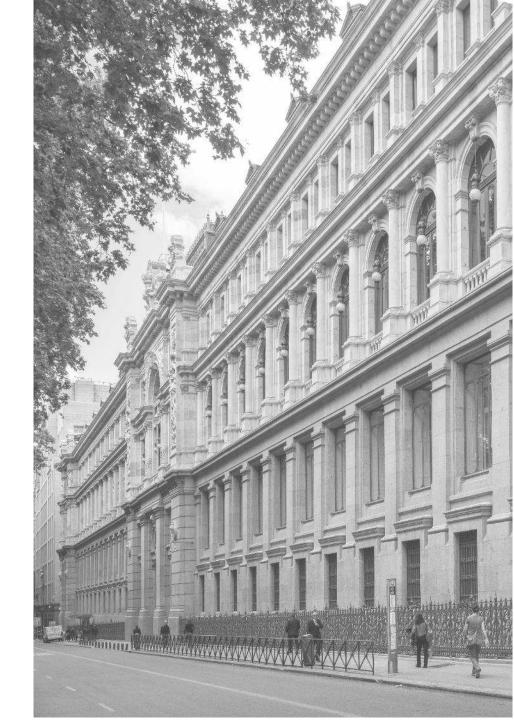


ANNUAL REPORT 2022

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Banco de España Madrid, 10 May 2023



BANCO DE ESPAÑA ANNUAL REPORT 2022

Chapter 1 The Spanish economy's resilience amid adversity and uncertainty Chapter 2 Robust and sustainable growth and convergence with the euro area: challenges and opportunities Chapter 3 The current episode of price pressures in the euro area, the monetary policy response and its effects Spain and the European Union in the face of the energy crisis: near-term adjustments and challenges pending Chapter 4



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DESPITE AN ADVERSE AND UNCERTAIN ENVIRONMENT, IN RECENT QUARTERS ECONOMIC GROWTH IN SPAIN – AND WORLDWIDE – HAS BEEN MORE RESILIENT THAN EXPECTED

Main factors underpinning activity

Partial correction of some of the previous <u>negative supply shocks</u> (e.g. energy prices and bottlenecks in global production and supply chains)

Reopening of the economy after the pandemic (especially during 2022 H1, but with relatively lasting effects)

Support measures rolled out by the authorities in the face of the energy crisis and rising prices

Strong labour market momentum - underpinned by wage moderation - and a declining temporary employment ratio

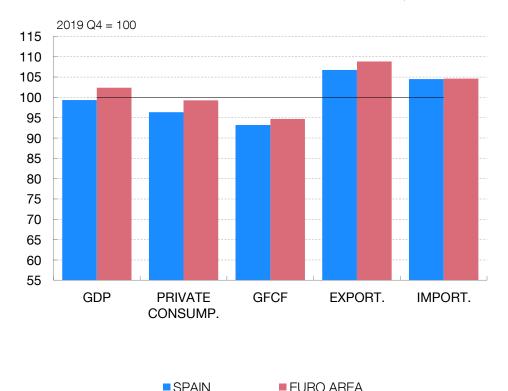
Sound external sector performance

(thanks to the strong recovery in international tourism and growth in non-tourism services exports)

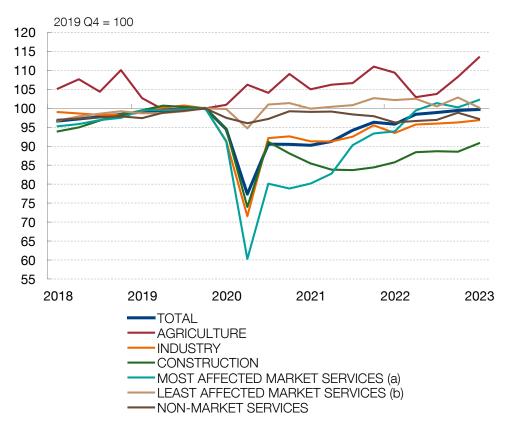
SPANISH GDP GREW BY 0.5% IN 2023 Q1 – ABOVE EXPECTATIONS AND MORE THAN THE EURO AREA GDP – AND HAS PRACTICALLY RETURNED TO ITS PRE-PANDEMIC LEVEL, ALBEIT VERY UNEVENLY

- Private consumption and, especially, investment (particularly residential investment) are still below their pre-pandemic levels
- By sector, agriculture and services have recovered the pre-COVID-19 level of activity, unlike industry and construction

GDP AND DEMAND COMPONENTS IN 2022 Q4



GVA, BY SECTOR OF ACTIVITY



Sources: INE, Eurostat and Banco de España.

⁽a) Wholesale and retail trade, transportation and accommodation and food service activities, professional, scientific and administrative activities and arts and recreation services.

⁽b) Information and communication, financial and insurance activities and real estate activities.





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WHILE INFLATIONARY PRESSURES HAVE RECENTLY MODERATED, THEY WILL REMAIN HIGH IN THE COMING QUARTERS

The changing nature of inflationary pressures

From energy to food and the more stable components of the consumption basket and consumer services

From external to internal inflationary pressures

There are signs of price growth moderating in the initial stages of production processes

In any event, the current inflationary episode is having a very significant negative impact on national income

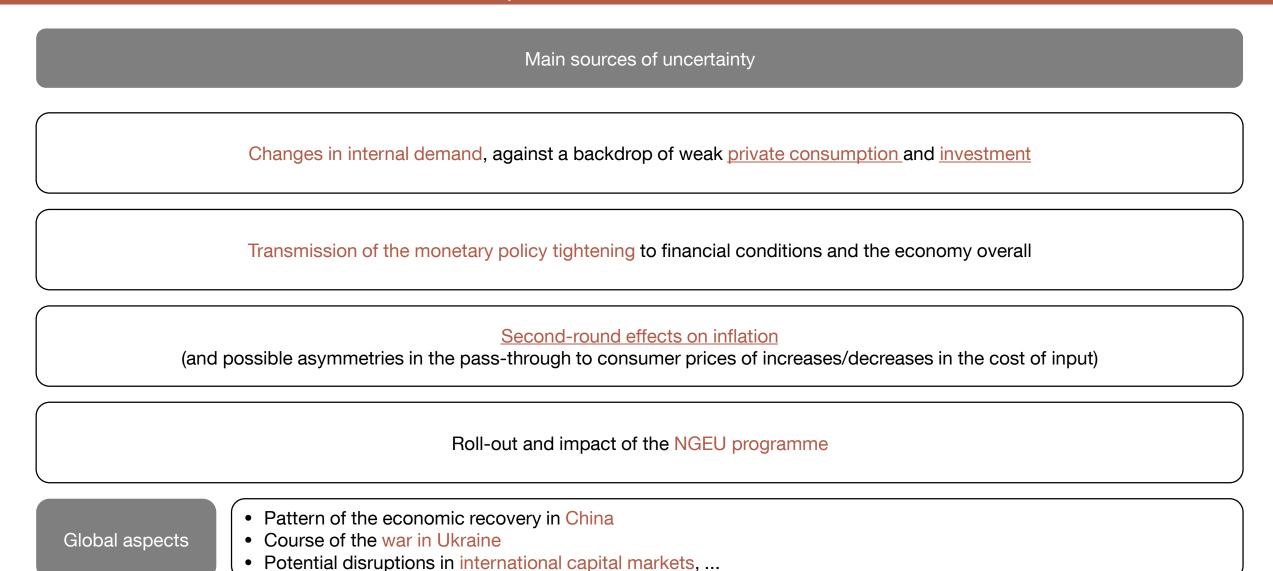




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IN THE COMING QUARTERS ECONOMIC GROWTH IS EXPECTED TO GRADUALLY ACCELERATE AND INFLATION TO PROGRESSIVELY DECLINE, IN A STILL VERY UNCERTAIN SETTING



IT IS PARTICULARLY IMPORTANT THAT THE TRANSMISSION OF MONETARY POLICY BE STUDIED IN THE CURRENT SITUATION AS IT MAY NOT BE OPERATING AS IT DID IN PREVIOUS EPISODES

The ECB has been adjusting its monetary policy stance since end-2021, in response to the high and persistent inflationary pressures

The impact that the measures adopted by the ECB have had and will have in the future is felt in different stages and through different channels

Pass-through to interest rates on new loans and deposits

Bank channel

Pass-through to credit standards and net financing flows

<u>Uneven pass-through across countries</u>: bank and national banking system characteristics

Income channel

Possibly weaker in the short them than in other previous episodes...

... although it is already having an appreciable and very heterogeneous impact by country...

... and across different types of households and firms in Spain

Effects on aggregate economic activity and inflation in a hypothetical scenario





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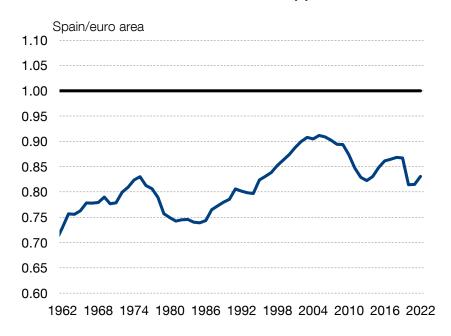
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SPANISH ECONOMIC GROWTH IN RECENT DECADES HAS NOT BEEN ENOUGH TO ACHIEVE CONVERGENCE WITH THE PER CAPITA INCOME LEVEL OF THE EURO AREA

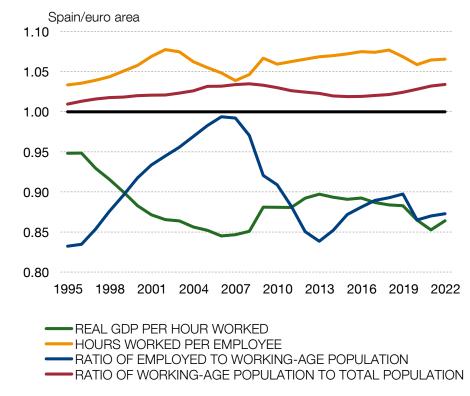
This lack of convergence is fundamentally determined by the persistence of two well-known shortcomings: low productivity and a low employment rate

$$\frac{\text{GDP}}{\text{P}_{\text{total}}} = \frac{\text{GDP}}{\text{Hours}} \frac{\text{Hours}}{\text{L}} \frac{\text{L}}{\text{P}_{16-64}} \frac{\text{P}_{16-64}}{\text{P}_{\text{total}}}$$

GDP PER CAPITA (a)



COMPONENTS OF GDP PER CAPITA



Source: Eurostat.

(a) GDP per capita in Spain relative to the 19 euro area countries in real and relative purchasing power parity terms.

REMEDYING THESE SHORTCOMINGS WILL DEMAND VERY SUBSTANTIAL CHANGES TO MANY STRUCTURAL ASPECTS OF THE SPANISH ECONOMY

- To this end, public policies have a vital role to play, including, in particular
 - the appropriate use of NGEU funds, and
 - the rigorous and ambitious design and implementation of the reforms included in the Spanish Recovery, Transformation and Resilience Plan (RTRP)
- The success of these policies depends on, among other factors, their objectives (which must be clear and measurable) being carefully defined in advance
- It is also contingent on such interventions being rigorously and transparently evaluated following their implementation in order to determine the extent to which each one enables goals to be met efficiently

Figure 2.1 MAIN ACTIONS CARRIED OUT AND SCHEDULED IN THE SPANISH RTRP (a)



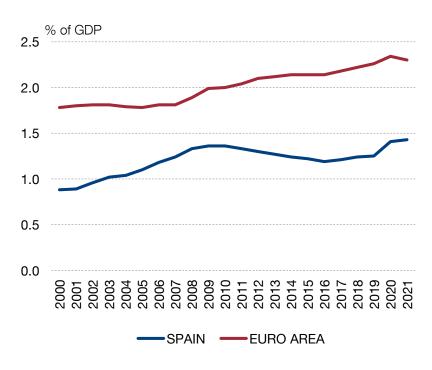
and Spain.

a Reforms already completed are in green, while pending reforms are in yellow.

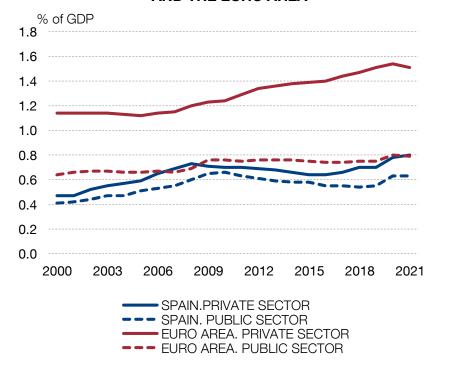
ONE ASPECT THAT IS USEFUL TO EXPLAIN SPAIN'S RELATIVELY LACKLUSTRE PRODUCTIVITY IS ITS LOW SHARE OF INNOVATION

- In general, innovation and productivity dynamics are the product of several interconnected factors, notably including
 - the levels of physical and human capital
 - the regulatory and institutional framework, primary determinant of the economy's sectoral structure, firm size, the ease of cross-firm and cross-sectoral allocation (or reallocation) of productive resources, and the ability to finance investment projects
 - public policies relating to the stimulus, coordination and financing of innovation-related activities

R&D&I INVESTMENT IN SPAIN AND THE EURO AREA



PUBLIC AND PRIVATE SECTOR R&D&I INVESTMENT IN SPAIN AND THE EURO AREA



Source: Eurostat.

THERE IS PLENTY OF ROOM FOR IMPROVEMENT TO BOOST INNOVATION AND, ALONG WITH IT, PRODUCTIVITY IN SPAIN

Encouraging business growth and mechanisms for cross-firm and cross-sectoral reallocation of factors of production



For example, by undertaking a review of the regulatory thresholds which discourage business growth, reducing the delay on general government payments, ensuring market unity, fostering competition and continuing to broaden sources of funding available to firms

Bolstering innovative activities



For example, by strengthening the role of direct public investment, tax incentives for innovative firms, direct transfers for basic research, governance of innovative systems and financing for newly created innovative firms

Increasing human capital



In European countries with a higher level of human capital based on the PIAAC numeracy scores, R&D&I investment is on average 1 pp higher than in Spain, while their employment rate is on average 10 pp higher (equivalent to over 2 million jobs)

Strengthening the central role played by institutions and general government

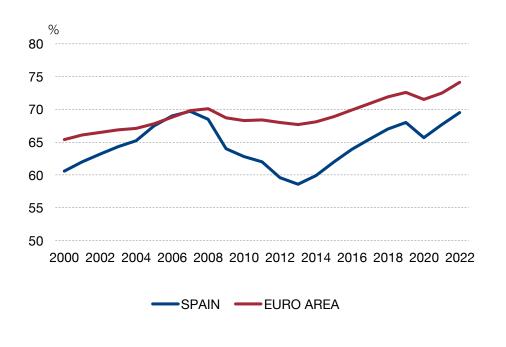


For example, by modernising and digitalising general government, improving efficiency in public expenditure, and reinforcing the evaluation framework for public policies

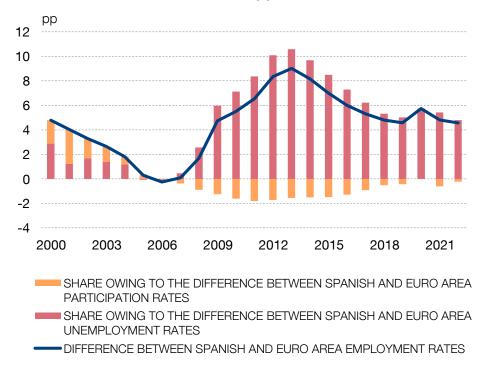
A PERSISTENTLY LOW EMPLOYMENT RATE IS ANOTHER MAJOR FACTOR BEHIND SPAIN'S LACK OF CONVERGENCE WITH THE PER CAPITA INCOME LEVEL OF THE EURO AREA

- Spain's lower employment rate relative to the euro area can be seen in all population groups and reflects the higher relative impact of unemployment in Spain
- Any thorough assessment of the success of the 2021 labour market reform in correcting the persistent shortcomings seen in the Spanish labour market will require analysis of its impact on a range of areas, a broad time frame and analysis of the most granular data possible

EMPLOYMENT RATE IN SPAIN AND THE EURO AREA. 20-64 YEAR OLDS



DISAGGREGATED DIFFERENCE BETWEEN SPANISH AND EURO AREA EMPLOYMENT RATES (a). 20-64 YEAR OLDS



Source: Eurostat (Labour Force Survey).

⁽a) The difference between Spanish and euro area employment rates can be calculated as the sum of two components: the difference between the two unemployment rates multiplied by the euro area participation rate and the difference between the two participation rates, multiplied by (1 - Spanish unemployment rate).

THE HIGH LEVELS OF UNEMPLOYMENT SEEN IN SPAIN IN RECENT DECADES HAVE A STRONG STRUCTURAL COMPONENT

In spite of the robust recovery in activity in 2021 and 2022 and even signs of the Spanish labour market overheating, the unemployment rate has remained steady at around 13% (around 7% in the euro area)

It is essential to examine the role of active and passive employment policies. Protecting the more vulnerable while maintaining appropriate incentives on the labour supply side demands greater coordination between active and passive labour market policies



Box. "Contributory unemployment benefits: a granular analysis drawing on social security administrative labour records"

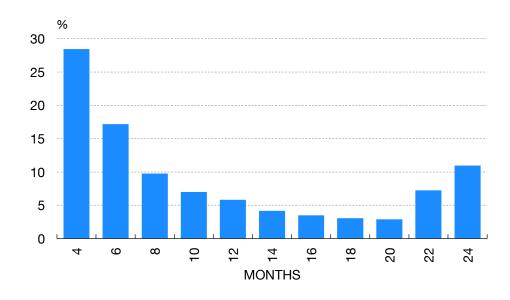
First, a diagnostic exercise is performed of how contributory unemployment benefits have functioned in Spain in recent decades. This is an indispensable first step in any economic policy review

Second, the box explores whether it would be possible to adjust the present design of the Spanish benefit system to encourage benefit recipients to return to employment. In all cases, without affecting ex ante the overall level of protection afforded to workers and the unemployed, which is an essential safety net in the Spanish economy

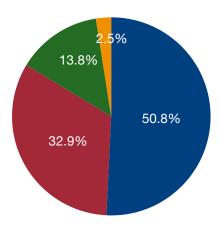
BOX. "CONTRIBUTORY UNEMPLOYMENT BENEFITS: A GRANULAR ANALYSIS DRAWING ON SOCIAL SECURITY ADMINISTRATIVE LABOUR RECORDS" (1/2)

- Approximately half of all benefits granted between 1987 and 2019 had a maximum potential duration of four or six months. At the opposite end of the scale, 18% of all new benefits had a potential duration of 22 or 24 months
- In the full sample, approximately half of all benefits lasting four months ended before their recipients returned to employment. Even in the longest durations, in 18% of cases the benefits ended before their recipients found new employment
- Over the period analysed, the monthly benefit amount was constant in over 86% of cases

INITIAL DURATION OF CONTRIBUTORY BENEFITS STARTING BETWEEN 1987 AND 2019



DISTRIBUTION OF CONTRIBUTORY BENEFITS STARTING BETWEEN JULY 2012 AND 2019, BY THEIR CONSTANT / DECLINING PROFILE



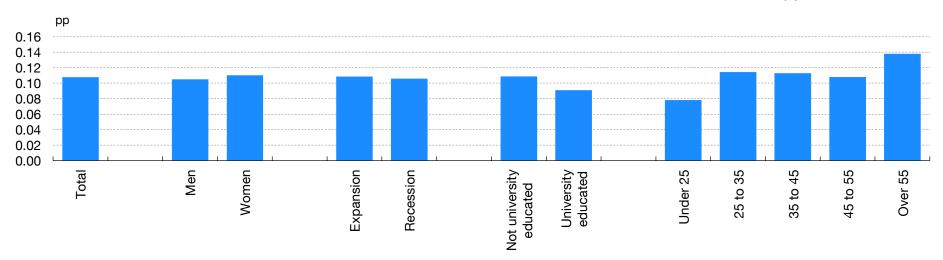
- CONSTANT BECAUSE LESS THAN SIX MONTHS' DURATION
- CONSTANT BECAUSE OVER MAXIMUM BENEFIT
- DECLINING
- CONSTANT BECAUSE BELOW MINIMUM BENEFIT

Source: Banco de España, drawing on MCVL data.

BOX. "CONTRIBUTORY UNEMPLOYMENT BENEFITS: A GRANULAR ANALYSIS DRAWING ON SOCIAL SECURITY ADMINISTRATIVE LABOUR RECORDS" (2/2)

- A microsimulator developed by the Banco de España enables the effects of a hypothetical design of the benefit system to be explored, where the current level of overall protection is maintained ex ante increasing the monthly benefit amount and reducing the potential benefit duration
- The results of this analytical exercise, which are in line with others documented in the academic literature, suggest that there could be some room for improvement in the design of unemployment benefits
- The granularity of the exercise also enables identification of the groups that would be potentially most affected by the simulated changes, so that different compensatory measures could be designed to neutralise any possible adverse effects
- In any event, the results presented here should be interpreted with caution

SIMULATED INCREASE IN THE MONTHLY PROBABILITY OF A RETURN TO EMPLOYMENT (a)



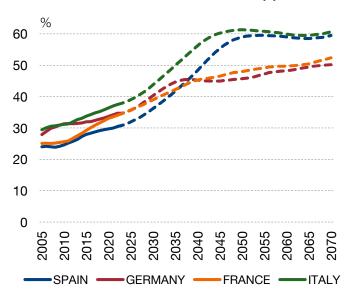
Source: Banco de España, drawing on MCVL data.

⁽a) The columns denote the change in the probability of employment being found when the initial duration of all benefits is reduced by 5% and the monthly benefit amount is increased by 2 pp with no change to the minimum and maximum benefits. The model used is a linear probability model of employment being found applied to the benefit parameters. A set of control variables is also used to ensure that the effect of the benefits is isolated from their possible correlation with other observable variables. The control variables include age, length of unemployment spell, family size, level of education, controls for month and year, and fixed individual effects. Most variables are included semi-parametrically, to avoid the imposition a priori of concrete functional forms.

OTHER KEY FACTORS FOR THE FUTURE COURSE OF THE LABOUR SUPPLY AND PER CAPITA INCOME IN SPAIN AND, THEREFORE, FOR CONVERGENCE

- Population ageing: all else being constant, Spain's employment rate could decline by 1.2 pp between 2022 and 2030 as a result of
 expected demographic shifts. These shifts would be even more pronounced were it not for the positive and relatively high net migration
 expected in Spain in the years ahead
- Changes in the number of hours worked per employee: all else being constant, the projected demographic changes would suggest that, by 2033, the average working week could be nearly three hours shorter
- The Spanish population's general health and how it changes over time

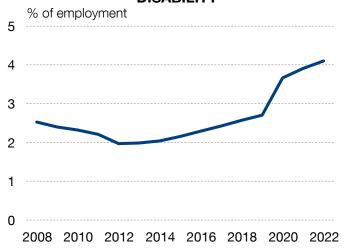
COMPARISON OF DEPENDENCY RATIO IN OTHER EURO AREA COUNTRIES (a)



AVERAGE WEEKLY WORKING HOURS PER WORKER



LOSS OF WORK DAYS DUE TO ILLNESS, INJURY OR DISABILITY



Sources: INE, Eurostat and Banco de España. (a) Projections from EUROPOP-2023.





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A GROWTH PATH THAT IS ASSOCIATED WITH PERSISTENT OR ACCUMULATING MACROECONOMIC, FINANCIAL OR SOCIAL VULNERABILITIES IS NOT SUSTAINABLE

Since the outbreak of the global financial crisis, the Spanish economy has corrected some of the significant macro-financial imbalances that built up in the prior expansionary phase and has shown a more balanced growth pattern

For example:

- Household and firm debt
- External imbalances
- Situation of the financial sector
- Share of investment in construction
- House price overvaluation

Nevertheless, the sustainability of the Spanish economy's growth path in the years to come faces enormous structural challenges



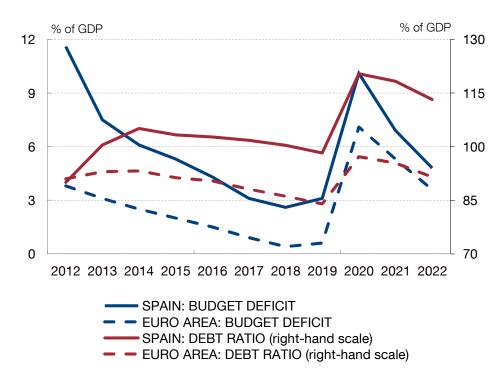
For example:

- Climate change and the green transition
- Complex international geopolitical context marked by increasing fragmentation
- High level of public debt
- Social vulnerability that may derive from high inequality

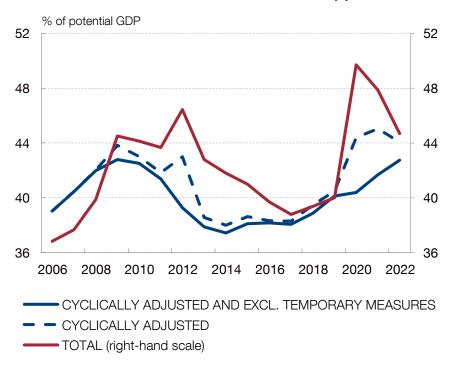
GENERAL GOVERNMENT DEBT AND DEFICIT DECLINED IN 2022, BUT A SIGNIFICANT FISCAL IMBALANCE REMAINED WITH A HIGH STRUCTURAL COMPONENT

- In 2022 the structural public deficit was estimated to be higher than in 2019 (when it stood at around 3% of GDP), before the outbreak of the pandemic
- This deterioration in the structural deficit is expected to be largely determined by the increase in structural primary expenditure observed in recent years. A significant portion of this increase appears to be related in particular to pension expenditure.

GENERAL GOVERNMENT FINANCIAL POSITION

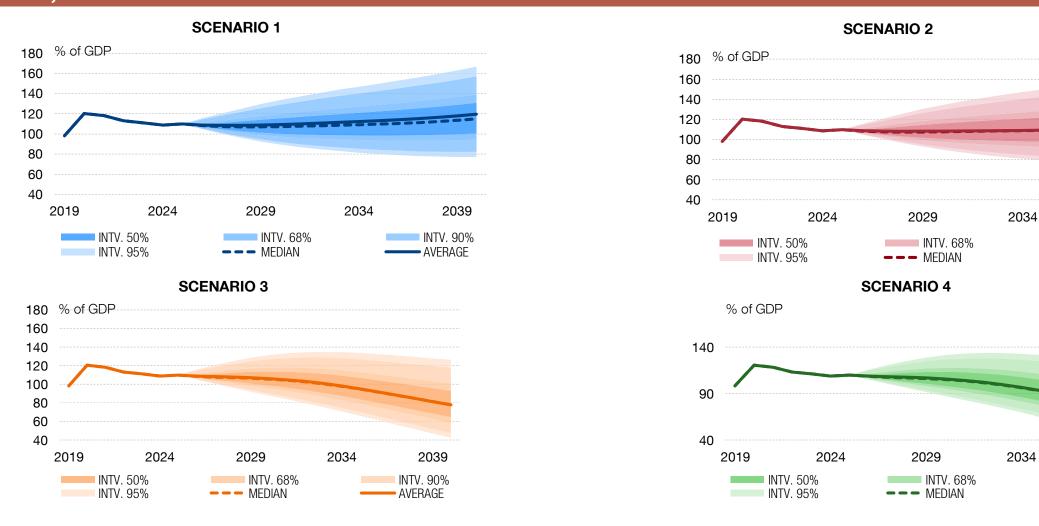


CHANGES IN PRIMARY SPENDING (a)



Source: Banco de España, drawing on data from IGAE, Agencia Tributaria and INE. (a) Excluding NGEU.

IN THE COMING YEARS, PUBLIC DEBT WILL REMAIN VERY CLOSE TO OR EVEN EXCEED CURRENT LEVELS, UNLESS AN AMBITIOUS BUDGETARY CONSOLIDATION PLAN IS IMPLEMENTED



Sources: INE, AIReF and Banco de España.

All the scenarios include a deterioration in the structural primary balance up to 2040 owing to ageing costs (pensions, health and long-term care). Scenario 1 assumes a fiscal policy that makes a consolidation effort consistent with the new measures contained in the 2023 reform of the pension system, but without considering activation of the automatic mechanism for raising revenue from social security contributions aimed at correcting deviations in pension spending. Scenario 2 is based on the former, but does envisage activation of the automatic mechanism. Alternatively, scenario 3 assumes a fiscal policy that makes a further adjustment to the structural primary balance of 0.5 pp of potential GDP each year, until structural balance equilibrium is reached. Scenario 4 modifies scenario 3 with long-term potential GDP growth of 1.9% (instead of 1.4% as assumed in all the other scenarios).

2039

INTV. 90%

AVERAGE

2039

INTV. 90%

AVFRAGE

THE SPANISH ECONOMY MUST EMBARK IN 2023 ON A FISCAL CONSOLIDATION PROCESS THAT GRADUALLY REDUCES THE STRUCTURAL DEFICIT IN ITS PUBLIC FINANCES

In the short term, the roll-out of the NGEU European funds could soften the impact of the economic slowdown that might be triggered by the start of this fiscal consolidation process

Furthermore, embarking on a gradual process of bolstering public finances could be compatible with maintaining some of the tax support measures in place for the more vulnerable groups

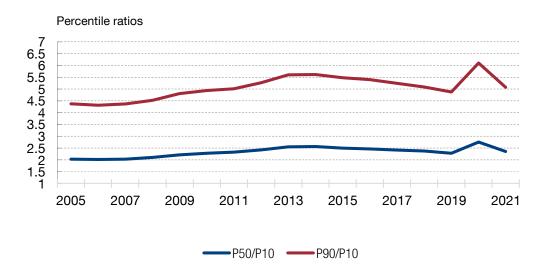
Aside from the fiscal policy stance adopted in 2023, on a broader time scale, a multi-year fiscal consolidation plan will have to be designed and implemented

The Stability Programme Update 2023-2026 projects a reduction in the structural deficit of 1.1 pp between 2022 and 2026 (from 3.6% of GDP to 2.5%) and a 1.6 pp improvement in the primary structural balance. This, together with the cyclical improvement expected by the Government, would place the budget deficit at 2.5% of GDP in 2026

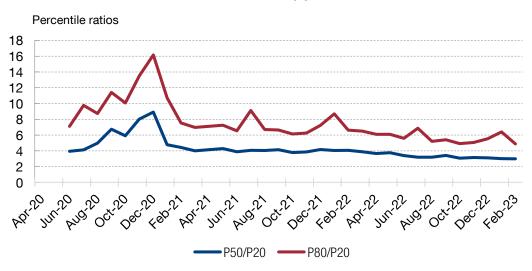
FOCUSING ON THE DIFFERENTIAL IMPACT OF ECONOMIC DEVELOPMENTS ON DIFFERENT POPULATION GROUPS IS ALSO CRUCIAL

- Various recent studies by the Banco de España have documented certain pockets of social, economic and financial vulnerability in Spanish households, which appear to be especially concentrated on those with lower incomes
- The root cause of these vulnerabilities varies significantly and mitigating their effects requires that government measures be put in place in very different areas
- Broadly speaking, some of the most commonly used measures of inequality currently remain close to their pre-pandemic levels, which, in turn, were higher before the global financial crisis

WAGE INCOME PERCENTILE RATIOS (a)



WAGE INCOME PERCENTILE RATIO CAIXABANK RESEARCH (b)



Sources: Banco de España calculations, drawing on Ministerio de Inclusión, Seguridad Social y Migraciones (MCVL) microdata and CaixaBank Research internal data.

- (a) Ratios between two percentiles of the daily wage income distribution, including ERTEs.
- (b) Ratios between two percentiles of the income distribution, after public-sector transfer payment.

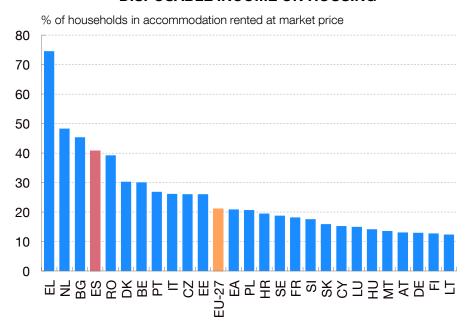
HOUSING AFFORDABILITY, WHICH HAS TIGHTENED IN RECENT YEARS, IS ONE DOMAIN IN WHICH PARTICULAR VULNERABILITY IS OBSERVED

- The sharp fall in the owner-occupancy rate seen in Spain since 2014, particularly among the young, has contributed to increasing inequality in the country in recent years
- Meanwhile, steep rents (when compared with labour income) increase the proportion of the population at risk of social exclusion and of households whose ability to spend on other goods and services is constrained

POPULATION AT RISK OF POVERTY OR SOCIAL EXCLUSION



HOUSEHOLDS SPENDING OVER 40% OF THEIR DISPOSABLE INCOME ON HOUSING



Source: Eurostat (EU-SILC 2021).

AT: Austria; BE: Belgium; BG: Bulgaria; CY: Cyprus; CZ: Czech Republic; DE: Germany; DK: Denmark; EE: Estonia; EL: Greece; ES: Spain; FI: Finland; FR: France; HR: Croatia; HU: Hungary; IE: Ireland; LT: Lithuania; LU: Luxembourg; LV: Latvia; MT: Malta; NL: Netherlands; PL: Poland; PT: Portugal; RO: Romania; SE: Sweden; SI: Slovenia; SK: Slovakia; EU-27: European Union.

THE FUTURE LAW ON THE RIGHT TO HOUSING PLACES GREATER EMPHASIS ON THE NEED TO INCREASE THE SUPPLY OF RENTAL HOUSING

However, some of the measures included, such as rent control, could have unwanted effects in the medium term



According to the economic literature, while price controls can reduce rents in regulated areas in the short term, they can also bear adversely on rental supply and create real estate market segmentation

Aside from the need to boost the public stock of rental housing, the scale of the current supply-demand mismatch may also require resolute support from the private rental housing sector

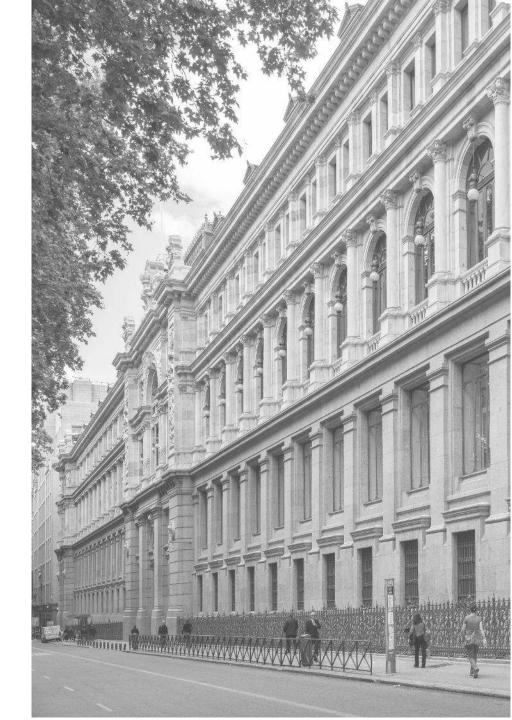


To this end, measures that asymmetrically distort price signals should be avoided, greater effective legal certainty should be provided to landlords, and regulatory uncertainty in this market ought to be reduced

Once the new Law has been approved, it will be essential to diligently assess its capacity to effectively meet its objectives



THANK YOU FOR YOUR ATTENTION



<u>CHAPTER 1.</u> THE SPANISH ECONOMY'S RESILIENCE AMID ADVERSITY AND UNCERTAINTY

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Box: Macroeconomic impact of support measures to address the surge in inflation and the energy crisis



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Box: Contributory unemployment benefits: a granular analysis drawing on social security administrative labour records



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 - 4.3 Uneven transmission of monetary policy to financial conditions
 - 4.4 Evidence on the second stage: effects on economic activity and inflation

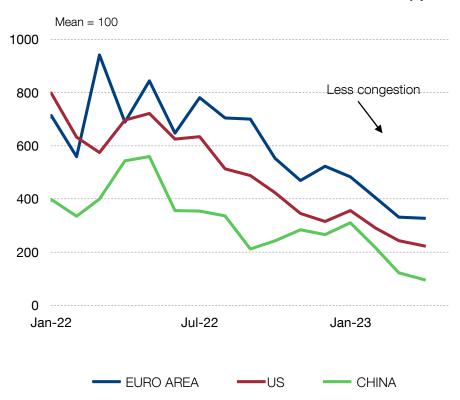
Box: The impact of a faster than expected reduction in Eurosystem asset holdings on euro area sovereign bond yields



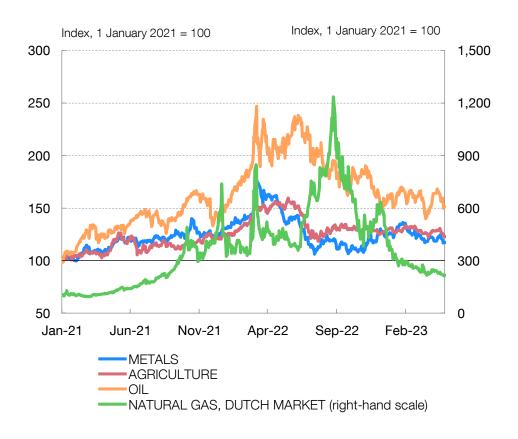
RECENT MONTHS HAVE SEEN THE GRADUAL NORMALISATION OF GLOBAL SUPPLY CHAINS AND A SIGNIFICANT FALL IN ENERGY PRICES

... though energy prices remain above their early 2021 levels

TEXT ANALYSIS INDEX: SUPPLY BOTTLENECKS (a)



COMMODITY PRICES



Sources: Factiva, Refinitiv and Banco de España.

(a) Burriel P., Kataryniuk I., Moreno C. and Viani F. (2023), A new supply bottlenecks index based on newspaper data, Working Paper 23/04, Banco de España.

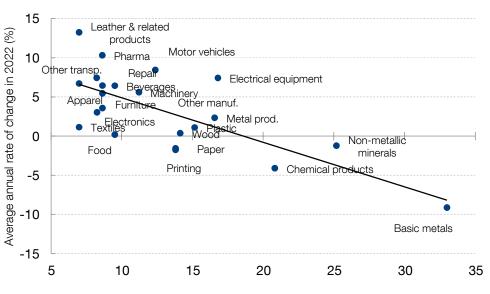


WHILE SERVICES HAVE BEEN BOOSTED BY THE END OF THE HEALTH CRISIS, INDUSTRIAL ACTIVITY HAS BEEN HARD HIT BY THE ENERGY CRISIS

All of this in a context in which consumer confidence has been gradually recovering from its lowest ebb in 2022 Q3

PURCHASING MANAGERS' INDEX Index 60 Jan-21 Feb-21 Apr-21 Jun-21 Jun-21 Jun-22 Dec-21 Jun-22 Apr-22 Apr-22 Apr-22 Apr-22 Jun-22 Jun-22 Jun-22 Jun-22 Jun-22 Jun-22 Sep-22 Jun-22 Jun-22 Jun-22 Aug-22 Jun-22 Aug-22 MANUFACTURING OUTPUT PMI -SERVICES ACTIVITY PMI -COMPOSITE PMI

INDUSTRIAL PRODUCTION IN 2022 AND ENERGY DEPENDENCE, BY SECTOR

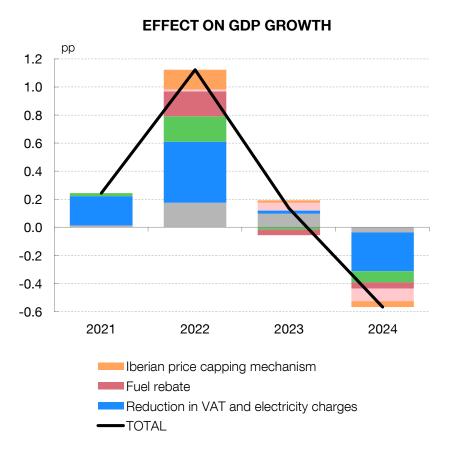


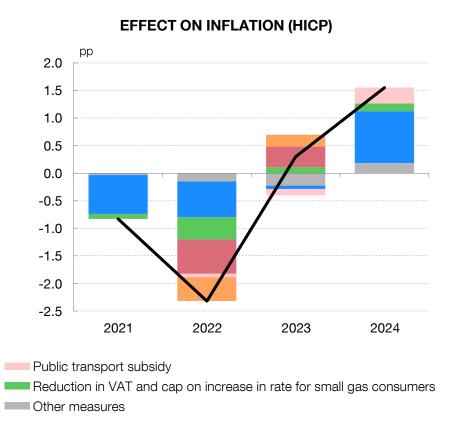
Energy dependence (total direct and indirect energy expenditure divided by total output (%))



THE MEASURES ROLLED OUT BY THE SPANISH AUTHORITIES TO ADDRESS THE ENERGY CRISIS HAVE HELPED REDUCE INFLATION AND GALVANISE ECONOMIC ACTIVITY

- <u>As in other European countries</u>, and although some progress has been made, these measures have mostly been blanket measures, rather than targeted at the most vulnerable groups
- Measures better designed to target the most vulnerable agents would have been more effective, at a lower fiscal cost, in mitigating the impact of the inflationary crisis on such agents, while, in turn, minimising the potential inflationary impact of the measures themselves



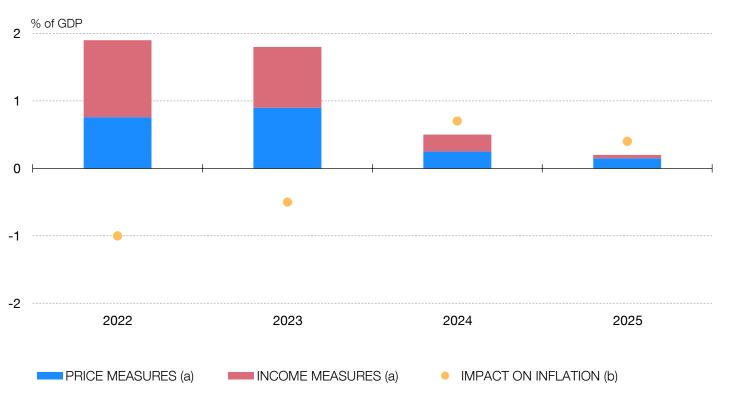


Source: Banco de España, drawing on data from the INE.

AUTHORITIES IN THE MAIN EURO AREA COUNTRIES STEPPED UP SUPPORT IN 2022 FOR FIRMS AND HOUSEHOLDS FACING THE ENERGY CRISIS, EXTENDING SUCH MEASURES INTO 2023

- In total, the stimulus measures amount to almost 2% of euro area GDP in both years (1.4% and 0.9% in 2022 and 2023, respectively, in Spain)
- Although these measures helped contain inflation in 2022 and are expected to do so again in 2023, their withdrawal will have the reverse effect, exerting upside pressure on prices in the coming years, especially in 2024

COMPENSATORY FISCAL MEASURES FOR ENERGY AND INFLATION



Sources: Eurostat and Banco de España.



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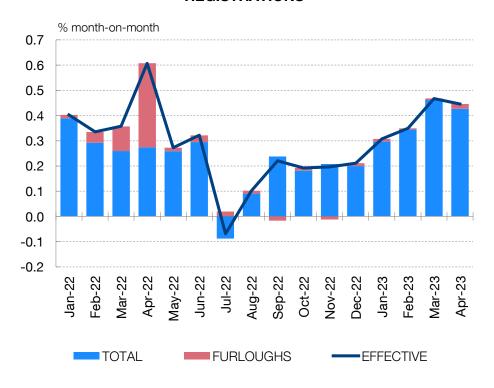
⁽a) The measures are classified based on the European Commission methodology. Price measures are those that directly affect the cost of consuming an additional unit of energy. Income measures do not directly depend on the quantity of energy consumed.

⁽b) The impacts on inflation are shown at aggregate level for the euro area as percentage point deviations against a reference scenario of no compensatory fiscal policy measures for energy and inflation. The simulations are conducted under the simplified assumption that the fiscal shocks are exogenous and there is no monetary policy response.

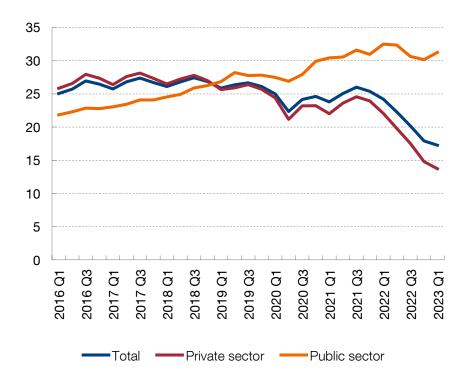
JOB CREATION HAS BEEN VERY ROBUST, WHILE THE SHARE OF TEMPORARY EMPLOYMENT HAS FALLEN

- In 2023 Q1 the number of persons employed was 2.3% higher than its pre-pandemic level (according to Quarterly National Accounts data)
- This increase has outpaced the increase in total hours worked, such that the average working day has shortened

FURLOUGHS AND SOC. SEC. REGISTRATIONS AND EFFECTIVE REGISTRATIONS



TEMPORARY EMPLOYMENT RATIO (%)



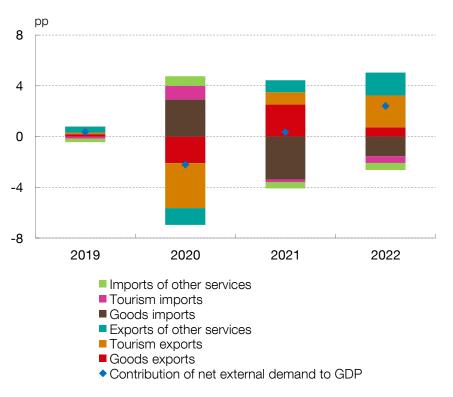


Sources: Ministerio de Inclusión, Seguridad Social y Migraciones and the Spanish Labour Force Survey (INE).

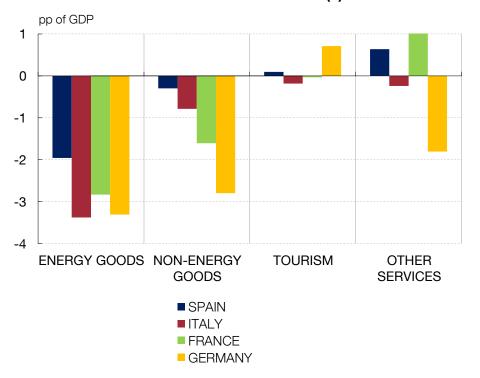
IN 2022 NET EXTERNAL DEMAND MADE A SIGNIFICANT CONTRIBUTION TO GDP GROWTH, AND THERE WERE MODERATE GAINS IN COMPETITIVENESS

- Since 2019, the deterioration of the balance of goods and services has been more modest in Spain than in the other large euro area countries
- Despite the surge in energy prices, in 2022 Spain once again posted a current account surplus, of 0.6% of GDP

THE EXTERNAL SECTOR'S CONTRIBUTION TO THE CHANGE IN REAL GDP



DIFFERENCES IN THE GOODS AND SERVICES BALANCES BETWEEN 2019 AND 2022 (a)



Sources: INE, Eurostat, Departamento de Aduanas and Banco de España.

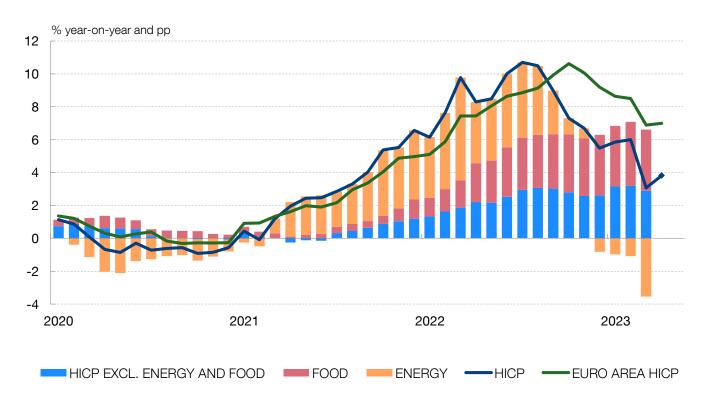


⁽a) The breakdown of the goods balance into its energy and non-energy components is estimated using the data on foreign trade in goods disaggregated by product.

WHILE INFLATION APPEARS TO HAVE PEAKED, UNDERLYING INFLATION AND THE FOOD COMPONENT STILL SHOW HIGH DOWNWARD STICKINESS

Both the initial rise in energy inflation and its subsequent decline have been considerably sharper in Spain than in the euro area

HICP AND CONTRIBUTIONS

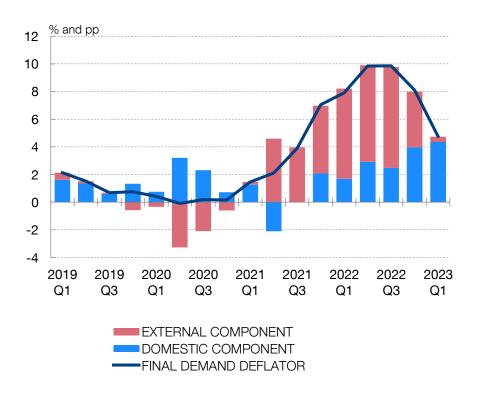




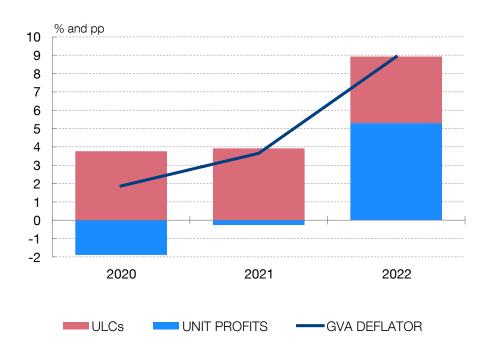
HIGH IMPORTED INFLATION HAS RECENTLY PROMPTED AN INCREASE IN DOMESTIC PRODUCTION INFLATION

- In the second half of 2022, unit profits contributed more to value added deflator growth than unit labour costs (ULCs)
- However, on a broader time scale, since end-2019 the cumulative increase in unit profits has only slightly exceeded that in ULCs

FINAL DEMAND DEFLATOR Year-on-year rates of change and contributions (a)



MARKET ECONOMY GVA DEFLATOR (Cumulative growth rate since 2019 and contributions)



Sources: INE and Banco de España.

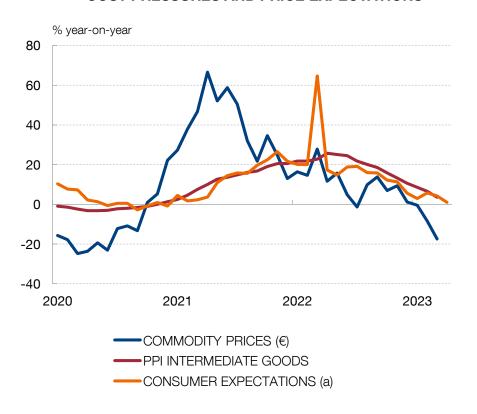
(a) The contribution of the external and domestic component to the year-on-year growth of the final demand deflator is an approximation.



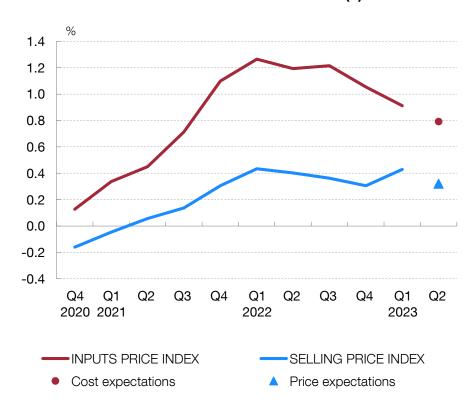
THERE ARE SOME SIGNS OF PRICE GROWTH MODERATING IN THE INITIAL STAGES OF PRODUCTION PROCESSES

Nevertheless, a very high proportion of products still have particularly elevated inflation rates; the percentage of the 129 HICP sub-indices excluding energy and food with inflation rates above 4% has tended to stabilise at 45% since July 2022

COST PRESSURES AND PRICE EXPECTATIONS



FIRMS' PRICES AND COSTS (b)



Sources: INE, Eurostat and European Commission.

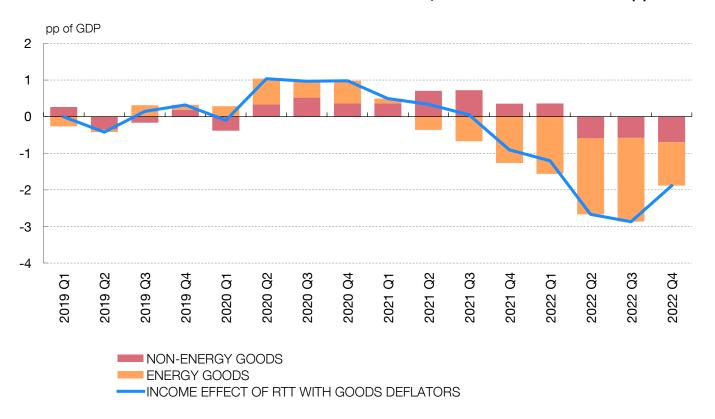


(b) Results of the Banco de España Business Activity Survey (EBAE). The price and cost indices are constructed by assigning the following values to the firms' qualitative responses: significant increase = 2; slight increase = 1; unchanged = 0; slight decrease = -1; significant decrease = -2.

THE WORSENING OF THE REAL TERMS OF TRADE AS A RESULT OF RISING ENERGY PRICES WAS AT ITS MOST INTENSE IN THE MIDDLE STRETCH OF 2022

... when it had an adverse impact on national income of around 3% of GDP

INCOME EFFECT OF REAL TERMS OF TRADE, WITH GOODS DEFLATORS (a)



Source: INE.

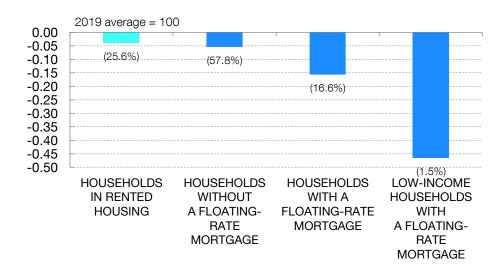


⁽a) The disaggregation of deflators into energy and non-energy components is calculated based on the export and import UVIs (unit value indices of exports and imports).

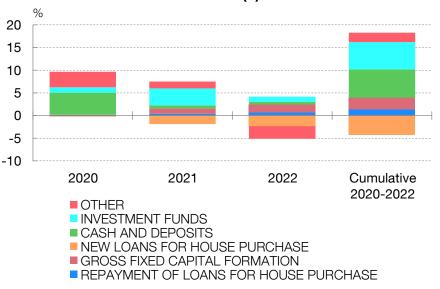
THE DECLINE IN HOUSEHOLD PURCHASING POWER AND INTEREST RATE RISES HAVE HELD BACK GROWTH IN PRIVATE CONSUMPTION

- These factors have adversely impacted the purchasing power of households (especially those with floating-rate debt), who have lowered their saving ratio in recent months, and in 2022 H2 the household saving ratio stood below its pre-pandemic levels
- Almost 45% of the sizable extraordinary savings built up during the pandemic are held in bank deposits, but these funds are unlikely to give a significant impetus to consumption

IMPACT OF CHANGES IN MORTGAGE RATE EXPECTATIONS ON EXPECTED GROWTH IN CONSUMPTION (a)



SURPLUS SAVINGS BUILT UP DURING THE PANDEMIC AND SAVING AND INVESTMENT FLOWS IN EXCESS OF THEIR 2019 LEVELS (b)





Sources: Banco de España, Consumer Expectations Survey and INE.

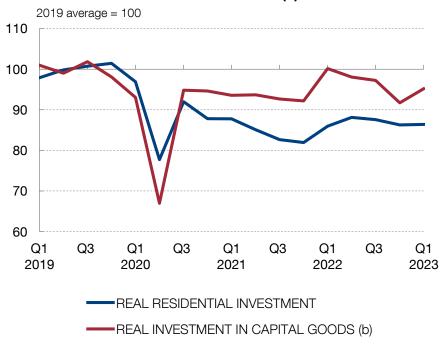
(a) Expected impact on consumption based on interest rate expectations. Expected changes in income level are controlled for in the estimation. Household fixed effects are also included. Standard errors clustered at household and time level. For households living in rented housing, the expected impact of changes in interest rates on the growth in consumption is estimated less accurately and is not significant. The figures in brackets denote the proportion of households in each of the groups depicted in the chart as a percentage of the total population.

(b) Surplus saving is calculated as the flow of saving (as a percentage of gross disposable income) in excess of its 2019 level. Saving and investment flows also reflect the amount channelled towards different assets and liabilities above the 2019 level. "Other" comprises the flows channelled towards assets and liabilities not depicted in the chart, in addition to statistical discrepancies between the financial account and the capital account, net capital transfers and net acquisitions of non-produced assets.

RESIDENTIAL AND BUSINESS INVESTMENT LOST STEAM IN 2022, OWING TO HIGH UNCERTAINTY AND THE GREATER DIFFICULTIES IN ACCESSING CREDIT

Since mid-2022, there has been a deceleration in external financing granted to firms and, in particular, in demand for credit for investment, whereas credit for working capital has proven stronger, possibly because of the higher cost of commodities

REAL RESIDENTIAL INVESTMENT AND REAL INVESTMENT IN CAPITAL GOODS (a)

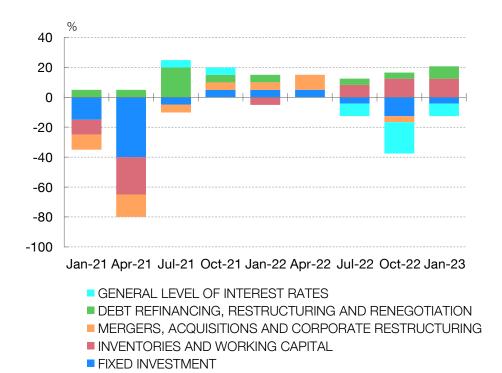


Sources: Banco de España and INE.

- (a) Seasonally and calendar-adjusted series.
- (b) Gross fixed capital formation in capital goods, machinery and cultivated biological assets.

(c) Percentage of banks reporting that the factor has contributed considerably to increasing demand \times 1 + percentage of banks reporting that it has contributed somewhat to increasing demand \times 1/2 - percentage of banks reporting that it has contributed somewhat to reducing demand \times 1. Data from the Banco de España Bank Lending Survey (BLS).

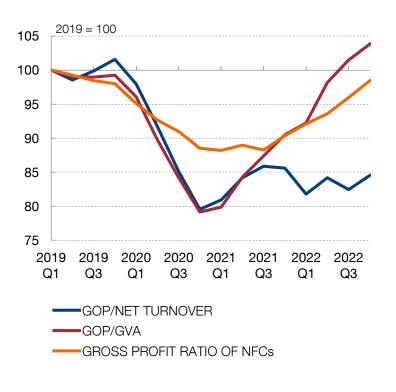
FACTORS CONTRIBUTING TO THE CHANGE IN LOAN DEMAND (c)



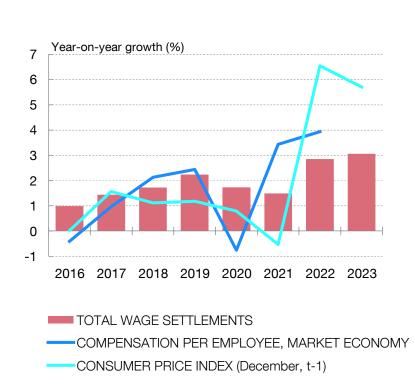


CONTAINING PROFIT MARGINS AND LABOUR COSTS WILL BE KEY TO AVOIDING SIGNIFICANT SECOND-ROUND EFFECTS ON INFLATION

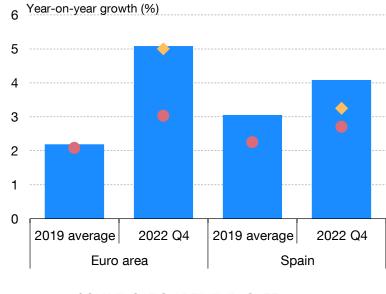
NFCs' PROFIT MARGINS (a)



WAGES (b)



COMPENSATION PER EMPLOYEE AND WAGE SETTLEMENTS (c)



- COMPENSATION PER EMPLOYEE
- WAGE SETTLEMENTS
- ◆ NEW WAGE AGREEMENTS SIGNED IN 2022 Q4

Sources: INE, Ministerio de Trabajo y Economía Social, Eurostat, ECB and Banco de España.

- (a) Data from the Banco de España Central Balance Sheet Data Office Quarterly Survey (CBQ) are used for GOP/Net turnover and GOP/GVA. For the gross profit ratio of NFCs, data from the Non-Financial Accounts for the Institutional Sectors are used. Cumulative four-quarter data.
- (b) The data for 2023 refer to collective agreements registered to March.
- (c) Excluding one-off payments.

THE EUROPEAN CENTRAL BANK'S MONETARY POLICY DECISIONS SINCE DECEMBER 2021



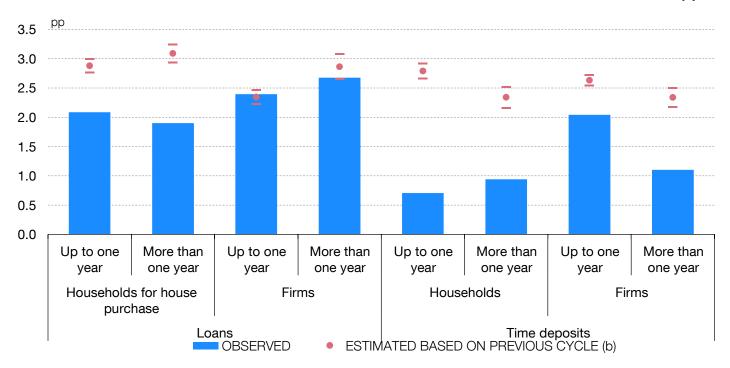
TRANSMISSION CHANNELS OF MONETARY POLICY TIGHTENING

STAGE 1: TRANSMISSION TO FINANCIAL CONDITIONS	SPEED OF TRANSMISSION		
Capital markets channel: ↑ cost of market financing	Very fast ("immediate")		
Bank channel: ↑ cost of bank financing and deposit remuneration	Fast (6-12 months)		
Income channel: ↑ interest income and payments	Slow (more than 12 months)		
Wealth channel: ↓ value of financial wealth and real wealth	Very fast in financial wealth and fast in real wealth		
Exchange rate channel: appreciation of the euro	Very fast ("immediate")		
STAGE 2: TRANSMISSION TO THE REAL ECONOMY	SPEED OF TRANSMISSION		
Intertemporal substitution effect: \downarrow spending due to higher interest rates	Slow (12-18 months)		
Income effect: ↓ spending due to lower income	Slow (12-18 months)		
Wealth effect: ↓ spending due to lower wealth	Slow (12-18 months)		
Exchange rate effect: the appreciation of the euro reduces external demand and exerts downward pressure on the price of imported goods	Slow (12-18 months)		
Euro area trade channel: ↓ exports due to the contraction in activity in other euro area countries	Slow (12-18 months)		
Price declines due to the drop in aggregate demand and the appreciation of the euro	Very slow (18-24 months)		

BANKS IN SPAIN ARE GRADUALLY PASSING INCREASES IN MARKET INTEREST RATES THROUGH TO NEW LOANS AND DEPOSITS

- Broadly speaking, the pass-through of higher market rates to the cost of new loans for house purchase and deposit remuneration has, to date, been more sluggish than might be expected based on the historical regularities
- In the case of lending to firms, the pass-through is in line with what could be expected based on such regularities

CUMULATIVE CHANGE IN BANK RATES FROM DECEMBER 2021 TO FEBRUARY 2023. SPAIN (a)



Euro area evidence

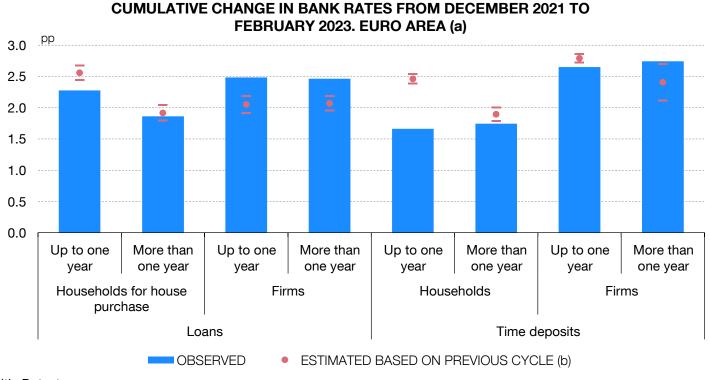
Sources: Banco de España, ECB and Refinitiv Datastream.

⁽a) Interest rates are narrowly defined effective rates (NDERs), which exclude related charges, such as repayment insurance premia and fees, and are adjusted seasonally and for the irregular component (small changes in the series with no recognisable pattern in terms of periodicity or trend). The term refers to the frequency with which interest rates are reset.

⁽b) Resulting bank interest rate if the observed market interest rate developments between January 2022 and February 2023 had been passed through to bank interest rates as in past periods, in line with the historical pattern captured by a standard error-correction model estimated between January 2003 and August 2007. The horizontal lines show the confidence bands.

THE PASS-THROUGH OF HIGHER MARKET RATES TO NEW LOANS AND DEPOSITS IN THE EURO AREA

- In the euro area, market rates are, overall, passing through to the cost of new lending to households for house purchase at a similar pace to past cycles, but somewhat more quickly in the case of lending to firms
- Conversely, in terms of remuneration on new time deposits, the pass-through in the current cycle has been slower for those of euro area households and similar or somewhat slower, depending on the term, for those of firms



Sources: Banco de España, ECB and Refinitiv Datastream.

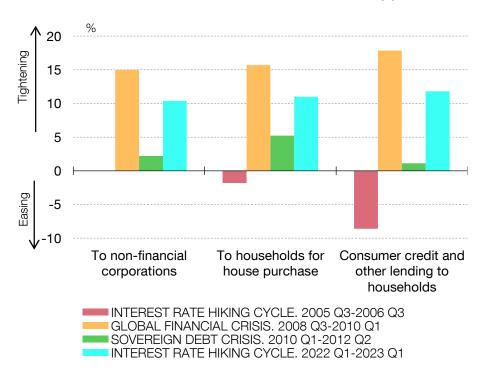
⁽a) The interest rates are narrowly defined effective rates (NDERs), which exclude related charges, such as repayment insurance premia and fees, and are adjusted seasonally and for the irregular component (small changes in the series with no recognisable pattern in terms of periodicity or trend). The term refers to the frequency with which interest rates are reset.

⁽b) The resulting bank interest rate had the observed market interest rate developments between January 2022 and February 2023 been passed through to bank interest rates comparably with past periods, in line with the historical pattern captured by a standard error-correction model estimated between January 2003 and August 2007. The horizontal lines show the confidence bands.

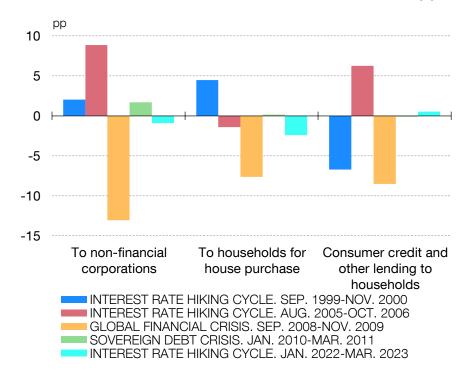
THE SUPPLY OF CREDIT HAS CONTRACTED AND NET FINANCING FLOWS HAVE LOST MOMENTUM

Broadly speaking, net financing flows are losing more momentum than in previous interest rate hiking cycles

CHANGE IN CREDIT STANDARDS. SPAIN (a)



CHANGE IN YEAR-ON-YEAR CREDIT GROWTH. SPAIN (b)





Sources: ECB and Banco de España.

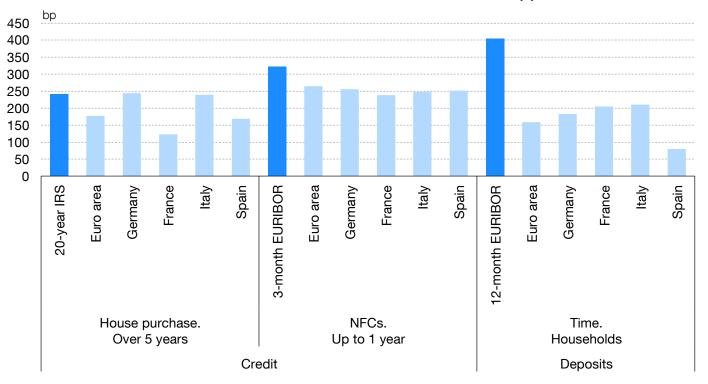
(b) Securitised credit is not included.

⁽a) Average of the diffusion index for the corresponding period. The diffusion index is defined as: percentage of banks that have tightened standards considerably x 1 + percentage of banks that have eased standards somewhat x 1/2 – percentage of banks that have eased standards considerably x 1.

THE IMPACT OF THE BANK CHANNEL HAS BEEN HIGHLY HETEROGENEOUS ACROSS THE MAIN EURO AREA COUNTRIES ...

- In particular, deposit remuneration has risen unevenly, with Spain recording the smallest increase of the four largest euro area countries.
 Specifically, in Spain household time deposit remuneration has increased 79 bp less than in the euro area overall and represents just 20% of the change in the 12-month EURIBOR
- Conversely, in loans to firms with an interest rate reset period of up to one year the bulk of this segment the pass-through of higher reference rates has been very similar across jurisdictions



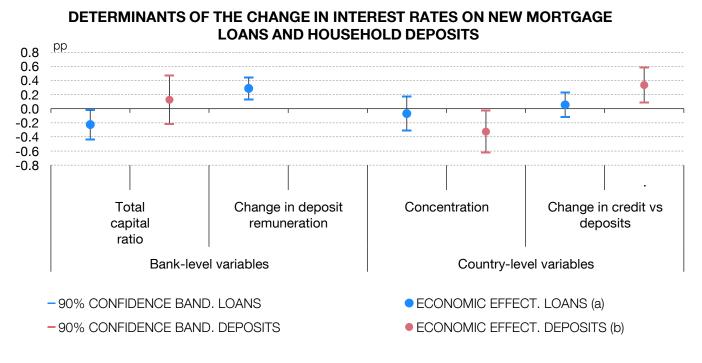


Sources: Banco de España, ECB and Refinitiv Datastream.

⁽a) Bank interest rates are narrowly defined effective rates (NDERs) and are adjusted for seasonal and irregular components. The term denotes the frequency at which the loan interest rate is reset.

... INFLUENCED BY THE DIFFERING CHARACTERISTICS OF THE BANKS AND THE NATIONAL BANKING SYSTEMS

- Better-capitalised banks and those whose funding costs have risen least have raised interest rates on new mortgages to a lesser extent
- Banks that operate in countries where there is lower reliance on deposit funding to underpin lending or a higher degree of banking sector concentration have raised deposit remuneration more moderately
- The more moderate increase in deposit remuneration in Spain compared with the euro area owes to Spanish banks' lower reliance on deposit funding and, to a lesser extent, the higher concentration of the country's banking system



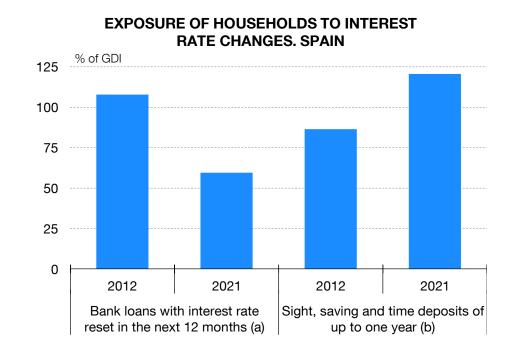
Sources: Banco de España, ECB and Refinitiv Datastream.

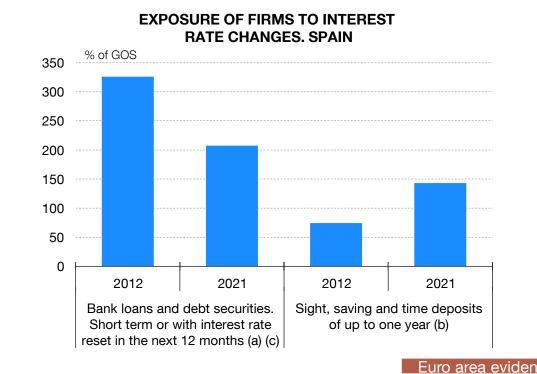
⁽a) Economic effect derived from a bank-level regression analysis in which the dependent variable is the change in the average monthly interest rate between September and December 2022 for new mortgage loans with an interest rate reset period of more than five years relative to the average for the same period in 2021.

⁽b) Economic effect derived from a bank-level regression analysis in which the dependent variable is the change in the average monthly remuneration between September and December 2022 on time deposits with agreed maturity of less than two years relative to the average for the same period in 2021.

IN RECENT YEARS, CHANGES IN THE COMPOSITION AND VOLUME OF HOUSEHOLDS' AND FIRMS' ASSETS AND LIABILITIES HAVE, IN NET TERMS, WEAKENED THE INCOME CHANNEL

- On the liabilities side, the lower exposure to interest rates hikes in the near term owes essentially to the decrease in the volume of debt (in terms of income) and the higher proportion of long-term and fixed rate debt
- On the assets side, the positive effect of the income channel has strengthened, mainly due to the higher volume of deposits





Sources: ECB and Banco de España.

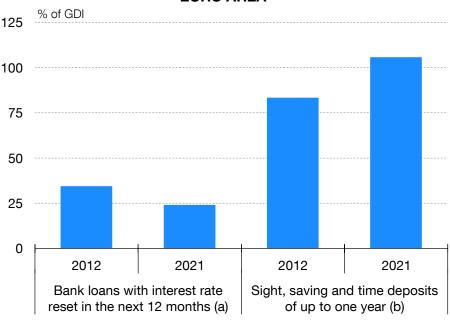
(a) Obtained by multiplying the volume of resident bank loans whose interest rate is reset within a year by the ratio of total bank loans to income.

(b) Obtained by multiplying the volume of sight and time deposits of up to one year at resident banks by the ratio of total bank deposits to income.

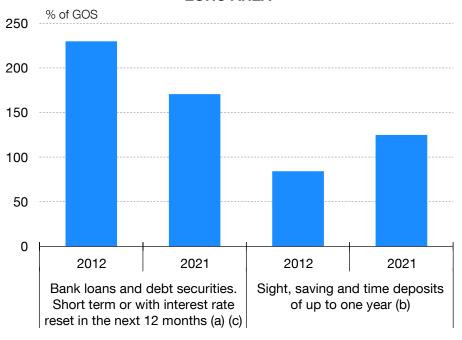
(c) Resident bank loans whose interest rate is reset within a year also include those with residual maturity of up to one year, given that firms typically renew their short-term loans. The debt security component includes securities with an original maturity of up to one year and those with longer maturities that will be redeemed in the next 12 months.

THESE SAME FACTORS HAVE ALSO CONTRIBUTED TO A NET WEAKENING OF THE INCOME CHANNEL IN THE EURO AREA

EXPOSURE OF HOUSEHOLDS TO INTEREST RATE CHANGES. EURO AREA



EXPOSURE OF FIRMS TO INTEREST RATE CHANGES. EURO AREA





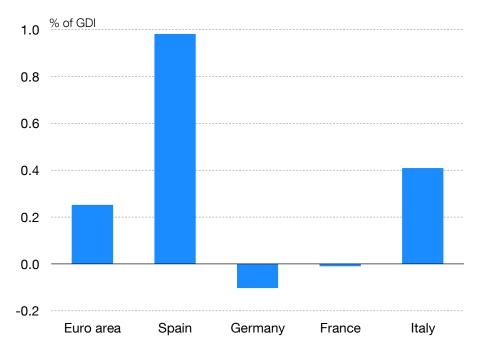
Sources: ECB and Banco de España.

- (a) Obtained by multiplying the volume of resident bank loans whose interest rate is reset within a year by the ratio of total bank loans to income.
- (b) Obtained by multiplying the volume of sight and time deposits of up to one year at resident banks by the ratio of total bank deposits to income.
- (c) Resident bank loans whose interest rate is reset within a year also include those with residual maturity of up to one year, given that firms typically renew their short-term loans. The debt security component includes securities with an original maturity of up to one year and those with longer maturities that will be redeemed in the next 12 months.

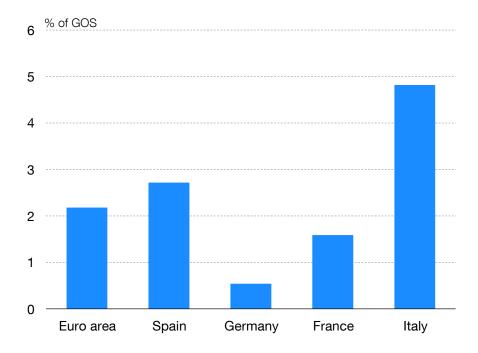
HIGHER INTEREST RATES HAVE BEGUN TO HAVE AN IMPACT ON THE INCOME OF SPANISH AND EURO AREA HOUSEHOLDS AND FIRMS

The effects are more marked in Spain than in other euro area economies, essentially due to the higher proportion of short-term loans (in the case of firms) and of long-term and floating rate loans (in the case of mortgages)

CHANGE IN HOUSEHOLDS' NET INTEREST PAYMENTS BETWEEN DECEMBER 2021 AND FEBRUARY 2023 (a)



CHANGE IN FIRMS' NET INTEREST PAYMENTS BETWEEN DECEMBER 2021 AND FEBRUARY 2023(a)



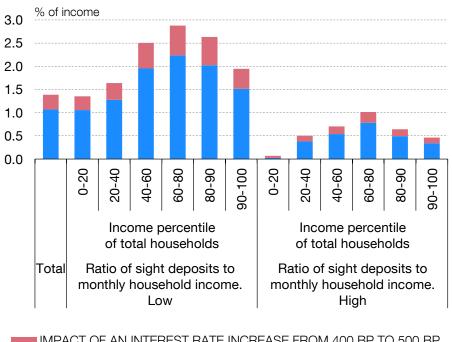
Source: ECB.

⁽a) Calculated as the difference between the increase in bank loan interest payments and the increase in interest income on sight and time deposits (calculated based on the stock of bank balances at end-2021) relative to 2021 income.

THE IMPACT VIA THE INCOME CHANNEL HAS ALSO BEEN HIGHLY UNEVEN ACROSS SPAIN'S **HOUSEHOLDS AND FIRMS**

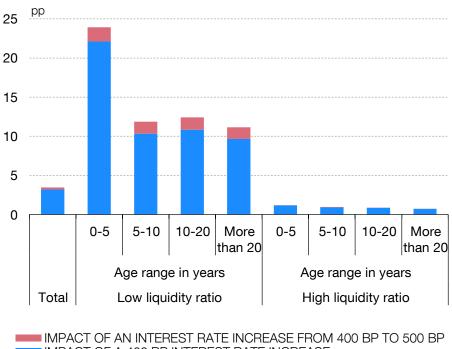
- The Spanish households and firms most affected by higher interest rates are those with a lower volume of liquid assets. Among firms with lower liquidity ratios, the youngest are the most affected
- This heterogeneity contributes to amplifying the adverse impact of higher interest rates on aggregate consumption and investment

INCREASE IN HOUSEHOLDS' NET DEBT BURDEN ASSOCIATED WITH HIGHER INTEREST RATES



IMPACT OF AN INTEREST RATE INCREASE FROM 400 BP TO 500 BP IMPACT OF A 400 BP INTEREST RATE INCREASE

ESTIMATED INCREASE IN MEDIAN DEBT BURDEN DUE TO **HIGHER INTEREST RATES**



IMPACT OF A 400 BP INTEREST RATE INCREASE.



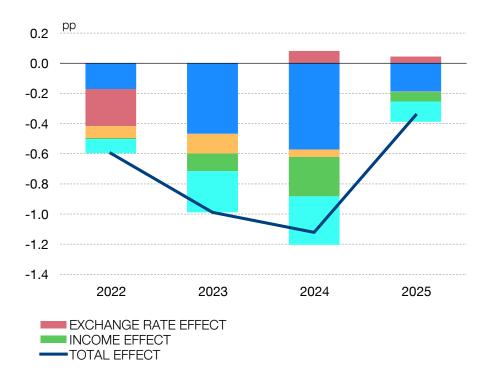
Sources: Banco de España and Spanish Survey of Household Finances (2020).

MONETARY POLICY TIGHTENING IS ALREADY PASSING THROUGH TO ACTIVITY AND INFLATION IN SPAIN, BUT THE BULK OF THE IMPACT WILL BE FELT FROM THIS YEAR ONWARDS

According to the Quarterly Macroeconometric Model of the Banco de España (MTBE), in a hypothetical counterfactual scenario in which the monetary policy transmission channels act in line with the empirical regularities observed in the past and no additional shocks affect any other area of the economy, in 2022 the monetary policy tightening of recent quarters would have reduced inflation in Spain by around 0.2 pp

EFFECT ON INFLATION (HICP) IN SPAIN pp 0.2 0.0 -0.2 -0.6 -1.2 -1.4 2023 2024 2025 2022 INTERTEMPORAL SUBSTITUTION EFFECT WEALTH EFFECT EURO AREA TRADE CHANNEL

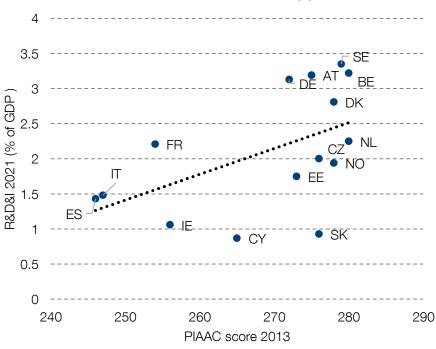
EFFECT ON GDP GROWTH IN SPAIN



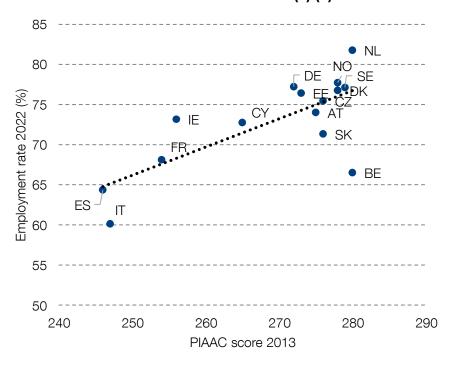


A COUNTRY'S HUMAN CAPITAL ENDOWMENT IS A KEY DETERMINANT OF ITS PRODUCTIVITY, CAPACITY TO INNOVATE AND EMPLOYMENT RATE

CORRELATION BETWEEN PIAAC SCORE AND R&D&I INVESTMENT (a)



CORRELATION BETWEEN PIAAC SCORE AND EMPLOYMENT RATE (a) (b)



Sources: Eurostat and OECD.



⁽a) Including data for the EU countries that participated in the OECD's 2013 PIAAC assessment.

⁽b) Employment rate for the group aged 15-64.

THE FAR-REACHING DEMOGRAPHIC CHANGE UNDER WAY IN SPAIN WILL, IN THE COMING DECADES, LEAD TO A SIGNIFICANT INCREASE IN SPENDING ON PENSIONS ...

- ... and also in spending on health and long-term care
- While subject to much uncertainty, an overall analysis of the main legislative changes to the Spanish pension system since 2021 suggests that new measures will foreseeably be necessary from 2025 to shore up the system's financial sustainability
- A further source of uncertainty is the potential impact of the revenue-raising measures adopted in 2023 on employment, wages and the competitiveness of the Spanish economy.
 - A simulation exercise conducted using the MTBE suggests that a 1 pp increase in the average effective rate of social security contributions could lead to a decrease of close to 0.25% in employment after four years
- The above considerations, especially bearing in mind the significance of the changes implemented, make an ongoing, transparent and thorough assessment of the magnitude of their effects advisable, including their impact on intergenerational equity

QUANTIFICATION OF THE MAIN MEASURES ADOPTED IN THE PENSION REFORM

Percentage of GDP in 2050

Description of the measure	AIReF	MISSyM	Fedea	BdE
A. MEASURES – REVENUE PERSPECTIVE				
New contributions system for the self-employed	0.5	0.4	0.8	0.5
Intergenerational equity mechanism	0.4	0.5	0.4	0.5
Higher maximum contribution base	0.4	0.5	0.4	0.3
Surcharge on wages above the maximum base	0.1	0.1	0.1	0.1
Automatic adjustment mechanism	-	-	-	-
B. MEASURES – EXPENDITURE PERSPECTIVE				
Indexing pensions to CPI	2.7	2.7 ^(a)	2.7 ^(a)	2.7 ^(a)
Elimination of the sustainability factor	0.8	0.8 ^(a)	0.8 ^(a)	0.8 ^(a)
Incentives for later retirement	-0.8	-1.5	-0.1	-
New early retirement penalty scheme	0.0	0.0	0.0	0.0
Increase in pensions for the self-employed	-	-	0.7	-
Increase in the maximum pension	-0.4	0.1	0.1	0.0
Modification of the calculation period for the regulatory base	0.0	0.2	0.2	-
Increase in minimum pensions	0.0	0.1	0.3 ^(b)	0.2
Measures to reduce the gender gap	-	-	-	-

Sources: AIReF (2023), Ministerio de Inclusión, Seguridad Social y Migraciones, De la Fuente (2023a and 2023b) and Banco de España.

- (a) 2021 Ageing Report.
- (b) Includes the increase in the gender gap reduction supplement.

