	Specialist nurses per 1,000 inhabitants	Primary care nurses per 1,000 people asigned	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	85,503	2.0	0.8	3.7	0.7			148	99
2021	7.3	88,625●							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.

Notes

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