SEFO

SPANISH AND INTERNATIONAL
ECONOMIC & FINANCIAL OUTLOOK

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# The impact of rate hikes on Spain´s economy and financial sector

funcas

## WHAT MATTERS

**Housing markets** ahead of the threat of recession

Spain: Reduced vulnerability to **gas rationing** relative to other European countries

**Spanish banks** ahead of the return to positive interest rates

Translating EURIBOR increases into improved **banking margins**: Differential timing on asset and liability repricing

Monetary policy and **business lending:** Impact on pricing

Securing **fiscal stability** in the context of uncertainty

**Income inequality** in year one of the pandemic

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# SEFO

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# Letter from the Editors

The international context has deteriorated sharply since the July issue of *Spanish and International Economic & Financial Outlook (SEFO)*. According to leading indicators, the risk of recession has increased in three of the world´s leading economic growth engines, – the US, China and the eurozone. For the first time since the start of the post-COVID recovery period, the global purchasing managers' index (global PMI) fell below 50 in August, marking the threshold for a contraction.

This deterioration is largely a reflection of the intensification of the energy crisis, particularly in gas markets. The stagflationary nature of the energy disruption has prompted the ECB to cut its eurozone growth forecasts and sharply raise those for inflation.

Within this uncertain context, the September issue of *SEFO* starts off by assessing the outlook for the housing market, one of the main unknowns in the current economic environment, with critical potential ramifications for both social and financial stability.

Despite the drop in household income as a result of prevailing inflation, the housing market has remained dynamic: transaction volumes are up 20% so far this year and prices are tracking 8% higher. This atypical trend is attributable to the safe-haven appeal of housing at a time of rampant inflation, in addition to the savings accumulated during the pandemic and access to abundant financing. The current bull market may be reaching an inflection point, however, in light of the tighter monetary policy stance. Though we still expect prices to increase by around 6% on average this year, in line with our earlier estimate, a marked slowdown is predicted for next year. The market will not collapse, however, in light of the strong underlying demand and relatively healthy financial position of households. The main risk to that baseline scenario is not the formation of a bubble (as is the case in other countries), but rather the macroeconomic fallout from the energy crisis and general climate of uncertainty.

We then take a deeper look at how gas market tensions are expected to impact Spain. The "Save Gas for a Safe Winter" plan approved by the European Commission involves a 15% reduction in gas demand between August 1st, 2022, and March 31st, 2023, although some countries, such as Spain, will only face a reduction of 7%. On the productive side, the economic sector most sensitive to a rationing of gas consumption will be industry and, in particular: (i) chemicals and pharmaceuticals; and, (ii) the transport and storage sector, which have the greatest direct weight in Spain's GVA (also in the euro area). From a country perspective, among the large European nations, Germany and Italy are most exposed to this geopolitical risk, while

Spain is less sensitive, not only because its industry consumes very little Russian gas, but also because the country´s expected reduction in demand will be lower. In any case, Spain will still be exposed to the risks that this adverse geopolitical environment poses for the coming autumn-winter.

The next three articles in the September *SEFO* examine how the recent shift in ECB monetary policy, namely, the beginning of the interest rate hike cycle, will impact both the financial sector, as well as firms.

As regards the banks, they now have the opportunity to advance on the challenge of boosting their profitability. With interest rates gradually rising, the banks are looking at business and margin growth prospects not enjoyed in recent years. However, the new rate climate is not all good news for the banks, particularly in the current complex economic environment, characterized by high uncertainty (largely as a result of inflation and deteriorating confidence), which does not bode well for immediate growth in business lending volumes sufficient to translate into significant growth in profitability in the near-term. Indeed, latest available figures show that prior to ECB rate hikes, Spanish banks´ net interest margins remained stuck at 0.8% of average total assets, with interest income at around 1.1% and interest expense at 0.3%. That said, Spanish banks remain at the forefront of increasing operating efficiency through reducing operating expenses and fee and commission income has been growing, albeit displaying a high degree of volatility. Moreover, a number of risks carried over from the previous financial crisis remain, including those related to: business sector vulnerability; the ability to repay the state-guaranteed loans extended during the pandemic; and, the looming end of the various credit relief schemes.

As well, the timing of asset and liability repricing will play a key role in the pace of profitability increases. The historical evidence-backed convention indicates that the banks' net interest margin gets squeezed far more during times of low rates and, certainly during periods of zero or negative rates, as has been the case in the eurozone for more than five years. By this logic, the Spanish and European banks' margins should improve within the context of the new, positive interest rate environment. The most important curve for the retail banking business is 12-month EURIBOR, which is currently trading firmly in positive territory, after more than five years in negative terrain. However, rate increases will not translate into higher net interest income (NII) in a linear fashion. In fact, it is highly probable that we will see the banks' income etch out a sort of J-curve, with margins actually dipping before recovering and heading decisively north. The reason for this is the different pace and intensity of bank asset and liability repricing in response to the new EURIBOR curve. Indeed, the pace of repricing is slower in the case of floating mortgages (an asset category of significance for the Spanish banking system), giving rise to the initial effect of contracting margins prior to a gradual recovery ahead of moving into clear positive territory.

As regards corporates, the recent reversal of the ECB´s unconventional monetary policy is already driving interest rates higher, raising the risk of triggering an increase in corporate bankruptcies, which would increase the private sector´s marginal cost of borrowing even further. In this regard, this issue of *SEFO* analyses the measures implemented since the financial crisis of 2008 and the extent to which they have affected the real economy, with a focus on how they have affected business loan price formation. Our analysis shows that both the ECB´s corporate bond buyback program and its liquidity scheme have played a particularly important role in reducing the cost of borrowing for SMEs since 2014. The reversal of those unconventional monetary policies will drive interest rates higher, as we are already seeing. That phenomenon could trigger an increase in corporate bankruptcies, which would increase the business community's marginal cost of borrowing even further. The thorny issue for the central banks is whether the

existence of inflation *per se* has more adverse consequences for the economy than the path of rate tightening they establish. This will be the crux of the difficult debate for governing councils´ of central banks globally going forward, particularly since monetary policy has already begun shifting direction all around the world, as exemplified by the ECB's recent moves to hike its key rates by 50 basis points and subsequently by 75 basis points and provide new forward guidance.

We close the September *SEFO* by analysing the impact of recent fiscal measures taken to mitigate the consequences of the pandemic as part of the broader outlook for future fiscal stability, as well as inequality in Spain.

As regards fiscal consolidation, decisive policy actions in response to the pandemic at the EU and Spanish level have been more effective than those taken to tackle the Great Recession. However, those same decisions have also clouded the outlook for fiscal stability. Transitory relief is drawing to an end at a time when interest rates are increasing, and the adverse effects of uncertainty will weigh on GDP growth and its trajectory back to pre-pandemic levels. In the first half of the year, the overall deficit has come down sharply to already below the target of 5% for 2022, compared to 6.8% in 2021, although the forecasts for this year are not entirely aligned. The positive and unexpected dynamics of tax collection are the reason why the increase in public spending is not having a significantly adverse impact on the deficit. Assuming no change in policy, the government expects the deficit to gradually trend down towards around 3% in 2025, shaped by a structural deficit which, despite a slight improvement, would remain above 3%. Moreover, while the government is forecasting a very slow but steady reduction in the debt ratio, the Bank of Spain sees no prospect for improvement. Within this context, it is not enough to hope for correction via the economic situation, which looks likely to be more complex in 2023 than was anticipated a few months ago. To ensure compliance with the incoming European fiscal rules and the eligibility criteria for the new Transmission Protection Instrument, limit the country's debt service burden in the medium-term and win back space for discretionary fiscal policy, now is the time to define reforms and targets to realign public revenue with expenditure.

On the topic of inequality, were it not for the mitigating social protection measures rolled out, the effects of COVID-19 on Spanish households' primary income would have been felt more keenly in the lower income brackets and would have translated into a sharp increase in inequality. Public transfers offset a significant portion of the income lost by the households most affected by unemployment or disability. However, they were not capable of fully neutralising the increase in inequality. The adverse effect on disposable income was concentrated in the first decile of the income distribution. Moreover, the persistence of pockets of poverty in Spain cannot be blamed on the crisis induced by the pandemic but rather must be attributed to more structural factors related with low levels of education and job qualifications in some segments of the population, the insufficiency of the minimum income scheme, the scarcity of help for families and the limited size of non-contributory pensions.

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# What´s Ahead (Next Month)

| Month | Day | Indicator / Event |
|---|---|---|
| October | 3 | Eurogroup meeting |
| | 4 | Social Security registrants and official unemployment (September) |
| | 4 | Tourists arrivals (August) |
| | 6 | Industrial production index (August) |
| | 10 | Financial Accounts Institutional Sectors (2nd. quarter) |
| | 14 | CPI (September) |
| | 18 | Foreign trade report (August) |
| | 20-21 | European Council meeting |
| | 27 | ECB monetary policy meeting |
| | 27 | Labour Force Survey (3rd. quarter) |
| | 28 | GDP 3rd. quarter, advance estimate |
| | 28 | Preliminary CPI (October) |
| | 31 | Retail trade (September) |
| | 31 | Non-financial accounts: Central Government, Regional Governments and Social Security (August) |
| | 31 | Non-financial accounts, State (September) |
| | 31 | Balance of payments monthly (August) |
| November | 3 | Social Security registrants and official unemployment (October) |
| | 3 | Tourists arrivals (September) |
| | 4 | Industrial production index (September) |
| | 7 | Eurogroup meeting |
| | 15 | CPI (October) |
| | 17 | Foreign trade report (September) |
| | 29 | Preliminary CPI (November) |
| | 30 | Non-financial accounts: Central Government, Regional Governments and Social Security (September) |
| | 30 | Non-financial accounts, State (October) |
| | 30 | Retail trade (October) |
| | 30 | Balance of payments monthly (September) |

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# What Matters












## Regulation and Economic Outlook



## Key Facts

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# Housing markets ahead of the threat of recession

Despite the drop in household income as a result of inflation, the housing market has remained dynamic due to its safe-haven appeal, pent-up savings and abundant financing. This atypical trend may, however, be reaching an inflection point in the face of changing monetary conditions; nonetheless, we are not looking at a market standstill or a major increase in non-performing loans but rather a sharp slowdown of the current expansionary cycle, with the main risk to this baseline scenario stemming from the macroeconomic effects of the energy crisis and a worsening geopolitical context.

Raymond Torres

Abstract: Despite the drop in household income as a result of prevailing inflation, the housing market has remained dynamic: transaction volumes are up 20% so far this year and prices are tracking 8% higher. This atypical trend is attributable to the safe-haven appeal of housing at a time of rampant inflation, in addition to the savings accumulated during the pandemic and access to abundant financing. The current bull market may be reaching an inflection point, however, in light of the tighter monetary policy stance. Though we still expect prices to increase by around 6% on average this year, in line with our earlier estimate, a marked slowdown is predicted for next year. The market will not collapse, however, in light of the strong underlying demand and relatively healthy financial position of households. The main risk to that baseline scenario is not the formation of a bubble (as is the case in other countries), but rather the macroeconomic fallout from the energy crisis and general climate of uncertainty.

## Introduction

In recent months, particularly since the invasion of Ukraine, the economic outlook has deteriorated sharply. The intensification of the energy crisis, coupled with the effects of the war and its broader geopolitical tensions, have heightened the risk of recession, especially in Europe (ECB, 2022). That turbulence is also continuing to fuel inflationary pressures, forcing the main central banks, including (after much hesitation) the ECB, to change monetary tack.

In an increasingly uncertain environment, one of the main unknowns relates to the housing market. Its predicament is an important question from the social point of view as well as in terms of financial stability. The property market has been surprisingly dynamic throughout the pandemic, fanned by the prospects of recovery and ongoing low interest rates. Now that the risk of recession looms, the sustainability of that dynamism is in question.

## The housing market has continued to grow despite the economic slowdown

For now, the downturn in economic prospects has hardly affected the housing market, at least in Spain. Transaction volumes continue to rise at an annual rate of over 20%, according to the second-quarter figures, albeit slowing slightly compared to the start of the year (Exhibit 1). Prices have also been heading north since the dip taken during the pandemic. The average appraisal value has been increasing at an annual rate of close to 8% up until the summer. In August, a traditionally slow month, the price index fell back slightly (-0.8% compared to July, which is similar to the contraction observed in August 2021).

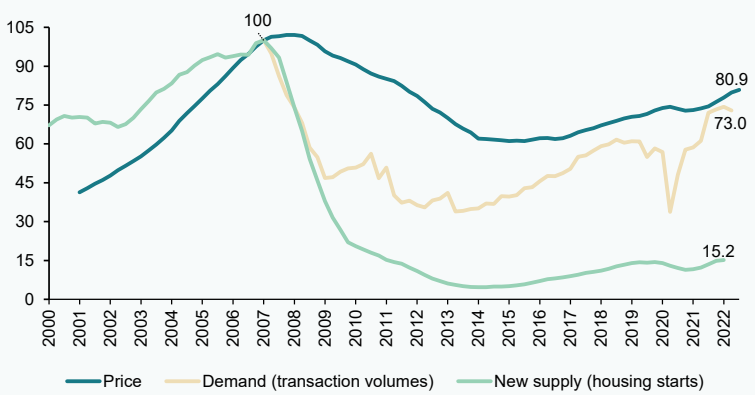
There are no major differences among the various regions, although the trend is less even than in recent years. Prices continue to rise in places like Madrid, the Balearics and, to a lesser extent, the Canaries. However, prices are stagnating in regions with less dynamic demographics, such as Castile La Mancha, Castile & Leon and Extremadura, and they are stagnating at relatively low levels, moreover.

Nor are we seeing a change of trend in the mortgage market, where transactions are registering year-on-year growth of close to 1% so far this year, compared to 0.7% in 2021. That performance contrasts with the

Exhibit 1

**The market remains buoyant but cooler than at the height of the bubble**

House prices (TINSA), transaction volumes and housing starts during the last 12 months. Rebased 1Q07 = 100




*Sources: Author's own elaboration based on the Bank of Spain, INE and TINSA.*

> “The Spanish market remains below the valuation levels observed at the height of the bubble 15 years ago, while the EU market as a whole has revalued almost 40%.”

contraction observed prior to the pandemic when loan repayments were outpacing the arrangement of new loans.

In short, despite the economic slump, the market continues to grow, although the pace of that growth may well be easing. We are therefore talking about dynamics that contrast starkly with those observed when the real estate bubble burst, evidencing the fact that this time the market is not starting from a position of widespread overvaluation. A comparison with other European countries leads to a similar conclusion (Exhibit 2). According to the European statistics office, Eurostat, the Spanish market remains below the valuation levels observed at the height of the bubble 15 years ago, while the EU market as a whole has revalued almost 40% and the German market has doubled in price. The analysis performed by the Bank for International Settlements, an organism watched closely by the market, coincides with these findings (BIS, 2022).

## Housing growth has been nurtured by surplus savings and demand for safe assets in a context of inflation

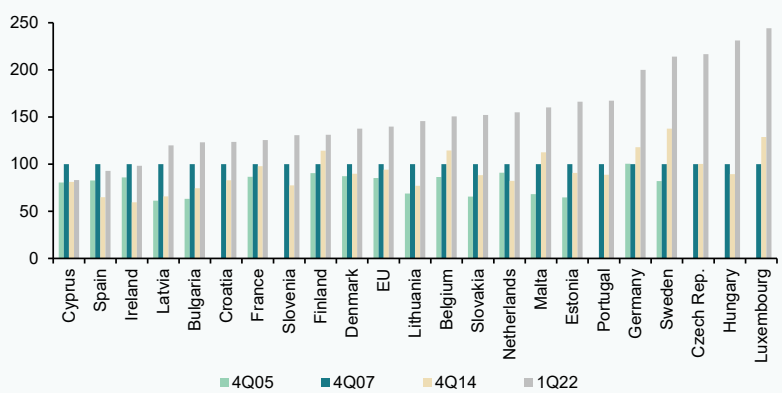
The main market support factor is buyers' perceptions that housing is a safe investment in the current context of uncertainty and inflation. Housing is a wealth-preserving investment for now, unlike liquid deposits which tend to depreciate with CPI, or financial products, such as bonds and shares, which have proven highly volatile so far this year.

The return on property investments, in addition to being relatively stable, stands at 3.7% (without factoring in valuation upside). That yield is very attractive relative to other

Exhibit 2

**House prices: A European comparison**

House prices: 1Q07 = 100




*Source: Author's own elaboration based on Eurostat.*

> Spanish households increased their savings by €75 billion between 2020 and 2021, in clear contrast to the excessive leverage observed during the previous real estate bubble.

alternatives for financial savings (take a look at the housing market indicators updated periodically on the Bank of Spain's statistics portal). For now, that return is also higher than the related borrowing cost, thanks to favourable mortgage terms and conditions, despite monetary policy tightening. The expectation that rates will rise may even have triggered a temporary spike in purchase intent.

Elsewhere, the savings set aside during the pandemic are also driving demand for housing, offsetting the loss of purchasing power induced by current inflation. Spanish households increased their savings by €75 billion between 2020 and 2021, in clear contrast to the excessive leverage observed during the previous real estate bubble. Those surplus savings are fuelling demand for housing while helping finance investments in refurbishment which had stagnated during the lockdown. Although the savings rate fell back during the first half of this year, it remains slightly above the long-run average, evidencing households' cautious attitude in the current climate of uncertainty.

Another plus is the fact that the job market has performed relatively well. Social Security contributors numbers have continued to increase, albeit seemingly starting to lose momentum, as the economy looks increasingly likely to slump. The jobs being created are, moreover, more stable than before the labour market reform, which may be giving buyers a sense of security.

Lastly, the supply side is reacting slowly to the growth in demand due to the paralysis of the construction sector during the lockdown and, afterwards, the onset of bottlenecks in the supply chain. According to Spain's official statistics office, investment in housing remained 8.5% below pre-crisis levels as of the fourth quarter of 2021. The run-up in production costs in the construction sector has also eroded supply-side responsiveness to vibrant demand. Average construction material prices are 19% higher than before the pandemic (using INE data as of November, by comparison with November 2019 figures).

## The shift in monetary policy: Prelude to a significant deceleration but not a market collapse

In the very near-term, we are likely to see additional increases in prices as a result of lingering underlying support factors on both the demand and supply sides.

However, the market is expected to slow as financing terms and conditions tighten, as is to be expected in light of rising interest rates. EURIBOR, the main benchmark index for the mortgage market, which was still in negative territory at the start of the year (at around -0,5%, which is close to the ECB's deposit facility rate for the first part of the year), is currently trading at over 2%. The Funcas consensus estimate suggests that EURIBOR will rise a further half a point over the coming year (Funcas, 2022).

> It is estimated that each additional point in mortgage rates increases the ratio of borrowing costs to disposable income by four percentage points - the housing affordability index.

It is estimated that each additional point in mortgage rates increases the ratio of borrowing costs to disposable income by four percentage points – the housing affordability index. Note, however, that effect takes place gradually, as the stock of mortgages gets turned over. That estimate is based on the following equation:

$$A=I*(D/GDI)+(R/GDI),$$

where *A* is the Affordability index; *I* is the Interest rate; *D* is the Debt taken on to purchase a home; *R* is the annual loan Repayment amount and *GDI* is the household's Gross Disposable Income.

The values observed in the market today yield an estimated affordability index of 35.5%. In other words, the households that borrow money to buy their homes have to earmark over one-third of their income to the payment of interest and repayment of principal. That estimate is in turn underpinned by the following assumptions:

- The average house purchase price is equivalent to 8.5 times' gross disposable income and the mortgage taken on by home-buyers represents 65% of the value of the property purchased. Those assumptions yield a borrowing ratio (D/GDI) of 5.5x.
- We assume the mortgage has an average life of 25 years, which, coupled with the previous estimates, leads to a ratio of R/GDI of 22.1%.
- The effective interest rate (EURIBOR plus the fees borne by the borrower), I, is 2.4%.

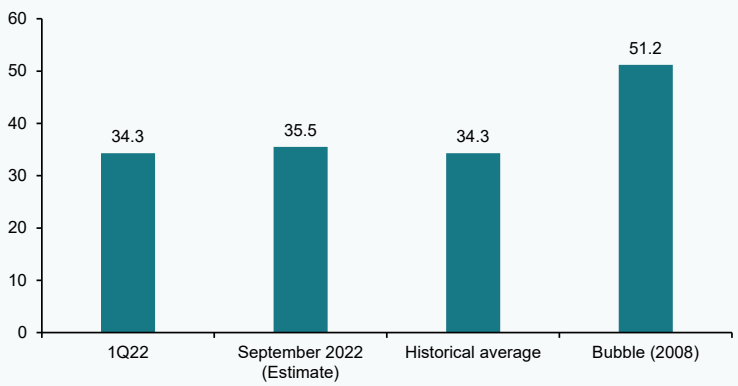
An increase in the interest rate of one percentage point, to 3.4%, would increase the affordability index to nearly 39.4%. That is the threshold beyond which households will begin to taper their demand for square metres or forgo mortgages either because they cannot afford to borrow or because the banks decide, under prevailing prudential regulations, not to extend them (this estimate already factors in a slight drop in demand).

The affordability index is already slightly above the long-run average (Exhibit 3), such that demand will inevitably slow as

Exhibit 3

**Housing affordability index**

Interest and principal burden as a % of household income




*Source: Author's own elaboration based on the Bank of Spain's affordability index (for estimate details, refer to the text above).*

> “Indebted households that have borrowed at floating rates will be able to afford the higher cost of their mortgages so long as they hold on to their jobs, an eventuality that could be more likely than in the past, thanks to the Spanish economy’s overall competitive positioning, the absence of bubbles and the recent labour market reform.”

the financial burden of purchasing a home increases.

Elsewhere, the volume of bank deposits is not necessarily a good predictor of demand for housing. To sustain new home purchases, the savings accumulated in bank accounts would have to continue to increase, which is unlikely in the context of declining purchasing power.

These mitigating factors will become more tangible from 2023, when mortgage rates will fully reflect the unfolding shift in monetary policy and the supply side will have surmounted the current procurement issues (a prediction in line with others, like Montgoriol, 2022). As a result, in 2022, the current situation of surplus demand should prevail, driving faster growth in average annual prices than in household disposable income, of around 6% (by outpacing the estimated growth in households’ gross disposable income, the affordability index is already worse than before the pandemic, as we have seen).

The tightening of borrowing terms and conditions will become more tangible in 2023, weighing on demand. That, coupled with growth in supply, is likely to trigger a slowdown, with prices potentially trending in line with household disposable income. That situation would still be compatible with the banks’ prudential ratios in terms of financial burden in relation to income at the aggregate level. As a result, we do not expect non-performance to rise considerably, unless the job market takes a turn for the worse: indebted households that have borrowed at floating rates will be able to afford the higher cost of their mortgages so long as they hold on to their jobs, an eventuality that could be more likely than in the past, thanks to the Spanish economy’s overall competitive positioning, the absence of bubbles and the recent labour market reform.

In short, the housing market looks set to weaken as financing conditions tighten. However, we are not looking at a market standstill or a major increase in non-performing loans but rather a sharp slowdown of the current expansionary cycle. The main risk to this baseline scenario stems from the macroeconomic effects of the energy crisis and a worsening geopolitical context.

## References


BIS (2022). *BIS residential property price statistics in Q1 2022*. https://www.bis.org/statistics/pp_residential_2208.pdf

ECB (2022). *ECB staff macroeconomic projections for the euro area, September*. https://www.ecb.europa.eu/pub/pdf/other/ecb.projections202209_ecbstaff~3eafaaee1a.en.pdf

Funcas (2022). *Spanish economic forecasts panel: September 2022*. https://www.funcas.es/textointegro/panel-de-previsiones-de-la-economia-espanola-septiembre-2022/

Montgoriol, J. (2022). *How long can the real estate sector’s upward trend last?* CaixaBank Research, July. https://www.caixabankresearch.com/en/sector-analysis/real-estate/how-long-can-real-estate-sectors-upward-trend-last

Torres, R. and M. J. Fernández (2022). The conflict in Ukraine and the Spanish economy. *SEFO, Spanish and International Economic & Financial Outlook,* 11(2) (March). http://www.sefofuncas.com/The-war-in-Ukraine-and-implications-for-Spain/The-conflict-in-Ukraine-and-the-Spanish-economy



**Raymond Torres.** Economic Perspectives and International Economy Division, Funcas.

# Spain: Reduced vulnerability to gas rationing relative to other European countries

Spain´s lower expected reduction in demand under the pan European plan, together with a generally lower consumption of Russian gas by the country´s industry, translates into less sensitivity to current geopolitical tensions. Nonetheless, Spain will still be exposed to the risks generated by the adverse geopolitical environment heading into the autumn-winter.

María Romero and Juan Sosa

Abstract: The "Save Gas for a Safe Winter" plan approved by the European Commission involves a 15% reduction in gas demand between August 1st, 2022, and March 31st, 2023, although some countries, such as Spain, will only face a reduction of 7%. On the productive side, the economic sector most sensitive to a rationing of gas consumption will be industry and, in particular: (i) chemicals and pharmaceuticals; and, (ii) the transport and storage sector, which have the greatest direct weight in Spain's GVA (also in the euro area). From a country perspective, among the large European nations, Germany and Italy are most exposed to this geopolitical risk, while Spain is less sensitive, not only because its industry consumes very little Russian gas, but also because the country´s expected reduction in demand will be lower. In any case, Spain will still be exposed to the risks that this adverse geopolitical environment poses for the coming autumn-winter.

> The run-up in gas prices prompted the European Commission to design a consumption rationalisation plan targeting in particular the corporate segment.

## Introduction

The rise in gas prices in recent weeks (Exhibit 1) responds to the risk of a cut in Russian supplies of this raw material, which is so important for Europe, as Russia will continue to use gas as a geopolitical tool against Europe and in efforts to secure a relaxation of economic sanctions imposed as a result of the war in Ukraine. The most likely scenario being discounted by the market is that supply will suffer, leading to different gas rationing scenarios to be considered for the coming autumn-winter.

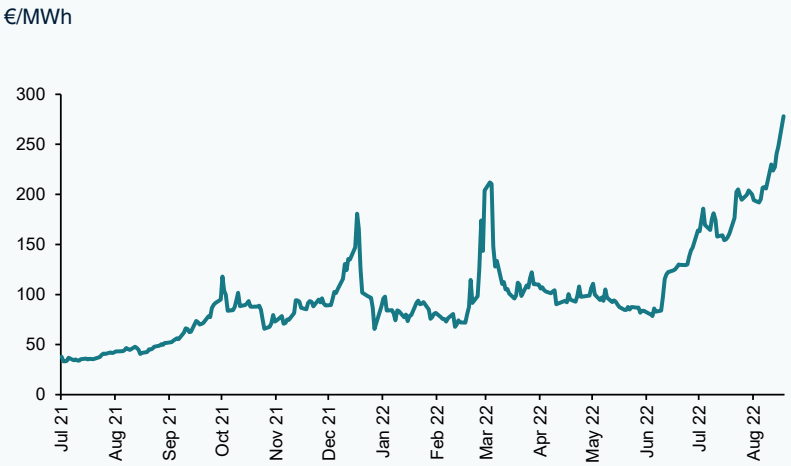
This article attempts to identify which economic sectors are more intensive in energy consumption and which are more dependent on supplies from Russia, with the aim of quantifying their direct weight and anticipating the economic impact that could arise if this risk materializes.

## The European gas demand rationing plan: "Save gas for a safe winter"

Aware of the risk that gas supply could be cut-off from Russia, the European Commission designed and published at the end of July: (i) a draft legislation; and, (ii) a plan ("Save Gas for a Safe Winter") aimed at reducing the use of gas in Europe by 15% between August 1st, 2022, and March 31st, 2023.

The legislation consists of a new Council Regulation that would give the Commission the possibility to declare, after consulting with member states, a 'Union Alert' on security of

Exhibit 1 **Gas prices in Europe**




*Source: Afi, Bloomberg.*

> “The extractive industry, the chemical and pharmaceutical industry, and the transportation and storage sector are the most energy-dependent on gas, the latter two being the most relevant in the euro area´s productive structure.”

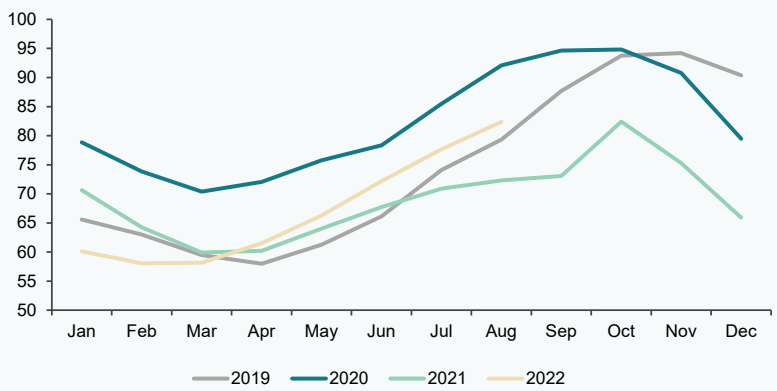
supply, imposing a mandatory gas demand reduction on all member states. That alert could be triggered when there is a substantial risk of a severe gas shortage or exceptionally high demand for gas. The member states are being asked to update their national emergency plans by the end of September to show how they intend to meet the reduction target and to report to the Commission on progress every two months.

To help member states deliver the necessary demand reductions, the Commission has also adopted a European Gas Demand Reduction Plan which sets out measures, principles and criteria for coordinated demand reduction. As anticipated, the new plan not only urges retail consumers to change their habits so as to reduce their energy consumption (*e.g.*, limit air conditioning thermostats to 25 degrees in the summer and heating to 19 degrees in the winter), it also urges the business population to use alternative sources of energy (prioritising renewable sources but acknowledging that a switch to coal, oil or nuclear power could be necessary as a temporary measure) in order to increase gas reserves as soon as possible (even though Spain is not as dependent on supplies from Russia and has already set aside over 80% of its total storage capacity by the end of August – Exhibit 2). The plan contemplates rationing measures that could reduce production in certain important sectors, weighing on growth for the rest of this year and, above all, in 2023 by more than we are currently contemplating.

Exhibit 2

**Gas stocks in Spain**

Percentage of storage capacity




*Sources: Afi, GIE AGSI.*

## Economic sectors dependent on Russian gas: Direct and indirect impact

Following the approval of this Plan by Brussels and all the member states, it is worth asking which economic sectors are more energy dependent and which of them consume more gas from Russia, in order to anticipate which economic activities will be more sensitive to this rationing of demand. Although the following exercise has been carried out for Spain, it has also been replicated for the euro area and its main member states, allowing comparisons to be made and conclusions to be drawn as to which countries are most exposed to this geopolitical risk.

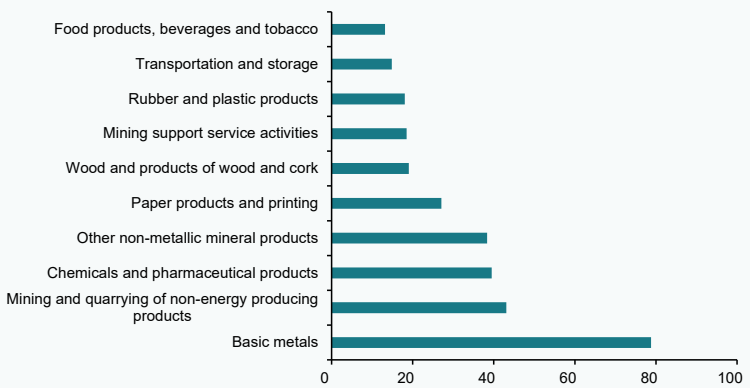
The input-output tables for the main European countries [1] provided by the OECD [2] show that the manufacturing sector is the most intensive user of energy. Tracking the weight of energy consumption over total sector gross value added (GVA) reveals that the metallurgy (basic metals) sector is the most dependent on energy (energy consumption accounts for nearly 80% of its GVA). That sector is followed by the extraction of non-energy products, the chemicals and pharmaceuticals industry, and other non-metallic minerals, whose energy consumption represents roughly 40% of the GVA they generate. Rounding out the top 10, with energy consumption ratios of over 10% of GVA and above the manufacturing sector average are activities such as: paper and printing; timber and cork; the extractive industry (mining support services); rubber and plastics; transportation and storage; and the agri-food industry (Exhibit 3). These energy-intensive economic activities in Spain are the same as those detected for the euro area as a whole.

However, the activities in Spain most dependent on energy sourced from Russia are, in this order, the extractive industry, the chemicals and pharmaceuticals industry and the transportation and storage sectors (Exhibit 4). In all of these, the energy imported from Russia accounts for over 1.5% of their total consumption (5% in the case of their eurozone equivalents), leaving them more vulnerable to a cut – total or partial – in energy supply during the coming months and rendering them some of the energy-intensive activities that may have to rationalise their activity the most, judging by the plan published by the Commission in July 2022.

Exhibit 3

**Energy consumption/GVA by sector (ordered from highest to lowest)**

Pecentage




*Source: Afi, OECD.*

> “Although Spain will be one of the countries least affected by current geopolitical tensions, it is not immune to the rationing policies imposed by the Commission; thus, the government will need to implement measures to support affected sectors.”

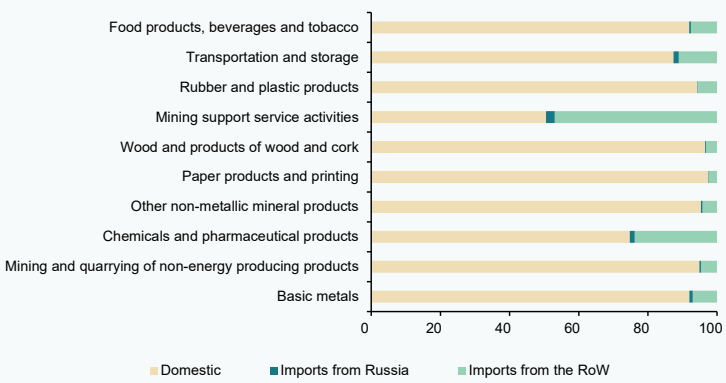
Other than the extractive industry, the other two economic sectors most dependent on Russian gas are those with the highest direct weight in the Spanish economy of the 10 sectors analysed above. Specifically, the transportation and storage sector is the most important of the three, as it generates 5% of total GVA. The chemicals and pharmaceuticals industry, meanwhile, is less significant, as its direct impact is a lower 2% of GVA. On aggregate the 10 sectors that are most dependent on energy account for 12.4% of GVA (Exhibit 5), painting a picture of the magnitude of the potential impact of the suspension of gas supply in the eurozone and of the Commission’s proposed rationing policy.

Moreover, the chemical and pharmaceutical sectors and the different means of transport are activities of significant strategic importance in the Spanish economy. Firstly, all of these sectors have an important carry-over effect over the rest of the economy, so that a negative shock on their turnover would lead, additionally, to a decrease in revenue (and activity) for suppliers and other auxiliar activities, and would also impact their capacity to generate employment; these are the “backward linkages”. Secondly, these two sectors also produce inputs to other value chains in the economy, so that the imposibility to serve orders, or a sharp increase in prices, would rapidly affect other sectors, both in terms of production and margins. These effects are particularly prevalent in the

Exhibit 4

**Source of the energy consumed by sector (ordered from highest to lowest energy consumption/GVA)**

Percentage

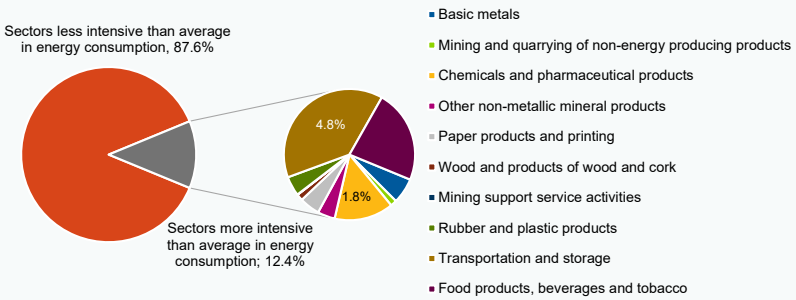



*Source: Afi, OECD.*

Exhibit 5

## Direct weight of the sectors that use energy most intensively in Spain

Percentage of total GVA




*Sources: Afi, OECD.*

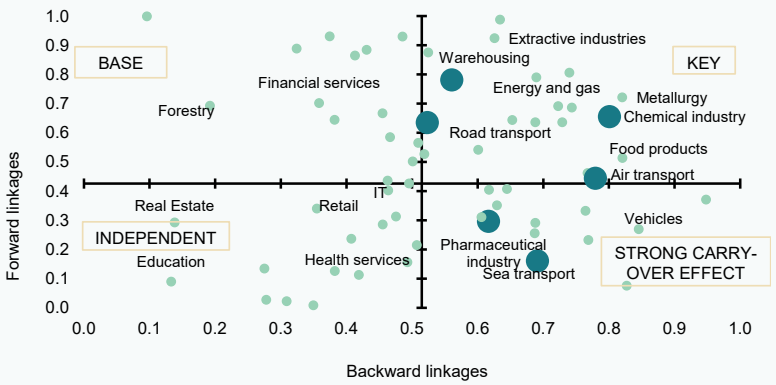
chemical industry, air and road transport, and warehousing, and are measured through the "forward linkages" (Exhibit 6). [3]

However, a comparison with other European countries indicates that Spain would be one of the countries least affected by this situation.

Exhibit 6

## Linkages of the Spanish economy

Percentage of total GVA




*Sources: Afi, OECD.*

“ Energy rationing will not only be guided by criteria of economic relevance but also the classifications made by each member state of their critical sectors in order to safeguard supply to their citizens. ”

That is not to say, however, that it is immune to the rationing policies imposed by the Commission. Germany and Italy are the major economies most exposed, specifically via their respective chemicals and pharmaceuticals industries.

That sector unquestionably stands to be one of the most affected by the rationing policies imposed over the coming months. Energy rationing will not only be guided by criteria of economic relevance but also the classifications made by each member state of their critical sectors in order to safeguard supply to their citizens. Against that backdrop, the European Gas Demand Reduction Plan published by the European Commission this week also helps the member states to identify and prioritise those critical sectors which, so far, include services related with health, food, safety, security, refining and defence.

At any rate, the authorities will have to implement fiscal policy measures to support the sectors most affected by energy rationing in order to mitigate all the adverse effects that may derive from this situation. In fact, the European Commission’s plan contemplates the member states providing support to their industries by amending the State aid Temporary Crisis Framework. The amendments increase the amount of direct aid that can be provided to companies in need to €500,000, specifying that the aid may cover only up to 70% of the beneficiary’s gas and electricity consumption during the same period of the previous year.

## Conclusion

The European “Save Gas for a Safe Winter” plan approved by Brussels and ratified by all member states involves a 15% reduction in gas demand between 01/08/22 and 31/03/23, in general, although some countries will suffer a lower cut (7%), as is the case of Spain.

The plan includes a series of recommendations for member states to implement measures to reduce gas demand, which will mainly affect the productive sector, although households will also have to make an effort in this respect. Within the productive fabric, the sector most sensitive to a rationing of gas consumption will be industry and, in particular, the extractive industry, the chemical and pharmaceutical industry, and the transport and storage sector. These last two sectors are the most dependent on Russian supplies and among the most important in the production structure of the euro area.

Their weight varies from country to country, with Germany and Italy being the most exposed and whose economies could suffer more from the direct and indirect effects of gas being potentially cut-off, possibly leading to a greater reduction in their activity than that contemplated in the analysts’ consensus forecasts. Spain, on the other hand, is less sensitive, not only because it hardly consumes any Russian gas, but also because its expected reduction in demand will be lower. In any case, it will also be exposed to the risks that the adverse geopolitical environment poses for this coming autumn-winter.

In this sense, the approval of measures to support these economic sectors as a way of mitigating the negative effects that may derive from this hypothetical risk should not be ruled out.

## Notes

[1] The following countries have been considered for the preparation of this article: Germany, France, Italy, Spain and Portugal. Together they represent approximately 80% of the GDP of the euro area.

[2] The latest available data refer to 2015.

[3] "Backward Linkages" are the result of dividing Intermediate Consumption by total Production. The higher the ratio, the stronger the carry-over effects (or economic spillovers) on the rest of the economy. "Forward Linkages" are the result of dividing total Intermediate Demand by total Production (intermediate consumption and final demand). The higher the ratio, the larger the share of a sector's production that will be used as input in other sectors' productive processes.

## References


European Commission (2022a). Save Gas for a Safe Winter: Commission proposes gas demand reduction plan to prepare EU for supply cuts. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4608

European Commission (2022b). State aid: Commission amends the Temporary Crisis Framework. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4622



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# Spanish banks ahead of the return to positive interest rates

Now that interest rates are finally back in positive territory, banks have the opportunity to advance on the challenge of increasing profitability. However, prevailing macroeconomic conditions of uncertainty and pessimism, together with risks, both those carried over from the previous financial crisis and emergent ones, mean that translating rate increases into commensurate growth in banks' earnings may not be so straight forward a task.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Abstract: Banks have the opportunity to advance on the challenge of boosting their profitability. With interest rates gradually rising, the banks are looking at business and margin growth prospects not enjoyed in recent years. However, the new rate climate is not all good news for the banks, particularly in the current complex economic environment, characterized by high uncertainty (largely as a result of inflation and deteriorating confidence), which does not bode well for immediate growth in business lending volumes sufficient to translate into significant growth in profitability in the near-term. Indeed, latest available figures show that prior to ECB rate hikes, Spanish banks´ net interest margins remained stuck at 0.8% of average total assets, with interest income at around 1.1% and interest expense at 0.3%. That said, Spanish banks remain at the forefront of increasing operating efficiency through reducing operating expenses and fee and commission income has been growing, albeit displaying a high degree of volatility. Moreover, a number of risks carried over from the previous financial crisis remain, including those related to: business sector vulnerability; the ability to repay the state-guaranteed loans extended during the pandemic; and, the looming end of the various credit relief schemes.

## Recent banking and monetary climate

The geopolitical events of recent months have highlighted structural, energy-related weaknesses across a large number of economies and generated, along with other factors, an inflationary spiral not seen in Europe or the US since the 1970s. That has meant that the long-awaited shift in monetary policy direction has taken place swiftly, with central banks moving to tighten financing conditions forcefully.

That more contractionary monetary policy is evident in the rollback of the extraordinary monetary facilities that had been deployed and interest rate hikes that spell the end of an extensive period of zero or negative rates in many jurisdictions. The Federal Reserve and Bank of England were the first to make their moves. The European Central Bank joined the fray in July of this year, moving resolutely, spurred on by a set of circumstances that pose a huge challenge for the central banks. A recurring question is to what extent will the rise in interest rates have a positive impact on the banking business after so many years in which the existence of ultra-low or negative rates made it very hard to eke out net interest margins. This article attempts to address that issue. That being said, all interpretations and forecasts should be taken with caution in light of the scale of uncertainty surrounding the macroeconomic and financial environment at present.

On July 21st, the ECB's Governing Council decided to raise its three official interest rates by 50 basis points. Significantly, it also approved the so-called monetary policy Transmission Protection Instrument (TPI). The ECB had decided it was "appropriate to take a larger first step on its policy rate normalisation path than signalled at its previous meeting." According to the monetary authority, that decision was based on the Council's "updated assessment of inflation risks and the reinforced support provided by the TPI for the effective transmission of monetary policy." As a result, the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility were increased to 0.50%, 0.75% and 0.00%, respectively, with effect from July 27th, 2022.

The ECB implied that its previous forward-looking approach, which usually took the form of forward guidance, would be replaced by a more contingent approach to interest-rate decision-making when it alluded to a "transition to a meeting-by-meeting approach to interest rate decisions." However, at its meeting on September 8th, described below, the ECB announced successive increases in the official price of money in the months to come, suggesting that it has not done away with its forward guidance altogether.

Elsewhere, the ECB's approval last July of the TPI was deemed a necessary step in normalising monetary policy transition without causing excessive turbulence for certain eurozone member states, namely those in which sovereign risks were beginning to become palpable as rates rallied and other liquidity support programmes began to be rolled back, such as Italy. Specifically, the ECB noted that the TPI "can be activated to counter unwarranted, disorderly market dynamics that pose a serious threat to the smooth transmission of monetary policy across the euro area" and that the "scale of TPI purchases depends on the severity of the risks facing policy transmission". Very importantly, the ECB made it explicit that purchases would not be restricted *ex ante,* leaving the monetary authority with significant room for manoeuvre in the event of market disruption. TPI purchases will be focused on public sector securities (marketable debt securities issued by central and regional governments as well as agencies, as defined by the ECB). Purchases of private sector securities could be considered, if appropriate. In the event the new instrument is deemed crucial, it would be activated following "comprehensive assessment of market and transmission indicators and an evaluation of the eligibility criteria".

At its meeting on September 8th, 2022, the ECB decided to hike its three official interest rates once again, this time by 75 basis points. As a result, the interest rate on the main refinancing operations and the interest

> “For the banks, the market and, in general, much of the economy, the increase in interest rates should be seen as part of the process of normalising financing conditions and exiting the extraordinary arrangements that date back virtually to the financial crisis of 2007-2008.”

rates on the marginal lending facility and the deposit facility were increased to 1.25%, 1.50% and 0.75%, respectively, with effect from September 14th, 2022.

For the banks, the market and, in general, much of the economy, the increase in interest rates should be seen as part of the process of normalising financing conditions and exiting the extraordinary arrangements that date back virtually to the financial crisis of 2007-2008. In theory, the banks, investors and other market agents can operate in a climate more propitious to generating returns and assessing them as a function of their risks. That does not mean, however, that the increases in interest rates and rollback of liquidity programmes will necessarily spell immediate growth in bank profits or dispel operating uncertainties. All processes involving a change in monetary conditions are shaped by supply and demand factors and the current process of normalisation is replete with challenges and difficulties, not least of which a severe inflationary episode, the threat of economic slowdown and/or recession and financial weakness across a large swath of businesses in numerous countries.

Last July, the Spanish banks reported their earnings for the first half of 2022. The six largest financial institutions reported year-on-year bottom-line growth of 36% to 3.74 billion euros in the first six months of the year. As we will show later in this paper, net interest income did not make much of a contribution to that earnings growth. Instead, an additional 12.4% drop in operating expenses was the most relevant factor. The banks were also able to recognise fewer loan-loss provisions than in 2021, with impairment losses decreasing by 133.4%.

## What do rising interest rates imply? Opportunities and risks

With interest rates gradually rising, the banks are looking at business normalisation prospects not seen in recent years. It would be easy to jump to the conclusion that the increase in the price of money will drive commensurate growth in the banks' earnings. Despite the fact that several studies have indicated that the existence of negative interest rates has had an adverse effect on net interest margins, it cannot be concluded that positive rates will be a panacea, particularly in light of the current complex environment.

Table 1 enumerates some of the main effects for the banks from the transition between the two monetary policy biases. Firstly, in terms of profitability, prior studies (refer to the Table´s source) have shown that the banks' net interest income declined by 18.4% on average in the countries where rates turned negative, reducing their return on assets by an average of 3%. That phenomenon has had a bigger

> “Although the shift towards much higher interest rates may well be accompanied by higher profitability, a lot will depend on the outcome of the various problems causing macroeconomic instability at present.”

Table 1 **Effects of the shift in interest rates for the banks**

| | Negative interest rates | Change in monetary climate marked by rate increases and high inflation |
|---|---|---|
| Profitability | • Drop in the banks' net interest margin (-18.4%) and ROA (-3.06%).<br>• Asymmetric effect on profitability: the banks with more liquid assets, better capitalised, with higher volumes of reserves at the central banks and with greater exposure to customer deposits are more affected. | • Upside in profitability dependent on the economic environment (geopolitical instability, economic slowdown and inflation).<br>• Intensifying competitive pressures. |
| Lending | • Reversal effect: low interest rates could actually reduce lending instead of increasing it.<br>• Monetary policy is less effective at stimulating growth in lending when rates reach very low levels. | • Difficulty in relaunching the bank lending channel.<br>• Credit facilities with public guarantees and difficulties in keeping the flow of credit going.<br>• Opportunities in the SME segment. |
| Funding costs | • Increase in cost for the banks with greater exposure to deposits. | • Expanded market funding possibilities offset by relative dearth of ECB funds. |
| Risk | • Risk reduction (after implementation of negative interest rates, the banks' risk asset holdings decreased by 10%).<br>• Asymmetric impact on risk: the impact on risk assumption depends on the banks' capitalisation and size. | • Non-performance contained for now.<br>• Structural weaknesses across much of the business landscape.<br>• State-guaranteed loan maturity looming \| End of relief and moratoria.<br>• Increase in sovereign risk. |

*Source: Authors' own elaboration and update based on Carbó-Valverde, Cuadros-Solas & Rodríguez-Fernández (2021).*

impact on the banks with more liquidity, larger deposit pools and more capital. Although the shift towards much higher interest rates may well be accompanied by higher profitability, a lot will depend on the outcome of the various problems causing macroeconomic instability at present. It is also worth noting that competitive pressures are also intensifying, shaped by competition between the banks themselves but also from newcomers from the world of technology.

It has also been established that overly-low interest rates send a negative signal about the state of the economy which impedes growth in lending volumes despite the reduced cost of money. As a result, the monetary policy transmission channel suffers. With interest rates on the rise, the central banks are continuing to encounter difficulty in revitalising the lending channel. That is partly due to structural weaknesses across a swath of the business community that are carried over from the financial crisis. The only significant growth observed in lending in the eurozone took place in the wake of the pandemic-induced fiscal stimulus measures (including government loan guarantee schemes), after which lending growth returned to modest

“With rates moving higher, although the banks can better assess the trade-off between risks and rewards, new sources of uncertainty are emerging in relation to the viability of many companies in the face of rising financing costs.”

levels. Nevertheless, the banks do face opportunities in the context of rising interest rates, particularly in business lending and especially in SME lending, where they should be better positioned to properly assess the risk-reward trade-off once the key sources of macroeconomic uncertainty dissipate.

The banks also saw how their own funding costs did not come down by a commensurate amount when rates were ultra-low or negative, especially the banks with bigger deposit pools, due to the practical difficulty in applying zero or negative rates to that source of funding. Nevertheless, the ECB made abundant liquidity facilities available.

Lastly, it is important to consider how risk levels are changing. With rates in negative territory, the banks were more inclined to assume risk, due in part to the existence of tighter regulatory pressure at the time. With rates moving higher, although the banks can better assess the trade-off between risks and rewards, new sources of uncertainty are emerging in relation to the viability of many companies in the face of rising financing costs. It is also worth watching the trend in non-performance on the loans guaranteed by the state and following the end of the credit moratoria schemes.

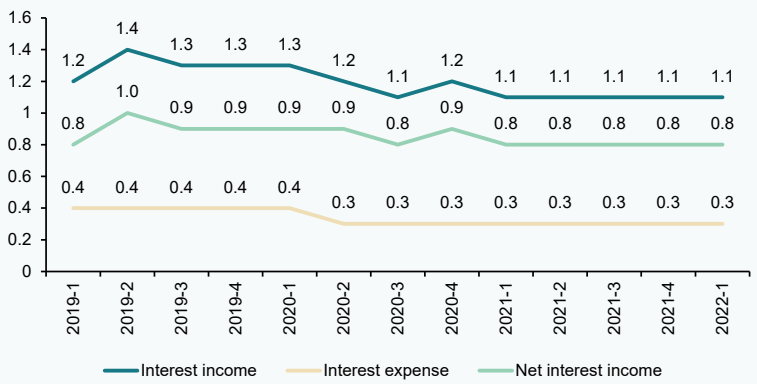
## Outlook for the Spanish banks' earnings and margins

The data paint a picture of improving earnings in the Spanish banking sector, while also pointing to some lingering uncertainties. Based on the data reported by the Bank of Spain as of the first quarter of 2022, *i.e.,*

Exhibit 1

**Trend in net interest margin and its components (2019-2022)**

Percentage of average total assets

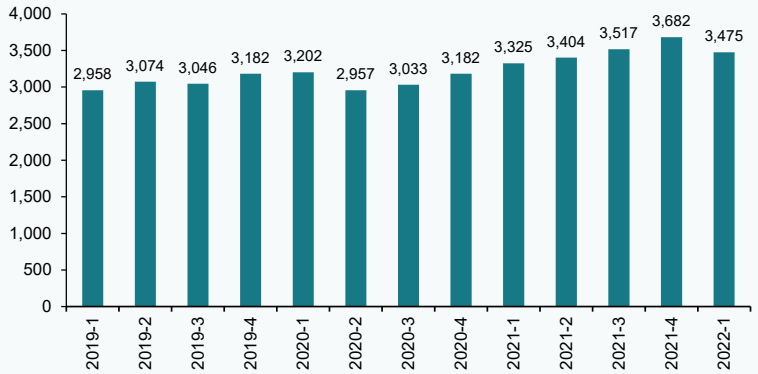



*Source: Bank of Spain and authors' own elaboration.*

Exhibit 2

**Trend in the banks' net fee and commission income (2019-2022)**

Millions of euros




*Source: Bank of Spain and authors' own elaboration.*

before the ECB embarked decisively on monetary tightening, the sector's net interest margin was stagnant at 0.8% of average total assets, with interest income at around 1.1% and interest expense at 0.3% (Exhibit 1).

In an increasingly competitive environment, with net interest margins under pressure, the banks have had to expand their value-added services and generate more income from "other recurring products". As shown in Exhibit 2, fee and commission income has increased, having contracted during the pandemic. However, that stream of income has slowed somewhat compared to the beginning of 2022.

Meanwhile, the Spanish banks remain focused on reducing their operating expenses and they remain at the forefront of their eurozone peers as far as efficiency is concerned. That trend is being accompanied by a restructuring effort marked by a growing strategic commitment to digital over physical channels. Operating expenses account for between 0.9% and 1% of average total assets, half of which corresponds to staff costs (Exhibit 3).

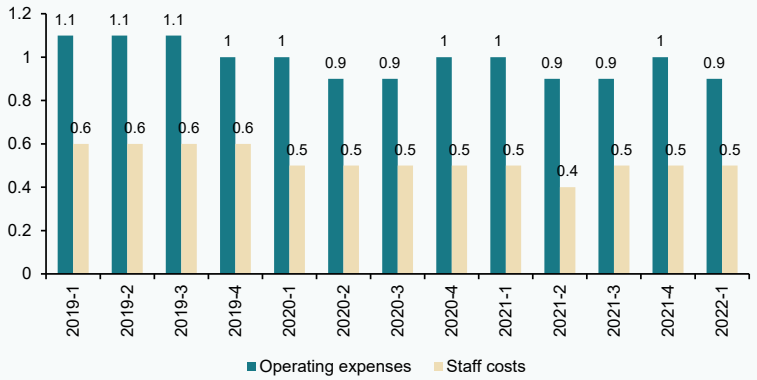
As for their profitability, measured using profit before tax (Exhibit 4), the Spanish banks continue to face a sizeable challenge, as do their peers in the rest of the world. It is common to get mixed up between absolute and relative profit readings. As with any other type of enterprise, what counts is the amount of profit generated for shareholders in relation to the business, or earnings per share. In other words, the profitability the market demands for investing in a company. Against that backdrop, the Spanish banks' pre-tax profit stands at a scant 0.5% of average total assets, albeit recovered from the losses reported during the pandemic, mainly a consequence of the

"Spanish banks remain focused on reducing their operating expenses and they remain at the forefront of their eurozone peers as far as efficiency is concerned."

Exhibit 3

## Trend in operating expenses and in staff costs (2019-2022)

Percentage of average total assets



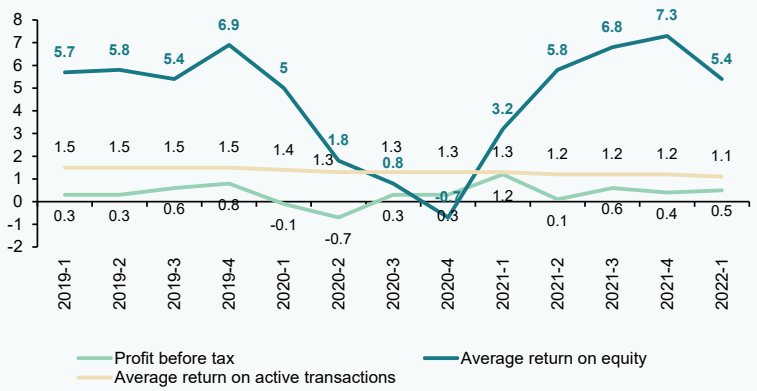

*Source: Bank of Spain and authors' own elaboration.*

high volume of provisions recognised to cover possible negative contingencies. As a result, their return on equity increased to 7.3% by the end of 2021 but in the first quarter of 2022, as economic uncertainty intensified, that metric once again fell back to 5.4%. Those readings are still far below the double-digit returns observed before the financial crisis. The average return on active transactions has been virtually flat in recent quarters, at around 1.1%–1.2%.

Exhibit 4

## Profitability in the Spanish banking sector (2019-2022)

Percentage of average total assets




*Source: Bank of Spain and authors' own elaboration.*

> “The banks’ core business –lending– could contribute to growth in business volumes and profitability in a rising interest rate environment; however, the post-pandemic years have been marked by far more moderate lending growth.”

It could be argued that the growth in the banks’ core business –lending– could contribute to growth in business volumes and profitability in an environment marked by rising rates. However, in light of the year-on-year growth rates fuelled by the special programmes articulated during the pandemic (in the business lending segment), the post-pandemic years have been marked by far more moderate growth. Business lending actually contracted year-on-year in June 2022, albeit trending back in line with the average of recent months in July (0.8%). Household lending increased by 1.2% in July, slowing somewhat by comparison with recent months.

## Conclusions

This paper analyses the outlook for the banking business in Spain now that rates are back in positive terrain. Our conclusions are necessarily preliminary as the key data do not yet provide enough insight to assess the issue with the precision required. Nevertheless, in general terms, it can be said that:

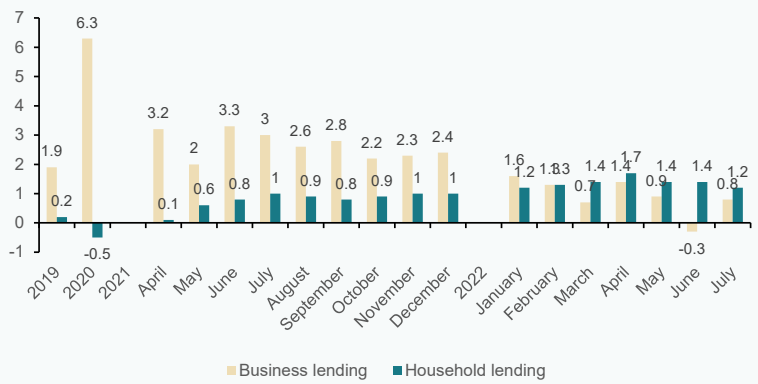
- The rise in interest rates should be understood as a development that will normalise the assessment of the risk-reward trade-off, which had become muddied by the protracted existence of zero or negative rates.

- The banks have the opportunity to advance on the challenge of boosting their profitability. However, the prevailing macroeconomic uncertainty (especially, inflation and pessimistic expectations) does not bode well for immediate growth

Exhibit 5

**Business and household lending in Spain (2019-2022)**

Year-on-year change, %




*Source: Bank of Spain and authors’ own elaboration.*

in business lending volumes sufficient to translate into significant growth in profitability in the near-term.

- Risks remain, a high number of which are carried over from the financial crisis. Many are related with vulnerabilities in part of the business community, particularly the more indebted firms. Other risks include the ability to repay the state-guaranteed loans extended during the pandemic and the looming end of the various credit relief schemes.

## References

Carbó-Valverde, S., Cuadros-Solas, P. J. and Rodríguez-Fernández, F. (2021). The effects of negative interest rates: A literature review and additional evidence on the performance of the European banking sector. *The European Journal of Finance,* 27(18), pp. 1908-1938.

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# Translating EURIBOR increases into improved banking margins: Differential timing on asset and liability repricing

After more than five years of abnormally low, even negative, interest rate levels in the case of the 12-month EURIBOR, the fact that rates have turned positive and look likely to stay there on a structural basis foreshadows a clearcut improvement in the banking sector's net interest income. Irrespective of the clearly positive impact of the new rate scenario for the banks, the transition will not be linear and before margins increase, they will likely dip.

Marta Alberni, Ángel Berges and María Rodríguez

Abstract: The historical evidence-backed convention indicates that the banks' net interest margin gets squeezed far more during times of low rates, and certainly during periods of zero or negative rates, as has been the case in the eurozone for more than five years. By this logic, the Spanish and European banks' margins should improve within the context of the new, positive interest rate environment. The most important curve for the retail banking business is 12-month EURIBOR, which is currently trading firmly in positive territory, after more than five years in negative terrain. However, rate increases will not translate into higher net interest income (NII) in a linear fashion. In

fact, it is highly probable that we will see the banks' income etch out a sort of J-curve, with margins actually dipping before recovering and heading decisively north. The reason for this is the different pace and intensity of bank asset and liability repricing in response to the new EURIBOR curve. Indeed, the pace of repricing is slower in the case of floating mortgages (an asset category of significance for the Spanish banking system), giving rise to the initial effect of contracting margins prior to a gradual recovery ahead of moving into clear positive territory.

## Sharp rebound in EURIBOR following five years in negative territory

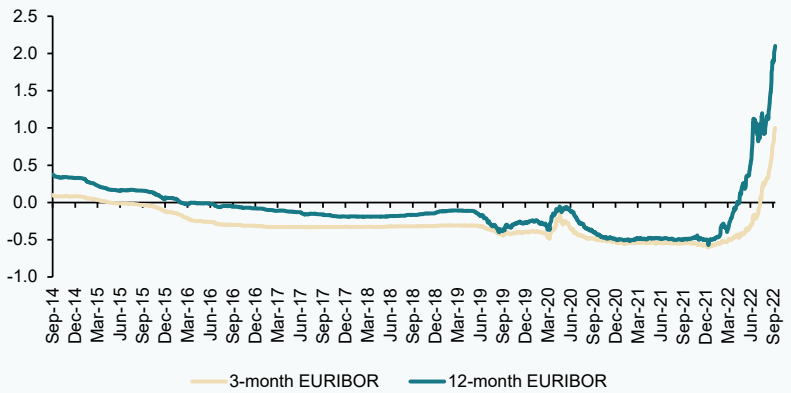
The most relevant interest rate for the retail banking business, EURIBOR, particularly the 12-month rate, has been in negative territory for more than five years, exerting strong downward pressure on net interest margins, sandwiched between assets on which returns kept heading lower and lower and, on the liabilities side, deposits on which it was practically impossible to apply negative rates, other than wholesale funding tied to EURIBOR.

In recent months, this situation has changed radically as inflation has spiralled, fuelled, initially by the bottlenecks arising as the world emerged from the pandemic, then by the invasion of Ukraine, and lastly, by the burgeoning risk of second-round effects, prompting the central banks to tighten their monetary policies far faster and more forcefully in the case of the Federal Reserve and much more gradually in the case of the European Central Bank.

Despite the ECB's 'wait-and-see' approach, the markets began to price in the shift in rate scenarios several months ago. As shown in Exhibit 1, benchmark rates began to climb higher last December, a trend that has gathered speed during the first few months of 2022, particularly since March, shortly after the armed conflict broke out, driving energy prices sharply higher and fuelling inflation in the process.

Given the radical change in the interest-rate scenario, it is timely to analyse the likely trend in the Spanish banks' net interest income in both a structural context characterised by clearly positive rates, and during the transition

Exhibit 1 **3-month and 12-month EURIBOR**




*Source: Authors' own elaboration based on Bloomberg figures.*

> “Historical evidence demonstrates the favourable effect on interest income of a positive EURIBOR scenario, boosting the retail or customer interest income margin to between 1% and 2%, compared to a margin of a scant 1% when rates are at or below zero.”

to that scenario, particularly in light of the extraordinary volatility that has marked the rebound in rates and the differing sensitivities thereto of assets and liabilities.

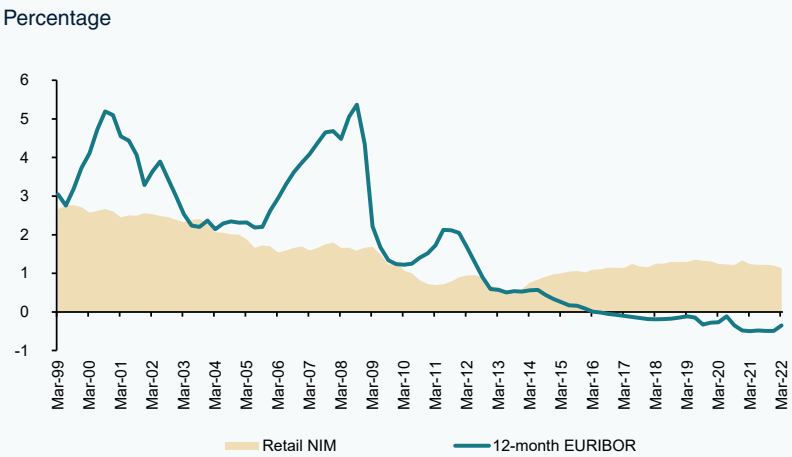
From a structural standpoint, it is fairly obvious that the banks' net interest income is directly correlated to interest rate levels. The main reason is the existence of a large stock of sight deposits that earns little or no income, which is not enough to compensate for the drop in financial income when rates fall to or below zero but does buffer interest income when rates are high.

That direct correlation between the margin and rate levels is corroborated by the margins reported by the Spanish banking system since the single currency was created at the start of 1999. Exhibit 2 plots the long-term trend in NIM against the trend in 12-month EURIBOR. Leaving the short-term volatility aside, the change in NIM when the market moves into a positive EURIBOR scenario is clear: at such times, the margin moves between 1% and 2%, compared to a scant 1% when EURIBOR heads towards or below zero.

That structural correlation suggests, therefore, that in the new rate environment, in which EURIBOR looks to be headed towards a cruising level of around 2.5% (the level which the futures market views for 12-month EURIBOR for the next three to four years), the Spanish banks should see their net interest income rise considerably.

Exhibit 2

**Retail net interest margin in the Spanish banking sector *versus* 12-month EURIBOR**




*Sources: Authors' own elaboration based on Bank of Spain and Bloomberg.*

> “It is worth noting that in the case of the Spanish banks, the favourable impact of positive rates could ultimately be even greater given that floating rate loans represent a higher weight of transactions relative to the European average.”

The potential favourable impact of the positive rate environment on net interest income was estimated by the European Central Bank itself in its last *Financial Stability Review*. Specifically, the ECB estimates that a parallel shift in the curve of +200bp could generate an increase in earnings (NII) as a percentage of the banks' capital of between 2 and 5 percentage points for a broad sample of European entities. Here it is worth noting that in the case of the Spanish banks, that impact could be even greater given that floating rates represent a higher weight of transactions relative to the European average.

## NII during the transition phase: Differential timing of asset and liability repricing

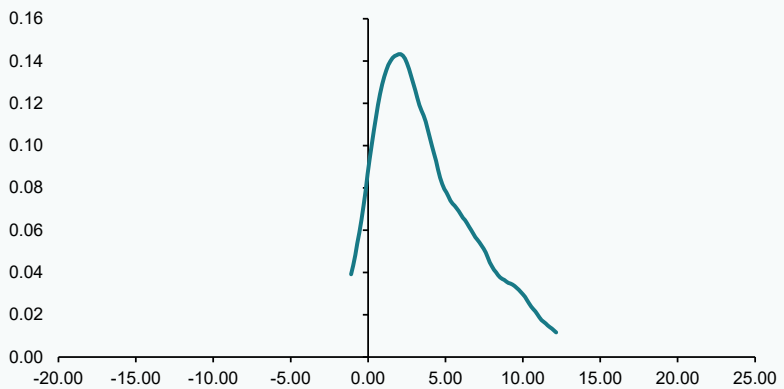
Irrespective of the potential positive impact on NII in the new rate scenario, the transition to such a scenario is not likely to be linear given the rapidity with which the change in rate expectations has taken place and the different sensitivities of banking assets and liabilities to the new rates.

The first step in our analysis of those sensitivities was to look at the historical trend in both components of retail banking interest

Exhibit 3

**Impact of an upward shift in the yield curve of +200bp on eurozone banks**

Y-axis: Density; X-axis: % of CET1 capital




*Source: Authors' own elaboration based on the European Central Bank's Spring 2022* Financial Stability Review.

> "The rebound in benchmark rates gets factored into the income component of the net interest margin gradually, with a slight lag, which is primarily the result of the existence of long-term, fixed-rate loans, as well as the timing of floating-rate mortgage repricing episodes (usually, every 12 months)."

income (return on credit, or investments, and the cost of retail funding, or deposits) and their correlation with 12-month EURIBOR since the creation of that benchmark index, in conjunction with the introduction of the euro.

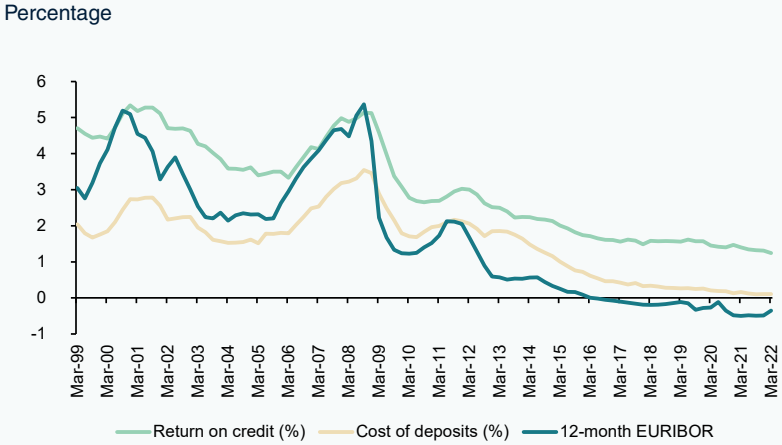
That analysis yields two very interesting conclusions with respect to the possible outlook for the banks' interest income. Firstly, the EURIBOR sensitivity coefficient is substantially higher in the case of investment returns (0.72) than in the cost of deposits (0.47), further corroborating the favourable impact of a high-rate environment on margins. However, the analysis also reveals how the response to sudden changes in EURIBOR is far slower in the case of loan income relative to the cost of deposits.

The slower incorporation of increases (and decreases) in EURIBOR into the return on the banks' credit has to do with the existence of long-term loans at fixed rates of interest, essentially fixed-rate mortgages. In Spain, fixed-rate mortgages have a relatively short history. The banks have only been marketing them on a widespread basis since 2020, nonetheless, they account for just under 25% of all outstanding mortgage credit, according to the Bank of Spain.

The other reason why there is a lag in seeing the increase in 12-month EURIBOR

Exhibit 4

**Return on loans and cost of retail deposits relative to 12-month EURIBOR**




*Sources: Authors' own elaboration based on Bank of Spain and Bloomberg.*

trickle through to the banks' interest income is the timing with which floating-rate loans, essentially mortgages, get repriced. Those loans, with an outstanding balance of 375 billion euros at year-end 2021, represent the largest segment of the Spanish banks' loan portfolio and their repricing dynamics are key determinants of the trend in the banks' interest income. While a trickle of loans may still be benchmarked to other indices, the vast majority of floating-rate mortgages are benchmarked to 12-month EURIBOR, and are repriced annually, on the basis of the average EURIBOR rate during the month prior to the repricing event.

Based on that repricing regime, and assuming that the price resets take place evenly over the course of the year (a fairly reasonable assumption, perhaps with the exception of August when new lending tends to dip), the transfer of the increase in EURIBOR to interest income will take place on a staggered basis over a 12-month period, so that the banks will not benefit from the full effect of the repricing phenomenon until the end of that period.

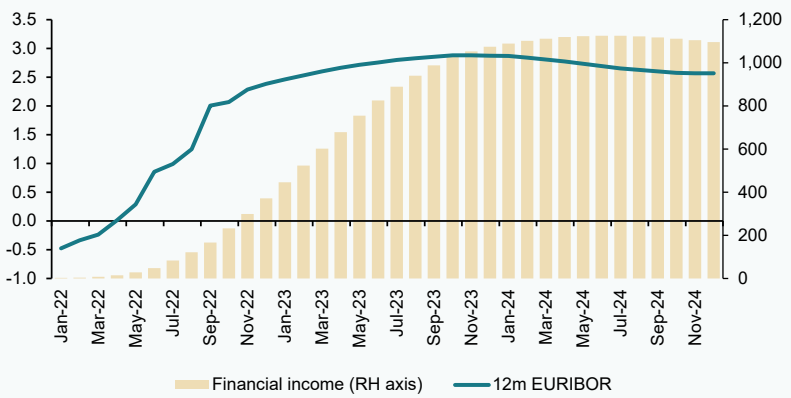
To illustrate the effect of that time lag, below we simulate the timing of the increase in interest income under that repricing regime, assuming, moreover, that 12-month EURIBOR actually performs as is currently being discounted by the futures market (refer to Exhibit 5). That same exhibit depicts the trend in incremental monthly interest income as a result of the repricing dynamic, using the monthly average observed in 2021, before EURIBOR embarked on its upward path, as the basis of comparison.

That simulation illustrates how the new rate scenario, assuming 12-month EURIBOR around 2.5% discounted by the market, will translate into growth in monthly interest income of around €1,000 million more compared to what the banks were making when EURIBOR was at -0.5%. However, achieving the full benefits of the new rate

Exhibit 5

**Simulation of the lagged impact of the increase in EURIBOR on the floating-rate mortgage portfolio**

Percentage and million euros




*Sources: Authors' own elaboration based on Bank of Spain and Bloomberg.*

scenario will take almost 12 months from when EURIBOR reaches those expected levels of 2.5%, with income rising very gradually during the transition to that ceiling.

## Conclusions

After more than five years of abnormally low –negative– interest rate levels in the case of the most important benchmark index for the banking business (12-month EURIBOR), the fact that rates have turned positive and look likely to stay there on a structural basis foreshadows a clearcut improvement in the banking sector's net interest income. The historical evidence since that benchmark index came into existence indicates that interest income is far more sensitive to rate changes than interest expense.

Irrespective of the clearly positive impact of the new rate environment for the banks' net interest income, the transition will not be linear and before the margin increases it is likely it will dip. The reason lies with the staggered incorporation of the rebound in EURIBOR in the core loan segment for the Spanish banking system –floating-rate mortgages– where the impact of the rate increase arrives with a one-year lag. That lag is greater the quicker the rise in rates takes place (the current shift in expectations has come about particularly swiftly – around 2.5 percentage points in just nine months).

That J-curve effect in net interest income (initial decline followed by clearcut recovery) is already materialising in the first quarters of 2022, judging by the earnings reported by the biggest Spanish banks, whose net interest income declined by 4% year-on-year in the first quarter and by 2% in the second quarter. In the coming quarters, it is likely that the year-on-year contractions in NII will gradually slow before moving on to sustain growth throughout 2023, when the bulk of the assets subject to repricing will already feature EURIBOR of around 1% or higher, depending on when the repricing took place.

## References

ECB (2022). *Financial Stability Review,* May.

Hernández de Cos, P. (2022). *The Spanish banking industry and the economic challenges ahead,* June.

**Marta Alberni, Ángel Berges and María Rodríguez. A.F.I. –** Analistas Financieros Internacionales, S.A.

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# Monetary policy and business lending: Impact on pricing

The recent reversal of the ECB´s unconventional monetary policy is already driving interest rates higher, raising the risk of triggering an increase in corporate bankruptcies, which would increase the private sector´s marginal cost of borrowing even further. As interest rate hikes have started around the world, global central banks will have to determine whether or not they choose to live with inflation, or risk adverse consequences for the economy.

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

Abstract: When Mario Draghi promised to do "whatever it takes" on July 23rd, 2012, he managed to stabilise the euro and avert the sovereign debt crisis. Those words also cemented the unconventional monetary policy measures first rolled out in response to the financial crisis of 2008. Later, the health crisis induced by the COVID-19 pandemic ushered in new challenges for monetary policy design which translated into new EU recovery programmes. The purpose of this paper is to analyse the measures implemented since the financial crisis of 2008 and the extent to which they have affected the real economy, with a focus on how they have affected business loan price formation. Our analysis shows that both the ECB´s corporate bond buyback program and its liquidity scheme have played a particularly important role in reducing the cost of borrowing for SMEs since 2014. The reversal of those unconventional monetary policies will drive interest rates higher, as we are already seeing. That phenomenon could trigger an increase in corporate bankruptcies, which would increase the business community's marginal cost of borrowing even further. The thorny issue for the central banks is whether the existence of inflation *per se* has more adverse consequences for the economy than the path of rate tightening they establish.

> “The unconventional monetary policy pursued since the last crisis has driven unprecedented growth in the ECB’s balance sheet.”

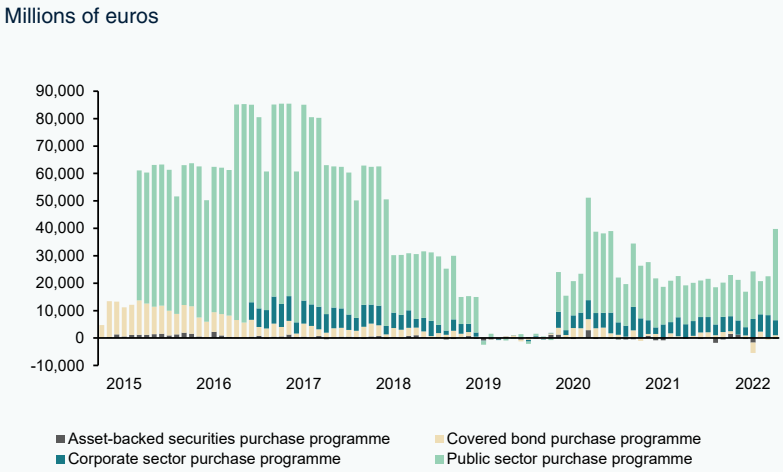
This will be the crux of the difficult debate for governing councils´ of central banks globally going forward, particularly since monetary policy has already begun shifting direction all around the world, as exemplified by the ECB’s recent moves to hike its key rates by 50 basis points and subsequently by 75 basis points and provide new forward guidance.

## Beyond the imaginable: Unconventional monetary policy

In economic history, there are turning points that mark an era, conditioning the economic agents’ decisions, actions, and developments. In recent years, in the case of Europe, the words, “whatever it takes”, pronounced by then European Central Bank (ECB) President, Mario Draghi, on July 23rd, 2012, came as relief for the euro, in the midst of the sovereign debt crisis, but also cemented the unconventional monetary policy measures that were first rolled out in response to the crisis of 2008. The ECB’s recent decisions to raise its three key interest rates, *i.e.,* the rates on its marginal deposit facility (“MDF”), main refinancing operations (“MRO”) and marginal lending facility (“MLF”), by 50 basis points and subsequently by 75 basis points marks an inflection point in European monetary policy, abandoning negative rate territory for the first time since 2014.

From a global perspective, the unconventional monetary policy measures were created with the aim of re-establishing the (conventional) monetary policy transmission channels, which had been affected by the fallout from the financial crisis. They were also shaped by the fact that the official interest rate had reached its natural lower limit of 0% without alleviating concern about the deflationary and recessionary dynamics on display (CaixaBank,

Exhibit 1 **Net purchases accumulated under the APP**




*Source: Authors’ own elaboration based on ECB data.*

2013). The measures were therefore designed to stimulate economic growth in the eurozone while fending off, framed by the ECB's price stability target, the risk of deflation (Cano, 2020).

To that end, unconventional monetary policy can be classified into two types of measures, both of which have had the effect of increasing the size of the central bank's balance sheet: (i) the provision of liquidity facilities to financial institutions on advantageous terms (particularly the Targeted Long Term Refinancing Operations or TLTROs); and, (ii) asset purchase programmes, including the purchase of sovereign bonds (notably the Public Sector Purchase Programme or PSPP) and of corporate bonds (the Corporate Sector Purchase Programme or CSPP). In addition to those two types of programmes, it is common to add a third element on account of its growing and inseparable importance with respect to the programmes: namely, messaging about where monetary policy is headed, known as forward guidance.

These measures have had a significant impact on growth in the ECB's balance sheet, given their influence in nudging eurozone economic growth along, while resolving the sovereign debt crisis and liquidity crunch in the financial and corporate sectors, an aspect analysed in depth in this paper.

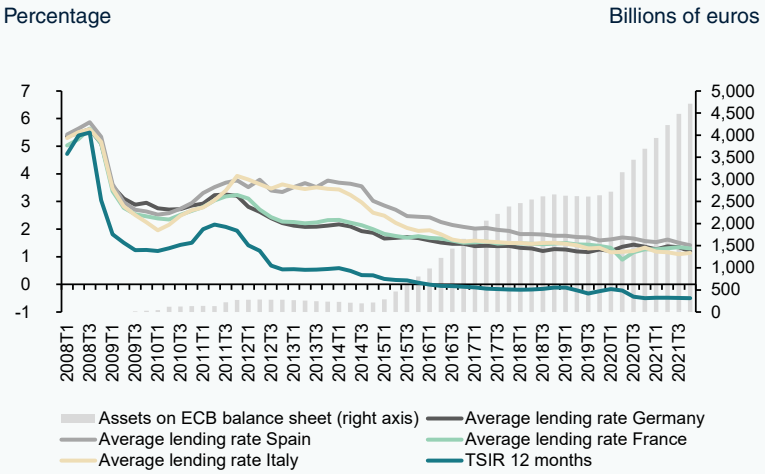
## Monetary policy and business sector financing

Implementation of the above-mentioned monetary policies, which as we have said include liquidity facilities for the banks and asset purchase programmes, have an impact on the rates at which European businesses can borrow money. As shown in Exhibit 2, both the purchase of assets by the ECB and the term structure of interest rates (TSIR), a variable that serves as a proxy for the liquidity programmes are negatively and positively correlated, respectively, with the average rate on business lending.

With respect to the ECB's efforts to provide the banks with liquidity on advantageous terms, the relationship of cause and effect with business lending terms is deemed direct due to the following: if the banking sector is able to obtain liquidity at a lower cost and at longer maturities, that should translate into lending at lower rates, particularly if

Exhibit 2

**TSIR, assets on the ECB's balance sheet and average lending rate**




*Source: Authors' own elaboration based on ECB data.*

> “The ECB´s TLTRO and CSPP schemes have affected business lending rates not only on account of their direct impact on the interest rate curve but also by reducing the cost for corporate issuers of tapping the bond market.”

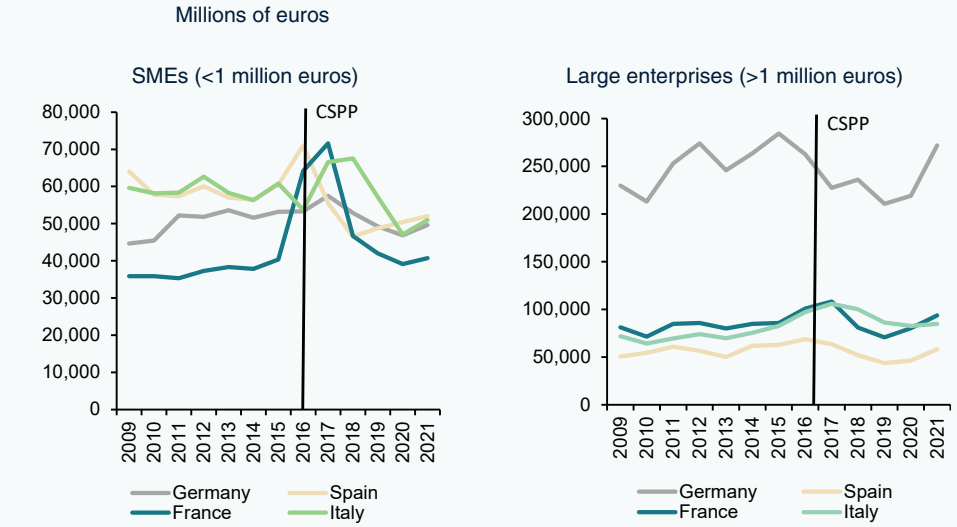
the provision of credit is a prerequisite for accessing that liquidity, as is the case with the TLTRO programmes.

As for the asset repurchase programmes, limiting our analysis to the programme that affects the corporate sector only (the CSPP), the relationship between implementation of the programme and borrowing terms is, at least apparently, less direct, as only a relatively small percentage of the European economies' firms finance themselves with bonds that are eligible for that programme. [1] However, the empirical evidence suggests that implementation of the CSPP, by altering the internal rate of return (IRR) or yield on the eligible bonds, has an impact on the terms at which the broader business universe can borrow. Specifically, implementation of the CSPP should increase demand for investment grade bonds, driving their prices higher and their yields lower.

Lastly, by rendering bond issues less costly (regardless of whether or not eligible for the CSPP), more eligible issuers are encouraged to take the capital markets route rather than relying on bank financing. Ultimately, the reduced demand for bank credit by large enterprises drives its price down, making borrowing cheaper for all companies that do not tap the markets, as was the case with the rates on loans provided to SMEs.

All of this interplay, commonly known as the *monetary policy transmission mechanism,*

Exhibit 3 **New lending by geography**




*Source: Authors' own elaboration based on ECB data.*

allows the ECB to influence borrowing terms, by reducing yields on bonds not eligible for the CSPP and lowering the cost of bank financing.

To study the impact of the two types of monetary policies with the greatest influence on the price of business loans, we have divided our analysis into two parts: in the first, we estimate *pricing based on the risk* on the credit extended to businesses in the four main European banking systems, which represent over 78% of total eurozone assets (Spain, Germany, France and Italy); in the second, we study, using the impulse-response function (IRF) the cause-and-effect relationship between monetary policy and the pricing derived in the first part of our analysis.

### *Estimation of the theoretical average lending rate*

When lending money, the banks study potential borrowers' creditworthiness, assigning credit scores or ratings, which determine the price of each loan they grant. That loan price or interest rate needs to incorporate four main variables: the entity's capital structure or funding cost; the entity's operating expenses, essentially staff and administrative costs; the associated cost of risks; and, remuneration for their shareholders.

To conduct our theoretical and comparative analysis, we estimate the *risk-based prices* [2] associated with loans to SMEs and large enterprises extended for an average term of three years, quarterly between 2008 and 2021, for each of the four major eurozone economies: Spain, Germany, France, and Italy.

To determine the funding cost, we start from the historical liability structure presented by the banking systems across the four countries itemised, distinguishing between:

- Average rates on sight deposits.
- The rate offered to attract term deposits.
- The yield on senior wholesale issues, plus the TSIR spread for each term.
- The yield on subordinated wholesale issues, plus the TSIR spread for each term.

To estimate the average cost of financing we weighted the cost of each source of financing by its weight in each banking system.

To determine administrative costs, we used administrative costs over average total assets for each quarter comprising our sample timeframe, so using an average cost model, which is the most appropriate method for a price formation exercise, according to Mota (2019).

Table 1 **Components of pricing of 3-year loans to 2021**

Percentage

| | Fin. costs | Admin. costs | Default rate SMEs | Defaults rate LE | RWA SMEs | RWA LE | Tar. ROE | Solvency | Pricing SMEs | Pricing LE |
|---|---|---|---|---|---|---|---|---|---|---|
| Germany | 0.07 | 1.20 | 2.51 | 2.16 | 57.6 | 100.0 | 10.0 | 11.0 | 3.58 | 3.82 |
| Spain | 0.12 | 1.21 | 6.07 | 3.08 | 57.6 | 100.0 | 10.0 | 11.0 | 6.01 | 4.48 |
| France | 0.10 | 1.16 | 5.08 | 0.78 | 57.6 | 100.0 | 10.0 | 11.0 | 5.28 | 2.88 |
| Italy | 0.11 | 1.37 | 7.60 | 2.15 | 57.6 | 100.0 | 10.0 | 11.0 | 7.18 | 4.02 |

*Notes: Fin. costs: Average borrowing cost; Admin. costs: Administrative costs over average total assets; LE: Large enterprises; RWA: Risk-weighted assets; Tar. ROE: Target ROE based on the ECB's cost of capital calculations.*

*Sources: Authors' own elaboration based on ECB, Bloomberg, and S&P Capital IQ data.*

In addition, to calculate the cost of risk for each business lending segment (SMEs *vs*. large enterprises), we start from the aggregate business loan default rate in order to, subsequently, and based on historical analysis of the PDs [3] of the main entities in each of the countries, estimate the rate of non-performance associated with SMEs *versus* large enterprises.

Lastly, for shareholder remuneration, we estimated the cost of capital associated with banking, which stands at around 10% (the market standard, according to the ECB [2021]), and the historical average capital requirement, which stands at around 11% for the European banks according to the supervisory capital analysis conducted by the SSM (2022). Lastly, to distinguish between the two segments – SMEs *versus* large enterprises– the calculation was adjusted using the average weighting applied to calculate the capital requirements defined in Basel III: 57.56% for SMEs; and 100% for large enterprises.

The sum of the four components gives us the risk-based pricing for each of the banking systems, as shown in Table 1.

### *Impact of monetary policy on loan pricing*

In order to study what impact the expansionary monetary policies rolled out had on the risk-based pricing so derived, in this section we conduct impulse-response analysis. To do that, we studied the stationarity of our variables, the potential cointegration of the variables and, by extension, developed VAR (vector autoregressive) models. [4]

By way of impulse variables (*i.e.,* those that introduce the shock), we used: (i) the 12-month TSIR as a proxy for the liquidity programmes provided to the banks as that curve is virtually risk-free and because of the role played by interbank rates on its formation (considering the fact that those liquidity schemes are channelled via the banks); and, (ii) the ECB's balance-sheet assets [5] as a proxy for the asset purchase programmes.

By way of response variables (*i.e.,* those that receive the shock), we used the 5-year risk-based pricing obtained in the previous section for SMEs and large enterprises in each of the major European banking systems referenced above.

That led to the construction of four VAR models for each of the banking systems under study (Spain, Germany, France, and Italy), each one structured as follows:

- Model 1: The endogenous variables selected are: (i) 5-year risk-based pricing for *large enterprises;* and (ii) the 12-month TSIR.
- Model 2: The endogenous variables selected are: (i) 5-year risk-based pricing for *SMEs;* and (ii) the 12-month TSIR.
- Model 3: The endogenous variables selected are: (i) 5-year risk-based pricing for *large enterprises;* and (ii) the financial assets held by the ECB on its balance sheet.
- Model 4: The endogenous variables selected are: (i) 5-year risk-based pricing for *SMEs;* and (ii) the financial assets held by the ECB on its balance sheet.

Note that all of the regression models were estimated using a single exogenous variable.

Exhibit 4 charts the impulse-response function resulting from each of the models built. It shows how, in general terms, implementation of the liquidity programmes for the banks has

> "Our analysis shows how, in general terms, implementation of the ECB´s liquidity programmes for the banks has had a statistically significant impact on the price of the loans awarded to large enterprises and SMEs in the main eurozone economies."

had a statistically significant impact [6] on the price of the loans awarded to large enterprises and SMEs in the main eurozone economies. A positive (negative) shock to the TSIR, derived from implementation of the bank liquidity programmes, increases (decreases) loan grant rates. It also shows how the impact of a shock to the TSIR on loan pricing is not statistically significant in the short-term in the case of the Spanish and Italian economies and that that impact is not statistically significant for all four economies beyond two years (eight quarters) after the shock in the case of either the SMEs or the large enterprises.

Elsewhere, the asset purchase programmes have a statistically significant impact on the average rate charged to SMEs and large enterprises to borrow money. An increase (decrease) in asset purchases by the ECB reduces (increases) the rate charged to SMEs and large enterprises as a result of the monetary policy transmission mechanisms discussed previously. The analysis reveals that the impact of the purchase programmes on lending rates is especially significant in the case of Germany (for SMEs and large enterprises alike) and in the case of large enterprises in France and Italy, with a statistically significant impact even two years after introduction of the shock. In Spain, the impact is statistically significant for the first 18 months after the onset of the shock.

Exhibit 4 **Impulse-response function**

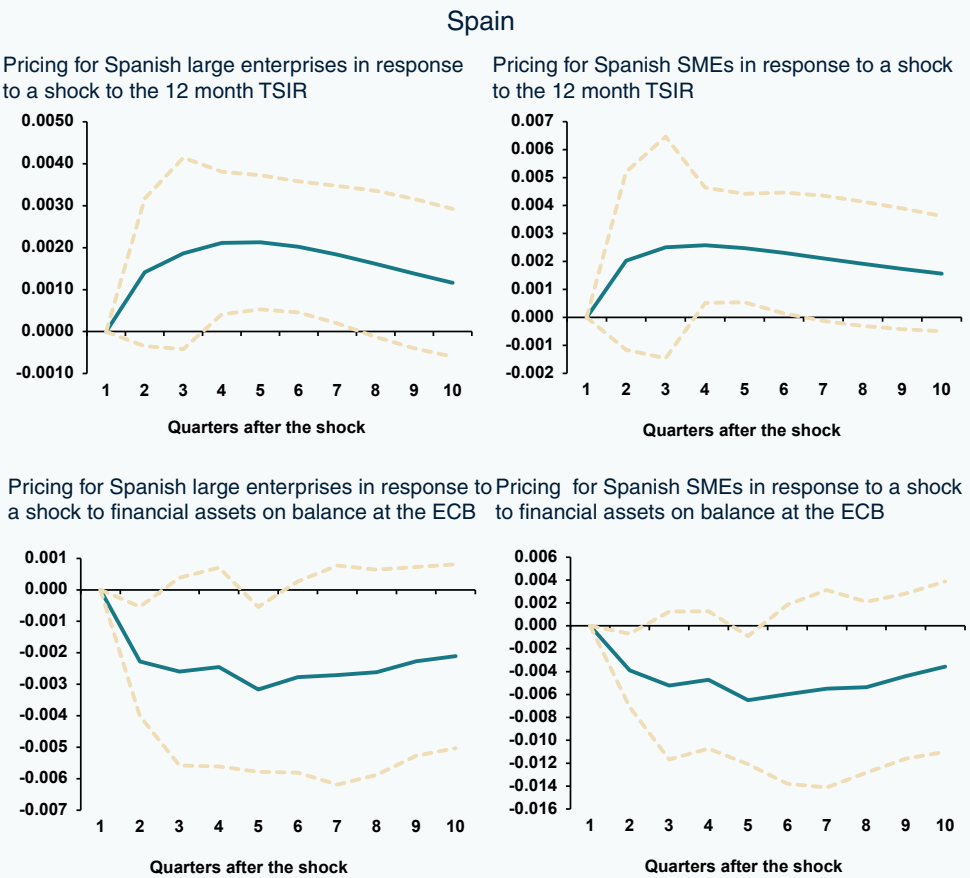
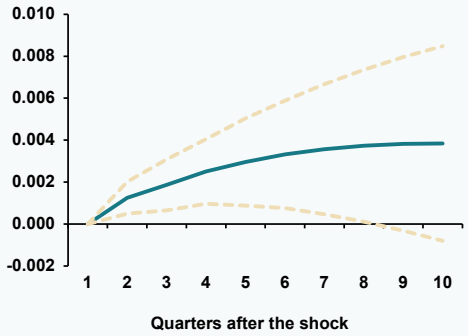


Exhibit 4 **Impulse-response function**

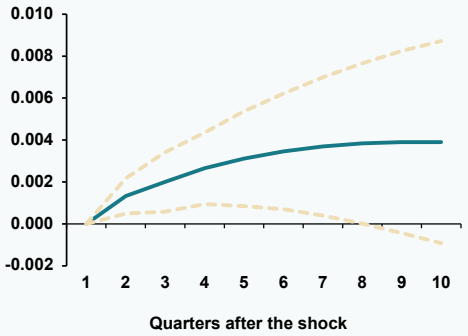
Continued

## Germany

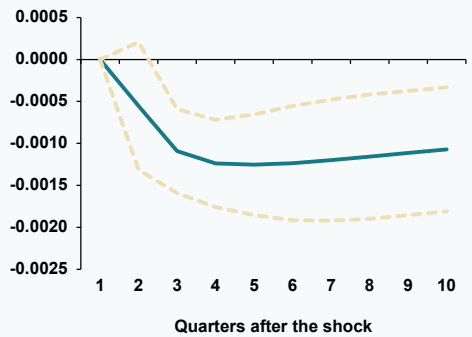
Pricing for German large enterprises in response to a shock to the 12 month TSIR



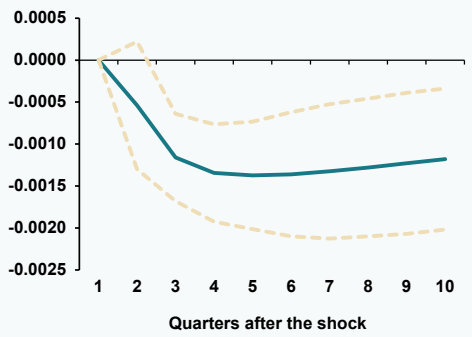

Pricing for German SMEs in response to a shock to the 12 month TSIR




Pricing for German large enterprises in response to a shock to financial assets on balance at the ECB

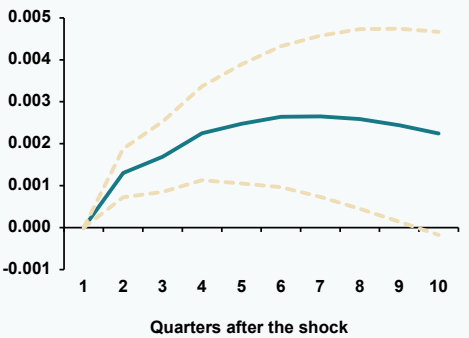



Pricing for German SMEs in response to a shock to financial assets on balance at the ECB




## France

Pricing for French large enterprises in response to a shock to the 12 month TSIR




Pricing for French SMEs in response to a shock to the 12 month TSIR

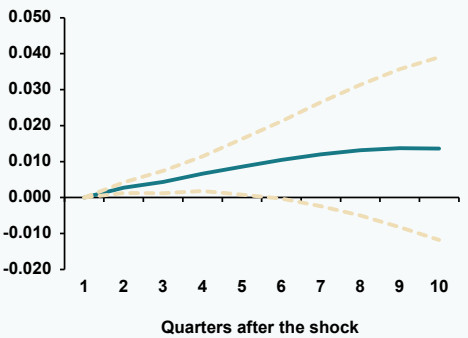
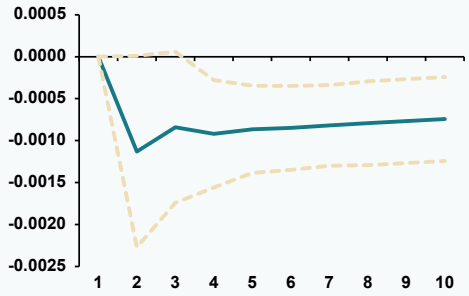


Exhibit 4 **Impulse-response function**

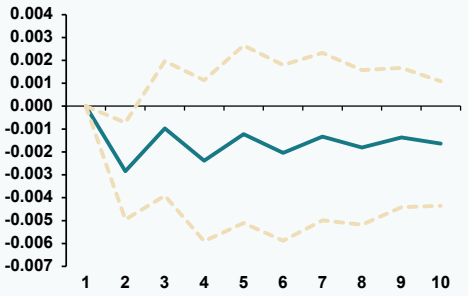
Continued

## France

Pricing for French large enterprises in response to a shock to financial assets on balance at the ECB

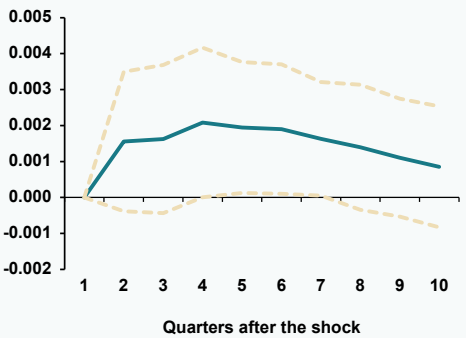



Pricing for French SMEs in response to a shock to financial assets on balance at the ECB

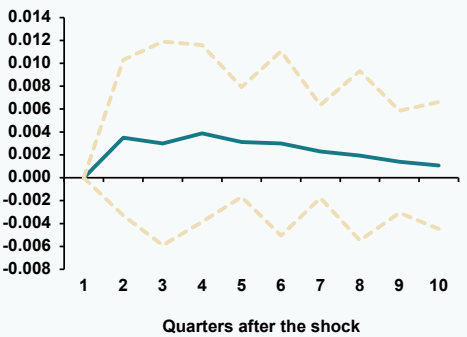



## Italy

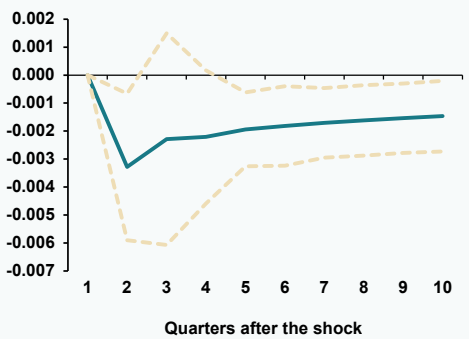
Pricing for Italian large enterprises in response to a shock to the 12 month TSIR



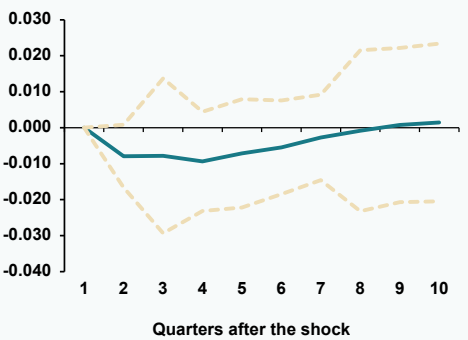

Pricing for Italian SMEs in response to a shock to the 12 month TSIR




Pricing for Italian large enterprises in response to a shock to financial assets on balance at the ECB




Pricing for Italian SMEs in response to a shock to financial assets on balance at the ECB




*Source: Authors' own elaboration.*

## Conclusions

Global central banks' monetary policies have served as a buffer against the fallout from the crisis of 2008 and, more recently, that emanating from COVID-19. It is impossible to tell what might have happened in their absence but there is no doubt that it would have been counter-productive for the European economies in general and for their banking sectors in particular.

Although all of the unconventional monetary policy programmes designed have had, to a greater or lesser degree, an impact on yield curves, on business lending and on the cost of risk, among other things, the ECB's corporate bond buyback programme and its liquidity scheme for the banks have made the biggest contribution to reducing the cost of borrowing for companies.

By means of impulse-response analysis, we show that both types of programmes have played a particularly important role in reducing the cost of borrowing for SMEs since 2014. By the same token, we can deduct from our analysis that the reversal of those unconventional monetary policies will drive interest rates higher, as we are already seeing. That phenomenon could trigger an increase in corporate bankruptcies as a result of the higher cost of borrowing, which would increase the business community's marginal cost of borrowing even further.

The thorny issue for the central banks is whether the existence of inflation *per se* has more adverse consequences for the economy than the path of rate tightening they establish. This will be the crux of difficult debate for governing councils´ for central banks globally going forward.

## Notes

[1[ This is particularly relevant in the case of the Spanish market as a result, primarily, of the difficulty faced by smaller-sized firms in tapping the capital markets. It is less traditional in the Spanish financial system for smaller firms to issue listed bonds and, as a direct result, the fixed-income markets are less developed, with bank lending more predominant relative to other neighbouring financial systems (particularly the Anglo-Saxon systems).

[2] We refer to the construction of loan pricing by breaking it down into the four variables referenced considering non-performance in each segment during the period under analysis and the average maturity of the loans.

[3] Probabilities of default.

[4] The stationarity study was performed using the Augmented Dickey-Fuller (ADF) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) tests, which are the two most widely used tests in stationarity studies. To test for cointegration, we used the Johansen test, which detects the existence of cointegration relationships in multivariable models such as ours. In addition, to estimate the impulse-response function, we chose the Cholesky decomposition method to identify the structural VAR, so that we were sure that the shock introduced was exogenous.

[5] We used the logarithm of this variable to stabilise the series and facilitate interpretation of the impulse-response analysis.

[6] The impulse-response exhibits should be interpreted as follows: if the value 0 falls within the confidence interval (orange lines) in a given quarter after introduction of the shock, the conclusion is that the impact of the impulse variable on our response variable is not statistically significant at 95% of the confidence interval that quarter. The opposite holds if the 0 value falls outside the confidence interval.

## References


Caixabank Research (2013). Unconventional monetary policy: An (unfinished) story of (limited) success. *The Spanish Economy – Monthly Report La Caixa,* February, pp. 23-25.

Cano, D. (2020). La política monetaria (no convencional), clave para mitigar los efectos económicos del COVID-19 [Monetary policy (non-conventional), key to mitigating the economic effects of the COVID-19]. *Documento Opinión*. ieee.es.

ECB (2021). Measuring the cost of equity of euro area banks. *Occasional Paper Series,* 254 / January 2021.

ECB Banking Supervision (2022). Single Supervisory Mechanism: Aggregated results of SREP 2021. https://www.bankingsupervision.

europa.eu/banking/srep/2022/html/ssm.srepaggregateresults2022.en.html

Mota, A. (2019). *Fijación de colchones de capital anticíclicos: una nueva aproximación* [Setting anti-cyclical capital buffers: A new approach] [Unpublished doctoral thesis]. Madrid's Autónoma University.

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# Securing fiscal stability in the context of uncertainty

Decisive policy action in response to the pandemic at the EU and Spanish level has been more effective than measures taken to tackle the Great Recession; yet, recent support measures have clouded the outlook for fiscal stability. Ensuring compliance with the European fiscal rules and securing a path towards debt sustainability in the future will require defining today the reforms and targets needed to realign public revenue with expenditure.

Santiago Lago Peñas

Abstract: Decisive policy actions in response to the pandemic at the EU and Spanish level have been more effective than those taken to tackle the Great Recession. However, those same decisions have also clouded the outlook for fiscal stability. Transitory relief is drawing to an end at a time when interest rates are increasing, and the adverse effects of uncertainty will weigh on GDP growth and its trajectory back to pre-pandemic levels. In the first half of the year, the overall deficit has come down sharply to already below the target of 5% for 2022, compared to 6.8% in 2021, although the forecasts for this year are not entirely aligned. The positive and unexpected dynamics of tax collection are the reason why the increase in public spending is not having a significantly adverse impact on the deficit. Assuming no change in policy, the government expects the deficit to gradually trend down towards around 3% in 2025, shaped by a structural deficit which, despite a slight improvement, would remain above 3%. Moreover, while the government is forecasting a very slow but steady reduction in the debt ratio, the Bank of Spain sees no prospect for improvement. Within this context, it is not enough to hope for correction via the

economic situation, which looks likely to be more complex in 2023 than was anticipated a few months ago. To ensure compliance with the incoming European fiscal rules and the eligibility criteria for the new Transmission Protection Instrument, limit the country's debt service burden in the medium-term and win back space for discretionary fiscal policy, now is the time to define reforms and targets to realign public revenue with expenditure.

## Introduction

Spain and indeed the whole of the European Union are reeling from a host of intense and unexpected negative shocks. These shocks have been triggered by factors that are exogenous to the economic system but are having a sharp and swift impact thereon. In general, the responses devised at both the European and Spanish level have been astute and rightly focused. Without question, they have been more effective and forceful than those taken to tackle the Great Recession. However, those same reactions have also clouded the horizon as far as fiscal stability is concerned.

Spain's public accounts are a clear example. The collapse in tax collection and increase in public spending needed to offset the health and economic consequences of the pandemic pushed the public deficit above 10% of gross domestic product (GDP) and the public debt ratio to over 125% of GDP. Both fiscal metrics, despite improving in 2021 and so far in 2022, have remained significantly above benchmark levels by European Union standards. Those high levels have not posed a bigger issue for the country's financial stability thanks to activation of the Stability and Growth Pact (SGP) escape clause and the European Central Bank's extraordinary bond purchase programme.

That transitory relief is drawing to an end: the extraordinary bond repurchase programme is being rolled back and will be replaced by a monetary policy Transmission Protection Instrument (TPI), state eligibility for which will imply compliance with certain criteria; the cost at which public debt gets issued is set to rise gradually; and, the EU fiscal rules will be reinstated, as amended, in 2024 (Lago Peñas, 2022). Moreover, the return to a less expansionary fiscal policy is set to take place against the backdrop of a macroeconomic climate which has deteriorated sharply in recent months as a result, mainly, of the war in Ukraine. Specifically, we are looking at an increase in inflation rates that is not acceptable by European standards, so forcing an abrupt shift in monetary policy. The increase in interest rates, coupled with the difficulty in securing a broad income pact, and the adverse effect of the prevailing uncertainty on consumer and investment decisions, will weigh on GDP growth and its trajectory back to pre-pandemic levels.

The objectives of this paper are threefold. Firstly, to assess the budget outturn so far in 2022 and the outlook for the rest of the year. Secondly, to look at the projections for 2023 to 2025, based on public information about the government's plans and commitments as they relate to either side of the budget equation. And thirdly, to provide an overview of certain key matters for defining and implementing a robust fiscal consolidation strategy in Spain.

## Budget outturn year-to-date and outlook for the rest of 2022

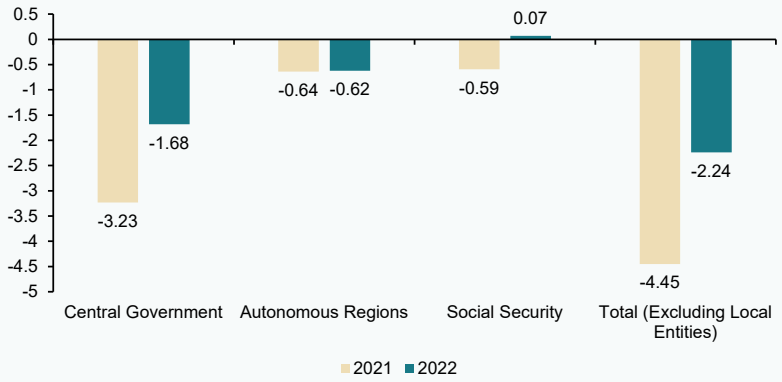
Exhibit 1 provides the budget outturn up until June 30th, 2022, and compares it to that corresponding to the same period of 2021. The figures are expressed as a percentage of gross domestic product (GDP) and exclude local governments. According to Spain's independent fiscal institute, AIReF (2022b), local governments are expected to present a

> "The overall deficit has come down sharply in the first six months of the year (by 2.2 percentage points), already dipping below the target for the full year, namely that of reaching 5%, compared to 6.8% in 2021."

Exhibit 1

**Public deficit as of June 30th, 2021 and 2022**

Percentage of GDP




*Source: Author's own elaboration based on Ministry of Finance and Civil Service figures (2022c).*

surplus of 0.2% of GDP this year, just below that of 0.27% attained in 2021. The overall deficit has come down sharply in the first six months of the year (by 2.2 percentage points), already dipping below the target for the full year, namely that of reaching 5%, compared to 6.8% in 2021.

The forecasts for 2022, as shown in Exhibit 2, are not entirely aligned. Whereas the Funcas consensus forecast is for a deficit of 5.2%, 0.2 percentage points above the official target of 5.0%, the Bank of Spain (4.6%) and AIReF (4.5%) are a lot more upbeat, assuming consolidation of the dynamics observed during the first half of the year, despite factoring in the budgetary cost of many of the compensatory measures taken to tackle the fallout from the invasion of Ukraine. According to AIReF (Herrero, 2022), the measures already passed by the end of June will imply a cost of 13.06 billion euros, which is roughly 1% of GDP, pushing the deficit higher. Moreover, that figure has only increased with every new decision taken since then. Those measures include the natural gas VAT cut from October 1st, with an estimated cost of 190 million euros for the remainder of the year (according to the Ministry of Finance), the rollover of free transport season tickets and expansion of the student scholarship scheme. By the end of the year, it is highly likely that the above-mentioned 1% will have increased by the odd decimal point.

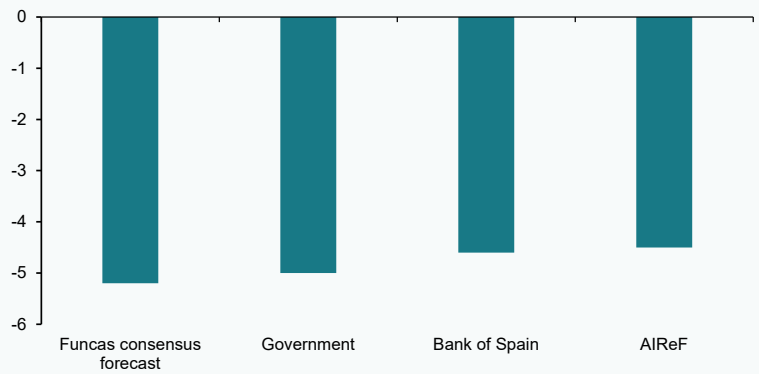
The positive and unexpected dynamics of tax collection are the reason why the increase in

> "The positive and unexpected trend in tax revenue is the reason why the increase in public spending is not having a significantly adverse impact on the deficit."

Exhibit 2

## Public deficit forecasts for 2022

Percentage of GDP



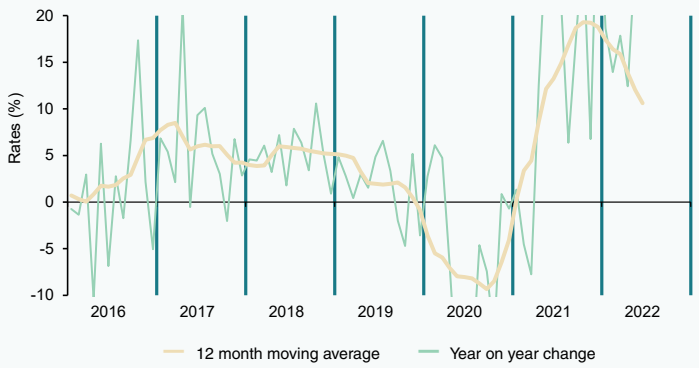

*Source: Author's own elaboration based on Funcas statistics (2022).*

public spending and temporary tax relief are not having a significantly adverse impact on the deficit (Exhibit 3). Even though the drop in tax revenue was less pronounced than the collapse in GDP in 2020 by a wide margin, in clear contrast to the trend observed in 2009, the recovery in 2021 and the first half of 2022 implies tax revenue elasticities relative to GDP that are considerably above long-run estimates and are among the highest

Exhibit 3

## Tax revenue

Annual rate and 12-month moving average




*Source: AEAT (2022).*

> “Next year will be marked by a general election as well as elections at the municipal and regional levels, creating an incentive to spend more and freeze or cut taxes.”

in the European Union today. The income support schemes (furlough, help for the self-employed) are certainly partly responsible for that positive result, as are the healthy job market dynamics being witnessed and, probably, the shrinkage of the shadow economy due to the boom in digital payments and a shift in the perceived risks and costs of remaining outside the official economy. Although we still lack accurate estimates of the relative weight of each of these three factors, it would be neither advisable nor prudent to assume that the current extraordinarily high elasticities will remain at these levels in the near future.

## Outlook for 2023-2025

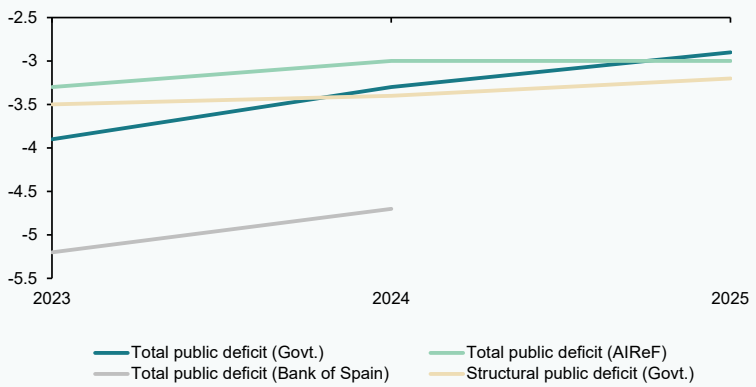
Exhibit 4 shows the forecast trend in the public deficit between 2023 and 2025 (Ministry of Finance and Civil Service, 2022a). Assuming a scenario of no-policy changes, the government expects the deficit to gradually trend down towards around 3% in 2025, shaped by a structural deficit which, despite a slight improvement, would remain above 3% that year. AIReF (2022a) supports that scenario on the whole, albeit with two caveats. Firstly, the fiscal authority is forecasting lower deficit reductions in 2023 and lower cuts the following two years. Secondly, its structural deficit estimate is higher than that of the government, still at roughly 4% in 2025. The Bank of Spain's prognosis (2022) is more pessimistic. Without meaningful policy changes, it does not expect the deficit to improve significantly, remaining above 4.5% in 2023 and 2024.

Exhibit 5 translates the above deficit picture into public debt terms. While the government

Exhibit 4

**Public deficit forecasts, 2023-2025**

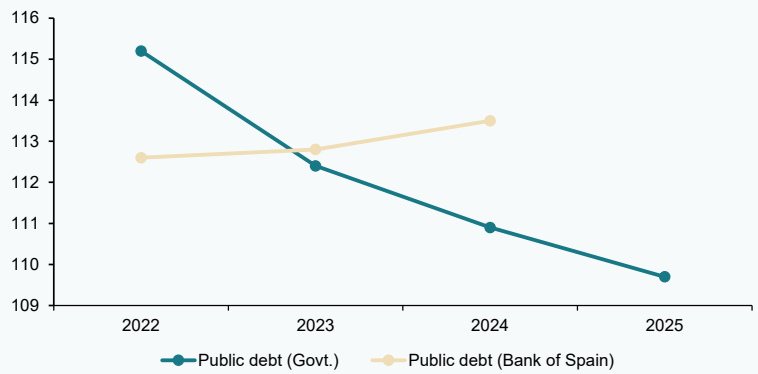
Percentage of GDP




*Sources: Author's own elaboration based on Bank of Spain (2022), AIReF (2022a) and Ministry of Finance and Civil Service figures (2022a).*

Exhibit 5 **Public debt forecasts, 2022-2025**

Percentage of GDP




*Sources: Author's own elaboration based on Bank of Spain (2022) and Ministry of Finance and Civil Service figures (2022a).*

is forecasting a very slow but steady reduction in the debt ratio, the Bank of Spain sees no prospect for improvement.

In short, it is not enough to hope for fiscal stabilizers and the improvement of the economic situation which, moreover, looks likely to be more complex in 2023 than was anticipated a few short months ago. Subject to a high degree of uncertainty, the current GDP forecasts are modest and are continually being revised downwards. From an political economy standpoint, it is fair to say that 2023 is looking particularly challenging for consolidation. Next year will be marked by a general election as well as elections at the municipal and regional levels, creating an incentive to spend more and freeze or cut taxes. Furthermore, the fresh rollback of the reinstatement of the European fiscal rules suggests that fiscal consolidation efforts will be rather restrained. Nevertheless, the above scenario is compatible with making an effort to define and negotiate a series of steps and a plan capable of generating confidence and credibility around Spain's commitment to fiscal stability.

## Considerations on policy action for the future

If we want to ensure compliance with the incoming European fiscal rules and the eligibility criteria for the new Transmission Protection Instrument, if we want to limit the country's debt service burden in the medium-term and if we want to win back room for fiscal manoeuvre, now is the time to define reforms and targets that bring non-financial public spending and revenue closer in line. It is true that tax revenue is helping, that inflation, for now, is driving faster growth in revenues than disbursements and that the two new extraordinary taxes (for 2023-2024) on energy companies and financial institutions will generate, according to the government's calculations, around 3.5 billion euros of additional tax revenue for every year they remain in force. However, the likely rollover in 2023 of measures intended to offset the effects of the war in Ukraine, the restatement of pensions in line with actual CPI and the additional budget expected to be allocated to defence spending will exert sharp pressure in the other direction.

Item #28 of Spain's Recovery, Transformation and Resilience Plan contemplates far-reaching

> "In order to: ensure compliance with the incoming European fiscal rules and the eligibility criteria for the new Transmission Protection Instrument; limit Spain's debt service burden in the medium-term; and, win back room for fiscal manoeuvre, now is the time to define reforms and targets to better align non-financial public spending with revenue."

tax reforms which are scheduled for approval as early as the first quarter of 2023. Spain will negotiate the finer details with the European Commission in the autumn, at a time when progress on green taxation and incentives for decarbonisation and energy transition are likely to have to take a back seat. What makes sense against that backdrop is to articulate the overall shape of the reforms now and leave aside the parts that clearly contradict the compensatory measures in place at present and to activate the aspects that do not enter into conflict over the course of 2023.

On the spending side, pensions constitute the biggest outlay. The commitment to restate all pensions in line with the actual CPI readings observed in December 2021 and 2022 will imply a step effect in the 2023 budget, expenditure that was not contemplated and that will get consolidated going forward, further complicating the ability to meet the system's projected budget figures. Item #30 of the Recovery, Transformation and Resilience Plan details the initiatives underway, and others planned for the next decade in an attempt to render the pension system sustainable. However, there are doubts those measures will suffice (Bandrés, 2021)

Item #29 of the Recovery, Transformation and Resilience Plan focuses on another key aspect of Spain's public sector: public policy assessment. It is imperative to specify and accelerate attainment of the milestones constituting this component of the plan in order to eke out gains in public and fiscal spending efficiency in the very short-term. Progress on that front will unlock public sector savings and quality, which will in turn enhance citizens' perceptions thereof. The same can be said of item #27, which addresses tax fraud. Here it is vital to accelerate initiatives and unlock results in order to reinforce the sufficiency of the tax system and enhance horizontal equity, which will ultimately boost taxpayer morale.

Lastly, in light of the likely extension to 2023 of some of the fiscal support measures introduced to tackle the effects of the invasion of Ukraine, the analysis performed by Checherita-Westphal, Freier and Muggenthaler (2022) is highly relevant. Their estimates for the Eurozone as a whole point to two undesirable features. The first is the mostly untargeted nature of the support being provided. Just 12% of the measures are focused on the most vulnerable households. The second is the fact that just 1% of the measures make a positive contribution to the green transition and decarbonisation. It would be desirable if, with more time to fine-tune the measures, both percentages were to increase substantially in order to maximise their redistributive impact, render the short-term initiatives compatible with the bigger challenges looming in terms of climate change and dependence on non-renewable energy sources, and limit their overall fiscal cost.

## References

AEAT (2022). *Monthly Tax Collection Reports. June 2022*. Retrievable from: https://sede.agenciatributaria.gob.es/Sede/datosabiertos/catalogo/hacienda/Informe_mensual_de_Recaudacion_Tributaria.shtml

AIReF (2022a). *Report on the 2022-2025 Stability Programme Update*. May 5th, 2022. Retrievable from: www.airef.es

AIReF (2022b). *Monthly stability target monitoring, 2022*. July 7th, 2022. Retrievable from: www.airef.es

Bank of Spain (2022). *Macroeconomic projections for the Spanish economy, 2022-2024,* June 10th, 2022. Retrievable from: www.bde.es

Bandrés, E. (2021) Social Security budget for 2022: Short-term state support yet a need for structural reform. *Spanish Economic and Financial Outlook,* 10(1). Retrievable from: https://www.sefofuncas.com/Spain%E2%80%99s-bumpy-post-COVID-19-recovery/Social-Security-budget-for-2022-Short-term-state-support-yet-a-need-for-structural-reform

Checherita-Westphal, C., Freier, M. and Muggenthaler, P. (2022). Euro area fiscal policy response to the war in Ukraine and its macroeconomic impact. *ECB Economic Bulletin,* 5/2022. Retrievable from: https://www.ecb.europa.eu

Funcas (2022). *Spanish Economic Forecasts Panel. September 2022*. Retrievable from: www.funcas.es

Herrero, C. (2022). *Testimony in Congress Before the Finance Committee. Report on the 2022-2025 Stability Programme Update*. June 27th, 2022. Retrievable from: www.airef.es

Lago Peñas, S. (2022). Implications for Spain of the reform of the EU's fiscal rules. *Spanish Economic and Financial Outlook*, 11(2). Retrievable from: http://www.sefofuncas.com/The-war-in-Ukraine-and-implications-for-Spain/Implications-for-Spain-of-the-reform-of-the-EUs-fiscal-rules

Spanish Ministry of Finance and Civil Service (2022a). *Stability Programme Update, 2022 - 2025*. April 29th, 2022. Retrievable from: www.hacienda.gob.es

Spanish Ministry of Finance and Civil Service (2022b). *Límite de gasto no financiero del Estado y tasas de referencia de déficit público 2023* [State non-financial state spending limit and public deficit targets for 2023]. July 26th, 2022. Retrievable from: www.hacienda.gob.es

Spanish Ministry of Finance and Civil Service (2022c). *Ejecución presupuestaria de las Administraciones Públicas*. [Budget outturn figures] September 2022. 12.9.2022. Retrievable from: www.hacienda.gob.es

Torres, R. (2022). Responses to the energy crisis: The cases of Germany, France, Italy and Spain. *Spanish Economic and Financial Outlook*, 11(3). Retrievable from: http://www.sefofuncas.com/Considerations-for-Spain-Geopolitical-risk-on-top-of-a-challenging-post-pandemic-recovery/Responses-to-the-energy-crisis-The-cases-of-Germany-France-Italy-and-Spain

**Santiago Lago Peñas.** Professor of Applied Economics at Vigo University and Senior Researcher at Funcas



# Income inequality in year one of the pandemic

Social protection measures rolled out by the government during the COVID-19 crisis strongly mitigated the negative effect of the pandemic on lower income households. However, public transfers were not enough to fully neutralize the increase in inequality in Spain, which must be attributed to more structural factors.

Eduardo Bandrés

Abstract: Were it not for the mitigating social protection measures rolled out, the effects of COVID-19 on Spanish households' primary income would have been felt more keenly in the lower income brackets and would have translated into a sharp increase in inequality. Public transfers offset a significant portion of the income lost by the households most affected by unemployment or disability. However, they were not capable of fully neutralising the increase in inequality. The adverse effect on disposable income was concentrated in the first decile of the income distribution. Moreover, the persistence of pockets of poverty in Spain cannot be blamed on the crisis induced by the pandemic but rather must be attributed to more structural factors related with low levels of education and job qualifications in some segments of the population, the insufficiency of the minimum income scheme, the scarcity of help for families and the limited size of non-contributory pensions.

## Introduction

Recent publication of the *Living Conditions Survey 2021* (INE, 2022 and Eurostat, 2022), which contains household income figures for 2020, enables analysis of the impact of the economic crisis on distribution of personal income during that first year of the pandemic. The goal of this paper is to provide a

> “The Gini coefficient of equivalised disposable income before transfers increased by 3.2 points in 2020, while during the years of the Great Recession, the biggest increase in two successive years took place in 2009: 2.3 percentage points with respect to 2008.”

preliminary assessment of the main indicators of inequality, comparing 2019 and 2020, in particular. Works such as those of Aspachs *et al.* (2021), Cantó (2021) and Martínez-Bravo and Sanz (2022) have yielded early analysis of the effects of the crisis induced by COVID-19 on inequality during the initial months of the pandemic: the first, using real-time information about salaries and public transfers gleaned from over 2 million bank accounts; the second by simulating flows between employment and unemployment and the public policies rolled out; and, the third, using the data derived from two surveys conducted in 2020.

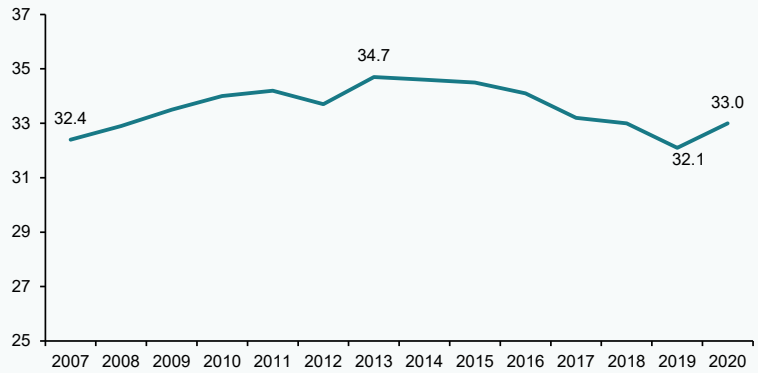
## The impact of social transfers on income inequality

The benchmark metric used to measure income inequality is the Gini coefficient which for the purposes of this paper ranges from 0 to 100. In 2019, the Gini index of equivalised (net annual) disposable income was 32.1; it increased by 0.9 points to 33.0 in 2020 – implying an increase in inequality. As shown in Exhibit 1, 2020 marked the end of the downward trend initiated in 2014. It is reasonable to assume that the effect of the lockdowns and business restrictions on employment and the number of hours worked had an uneven effect on income across the various occupancies with the attendant impact on the main inequality indicators (refer to Ocaña *et al.,* 2020).

Note, however, that despite the fact that GDP contracted by 11.3% in 2020, the social protection policies rolled out by the government, which took the form of social benefits, went a long way to offsetting the

Exhibit 1 **Trend in the Gini coefficient, 2007-2020**

Equivalised disposable income




*Source:* Living Conditions Survey *(INE).*

> "The comparison of income inequality before and after public transfers suggests that it was thanks to the mechanisms for redistributing pensions and, above all, other social benefits that Spain's Gini coefficient only increased by 0.9 points in 2020 by comparison with 2019, despite the massive impact of the pandemic-induced crisis on GDP and employment."

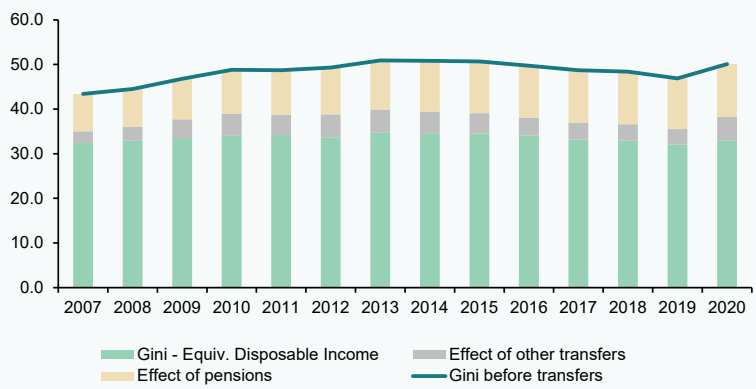
loss of primary income. In fact, the *Living Conditions Survey (LCS)* figures reveal that average income per person in Spain dipped by just 0.18% in 2020 by comparison with 2019.

To isolate the impact of the social benefits on inequality, we use the Gini coefficient readings in three different scenarios: (i) equivalised disposable income (EDI), as mentioned previously; (ii) equivalised disposable income before all forms of social transfers; and, (iii) equivalised disposable income including pensions but excluding all other transfers. Recall that by using disposable income, we are referring to income after all the direct taxes and social security contributions borne by Spanish households. As shown in Exhibit 2, the Gini coefficient of EDI before transfers increased from 46.9 in 2019 to 50.1 in 2020, an increase of 3.2 points, which is a significant jump for just one year. In fact, during the years of the Global Financial Crisis and Great Recession, the biggest increase in the Gini coefficient of EDI before transfers in two successive years took place in 2009, when it increased by 2.3 percentage points with respect to 2008.

The impact of pensions on income inequality reduction has been increasing from 8.4 points of the Gini coefficient in 2007 to 11.8 points in 2020. [1] In turn, the effect of all other transfers (unemployment benefits, sick pay, family support, the minimum income scheme, *etc.*) on inequality reduction peaked at 5.2 points in 2013 and has since been coming down slowly, in tandem with the

Exhibit 2

**Gini coefficient under different scenarios for household income, 2007-2020**




*Source: Author's own elaboration based on* EU-SILC Survey figures *(Eurostat).*

> “Despite the restorative effect of the public transfers, average disposable income per person in the first decile decreased by 9%, compared to 2% in the second and third deciles.”

downtrend in unemployment, to 3.4 points in 2019. That said, it increased once again to 5.3 points in 2020. The comparison of the inequality coefficients for the three definitions of disposable income suggests that it was thanks to the mechanisms for redistributing pensions and, above all, other social benefits that inequality in Spain only increased by 0.9 points in 2020 by comparison with 2019, despite the massive impact of the pandemic crisis on GDP and employment. In 2020, public spending on social benefits in cash increased by 31.47 billion euros, or 16.1%, from 2019, to 228.63 billion euros (IGAE, 2022). More specifically, expenditure on unemployment benefits, fuelled largely by the furlough scheme, increased by 22.18 billion euros, more than doubling the 2019 figure, and payments for sick and disability leave – again closely related with the health ramifications of COVID-19 – increased by 3.07 billion euros.

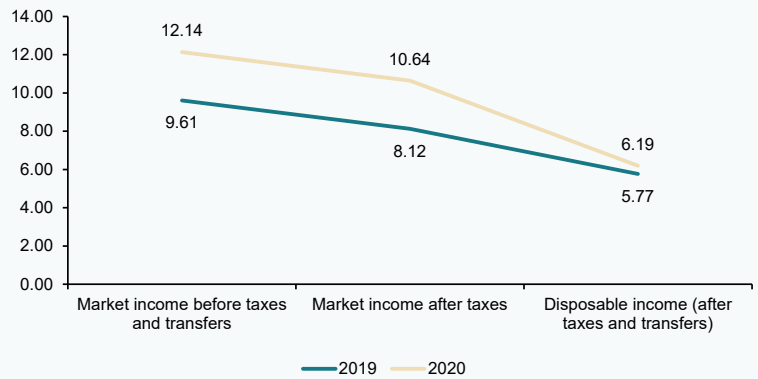
The greater redistributive effect of the social benefits awarded in 2020 is likewise tangible if we compare the trend in the relationship between the average income of the 20% of the population with the highest income and the 20% with the lowest income (the income quintile share ratio, or S80/S20 ratio), as depicted in Exhibit 3. Whereas the impact of taxes and social security contributions on income inequality is very similar in 2019 as in 2020, the impact attributable to social benefits is nearly twice as high in 2020 judging by the reduction in the S80/S20 ratio.

## Focusing on the lowest earners

Use of the Gini coefficient does not provide sufficiently accurate insight into inequality between the extremes of the disposable income distribution. We therefore round out that information with statistics around income deciles and other ratios that

Exhibit 3 **Impact of taxes and transfers on inequality in 2019 and 2020**

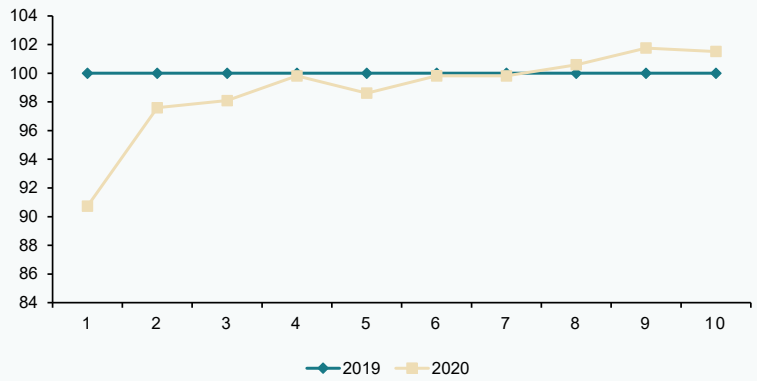
S80/S20 ratio




*Source: Author's own elaboration based on* EU-SILC Survey figures *(Eurostat).*

Exhibit 4 **Trend in average income per person in 2020, by income deciles**

Rebased to 100 in 2019



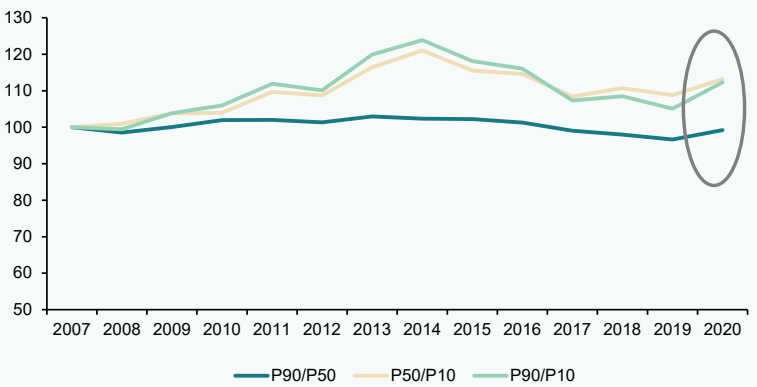

*Source: Authors' own elaboration based on* EU-SILC Survey figures *(Eurostat).*

correlate income between the higher and lower deciles and percentiles. Specifically, despite the restorative effect of the public transfers, average disposable income per person in the first decile decreased by 9%, compared to 2% in the second and third deciles. At the other end of the distribution, average income per person in the ninth and tenth deciles increased by 2%, also increasing, by 1%, in the eighth decile (Exhibit 4).

In other words, whereas the Gini coefficient increased by 2.8% between 2019 and 2020, the S90/S10 ratio, which measures

Exhibit 5 **Trend in several inequality indicators, 2007-2020**

Rebased to 100 = 2007




*Source: Author's own elaboration based on* EU-SILC Survey figures *(Eurostat).*

the relationship between the equivalised disposable income of the 10% of the population with the highest income and the 10% with the lowest income, increased by 11.7%, indicating that the increase in inequality in 2020, essentially took the form of a widening in the distance between the two extremes of the distribution. That divergence is also evident if we look at the relationship between the income of the 90th and 10th percentiles (P90/P10), which can in turn be broken out into two ratios, P90/P50 and P50/P10, using the distribution median as an interim reference point (P50). As shown in Exhibit 5, the increase in inequality during the Great Recession, captured using P90/P10, was over 90% attributable to the increase in the distance between the median income level and the lower income levels (P50/P10), and only 10% attributable to the growth in high incomes with respect to the median (P90/P50). However, in 2020, the P90/P50 ratio also increases and explains over 35% of the increase in the distance between the 90th and 10th percentiles. A comparison of the 95th and 5th percentiles yields a similar conclusion. Once again, that analysis shows that although the distance between the median and the lowest income percentiles (P50/P05) explains two-thirds of the increase in inequality between the highest and lowest earners in 2020 (P95/P05), over 30% is explained by the increase in the P95/P50 ratio.

It is highly feasible, moreover, that, as the labour market normalised over the course of 2021, with employment rising and unemployment coming down, the income inequality indicators will have come down, largely offsetting the increase observed during year one of the pandemic.

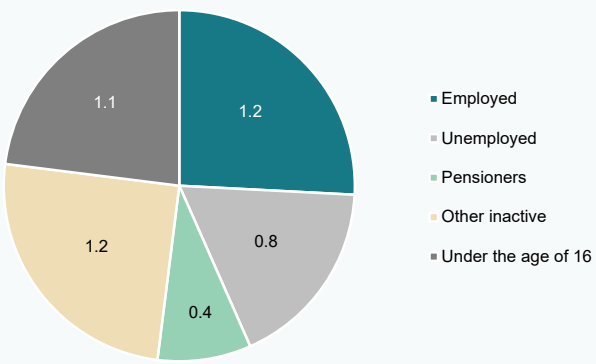
Regardless, from the perspective of affording social shelter to the lowest earners, it is worth shining the spotlight on the first decile of the income band, which, by definition, includes around 4.7 million people. In 2020, the upper income limit per person for that poorest 10% of the population stood at around 4,200 euros per annum, *i.e.,* 350 euros per month. Drilling down further into the 5th percentile (2.35 million people) those figures were 2,800 euros per annum and 230 euros per month; and in the 1st percentile (470,000 people), less than 40 euros a month.

The constituents of the first decile (Exhibit 6) include minors under the age of 16 (around 1.1

Exhibit 6

**Breakdown of the population comprising the first decile according to their working status, 2020**

Millions of people




*Source: Author's own elaboration based on the* Living Conditions Survey *(INE).*

million), job-seekers (820,000), wage earners (1.2 million), retirees and pensioners (some 400,000) and other inactive individuals (1.2 million). Those figures are not too different from those of 2019, so that the persistence of such situations of poverty cannot be entirely blamed on the crisis induced by the pandemic but rather must be attributed to more structural factors related with low levels of education and job qualifications in some segments of the population, the insufficiency of the minimum income scheme, the scarcity of help for families and the limited size of non-contributory pensions. The bulk of this category is, therefore, made up of people of working age and children living in those same households (single-parent families headed up by women, young people with and without children) whose income prospects are derived from a mix of factors related with the job market – participation, employment, hours worked, wages – and others related with taxation and social policy.

## Notes

[1] Measurement of the impact of pensions on inequality for this analysis is done taking a strictly annual approach, *i.e.,* without factoring in the impact of annuities, which would require us to compare the capitalised value of the contributions made throughout ones entire working life with the present value of all pensions received during entitlement to those benefits.

## References

Aspachs, O., Durante, R., Graziano, A., Mestres, J., Montalvo, J. G. and Reynal-Querol, M. (2021). Seguimiento de la desigualdad en tiempo real en España durante la crisis de la COVID-19 [Monitoring inequality in Spain in real time during the COVID-19 crisis]. *Información Comercial Española,* 923, pp. 163-179.

Cantó Sánchez, O. (2021). Los efectos de la pandemia de la COVID-19 en la distribución de la renta y el papel de las políticas públicas [The effects of the COVID-19 pandemic on income distribution and the role of public policy]. *Información Comercial Española,* 923, pp. 145-161.

IGAE (2022). *National accounts. Annual series. Government expenditure by function – COFOG.* Ministry of Finance and Civil Service.

Martínez-Bravo, M. and Sanz, C. (2022). Inequality and psychological well-being in times of COVID-19: Evidence from Spain. *Working Papers,* No. 2204. Bank of Spain.

Ocaña, C. (dir.), Bandrés, E., Chuliá, E., Fernández, M. J., Malo, M .A., Rodríguez, J. C. and Torres, R. (2020). *Impacto social de la pandemia en España. Una evaluación preliminar* [Social impact of the pandemic in Spain. A preliminary assessment] Funcas. Disponible en: https://www.funcas.es/wp-content/uploads/2020/11/Impacto-social-de-la-pandemia-en-Espa%C3%B1a.pdf

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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 12/2022 regulating occupational pension schemes (published in the *Official State Journal* on July 1st, 2022)

Law 12/2022, which took effect the day after its publication, creates a new product –publicly sponsored occupational pension plans– and establishes their legal regime. They are backed by the Ministry of Inclusion, Social Security and Migration through its Sponsorship and Oversight Committee. They can take the form of "simplified" occupational pension plans (see below) or defined contribution retirement plans.

The new plans will have the following characteristics:

- The title –public open occupational pension plans– and the related acronym (FPEPP in Spanish) will be restricted to the funds set up under the scope of this piece of legislation.
- They will be open in nature with respect to their investment processes.
- The Sponsorship and Oversight Committee will act as the public sponsoring entity and take the form of a collegiate body under the Ministry of Inclusion, Social Security and Migration, specifically made up of nine members from the General State Administration. Its duties will include incorporation, dissolution, selection of management and depositary institutions, formulation and approval of investments strategies and ongoing oversight of performance.
- A single Special Control Committee will be created for all plans set up and will be tasked with their supervision. That committee will be made up of 13 people, appointed by the Sponsorship and Oversight Committee, with proven experience, knowledge and supervisory and managerial capabilities.
- The assets must be invested exclusively in the interests of the unitholders and beneficiaries, factoring in investment return, risk and social impact considerations. All such plans will share the core aspects of their investment strategies, which will be framed by guidelines with respect to the use of derivatives, specific investment security, profitability, diversification, dispersion and congruence criteria and financial risk management considerations, among other aspects.
- The funds will be managed by a management institution with the help of a depositary institution, which must meet a series of requirements. In exchange for the performance of their duties, those entities will receive a fee within the limit established in the pension funds' management rules, which may not exceed the legally-stipulated ceiling.
- There will be a common digital platform for all management and depositary institutions in order to enable and facilitate interoperability, process standardisation and quality, transaction agility, monitoring and supervision, fund reporting processes and access to information for companies, investors and beneficiaries.

Law 12/2022 creates the concept of a "simplified" occupational pension plan especially designed for use by SMEs and the self-employed. Such plans can be arranged by the following entities:

- Companies covered by sector-wide collective bargaining agreements.

- Public administrations and public corporations.

- Associations, federations, confederations or unions of associations of self-employed workers or independent contractors, trade unions, professional associations and related mutual societies that complement social security.

- Cooperative societies and worker-owned firms as per an agreement between their governing bodies and their workers' representative bodies.

The creation, formalization and integration of simplified pension plans will take the form of resolutions taken at the corresponding negotiating tables or at the agreement of the firms sponsoring the plans for the self-employed/independent contractors or for the work partners of cooperative societies or worker-owned firms. Simplified plans must take the form of defined contribution retirement plans and may not be transferred to other pension plans until the end of the calendar year after entry into effect of Law 12/2022.

The new legislation additionally contemplates the following:

- Total maximum annual contributions by companies to the pension plans regulated under the new law may not exceed 1,500 euros. However, that figure may increase by 8,500 euros if made by the employer or by the employee in an amount no more than total employer contributions; or by 4,250 euros if derived from contributions to self-employed workers' simplified occupational pension funds or contributions made by business owners. Under no circumstances may the maximum contribution to these plans exceed 8,500 euros per annum.

- The legislation ushers in tax measures that affect personal income tax (the maximum deduction increases to up to 10,000 euros, 1,500 for individual plans and 8,500 for occupational plans), corporate income tax and taxation on financial transactions.

## Royal Decree-law 11/2022 implementing measures in response to the consequences of the war in Ukraine and addressing situations of vulnerability (published in the *Official State Journal* on June 26th, 2022)

Royal Decree-law 11/2022 took effect the day after its publication. Among other measures, it notably amends Royal Decree-law 24/2021 in respect of covered bonds, mainly in relation to the scope of application and regime governing property appraisals at the time of adding loans to a cover pool.

Royal Decree-law 24/2021 applies exclusively to covered bonds issued by credit institutions operating in Spain (including the country's official credit institute, ICO) and covered bonds issued outside of Spain by credit institutions duly authorised in Spain.

With respect to the regime governing the appraisal of collateral assets, the "current valuation" concept has been revised to include in the cover pool of covered bonds issued prior to effectiveness of the first book of Royal Decree-law 24/2021, *i.e.,* July 8th, 2022. Specifically, and exclusively in such cases, the current valuation to be used will be the benchmark valuation being used as per the Accounting Circular, which may not exceed the amount obtained from the last full appraisal conducted in conjunction with the loan grant.

Issuers are also obliged to inform their investors as to how they have complied with their valuation requirements in respect of the properties securing the allocated mortgage bonds.

The new legislation permits the use of the appraisal conducted at the time the loan was arranged so long as it took place during the six months prior to adding the mortgage to the cover pool. If the appraisal took place before that cut-off, the appraisal completed at the time of the loan's arrangement can be used as the current valuation so long as the issuer can verify the absence of indications of significant impairment.

As for the rules on substitution assets for "other covered bonds", the new legislation requires such assets to comply with the requirements stipulated in Article 6 of Directive (EU) 2019/2162.

The other pieces of legislation amended via Royal Decree-law 11/2022 can be summed up as follows:

- Royal Decree-law 11/2020: the suspension of eviction proceedings and foreclosures (in the instances and in the manner already stipulated) has been extended to December 31st, 2022.

- Royal Decree-law 37/2020: landlords affected by the extraordinary suspension of the procedures in place for recovering their leased or occupied dwellings are entitled to financial compensation which they have until January 31st, 2023, to apply for.

- Royal Decree 401/2021: extension of the deadlines concerning the procedure for awarding compensation for property owners and lessors to align them with those stipulated in Royal Decree-laws 11/2020 and 37/2020.

### Organic Law 9/2022 setting the rules for facilitating the use of financial information and other measures designed to prevent, detect, investigate or process criminal offences (published in the *Official State Journal* on July 29th, 2022)

This law, which took effect one month after its publication, rounds out the regime governing access to financial information and the exchange of information in efforts to fight money laundering and the financing of terrorism and expands the scope of the prevention, detection, investigation and processing of serious criminal offences. To that end, it establishes measures designed to facilitate: (i) access to financial information and to the information contained in the so-called Financial Ownership File and its use by the competent authorities in order to prevent, detect, investigate or process serious criminal offences; and, (ii) access to the information in the hands of the competent authorities by SEPBLAC, the acronym in Spanish for the Executive Branch of the Commission for the Prevention of Money Laundering and Monetary Infractions, in its capacity as the Financial Intelligence Unit for the prevention and thwarting of money laundering, related underlying offences and the financing of terrorism.

The most noteworthy financial measures include:

- The competent authorities may access and consult, directly and immediately, the information contained in the Financial Ownership File whenever deemed necessary in order to carry out their remit and fulfil their duty to prevent, detect, investigate or process a serious offence or to support a criminal investigation in relation to a serious offence, including the identification, tracing and freezing of the assets related with such investigation.

- Only persons who are specifically designated and authorised to do so, on a case by case basis, may access and consult the Financial Ownership File and any such consultations must be channelled exclusively through the access points set up by the competent authorities.

- SEPBLAC is required to cooperate with the competent authorities and respond to requests for financial information in its possession, as well as to financial analyses already conducted. Likewise, the Spanish competent authorities can exchange the financial information or reports obtained from SEPBLAC with a designated competent authority in order to receive that information from another European Union member state, upon request, depending on the case's circumstances, and at any rate aimed at preventing, detecting and combatting money laundering, related underlying crimes and the financing of terrorism.

- SEPBLAC is required to keep a record of each time the competent authorities access and consult the Financial Ownership File.

In addition, the competent authorities and SEPBLAC must keep a record of information requests.

Lastly, the new law amends Law 10/2010 with respect to access to the Financial Ownership File.

### CNMV Circular 3/2022 on the prospectus for collective investment schemes and the registration of the key investor document (published in the *Official State Journal* on August 4th, 2022)

This Circular, due to take effect on January 1st, 2023, will replace CNMV Circular 2/2013 in order to adapt Spanish legislation on the prospectus for collective investment schemes (CISs) and the registration of the key investor document (KID) for Directive (EU) 1286/2014 (PRIIPs), and Directive 2009/65/EC (UCITS).

The contents of Circular 3/2022 largely coincide with those of Circular 2/2013, albeit introducing a series of modifications, notable among which:

- Eliminating the regulations regarding the contents, format and events triggering the update of the KID as those aspects are already regulated in the PRIIPs Regulation. The Circular addresses aspects related with the format, content and presentation of the prospectus and its updates, as well as the manner in which both the prospectus and the KID has to be sent to the CNMV for registration.

- Eliminating certain prospectus content requirements that are not required by the UCITS Directive and that are already included in the KID, such as the current expense indicator, the performance scenarios for structured products and the synthetic risk indicator. The new legislation therefore simplifies the prospectus, avoids reiteration and brings it in line with the prospectus requirements in other neighbouring countries.

- Eliminating or modifying certain "essential elements" and introducing one new one, stipulating that the essential elements take effect at the time of prospectus registration.

The UCITS depositary is required to verify the accuracy, quality and sufficiency of the information contained in the prospectus and the KID and to endorse submission of the prospectus to the CNMV.

Lastly, the new wording also refers to the manner in which prospectus contents related with UCITS sustainability reporting obligations under European legislation must be submitted.

# Spanish economic forecasts panel: September 2022*

Funcas Economic Trends and Statistics Department

## GDP growth estimate for 2022 remains unchanged at 4.2%

According to provisional data, second quarter GDP growth was 1.1%, 0.6 percentage points more than expected by the panellists. Domestic demand contributed 2.1pp, while the foreign sector contributed negatively to growth by 1pp. Leading indicators showed solid performance, although in the months to come they point to a change in this trend, except for the labour market, which continues to record positive data.

The analysts´ forecasts point to a very weak growth in the third quarter of just 0.1%, followed by a drop of two tenths of a percentage point in the fourth quarter (Table 2), with the majority of the panellists expecting a negative growth rate. For the year as a whole, the average estimate stands at 4.2%, unchanged from the previous set of forecasts (Table 1).

In terms of the composition of GDP growth for 2022, the contribution of domestic demand is expected to be 2.7pp (one tenth more than the last Panel), while that of the foreign sector is forecast to decline to 1.5pp (0.1pp less than in the last Panel). The forecast for household consumption and investment was revised upwards, while that of public consumption was revised downwards by 0.9pp. As for exports and imports, the forecasts were raised by 0.3 and 0.8pp, respectively (Table 1).

## The 2023 forecast is down six tenths to 1.9%

The expected sharp slowdown in the second half of 2022 has had an impact on the projected growth rate for 2023, which, as a result of a carryover effect, has been reduced by 0.6pp from the previous forecast, to 1.9%. As for the quarterly forecast, growth of 0.3% is expected in the first quarter, followed by growth of around 0.7%-0.8% for the remaining quarters of the year (Table 2).

The foreign sector is expected to make a slightly negative contribution. Domestic demand, on the other hand, will still foster economic activity – albeit less than anticipated in the last Panel. Both investment and household consumption are expected to grow less than in 2022, while the opposite trend is predicted for public consumption.

## Upward revision of the inflation forecast

The CPI increased over 10% year-on-year in June, July and August, due to strong pressure from energy prices and their indirect effects on other prices. Core inflation has maintained its upward trend, reaching 6.4% in August in year-on-year terms. In the remaining months of the year, inflation is expected to moderate, largely due to base effects (Table 3).

The forecast for the average annual inflation rate for 2022 has been raised by 0.7pp to 8.6%, while the forecast for core inflation has been raised by 0.4pp to 5%. As for 2023, the consensus forecast has been revised upwards to 3.8%, for both headline and core inflation (Table 1).

The projected year-on-year rates of the overall index for December 2022 and December 2023 are 7.5% and 2.4%, respectively (Table 3).

## Unemployment continues to fall

According to Social Security enrolment figures, the seasonally adjusted pace of employment growth weakened in July, but recorded a good performance in August, both at the aggregate level and in the main sectors.

The implied forecast of productivity growth and unit labour cost (ULC) growth is derived from the forecasts of GDP growth, employment and wage growth. Productivity per full-time equivalent job will increase by 0.9% this year and 0.4% in 2023. ULCs are projected to increase by 1.8% in 2022 and 2.5% in the next year, in line with the July Panel´s forecasts.

The average annual unemployment rate will continue to fall to 13.3% in 2022 –0.2pp lower than in the last Panel – and 13% in 2023 – 0.1pp lower.

## External surplus maintained despite rising energy costs

Leading up to June, the current account deficit was 1.23 billion euros, compared with a surplus of 2.09 billion recorded in the same period of the previous year. This worsening mainly reflects the decline in the surplus on the balance of goods and services, as a result of higher energy costs.

The negative sign of the current account in the first months of the year has a highly seasonal component. For this reason, the panellists expect a positive current account balance for the year as a whole, equivalent to 0.5% of GDP (the same as in the last Panel). For 2023, the consensus forecast has been lowered by 0.1pp to 0.8%.

## Gradual reduction of the public deficit

The fiscal deficit, excluding local authorities, amounted to 29.64 billion euros as of June of this year, compared to 54.3 billion in the same period of the previous year. This improvement was due to a larger than expected increase in revenue of 28.31 billion, greater than the 3.66 billion increase in expenditures.

The analysts expect the overall deficit to come down over 2022 and 2023. Thus, the public deficit is forecast at 5.2% of GDP this year and 4.6% next year. Note that these forecasts are more pessimistic than those of the Spanish government and the Bank of Spain (Table 1).

## The global and European economies face severe turbulence

The international context has deteriorated sharply since the July Panel. According to leading indicators, the risk of recession has increased in three of the world´s economic engines, namely the US, China and the eurozone. For the first time since the start of the post-COVID recovery period, the global purchasing managers' index (global PMI) fell below 50 in August, marking the threshold for a contraction.

First and foremost, this deterioration reflects the intensification of the energy crisis, particularly where gas is concerned. Since the last Panel, the price of this commodity has increased by 33.5% on the European TTF market, exacerbating inflationary pressures. In addition, Russian exports through the Nord Stream 1 pipeline have suffered numerous disruptions in a turbulent geopolitical environment marked by the invasion of Ukraine. The threat of a complete shutdown is increasingly palpable, augmenting the risk of a recession in Europe while straining electricity markets. Other supply shock factors, such as the cost of shipping, food commodities and oil, have moderated since July, but without mitigating the previous upward cycle.

The stagflationary nature of the energy disruption has prompted the ECB to cut its growth forecasts for the eurozone and sharply raise those for inflation.

In such an uncertain context, the analysts´ assessments of the international environment in the coming months remain pessimistic (Table 4). Virtually all see it as unfavourable, both within and outside the EU – with little changed since the July Panel. And the quasi-unanimous expectation is that this situation will persist or even deteriorate in coming months.

## Sharp upward revision of projections for interest rates, in line with ECB tighter stance

Faced with persistent inflation and an increasingly substantial risk of second-round effects on domestic prices and wages, the major central banks of advanced economies have accelerated their exits from the era of quantitative easing. In less than two months, the ECB has increased its principal interest rate (the deposit facility) by 1.25pp, a move that follows in the footsteps of the Federal Reserve and at a speed that is unprecedented in the history of the euro. Moreover, President Christine Lagarde has announced between two and four additional interest rate hikes in the coming months. Frankfurt is also considering reducing the outstanding amount of bonds in its portfolio.

The markets have been quick to incorporate the shift in monetary policy – the one-year Euribor stands at around 2%, twice as high as when the last Panel was published. Likewise, the yield on the Spanish 10-year bond is above 2.8%, 35 basis points higher than in July. However, the risk premium has not undergone major changes and is hovering around 120 basis points, a level that shows the absence of financial tensions, at least at present.

The analysts have revised their interest rate forecasts sharply upwards. The ECB´s deposit

facility is expected to be close to 1.5% at the end of the forecast period (Table 2), half a point higher than in the previous forecast. Euribor has been revised by a similar magnitude to 2.3%, while the 10-year bond yield, for its part, is expected to exceed 3.1%, 0.1pp higher than in July.

## The euro´s depreciation against the dollar slows down

As a result of the ECB´s interest rate hikes, the markets are anticipating a narrowing of the yield spread between the two sides of the Atlantic. Thus, after a period of depreciation, the euro has stabilized around parity against the dollar. Analysts expect little change in the exchange rate of the euro (Table 2), in line with the previous forecast.

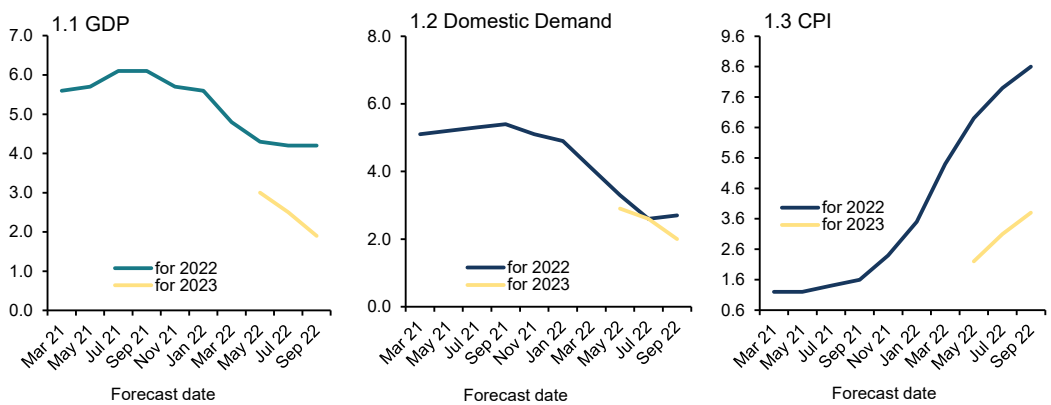
## Macroeconomic policy should be less expansionary

Concerns about inflation and its costs for households and businesses are reflected in analysts´ views on economic policy. Thus, while there is still near unanimity on the expansionary nature of fiscal policy at present (Table 4), the number of panellists who believe that fiscal policy should be more neutral or even restrictive in relation to the economic cycle is growing. Likewise, all but two members (there were three in the last Panel) believe that monetary policy should not be neutral or restrictive, and not expansionary.

Exhibit 1

**Change in forecasts (Consensus values)**

Annual rates in %




*Source: Funcas Panel of Forecasts.*

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

# Spanish economic forecasts panel: September 2022*

Funcas Economic Trends and Statistics Department

Table 1

## Economic Forecasts for Spain – September 2022

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

| | GDP[1] | | Household consumption | | Public consumption | | Gross fixed capital formation | | GFCF machinery and capital goods | | GFCF construction | | Domestic demand[3] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 |
| Analistas Financieros Internacionales (AFI) | 4.3 | 1.8 | 1.6 | 2.0 | 1.5 | 0.2 | 5.9 | 2.0 | 10.4 | 3.0 | 2.1 | 1.7 | 2.5 | 1.5 |
| BBVA Research | 4.1 | 1.8 | 1.9 | 2.3 | -0.3 | 1.6 | 9.8 | 6.9 | 17.2 | 4.4 | 4.5 | 8.7 | 3.0 | 3.1 |
| CaixaBank Research | 4.2 | 2.4 | 1.5 | 3.1 | 0.0 | 0.8 | 6.7 | 3.6 | 12.4 | 2.5 | 2.4 | 4.3 | 2.2 | 2.7 |
| Cámara de Comercio de España | 4.1 | 2.2 | 2.0 | 1.9 | 0.5 | 0.8 | 6.4 | 3.3 | 10.7 | 5.2 | 3.2 | 2.0 | 2.9 | 2.2 |
| Centro de Estudios Economía de Madrid (CEEM-URJC) | 3.9 | 2.0 | 1.8 | 2.8 | 1.0 | 0.1 | 6.6 | 3.2 | 9.5 | 4.5 | 5.0 | 2.5 | 2.6 | 2.2 |
| Centro de Predicción Económica (CEPREDE-UAM) | 4.7 | 2.0 | 3.0 | 1.9 | -0.7 | 1.7 | 8.4 | 4.2 | 11.5 | 3.9 | 6.1 | 3.8 | 3.3 | 2.5 |
| CEOE | 4.3 | 1.5 | 2.9 | 1.9 | -0.8 | -0.1 | 9.3 | 4.9 | 14.0 | 6.0 | 6.1 | 4.6 | 2.8 | 1.6 |
| Equipo Económico (Ee) | 4.3 | 1.9 | 2.1 | 1.6 | 2.1 | 1.4 | 6.4 | 4.8 | 6.4 | 5.8 | 4.8 | 4.1 | 3.0 | 2.2 |
| EthiFinance Ratings | 4.3 | 1.9 | 2.2 | 2.3 | -0.4 | 1.4 | 7.1 | 5.0 | 13.0 | 5.3 | 3.8 | 4.7 | -- | -- |
| Funcas | 4.2 | 2.0 | 1.8 | 2.0 | 0.6 | 1.5 | 5.0 | 2.8 | 9.1 | 1.0 | 1.1 | 3.8 | 2.1 | 2.0 |
| Instituto Complutense de Análisis Económico (ICAE-UCM) | 4.2 | 2.2 | 3.2 | 2.2 | 0.3 | 2.0 | 9.0 | 4.6 | 13.0 | 3.6 | 7.8 | 6.9 | 3.5 | 2.4 |
| Instituto de Estudios Económicos (IEE) | 3.9 | 1.2 | 2.4 | 1.9 | 1.8 | -0.1 | 7.7 | 4.3 | 11.2 | 5.2 | 3.9 | 4.4 | 2.7 | 1.5 |
| Intermoney | 3.7 | 2.0 | 1.0 | 2.2 | 0.2 | 1.4 | 4.5 | 4.3 | 6.4 | 4.8 | 2.6 | 3.8 | 1.5 | 2.3 |
| Mapfre Economics | 4.1 | 1.9 | 2.8 | 2.0 | -0.3 | 1.8 | 7.2 | 2.6 | -- | -- | -- | -- | 2.1 | 1.1 |
| Oxford Economics | 4.3 | 1.0 | 2.9 | 1.1 | -0.6 | 2.5 | 7.7 | 1.8 | 6.1 | -1.1 | 6.0 | 4.5 | 2.6 | 1.1 |
| Repsol | 4.0 | 2.0 | 2.6 | 1.3 | -1.3 | 0.3 | 8.3 | 2.5 | 11.6 | 1.1 | 6.1 | 3.7 | 2.8 | 1.2 |
| Santander | 4.3 | 1.4 | 3.4 | 1.9 | -1.0 | 0.5 | 8.5 | 4.1 | 11.5 | 2.9 | 7.0 | 5.2 | 3.3 | 1.9 |
| Metyis | 3.8 | 1.4 | 2.2 | 2.0 | 0.6 | 0.7 | 5.6 | 2.3 | 10.5 | 2.9 | 3.1 | 2.5 | 2.7 | 1.8 |
| Universidad Loyola Andalucía | 4.2 | 2.6 | 3.4 | 2.4 | -1.1 | 0.2 | 10.2 | 10.7 | 13.2 | 4.2 | 5.1 | 3.7 | 3.4 | 2.4 |
| CONSENSUS (AVERAGE) | 4.2 | 1.9 | 2.4 | 2.0 | 0.1 | 1.0 | 7.4 | 4.1 | 11.0 | 3.6 | 4.5 | 4.2 | 2.7 | 2.0 |
| Maximum | 4.7 | 2.6 | 3.4 | 3.1 | 2.1 | 2.5 | 10.2 | 10.7 | 17.2 | 6.0 | 7.8 | 8.7 | 3.5 | 3.1 |
| Minimum | 3.7 | 1.0 | 1.0 | 1.1 | -1.3 | -0.1 | 4.5 | 1.8 | 6.1 | -1.1 | 1.1 | 1.7 | 1.5 | 1.1 |
| Change on 2 months earlier[1] | 0.0 | -0.6 | 0.4 | -0.6 | -0.9 | -0.2 | 0.7 | -0.5 | 0.3 | -1.1 | 1.5 | 0.0 | 0.1 | -0.6 |
| - Rise[2] | 5 | 0 | 8 | 3 | 0 | 5 | 9 | 4 | 7 | 0 | 9 | 6 | 6 | 3 |
| - Drop[2] | 5 | 14 | 4 | 12 | 13 | 10 | 2 | 10 | 4 | 12 | 2 | 5 | 5 | 11 |
| Change on 6 months earlier[1] | -0.6 | -- | -1.5 | -- | -1.7 | -- | 0.3 | -- | 2.7 | -- | -1.2 | -- | -1.4 | -- |
| Memorandum items: | | | | | | | | | | | | | | |
| Government (July 2022) | 4.3 | 2.7 | 3.0 | 2.5 | 0.9 | 2.2 | 9.3 | 6.6 | 12.6 | 3.8 | 5.2 | 7.4 | 3.7 | 3.3 |
| Bank of Spain (June 2022) | 4.1 | 2.8 | 1.4 | 4.9 | -0.2 | 0.4 | 6.5 | 2.1 | -- | -- | -- | -- | 2.1 | 3.2 |
| EC (July 2022) | 4.0 | 2.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| IMF (July 2022) | 4.0 | 2.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OECD (June 2022) | 4.1 | 2.2 | 0.1 | 3.2 | 1.2 | 1.3 | 7.4 | 4.7 | -- | -- | -- | -- | -- | -- |

*[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 – September 2022

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

| | Exports of goods & services | | Imports of goods & services | | CPI (annual av.) | | Core CPI (annual av.) | | Wage earnings[3] | | Jobs[4] | | Unempl. (% labour force) | | C/A bal. of payments (% of GDP)[5] | | Gen. gov. bal. (% of GDP)[6] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 |
| Analistas Financieros Internacionales (AFI) | 12.3 | 1.4 | 7.5 | 0.8 | 8.4 | 4.0 | 5.0 | 4.3 | -- | -- | 3.1 | 1.0 | 13.2 | 13.3 | 0.4 | 1.1 | -5.0 | -3.8 |
| BBVA Research | 14.4 | 3.1 | 11.8 | 6.7 | 7.9 | 3.2 | 5.0 | 4.0 | 2.6 | 3.8 | 3.8 | 0.6 | 13.0 | 12.9 | -- | -- | -- | -- |
| CaixaBank Research | 10.9 | 1.6 | 5.4 | 2.2 | 8.0 | 2.6 | 4.6 | 3.0 | 3.4 | 3.4 | 3.8 | 1.7 | 13.0 | 12.6 | 0.1 | 1.3 | -5.5 | -4.8 |
| Cámara de Comercio de España | 11.7 | 4.4 | 8.4 | 4.2 | 8.4 | 3.9 | 4.8 | 4.0 | -- | -- | 2.8 | 1.4 | 13.6 | 13.2 | 1.1 | 0.6 | -5.3 | -4.8 |
| Centro de Estudios Economía de Madrid (CEEM-URJC) | 12.1 | 4.8 | 8.6 | 5.3 | 9.0 | 4.6 | 5.2 | 4.3 | -- | -- | 2.8 | 1.8 | 13.3 | 12.8 | 0.5 | 0.0 | -5.1 | -4.2 |
| Centro de Predicción Económica (CEPREDE-UAM) | 13.3 | 3.7 | 9.5 | 5.0 | 8.6 | 3.4 | -- | -- | 2.3 | 3.3 | 3.4 | 0.3 | 13.4 | 13.5 | 0.6 | 1.0 | -6.0 | -4.8 |
| CEOE | 13.6 | 5.3 | 9.7 | 5.8 | 8.8 | 3.5 | 5.0 | 3.5 | 2.1 | 2.3 | 2.9 | 1.4 | 13.0 | 12.7 | 0.2 | 0.8 | -5.2 | -4.5 |
| Equipo Económico (Ee) | 11.5 | 2.5 | 8.1 | 3.7 | 9.1 | 4.6 | 5.6 | 4.1 | 3.0 | 2.4 | 3.0 | 2.1 | 13.3 | 12.9 | 0.7 | 0.5 | -5.0 | -4.0 |
| EthiFinance Ratings | 13.6 | 2.3 | 10.0 | 2.6 | 8.6 | 4.3 | 4.2 | 3.0 | -- | -- | -- | -- | 13.6 | 13.1 | 0.5 | 0.8 | -5.0 | -4.1 |
| Funcas | 13.0 | 3.3 | 7.4 | 3.6 | 8.9 | 4.8 | 5.0 | 3.8 | 2.5 | 3.5 | 3.1 | 1.1 | 12.7 | 11.8 | 0.7 | 0.2 | -4.7 | -4.5 |
| Instituto Complutense de Análisis Económico (ICAE-UCM) | 10.4 | 5.2 | 8.1 | 6.1 | 8.7 | 3.5 | 4.8 | 3.1 | -- | -- | 3.0 | 1.6 | 13.4 | 13.0 | 0.9 | 0.7 | -5.0 | -4.7 |
| Instituto de Estudios Económicos (IEE) | 11.5 | 5.0 | 8.1 | 5.8 | 8.5 | 3.0 | 5.0 | 3.0 | 2.0 | 2.3 | 3.0 | 1.1 | 13.8 | 13.0 | 0.0 | 0.2 | -5.5 | -4.9 |
| Intermoney | 11.5 | 3.5 | 6.4 | 4.8 | 8.5 | 4.0 | 4.8 | 3.3 | -- | -- | 3.8 | 2.6 | 14.2 | 13.5 | 0.6 | -- | -5.6 | -4.8 |
| Mapfre Economics | 12.1 | 1.8 | 7.5 | 2.0 | 8.2 | 3.6 | 4.8 | 3.0 | -- | -- | 4.0 | 0.6 | 12.9 | 13.1 | 0.6 | 1.5 | -5.1 | -4.8 |
| Oxford Economics | 11.9 | 0.9 | 7.3 | 1.1 | 8.6 | 3.8 | 5.1 | 3.3 | -- | -- | -- | -- | 12.8 | 13.4 | 0.4 | 1.2 | -5.5 | -5.5 |
| Repsol | 11.7 | 7.3 | 8.1 | 5.5 | 8.9 | 2.7 | 5.0 | 3.5 | 3.5 | 2.0 | 2.5 | 1.6 | 13.3 | 14.1 | -0.5 | 0.5 | -4.5 | -4.7 |
| Santander | 12.0 | 1.2 | 9.5 | 2.9 | 9.3 | 5.0 | 4.6 | 4.3 | -- | -- | -- | -- | 13.2 | 13.6 | -- | -- | -- | -- |
| Metyis | 13.6 | 3.2 | 6.9 | 4.4 | 8.6 | 3.8 | 5.3 | 3.7 | -- | -- | 3.2 | 2.0 | 13.3 | 13.0 | 0.9 | 0.9 | -5.2 | -4.8 |
| Universidad Loyola Andalucía | 13.0 | 3.3 | 10.5 | 5.4 | 8.0 | 3.2 | 5.4 | 7.2 | -- | -- | 4.8 | 2.7 | 13.0 | 12.0 | 0.2 | 0.8 | -- | -- |
| CONSENSUS (AVERAGE) | 12.3 | 3.4 | 8.4 | 4.1 | 8.6 | 3.8 | 5.0 | 3.8 | 2.7 | 2.9 | 3.3 | 1.5 | 13.3 | 13.0 | 0.5 | 0.8 | -5.2 | -4.6 |
| Maximum | 14.4 | 7.3 | 11.8 | 6.7 | 9.3 | 5.0 | 5.6 | 7.2 | 3.5 | 3.8 | 4.8 | 2.7 | 14.2 | 14.1 | 1.1 | 1.5 | -4.5 | -3.8 |
| Minimum | 10.4 | 0.9 | 5.4 | 0.8 | 7.9 | 2.6 | 4.2 | 3.0 | 2.0 | 2.0 | 2.5 | 0.3 | 12.7 | 11.8 | -0.5 | 0.0 | -6.0 | -5.5 |
| Change on 2 months earlier[1] | 0.3 | -0.5 | 0.8 | -0.3 | 0.7 | 0.7 | 0.4 | 0.5 | 0.1 | 0.3 | -0.1 | -0.9 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 |
| - Rise[2] | 9 | 1 | 10 | 4 | 14 | 12 | 12 | 10 | 2 | 3 | 4 | 2 | 1 | 6 | 3 | 3 | 2 | 5 |
| - Drop[2] | 4 | 13 | 3 | 10 | 0 | 1 | 2 | 3 | 0 | 0 | 5 | 8 | 10 | 6 | 6 | 4 | 3 | 1 |
| Change on 6 months earlier[1] | 1.6 | -- | -0.2 | -- | 3.2 | -- | 2.2 | -- | 0.7 | -- | -0.2 | -- | -0.6 | -- | -0.2 | -- | 0.3 | -- |
| Memorandum items: | | | | | | | | | | | | | | | | | | |
| Government (July 2022) | 10.2 | 4.9 | 9.1 | 6.5 | -- | -- | -- | -- | -- | -- | 3.7 | 0.8 | 12.8 | 12.0 | -- | -- | -5.0 | -3.9 |
| Bank of Spain (June 2022) | 12.5 | 2.9 | 7.0 | 4.0 | 7.2 [7] | 2.6 [7] | 3.2 [8] | 2.2 [8] | -- | -- | 4.6 [9] | 1.5 [9] | 13.0 | 12.8 | -- | -- | -4.6 | -4.5 |
| EC (July 2022) | -- | -- | -- | -- | 8.1 [7] | 3.4 [7] | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| IMF (July 2022) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OECD (June 2022) | 13.7 | 2.5 | 7.5 | 4.8 | 8.1 [7] | 4.8 [7] | 4.5 [8] | 4.5 [8] | -- | -- | -- | -- | 13.6 | 13.9 | 1.0 | 0.1 | -5.0 | -4.2 |

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

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

[3] *Average earnings per full-time equivalent job.*

[4] *In National Accounts terms: Full-time equivalent jobs.*

[5] *Current account balance, according to Bank of Spain estimates.*

[6] *Excluding financial entities bail-out expenditures.*

[7] *Harmonized Index of Consumer Prices (HICP).*

[8] *Harmonized Index excluding energy and food.*

[9] *Hours worked.*

Table 2

## Quarterly Forecasts – September 2022

| | 22-I Q | 22-II Q | 22-III Q | 22-IV Q | 23-I Q | 23-II Q | 23-III Q | 23-IV Q |
|---|---|---|---|---|---|---|---|---|
| GDP[1] | 0.2 | 1.1 | 0.1 | -0.2 | 0.3 | 0.7 | 0.8 | 0.8 |
| Euribor 1 yr [2] | -0.24 | 0.85 | 1.64 | 1.87 | 2.08 | 2.17 | 2.23 | 2.27 |
| Government bond yield 10 yr [2] | 1.22 | 2.63 | 2.79 | 2.92 | 3.03 | 3.10 | 3.11 | 3.13 |
| ECB main refinancing operations interest rate [2] | 0.00 | 0.00 | 1.25 | 1.46 | 1.77 | 1.90 | 1.92 | 1.90 |
| ECB deposit rates [2] | -0.50 | -0.50 | 0.50 | 0.99 | 1.33 | 1.47 | 1.48 | 1.46 |
| Dollar / Euro exchange rate [2] | 1.10 | 1.06 | 1.00 | 1.00 | 1.03 | 1.03 | 1.05 | 1.06 |

*Forecasts in yellow.*
*[1] Qr-on-qr growth rates.*
*[2] End of period.*

Table 3

## CPI Forecasts – September 2022

| Year-on-year change (%) | | | | | |
|---|---|---|---|---|---|
| Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Dec-23 |
| 10.5 | 9.4 | 8.4 | 8.2 | 7.5 | 2.4 |

Table 4

## Opinions – September 2022

Number of responses

| | Currently | | | Trend for next six months | | |
|---|---|---|---|---|---|---|
| | Favourable | Neutral | Unfavourable | Improving | Unchanged | Worsening |
| International context: EU | 0 | 2 | 17 | 0 | 6 | 13 |
| International context: Non-EU | 0 | 0 | 19 | 1 | 11 | 7 |
| | **Is being** | | | **Should be** | | |
| | Restrictive | Neutral | Expansionary | Restrictive | Neutral | Expansionary |
| Fiscal policy assessment[1] | 1 | 3 | 15 | 2 | 11 | 6 |
| Monetary policy assessment[1] | 2 | 6 | 11 | 8 | 9 | 2 |

*[1] In relation to the current state of the Spanish economy.*

# Key Facts

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# Economic Indicators

Table 1

## National accounts: GDP and main expenditure components SWDA*

Forecasts in yellow

| | | GDP | Private consumption | Public consumption | Gross fixed capital formation | | | Exports | Imports | Domestic demand (a) | Net exports (a) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total | Construction | Equipment & others products | | | | |
| Chain-linked volumes. annual percentage changes | | | | | | | | | | | |
| 2015 | | 3.8 | 2.9 | 2.0 | 4.9 | 1.5 | 8.2 | 4.3 | 5.1 | 3.9 | -0.1 |
| 2016 | | 3.0 | 2.7 | 1.0 | 2.4 | 1.6 | 3.1 | 5.4 | 2.6 | 2.0 | 1.0 |
| 2017 | | 3.0 | 3.0 | 1.0 | 6.8 | 6.7 | 6.9 | 5.5 | 6.8 | 3.1 | -0.2 |
| 2018 | | 2.3 | 1.7 | 2.3 | 6.3 | 9.5 | 3.4 | 1.7 | 3.9 | 2.9 | -0.6 |
| 2019 | | 2.0 | 1.1 | 1.9 | 4.5 | 7.2 | 1.8 | 2.2 | 1.3 | 1.6 | 0.4 |
| 2020 | | -11.3 | -12.2 | 3.5 | -9.7 | -10.2 | -9.2 | -19.9 | -14.9 | -9.1 | -2.2 |
| 2021 | | 5.5 | 6.0 | 2.9 | 0.9 | -3.7 | 5.8 | 14.4 | 13.9 | 5.2 | 0.3 |
| 2022 | | 4.2 | 1.8 | 0.6 | 5.0 | 1.1 | 8.7 | 13.0 | 7.4 | 2.1 | 2.1 |
| 2023 | | 2.0 | 2.0 | 1.5 | 2.8 | 3.8 | 2.0 | 3.3 | 3.6 | 2.0 | 0.0 |
| 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 | 6.7 | 3.4 | -1.0 | 3.5 | -0.2 | 7.1 | 19.9 | 12.2 | 3.8 | 2.8 |
| | II | 6.8 | 2.4 | -2.9 | 4.9 | 4.4 | 5.3 | 23.1 | 8.8 | 1.9 | 4.9 |
| 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 | -0.2 | -1.2 | -0.3 | 3.3 | 0.0 | 6.6 | 5.2 | 1.0 | -1.8 | 1.6 |
| | II | 1.5 | 1.2 | -1.3 | 2.5 | 6.5 | -1.3 | 4.9 | 2.8 | 0.5 | 0.9 |
| | | Current prices (EUR billions) | Percentage of GDP at current prices | | | | | | | | |
| 2015 | | 1,078 | 58.5 | 19.5 | 18.0 | 8.7 | 9.3 | 33.6 | 30.6 | 97.0 | 3.0 |
| 2016 | | 1,114 | 58.2 | 19.1 | 18.0 | 8.6 | 9.4 | 33.9 | 29.9 | 96.0 | 4.0 |
| 2017 | | 1,162 | 58.3 | 18.7 | 18.7 | 9.0 | 9.7 | 35.1 | 31.5 | 96.4 | 3.6 |
| 2018 | | 1,204 | 58.1 | 18.7 | 19.4 | 9.7 | 9.7 | 35.1 | 32.4 | 97.3 | 2.7 |
| 2019 | | 1,246 | 57.4 | 18.9 | 20.0 | 10.4 | 9.7 | 34.9 | 32.0 | 97.1 | 2.9 |
| 2020 | | 1,118 | 56.1 | 22.0 | 20.4 | 10.5 | 9.8 | 30.8 | 29.3 | 98.5 | 1.5 |
| 2021 | | 1,207 | 56.2 | 21.4 | 19.8 | 10.0 | 9.8 | 34.9 | 33.4 | 98.5 | 1.5 |
| 2022 | | 1,315 | 56.4 | 20.4 | 20.3 | 9.6 | 10.7 | 38.6 | 37.0 | 98.4 | 1.6 |
| 2023 | | 1,392 | 57.1 | 20.1 | 20.3 | 9.6 | 10.7 | 39.2 | 38.0 | 98.7 | 1.3 |

**Seasonally and Working Day Adjusted.*

*(a) Contribution to GDP growth.*

*Source: INE and Funcas (Forecasts).*

**Chart 1.1 - GDP**

Percentage change

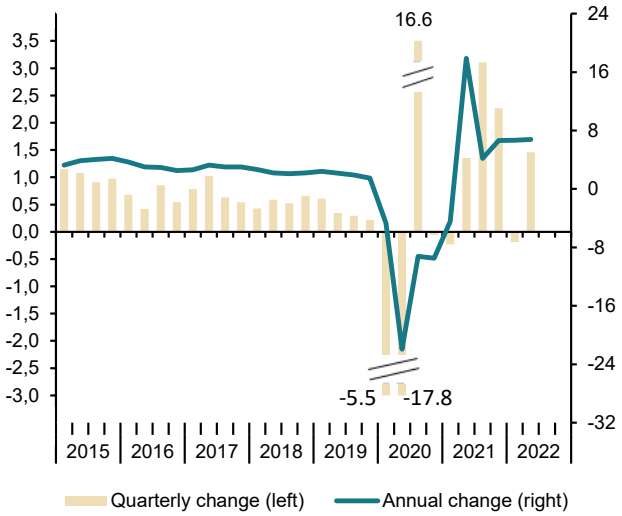



**Chart 1.2 - Contribution to GDP annual growth**

Percentage points

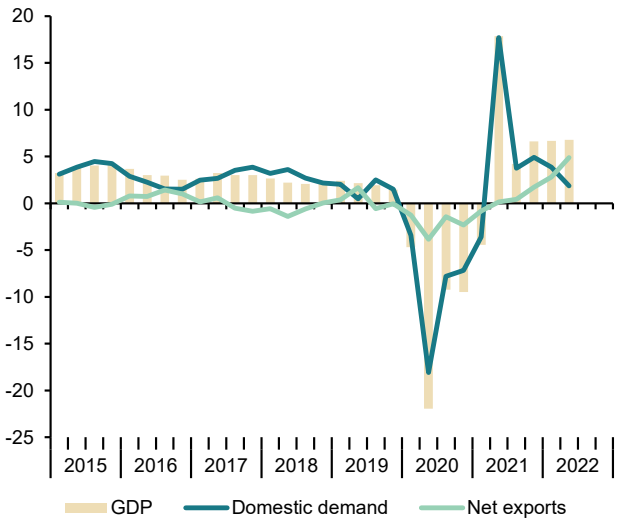



**Chart 1.3 - Final consumption**

Annual percentage change

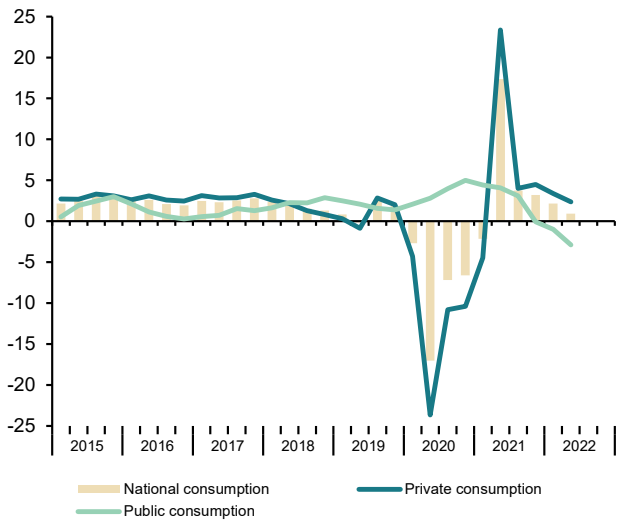



**Chart 1.4 - Gross fixed capital formation**

Annual percentage change

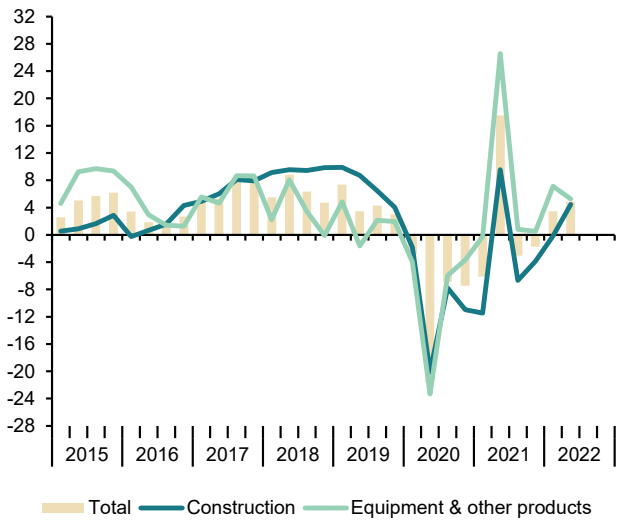


Table 2

## National accounts: Gross value added by economic activity SWDA*

| | | Gross value added at basic prices | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 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 | | | | | | | | |
| 2015 | | 3.3 | 4.7 | 3.0 | 4.6 | 5.5 | 3.1 | 1.1 | 3.8 | 9.6 |
| 2016 | | 2.8 | 4.8 | 4.1 | 2.3 | 3.9 | 2.4 | 1.4 | 2.7 | 5.2 |
| 2017 | | 3.1 | -3.7 | 4.0 | 5.7 | 2.0 | 3.3 | 2.5 | 3.5 | 1.9 |
| 2018 | | 2.3 | 7.5 | 0.0 | -1.1 | 2.3 | 2.6 | 1.6 | 2.9 | 2.1 |
| 2019 | | 2.1 | -5.9 | 1.5 | 0.5 | 4.3 | 2.3 | 1.5 | 2.6 | 1.0 |
| 2020 | | -11.4 | 4.5 | -13.1 | -15.4 | -13.2 | -11.4 | -1.4 | -14.6 | -10.8 |
| 2021 | | 5.4 | 2.1 | 6.6 | 8.9 | -3.0 | 6.0 | 1.1 | 7.8 | 6.7 |
| 2020 | III | -9.3 | 4.1 | -8.5 | -9.7 | -9.2 | -9.9 | -2.1 | -12.4 | -8.6 |
| | IV | -9.5 | 9.1 | -7.4 | -8.3 | -11.9 | -10.4 | -0.8 | -13.5 | -9.1 |
| 2021 | I | -4.6 | 4.1 | -0.2 | -0.2 | -9.6 | -5.4 | 1.6 | -7.7 | -3.1 |
| | II | 17.9 | 0.0 | 27.5 | 36.1 | 13.3 | 17.3 | 3.2 | 23.4 | 17.6 |
| | III | 4.1 | 2.5 | 0.4 | 3.0 | -8.2 | 6.0 | 1.2 | 7.7 | 5.3 |
| | IV | 6.4 | 1.8 | 3.2 | 4.0 | -4.1 | 8.2 | -1.3 | 11.7 | 8.7 |
| 2022 | I | 6.4 | 3.9 | 2.7 | 4.9 | 0.6 | 7.8 | -1.9 | 11.4 | 9.5 |
| | II | 6.7 | -1.2 | 4.5 | 5.5 | 5.1 | 7.7 | -5.5 | 12.4 | 7.2 |
| | | Chain-linked volumes. quarter-on-quarter percentage changes | | | | | | | | |
| 2020 | III | 17.0 | -2.1 | 28.7 | 36.9 | 23.2 | 15.1 | 1.2 | 21.1 | 13.6 |
| | IV | 0.0 | 4.8 | 0.5 | 1.1 | -3.3 | 0.0 | 2.0 | -0.8 | -0.5 |
| 2021 | I | -0.3 | -3.7 | -1.4 | -2.3 | -3.0 | 0.3 | -0.2 | 0.4 | 0.6 |
| | II | 1.2 | 1.2 | 0.0 | 0.7 | -1.9 | 1.7 | 0.1 | 2.2 | 3.4 |
| | III | 3.2 | 0.4 | 1.4 | 3.6 | -0.2 | 4.0 | -0.7 | 5.7 | 1.7 |
| | IV | 2.2 | 4.1 | 3.3 | 2.0 | 0.9 | 2.0 | -0.5 | 2.9 | 2.7 |
| 2022 | I | -0.4 | -1.7 | -1.9 | -1.5 | 1.8 | -0.1 | -0.8 | 0.1 | 1.3 |
| | II | 1.5 | -3.8 | 1.7 | 1.4 | 2.5 | 1.6 | -3.6 | 3.2 | 1.2 |
| | | Current prices EUR billions) | Percentage of value added at basic prices | | | | | | | |
| 2015 | | 979 | 3.0 | 16.3 | 12.4 | 5.8 | 74.9 | 18.5 | 56.4 | 10.1 |
| 2016 | | 1,011 | 3.1 | 16.2 | 12.4 | 5.9 | 74.9 | 18.4 | 56.5 | 10.2 |
| 2017 | | 1,054 | 3.1 | 16.2 | 12.5 | 5.9 | 74.8 | 18.1 | 56.7 | 10.3 |
| 2018 | | 1,089 | 3.0 | 16.0 | 12.2 | 5.9 | 75.0 | 18.1 | 56.9 | 10.5 |
| 2019 | | 1,130 | 2.7 | 15.8 | 12.0 | 6.3 | 75.2 | 18.2 | 57.0 | 10.3 |
| 2020 | | 1,020 | 3.1 | 16.0 | 12.1 | 6.1 | 74.8 | 20.3 | 54.5 | 9.6 |
| 2021 | | 1,091 | 2.9 | 16.9 | 12.8 | 5.6 | 74.6 | 19.2 | 55.4 | 10.6 |

** Seasonally and Working Day Adjusted.*

*Source: INE.*

**Chart 2.1 - GVA by sectors**

Annual percentage change

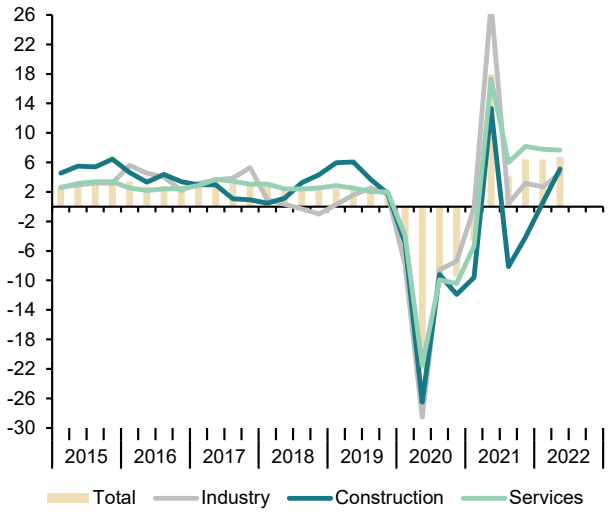



**Chart 2.2 - GVA. Industry**

Annual percentage change

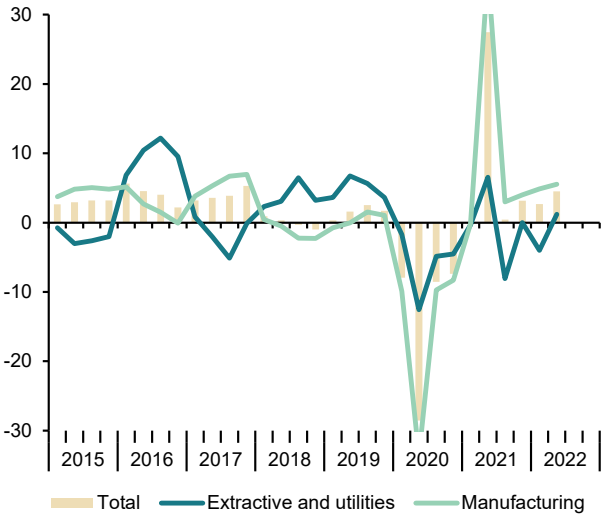



**Chart 2.3 - GVA. services**

Annual percentage change

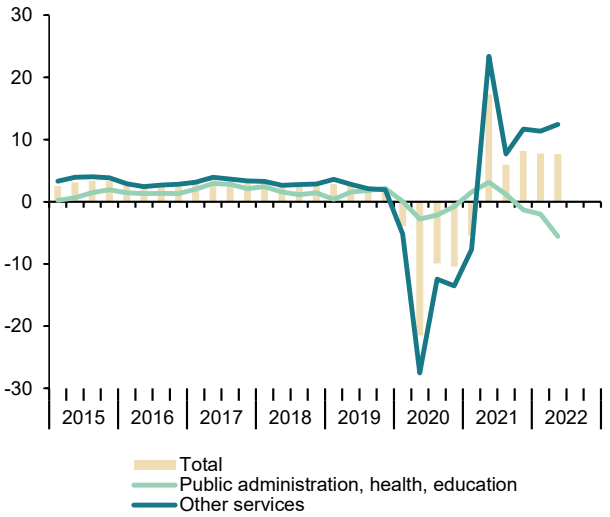



**Chart 2.4 - GVA. structure by sectors**

Percentage of value added at basic prices

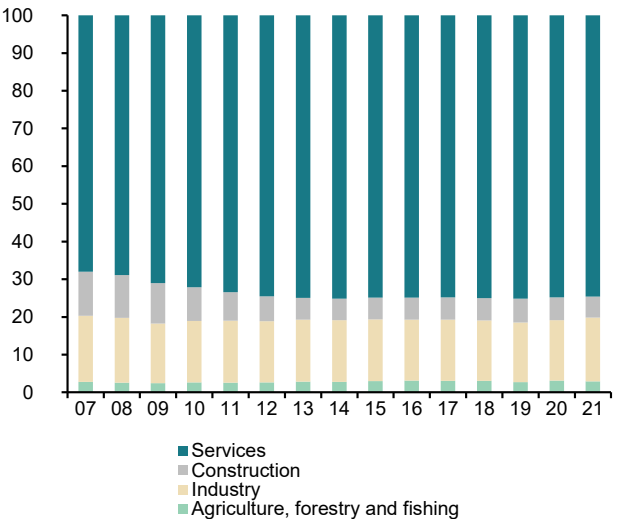


Table 3

## National accounts: Productivity and labour costs

Forecasts in yellow

| | | Total economy | | | | | | Manufacturing Industry | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | GDP. constant prices | Employment (jobs. full time equivalent) | Employment productivity | Compensation per job | Nominal unit labour cost | Real unit labour cost (a) | Gross value added. constant prices | Employment (jobs. full time equivalent) | Employment productivity | Compensation per job | Nominal unit labour cost | Real unit labour cost (a) |
| | | 1 | 2 | 3=1/2 | 4 | 5=4/3 | 6 | 7 | 8 | 9=7/8 | 10 | 11=10/9 | 12 |
| | | Indexes. 2015 = 100. SWDA | | | | | | | | | | | |
| 2015 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2016 | | 103.0 | 102.8 | 100.2 | 99.4 | 99.2 | 98.8 | 102.3 | 103.5 | 98.9 | 100.1 | 101.3 | 100.5 |
| 2017 | | 106.1 | 105.8 | 100.3 | 100.1 | 99.8 | 98.2 | 108.1 | 106.6 | 101.4 | 101.5 | 100.1 | 100.1 |
| 2018 | | 108.5 | 108.1 | 100.4 | 101.9 | 101.5 | 98.6 | 106.9 | 108.7 | 98.3 | 102.7 | 104.5 | 102.4 |
| 2019 | | 110.7 | 111.7 | 99.1 | 104.4 | 105.3 | 100.9 | 107.4 | 110.6 | 97.1 | 104.3 | 107.4 | 103.3 |
| 2020 | | 98.1 | 104.0 | 94.3 | 106.9 | 113.3 | 107.2 | 90.8 | 105.7 | 85.9 | 105.3 | 122.6 | 109.7 |
| 2021 | | 103.6 | 110.9 | 93.4 | 106.2 | 113.7 | 105.2 | 98.9 | 107.7 | 91.8 | 105.7 | 115.1 | 99.6 |
| 2022 | | 107.9 | 114.4 | 94.4 | 108.8 | 115.3 | 101.9 | -- | -- | -- | -- | -- | -- |
| 2023 | | 110.1 | 115.6 | 95.2 | 112.6 | 118.3 | 100.7 | -- | -- | -- | -- | -- | -- |
| 2020 | III | 100.7 | 106.0 | 95.0 | 107.1 | 112.8 | 106.6 | 97.4 | 105.6 | 92.2 | 107.2 | 116.2 | 104.4 |
| | IV | 100.6 | 107.3 | 93.7 | 106.7 | 113.8 | 106.9 | 98.4 | 108.0 | 91.2 | 105.9 | 116.2 | 103.9 |
| 2021 | I | 100.4 | 108.0 | 92.9 | 106.4 | 114.5 | 107.1 | 96.2 | 105.7 | 91.0 | 102.3 | 112.4 | 98.5 |
| | II | 101.7 | 109.1 | 93.2 | 105.4 | 113.1 | 105.9 | 96.9 | 107.9 | 89.8 | 105.2 | 117.2 | 102.6 |
| | III | 104.9 | 112.7 | 93.0 | 106.5 | 114.5 | 105.9 | 100.3 | 107.4 | 93.4 | 109.5 | 117.2 | 100.6 |
| | IV | 107.3 | 113.8 | 94.3 | 106.3 | 112.7 | 102.1 | 102.4 | 110.0 | 93.0 | 105.8 | 113.8 | 96.9 |
| 2022 | I | 107.1 | 113.7 | 94.2 | 106.2 | 112.8 | 102.2 | 100.9 | 108.0 | 93.4 | 102.5 | 109.7 | 92.2 |
| | II | 108.6 | 114.8 | 94.6 | 107.3 | 113.4 | 102.5 | 102.2 | 111.9 | 91.3 | 106.2 | 116.3 | 95.7 |
| | | Annual percentage changes | | | | | | | | | | | |
| 2015 | | 3.8 | 3.2 | 0.7 | 0.6 | -0.1 | -0.6 | 4.6 | 2.4 | 2.2 | -0.7 | -2.9 | -2.6 |
| 2016 | | 3.0 | 2.8 | 0.2 | -0.6 | -0.8 | -1.2 | 2.3 | 3.5 | -1.1 | 0.1 | 1.3 | 0.5 |
| 2017 | | 3.0 | 2.9 | 0.1 | 0.7 | 0.6 | -0.7 | 5.7 | 3.0 | 2.6 | 1.4 | -1.1 | -0.4 |
| 2018 | | 2.3 | 2.2 | 0.1 | 1.8 | 1.7 | 0.5 | -1.1 | 2.0 | -3.1 | 1.1 | 4.3 | 2.3 |
| 2019 | | 2.0 | 3.3 | -1.3 | 2.4 | 3.8 | 2.3 | 0.5 | 1.7 | -1.2 | 1.6 | 2.8 | 0.8 |
| 2020 | | -11.3 | -6.8 | -4.8 | 2.4 | 7.6 | 6.3 | -15.4 | -4.4 | -11.5 | 1.0 | 14.1 | 6.2 |
| 2021 | | 5.5 | 6.6 | -1.0 | -0.7 | 0.3 | -1.9 | 8.9 | 1.9 | 6.9 | 0.4 | -6.1 | -9.2 |
| 2022 | | 4.2 | 3.1 | 1.1 | 2.5 | 1.4 | -3.2 | -- | -- | -- | -- | -- | -- |
| 2023 | | 2.0 | 1.1 | 0.9 | 3.5 | 2.6 | -1.1 | -- | -- | -- | -- | -- | -- |
| 2020 | III | -9.2 | -5.1 | -4.3 | 2.2 | 6.7 | 5.2 | -9.7 | -4.9 | -5.1 | 2.4 | 7.8 | 0.5 |
| | IV | -9.5 | -4.7 | -5.0 | 1.9 | 7.3 | 6.0 | -8.3 | -2.7 | -5.8 | 1.3 | 7.5 | 1.5 |
| 2021 | I | -4.4 | -2.7 | -1.7 | 1.6 | 3.3 | 1.5 | -0.2 | -6.0 | 6.2 | -1.7 | -7.5 | -14.0 |
| | II | 17.9 | 18.9 | -0.9 | -3.7 | -2.8 | -4.1 | 36.1 | 11.3 | 22.2 | 1.0 | -17.4 | -14.7 |
| | III | 4.2 | 6.4 | -2.0 | -0.5 | 1.5 | -0.6 | 3.0 | 1.6 | 1.3 | 2.2 | 0.8 | -3.6 |
| | IV | 6.6 | 6.0 | 0.6 | -0.3 | -0.9 | -4.5 | 4.0 | 1.9 | 2.0 | -0.1 | -2.1 | -6.8 |
| 2022 | I | 6.7 | 5.3 | 1.3 | -0.1 | -1.5 | -4.6 | 4.9 | 2.2 | 2.6 | 0.2 | -2.4 | -6.4 |
| | II | 6.8 | 5.2 | 1.5 | 1.8 | 0.3 | -3.2 | 5.5 | 3.8 | 1.7 | 0.9 | -0.8 | -6.8 |

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

*Source: INE and Funcas (Forecasts).*

**Chart 3.1 - Nominal ULC, total economy**

Index. 2000=100

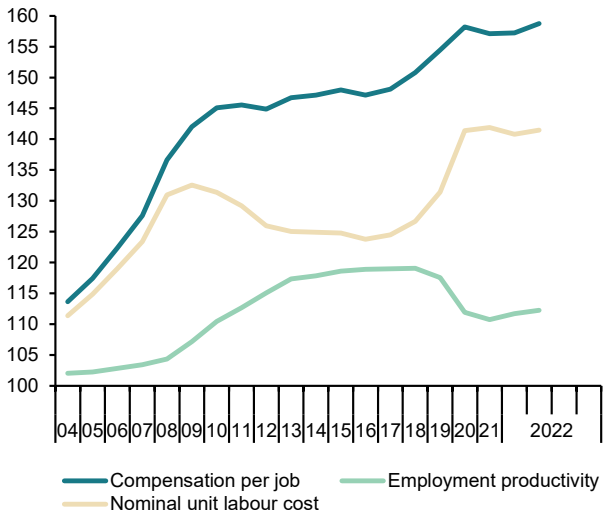
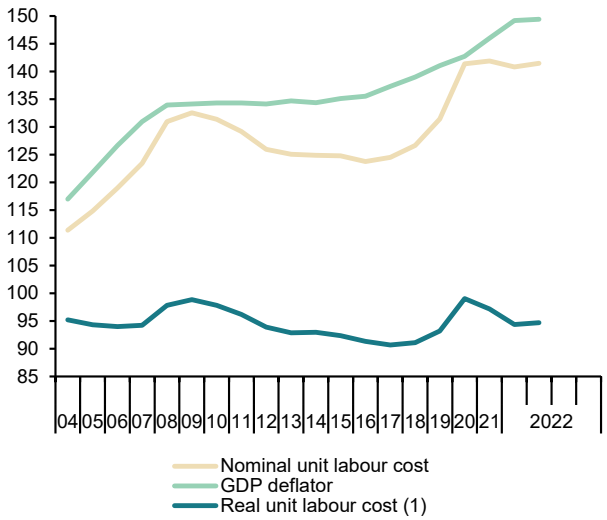



**Chart 3.2 - Real ULC, total economy**

Index. 2000=100




*(1) Nominal ULC deflated by GDP deflator.*

**Chart 3.3 - Nominal ULC, manufacturing industry**

Index. 2000=100

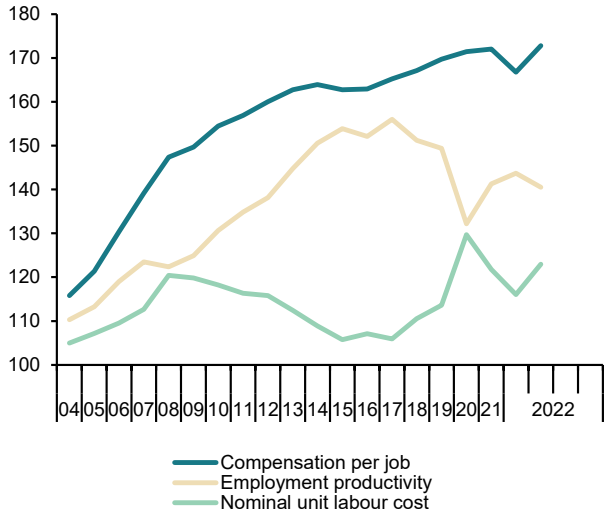
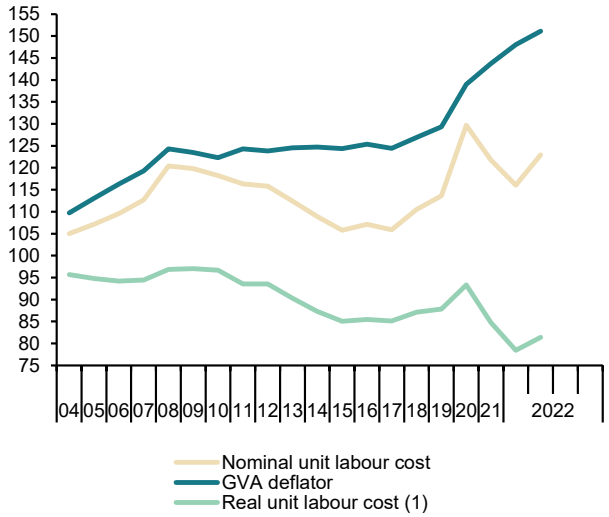



**Chart 3.4 - Real ULC, manufacturing industry**

Index. 2000=100




*(1) Nominal ULC deflated by manufacturing GVA deflator.*

Table 4

## National accounts: National income. distribution and disposition

Forecasts in yellow

| | | Gross domestic product | 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 | | | | | |
| 2015 | | 1,078.1 | 492.9 | 473.1 | 1,067.2 | 840.6 | 226.5 | 204.7 | 45.7 | 43.9 | 21.0 | 19.0 | 2.0 | 2.7 |
| 2016 | | 1,114.4 | 503.7 | 496.4 | 1,105.4 | 861.1 | 244.2 | 208.9 | 45.2 | 44.5 | 21.9 | 18.7 | 3.2 | 3.4 |
| 2017 | | 1,162.5 | 523.7 | 519.0 | 1,152.8 | 895.1 | 257.7 | 225.5 | 45.0 | 44.6 | 22.2 | 19.4 | 2.8 | 3.0 |
| 2018 | | 1,203.9 | 545.7 | 532.0 | 1,193.8 | 924.8 | 269.0 | 246.4 | 45.3 | 44.2 | 22.3 | 20.5 | 1.9 | 2.4 |
| 2019 | | 1,245.5 | 579.4 | 538.5 | 1,234.8 | 949.5 | 285.3 | 259.4 | 46.5 | 43.2 | 22.9 | 20.8 | 2.1 | 2.4 |
| 2020 | | 1,118.0 | 555.7 | 460.6 | 1,106.9 | 873.6 | 233.2 | 228.1 | 49.7 | 41.2 | 20.9 | 20.4 | 0.5 | 1.0 |
| 2021 | | 1,206.8 | 585.0 | 497.1 | 1,200.2 | 937.4 | 262.8 | 251.5 | 48.5 | 41.2 | 21.8 | 20.8 | 0.9 | 1.9 |
| 2022 | | 1,315.4 | 608.1 | 570.2 | 1,304.4 | 1,010.6 | 293.8 | 283.9 | 46.2 | 43.3 | 22.3 | 21.6 | 0.7 | 2.9 |
| 2023 | | 1,391.9 | 639.0 | 606.5 | 1,380.5 | 1,078.1 | 302.5 | 300.2 | 45.9 | 43.6 | 21.7 | 21.6 | 0.2 | 1.9 |
| 2020 | III | 1,144.3 | 560.3 | 479.8 | 1,137.3 | 889.8 | 247.5 | 235.4 | 49.0 | 41.9 | 21.6 | 20.6 | 1.1 | 1.4 |
| | IV | 1,118.0 | 555.7 | 460.4 | 1,110.7 | 873.6 | 237.1 | 228.1 | 49.7 | 41.2 | 21.2 | 20.4 | 0.8 | 1.2 |
| 2021 | I | 1,109.9 | 553.1 | 456.0 | 1,100.6 | 870.0 | 230.6 | 226.8 | 49.8 | 41.1 | 20.8 | 20.4 | 0.3 | 1.2 |
| | II | 1,157.6 | 568.8 | 473.9 | 1,149.5 | 906.7 | 242.8 | 237.0 | 49.1 | 40.9 | 21.0 | 20.5 | 0.5 | 1.3 |
| | III | 1,176.1 | 577.0 | 477.9 | 1,167.6 | 919.8 | 247.8 | 240.9 | 49.1 | 40.6 | 21.1 | 20.5 | 0.6 | 1.6 |
| | IV | 1,206.8 | 585.0 | 496.3 | 1,200.2 | 937.4 | 262.8 | 251.5 | 48.5 | 41.1 | 21.8 | 20.8 | 0.9 | 1.9 |
| 2022 | I | 1,236.3 | 593.7 | 510.5 | 1,232.2 | 956.0 | 276.2 | 258.7 | 48.0 | 41.3 | 22.3 | 20.9 | 1.4 | 1.6 |
| | II | 1,267.3 | 604.6 | 525.4 | -- | 975.3 | -- | 266.7 | 47.7 | 41.5 | -- | 21.0 | -- | -- |
| | | Annual percentage changes | | | | | | | Difference from one year ago | | | | | |
| 2015 | | 4.4 | 4.1 | 3.8 | 4.8 | 3.0 | 12.0 | 10.8 | -0.1 | -0.3 | 1.4 | 1.1 | 0.3 | -1.8 |
| 2016 | | 3.4 | 2.2 | 4.9 | 3.6 | 2.4 | 7.8 | 2.0 | -0.5 | 0.7 | 0.9 | -0.2 | 1.1 | 0.7 |
| 2017 | | 4.3 | 4.0 | 4.6 | 4.3 | 3.9 | 5.5 | 8.0 | -0.2 | 0.1 | 0.3 | 0.7 | -0.4 | -0.4 |
| 2018 | | 3.6 | 4.2 | 2.5 | 3.6 | 3.3 | 4.4 | 9.3 | 0.3 | -0.5 | 0.2 | 1.1 | -0.9 | -0.7 |
| 2019 | | 3.5 | 6.2 | 1.2 | 3.4 | 2.7 | 6.1 | 5.3 | 1.2 | -1.0 | 0.6 | 0.4 | 0.2 | 0.1 |
| 2020 | | -10.2 | -4.1 | -14.5 | -10.4 | -8.0 | -18.3 | -12.1 | 3.2 | -2.0 | -2.0 | -0.4 | -1.6 | -1.4 |
| 2021 | | 7.9 | 5.3 | 7.9 | 8.4 | 7.3 | 12.7 | 10.3 | -1.2 | 0.0 | 0.9 | 0.4 | 0.5 | 0.9 |
| 2022 | | 9.0 | 4.0 | 14.7 | 8.7 | 7.8 | 11.8 | 12.9 | -2.2 | 2.2 | 0.6 | 0.7 | -0.2 | 1.0 |
| 2023 | | 5.8 | 5.1 | 6.4 | 5.8 | 6.7 | 3.0 | 5.7 | -0.3 | 0.2 | -0.6 | 0.0 | -0.6 | -1.0 |
| 2020 | III | -7.5 | -2.0 | -10.6 | 4.6 | -5.5 | 70.1 | 13.0 | 2.7 | -1.5 | 9.9 | 3.7 | 6.1 | -1.2 |
| | IV | -10.2 | -4.1 | -14.5 | 1.3 | -8.0 | 61.6 | 9.5 | 3.2 | -2.1 | 9.4 | 3.7 | 5.7 | -1.5 |
| 2021 | I | -10.0 | -5.1 | -13.3 | -10.2 | -8.0 | -17.6 | -11.8 | 2.6 | -1.5 | -1.9 | -0.4 | -1.5 | -1.4 |
| | II | -1.0 | 0.6 | -4.0 | -1.0 | 0.0 | -4.7 | -1.8 | 0.8 | -1.3 | -0.8 | -0.2 | -0.7 | -0.7 |
| | III | 2.8 | 3.0 | -0.4 | 2.7 | 3.4 | 0.1 | 2.3 | 0.1 | -1.3 | -0.6 | -0.1 | -0.5 | 0.2 |
| | IV | 7.9 | 5.3 | 7.8 | 8.1 | 7.3 | 10.8 | 10.3 | -1.2 | -0.1 | 0.6 | 0.4 | 0.1 | 0.7 |
| 2022 | I | 11.4 | 7.3 | 12.0 | 12.0 | 9.9 | 19.8 | 14.1 | -1.8 | 0.2 | 1.6 | 0.5 | 1.1 | 0.4 |
| | II | 9.5 | 6.3 | 10.9 | -- | 7.6 | -- | 12.5 | -1.4 | 0.5 | -- | 0.6 | -- | -- |

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

*Source: INE and Funcas (Forecasts).*

**Chart 4.1 - National income, consumption and saving**

EUR Billions. 4-quarter cumulated

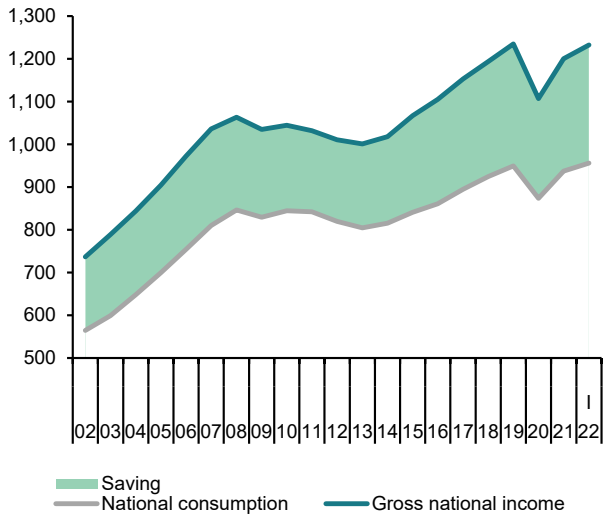



**Chart 4.2 - National income, consumption and saving rate**

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

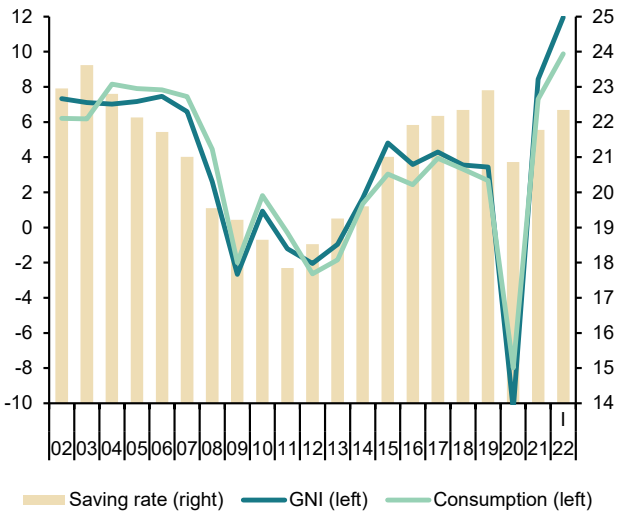



**Chart 4.3 - Components of National Income**

Percentage of GDP, 4-quarter moving averages

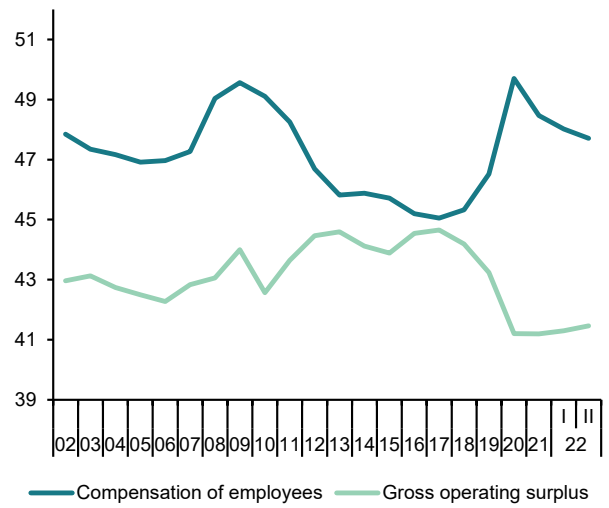



**Chart 4.4 - Saving. Investment and Current Account Balance**

Percentage of GDP, 4-quarter moving averages

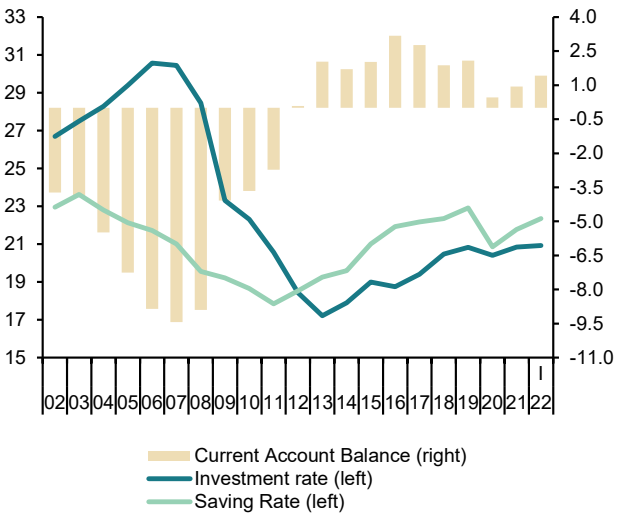


Table 5

## National accounts: Household and non-financial corporations accounts

Forecasts in yellow

| | | Households | | | | | | | Non-financial corporations | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Gross disposable income (GDI) | Final consumption expenditure | Gross saving | Gross capital formation | Saving rate | Gross capital formation | Net lending or borrowing | Gross operating surplus | Gross saving | Gross capital formation | Saving rate | Gross capital formation | Net lending or borrowing |
| | | EUR Billions. 4-quarter cumulated operations | | | | Percentage of GDI | Percentage of GDP | | EUR Billions. 4-quarter cumulated operations | | | Percentage of GDP | | |
| 2015 | | 682.2 | 630.2 | 49.0 | 30.5 | 7.2 | 2.8 | 1.7 | 241.0 | 185.1 | 140.4 | 17.2 | 13.0 | 4.4 |
| 2016 | | 700.6 | 648.3 | 49.2 | 31.8 | 7.0 | 2.9 | 1.4 | 255.3 | 196.2 | 149.2 | 17.6 | 13.4 | 4.4 |
| 2017 | | 722.9 | 678.1 | 41.8 | 36.8 | 5.8 | 3.2 | 0.2 | 267.0 | 200.8 | 160.6 | 17.3 | 13.8 | 3.6 |
| 2018 | | 743.6 | 699.5 | 41.3 | 40.7 | 5.5 | 3.4 | -0.1 | 271.2 | 200.4 | 177.2 | 16.7 | 14.7 | 2.1 |
| 2019 | | 780.9 | 713.6 | 64.5 | 42.0 | 8.3 | 3.4 | 1.7 | 274.4 | 203.0 | 189.2 | 16.3 | 15.2 | 1.3 |
| 2020 | | 742.5 | 628.0 | 110.7 | 41.2 | 14.9 | 3.7 | 6.1 | 224.6 | 180.7 | 154.7 | 16.1 | 13.8 | 2.8 |
| 2021 | | 758.7 | 669.7 | 86.5 | 69.6 | 11.4 | 5.8 | 1.6 | 250.4 | 192.6 | 153.3 | 16.0 | 12.7 | 3.9 |
| 2022 | | 804.2 | 742.0 | 59.7 | 55.6 | 7.4 | 4.2 | 0.2 | 277.0 | 207.2 | 183.7 | 15.8 | 14.0 | 3.0 |
| 2023 | | 854.6 | 798.8 | 53.4 | 50.1 | 6.3 | 3.6 | 0.2 | 296.1 | 220.2 | 205.7 | 15.8 | 14.7 | 2.0 |
| 2020 | II | 758.5 | 662.0 | 93.6 | 40.1 | 12.3 | 3.4 | 4.4 | 242.9 | 191.7 | 169.8 | 16.4 | 14.5 | 2.0 |
| | III | 753.8 | 648.4 | 102.0 | 41.4 | 13.5 | 3.6 | 5.2 | 234.9 | 184.1 | 162.1 | 16.1 | 14.1 | 2.1 |
| | IV | 742.5 | 628.0 | 110.7 | 41.2 | 14.9 | 3.7 | 6.1 | 224.6 | 180.7 | 154.7 | 16.1 | 13.8 | 2.8 |
| 2021 | I | 740.7 | 616.1 | 120.9 | 46.1 | 16.3 | 4.1 | 6.6 | 222.6 | 178.3 | 152.5 | 16.0 | 13.7 | 2.9 |
| | II | 750.4 | 648.6 | 97.7 | 52.5 | 13.0 | 4.5 | 3.8 | 236.8 | 185.3 | 156.5 | 16.0 | 13.5 | 3.0 |
| | III | 752.0 | 654.3 | 94.9 | 58.6 | 12.6 | 5.0 | 3.1 | 237.8 | 186.3 | 152.2 | 15.8 | 12.9 | 3.4 |
| | IV | 758.7 | 669.7 | 86.5 | 69.6 | 11.4 | 5.8 | 1.6 | 250.4 | 192.6 | 153.3 | 16.0 | 12.7 | 3.9 |
| 2022 | I | 765.3 | 692.0 | 70.6 | 74.4 | 9.2 | 6.0 | -0.1 | 260.2 | 201.9 | 154.9 | 16.3 | 12.5 | 4.4 |
| | | Annual percentage changes | | | | Difference from one year ago | | | Annual percentage changes | | | Difference from one year ago | | |
| 2015 | | 4.0 | 2.9 | 18.1 | 1.1 | 0.9 | -0.1 | 0.7 | 5.4 | 7.8 | 10.0 | 0.5 | 0.7 | -0.3 |
| 2016 | | 2.7 | 2.9 | 0.5 | 4.2 | -0.2 | 0.0 | -0.3 | 5.9 | 6.0 | 6.2 | 0.4 | 0.4 | 0.0 |
| 2017 | | 3.2 | 4.6 | -15.2 | 15.7 | -1.3 | 0.3 | -1.2 | 4.6 | 2.3 | 7.7 | -0.3 | 0.4 | -0.8 |
| 2018 | | 2.9 | 3.2 | -1.2 | 10.6 | -0.2 | 0.2 | -0.3 | 1.6 | -0.2 | 10.3 | -0.6 | 0.9 | -1.5 |
| 2019 | | 5.0 | 2.0 | 56.4 | 3.3 | 2.7 | 0.0 | 1.8 | 1.2 | 1.3 | 6.7 | -0.3 | 0.5 | -0.8 |
| 2020 | | -4.9 | -12.0 | 71.6 | -1.9 | 6.6 | 0.3 | 4.5 | -18.2 | -11.0 | -18.2 | -0.2 | -1.4 | 1.4 |
| 2021 | | 2.2 | 6.6 | -21.8 | 68.7 | -3.5 | 2.1 | -4.5 | 11.5 | 6.6 | -0.9 | -0.1 | -1.1 | 1.1 |
| 2022 | | 6.0 | 10.8 | -31.0 | -20.0 | -4.0 | -1.5 | -1.4 | 10.6 | 7.6 | 19.8 | -0.2 | 1.2 | -0.9 |
| 2023 | | 6.3 | 7.6 | -10.5 | -10.0 | -1.2 | -0.6 | -0.1 | 6.9 | 6.3 | 12.0 | 0.0 | 0.8 | -1.0 |
| 2020 | II | -1.0 | -6.3 | 62.6 | -3.3 | 4.8 | 0.0 | 3.3 | -10.9 | -3.7 | -8.7 | 0.1 | -0.7 | 0.7 |
| | III | -2.5 | -8.7 | 71.0 | -1.2 | 5.8 | 0.2 | 3.9 | -13.8 | -7.9 | -13.4 | -0.1 | -1.0 | 0.8 |
| | IV | -4.9 | -12.0 | 71.6 | -1.9 | 6.6 | 0.3 | 4.5 | -18.2 | -11.0 | -18.2 | -0.2 | -1.4 | 1.4 |
| 2021 | I | -5.3 | -12.5 | 60.3 | 8.4 | 6.7 | 0.7 | 4.1 | -15.6 | -8.0 | -17.1 | 0.3 | -1.2 | 1.9 |
| | II | -1.1 | -2.0 | 4.3 | 31.2 | 0.7 | 1.1 | -0.7 | -2.5 | -3.3 | -7.8 | -0.4 | -1.0 | 1.0 |
| | III | -0.2 | 0.9 | -6.9 | 41.6 | -0.9 | 1.4 | -2.1 | 1.2 | 1.2 | -6.1 | -0.2 | -1.2 | 1.4 |
| | IV | 2.2 | 6.6 | -21.8 | 68.7 | -3.5 | 2.1 | -4.5 | 11.5 | 6.6 | -0.9 | -0.1 | -1.1 | 1.1 |
| 2022 | I | 3.3 | 12.3 | -41.6 | 61.2 | -7.1 | 1.9 | -6.8 | 16.9 | 13.3 | 1.6 | 0.3 | -1.2 | 1.5 |

*Source: INE and Funcas (Forecasts).*

**Chart 5.1 - Households: Net lending or borrowing**

Percentage of GDP, 4-quarter moving averages

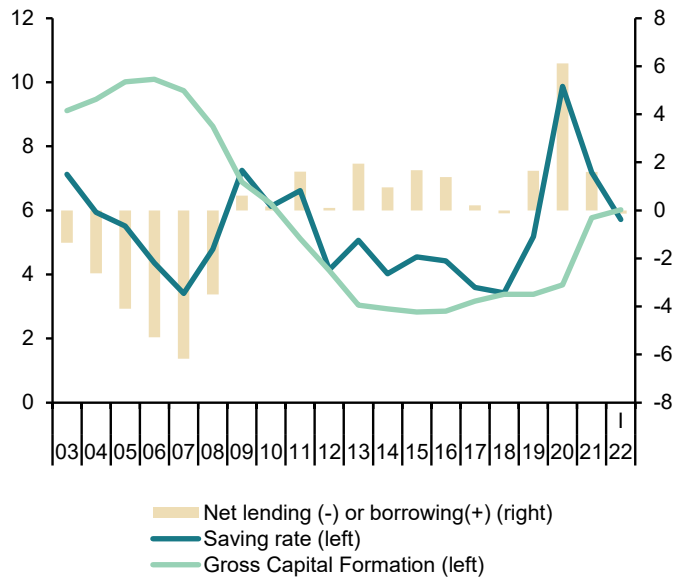



**Chart 5.2 - Non-financial corporations: Net lending or borrowing**

Percentage of GDP, 4-quarter moving averages

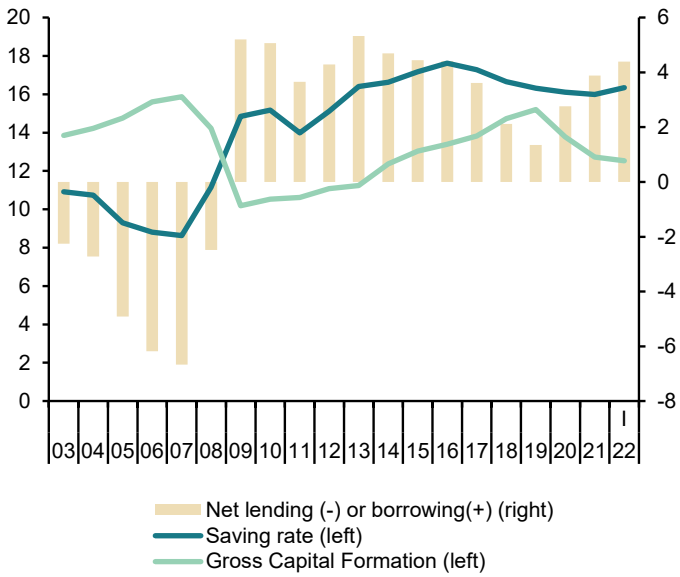


Table 6

## National accounts: Public revenue. expenditure and deficit

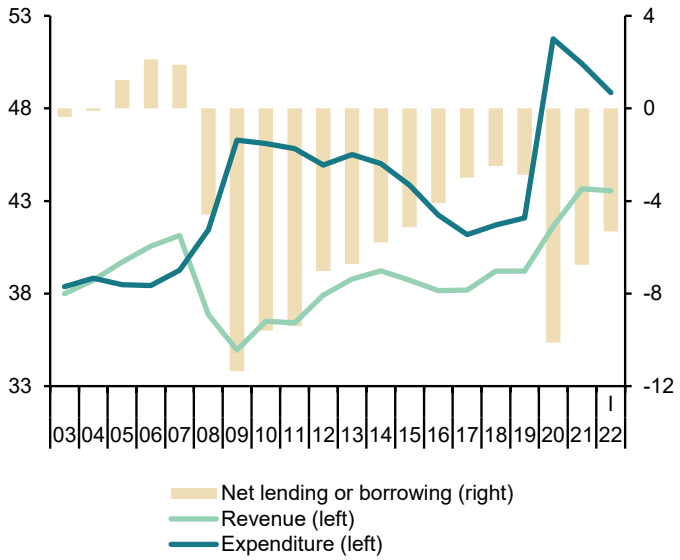
Forecasts in yellow

| | | Non financial revenue | | | | | Non financial expenditures | | | | | | | Net lending(+)/ net borrowing(-) | Net lending(+)/ net borrowing (-) excluding financial entities bail-out expenditures |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Taxes on production and imports | Taxes on income and wealth | Social contributions | Capital and other revenue | Total | Compensation of employees | Intermediate consumption | Interests | Social benefits and social transfers in kind | Gross capital formation and other capital expenditure | Other expenditure | Total | | |
| | | 1 | 2 | 3 | 4 | 5=1+2+3+4 | 6 | 7 | 8 | 9 | 10 | 11 | 12=6+7+8+9+10+11 | 13=5-12 | 14 |
| | | EUR Billions. 4-quarter cumulated operations | | | | | | | | | | | | | |
| 2015 | | 126.4 | 107.1 | 131.5 | 52.5 | 417.6 | 119.2 | 59.0 | 32.8 | 198.6 | 36.9 | 28.3 | 474.8 | -57.2 | -55.2 |
| 2016 | | 128.9 | 110.0 | 135.6 | 50.8 | 425.3 | 121.5 | 58.7 | 30.7 | 203.0 | 30.8 | 28.4 | 473.1 | -47.9 | -45.6 |
| 2017 | | 135.1 | 116.9 | 142.4 | 49.5 | 444.0 | 123.5 | 59.9 | 29.3 | 207.4 | 31.8 | 28.1 | 480.0 | -36.1 | -34.8 |
| 2018 | | 141.2 | 127.3 | 149.5 | 54.2 | 472.1 | 127.6 | 62.1 | 29.3 | 216.6 | 37.9 | 29.8 | 503.3 | -31.2 | -30.0 |
| 2019 | | 143.0 | 129.1 | 160.7 | 55.7 | 488.5 | 134.7 | 64.7 | 28.4 | 229.6 | 37.7 | 31.6 | 526.6 | -38.1 | -35.7 |
| 2020 | | 126.5 | 125.3 | 162.2 | 51.5 | 465.5 | 140.5 | 66.5 | 25.2 | 262.2 | 44.8 | 41.5 | 580.7 | -115.2 | -113.1 |
| 2021 | | 146.2 | 143.5 | 172.5 | 64.8 | 527.0 | 147.4 | 71.3 | 26.1 | 264.0 | 58.8 | 42.2 | 609.8 | -82.8 | -81.5 |
| 2022 | | 157.8 | 148.3 | 177.9 | 78.4 | 562.4 | 150.3 | 75.2 | 27.2 | 272.2 | 60.2 | 38.8 | 623.9 | -61.5 | -61.5 |
| 2023 | | 166.9 | 156.4 | 187.0 | 75.9 | 586.2 | 153.3 | 79.1 | 31.3 | 292.9 | 57.0 | 34.3 | 648.1 | -61.8 | -61.8 |
| 2020 | II | 131.9 | 126.6 | 161.6 | 53.7 | 473.8 | 137.0 | 65.0 | 26.6 | 250.3 | 40.4 | 37.5 | 556.8 | -83.1 | -80.9 |
| | III | 128.4 | 126.7 | 161.5 | 52.4 | 469.0 | 138.4 | 65.4 | 26.0 | 255.9 | 40.8 | 38.8 | 565.4 | -96.4 | -94.2 |
| | IV | 126.5 | 125.3 | 162.2 | 51.5 | 465.5 | 140.5 | 66.5 | 25.2 | 262.2 | 44.8 | 41.5 | 580.7 | -115.2 | -113.1 |
| 2021 | I | 126.5 | 126.1 | 164.1 | 50.4 | 467.1 | 142.4 | 67.7 | 25.4 | 267.4 | 46.7 | 43.0 | 592.6 | -125.5 | -123.3 |
| | II | 136.3 | 132.2 | 166.5 | 53.8 | 488.9 | 144.8 | 68.9 | 25.5 | 260.8 | 46.9 | 39.9 | 586.8 | -97.9 | -96.2 |
| | III | 141.7 | 133.6 | 169.7 | 58.7 | 503.8 | 146.4 | 70.1 | 25.3 | 261.6 | 52.3 | 40.3 | 595.9 | -92.1 | -90.8 |
| | IV | 146.2 | 143.5 | 172.5 | 64.8 | 527.0 | 147.4 | 71.3 | 26.1 | 264.0 | 58.8 | 42.2 | 609.8 | -82.8 | -81.5 |
| 2022 | I | 152.7 | 147.3 | 174.1 | 65.3 | 539.4 | 148.6 | 72.7 | 26.4 | 263.5 | 53.7 | 41.4 | 606.2 | -66.9 | -65.7 |
| | | Percentage of GDP. 4-quarter cumulated operations | | | | | | | | | | | | | |
| 2015 | | 11.7 | 9.9 | 12.2 | 4.9 | 38.7 | 11.1 | 5.5 | 3.0 | 18.4 | 3.4 | 2.6 | 44.0 | -5.3 | -5.1 |
| 2016 | | 11.6 | 9.9 | 12.2 | 4.6 | 38.2 | 10.9 | 5.3 | 2.8 | 18.2 | 2.8 | 2.5 | 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 | 4.6 | 41.6 | 12.6 | 5.9 | 2.3 | 23.5 | 4.0 | 3.7 | 51.9 | -10.3 | -10.1 |
| 2021 | | 12.1 | 11.9 | 14.3 | 5.4 | 43.7 | 12.2 | 5.9 | 2.2 | 21.9 | 4.9 | 3.5 | 50.5 | -6.9 | -6.8 |
| 2022 | | 12.0 | 11.3 | 13.5 | 6.0 | 42.8 | 11.4 | 5.7 | 2.1 | 20.7 | 4.6 | 2.9 | 47.4 | -4.7 | -4.7 |
| 2023 | | 12.0 | 11.2 | 13.4 | 5.5 | 42.1 | 11.0 | 5.7 | 2.2 | 21.0 | 4.1 | 2.5 | 46.6 | -4.5 | -4.5 |
| 2020 | II | 11.3 | 10.8 | 13.8 | 4.6 | 40.5 | 11.7 | 5.6 | 2.3 | 21.4 | 3.5 | 3.2 | 47.6 | -7.1 | -6.9 |
| | III | 11.2 | 11.1 | 14.1 | 4.6 | 41.0 | 12.1 | 5.7 | 2.3 | 22.4 | 3.6 | 3.4 | 49.4 | -8.4 | -8.2 |
| | IV | 11.3 | 11.2 | 14.5 | 4.6 | 41.6 | 12.6 | 5.9 | 2.3 | 23.5 | 4.0 | 3.7 | 51.9 | -10.3 | -10.1 |
| 2021 | I | 11.4 | 11.4 | 14.8 | 4.6 | 42.2 | 12.9 | 6.1 | 2.3 | 24.1 | 4.2 | 3.9 | 53.5 | -11.3 | -11.1 |
| | II | 11.8 | 11.4 | 14.4 | 4.7 | 42.2 | 12.5 | 6.0 | 2.2 | 22.5 | 4.1 | 3.4 | 50.7 | -8.5 | -8.3 |
| | III | 12.1 | 11.4 | 14.4 | 5.0 | 42.9 | 12.5 | 6.0 | 2.2 | 22.3 | 4.4 | 3.4 | 50.7 | -7.8 | -7.7 |
| | IV | 12.1 | 11.9 | 14.3 | 5.4 | 43.7 | 12.2 | 5.9 | 2.2 | 21.9 | 4.9 | 3.5 | 50.5 | -6.9 | -6.8 |
| 2022 | I | 12.3 | 11.9 | 14.1 | 5.3 | 43.5 | 12.0 | 5.9 | 2.1 | 21.3 | 4.3 | 3.3 | 48.9 | -5.4 | -5.3 |

*Source: IGAE and Funcas (Forecasts).*

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

Percentage of GDP, 4-quarter moving averages




*(a) Excluding financial entities bail-out expenditures.*

**Chart 6.2 - Public sector: Main expenditures**

Percentage of GDP, 4-quarter moving averages

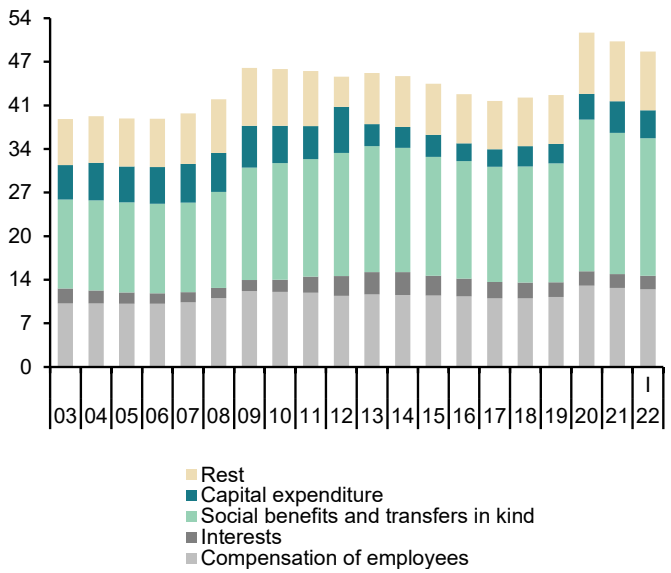


Table 7

## Public sector balances. by level of Government

Forecasts in yellow

| | | Net lending (+)/ net borrowing (-) (a) | | | | | Debt | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Central Government | Regional Governments | Local Governments | Social Security | TOTAL Government | Central Government | Regional Governments | Local Governments | Social Security | Total Government (consolidated) |
| | | EUR Billions. 4-quarter cumulated operations | | | | | EUR Billions. end of period | | | | |
| 2015 | | -28.2 | -18.9 | 4.6 | -12.9 | -55.2 | 982.9 | 263.3 | 35.1 | 17.2 | 1,113.7 |
| 2016 | | -25.7 | -9.5 | 7.0 | -17.4 | -45.6 | 1,008.9 | 277.0 | 32.2 | 17.2 | 1,145.1 |
| 2017 | | -20.6 | -4.2 | 6.7 | -16.8 | -34.8 | 1,049.8 | 288.1 | 29.0 | 27.4 | 1,183.4 |
| 2018 | | -15.7 | -3.3 | 6.3 | -17.3 | -30.0 | 1,082.8 | 293.4 | 25.8 | 41.2 | 1,208.9 |
| 2019 | | -16.4 | -7.3 | 3.8 | -15.9 | -35.7 | 1,095.8 | 295.1 | 23.2 | 55.0 | 1,223.4 |
| 2020 | | -84.2 | -2.4 | 2.9 | -29.3 | -113.1 | 1,206.6 | 304.0 | 22.0 | 85.4 | 1,345.8 |
| 2021 | | -72.1 | -0.3 | 3.3 | -12.3 | -81.5 | 1,280.0 | 312.6 | 22.1 | 97.2 | 1,427.2 |
| 2022 | | -- | -- | -- | -- | -61.5 | -- | -- | -- | -- | 1,497.2 |
| 2023 | | -- | -- | -- | -- | -61.8 | -- | -- | -- | -- | 1,560.1 |
| 2020 | II | -54.5 | -6.6 | 2.5 | -22.2 | -80.9 | 1,193.3 | 305.7 | 25.0 | 68.9 | 1,325.1 |
| | III | -64.7 | -2.0 | 3.5 | -30.9 | -94.2 | 1,211.9 | 301.9 | 23.7 | 74.9 | 1,342.4 |
| | IV | -84.2 | -2.4 | 2.9 | -29.3 | -113.1 | 1,206.6 | 304.0 | 22.0 | 85.4 | 1,345.8 |
| 2021 | I | -94.0 | -3.3 | 3.2 | -29.3 | -123.3 | 1,247.8 | 307.7 | 22.1 | 85.4 | 1,393.1 |
| | II | -74.6 | -2.2 | 3.8 | -23.2 | -96.2 | 1,273.4 | 312.0 | 22.7 | 91.9 | 1,424.7 |
| | III | -84.3 | 4.6 | 3.7 | -14.7 | -90.8 | 1,281.4 | 312.3 | 22.3 | 91.9 | 1,432.3 |
| | IV | -72.1 | -0.3 | 3.3 | -12.3 | -81.5 | 1,280.0 | 312.6 | 22.1 | 97.2 | 1,427.2 |
| 2022 | I | -60.7 | 3.3 | 3.1 | -11.4 | -65.7 | 1,306.7 | 309.7 | 22.4 | 99.2 | 1,453.9 |
| | | Percentage of GDP. 4-quarter cumulated operations | | | | | Percentage of GDP | | | | |
| 2015 | | -2.6 | -1.7 | 0.4 | -1.2 | -5.1 | 91.2 | 24.4 | 3.3 | 1.6 | 103.3 |
| 2016 | | -2.3 | -0.9 | 0.6 | -1.6 | -4.1 | 90.5 | 24.9 | 2.9 | 1.5 | 102.7 |
| 2017 | | -1.8 | -0.4 | 0.6 | -1.4 | -3.0 | 90.3 | 24.8 | 2.5 | 2.4 | 101.8 |
| 2018 | | -1.3 | -0.3 | 0.5 | -1.4 | -2.5 | 89.9 | 24.4 | 2.1 | 3.4 | 100.4 |
| 2019 | | -1.3 | -0.6 | 0.3 | -1.3 | -2.9 | 88.0 | 23.7 | 1.9 | 4.4 | 98.2 |
| 2020 | | -7.5 | -0.2 | 0.3 | -2.6 | -10.1 | 107.9 | 27.2 | 2.0 | 7.6 | 120.4 |
| 2021 | | -6.0 | 0.0 | 0.3 | -1.0 | -6.8 | 106.1 | 25.9 | 1.8 | 8.1 | 118.3 |
| 2022 | | -- | -- | -- | -- | -4.7 | -- | -- | -- | -- | 113.8 |
| 2023 | | -- | -- | -- | -- | -4.5 | -- | -- | -- | -- | 112.1 |
| 2020 | II | -4.7 | -0.6 | 0.2 | -1.9 | -6.9 | 102.1 | 26.2 | 2.1 | 5.9 | 113.4 |
| | III | -5.7 | -0.2 | 0.3 | -2.7 | -8.2 | 105.9 | 26.4 | 2.1 | 6.5 | 117.3 |
| | IV | -7.5 | -0.2 | 0.3 | -2.6 | -10.1 | 107.9 | 27.2 | 2.0 | 7.6 | 120.4 |
| 2021 | I | -8.5 | -0.3 | 0.3 | -2.6 | -11.1 | 112.4 | 27.7 | 2.0 | 7.7 | 125.5 |
| | II | -6.4 | -0.2 | 0.3 | -2.0 | -8.3 | 110.0 | 27.0 | 2.0 | 7.9 | 123.1 |
| | III | -7.2 | 0.4 | 0.3 | -1.3 | -7.7 | 108.9 | 26.6 | 1.9 | 7.8 | 121.8 |
| | IV | -6.0 | 0.0 | 0.3 | -1.0 | -6.8 | 106.1 | 25.9 | 1.8 | 8.1 | 118.3 |
| 2022 | I | -4.9 | 0.3 | 0.3 | -0.9 | -5.3 | 105.7 | 25.1 | 1.8 | 8.0 | 117.6 |

*(a) Excluding financial entities bail-out expenditures.*

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

**Chart 7.1 - Government deficit**

Percent of GDP, 4-quarter cumulated operations

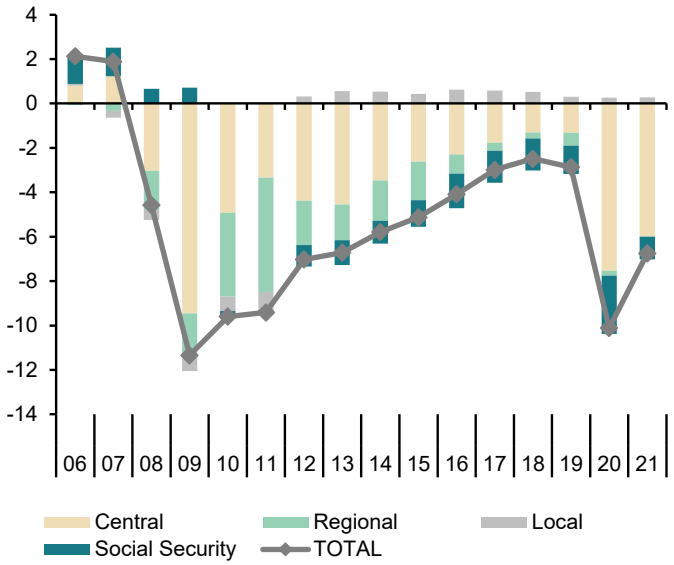



**Chart 7.2 - Government debt**

Percent of GDP

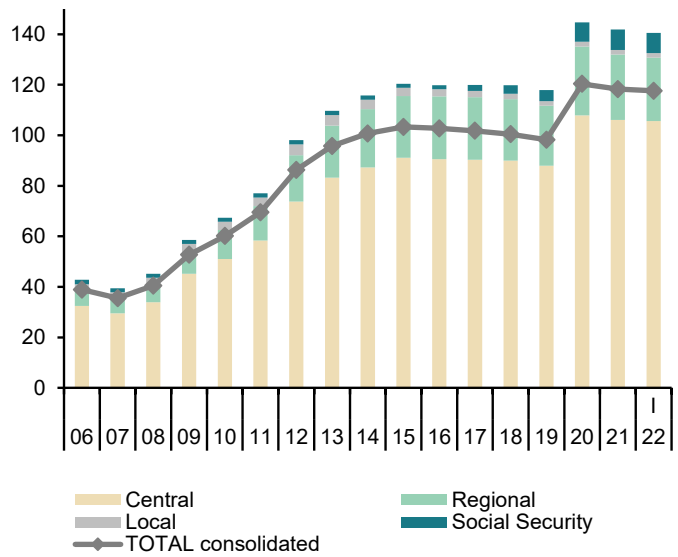


Table 8

## General activity and industrial sector indicators (a)

| | General activity indicators | | | | Industrial sector indicators | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Economic Sentiment Index | Composite PMI index | Social Security Affiliates (f) | Electricity consumption (temperature adjusted) | Industrial production index | Social Security Affiliates in industry | Manufacturing PMI index | Industrial confidence index | Manufacturing Turnover index deflated | Industrial orders |
| | Index | Index | Thousands | 1.000 GWH | 2015=100 | Thousands | Index | Balance of responses | 2015=100 (smoothed) | Balance of responses |
| 2014 | 100.0 | 55.1 | 16,111.1 | 247.2 | 96.8 | 2,022.8 | 53.2 | -7.6 | 95.3 | -16.3 |
| 2015 | 107.7 | 56.7 | 16,641.8 | 251.4 | 100.0 | 2,067.3 | 53.6 | -0.6 | 100.0 | -5.4 |
| 2016 | 106.0 | 54.9 | 17,157.5 | 252.1 | 101.8 | 2,124.7 | 53.1 | -2.1 | 102.7 | -5.4 |
| 2017 | 109.1 | 56.2 | 17,789.6 | 256.4 | 105.1 | 2,191.0 | 54.8 | 1.4 | 107.1 | 2.2 |
| 2018 | 107.9 | 54.6 | 18,364.5 | 257.9 | 105.3 | 2,250.9 | 53.3 | -0.5 | 108.4 | -0.2 |
| 2019 | 104.7 | 52.7 | 18,844.1 | 251.2 | 106.1 | 2,283.2 | 49.1 | -3.6 | 108.9 | -5.1 |
| 2020 | 90.0 | 41.5 | 18,440.5 | 239.1 | 95.9 | 2,239.3 | 47.5 | -13.6 | 98.9 | -30.0 |
| 2021 | 105.1 | 55.3 | 18,910.0 | 244.3 | 102.9 | 2,270.4 | 57.0 | 0.6 | 104.2 | -1.5 |
| 2022 (b) | 103.3 | 53.2 | 19,585.4 | 159.3 | 108.1 | 2,317.4 | 53.2 | 1.5 | 105.4 | 6.2 |
| 2020 IV | 92.2 | 44.8 | 18,592.5 | 61.8 | 102.9 | 2,244.1 | 51.1 | -8.3 | 107.1 | -20.2 |
| 2021 I | 97.3 | 46.1 | 18,634.2 | 61.4 | 103.5 | 2,245.5 | 53.1 | -4.7 | 104.1 | -12.7 |
| II | 105.0 | 58.9 | 18,666.3 | 61.3 | 102.1 | 2,258.5 | 59.2 | -0.4 | 102.8 | -0.9 |
| III | 109.0 | 59.6 | 19,018.8 | 60.1 | 101.7 | 2,280.7 | 58.8 | 2.6 | 103.8 | -0.5 |
| IV | 109.2 | 56.6 | 19,320.5 | 61.1 | 104.6 | 2,296.9 | 56.9 | 5.0 | 106.4 | 8.0 |
| 2022 I | 108.3 | 52.5 | 19,494.7 | 59.7 | 105.1 | 2,311.0 | 55.8 | 6.8 | 101.9 | 11.6 |
| II | 102.1 | 55.0 | 19,588.1 | 59.7 | 106.8 | 2,318.3 | 53.2 | 0.5 | 105.3 | 8.2 |
| III (b) | 97.5 | 51.6 | 19,680.2 | 39.0 | 106.4 | 2,330.4 | 49.3 | -5.1 | 102.4 | -4.9 |
| 2022 Jun | 102.1 | 53.6 | 19,646.6 | 19.7 | 107.6 | 2,321.7 | 52.6 | 1.7 | 104.9 | 9.9 |
| Jul | 97.1 | 52.7 | 19,648.2 | 19.6 | 106.4 | 2,324.7 | 48.7 | -4.8 | 102.4 | -3.6 |
| Aug | 97.9 | 50.5 | 19,712.1 | 19.5 | -- | 2,336.0 | 49.9 | -5.4 | -- | -6.3 |
| | | | | | Percentage changes (c) | | | | | |
| 2014 | -- | -- | 1.6 | -0.1 | 1.3 | 0.1 | -- | -- | 2.3 | -- |
| 2015 | -- | -- | 3.3 | 1.7 | 3.4 | 2.2 | -- | -- | 4.9 | -- |
| 2016 | -- | -- | 3.1 | 0.3 | 1.8 | 2.8 | -- | -- | 2.8 | -- |
| 2017 | -- | -- | 3.7 | 1.7 | 3.2 | 3.1 | -- | -- | 4.2 | -- |
| 2018 | -- | -- | 3.2 | 0.6 | 0.2 | 2.7 | -- | -- | 1.2 | -- |
| 2019 | -- | -- | 2.6 | -2.6 | 0.7 | 1.4 | -- | -- | 0.5 | -- |
| 2020 | -- | -- | -2.1 | -4.8 | -9.6 | -1.9 | -- | -- | -9.3 | -- |
| 2021 | -- | -- | 2.5 | 2.2 | 7.3 | 1.4 | -- | -- | 5.4 | -- |
| 2022 (d) | -- | -- | 4.5 | -2.5 | 3.5 | 2.7 | -- | -- | 0.0 | -- |
| 2020 IV | -- | -- | 1.5 | 3.5 | 3.2 | 0.8 | -- | -- | 4.2 | -- |
| 2021 I | -- | -- | 0.2 | -0.6 | 0.5 | 0.1 | -- | -- | -2.9 | -- |
| II | -- | -- | 0.2 | -0.2 | -1.3 | 0.6 | -- | -- | -1.3 | -- |
| III | -- | -- | 1.9 | -1.8 | -0.4 | 1.0 | -- | -- | 1.1 | -- |
| IV | -- | -- | 1.6 | 1.5 | 2.9 | 0.7 | -- | -- | 2.4 | -- |
| 2022 I | -- | -- | 0.9 | -2.2 | 0.5 | 0.6 | -- | -- | -4.2 | -- |
| II | -- | -- | 0.5 | -0.1 | 1.7 | 0.3 | -- | -- | 3.3 | -- |
| III (e) | -- | -- | 0.5 | -2.0 | -0.4 | 0.5 | -- | -- | -2.7 | -- |
| 2022 Jun | -- | -- | 0.4 | 1.4 | 1.1 | 0.1 | -- | -- | 0.7 | -- |
| Jul | -- | -- | 0.0 | -1.6 | -1.1 | 0.1 | -- | -- | -2.4 | -- |
| Aug | -- | -- | 0.3 | -2.8 | -- | 0.5 | -- | -- | -- | -- |

*(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. (f) Excluding domestic service workers and non-professional caregivers.*

*Sources: European Commision. Markit Economics Ltd.. M. of Labour. M. of Industry. National Statistics Institute. REE and Funcas.*

**Chart 8.1 - General activity indicators (I)**

Annual percentage changes

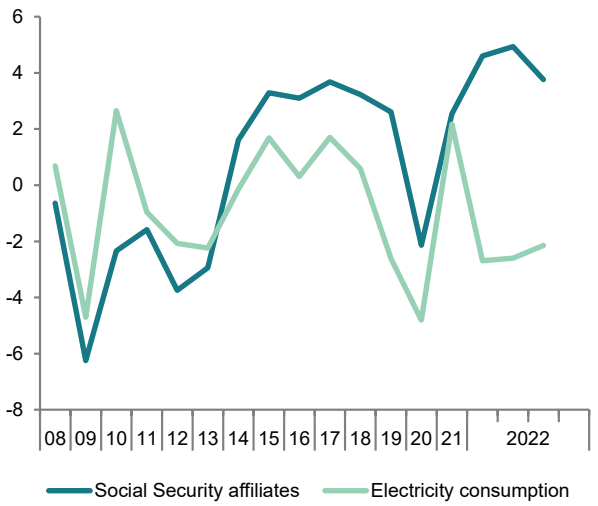



**Chart 8.2 - General activity indicators (II)**

Index

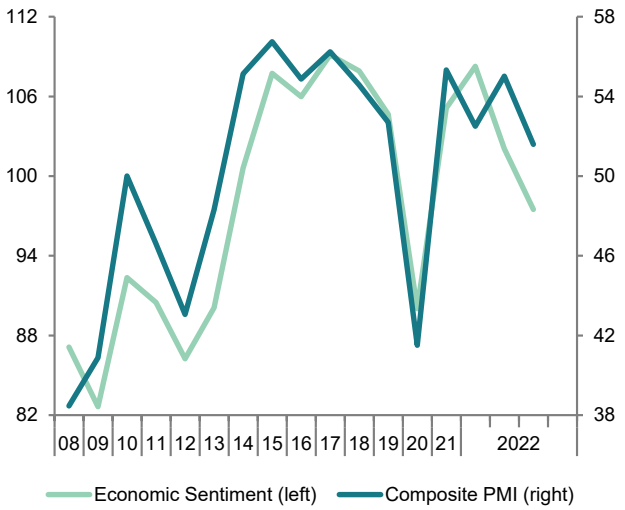



**Chart 8.3 - Industrial sector indicators (I)**

Annual percentage changes

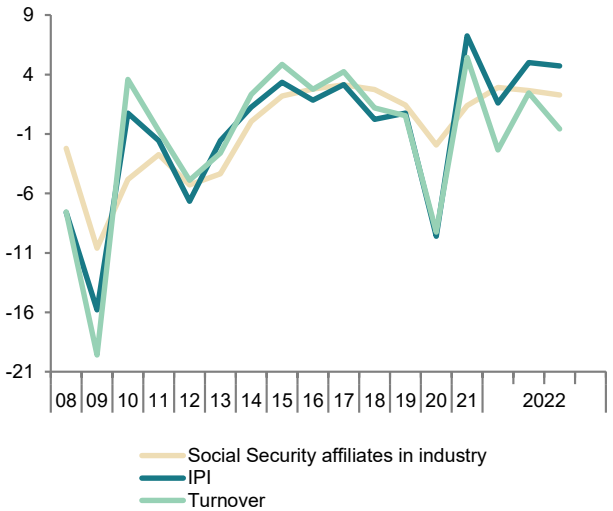



**Chart 8.4 - Industrial sector indicators (II)**

Index

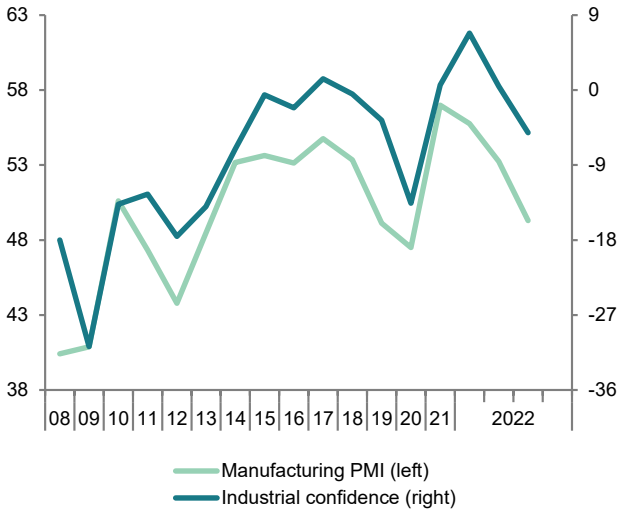


Table 9

## Construction and services sector indicators (a)

| | Construction indicators | | | | | Service sector indicators | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Social Security Affiliates in construction | Industrial production index construction materials | Construction confidence index | Official tenders (f) | Housing permits (f) | Social Security Affiliates in services (g) | Turnover index (nominal) | Services PMI index | Hotel overnight stays | Passenger air transport | Services confidence index |
| | Thousands | 2015=100 (smoothed) | Balance of responses | EUR Billions (smoothed) | Million $m^2$ | Thousands | 2015=100 (smoothed) | Index | Million (smoothed) | Million (smoothed) | Balance of responses |
| 2014 | 980.3 | 92.8 | -40.8 | 13.1 | 6.9 | 11,995.5 | 95.3 | 55.2 | 295.3 | 194.9 | 8.8 |
| 2015 | 1,026.7 | 100.0 | -26.6 | 9.4 | 9.9 | 12,432.3 | 100.0 | 57.3 | 308.2 | 206.6 | 18.9 |
| 2016 | 1,053.9 | 102.6 | -39.1 | 9.2 | 12.7 | 12,851.6 | 104.2 | 55.0 | 331.2 | 229.4 | 18.2 |
| 2017 | 1,118.8 | 111.5 | -25.1 | 12.7 | 15.9 | 13,338.2 | 111.1 | 56.4 | 340.6 | 248.4 | 22.9 |
| 2018 | 1,194.1 | 114.2 | -6.0 | 16.6 | 19.8 | 13,781.3 | 117.5 | 54.8 | 340.0 | 262.9 | 21.2 |
| 2019 | 1,254.9 | 124.8 | -7.7 | 18.2 | 20.0 | 14,169.1 | 122.2 | 53.9 | 343.0 | 276.9 | 13.9 |
| 2020 | 1,233.1 | 110.7 | -17.4 | 14.1 | 16.1 | 13,849.2 | 102.9 | 40.3 | 92.2 | 75.6 | -25.6 |
| 2021 | 1,288.6 | 124.2 | -1.9 | 23.6 | 19.7 | 14,235.1 | 119.2 | 55.0 | 172.8 | 119.4 | 8.3 |
| 2022 (b) | 1,325.6 | 131.5 | 7.3 | 16.2 | 8.1 | 14,855.1 | 139.6 | 53.6 | 220.6 | 158.8 | 16.2 |
| 2020 IV | 1,263.5 | 119.5 | -9.6 | 4.9 | 4.2 | 13,958.9 | 108.9 | 43.0 | 14.9 | 12.7 | -23.4 |
| 2021 I | 1,261.4 | 121.0 | -7.0 | 4.1 | 4.5 | 14,000.3 | 111.1 | 44.3 | 13.0 | 10.6 | -16.0 |
| II | 1,281.0 | 124.9 | 1.0 | 6.4 | 5.0 | 14,008.1 | 115.7 | 58.8 | 23.1 | 16.4 | 8.2 |
| III | 1,300.4 | 124.7 | -2.7 | 6.3 | 5.1 | 14,327.0 | 120.0 | 59.6 | 57.8 | 39.4 | 19.3 |
| IV | 1,312.3 | 125.8 | 1.2 | 6.8 | 5.2 | 14,604.4 | 129.8 | 57.4 | 69.1 | 49.4 | 21.7 |
| 2022 I | 1,321.7 | 125.7 | 4.0 | 6.0 | 5.4 | 14,769.3 | 134.7 | 52.2 | 66.6 | 48.7 | 16.0 |
| II | 1,318.0 | 129.9 | 10.7 | 7.4 | 2.7 | 14,867.7 | 144.9 | 55.9 | 80.0 | 59.1 | 17.3 |
| III (b) | 1,334.7 | 126.4 | 7.1 | 2.8 | -- | 14,941.2 | 142.2 | 52.2 | 56.1 | 42.0 | 14.8 |
| 2022 Jun | 1,323.5 | 134.2 | 1.8 | 2.9 | -- | 14,920.3 | 145.1 | 54.0 | 27.8 | 20.2 | 18.9 |
| Jul | 1,325.7 | 126.4 | 4.0 | 2.8 | -- | 14,927.7 | 142.2 | 53.8 | 27.9 | 21.0 | 15.1 |
| Aug | 1,343.6 | -- | 10.2 | -- | -- | 14,954.7 | -- | 50.6 | 28.2 | 21.1 | 14.5 |
| | | | | Percentage changes (c) | | | | | | | |
| 2014 | -1.7 | -0.9 | -- | 42.6 | 2.2 | 2.3 | 2.6 | -- | 3.2 | 4.6 | -- |
| 2015 | 4.7 | 7.8 | -- | -28.2 | 42.6 | 3.6 | 4.9 | -- | 4.4 | 6.0 | -- |
| 2016 | 2.6 | 2.6 | -- | -1.7 | 29.0 | 3.4 | 4.2 | -- | 7.4 | 11.0 | -- |
| 2017 | 6.2 | 8.6 | -- | 37.1 | 24.8 | 3.8 | 6.6 | -- | 2.8 | 8.3 | -- |
| 2018 | 6.7 | 2.5 | -- | 30.8 | 24.5 | 3.3 | 5.8 | -- | -0.2 | 5.8 | -- |
| 2019 | 5.1 | 9.2 | -- | 10.1 | 1.3 | 2.8 | 4.0 | -- | 0.9 | 5.3 | -- |
| 2020 | -1.7 | -11.3 | -- | -22.8 | -19.8 | -2.3 | -15.8 | -- | -73.1 | -72.7 | -- |
| 2021 | 4.5 | 12.2 | -- | 68.0 | 22.7 | 2.8 | 15.9 | -- | 87.4 | 57.8 | -- |
| 2022 (d) | 3.6 | 3.6 | -- | 22.0 | 3.7 | 5.5 | 22.9 | -- | 132.1 | 165.2 | -- |
| 2020 IV | 1.1 | 1.3 | -- | 16.0 | -7.8 | 1.7 | 4.4 | -- | -38.5 | -24.9 | -- |
| 2021 I | -0.2 | 1.3 | -- | 24.1 | -4.1 | 0.3 | 2.1 | -- | -13.0 | -16.6 | -- |
| II | 1.6 | 3.2 | -- | 118.0 | 48.9 | 0.1 | 4.1 | -- | 78.3 | 54.5 | -- |
| III | 1.5 | -0.2 | -- | 118.0 | 31.4 | 2.3 | 3.7 | -- | 149.8 | 140.6 | -- |
| IV | 0.9 | 0.9 | -- | 38.5 | 23.8 | 1.9 | 8.2 | -- | 19.7 | 25.5 | -- |
| 2022 I | 0.7 | 0.0 | -- | 43.7 | 20.1 | 1.1 | 3.8 | -- | -3.7 | -1.5 | -- |
| II | -0.3 | 3.3 | -- | 16.8 | -18.6 | 0.7 | 7.5 | -- | 20.2 | 21.5 | -- |
| III (e) | 1.3 | -2.7 | -- | 1.2 | -- | 0.5 | -1.8 | -- | 5.2 | 6.6 | -- |
| 2022 Jun | 0.4 | 1.8 | -- | 53.8 | -- | 0.4 | -1.0 | -- | 2.4 | -1.9 | -- |
| Jul | 0.2 | -5.8 | -- | 1.2 | -- | 0.0 | -2.0 | -- | 0.5 | 4.0 | -- |
| Aug | 1.3 | -- | -- | -- | -- | 0.2 | -- | -- | 1.0 | 0.4 | -- |

*(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. Markit Economics Ltd.. M. of Labour. M. of Public Works. National Statistics Institute. AENA. OFICEMEN. SEOPAN and Funcas.*

**Chart 9.1 - Construction indicators (I)**

Annual percentage changes and index

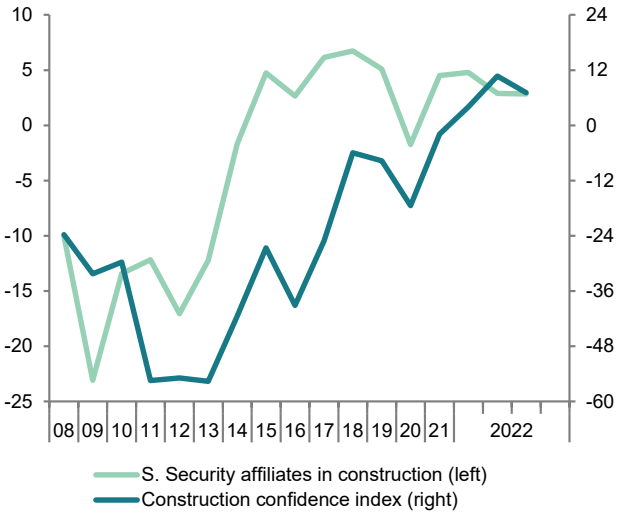



**Chart 9.2 - Construction indicators (II)**

Annual percentage changes

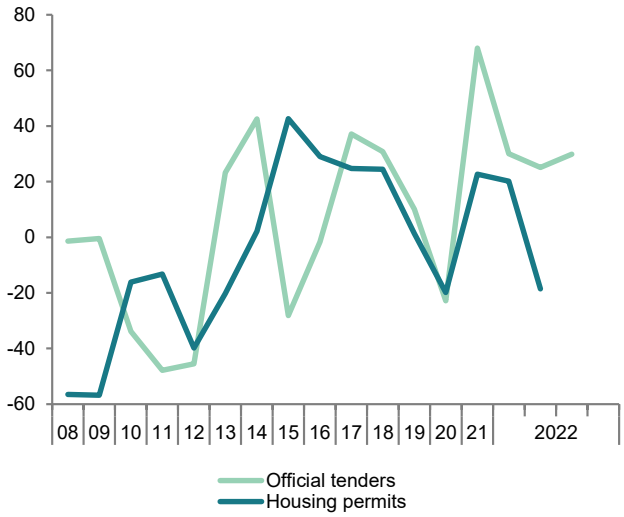



**Chart 9.3 - Services indicators (I)**

Annual percentage changes

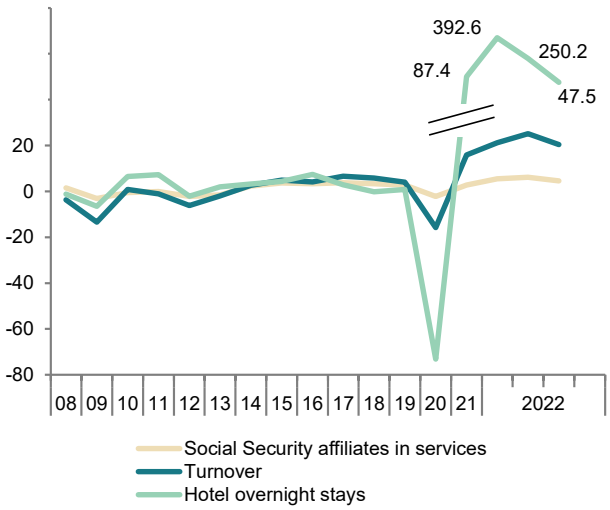



**Chart 9.4 - Services indicators (II)**

Index

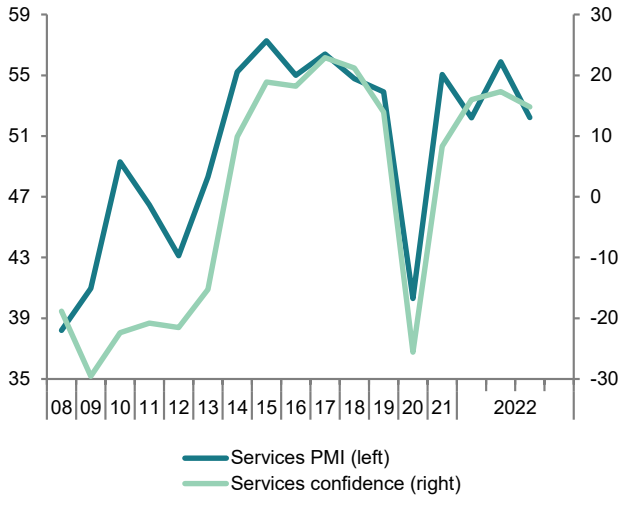


Table 10

## Consumption and investment indicators (a)

| | | Consumption indicators | | | | | Investment in equipment indicators | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Retail sales deflated | Car registrations | Consumer confidence index | Hotel overnight stays by residents in Spain | Industrial orders for consumer goods | Cargo vehicles registrations | Industrial orders for investment goods | Imports of capital goods (volume) |
| | | 2015=100 | Thousands | Balance of responses | Million (smoothed) | Balance of responses | Thousands | Balance of responses | 2005=100 |
| 2014 | | 96.0 | 890.1 | -15.5 | 104.7 | -9.1 | 137.5 | -16.5 | 81.6 |
| 2015 | | 100.0 | 1,094.0 | -4.9 | 110.3 | -3.1 | 180.3 | 0.2 | 93.3 |
| 2016 | | 103.9 | 1,230.1 | -6.2 | 114.2 | -1.4 | 191.3 | -0.2 | 97.2 |
| 2017 | | 104.7 | 1,341.6 | -2.8 | 115.8 | 2.2 | 207.6 | 4.9 | 103.3 |
| 2018 | | 105.4 | 1,424.0 | -4.4 | 116.5 | -5.6 | 230.0 | 12.4 | 105.4 |
| 2019 | | 107.8 | 1,375.6 | -6.4 | 119.6 | -2.9 | 220.9 | 8.8 | 105.6 |
| 2020 | | 100.4 | 939.1 | -22.7 | 51.2 | -25.5 | 170.8 | -22.7 | 100.0 |
| 2021 | | 103.9 | 953.7 | -12.8 | 90.7 | -11.2 | 186.9 | 4.7 | 111.1 |
| 2022 (b) | | 101.8 | 602.1 | -24.8 | 83.8 | -0.9 | 106.0 | 27.6 | 122.8 |
| 2020 | IV | 105.2 | 301.5 | -24.7 | 9.5 | -23.7 | 52.7 | -9.6 | 107.6 |
| 2021 | I | 102.2 | 199.0 | -18.9 | 8.8 | -18.4 | 50.4 | -13.7 | 110.4 |
| | II | 103.7 | 250.7 | -10.3 | 15.7 | -15.2 | 49.2 | 11.4 | 110.8 |
| | III | 104.3 | 244.3 | -8.8 | 30.6 | -9.5 | 43.6 | 6.4 | 111.7 |
| | IV | 105.9 | 256.6 | -13.0 | 28.0 | -1.5 | 43.1 | 14.7 | 115.3 |
| 2022 | I | 102.5 | 188.6 | -17.6 | 25.8 | 0.9 | 38.2 | 33.8 | 121.3 |
| | II | 104.9 | 229.9 | -26.4 | 31.5 | 2.3 | 40.0 | 29.8 | 127.4 |
| | III (b) | 103.9 | 159.2 | -33.4 | 20.3 | -8.3 | 27.0 | 15.1 | 130.8 |
| 2022 | Jun | 104.6 | 78.9 | -28.8 | 10.7 | 3.8 | 13.5 | 36.6 | 129.2 |
| | Jul | 103.9 | 71.2 | -35.0 | 10.3 | -3.0 | 12.3 | 11.5 | 130.8 |
| | Aug | -- | 88.0 | -31.7 | 10.0 | -13.5 | 15.0 | 18.7 | -- |
| | | | | | Percentage changes (c) | | | | |
| 2014 | | 1.1 | 19.9 | -- | 4.1 | -- | 27.8 | -- | 18.4 |
| 2015 | | 4.2 | 22.9 | -- | 5.3 | -- | 31.1 | -- | 14.4 |
| 2016 | | 3.9 | 12.4 | -- | 3.6 | -- | 6.1 | -- | 4.1 |
| 2017 | | 0.8 | 9.1 | -- | 1.4 | -- | 8.5 | -- | 6.4 |
| 2018 | | 0.7 | 6.1 | -- | 0.6 | -- | 10.8 | -- | 2.0 |
| 2019 | | 2.3 | -3.4 | -- | 2.7 | -- | -4.0 | -- | 0.2 |
| 2020 | | -6.9 | -31.7 | -- | -57.2 | -- | -22.6 | -- | -5.3 |
| 2021 | | 3.5 | 1.6 | -- | 77.3 | -- | 9.4 | -- | 11.1 |
| 2022 (d) | | 0.5 | -6.7 | -- | 47.2 | -- | -18.0 | -- | 14.7 |
| 2020 | IV | 0.6 | -0.5 | -- | -44.1 | -- | 0.0 | -- | 27.5 |
| 2021 | I | -2.9 | -34.0 | -- | -7.3 | -- | -4.2 | -- | 10.6 |
| | II | 1.5 | 26.0 | -- | 77.8 | -- | -2.4 | -- | 1.5 |
| | III | 0.6 | -2.6 | -- | 94.8 | -- | -11.4 | -- | 3.1 |
| | IV | 1.6 | 5.0 | -- | -8.4 | -- | -1.2 | -- | 13.5 |
| 2022 | I | -3.3 | -26.5 | -- | -8.1 | -- | -11.2 | -- | 22.6 |
| | II | 2.3 | 21.9 | -- | 22.1 | -- | 4.6 | -- | 21.7 |
| 2022 | III (e) | -0.9 | 3.9 | -- | -3.3 | -- | 2.4 | -- | 11.3 |
| 2022 | Jun | -0.3 | -1.6 | -- | 2.3 | -- | -0.4 | -- | 1.4 |
| | Jul | -0.7 | -9.7 | -- | -4.1 | -- | -8.3 | -- | 1.3 |
| | Aug | -- | 23.7 | -- | -3.0 | -- | 21.3 | -- | -- |

*(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

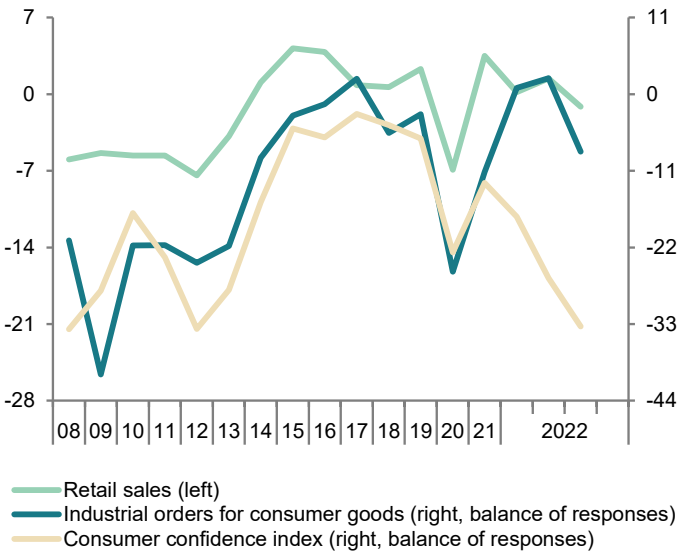



**Chart 10.2 - Investment indicators**

Annual percentage changes and balance of responses

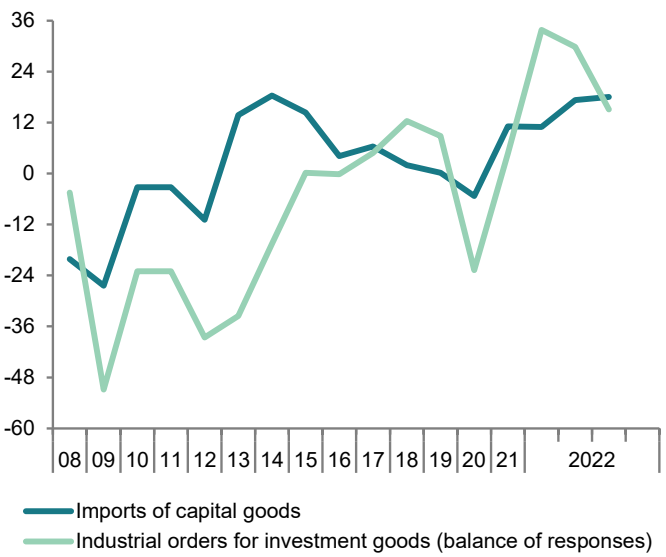


Table 11a

## Labour market (I)

Forecasts in yellow

| | Population aged 16 or more | Labour force | | Employment | | Unemployment | | Participation rate aged 16 or more (a) | Employment rate aged 16 or more (b) | Unemployment rate (c) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Total | Aged 16-24 | Spanish | Foreign |
| | | Original | Seasonally adjusted | Original | Seasonally adjusted | Original | Seasonally adjusted | Seasonally adjusted | | | | Original | |
| | 1 | 2=4+6 | 3=5+7 | 4 | 5 | 6 | 7 | 8 | 9 | 10=7/3 | 11 | 12 | 13 |
| | Million | | | | | | | Percentage | | | | | |
| 2015 | 38.5 | 22.9 | -- | 17.9 | -- | 5.1 | -- | 59.5 | 46.4 | 22.0 | 48.3 | 20.9 | 30.5 |
| 2016 | 38.5 | 22.8 | -- | 18.3 | -- | 4.5 | -- | 59.2 | 47.6 | 19.6 | 44.4 | 18.7 | 26.6 |
| 2017 | 38.7 | 22.7 | -- | 18.8 | -- | 3.9 | -- | 58.8 | 48.7 | 17.2 | 38.6 | 16.3 | 23.8 |
| 2018 | 38.9 | 22.8 | -- | 19.3 | -- | 3.5 | -- | 58.6 | 49.7 | 15.2 | 34.4 | 14.3 | 21.9 |
| 2019 | 39.3 | 23.0 | -- | 19.8 | -- | 3.2 | -- | 58.6 | 50.4 | 14.1 | 32.6 | 13.2 | 20.1 |
| 2020 | 39.6 | 22.7 | -- | 19.2 | -- | 3.5 | -- | 57.4 | 48.5 | 15.5 | 38.3 | 14.1 | 24.6 |
| 2021 | 39.7 | 23.2 | -- | 19.8 | -- | 3.4 | -- | 58.5 | 49.9 | 14.8 | 34.9 | 13.5 | 23.1 |
| 2022 | 39.8 | 23.5 | -- | 20.5 | -- | 3.0 | -- | 58.9 | 51.5 | 12.7 | -- | -- | -- |
| 2023 | 40.0 | 23.6 | -- | 20.8 | -- | 2.8 | -- | 59.0 | 52.0 | 11.8 | -- | -- | -- |
| 2020 III | 39.6 | 22.9 | 22.8 | 19.2 | 19.0 | 3.7 | 3.7 | 57.5 | 48.1 | 16.4 | 41.3 | 14.8 | 25.7 |
| IV | 39.6 | 23.1 | 23.0 | 19.3 | 19.3 | 3.7 | 3.8 | 58.1 | 48.6 | 16.3 | 41.1 | 14.5 | 26.6 |
| 2021 I | 39.6 | 22.9 | 23.0 | 19.2 | 19.4 | 3.7 | 3.6 | 58.1 | 49.0 | 15.6 | 38.3 | 14.4 | 26.2 |
| II | 39.6 | 23.2 | 23.2 | 19.7 | 19.6 | 3.5 | 3.5 | 58.5 | 49.6 | 15.3 | 37.4 | 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 | 31.8 | 13.5 | 21.7 |
| IV | 39.7 | 23.3 | 23.3 | 20.2 | 20.1 | 3.1 | 3.2 | 58.6 | 50.7 | 13.6 | 31.8 | 12.2 | 20.9 |
| 2022 I | 39.8 | 23.3 | 23.4 | 20.1 | 20.3 | 3.2 | 3.1 | 58.9 | 51.1 | 13.3 | 29.0 | 12.5 | 21.3 |
| II | 39.8 | 23.4 | 23.4 | 20.5 | 20.4 | 2.9 | 2.9 | 58.6 | 51.3 | 12.5 | 27.7 | 11.5 | 18.9 |
| | Percentage changes (d) | | | | | | | Difference from one year ago | | | | | |
| 2015 | 0.0 | -0.2 | -- | 3.0 | -- | -9.9 | -- | -0.1 | 1.4 | -2.4 | -4.9 | -2.1 | -4.0 |
| 2016 | 0.1 | -0.4 | -- | 2.7 | -- | -11.4 | -- | -0.3 | 1.2 | -2.4 | -3.9 | -2.2 | -3.8 |
| 2017 | 0.3 | -0.4 | -- | 2.6 | -- | -12.6 | -- | -0.4 | 1.1 | -2.4 | -5.9 | -2.4 | -2.8 |
| 2018 | 0.6 | 0.3 | -- | 2.7 | -- | -11.2 | -- | -0.2 | 1.0 | -2.0 | -4.2 | -2.0 | -1.9 |
| 2019 | 1.0 | 1.0 | -- | 2.3 | -- | -6.7 | -- | 0.0 | 0.7 | -1.2 | -1.8 | -1.1 | -1.8 |
| 2020 | 0.8 | -1.3 | -- | -2.9 | -- | 8.8 | -- | -1.2 | -1.9 | 1.4 | 5.7 | 0.9 | 4.5 |
| 2021 | 0.2 | 2.1 | -- | 3.0 | -- | -2.8 | -- | 1.1 | 1.3 | -0.7 | -3.4 | -0.6 | -1.5 |
| 2022 | 0.5 | 1.2 | -- | 3.7 | -- | -13.2 | -- | 0.4 | 1.6 | -2.1 | -- | -- | -- |
| 2023 | 0.5 | 0.5 | -- | 1.5 | -- | -6.2 | -- | 0.0 | 0.5 | -0.8 | -- | -- | -- |
| 2020 III | 0.7 | -0.8 | -0.9 | -3.5 | -3.5 | 15.8 | 15.0 | -0.9 | -2.1 | 2.3 | 8.7 | 1.7 | 6.3 |
| IV | 0.5 | -0.4 | -0.4 | -3.1 | -3.2 | 16.5 | 16.7 | -0.5 | -1.9 | 2.4 | 9.8 | 1.6 | 6.6 |
| 2021 I | 0.3 | -0.6 | -0.6 | -2.4 | -2.4 | 10.3 | 10.6 | -0.5 | -1.3 | 1.6 | 6.5 | 1.1 | 5.0 |
| II | 0.2 | 5.6 | 5.7 | 5.7 | 5.8 | 5.2 | 5.0 | 3.0 | 2.6 | -0.1 | -1.3 | 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 | -15.8 | 0.5 | 2.0 | -2.7 | -9.3 | -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 | -17.7 | 0.1 | 1.7 | -2.8 | -9.8 | -2.5 | -4.8 |

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

*Source: INE (*Labour Force Survey*) and Funcas.*

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

Annual growth rates and percentage of active population

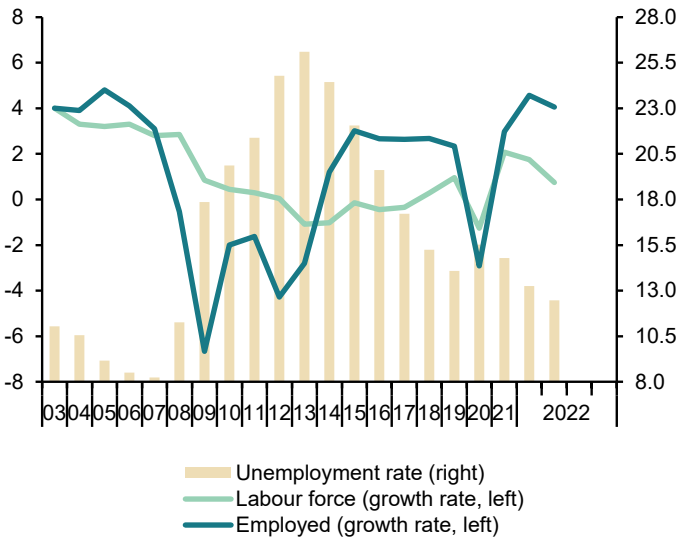



**Chart 11a.2 - Unemployment rates**

Percentage

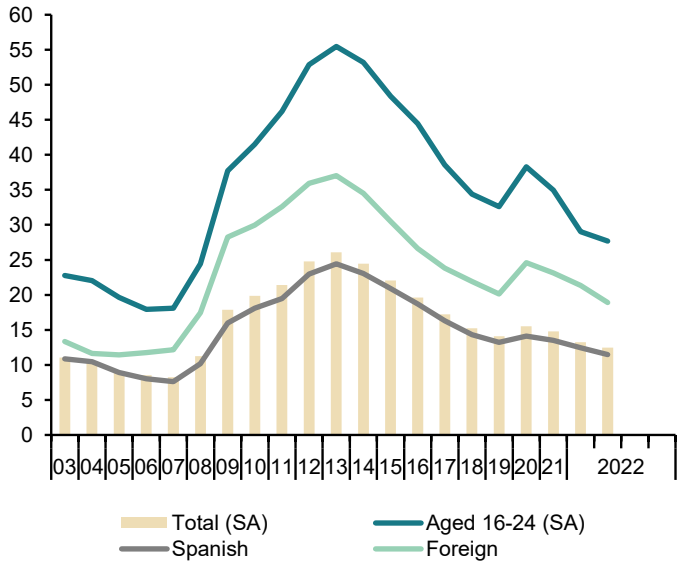


Table 11b

## Labour market (II)

| | Employed by sector | | | | Employed by professional situation | | | | | Employed by duration of the working-day | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Employees | | | | | | | |
| | | | | | | By type of contract | | | | | | |
| | Agriculture | Industry | Construction | Services | Total | Tempo-rary | Indefinite | Temporary employment rate (a) | Self employed | Full-time | Part-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) | | | | | | | | | | | |
| 2014 | 0.74 | 2.38 | 0.99 | 13.23 | 14.29 | 3.43 | 10.86 | 24.0 | 3.06 | 14.59 | 2.76 | 15.91 |
| 2015 | 0.74 | 2.48 | 1.07 | 13.57 | 14.77 | 3.71 | 11.06 | 25.1 | 3.09 | 15.05 | 2.81 | 15.74 |
| 2016 | 0.77 | 2.52 | 1.07 | 13.97 | 15.23 | 3.97 | 11.26 | 26.1 | 3.11 | 15.55 | 2.79 | 15.21 |
| 2017 | 0.82 | 2.65 | 1.13 | 14.23 | 15.72 | 4.19 | 11.52 | 26.7 | 3.11 | 16.01 | 2.82 | 14.97 |
| 2018 | 0.81 | 2.71 | 1.22 | 14.59 | 16.23 | 4.35 | 11.88 | 26.8 | 3.09 | 16.56 | 2.76 | 14.31 |
| 2019 | 0.80 | 2.76 | 1.28 | 14.94 | 16.67 | 4.38 | 12.29 | 26.3 | 3.11 | 16.95 | 2.83 | 14.30 |
| 2020 | 0.77 | 2.70 | 1.24 | 14.49 | 16.11 | 3.88 | 12.23 | 24.1 | 3.09 | 16.51 | 2.70 | 14.05 |
| 2021 | 0.80 | 2.70 | 1.29 | 14.98 | 16.63 | 4.17 | 12.46 | 25.1 | 3.15 | 17.03 | 2.74 | 13.87 |
| 2022 (c) | 0.81 | 2.74 | 1.33 | 15.40 | 17.12 | 3.98 | 13.14 | 23.2 | 3.16 | 17.46 | 2.81 | 13.88 |
| 2020 III | 0.73 | 2.69 | 1.25 | 14.51 | 16.11 | 3.89 | 12.21 | 24.2 | 3.07 | 16.52 | 2.65 | 13.84 |
| IV | 0.78 | 2.69 | 1.28 | 14.59 | 16.24 | 4.00 | 12.24 | 24.6 | 3.10 | 16.55 | 2.80 | 14.47 |
| 2021 I | 0.80 | 2.64 | 1.26 | 14.50 | 16.10 | 3.83 | 12.27 | 23.8 | 3.10 | 16.51 | 2.70 | 14.04 |
| II | 0.81 | 2.67 | 1.32 | 14.87 | 16.51 | 4.14 | 12.37 | 25.1 | 3.16 | 16.84 | 2.84 | 14.41 |
| III | 0.76 | 2.73 | 1.29 | 15.25 | 16.92 | 4.40 | 12.52 | 26.0 | 3.11 | 17.33 | 2.70 | 13.46 |
| IV | 0.84 | 2.77 | 1.29 | 15.29 | 16.97 | 4.31 | 12.67 | 25.4 | 3.21 | 17.45 | 2.74 | 13.56 |
| 2022 I | 0.83 | 2.70 | 1.32 | 15.24 | 16.93 | 4.10 | 12.83 | 24.2 | 3.16 | 17.28 | 2.81 | 13.99 |
| II | 0.79 | 2.78 | 1.34 | 15.56 | 17.30 | 3.86 | 13.45 | 22.3 | 3.16 | 17.65 | 2.82 | 13.77 |
| | Annual percentage changes | | | | | | | Difference from one year ago | Annual percentage changes | | | Difference from one year ago |
| 2014 | -0.1 | 1.0 | -3.5 | 1.7 | 1.5 | 5.3 | 0.4 | 0.9 | -0.4 | 1.1 | 1.9 | 0.1 |
| 2015 | 0.1 | 4.3 | 8.1 | 2.6 | 3.4 | 8.3 | 1.9 | 1.1 | 1.1 | 3.2 | 1.9 | -0.2 |
| 2016 | 5.1 | 1.6 | 0.0 | 2.9 | 3.1 | 6.8 | 1.8 | 0.9 | 0.7 | 3.3 | -0.8 | -0.5 |
| 2017 | 5.8 | 5.0 | 5.1 | 1.9 | 3.2 | 5.6 | 2.3 | 0.6 | -0.1 | 2.9 | 1.0 | -0.2 |
| 2018 | -0.8 | 2.3 | 8.3 | 2.5 | 3.3 | 3.8 | 3.1 | 0.1 | -0.5 | 3.5 | -1.9 | -0.7 |
| 2019 | -1.9 | 2.0 | 4.6 | 2.4 | 2.7 | 0.6 | 3.5 | -0.6 | 0.5 | 2.3 | 2.3 | 0.0 |
| 2020 | -4.0 | -2.3 | -2.6 | -3.0 | -3.4 | -11.4 | -0.5 | -2.2 | -0.5 | -2.6 | -4.6 | -0.3 |
| 2021 | 4.9 | 0.1 | 3.8 | 3.3 | 3.2 | 7.6 | 1.8 | 1.0 | 1.8 | 3.2 | 1.7 | -0.2 |
| 2022 (d) | 0.5 | 3.1 | 2.6 | 4.9 | 5.0 | -0.2 | 6.6 | -1.2 | 0.9 | 4.7 | 1.7 | -0.3 |
| 2020 III | -2.0 | -4.5 | -1.6 | -3.5 | -4.1 | -13.0 | -0.8 | -2.5 | -0.5 | -3.3 | -4.8 | -0.2 |
| IV | -1.5 | -2.5 | -0.3 | -3.6 | -3.6 | -9.0 | -1.7 | -1.5 | -0.6 | -4.3 | 4.8 | 1.1 |
| 2021 I | 1.7 | -4.6 | -1.3 | -2.3 | -2.8 | -7.5 | -1.2 | -1.2 | -0.6 | -1.9 | -5.3 | -0.4 |
| II | 6.2 | 0.9 | 13.3 | 6.0 | 6.3 | 19.2 | 2.6 | 2.7 | 2.7 | 4.4 | 14.1 | 1.1 |
| III | 4.2 | 1.5 | 3.5 | 5.1 | 5.0 | 13.0 | 2.5 | 1.8 | 1.5 | 4.9 | 1.6 | -0.4 |
| IV | 7.4 | 2.7 | 0.4 | 4.8 | 4.5 | 7.7 | 3.5 | 0.8 | 3.5 | 5.5 | -2.2 | -0.9 |
| 2022 I | 3.7 | 2.1 | 4.3 | 5.1 | 5.1 | 7.0 | 4.5 | 0.4 | 1.7 | 4.6 | 4.2 | 0.0 |
| II | -2.7 | 4.2 | 1.0 | 4.7 | 4.8 | -6.8 | 8.7 | -2.8 | 0.0 | 4.8 | -0.6 | -0.6 |

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

*Source: INE (*Labour Force Survey*).*

**Chart 11b.1 - Employment by sector**

Annual percentage changes


**Chart 11b.2 - Employment by type of contract**

Annual percentage changes and percentage over total employees

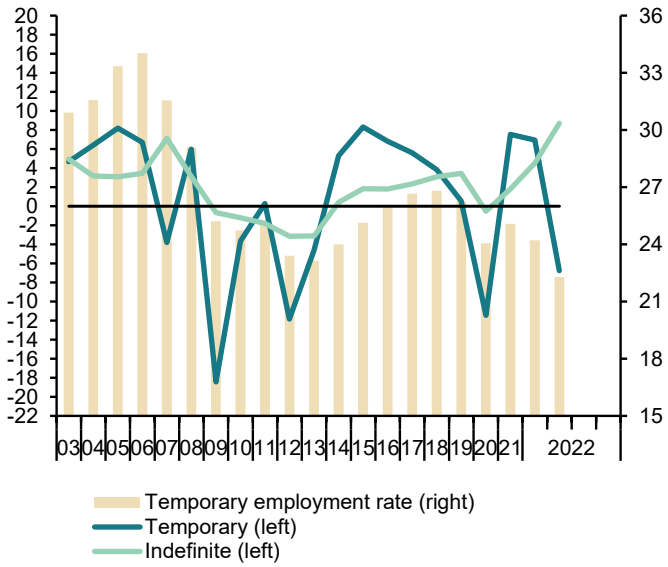


Table 12

## Index of Consumer Prices

Forecasts in yellow

| | | Total | Total excluding food and energy | Excluding unprocessed food and energy | | | | Unprocessed food | Energy | Food |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total | Non-energy industrial goods | Services | Processed food | | | |
| % of total in 2021 | | 100.00 | 62.28 | 79.09 | 23.28 | 39.01 | 16.81 | 8.92 | 11.98 | 25.73 |
| Indexes. 2021 = 100 | | | | | | | | | | |
| 2016 | | 93.2 | 96.0 | 95.8 | 98.7 | 94.4 | 95.3 | 87.4 | 80.6 | 92.6 |
| 2017 | | 95.0 | 97.0 | 96.8 | 98.9 | 95.9 | 96.0 | 89.6 | 87.1 | 93.8 |
| 2018 | | 96.6 | 97.9 | 97.7 | 98.9 | 97.3 | 96.9 | 92.4 | 92.4 | 95.5 |
| 2019 | | 97.3 | 98.9 | 98.5 | 99.2 | 98.7 | 97.5 | 94.2 | 91.3 | 96.3 |
| 2020 | | 97.0 | 99.4 | 99.2 | 99.4 | 99.4 | 98.7 | 97.7 | 82.5 | 98.4 |
| 2021 | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2022 | | 109.1 | 103.8 | 105.1 | 104.6 | 103.3 | 110.0 | 110.9 | 134.4 | 110.4 |
| 2023 | | 114.1 | 107.8 | 109.5 | 108.1 | 107.5 | 116.1 | 119.6 | 141.5 | 117.3 |
| 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 | | 9.1 | 3.8 | 5.1 | 4.6 | 3.3 | 10.0 | 10.9 | 34.4 | 10.4 |
| 2023 | | 4.6 | 3.8 | 4.2 | 3.3 | 4.1 | 5.5 | 7.9 | 5.2 | 6.3 |
| 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 | 13.2 |
| | Sep | 9.8 | 4.6 | 6.3 | 5.8 | 3.8 | 12.7 | 14.1 | 30.1 | 13.2 |
| | Oct | 9.1 | 4.6 | 6.3 | 6.1 | 3.7 | 12.7 | 14.8 | 23.2 | 13.5 |
| | Nov | 9.3 | 4.7 | 6.4 | 6.4 | 3.7 | 12.8 | 13.1 | 25.4 | 12.9 |
| | Dec | 8.3 | 5.0 | 6.5 | 6.6 | 3.9 | 12.3 | 11.0 | 18.3 | 11.8 |
| 2023 | Jan | 7.9 | 4.5 | 6.0 | 5.3 | 3.9 | 11.6 | 11.4 | 17.6 | 11.6 |
| | Feb | 7.3 | 4.4 | 5.7 | 4.9 | 4.1 | 10.3 | 11.9 | 14.3 | 10.8 |
| | Mar | 4.6 | 4.4 | 5.5 | 4.7 | 4.2 | 9.5 | 9.7 | -3.3 | 9.5 |
| | Apr | 5.8 | 4.1 | 4.7 | 4.6 | 3.7 | 6.9 | 6.1 | 12.3 | 6.6 |
| | May | 5.3 | 4.0 | 4.3 | 4.3 | 3.7 | 5.7 | 6.3 | 10.3 | 5.9 |
| | Jun | 3.6 | 3.7 | 4.0 | 3.8 | 3.6 | 4.8 | 3.8 | 1.5 | 4.5 |
| | Jul | 3.4 | 3.6 | 3.7 | 2.8 | 4.0 | 4.0 | 3.6 | 1.7 | 3.9 |
| | Aug | 3.9 | 3.7 | 3.6 | 2.6 | 4.3 | 3.5 | 9.0 | 2.1 | 4.9 |
| | Sep | 3.9 | 3.5 | 3.5 | 2.2 | 4.3 | 3.2 | 8.7 | 3.0 | 5.1 |
| | Oct | 3.7 | 3.4 | 3.3 | 1.9 | 4.3 | 3.0 | 8.5 | 2.7 | 4.9 |
| | Nov | 3.5 | 3.2 | 3.1 | 1.5 | 4.3 | 2.7 | 8.3 | 2.5 | 4.7 |
| | Dec | 3.4 | 3.1 | 3.0 | 1.2 | 4.3 | 2.4 | 8.1 | 2.4 | 4.4 |

*Source: INE and Funcas (Forecasts).*

**Chart 12.1 - Inflation rate (I)**

Annual percentage changes

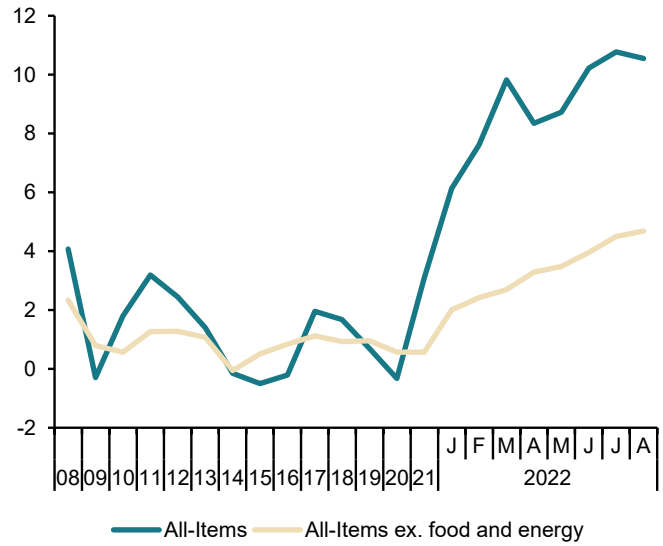



**Chart 12.2 - Inflation rate (II)**

Annual percentage changes

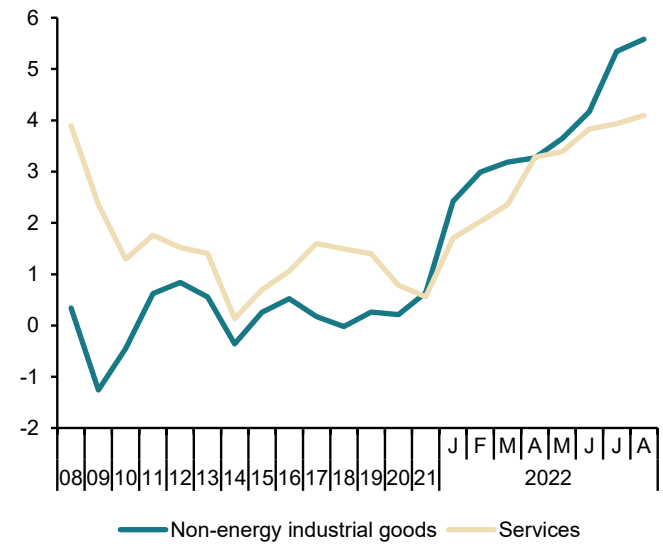


Table 13

## Other prices and costs indicators

| | | GDP deflator (a) | Industrial producer prices | | Housing prices | | Urban land prices (M. Public Works) | Labour Costs Survey | | | | Wage increase agreed in collective bargaining |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | Excluding energy | Housing Price Index (INE) | $m^2$ average price (M. Public Works) | | Total labour costs per worker | Wage costs per worker | Other cost per worker | Total labour costs per hour worked | |
| | | 2015=100 | 2015=100 | | 2007=100 | | | 2000=100 | | | | |
| 2014 | | 99.5 | 102.1 | 99.7 | 64.5 | 71.0 | 52.6 | 143.3 | 140.9 | 150.7 | 155.4 | -- |
| 2015 | | 100.0 | 100.0 | 100.0 | 66.8 | 71.7 | 54.9 | 144.2 | 142.5 | 149.6 | 156.5 | -- |
| 2016 | | 100.3 | 96.9 | 99.6 | 70.0 | 73.1 | 57.8 | 143.6 | 142.1 | 148.4 | 156.2 | -- |
| 2017 | | 101.6 | 101.1 | 101.9 | 74.3 | 74.8 | 58.2 | 144.0 | 142.3 | 149.1 | 156.2 | -- |
| 2018 | | 102.9 | 104.1 | 103.0 | 79.3 | 77.4 | 57.3 | 145.4 | 143.8 | 150.6 | 158.5 | -- |
| 2019 | | 104.4 | 103.6 | 103.2 | 83.3 | 79.8 | 57.7 | 148.7 | 146.4 | 155.7 | 162.7 | -- |
| 2020 | | 105.7 | 99.2 | 103.1 | 85.0 | 78.9 | 52.3 | 145.4 | 142.6 | 154.1 | 173.4 | -- |
| 2021 | | 108.1 | 116.4 | 110.4 | 88.2 | 80.6 | 54.3 | 153.9 | 151.5 | 161.5 | 172.3 | -- |
| 2022 (b) | | 110.5 | 154.0 | 123.6 | 93.6 | 84.5 | 58.4 | 158.2 | 155.8 | 165.8 | 169.2 | -- |
| 2020 | IV | 106.5 | 99.9 | 103.6 | 85.0 | 78.9 | 51.0 | 155.5 | 154.4 | 159.1 | 180.6 | -- |
| 2021 | I | 106.9 | 104.0 | 106.2 | 85.4 | 79.0 | 49.0 | 147.3 | 142.9 | 160.7 | 163.4 | -- |
| | II | 106.8 | 110.3 | 109.5 | 87.5 | 80.2 | 58.3 | 156.4 | 154.6 | 161.8 | 170.8 | -- |
| | III | 108.1 | 118.2 | 111.4 | 89.3 | 80.8 | 52.4 | 149.7 | 146.2 | 160.3 | 175.2 | -- |
| | IV | 110.5 | 132.9 | 114.4 | 90.4 | 82.4 | 57.5 | 162.5 | 162.2 | 163.3 | 179.6 | -- |
| 2022 | I | 110.4 | 147.1 | 119.6 | 92.7 | 84.3 | 58.3 | 154.2 | 150.3 | 166.2 | 165.5 | -- |
| | II | 110.6 | 158.6 | 126.4 | 94.5 | 84.6 | 58.4 | 162.3 | 161.3 | 165.3 | 172.8 | -- |
| | III (b) | -- | 161.0 | 127.3 | -- | -- | -- | -- | -- | -- | -- | -- |
| 2022 | May | -- | 158.1 | 126.6 | -- | -- | -- | -- | -- | -- | -- | -- |
| | Jun | -- | 161.0 | 127.1 | -- | -- | -- | -- | -- | -- | -- | -- |
| | Jul | -- | 161.0 | 127.3 | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | | | | Annual percent changes (c) | | | | | | |
| 2014 | | -0.2 | -1.3 | -0.8 | 0.3 | -2.4 | -4.6 | -0.3 | -0.1 | -1.0 | 0.1 | 0.5 |
| 2015 | | 0.5 | -2.1 | 0.3 | 3.6 | 1.1 | 4.3 | 0.6 | 1.1 | -0.7 | 0.6 | 0.7 |
| 2016 | | 0.3 | -3.1 | -0.4 | 4.7 | 1.9 | 5.3 | -0.4 | -0.3 | -0.8 | -0.1 | 1.0 |
| 2017 | | 1.3 | 4.4 | 2.3 | 6.2 | 2.4 | 0.8 | 0.2 | 0.1 | 0.5 | 0.0 | 1.4 |
| 2018 | | 1.2 | 3.0 | 1.1 | 6.7 | 3.4 | -1.6 | 1.0 | 1.0 | 1.0 | 1.5 | 1.8 |
| 2019 | | 1.4 | -0.4 | 0.1 | 5.1 | 3.2 | 0.7 | 2.2 | 1.9 | 3.4 | 2.6 | 2.3 |
| 2020 | | 1.2 | -4.3 | 0.0 | 2.1 | -1.1 | -9.4 | -2.2 | -2.6 | -1.0 | 6.6 | 1.9 |
| 2021 | | 2.3 | 17.3 | 7.0 | 3.7 | 2.1 | 3.7 | 5.9 | 6.3 | 4.8 | -0.6 | 1.5 |
| 2022 (d) | | 3.4 | 42.3 | 14.2 | 8.3 | 6.1 | 8.8 | 4.2 | 4.7 | 2.8 | 1.2 | 2.6 |
| 2020 | IV | 1.2 | -2.8 | 0.5 | 1.5 | -1.8 | -9.7 | -0.1 | -0.7 | 1.6 | 5.5 | 1.9 |
| 2021 | I | 1.8 | 2.6 | 2.6 | 0.9 | -0.9 | -16.9 | 1.4 | 1.0 | 2.6 | 3.1 | 1.6 |
| | II | 1.4 | 14.5 | 6.7 | 3.3 | 2.4 | 16.3 | 13.2 | 14.4 | 9.9 | -5.3 | 1.6 |
| | III | 2.2 | 19.1 | 8.4 | 4.2 | 2.6 | 6.2 | 4.9 | 5.0 | 4.4 | 0.6 | 1.5 |
| | IV | 3.8 | 33.1 | 10.4 | 6.4 | 4.4 | 12.7 | 4.5 | 5.1 | 2.7 | -0.5 | 1.5 |
| 2022 | I | 3.3 | 41.5 | 12.7 | 8.5 | 6.7 | 19.1 | 4.7 | 5.2 | 3.4 | 1.3 | 2.4 |
| | II | 3.6 | 43.8 | 15.4 | 8.0 | 5.5 | 0.2 | 3.8 | 4.3 | 2.2 | 1.2 | 2.5 |
| | III (e) | -- | 40.4 | 14.8 | -- | -- | -- | -- | -- | -- | -- | 2.6 |
| 2022 | Jun | -- | 43.1 | 15.3 | -- | -- | -- | -- | -- | -- | -- | 2.5 |
| | Jul | -- | 40.4 | 14.8 | -- | -- | -- | -- | -- | -- | -- | 2.6 |
| | Aug | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2.6 |

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

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

**Chart 13.1 - Housing and urban land prices**

Index (2007=100)

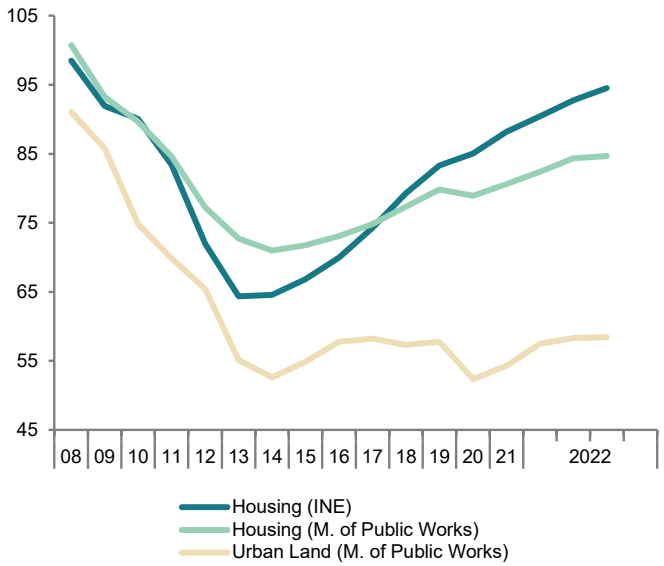



**Chart 13.2 - Wage costs**

Annual percent change

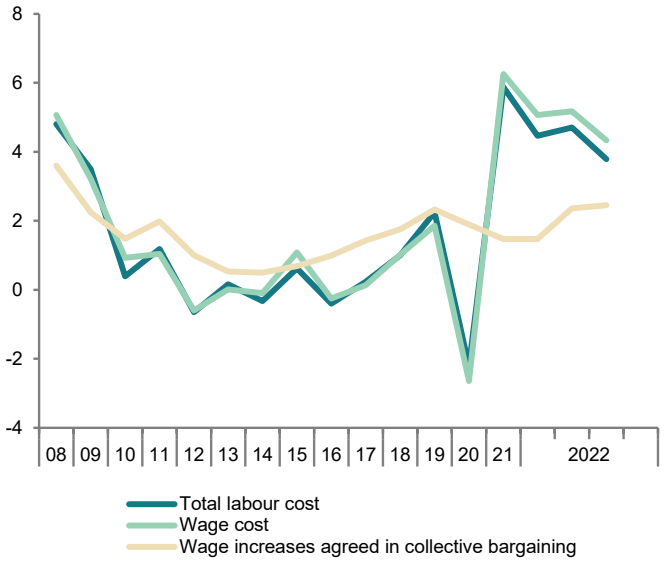


Table 14

## External trade (a)

| | | Exports of goods | | | Imports of goods | | | Exports to EU countries (monthly average) | Exports to non-EU countries (monthly average) | Total Balance of goods (monthly average) | Balance of goods excluding energy (monthly average) | Balance of goods with EU countries (monthly average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nominal | Prices | Real | Nominal | Prices | Real | | | | | |
| | | 2005=100 | | | 2005=100 | | | EUR Billions | | | | |
| 2015 | | 161.2 | 110.1 | 146.5 | 118.0 | 104.6 | 112.9 | 12.0 | 8.9 | -2.1 | 0.2 | 0.2 |
| 2016 | | 165.4 | 108.2 | 153.0 | 117.5 | 101.3 | 116.1 | 12.5 | 8.8 | -1.4 | 0.3 | 0.4 |
| 2017 | | 178.2 | 108.9 | 163.7 | 129.8 | 106.1 | 122.4 | 13.6 | 9.5 | -2.2 | 0.0 | 0.6 |
| 2018 | | 184.0 | 112.1 | 164.2 | 137.2 | 110.9 | 123.8 | 14.1 | 9.7 | -2.9 | -0.3 | 0.7 |
| 2019 | | 187.7 | 112.9 | 166.3 | 138.4 | 110.8 | 125.0 | 14.3 | 9.9 | -2.6 | -0.3 | 0.8 |
| 2020 | | 170.1 | 112.1 | 151.8 | 118.9 | 107.4 | 110.8 | 13.2 | 8.8 | -1.1 | 0.3 | 1.3 |
| 2021 | | 204.3 | 120.9 | 168.9 | 147.6 | 118.1 | 125.0 | 16.3 | 10.1 | -2.2 | 0.1 | 2.1 |
| 2022 (b) | | 247.7 | 139.5 | 177.5 | 195.3 | 137.4 | 142.1 | 19.8 | 12.0 | -5.5 | -0.7 | 3.2 |
| 2020 | II | 140.7 | 111.6 | 126.1 | 96.1 | 104.7 | 91.8 | 11.0 | 7.0 | -0.5 | 0.2 | 1.7 |
| 2022 | III | 176.4 | 110.5 | 159.7 | 120.2 | 105.5 | 114.0 | 13.8 | 8.8 | -0.6 | 0.6 | 1.5 |
| | IV | 180.9 | 112.5 | 160.8 | 123.8 | 107.4 | 115.2 | 14.0 | 9.2 | -0.7 | 0.5 | 1.2 |
| 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 | 134.8 | 172.7 | 181.0 | 134.4 | 134.6 | 19.1 | 10.8 | -5.1 | -1.2 | 3.1 |
| | II | 260.6 | 140.6 | 185.4 | 207.3 | 137.9 | 150.3 | 20.4 | 13.2 | -6.7 | -1.2 | 2.8 |
| 2022 | May | 272.2 | 148.3 | 183.6 | 214.5 | 143.7 | 149.3 | 21.3 | 13.6 | -6.6 | -1.3 | 2.9 |
| | Jun | 260.8 | 134.3 | 194.2 | 206.2 | 131.1 | 157.4 | 19.9 | 13.6 | -6.4 | -1.2 | 2.6 |
| | Jul | 248.7 | 147.7 | 168.3 | 201.3 | 143.6 | 140.2 | 19.8 | 12.1 | -7.0 | -1.3 | 2.9 |
| | | Percentage changes (c) | | | | | | | | Percentage of GDP | | |
| 2015 | | 3.8 | 0.6 | 3.2 | 3.5 | -2.5 | 6.1 | 5.3 | 1.8 | -2.3 | 0.2 | 0.2 |
| 2016 | | 2.6 | -1.7 | 4.4 | -0.4 | -3.1 | 2.8 | 4.7 | -0.1 | -1.6 | 0.3 | 0.4 |
| 2017 | | 7.7 | 0.7 | 7.0 | 10.5 | 4.7 | 5.5 | 8.3 | 6.9 | -2.3 | 0.0 | 0.7 |
| 2018 | | 3.3 | 3.0 | 0.3 | 5.7 | 4.5 | 1.2 | 3.9 | 2.5 | -2.9 | -0.3 | 0.7 |
| 2019 | | 2.0 | 0.7 | 1.3 | 0.9 | -0.1 | 0.9 | 1.8 | 2.2 | -2.5 | -0.3 | 0.8 |
| 2020 | | -9.4 | -0.7 | -8.8 | -14.1 | -3.1 | -11.4 | -8.2 | -11.1 | -1.2 | 0.3 | 1.4 |
| 2021 | | 20.1 | 7.9 | 11.3 | 24.2 | 10.0 | 12.8 | 23.8 | 14.5 | -2.2 | 0.1 | 2.0 |
| 2022 (d) | | 24.2 | 17.1 | 6.1 | 40.2 | 19.2 | 17.7 | 25.0 | 22.7 | -- | -- | -- |
| 2022 | III | 25.4 | -1.0 | 26.6 | 25.0 | 0.7 | 24.2 | 25.7 | 25.0 | -2.6 | 2.7 | 6.2 |
| | IV | 2.6 | 1.8 | 0.7 | 3.0 | 1.8 | 1.1 | 1.1 | 4.9 | -3.0 | 1.9 | 5.1 |
| 2021 | I | 3.5 | 2.4 | 1.1 | 5.0 | 3.0 | 1.9 | 6.4 | -0.8 | -4.6 | 2.7 | 7.3 |
| | II | 11.5 | 3.6 | 7.6 | 12.3 | 4.7 | 7.2 | 10.8 | 12.6 | -5.8 | 2.1 | 7.7 |
| | III | 0.9 | 2.6 | -1.6 | 3.2 | 3.2 | -0.1 | 1.6 | -0.2 | -8.2 | 1.0 | 9.3 |
| | IV | 2.4 | 3.0 | -0.7 | 9.3 | 3.8 | 5.3 | 2.2 | 2.5 | -15.5 | -3.2 | 8.2 |
| 2022 | I | 8.0 | 6.9 | 1.1 | 10.1 | 8.3 | 1.6 | 11.8 | 1.8 | -19.3 | -4.5 | 11.8 |
| | II | 11.9 | 4.2 | 7.3 | 14.6 | 2.6 | 11.7 | 6.8 | 22.8 | -25.0 | -4.4 | 10.4 |
| 2022 | May | 7.5 | 4.5 | 2.9 | 6.1 | 2.6 | 3.4 | 6.4 | 9.2 | -- | -- | -- |
| | Jun | -4.2 | -9.4 | 5.8 | -3.8 | -8.8 | 5.4 | -6.7 | -0.2 | -- | -- | -- |
| | Jul | -4.6 | 10.0 | -13.3 | -2.4 | 9.6 | -10.9 | -0.4 | -10.8 | -- | -- | -- |

*(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

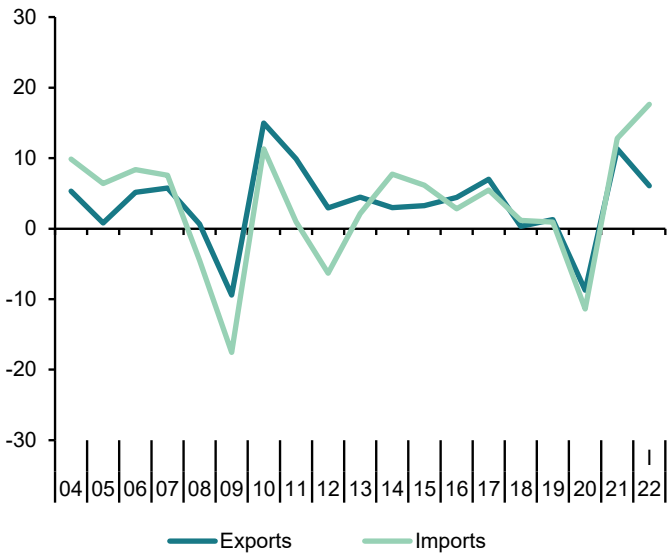



**Chart 14.2 - Trade balance**

EUR Billions, moving sum of 12 months

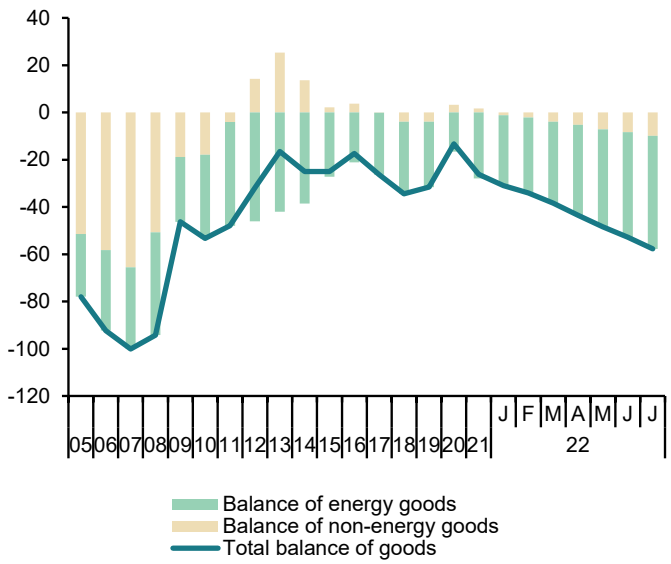


Table 15

## Balance of Payments (according to IMF manual)

(Net transactions)

| | | Current account | | | | | Capital account | Current and capital accounts | Financial account | | | | | | Errors and omissions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Goods | Services | Primary Income | Secondary Income | | | Financial account. excluding Bank of Spain | | | | | Bank of Spain | |
| | | | | | | | | | Total | Direct investment | 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 | | | | | | | | | | | | | | | |
| 2014 | | 17.54 | -21.26 | 53.25 | -3.79 | -10.67 | 4.54 | 22.08 | -10.00 | 10.68 | -2.67 | -19.03 | 1.01 | 27.14 | -4.94 |
| 2015 | | 21.83 | -20.68 | 53.44 | -0.24 | -10.69 | 6.98 | 28.80 | 69.47 | 30.07 | -5.16 | 40.75 | 3.81 | -40.79 | -0.12 |
| 2016 | | 35.37 | -14.28 | 58.70 | 2.75 | -11.80 | 2.43 | 37.80 | 89.49 | 11.19 | 46.65 | 29.09 | 2.57 | -54.02 | -2.34 |
| 2017 | | 32.21 | -22.04 | 63.93 | 0.44 | -10.13 | 2.84 | 35.05 | 68.01 | 12.46 | 25.08 | 22.74 | 7.72 | -32.63 | 0.33 |
| 2018 | | 22.61 | -29.31 | 62.00 | 1.73 | -11.81 | 5.81 | 28.42 | 46.64 | -16.87 | 15.13 | 49.43 | -1.05 | -14.25 | 3.98 |
| 2019 | | 26.24 | -26.63 | 63.24 | 2.20 | -12.58 | 4.22 | 30.45 | 10.07 | 7.95 | -49.96 | 59.17 | -7.09 | 15.76 | -4.63 |
| 2020 | | 6.79 | -8.63 | 24.92 | 2.74 | -12.24 | 5.13 | 11.93 | 90.94 | 17.66 | 48.60 | 31.58 | -6.91 | -81.88 | -2.87 |
| 2021 | | 11.52 | -19.71 | 37.63 | 6.34 | -12.74 | 10.91 | 22.44 | 7.48 | -16.92 | 2.42 | 19.00 | 2.97 | 16.03 | 1.07 |
| 2022 (a) | | -0.21 | -27.58 | 33.15 | 1.59 | -7.37 | 4.84 | 4.63 | 20.03 | 7.91 | -35.27 | 47.78 | -0.39 | -1.21 | 14.20 |
| 2020 | III | 1.06 | -2.68 | 7.43 | -0.94 | -2.75 | 0.89 | 1.95 | 13.58 | 7.95 | 4.64 | -0.98 | 1.98 | -0.54 | 11.09 |
| | IV | 5.43 | -0.69 | 5.30 | 3.96 | -3.15 | 2.78 | 8.20 | 6.23 | 2.14 | -7.38 | 11.19 | 0.28 | 5.70 | 3.73 |
| 2021 | I | -0.52 | -1.27 | 3.36 | 1.29 | -3.90 | 1.06 | 0.54 | 2.10 | -4.56 | 3.66 | 1.33 | 1.67 | -3.00 | -1.44 |
| | II | 2.26 | -1.11 | 6.27 | 0.78 | -3.68 | 1.78 | 4.04 | 24.11 | -16.20 | 15.43 | 24.71 | 0.16 | -14.40 | 5.66 |
| | III | 4.48 | -6.96 | 13.93 | 0.40 | -2.89 | 3.00 | 7.48 | 7.05 | -2.24 | 2.20 | 6.41 | 0.68 | 6.88 | 6.45 |
| | IV | 5.30 | -10.37 | 14.07 | 3.87 | -2.27 | 5.07 | 10.37 | 13.38 | 6.14 | -6.16 | 16.97 | -3.57 | -3.72 | -0.71 |
| 2022 | I | -3.56 | -13.67 | 12.03 | 1.61 | -3.53 | 1.49 | -2.07 | -2.06 | -2.01 | -24.60 | 24.33 | 0.22 | 2.66 | 2.68 |
| | II | 3.35 | -13.92 | 21.12 | -0.02 | -3.84 | 3.35 | 6.70 | 22.09 | 9.93 | -10.68 | 23.46 | -0.62 | -3.87 | 11.52 |
| | | | Goods and Services | | Primary and Secondary Income | | | | | | | | | | |
| 2022 | Apr | -0.42 | 1.46 | | -1.89 | | 0.82 | 0.39 | -28.48 | 1.48 | 24.21 | -55.57 | 1.41 | 33.23 | 4.36 |
| | May | 3.27 | 3.77 | | -0.51 | | 1.00 | 4.27 | 23.93 | -0.66 | 0.76 | 22.93 | 0.91 | -18.54 | 1.12 |
| | Jun | 0.50 | 1.97 | | -1.46 | | 1.54 | 2.04 | -13.23 | -0.93 | -8.89 | -2.52 | -0.89 | 10.19 | -5.08 |
| Percentage of GDP | | | | | | | | | | | | | | | |
| 2014 | | 1.7 | -2.1 | 5.2 | -0.4 | -1.0 | 0.4 | 2.1 | -1.0 | 1.0 | -0.3 | -1.8 | 0.1 | 2.6 | -0.5 |
| 2015 | | 2.0 | -1.9 | 5.0 | 0.0 | -1.0 | 0.6 | 2.7 | 6.4 | 2.8 | -0.5 | 3.8 | 0.4 | -3.8 | 0.0 |
| 2016 | | 3.2 | -1.3 | 5.3 | 0.2 | -1.1 | 0.2 | 3.4 | 8.0 | 1.0 | 4.2 | 2.6 | 0.2 | -4.8 | -0.2 |
| 2017 | | 2.8 | -1.9 | 5.5 | 0.0 | -0.9 | 0.2 | 3.0 | 5.9 | 1.1 | 2.2 | 2.0 | 0.7 | -2.8 | 0.0 |
| 2018 | | 1.9 | -2.4 | 5.2 | 0.1 | -1.0 | 0.5 | 2.4 | 3.9 | -1.4 | 1.3 | 4.1 | -0.1 | -1.2 | 0.3 |
| 2019 | | 2.1 | -2.1 | 5.1 | 0.2 | -1.0 | 0.3 | 2.4 | 0.8 | 0.6 | -4.0 | 4.8 | -0.6 | 1.3 | -0.4 |
| 2020 | | 0.6 | -0.8 | 2.2 | 0.2 | -1.1 | 0.5 | 1.1 | 8.1 | 1.6 | 4.3 | 2.8 | -0.6 | -7.3 | -0.3 |
| 2021 | | 1.0 | -1.6 | 3.1 | 0.5 | -1.1 | 0.9 | 1.9 | 0.6 | -1.4 | 0.2 | 1.6 | 0.2 | 1.3 | 0.1 |
| 2022 (a) | | 0.0 | -4.3 | 5.2 | 0.2 | -1.1 | 0.8 | 0.7 | 3.1 | 1.2 | -5.5 | 7.4 | -0.1 | -0.2 | 2.2 |
| 2020 | III | 0.4 | -1.0 | 2.6 | -0.3 | -1.0 | 0.3 | 0.7 | 4.8 | 2.8 | 1.7 | -0.3 | 0.7 | -0.2 | 3.9 |
| | IV | 1.8 | -0.2 | 1.8 | 1.3 | -1.1 | 0.9 | 2.8 | 2.1 | 0.7 | -2.5 | 3.8 | 0.1 | 1.9 | 1.3 |
| 2021 | I | -0.2 | -0.5 | 1.2 | 0.5 | -1.4 | 0.4 | 0.2 | 0.8 | -1.6 | 1.3 | 0.5 | 0.6 | -1.1 | -0.5 |
| | II | 0.8 | -0.4 | 2.1 | 0.3 | -1.2 | 0.6 | 1.3 | 8.0 | -5.4 | 5.2 | 8.2 | 0.1 | -4.8 | 1.9 |
| | III | 1.5 | -2.3 | 4.7 | 0.1 | -1.0 | 1.0 | 2.5 | 2.4 | -0.7 | 0.7 | 2.1 | 0.2 | 2.3 | 2.2 |
| | IV | 1.6 | -3.2 | 4.3 | 1.2 | -0.7 | 1.5 | 3.1 | 4.1 | 1.9 | -1.9 | 5.2 | -1.1 | -1.1 | -0.2 |
| 2022 | I | -1.1 | -4.4 | 3.9 | 0.5 | -1.1 | 0.5 | -0.7 | -0.7 | -0.6 | -7.9 | 7.8 | 0.1 | 0.9 | 0.9 |
| | II | 1.0 | -4.2 | 6.4 | 0.0 | -1.2 | 1.0 | 2.0 | 6.7 | 3.0 | -3.2 | 7.1 | -0.2 | -1.2 | 3.5 |

*(a) Period with available data.*

*Source: Bank of Spain.*

**Chart 15.1 - Balance of payments: Current and capital accounts**

EUR Billions, 12-month cumulated

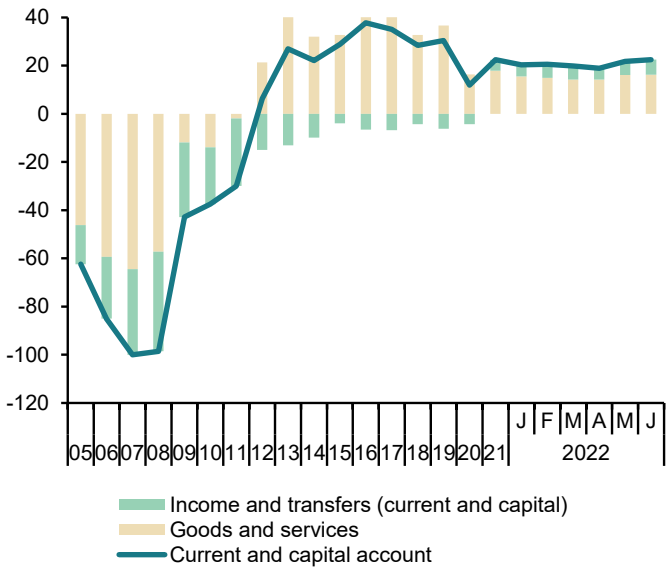



**Chart 15.2 - Balance of payments: Financial account**

EUR Billions, 12-month cumulated

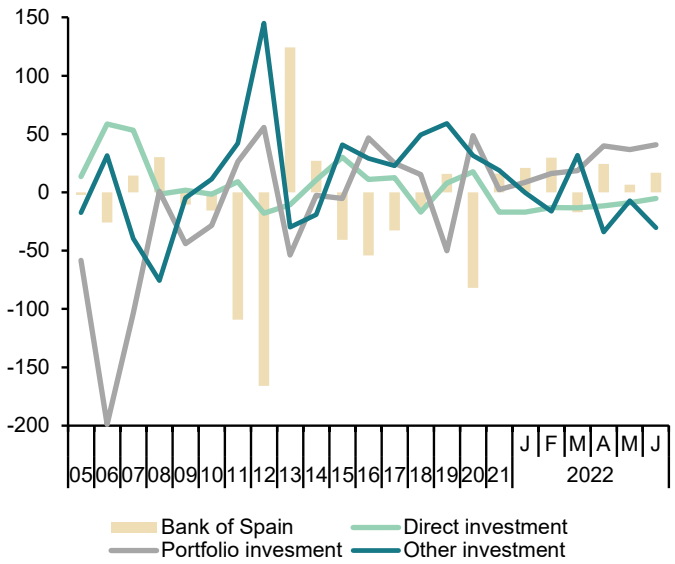


Table 16

## Competitiveness indicators in relation to EMU

| | | Relative Unit Labour Costs in manufacturing (Spain/Rest of EMU) (a) | | | Harmonized Consumer Prices | | | Producer prices | | | Real Effective Exchange Rate in relation to developed countries |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 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 |
| 2014 | | 102.2 | 99.7 | 102.6 | 100.6 | 100.0 | 100.7 | 102.1 | 102.8 | 99.3 | 112.2 |
| 2015 | | 99.4 | 99.9 | 99.4 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 107.8 |
| 2016 | | 98.1 | 96.7 | 101.4 | 99.7 | 100.3 | 99.4 | 96.9 | 97.9 | 98.9 | 108.0 |
| 2017 | | 97.7 | 96.4 | 101.4 | 101.7 | 101.8 | 99.9 | 101.2 | 100.7 | 100.5 | 109.7 |
| 2018 | | 97.4 | 93.3 | 104.4 | 103.5 | 103.6 | 99.9 | 103.8 | 103.3 | 100.4 | 110.5 |
| 2019 | | 97.6 | 94.0 | 103.9 | 104.3 | 104.8 | 99.5 | 103.4 | 103.7 | 99.8 | 109.1 |
| 2020 | | 95.4 | 93.3 | 102.2 | 103.9 | 105.1 | 98.9 | 99.8 | 101.2 | 98.6 | 108.5 |
| 2021 | | 97.1 | 94.9 | 102.4 | 107.0 | 107.8 | 99.3 | 114.6 | 111.0 | 106.2 | 108.9 |
| 2022 (b) | | -- | -- | -- | 115.2 | 115.0 | 100.2 | 145.7 | 135.6 | 107.4 | 108.9 |
| 2020 | III | -- | -- | -- | 103.4 | 105.1 | 98.4 | 99.7 | 100.6 | 99.2 | 108.2 |
| | IV | -- | -- | -- | 104.1 | 105.0 | 99.1 | 100.4 | 101.4 | 99.0 | 109.3 |
| 2021 | I | -- | -- | -- | 104.1 | 105.8 | 98.4 | 104.1 | 104.1 | 100.1 | 108.2 |
| | II | -- | -- | -- | 106.9 | 107.4 | 99.5 | 109.5 | 107.2 | 102.2 | 109.5 |
| | III | -- | -- | -- | 106.9 | 108.0 | 99.0 | 116.3 | 112.2 | 103.7 | 108.3 |
| | IV | -- | -- | -- | 110.2 | 109.9 | 100.3 | 128.3 | 120.4 | 106.6 | 109.4 |
| 2022 | I | -- | -- | -- | 112.3 | 112.3 | 100.0 | 139.8 | 130.5 | 107.2 | 108.9 |
| | II | -- | -- | -- | 116.5 | 116.1 | 100.4 | 149.6 | 138.1 | 108.3 | 109.2 |
| 2022 | Jun | -- | -- | -- | 118.2 | 117.0 | 101.0 | 151.7 | 139.6 | 108.7 | 110.2 |
| | Jul | -- | -- | -- | 117.5 | 117.1 | 100.3 | 151.4 | 143.6 | 105.4 | 108.6 |
| | Aug | -- | -- | -- | 117.8 | 117.9 | 100.0 | -- | -- | -- | -- |
| | | Annual percentage changes | | | | | Differential | Annual percentage changes | | Differential | Annual percentage changes |
| 2014 | | -1.7 | 0.2 | -1.9 | -0.2 | 0.4 | -0.6 | -1.3 | -1.5 | 0.2 | 13.0 |
| 2015 | | -2.8 | 0.2 | -3.0 | -0.6 | 0.0 | -0.6 | -2.0 | -2.8 | 0.8 | -3.9 |
| 2016 | | -1.3 | -3.2 | 2.0 | -0.3 | 0.3 | -0.6 | -3.1 | -2.1 | -1.0 | 0.2 |
| 2017 | | -0.4 | -0.4 | 0.0 | 2.0 | 1.5 | 0.5 | 4.5 | 2.8 | 1.7 | 1.5 |
| 2018 | | -0.3 | -3.2 | 2.9 | 1.7 | 1.7 | 0.0 | 2.5 | 2.6 | -0.1 | 0.8 |
| 2019 | | 0.2 | 0.7 | -0.5 | 0.8 | 1.2 | -0.4 | -0.3 | 0.4 | -0.6 | -1.3 |
| 2020 | | -2.3 | -0.7 | -1.6 | -0.3 | 0.3 | -0.6 | -3.6 | -2.5 | -0.8 | -0.6 |
| 2021 | | 1.8 | 1.6 | 0.1 | 3.0 | 2.6 | 0.4 | 14.8 | 9.7 | 5.1 | 0.4 |
| 2022 (c) | | -- | -- | -- | 9.0 | 7.6 | 1.4 | 37.8 | 26.9 | 10.9 | 0.2 |
| 2020 | III | -- | -- | -- | -0.6 | 0.0 | -0.6 | -0.6 | 0.0 | -0.6 | -0.3 |
| | IV | -- | -- | -- | -0.8 | -0.3 | -0.5 | -0.8 | -0.3 | -0.5 | 0.4 |
| 2021 | I | -- | -- | -- | 0.5 | 1.1 | -0.6 | 2.5 | 1.2 | 1.3 | 0.4 |
| | II | -- | -- | -- | 2.3 | 1.8 | 0.5 | 12.5 | 7.3 | 5.2 | 0.9 |
| | III | -- | -- | -- | 3.4 | 2.8 | 0.6 | 16.6 | 11.5 | 5.1 | 0.1 |
| | IV | -- | -- | -- | 5.8 | 4.6 | 1.2 | 27.8 | 18.8 | 9.0 | 0.1 |
| 2022 | I | -- | -- | -- | 7.9 | 6.1 | 1.8 | 34.3 | 25.4 | 8.9 | 0.7 |
| | II | -- | -- | -- | 8.9 | 8.0 | 0.9 | 36.6 | 28.9 | 7.7 | -0.3 |
| 2022 | Jun | -- | -- | -- | 10.0 | 8.6 | 1.4 | 36.3 | 28.8 | 7.5 | 0.5 |
| | Jul | -- | -- | -- | 10.7 | 8.9 | 1.8 | 33.5 | 29.7 | 3.8 | 0.5 |
| | Aug | -- | -- | -- | 10.5 | 9.1 | 1.4 | -- | -- | -- | -- |

*(a) EMU excluding Ireland and Spain. (b) Period with available data. (c) Growth of available period over the same period of the previous year.*
*Sources: Eurostat. Bank of Spain and Funcas.*

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

1998=100

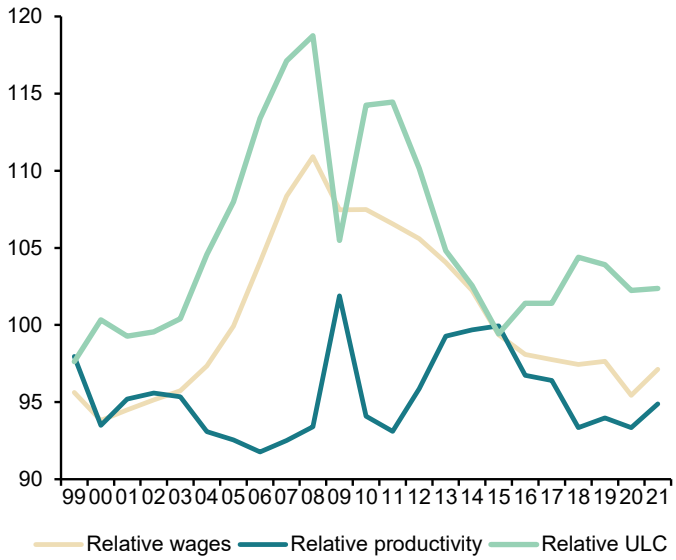



**Chart 16.2 - Harmonized Consumer Prices**

Annual growth in % and percentage points

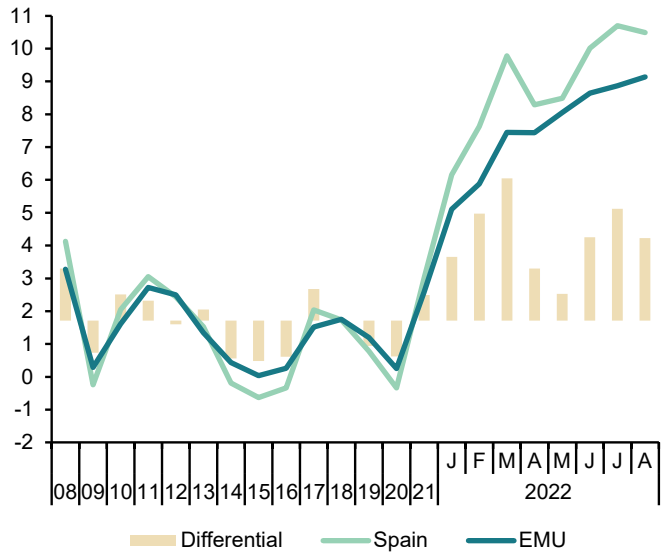


Table 17a

## Imbalances: International comparison (I)

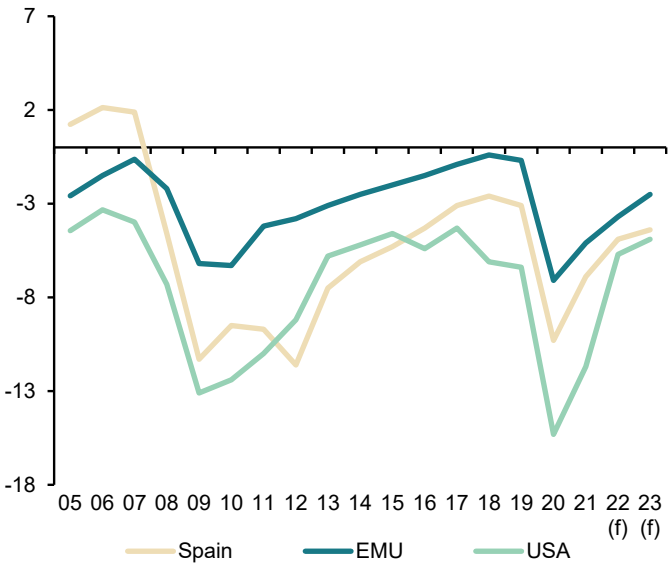
(In yellow: European Commission Forecasts)

| | Government net lending (+) or borrowing (-) | | | Government consolidated gross debt | | | Current Account Balance of Payments (National Accounts) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Spain | EMU | USA | Spain | EMU | USA | Spain | EMU | USA |
| | | | | Billions of national currency | | | | | |
| 2008 | -50.7 | -208.0 | -1,084.5 | 440.6 | 6,705.0 | 10,699.8 | -98.8 | -49.1 | -704.2 |
| 2009 | -120.6 | -578.3 | -1,896.6 | 569.5 | 7,444.7 | 12,311.3 | -43.7 | 64.9 | -383.1 |
| 2010 | -102.2 | -598.3 | -1,863.1 | 649.2 | 8,189.2 | 14,025.2 | -39.2 | 59.1 | -439.8 |
| 2011 | -103.6 | -416.1 | -1,709.1 | 743.0 | 8,648.5 | 15,222.9 | -29.0 | 88.5 | -460.3 |
| 2012 | -119.1 | -374.6 | -1,493.3 | 927.8 | 9,142.2 | 16,432.7 | 0.9 | 230.0 | -423.9 |
| 2013 | -76.8 | -305.4 | -977.3 | 1,025.7 | 9,466.9 | 17,352.0 | 20.8 | 285.1 | -352.1 |
| 2014 | -63.1 | -253.1 | -910.4 | 1,084.8 | 9,709.1 | 18,141.4 | 17.5 | 320.1 | -376.2 |
| 2015 | -57.2 | -210.1 | -837.2 | 1,113.7 | 9,828.8 | 18,922.2 | 21.8 | 359.2 | -424.7 |
| 2016 | -47.9 | -159.7 | -1,010.1 | 1,145.1 | 10,003.7 | 19,976.8 | 35.4 | 390.5 | -403.7 |
| 2017 | -36.1 | -105.3 | -833.7 | 1,183.4 | 10,089.5 | 20,492.7 | 32.2 | 414.5 | -372.9 |
| 2018 | -31.2 | -51.9 | -1,261.8 | 1,208.9 | 10,188.2 | 21,974.1 | 22.6 | 418.0 | -440.3 |
| 2019 | -38.1 | -79.6 | -1,363.9 | 1,223.4 | 10,273.2 | 23,201.4 | 26.2 | 343.4 | -479.8 |
| 2020 | -115.2 | -806.9 | -3,198.8 | 1,345.8 | 11,321.6 | 27,747.8 | 9.3 | 301.1 | -587.1 |
| 2021 | -82.8 | -625.7 | -2,680.4 | 1,427.2 | 11,945.1 | 29,617.2 | 11.5 | 386.0 | -828.7 |
| 2022 | -63.2 | -483.5 | -1,445.5 | 1,496.4 | 12,389.7 | 31,072.6 | 23.5 | 308.9 | -979.4 |
| 2023 | -60.3 | -342.3 | -1,297.1 | 1,563.7 | 12,796.9 | 32,340.5 | 28.5 | 396.4 | -913.0 |
| | | | | Percentage of GDP | | | | | |
| 2008 | -4.6 | -2.2 | -7.3 | 39.7 | 69.7 | 72.4 | -8.9 | -0.5 | -4.8 |
| 2009 | -11.3 | -6.2 | -13.1 | 53.3 | 80.3 | 85.0 | -4.1 | 0.7 | -2.6 |
| 2010 | -9.5 | -6.3 | -12.4 | 60.5 | 85.9 | 93.2 | -3.7 | 0.6 | -2.9 |
| 2011 | -9.7 | -4.2 | -11.0 | 69.9 | 88.3 | 97.6 | -2.7 | 0.9 | -3.0 |
| 2012 | -11.6 | -3.8 | -9.2 | 90.0 | 92.9 | 101.1 | 0.1 | 2.3 | -2.6 |
| 2013 | -7.5 | -3.1 | -5.8 | 100.5 | 95.3 | 103.0 | 2.0 | 2.9 | -2.1 |
| 2014 | -6.1 | -2.5 | -5.2 | 105.1 | 95.5 | 103.4 | 1.7 | 3.1 | -2.1 |
| 2015 | -5.3 | -2.0 | -4.6 | 103.3 | 93.4 | 103.9 | 2.0 | 3.4 | -2.3 |
| 2016 | -4.3 | -1.5 | -5.4 | 102.8 | 92.5 | 106.9 | 3.2 | 3.6 | -2.2 |
| 2017 | -3.1 | -0.9 | -4.3 | 101.9 | 89.9 | 105.2 | 2.8 | 3.7 | -1.9 |
| 2018 | -2.6 | -0.4 | -6.1 | 100.5 | 87.8 | 107.0 | 1.9 | 3.6 | -2.1 |
| 2019 | -3.1 | -0.7 | -6.4 | 98.3 | 85.7 | 108.6 | 2.1 | 2.9 | -2.2 |
| 2020 | -10.3 | -7.1 | -15.3 | 120.0 | 99.2 | 132.8 | 0.8 | 2.6 | -2.8 |
| 2021 | -6.9 | -5.1 | -11.7 | 118.4 | 97.4 | 128.8 | 1.0 | 3.2 | -3.6 |
| 2022 | -4.9 | -3.7 | -5.7 | 115.1 | 94.7 | 123.4 | 1.8 | 2.4 | -3.9 |
| 2023 | -4.4 | -2.5 | -4.9 | 113.7 | 92.7 | 122.1 | 2.1 | 2.9 | -3.4 |

*Source: European Commission Forecasts. Spring 2022.*

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

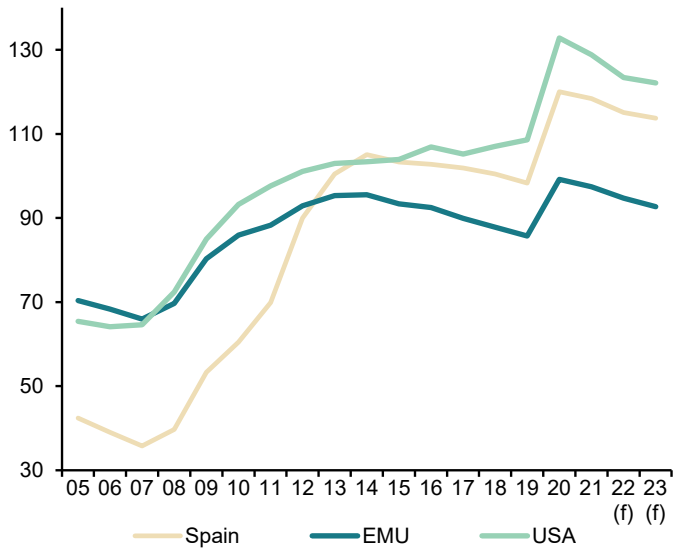
Percentage of GDP




*(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 | 4,771.4 | 12,115.6 | 954.1 | 7,273.3 | 8,187.1 |
| 2006 | 783.5 | 5,193.1 | 13,420.8 | 1,171.9 | 7,914.9 | 9,007.4 |
| 2007 | 879.3 | 5,561.2 | 14,350.6 | 1,371.6 | 8,673.8 | 10,141.9 |
| 2008 | 916.7 | 5,774.0 | 14,218.6 | 1,460.0 | 9,363.5 | 10,715.2 |
| 2009 | 908.9 | 5,880.7 | 14,056.7 | 1,473.5 | 9,458.0 | 10,197.5 |
| 2010 | 905.2 | 6,021.5 | 13,865.1 | 1,498.0 | 9,696.1 | 10,065.7 |
| 2011 | 877.9 | 6,104.5 | 13,734.6 | 1,458.3 | 10,085.7 | 10,302.9 |
| 2012 | 840.9 | 6,097.0 | 13,666.9 | 1,339.2 | 10,245.9 | 10,849.2 |
| 2013 | 793.6 | 6,057.7 | 13,899.1 | 1,267.9 | 10,273.1 | 11,363.0 |
| 2014 | 757.8 | 6,064.6 | 14,017.6 | 1,203.7 | 10,645.3 | 12,132.4 |
| 2015 | 733.3 | 6,127.9 | 14,190.1 | 1,183.7 | 11,194.0 | 12,944.7 |
| 2016 | 718.5 | 6,232.8 | 14,600.4 | 1,166.5 | 11,534.4 | 13,598.3 |
| 2017 | 711.0 | 6,395.1 | 15,145.3 | 1,146.6 | 11,711.1 | 14,562.6 |
| 2018 | 709.6 | 6,582.3 | 15,600.5 | 1,138.0 | 12,016.1 | 15,546.3 |
| 2019 | 707.7 | 6,809.2 | 16,090.6 | 1,150.1 | 12,385.1 | 16,306.3 |
| 2020 | 700.4 | 7,000.7 | 16,705.6 | 1,200.7 | 12,810.8 | 17,805.1 |
| 2021 | 704.1 | -- | 17,942.9 | 1,237.1 | -- | 18,649.3 |
| | | | Percentage of GDP | | | |
| 2005 | 70.8 | 56.5 | 92.9 | 102.9 | 86.1 | 62.8 |
| 2006 | 78.0 | 58.4 | 97.1 | 116.7 | 89.0 | 65.2 |
| 2007 | 81.8 | 59.2 | 99.1 | 127.5 | 92.4 | 70.1 |
| 2008 | 82.6 | 60.0 | 96.3 | 131.6 | 97.3 | 72.5 |
| 2009 | 85.0 | 63.4 | 97.1 | 137.8 | 102.0 | 70.4 |
| 2010 | 84.4 | 63.2 | 92.1 | 139.6 | 101.7 | 66.9 |
| 2011 | 82.5 | 62.3 | 88.0 | 137.1 | 103.0 | 66.0 |
| 2012 | 81.6 | 62.0 | 84.1 | 129.9 | 104.2 | 66.7 |
| 2013 | 77.8 | 61.0 | 82.5 | 124.2 | 103.4 | 67.5 |
| 2014 | 73.4 | 59.6 | 79.9 | 116.6 | 104.6 | 69.1 |
| 2015 | 68.0 | 58.2 | 77.9 | 109.8 | 106.4 | 71.1 |
| 2016 | 64.5 | 57.6 | 78.1 | 104.7 | 106.7 | 72.7 |
| 2017 | 61.2 | 57.0 | 77.7 | 98.6 | 104.4 | 74.8 |
| 2018 | 58.9 | 56.7 | 76.0 | 94.5 | 103.6 | 75.7 |
| 2019 | 56.8 | 56.8 | 75.3 | 92.3 | 103.3 | 76.3 |
| 2020 | 62.6 | 61.4 | 80.0 | 107.4 | 112.4 | 85.2 |
| 2021 | 58.3 | -- | 78.0 | 102.5 | -- | 81.1 |

*(a) Loans and debt securities.*

*Sources: Eurostat and Federal Reserve.*

**Chart 17b.1 - Household debt**

Percentage of GDP

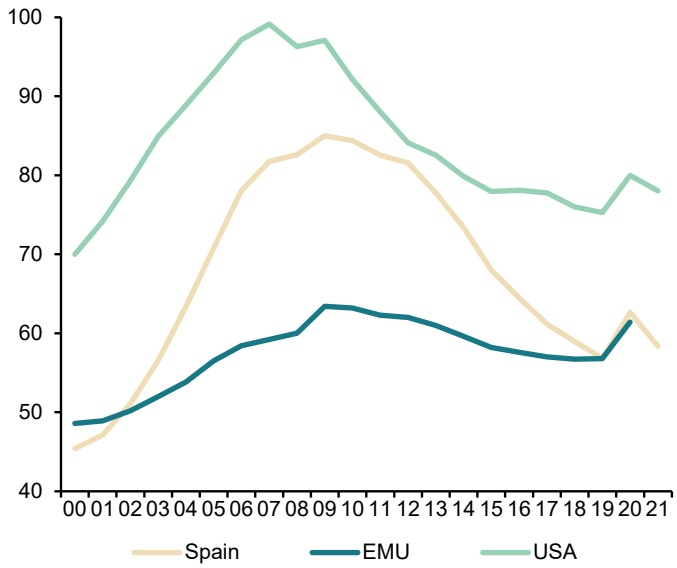
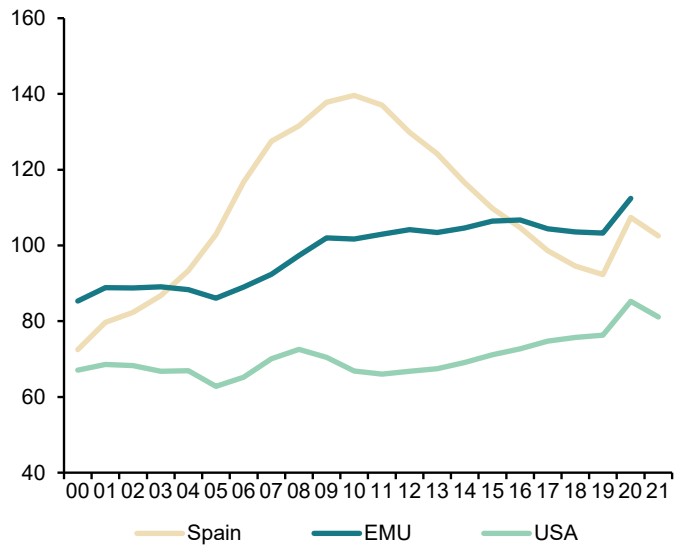



**Chart 17b.2 - Non-financial corporations debt**

Percentage of GDP



# 50 Financial System Indicators

Updated: September 15th, 2022

## *Highlights*

| Indicator | Last value available | Corresponding to: |
|---|---|---|
| Bank lending to other resident sectors (monthly average % var.) | 0.9 | June 2022 |
| Other resident sectors' deposits in credit institutions (monthly average % var.) | 1.0 | June 2022 |
| Doubtful loans (monthly % var.) | -5.6 | June 2022 |
| Recourse to the Eurosystem L/T (Eurozone financial institutions, million euros) | 2,124,718 | August 2022 |
| Recourse to the Eurosystem L/T (Spanish financial institutions, million euros) | 289,689 | August 2022 |
| Recourse to the Eurosystem (Spanish financial institutions million euros) - Main refinancing operations | 16 | August 2022 |
| "Operating expenses/gross operating income" ratio (%) | 53,15 | March 2022 |
| "Customer deposits/employees" ratio (thousand euros) | 13,310.65 | March 2022 |
| "Customer deposits/branches" ratio (thousand euros) | 118,280.77 | March 2022 |
| "Branches/institutions" ratio | 95.68 | March 2022 |

### A. Money and Interest Rates

| Indicator | Source | Average 2001-2019 | 2020 | 2021 | 2022 August | 2022 September | 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 | 0.654 | 1.013 | Daily data average |
| 3. One-year Euribor interest rate (from 1994) | Bank of Spain | 1.8 | -0.499 | -0.501 | 1.778 | 2.156 | End-of-month data |
| 4. Ten-year Treasury bonds interest rate (from 1998) | Bank of Spain | 3.4 | 0.03 | 0.5 | 2.6 | 2.8 | Market interest rate (not exclusively between account holders) |
| 5. Corporate bonds average interest rate | Bank of Spain | 3.8 | 1.3 | - | - | - | End-of-month straight bonds average interest rate (> 2 years) in the AIAF market |

*Comment on "Money and Interest Rates": Monetary authorities have shown increased concerns over inflation as prices have exhibited their highest growth in decades. Central banks have reacted by increasing interest rates by more than expected. In this context, interbank rates increased. The 1-year interbank rate went from 1.778% in August to 2.156% in mid-September and the 3-month Euribor increased from 0.654% to 1.013% over the same period. As for the Spanish 10-year bond yield, it increased to 2.8%.*

B. Financial Markets

| Indicator | Source | Average 2001-2018 | 2019 | 2020 | 2022 June | 2022 July | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 6. Outright spot treasury bills transactions trade ratio | Bank of Spain | 22.1 | 288.7 | 28.8 | 27.39 | 27.77 | (Traded amount/outstanding balance) x100 in the market (not exclusively between account holders) |
| 7. Outright spot government bonds transactions trade ratio | Bank of Spain | 19.8 | 87.2 | 18.5 | 12.61 | 10.56 | (Traded amount/outstanding balance) x100 in the market (not exclusively between account holders) |
| 8. Outright forward treasury bills transactions trade ratio | Bank of Spain | 0.5 | 0.01 | 0.34 | 0.01 | 0.01 | (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 | 1.2 | 0.63 | 0.50 | 0.46 | (Traded amount/outstanding balance) in the market (not exclusively between account holders) |
| 10. Three-month maturity treasury bills interest rate | Bank of Spain | 0.5 | -0.54 | -0.54 | -0.35 | -0.19 | Outright transactions in the market (not exclusively between account holders) |
| 11. Government bonds yield index (Dec1987=100) | Bank of Spain | 727.5 | 1.311.87 | 1.289.02 | - | - | Outright transactions in the market (not exclusively between account holders) |
| 12. Madrid Stock Exchange Capitalization (monthly average % chg.) | Bank of Spain and Madrid Stock Exchange | 0.1 | 1.2 | -0.6 | -7.3 | 0.6 | 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 | 2.6 | -7.4 | 10.7 | 1.8 | -19.7 | 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 | 1.007.1 | 881.6 | 718.9 | 807.7 | 803.6 (a) | Base 1985=100 |
| 15. IBEX-35 (Dec 1989=3000) | Bank of Spain and Madrid Stock Exchange | 9,703.6 | 8,812.9 | 7,347.3 | 8,0987 | 8,085.5 (a) | Base dec1989=3000 |
| 16. Madrid Stock Exchange PER ratio (share value/profitability) | Bank of Spain and Madrid Stock Exchange | 15.6 | 13.2 | 15.1 | 127 | 281 (a) | Madrid Stock Exchange Ratio "share value/ capital profitability" |
| 17. Long-term bonds. Stock trading volume (% chg.) | Bank of Spain and Madrid Stock Exchange | | - | | - | - | Variation for all stocks |

## B. Financial Markets (continued)

| Indicator | Source | Average 2001-2018 | 2019 | 2020 | 2022 June | 2022 July | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 18. Commercial paper. Trading balance (% chg.) | Bank of Spain and AIAF | | - | | - | - | AIAF fixed-income market |
| 19. Commercial paper. Three-month interest rate | Bank of Spain and AIAF | | - | | - | - | AIAF fixed-income market |
| 20. IBEX-35 financial futures concluded transactions (% chg.) | Bank of Spain | 0.9 | -14.4 | 5.1 | 06 | -78 | IBEX-35 shares concluded transactions |
| 21. IBEX-35 financial options concluded transactions (%chg.) | Bank of Spain | 12.9 | 30 | 35.4 | -437 | -667 | IBEX-35 shares concluded transactions |

*(a) Last data published: September 15th, 2022.*

*Comment on "Financial Markets": Stock markets fell in the first half of September amid substantial volatility mainly due to uncertainty related to inflation and macroeconomic projections. The IBEX-35 decreased to 8,086 points, and the General Index of the Madrid Stock Exchange to 804. During July (last month available), there was an increase in transactions of outright spot T-bills to 27.77 and a fall of spot government bonds transactions to 10.56. There was a decrease in IBEX-35 futures of 78% and of options of 667%.*

## C. Financial Saving and Debt

| Indicator | Source | Average 2008-2018 | 2019 | 2020 | 2021 Q4 | 2022 Q1 | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 22. Net Financial Savings/GDP (National Economy) | Bank of Spain | -1.4 | 2.5 | 1.2 | 1.9 | 1.6 | 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 | 2.2 | 7.1 | 2.8 | 3.1 | 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 | 270.1 | 282.0 | 335.3 | 319.9 | 307.9 | 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 | 63.7 | 56.9 | 62.5 | 58.4 | 57.0 | Households and non-profit institutions debt over GDP |
| 26. Households and non-profit institutions balance: financial assets (quarterly average % chg.) | Bank of Spain | 0.5 | 5.9 | 1.8 | 2.7 | -1.0 | Total assets percentage change (financial balance) |
| 27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.) | Bank of Spain | -1.2 | 0.3 | 0.3 | 0.8 | -0.5 | Total liabilities percentage change (financial balance) |

*Comment on "Financial Savings and Debt": During 2022Q1, the financial savings to GDP in the overall economy decreased to a rate of 1.6%. There was an increase in the financial savings rate of households to 3.1%. The debt to GDP ratio of the economy fell to 308%. Finally, there was a decrease in the stock of financial assets on households' balance sheets of 1% and of 0.5% in the stock of financial liabilities.*

D. Credit institutions. Business Development

| Indicator | Source | Average 2001-2019 | 2020 | 2021 | 2022 May | 2022 June | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 28. Bank lending to other resident sectors (monthly average % var.) | Bank of Spain | 5.2 | -0.1 | 0.2 | -0.01 | 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 | 0.7 | 1.0 | Deposits percentage change for the sum of banks, savings banks and credit unions. |
| 30. Debt securities (monthly average % var.) | Bank of Spain | 8.8 | 0.8 | -0.7 | 2.1 | 2.1 | 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 | 0.9 | -1.7 | Asset-side equity and shares percentage change for the sum of banks, savings banks and credit unions. |
| 32. Credit institutions. Net position (difference between assets from credit institutions and liabilities with credit institutions) (% of total assets) | Bank of Spain | -2.0 | -1.9 | 0.5 | 2.1 | 2.8 | 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 | -0.3 | -5.6 | 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 | -6.7 | -9.7 | 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 | 1.0 | 0.04 | Equity percentage change for the sum of banks, savings banks and credit unions. |

*Comment on "Credit institutions. Business Development": The latest available data as of June show an increase in bank credit to the private sector of 0.9%. Data also show a growth in financial institutions' deposit-taking of 1%. Holdings of debt securities grew 2.1%. Doubtful loans decreased 5.6% compared to the previous month.*

## E. Credit institutions. Market Structure and Eurosystem Refinancing

| Indicator | Source | Average 2000-2018 | 2019 | 2020 | 2021 December | 2022 March | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 36. Number of Spanish credit institutions | Bank of Spain | 179 | 114 | 113 | 110 | 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 | 81 | 78 | 84 | 82 | Total number of foreign credit institutions operating in Spanish territory |
| 38. Number of employees | Bank of Spain | 231.976 | 176,838 | 175,185 | 164,101 | 164,101 (a) | Total number of employees in the banking sector |
| 39. Number of branches | Bank of Spain | 37,607 | 23,851 | 22,589 | 19,015 | 18,467 | Total number of branches in the banking sector |
| 40. Recourse to the Eurosystem: long term (total Eurozone financial institutions) (Euro millions) | Bank of Spain | 371,551 | 642,118 | 1,774,798 | 2,206,332 | 2,124,718 (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 | 79,421 | 132,611 | 260,971 | 289,545 | 289,689 (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 | 26,049 | 102 | 3 | 16 | 16 (b) | Open market operations: main long term refinancing operations. Spain total |

*(a) Last data published: December 2021.*

*(b) Last data published: August 31th, 2022.*

*Comment on "Credit institutions. Market Structure and Eurosystem Refinancing": In August 2022, recourse to Eurosystem funding by Spanish credit institutions reached 289.7 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 626 billion euros in August 2022 and 4.9 trillion euros for the entire Eurozone banking system.*

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

| Indicator | Source | Average 2000-2018 | 2019 | 2020 | 2021 Q4 | 2022 Q1 | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 43. "Operating expenses/gross operating income" ratio | Bank of Spain | 49.11 | 53.30 | 54.90 | 54.18 | 53.15 | 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 | 4,219.37 | 9,574.38 | 11,173.92 | 12,137.18 | 13,310.65 | Productivity indicator (business by employee) |
| 45. "Customer deposits/ branches" ratio (Euro thousands) | Bank of Spain | 27,149.27 | 74.450.04 | 89,952.10 | 111,819.77 | 118,280.77 | Productivity indicator (business by branch) |

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

| Indicator | Source | Average 2000-2018 | 2019 | 2020 | 2021 Q4 | 2022 Q1 | Definition and calculation |
|---|---|---|---|---|---|---|---|
| 46. "Branches/institutions" ratio | Bank of Spain | 194.96 | 123.09 | 116.74 | 98.01 | 95.68 | Network expansion indicator |
| 47. "Employees/branches" ratio | Bank of Spain | 6.24 | 7.7 | 8.1 | 9.2 | 8.8 | Branch size indicator |
| 48. "Equity capital" (monthly average % var.) | Bank of Spain | 0.04 | 0.25 | -2.4 | 0.6 | 0.2 | Credit institutions equity capital variation indicator |
| 49. ROA | Bank of Spain | 0.43 | 0.59 | 0.4 | 0.5 | 0.4 | Profitability indicator, defined as the "pre-tax profit/average total assets" |
| 50. ROE | Bank of Spain | 5.78 | 6.96 | -0.7 | 6.9 | 5.3 | Profitability indicator, defined as the "pre-tax profit/equity capital" |

*Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability": During 2022Q1, there was a relative decrease in the profitability of Spanish banks.*

# Social Indicators

Table 1

## Population

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

*ID INE: Indicadores Demográficos INE.*

*EPC: Estadística del Padrón Continuo.*

*EVR: Estadística de Variaciones Residenciales.*

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

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

● *Provisional data.*

Table 2

## Households and families

| | Households | | | | Nuptiality | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Households (thousands) | Average household size | Households with one person younger than 65 (%) | Households with one person older than 65 (%) | Marriage rate (Spanish) | Marriage rate (foreign population) | Divorce rate | Mean age at first marriage, men | Mean age at first marriage, women | Same sex marriages (%) |
| 2008 | 16,742 | 2.71 | 12.0 | 10.2 | 8.5 | 8.4 | 2.39 | 32.4 | 30.2 | 1.6 |
| 2010 | 17,174 | 2.67 | 12.8 | 9.9 | 7.2 | 7.9 | 2.21 | 33.2 | 31.0 | 1.9 |
| 2012 | 17,434 | 2.63 | 13.7 | 9.9 | 7.2 | 6.7 | 2.23 | 33.8 | 31.7 | 2.0 |
| 2014 | 18,329 | 2.51 | 14.2 | 10.6 | 6.9 | 6.5 | 2.17 | 34.4 | 32.3 | 2.1 |
| 2015 | 18,376 | 2.54 | 14.6 | 10.7 | 7.3 | 6.5 | 2.08 | 34.8 | 32.7 | 2.3 |
| 2016 | 18,444 | 2.52 | 14.6 | 10.9 | 7.5 | 6.8 | 2.08 | 35.0 | 32.9 | 2.5 |
| 2017 | 18,512 | 2.52 | 14.2 | 11.4 | 7.4 | 7.0 | 2.11 | 35.3 | 33.2 | 2.7 |
| 2018 | 18,581 | 2.51 | 14.3 | 11.5 | 7.1 | 6.6 | 2.04 | 35.6 | 33.4 | 2.9 |
| 2019 | 18,697 | 2.52 | 14.9 | 11.2 | 7.1 | 6.7 | 1.95 | 36.0 | 33.9 | 3.1 |
| 2020 | 18,794 | 2.52 | 15.0 | 11.4 | 3.8 | 4.1 | 1.63 | 37.1 | 34.9 | 3.5 |
| 2021 | 18,919 | 2.50 | 15.6 | 11.0 | 6.3 | 5.6 | | | | 3.4 |
| 2022■ | 19,060 | 2.49 | | | | | | | | |
| Sources | LFS | LFS | EPF | EPF | ID INE | ID INE | ID INE | ID INE | ID INE | MNP |

Table 2 (Continued)

## Households and families

| | Fertility | | | | | |
|---|---|---|---|---|---|---|
| | Median age at first child, women | Total fertility rate (Spanish women) | Total fertility rate (Foreign women) | Births to single mothers (%) | Abortion rate | Abortion by Spanish-born women (%) |
| 2008 | 29.3 | 1.36 | 1.83 | 33.2 | 11.8 | 55.6 |
| 2010 | 29.8 | 1.30 | 1.68 | 35.5 | 11.5 | 58.3 |
| 2012 | 30.3 | 1.27 | 1.56 | 39.0 | 12.0 | 61.5 |
| 2014 | 30.6 | 1.27 | 1.62 | 42.5 | 10.5 | 63.3 |
| 2015 | 30.7 | 1.28 | 1.66 | 44.4 | 10.4 | 65.3 |
| 2016 | 30.8 | 1.27 | 1.72 | 45.8 | 10.4 | 65.8 |
| 2017 | 30.9 | 1.25 | 1.71 | 46.8 | 10.5 | 66.1 |
| 2018 | 31.0 | 1.20 | 1.65 | 47.3 | 11.1 | 65.3 |
| 2019 | 31.1 | 1.17 | 1.59 | 48.4 | 11.5 | 64.1 |
| 2020 | 31.2 | 1.12 | 1.45 | 47.6 | 10.3 | 65.8 |
| 2021 | 31.6 | 1.16 | 1.38 | | | |
| Sources | ID INE | ID INE | ID INE | ID INE | MSAN | MSAN |

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

*Marriage rate: Number of marriages per thousand population.*

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

*Divorce rate: Number of divorces per thousand population.*

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

■ *Data refer to January-June.*

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 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 | 55,266● | 4.93● |
| 2021 | 16.4 | 5.8 | 32.3 | 46.7 | 1,622,919● | 691,437● | 776,664● | 1,338,304 | 258,991 | | |
| 2022■ | 16.1 | 5.9 | 32.4 | 49.0 | | | | | | | |
| Sources | LFS | LFS | LFS | LFS | MECD | MECD | MECD | MECD | MECD | MECD | MECD |

*LFS: Labor Force Survey.*

*MECD: Ministerio de Educación, Cultura y Deporte.*

● *Provisional data.*

■ *Data refer to January-June.*

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 | 1,000 | 929,484 | 916 | 2,348,388 | 624 | 1,221,390 | 252,328 | 197,303 | 26,842 |
| 2015 | 838,392 | 5,641,908 | 1,021 | 931,668 | 923 | 2,353,257 | 631 | 1,102,529 | 253,838 | 198,891 | 23,643 |
| 2016 | 763,697 | 5,731,952 | 1,043 | 938,344 | 930 | 2,364,388 | 638 | 997,192 | 254,741 | 199,762 | 21,350 |
| 2017 | 726,575 | 5,826,123 | 1,063 | 947,130 | 936 | 2,360,395 | 646 | 902,193 | 256,187 | 199,120 | 19,019 |
| 2018 | 751,172 | 5,929,471 | 1,091 | 951,838 | 946 | 2,359,931 | 664 | 853,437 | 256,842 | 196,375 | 16,472 |
| 2019 | 807,614 | 6,038,326 | 1,138 | 957,500 | 975 | 2,361,620 | 712 | 912,384 | 259,570 | 193,122 | 14,997 |
| 2020 | 1,828,489 | 6,094,447 | 1,162 | 952,704 | 985 | 2,352,680 | 725 | 1,017,429 | 261,325 | 188,670 | 13,373 |
| 2021 | 922,856 | 6,165,349 | 1,190 | 949,765 | 994 | 2,353,987 | 740 | 969,412 | 262,177 | 184,378 | 11,892 |
| 2022 | 751,459■ | 6,240,196● | 1,252● | 951,903● | 1,035● | 2,350,951● | 777● | 890,397■ | 264,936■ | 181,303■ | 10,855■ |
| 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-August.*

*■ Data refer to January-July.*

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 | 7.63 | 115 | 81 |
| 2020 | 7.6● | 85,383● | 2.0 | 0.8 | 3.7 | 0.7 | | | 148 | 99 |
| 2021 | | | | | | | | | 121 | 75 |
| Sources | EUROSTAT | EUROSTAT | INCLASNS | INCLASNS | INCLASNS | INCLASNS | INCLASNS | INCLASNS | INCLASNS | INCLASNS |

*INCLASNS: Indicadores clave del Sistema Nacional del Salud.*

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

*● Provisional data.*

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# Notes

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