

## **ANNUAL REPORT 2023. CHAPTERS 1 & 2**

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Banco de España  
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## Chapter 1

The resilience of the Spanish economy in the European context

## Chapter 2

Structural challenges facing the Spanish economy

## Chapter 3

The Spanish labour market: current developments, structural trends and labour market policies

## Chapter 4

The Spanish housing market: recent changes, risks and affordability problems

## CONTENTS OF THIS PRESENTATION

1. **Key messages**
2. **Recent developments in Spanish economic activity**
3. **Structural challenges facing the Spanish economy**

# KEY MESSAGES

- Having returned to pre-pandemic levels of activity over the course of 2022, the Spanish economy continued to post strong momentum in 2023, amid a slowdown in economic activity worldwide, particularly in the euro area
- Spain's growth outlook for 2024-2026 remains relatively favourable, although there are some sources of uncertainty at both global and domestic level that should not be underestimated
- In any event, the Spanish economy's growth capacity over the years ahead will be highly influenced by a number of far-reaching structural challenges. The major ones are:
  - driving productivity growth,
  - reducing the high structural unemployment rate in the labour market,
  - increasing firm size and facilitating cross-sector and cross-firm reallocation of productive resources,
  - encouraging people to build up their human capital,
  - promoting investment in physical and technological capital and innovation,
  - improving the quality of, and trust in, Spanish institutions,
  - making public finances more sustainable,
  - reducing the supply and demand mismatches in the housing market, which are creating affordability problems, and
  - tackling the many challenges posed by population ageing, the existence of certain pockets of vulnerability in Spanish households and the green transition
- Successfully addressing these challenges requires the design and implementation of a comprehensive strategy of ambitious and lasting reforms
- Against this backdrop, the NextGenerationEU (NGEU) programme and the Spanish Recovery Transformation and Resilience Plan (RTRP) present a unique opportunity to boost Spain's potential growth capacity ...
- ... although a rigorous selection of the investment projects to be funded from the NGEU programme is critical, as is the ambitious implementation of the other reforms and milestones pending under the RTRP

# RECENT DEVELOPMENTS IN SPANISH ECONOMIC ACTIVITY

## Activity

- After growing by 5.8% in 2022, Spanish (GDP) grew by 2.5% in 2023, much faster than in the euro area (0.4%) and above expectations at start-2023

## Inflation

- In 2023 headline inflation continued to moderate, and did so more sharply than expected, owing mainly to energy prices dropping more than anticipated
- Core and food price inflation also slowed gradually, although they remain high and show some cross-component heterogeneity with regard to their downward stickiness

## Outlook for 2024-2026

- Inflation is expected to continue to gradually slow over the coming quarters and relatively stable GDP growth is forecast (faster than in the euro area). In 2024-2026, GDP growth is expected to converge on levels consistent with Spain's potential growth capacity

## Sources of uncertainty

- The Banco de España's March 2023 projection exercise deemed the risks to the growth projections to be tilted to the downside, while the risk to the inflation projections were balanced

# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY



Investment in  
capital and  
innovation



Firm size and  
demographics



Structural  
unemployment  
(Chapter 3 AR 2023)



Inequality and  
pockets of  
vulnerability in  
households



Housing market  
(Chapter 4 AR 2023)



Public  
finances



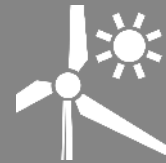
Population  
ageing



Productivity



Human  
capital



Green  
transition



Institutional  
framework



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## PRODUCTIVITY

### Context

- Total factory productivity (TFP) growth can be considered the fundamental determinant of long-term growth, as efficiency gains in the use of productive resources are not subject to diminishing returns, nor is their use exclusive

### Evidence

- In recent decades, the Spanish economy has seen a slowdown in productivity growth that has been significantly more pronounced than in other developed countries
- The main factors that explain the Spanish economy's sluggish aggregate productivity are low aggregate productivity growth among active firms and the small contribution of net firm entry to productivity growth

### Areas of action

- **Spain's lacklustre productivity is the product of many interacting factors, calling for actions to be taken simultaneously.** These factors notably include:
  - the aspects shaping firm size and demographics, and the reallocation of productive resources across sectors and firms
  - the level of human capital in the population
  - the technological capital stock and the drivers of investment in innovation
  - the regulatory and institutional framework
- **The Spanish national productivity board is being set up.** If it is to be effective, it will need to ensure the independence and expertise of its members, and sufficient resources will have to be available to undertake rigorous analyses



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## FIRM SIZE AND DEMOGRAPHICS

### Context

- Any artificial constraint on business growth or the ability to reallocate resources across firms and sectors ultimately holds back productivity in the economy

### Evidence

- **The proportion of small firms in Spain is relatively high by international standards** [In 2021, 76.8% of Spanish firms had between one and four employees, the highest percentage in the EU (for comparison, this figure was 63.2% in Germany, 70.4% in France and 72.5% in Italy)]
- **Spain's business landscape is also unusual, relative to its European peers, on account of its lower churn rate**, which holds back productivity as well

### Areas of action

- **Many obstacles shaping firm size and demographics in Spain have been identified in recent decades**, notably including:
  - **The quantity and quality of regulation** → ease the regulatory burden on firms and foster market unity
  - **Spanish firms' access to non-bank financing** → take firm steps towards a capital markets union in the EU
  - **Insolvency proceedings** → evaluate the impact of the Insolvency Law reform on such proceedings
  - **Public tender procedures**
  - **Regulatory thresholds**→ Evaluate the impact of these procedures and thresholds on firm demographics, as well as the effects of recent measures, such as the Law on business start-ups and growth





# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## HUMAN CAPITAL

### Context

- The academic literature emphasises the importance of human capital for economic growth:
  - From a macroeconomic standpoint, there is broad consensus that a lower stock of human capital reduces growth
  - From a business perspective, firms' productivity is highly correlated to their staff's educational attainment level
  - At individual level, there is a clear positive return to education, which in addition seems to be increasing over time

### Evidence

- Despite the improvement observed in recent decades, the educational attainment level of the Spanish population remains below the European average [For example, in terms of OECD Programme for International Student Assessment results, Eurostat data for educational attainment among adults, and early school leaving rates]
- There appears to mismatch between the supply of and demand for places at conventional (i.e. classroom-based) public universities, which could have a negative bearing on equality of opportunity and the Spanish economy's ability to undertake the green and digital transition

### Areas of action

- **It is essential that structural measures be developed to promote human capital accumulation, which may require an in-depth review of the institutional design of Spain's education system**
  - Public policies should continue to encourage **students to remain and progress in the formal education system** → for example, providing students and families with sufficient information on the employment returns to education
  - **High quality vocational training** could be a very effective alternative for reducing both the early school leaving rates and some of the existing supply and demand mismatches in the labour market, which could increase in the future → Assess and monitor the rollout of the dual vocational training system in Spain in line with the ambitious targets set in the RTRP
  - **University education:** evaluate the impact of the Organic Law on the University system of March 2023, assess the current university funding system (looking at its sufficiency, equity and ability to foster excellence) and reduce the supply and demand mismatches observed in public university education
  - **Financial education** is key if the general public are to take well-informed decisions about their finances and be able to make a critical assessment of public policies → Financial Education Plan (the National Securities Market Commission, Ministry of Economic Affairs and Banco de España)



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## INVESTMENT IN CAPITAL AND INNOVATION

### Context

- Investment in physical and technological capital and the pursuit of innovative activities have the potential to significantly drive up productivity and the economy's growth capacity in the medium and long-term → Any comprehensive policy for sustainable growth must stimulate such activities

### Evidence

- In recent decades, an aspect that partly explains Spain's relatively lacklustre productivity has been its **low share of innovation, which has also led to a smaller stock of intangible assets** [Spain has a lower percentage of innovative firms than other European countries. Moreover, according to OECD data, Spain's average innovation intensity is also low]
- **In the most recent period, the performance of investment has been highly uneven by component**, with investment in intangible assets and information and communication technologies being clearly buoyant, and weak in capital goods

### Areas of action

- Provide a **regulatory framework and a stable institutional environment**, to give investors regulatory and legal certainty
- Smooth **access to external financing for investment projects**, especially those that tend to face greater obstacles in raising finance
- Review the **efficiency and design of the system of tax incentives for innovation**
- Rigorously select **investment projects to be carried out using NGEU funds**, maximising the complementarity and synergies between public and private investment
- **Ambitiously implement the reforms under the RTRP** to reduce the barriers that hinder the sound functioning of markets and resource allocation in the Spanish economy
- Assess the impact of some of the **recent measures rolled out in this area**, such as the Law on Developing the Ecosystem of Emerging Businesses and the Law on Science, Technology and Innovation



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## INSTITUTIONAL FRAMEWORK

### Context

- There is broad consensus in the academic literature that the institutional framework and, more specifically, the quality of institutions and the degree of trust they instil among economic agents are key in determining long-run growth
- Furthermore, some empirical evidence suggests that lost trust in institutions often takes a relatively long time to be won back, meaning that the economic consequences can also be highly persistent

### Evidence

- According to different internationally comparable indicators (such as the World Bank's Worldwide Governance Indicators or the European Commission's Eurobarometer), institutional quality and trust have deteriorated in Spain since the financial crisis ...
- ... and they have done so more markedly than in other European countries

### Areas of action

- **There is scope for improving the “quality of regulation” in Spain**, as it negatively affects not only firm size and the Spanish economy's productivity, but also judicial efficacy
- **Action is needed to boost the efficacy and efficiency of Spanish general government**, which would help lift productivity and have a positive carry-over effect on private sector decision-making on spending, investment and innovation
- **Some areas in Project 11 of the RTRP relating to the modernisation of general government:** the Public Policy Assessment Agency is to be launched, and the assessment of some already approved measures affecting the civil service is pending, as is the approval/implementation of the new reform proposals recently announced



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## POPULATION AGEING

### Demographic dynamics

- In recent decades, demographic trends in Spain have been marked by a significant drop in both fertility and mortality rates → the considerable pace of **population ageing** ...
- ... that will continue to accelerate over the coming decades, more so in Spain than in other European countries [Between 2023 and 2053 the dependency ratio (the ratio of the population aged over 66 to those aged 16-66) in Spain will increase by 27.2 pp to 53.8%, compared with just 16.6 pp (to 45.8%) on average in the EU]

### The role of migration flows

- Migration flows have surged in recent years, but ...
- ... it seems unlikely that this will offset the current population ageing process in Spain, or effectively smooth any mismatches that might arise in the Spanish labour market

### Areas of action

- **Labour market:** Among other steps, (i) encourage longer working lives for older workers, (ii) strengthen lifelong learning and active and passive labour market policies, and (iii) continuously monitor the potential for new migration policies to effectively mitigate any labour market mismatches that may arise
- **Fiscal policy:** Population ageing is already driving a significant increase in public spending, both on pensions and on health and long-term care, which will continue to gather pace in the future → Undertake an ambitious medium-term fiscal consolidation plan without delay. This process will require ongoing and thorough assessment of the public pension system's financial sustainability
- **Fertility:** Examine the capacity of some of the public measures to promote work-life balance adopted in recent years to prompt an appreciable shift in fertility trends in Spain over the coming years



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## INEQUALITY AND POCKETS OF VULNERABILITY IN HOUSEHOLDS

### Context

- The academic literature suggests that **excessively high inequality levels** may weigh not only on the degree of social cohesion, but also on **economic growth capacity**, through their diverse effects on aggregate consumption, investment, the accumulation of human capital and opportunities for future generations

### Evidence

- In recent years, income inequality declined significantly in Spain against a backdrop of strong employment growth ...
- ... however, some **pockets of vulnerability** have been observed among some groups, which appear to be largely linked to housing affordability difficulties (*See Chapter 4 of the Annual Report 2023*)
- A recent Banco de España study (Grébol, Machelett, Stuhler and Villanueva, 2024) found that **the correlation between parents' level of educational attainment and that of their adult offspring decreased** in the second half of the 20<sup>th</sup> century, suggesting greater intergenerational mobility and, hence, **more equality of opportunity**

### Areas of action

- **Addressing these challenges stemming from the pockets of vulnerability among Spanish households requires public policy measures across a very broad range of areas.** For example:
  - to bring down the high structural employment rates in Spain
  - to correct the supply and demand mismatches observed in the Spanish housing market
  - to strengthen the quality of the country's education system and foster the accumulation of human capital by the population
  - via income and transfer policies
- **All policy measures rolled out in this area must be subject to ongoing and thorough assessment.** For example, there is scope for improving the integration of the minimum income scheme, the different local and regional subsistence income schemes and unemployment benefits, so as to increase their effectiveness and efficiency (Independent Authority for Fiscal Responsibility (AIReF, 2022 and 2023)



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## PUBLIC FINANCES

### Recent trends

- The general government debt and deficit fell in 2023 to 107.7% and 3.6% of GDP, respectively, although the public finances imbalance remains very high, both by historical and international standards
- In addition, this imbalance has a high structural component that has not improved in recent years. Notably higher revenue has been more than offset by the increase in expenditure

### Challenges facing the public pension system

- The pension system is one of government's most important structural expenditure items. The growth seen in pension expenditure in recent years is expected to continue in the coming decades
- The *Ageing Report* projections, net of the revenue measures quantified by AIReF, show that additional measures will most likely be needed to counter the future increase in pension expenditure

### New European fiscal rules

- Once it is approved, effective and rigorous implementation of the new fiscal framework is essential, both for the sustainability of Member States' public finances and for the credibility of the European project itself
- The new rules could entail significant fiscal adjustments in some countries in the coming years

### Fiscal consolidation plan

- The macroeconomic and fiscal dynamics of the Spanish economy highlight the need to implement, without delay, a medium-term fiscal consolidation plan that strengthens the sustainability of public finances
- It would be desirable for the multi-year consolidation plan to be set against the backdrop of a prudent macroeconomic framework and include details of the revenue and expenditure measures that would enable gradual fiscal consolidation



# STRUCTURAL CHALLENGES FACING THE SPANISH ECONOMY

## GREEN TRANSITION

### Context

- There is a broad consensus (see *Network for Greening the Financial System scenarios*) that:
  - the economic losses resulting from the materialisation of the physical risks associated with global warming far outweigh the cost of implementing an ambitious strategy to mitigate and adapt to climate change, and
  - a gradual and orderly transition carried out without delay and with a high degree of international coordination would cut the transition costs

### Evidence

- The consensus in the scientific community is that **the Iberian Peninsula could be significantly affected by the physical risks associated with climate change**, and that this impact would be very uneven across regions
- The **Banco de España's research agenda** suggest that the impact of the physical and transition risks on activity, employment, price and credit dynamics in the Spanish economy would be by no means insignificant. Moreover, these effects would be very heterogeneous across regions, sectors, firms and households, and would have a considerable impact on certain groups within these categories

### Areas of action

- In recent years, **Spain has taken on highly ambitious environmental commitments**, in line with those established in the EU and in other advanced economies
- Through **green taxation, public investment and regulation of economic activity**, public policies must act as the essential lever to boost the green transition
- In any event, **these policies must provide economic agents with certainty and mitigate the larger negative impact that this transition will have on the most vulnerable groups**
- The energy transition will require, among other measures, **large-scale deployment of renewable energy sources** over the coming decades ...
- ... although **improving energy interconnections within the EU and a determined commitment to energy efficiency gains** will also be essential 📌

THANK YOU

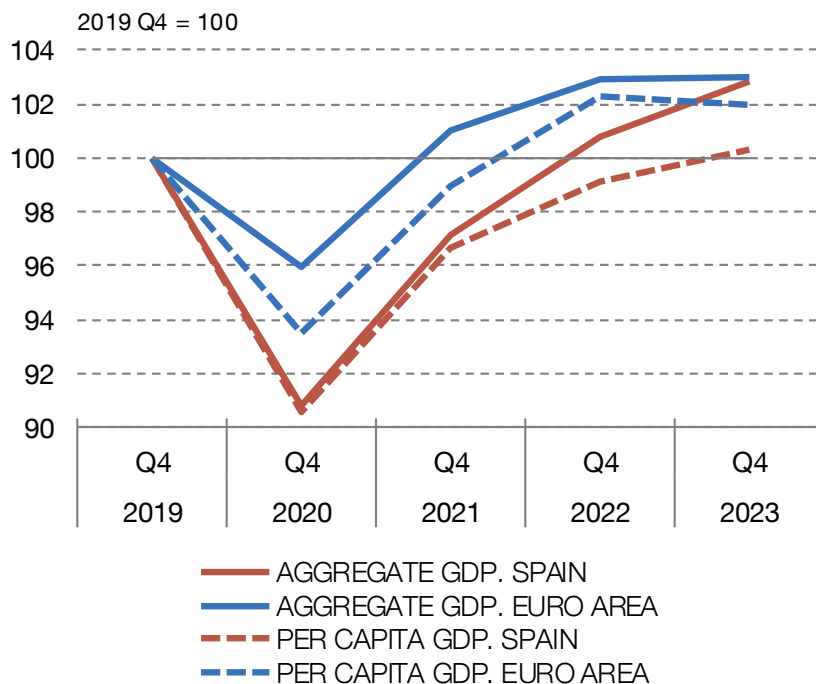




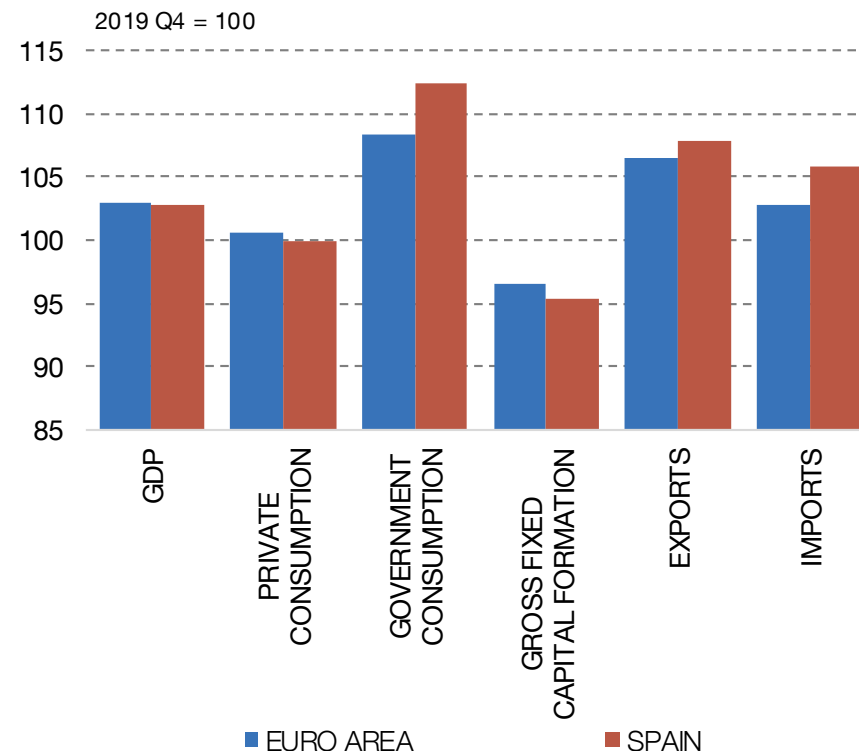
# SPANISH GDP GREW BY 2.5% IN 2023, A GROWTH RATE FAR AHEAD OF THAT OF THE EURO AREA OVERALL

- The fact that 2023 saw the Spanish economy grow significantly faster than the euro area overall is partly the result of a certain convergence in levels of activity in both regions, since Spanish GDP showed less momentum between 2019 and 2022
- Thus, at end-2023, GDP stood around 3% higher than at end-2019 in both Spain and the euro area. However, Spanish GDP per capita was barely 0.3% above its pre-pandemic level, while that of the wider euro area stood 2% above its end-2019 level

**AGGREGATE AND PER CAPITA GDP IN SPAIN AND THE EURO AREA**



**GDP AND DEMAND COMPONENTS (2023 Q4)**

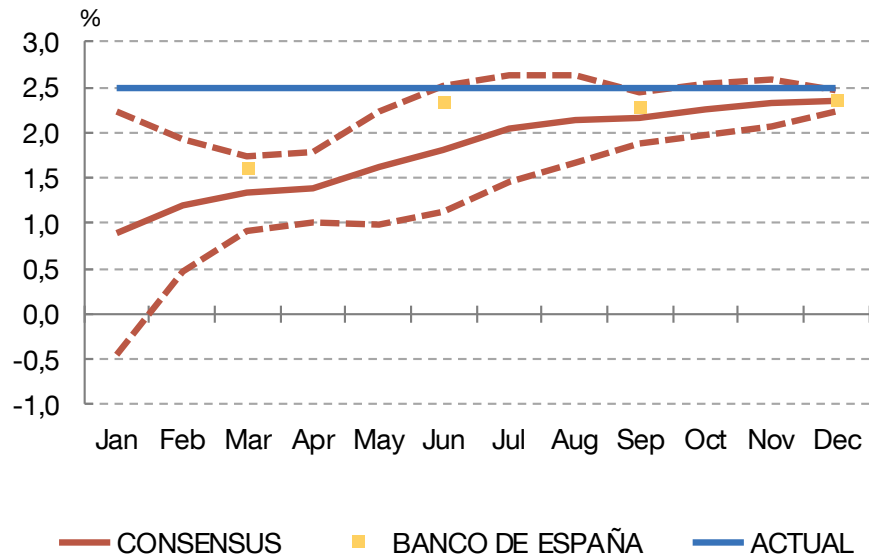


Sources: INE, Eurostat and Banco de España.

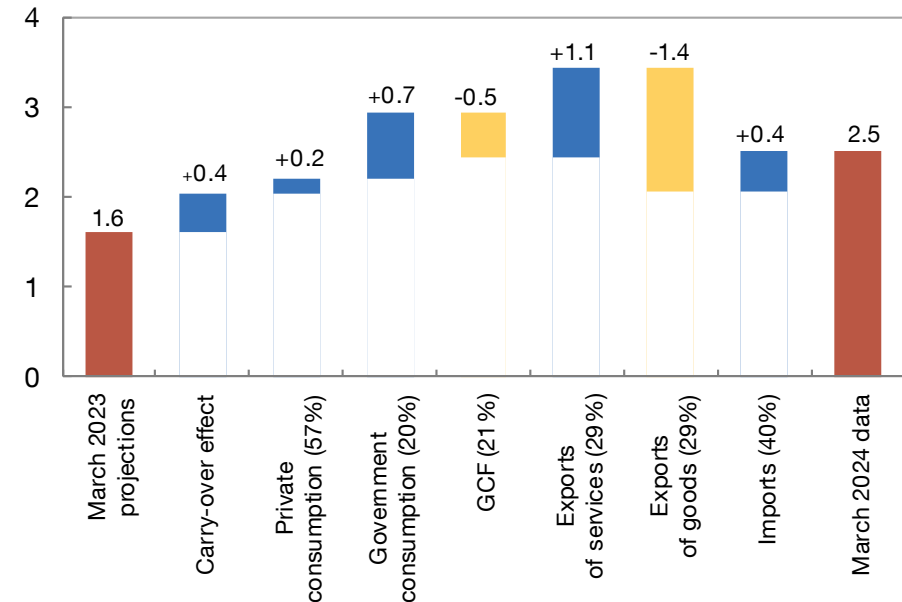
# SPANISH ECONOMIC ACTIVITY SURPRISED ON THE UPSIDE THROUGHOUT 2023

- In 2023, Spanish GDP grew at a rate well above that projected by the Banco de España in early 2023 (1.6%) and above the consensus forecast
- Among the factors underlying this **upside surprise**, mention should be made of the positive carry-over effect arising from the **revision of data for 2022** and stronger than expected **government consumption** (which grew by 3.8% in Spain, against 0.7% in the euro area overall) and **services exports**
- Conversely, **investment and goods exports surprised on the downside**, with the latter affected by the slowdown in economic activity globally and especially in the euro area

**FORECASTS FOR 2023 OVER THE YEAR. RATES OF CHANGE OF GDP (a)**



**REVISION COMPARED WITH THE MARCH 2023 MACROECONOMIC PROJECTIONS (b)**



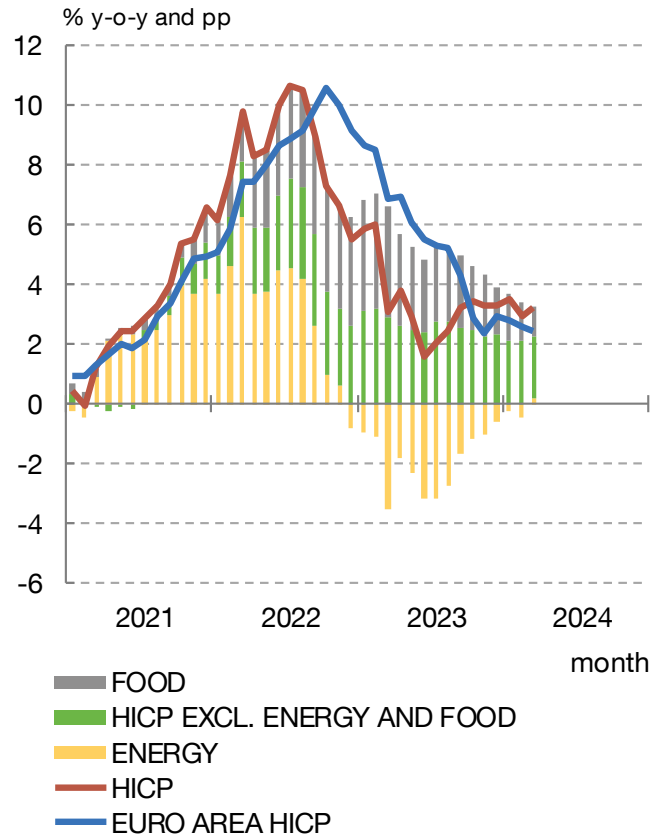
Sources: Consensus, INE and Banco de España.

(a) The dotted lines denote the Consensus panellists' highest and lowest GDP forecasts.

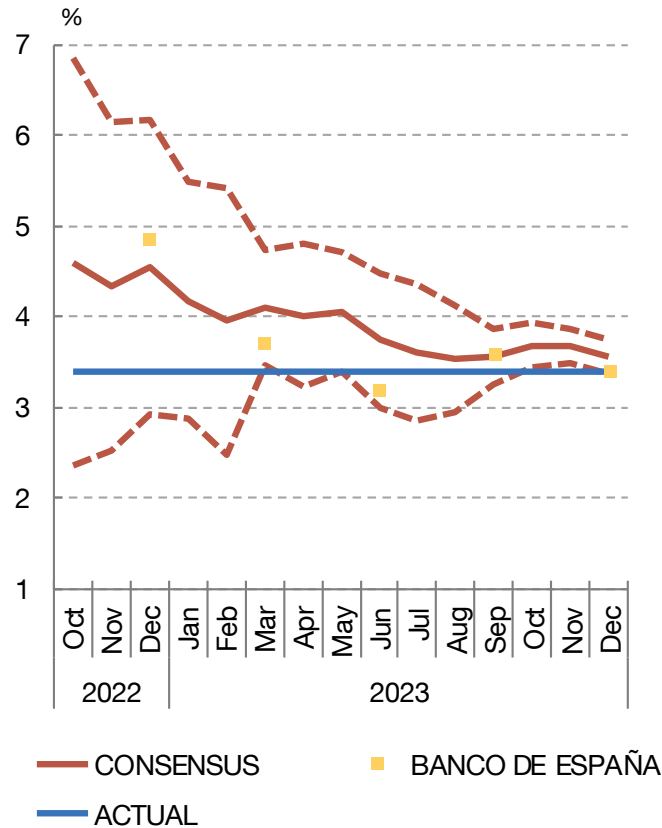
(b) The figures in brackets are the share of each component in 2022 GDP.

# HEADLINE INFLATION CONTINUED TO MODERATE IN 2023, AND MORE STEEPLY THAN FORECAST

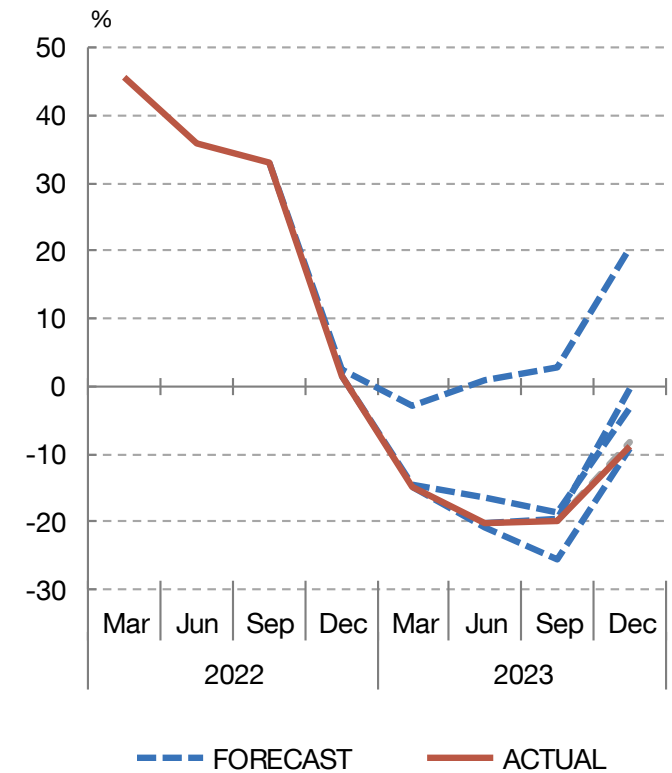
## HICP AND CONTRIBUTIONS



## AVERAGE HICP RATE FORECAST FOR 2023 (a)



## ENERGY HICP: PROJECTED PATHS AT THE CUT-OFF DATE OF EACH PROJECTION EXERCISE (b)



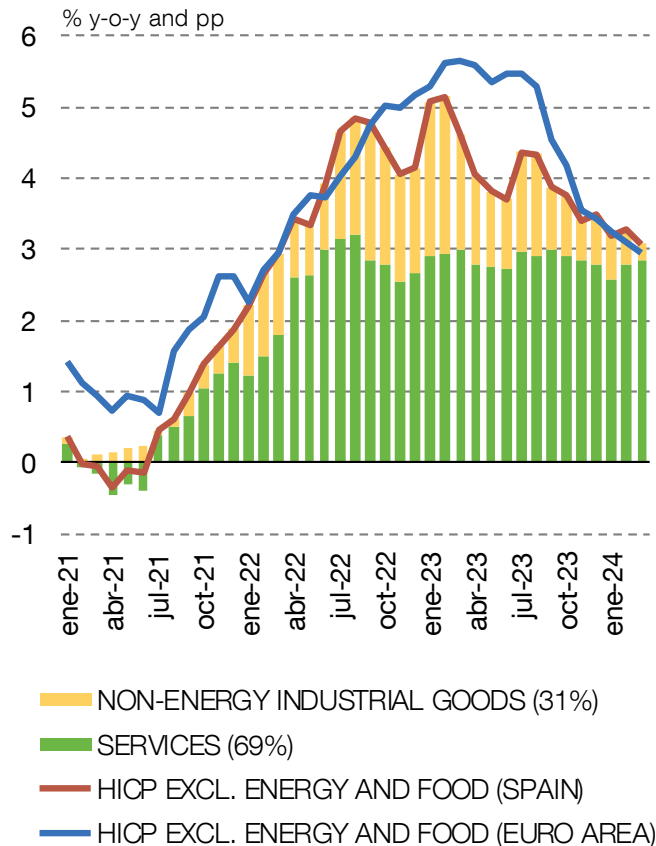
Sources: Eurostat, INE, Consensus and Banco de España.

(a) The dotted lines denote the Consensus panellists' highest and lowest forecasts.

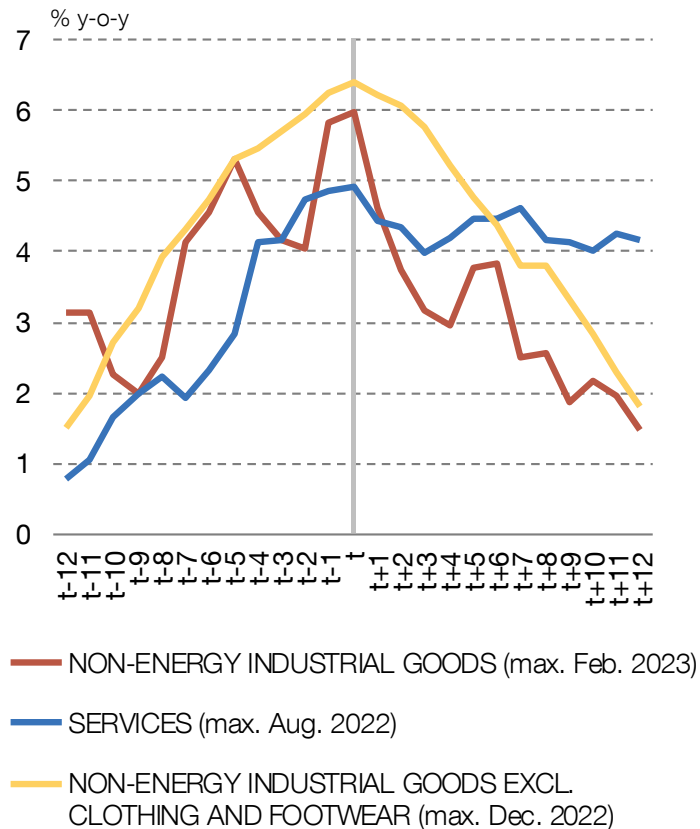
(b) The dotted lines denote the paths forecast in the Banco de España's projection exercises of December 2022, March 2023, June 2023 and December 2023.

# CORE INFLATION CONTINUED ON ITS SLOWING PATH, ALTHOUGH INFLATIONARY PRESSURES IN SERVICES SHOW GREATER DOWNWARD STICKINESS

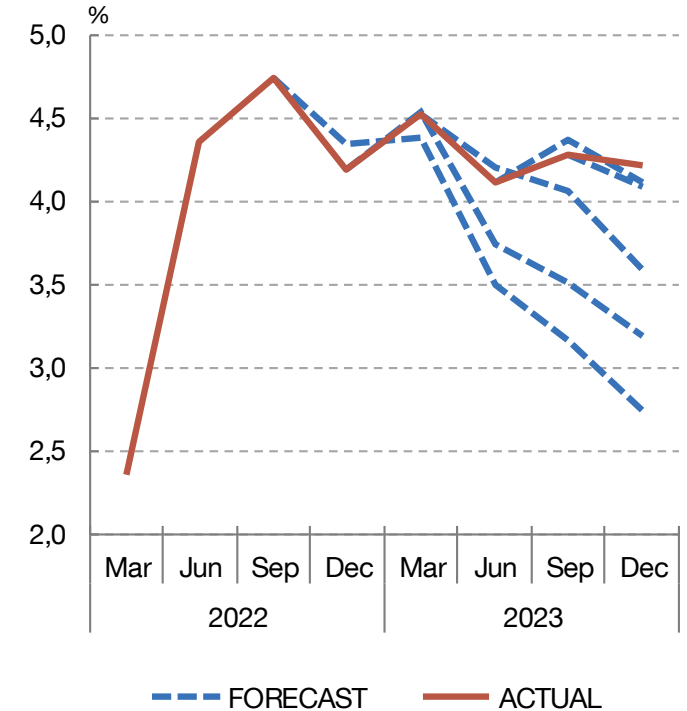
**HICP EXCL. ENERGY AND FOOD AND CONTRIBUTIONS (a)**



**HICP-SERVICES AND NON-ENERGY INDUSTRIAL GOODS: INFLATION BEFORE AND AFTER RECENT HIGHS**



**SERVICES HICP: PROJECTED PATHS AT THE CUT-OFF DATE OF EACH PROJECTION EXERCISE (b)**



Sources: Eurostat, INE, Consensus and Banco de España.

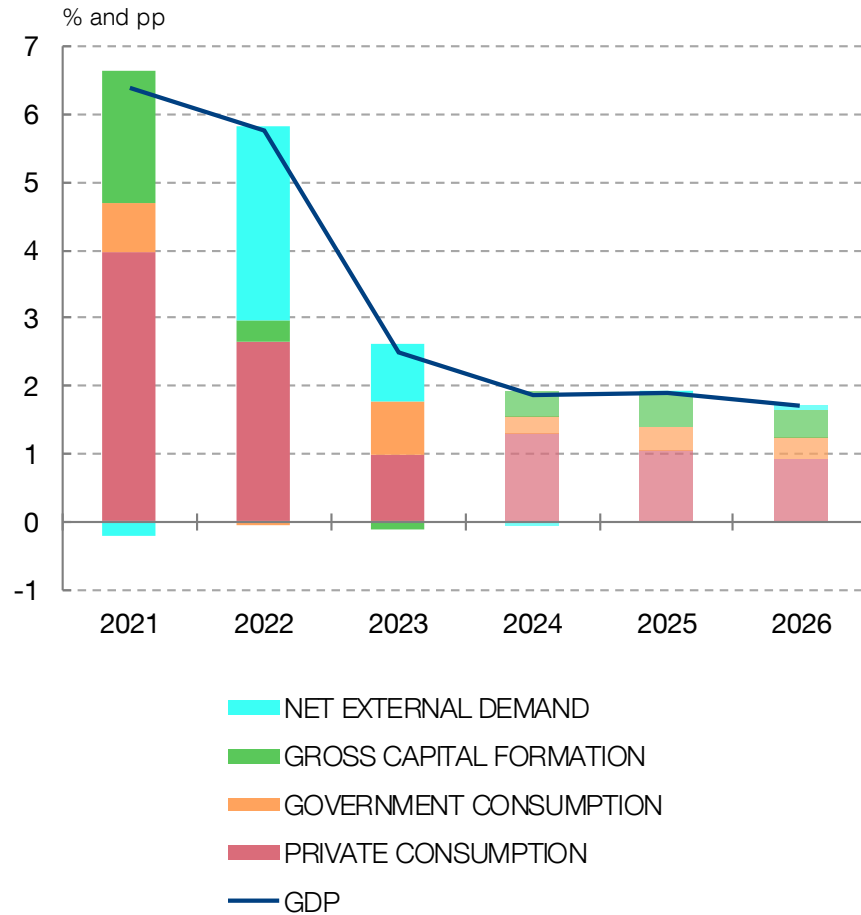
(a) The figures in brackets are the share of each component in core inflation in 2023.

(b) The dotted lines denote the paths forecast in the Banco de España's projection exercises of December 2022, March 2023, June 2023 and December 2023.

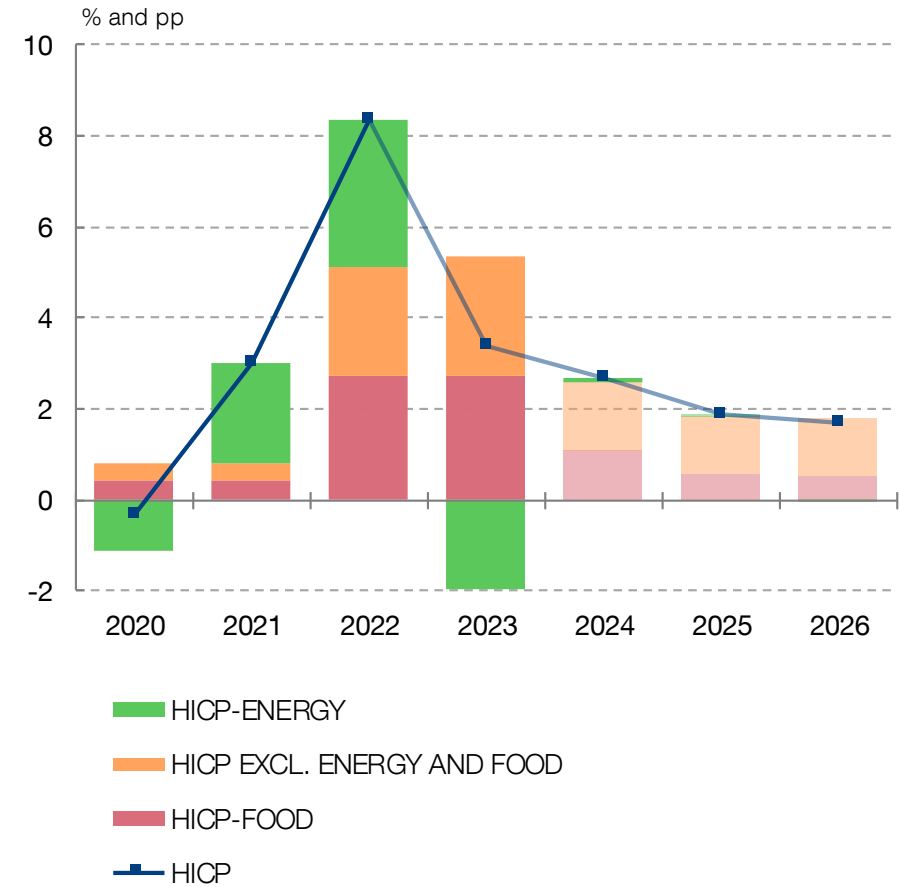
# MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY 2024-2026

## BANCO DE ESPAÑA – MARCH 2024

### GDP GROWTH AND CONTRIBUTIONS OF THE MAIN COMPONENTS



### CONTRIBUTIONS TO HIPC GROWTH, BY COMPONENT



Sources: INE and Banco de España.



# SOME OF THE MAJOR SOURCES OF RISK

Escalation of armed conflicts  
in the Gaza Strip, the Red Sea and Ukraine

Slowdown in global economic activity, owing, for  
example, to a stronger than expected deceleration in  
China

Size of the impact of monetary policy tightening on  
activity and prices

EU fiscal rules coming back into force

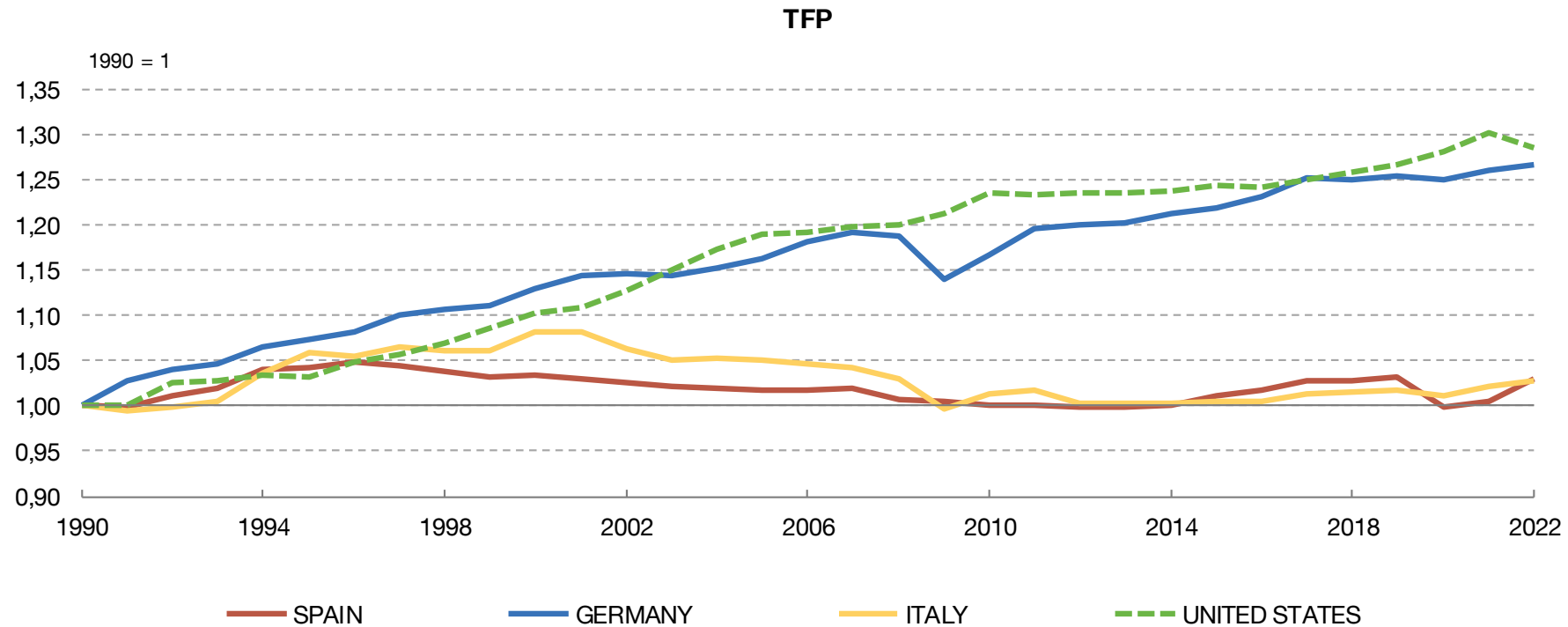
Changes in profit margins, wages, unit labour costs  
and competitiveness

Pace of the roll-out of projects funded by the NGEU  
programme and the impact on activity



# SPANISH TOTAL FACTOR PRODUCTIVITY (TFP) GROWTH

- Spanish TFP growth in 2000-2022 was around 13 and 17 pp lower than that observed in Germany and the United States, respectively
- As highlighted in Chapter 2 of the Banco de España *Annual Report 2022*, sluggish productivity is one of the main reasons, along with the persistence of very high unemployment rates, why the Spanish economy has lagged behind euro area per capita income in recent decades

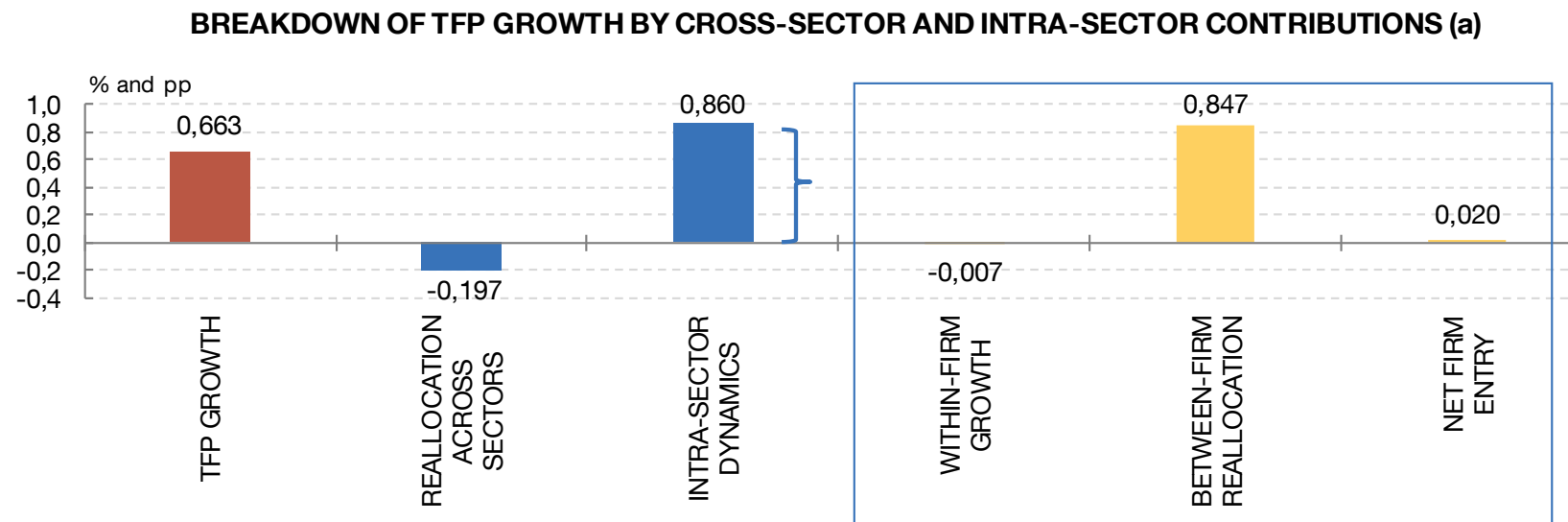


Source: OECD.



# A BREAKDOWN OF RECENT CHANGES IN SPANISH PRODUCTIVITY

- The Banco de España's estimations show that cross-sector reallocation of activity made a **small negative contribution to TFP growth in Spain** between 2013 and 2021
- **During this period, however, sector-level productivity contributed positively to aggregate TFP growth**, as it did in other European countries. As regards intra-sector productivity growth:
  - **resource reallocation across firms operating in the same sector** made a positive contribution to productivity growth
  - the **within-firm component** made a negative contribution, that is to say, firms' average productivity growth was negative
  - the **extensive margin** (i.e. net entry) made a very modest contribution to productivity growth



Fuente: Banco de España (CBSO).

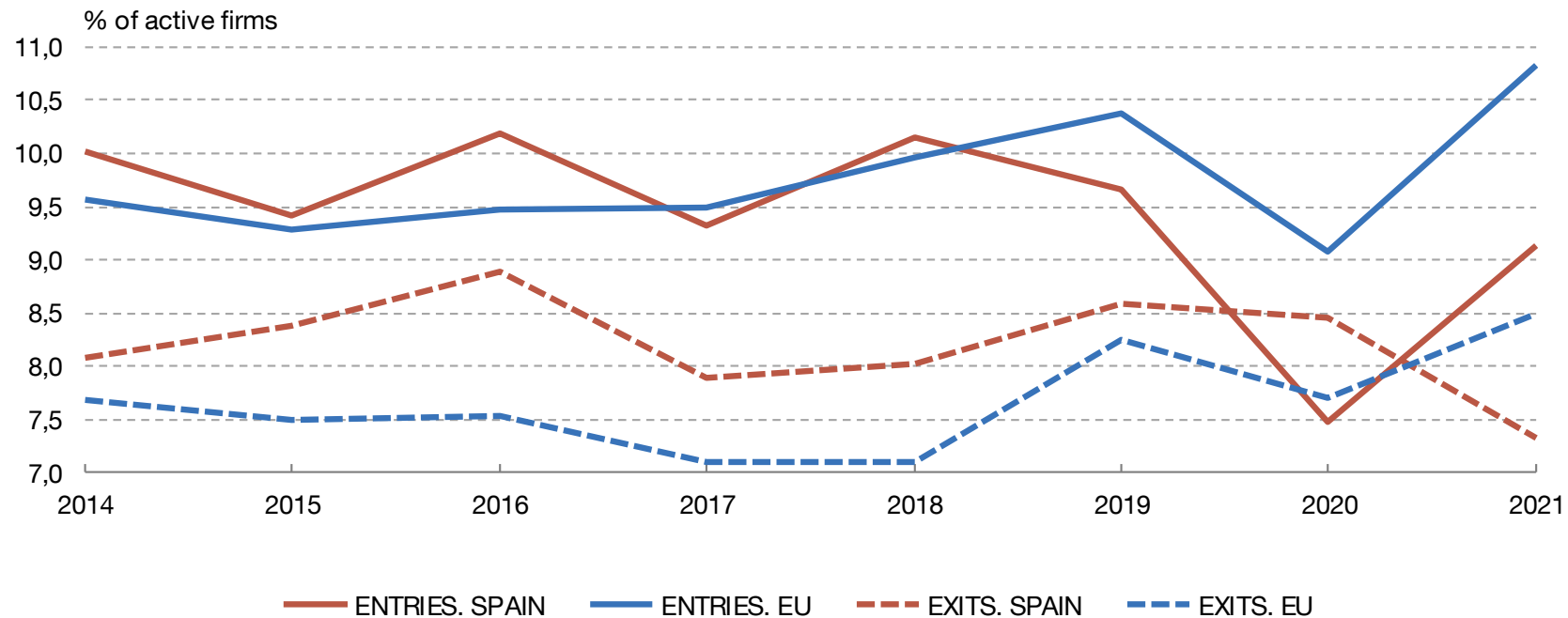
(a) Data in percentage (%) in the case of TFP growth and in percentage points (pp) in all other cases. Breakdown of TFP of the firms in the Central Balance Sheet Data Office integrated database, following the methodology of Foster, Haltiwanger and Krizan (2001) and weighted by sales for aggregation, and the method of Wooldridge (2009) to calculate TFP at firm level.



# SPAIN HAS A LOWER BUSINESS CHURN RATE THAN OTHER COUNTRIES ...

- Although the number of firms has returned to its pre-pandemic mark (+1.5% in Spain, compared with +9.8% in the EU), the business churn rate declined (from 18.2% in 2016-2019 to 16.2% in 2020-2021) and it remains low (in the EU, it rose from 17.3% to 18.1% in the same period)
- Spain has a lower business churn rate than the EU because its entry and exit rates are lower

FIRM ENTRY AND EXIT RATES IN SPAIN AND THE EU (a)

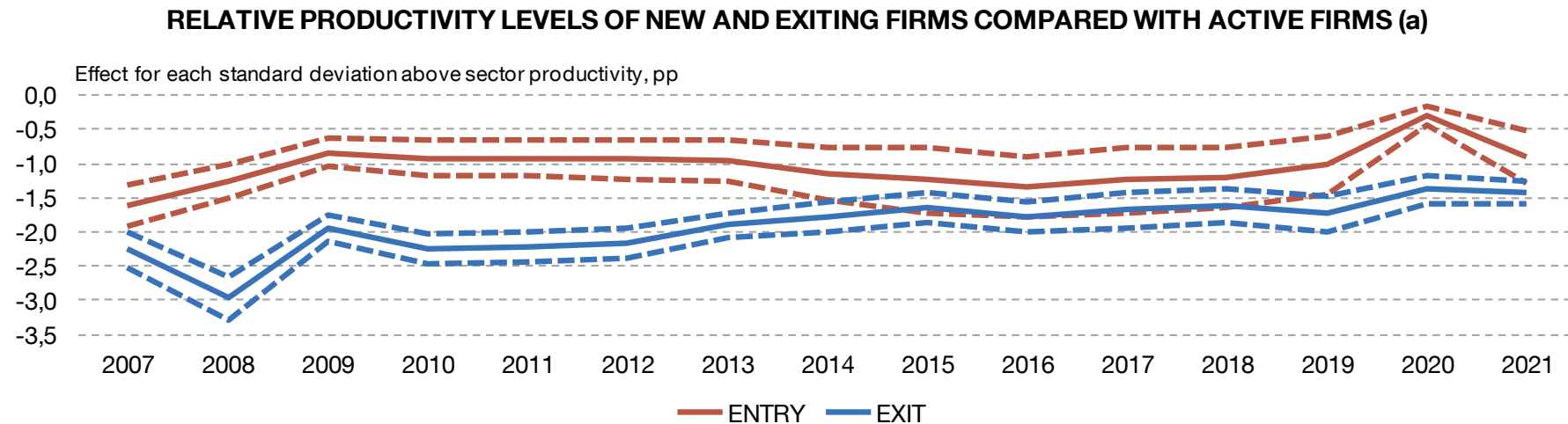


Sources: Eurostat and Banco de España (CBSO).

(a) Given the lack of information for some of the years between 2014 and 2021, the EU aggregate does not include Belgium, Greece, Ireland, Malta, Poland or Sweden. Moreover, the Eurostat data do not include firms in the following sectors: agriculture (NACE Rev. 2 section A), financial service activities, except insurance and pension funding (division K64), public administration (section O), other service activities (section S), activities of households (section T) and activities of extraterritorial organisations and bodies (section U).

## ... WHICH HOLDS BACK PRODUCTIVITY

- The entry and exit of firms contribute positively to productivity, meaning that a lower business churn rate limits aggregate productivity growth. According to Banco de España estimates:
  - Less productive firms are more likely to exit the market
  - New firms are less productive than established ones. However, new firms typically have more room for improvement [The productivity growth of firms that entered the market between 2014 and 2016 was, after five years, around 22 pp higher than that of established firms → they were already more productive than their competitors from their fifth year onwards]
  - In any event, new firms are more productive than exiting firms

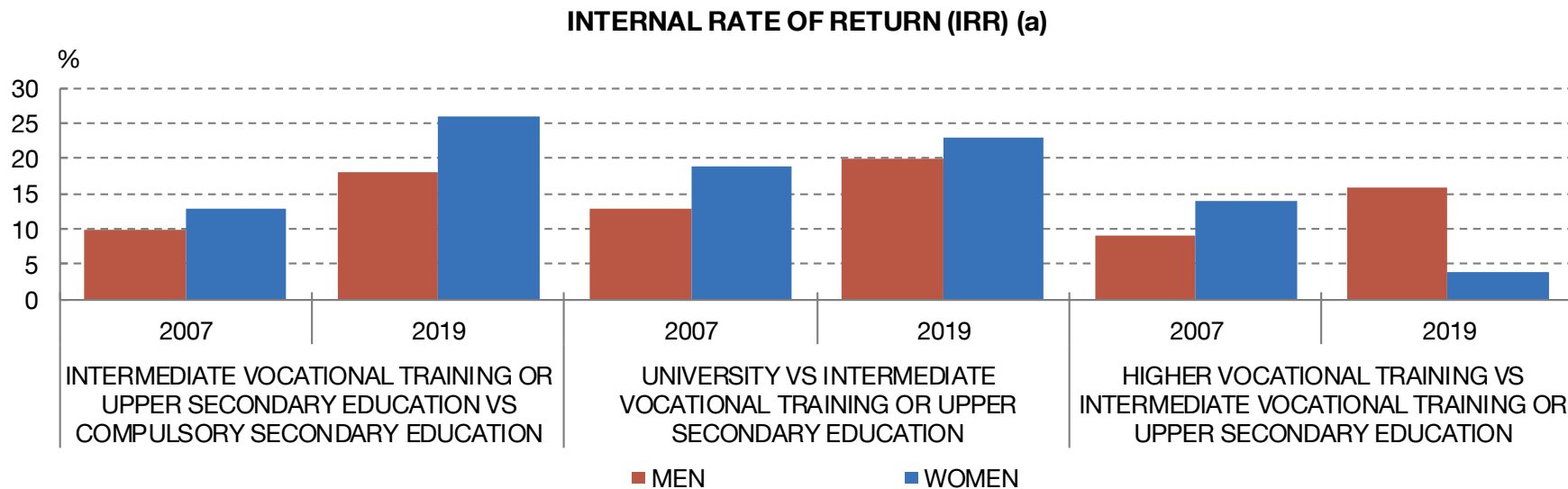


Sources: Eurostat and Banco de España (CBSO).

(a) The chart shows the coefficients associated with firm-level TFP (in deviations from the sector average) and estimated for each year in two regressions: one in which the dependent variable is a dummy variable that takes the value of 1 if the firm exits the market and 0 otherwise (blue line), and another in which the dependent variable is a dummy variable that takes the value of 1 if the firm has entered the market within the last year and 0 otherwise (red line). Consequently, the estimated coefficients measure the effect of one-standard-deviation changes in firms' TFP with respect to the sector average on entry and exit rates. Firm-level TFP is estimated previously, drawing on the method of Wooldridge (2009). The broken lines show 95% confidence intervals.

# THE BANCO DE ESPAÑA'S SPANISH SURVEY OF HOUSEHOLD FINANCES (EFF) CAN BE USED TO ESTIMATE THE INTERNAL RATE OF RETURN TO EDUCATION AS WITH ANY OTHER INVESTMENT

- The **cost of the investment** is quantified on the basis of the sum of the income forgone by not working during the period of study
- The **benefit** can be calculated considering the positive labour income differential obtained after education
- According to this analysis, in 2019:
  - **an upper secondary education or intermediate vocational training** provided a return of 18% for men and 26% for women compared with compulsory secondary education alone; in both cases, this return was greater than that estimated in 2007
  - **completing university studies** provided an additional return of 20% for men and 23% for women; again, these figures were higher than those estimated in 2007
  - the additional return to **higher vocational training** compared with intermediate vocational training (non-compulsory level) was also positive for men and women in 2019, although for women it was lower than in 2007



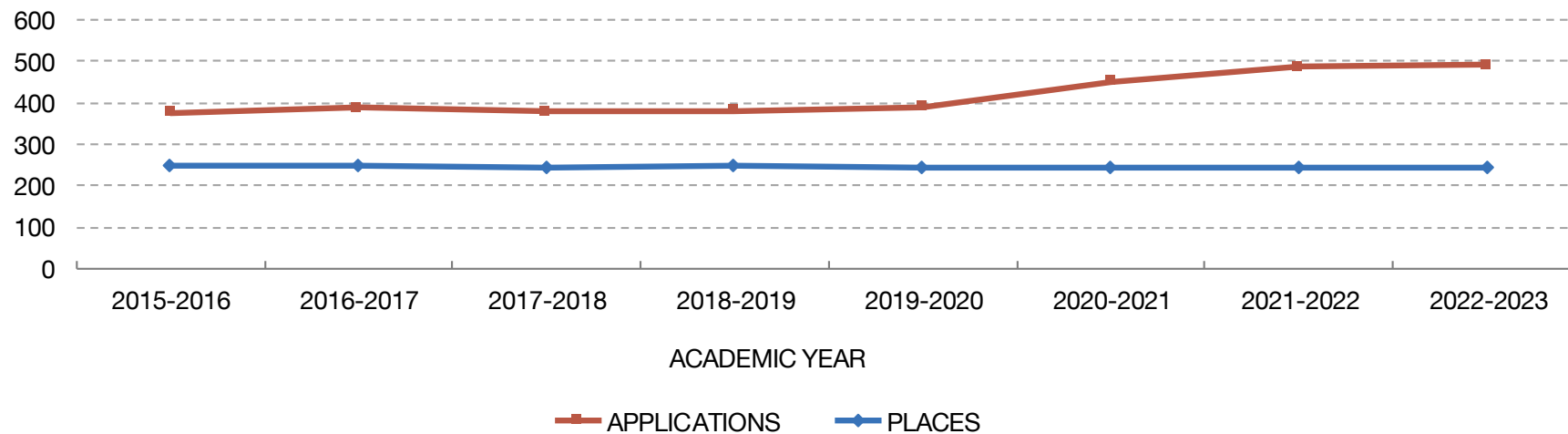
Source: Banco de España (EFF).

(a) The IRR to a level of educational attainment is defined as the discount rate that equates the sum of the present value of earnings over 50 years of work experience with the opportunity cost (the present value of income earned by not remaining in education). For more information, see Jansen and Lacuesta (2024).

# CONVENTIONAL (CLASSROOM-BASED) PUBLIC UNIVERSITY EDUCATION SEEMS TO BE RESPONDING ONLY VERY SLIGHTLY TO CHANGES IN DEMAND

- On the demand side, the number of applications to conventional public universities rose by 30% in Spain between 2015 and 2022
- Furthermore, such applications appeared to be aligned, to some extent, to labour market demand. Specifically, on average, these applications were positively correlated to graduates' contribution base four years after graduation: courses that lead to with 10% higher wages than other courses receive 6% more applications
- On the supply side, however, the number of places available at these universities for new students fell by 1% in the period analysed
- Moreover, in contrast to the number of applications, the number of places available in areas of study at conventional public universities is not correlated to wage variation. Specifically, these universities are offering more courses in areas of study with greater job opportunities, but without making more places available

CONVENTIONAL PUBLIC UNIVERSITIES: FIRST-CHOICE APPLICATIONS AND PLACES

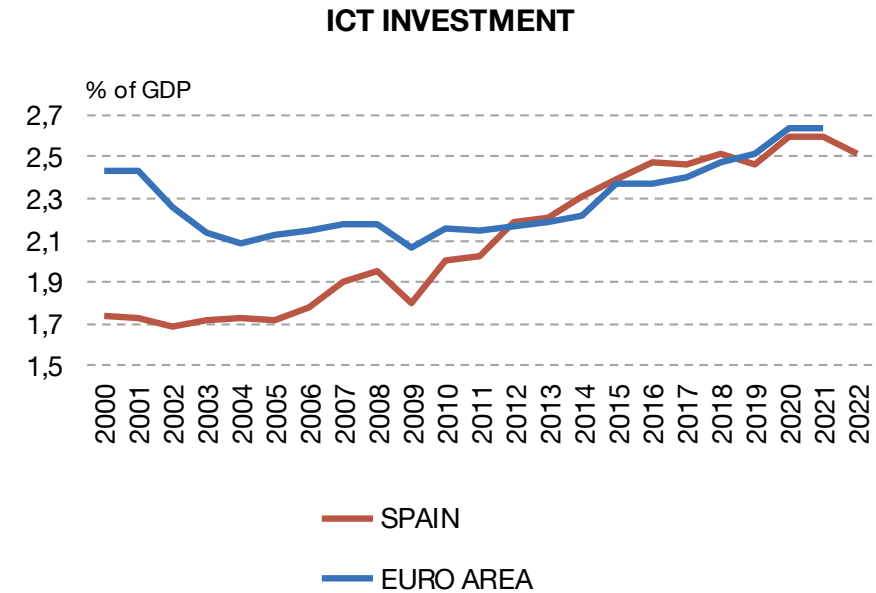
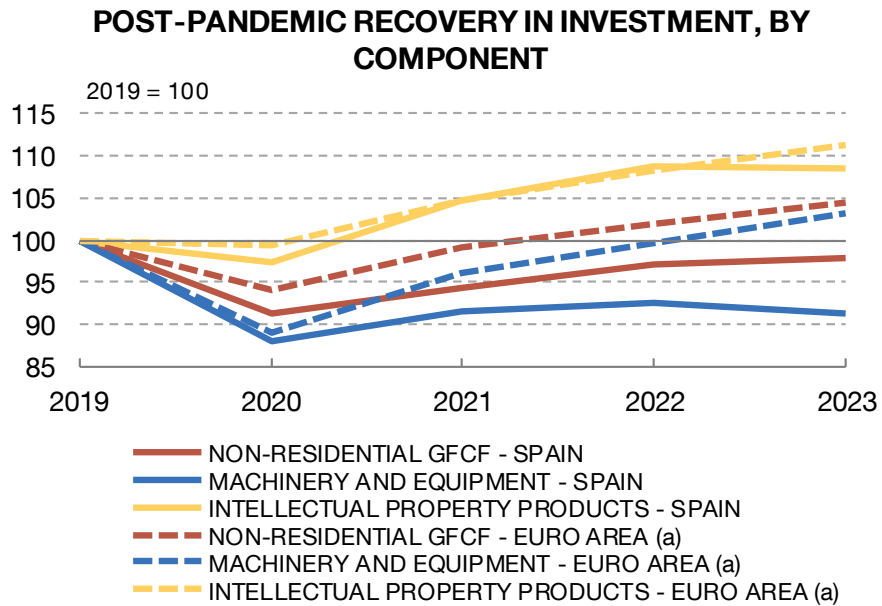


Source: Ministerio de Ciencia, Innovación y Universidades (UNIVbase).



# IN THE MOST RECENT PERIOD, THE PERFORMANCE OF INVESTMENT HAS BEEN HIGHLY UNEVEN BY COMPONENT

- Since the outbreak of the health crisis, the recovery in **investment in intangible assets** in Spain has been stronger than in the other investment components
- As for tangible capital, the adverse impact of the various adverse shocks that have shaped economic activity in Spain and globally in recent years appear to be having a sharper impact on **investment in machinery and equipment**, and on **investment in transport equipment** in particular.
- **Public investment** has increased significantly in Spain in recent years: in 2022 it was up by 27.1% on its 2019 level, compared with an increase of 7.1% in the euro area
- Lastly, between 2000 and 2022 **ICT investments** showed notable buoyancy in Spain, with its share of GDP increasing from 1.7% to 2.5%, very close to the 2.6% observed in the euro area as a whole



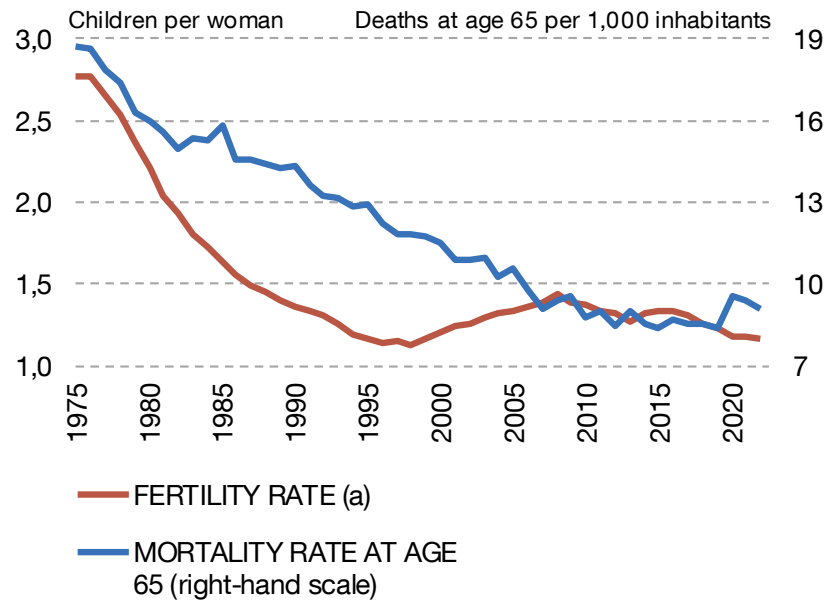
Source: Eurostat.  
(a) Euro area excluding Ireland.



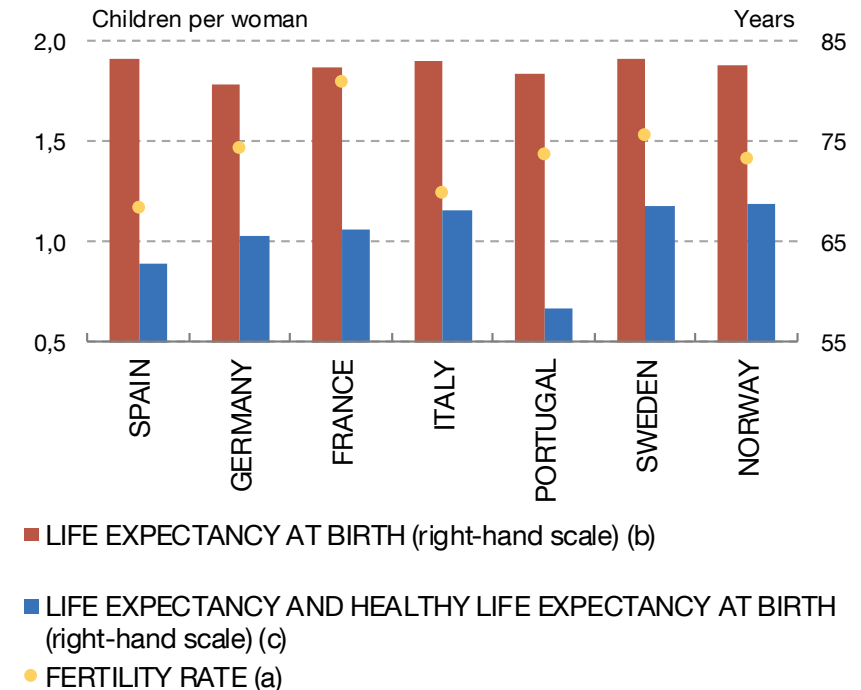
# THE POPULATION AGEING PROCESS IN SPAIN

- Spain stands out internationally for its **high life expectancy at birth**: 83.2 years in 2022
- However, it has a poorer relative position in terms of **“healthy life expectancy”**, lagging behind, for instance, Germany, France and Italy

**FERTILITY AND MORTALITY RATES IN SPAIN**



**FERTILITY RATE, LIFE EXPECTANCY AND HEALTHY LIFE EXPECTANCY AT BIRTH IN 2022, BY COUNTRY**



Sources: INE and Eurostat.

(a) Measures the average number of children a woman would give birth to during her child-bearing years, assuming she gave birth according to the average fertility rate for each year of age.

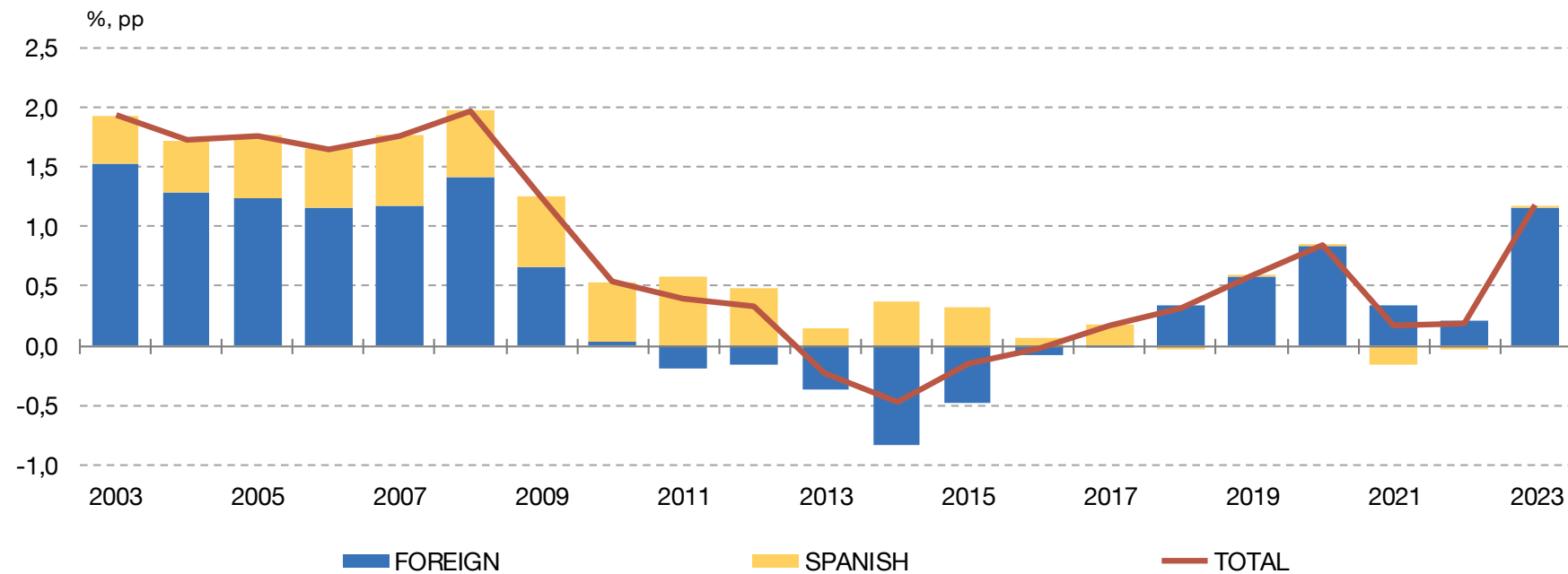
(b) Measures the average number of years that a newborn is expected to live if the mortality patterns in the period observed remain unchanged.

(c) Calculated on the basis of life expectancy at birth minus the expected number of years lived with disability or in poor health, considering the multiple causes that may contribute to poor health, weighted according to their severity (Mathers, Sadana, Salomon, Murray and Lopez, 2001). Data refer to 2021, except for Norway, where they refer to 2020.

# THE SCALE OF MIGRATION FLOWS INTO SPAIN

- Following the decline observed during the pandemic, immigrant arrivals recovered strongly to stand at around 1.1 million in 2022, even above 2007 levels → Spain has thus become one of the European countries with the highest immigrant rates (approximated as the rate of foreigner arrivals per thousand inhabitants) even ahead of Germany  
[In terms of the number of permanent immigrants, Spain is the world's fourth destination country, only behind the United States, Germany and the United Kingdom]
- Net foreigner arrivals (close to 5 million between 2002 and 2022) have become practically the only source of population growth in Spain → Since 2002, the percentage of residents born abroad has increased by almost 12 pp, to more than 17%

RESIDENT POPULATION GROWTH IN SPAIN AND CONTRIBUTION BY NATIONALITY



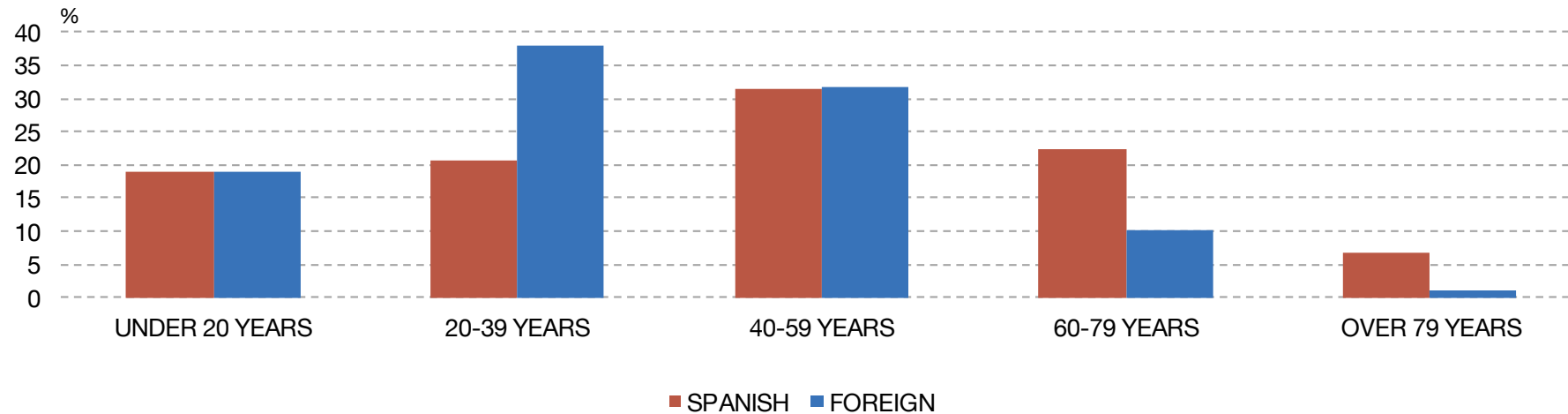
Source: INE.



# THE CAPACITY OF MIGRATORY FLOWS TO PREVENT POPULATION AGEING AND SMOOTH ANY MISMATCHES THAT MIGHT ARISE IN THE SPANISH LABOUR MARKET

- Immigrants to Spain are, on average, younger than Spanish nationals. However, for the dependency ratio in Spain to remain constant over the next 30 years, the foreign-born population of working age would have to be three times larger than anticipated in the latest INE projections (which already estimate that migration flows will lead to net population growth of almost 10 million in cumulative terms up to 2053)
- In the labour market, in recent years, foreign workers are estimated to have contributed to reducing, at least in part, the mismatches between labour supply and demand seen in some jobs. However, there are some key differences between foreign and Spanish nationals:
  - The participation rate among immigrants is high, generally above that of Spanish nationals (70% and 56.5%, respectively, in 2022).
  - In 2023, in the cohort of foreign nationals who had lived in Spain for less than one year, around 80% of those of working age did not have a university education, and more than 70% were in low-skilled employment, percentages well above those for Spanish nationals [In 2022, around 60% of all Spanish-born emigrants were university educated]

AGE DISTRIBUTION, BY NATIONALITY OF RESIDENT POPULATION IN SPAIN (1 JANUARY 2023)



Source: INE.

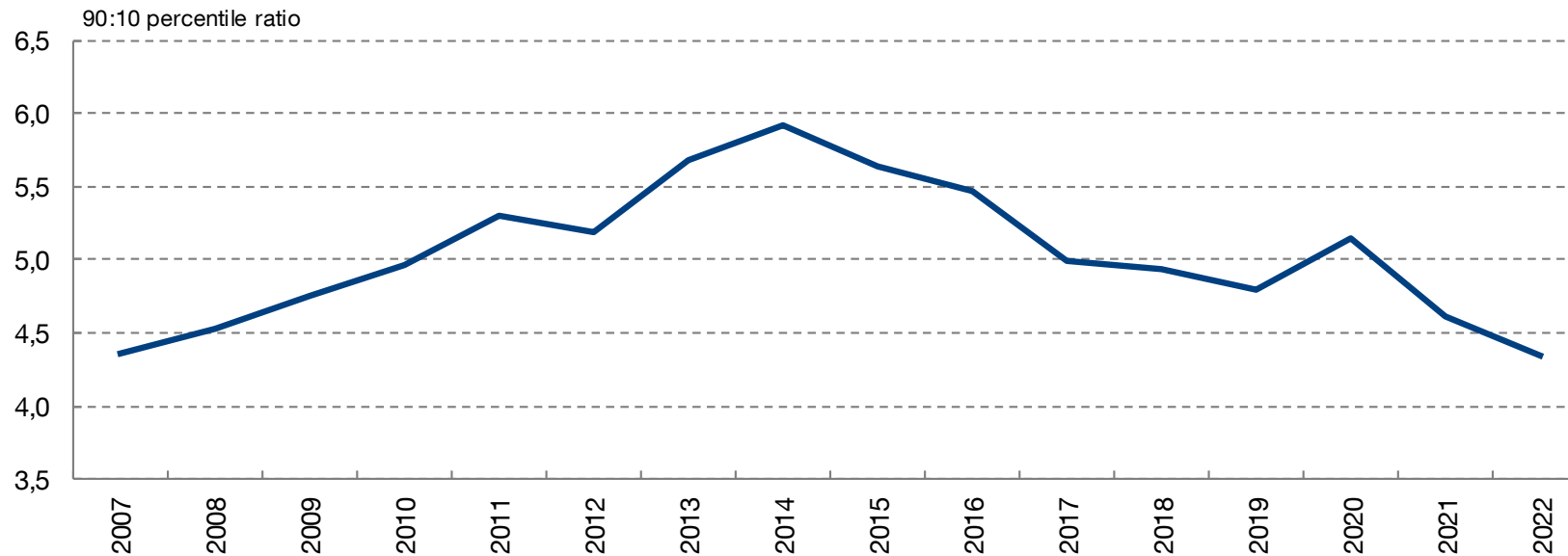




# INCOME INEQUALITY FOLLOWING THE PANDEMIC

- The majority of the **most commonly used measures of inequality, such as wage inequality, income inequality or relative poverty** have followed a very similar pattern in recent years: although they rose significantly in 2020 following the outbreak of the health crisis, they have fallen sharply since then, mainly as a result of the notable buoyancy of activity and employment in Spain since 2021
- The most recent data of the INE's Living Conditions Survey suggest that **the levels of income inequality in Spain in 2022 were very similar to, and even lower than, those observed before the start of the global financial crisis**

**CHANGES IN THE 90:10 PERCENTILE RATIO OF THE INCOME DISTRIBUTION (a)**



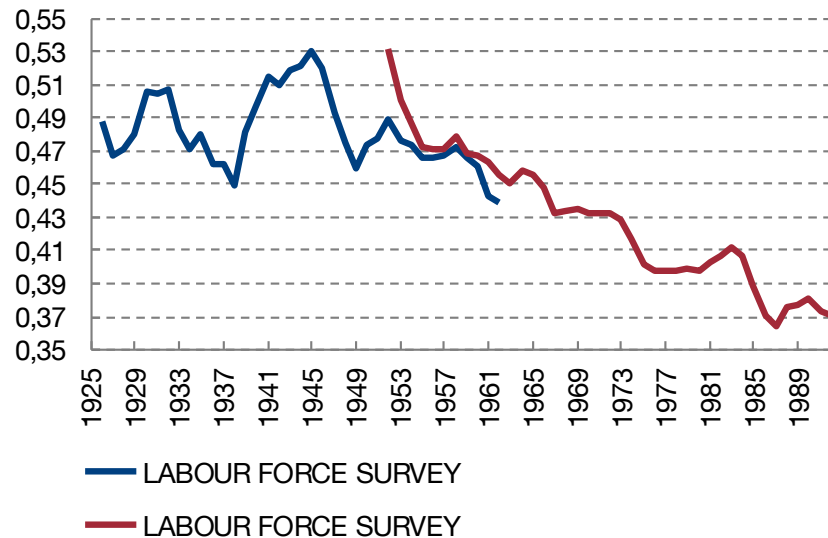
Source: INE.

(a) Ratio of two percentiles in the income distribution. For a sample of individuals aged between 25 and 60, income is measured as gross household income plus transfers, less taxes and mandatory social security contributions of workers, the self-employed, the unemployed (if applicable) and employers, divided by the number of household members calculated using the OECD's equivalence scale, where the first household member aged 14 or over counts as one person, other household members aged 14 or over are assigned a value of 0.5, and each household member aged under 13 a value of 0.3.

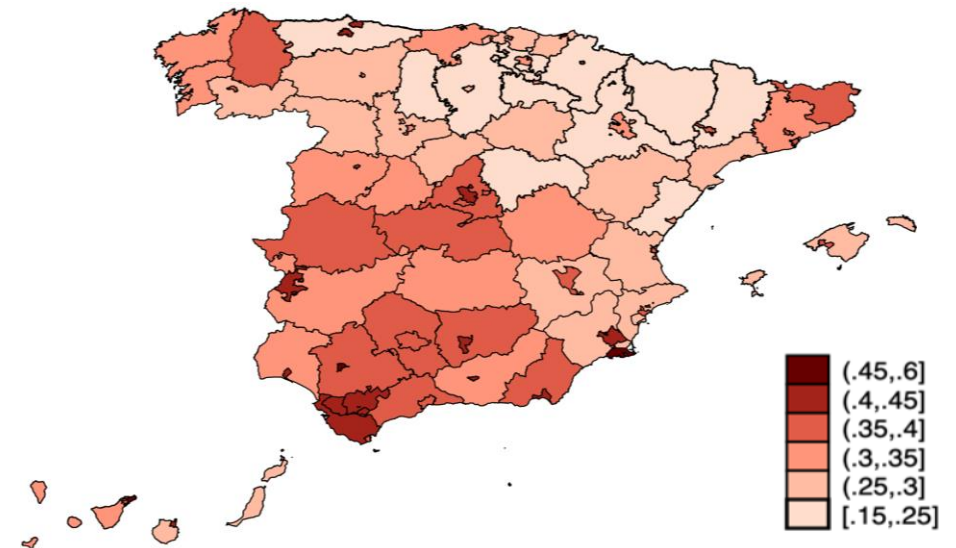
# EQUALITY OF OPPORTUNITY

- One of the most widely used approaches in the economic literature for assessing the extent to which equality of opportunity is guaranteed is to quantify **intergenerational mobility in education**, in particular, by measuring the correlation between the educational attainment levels of parents and their adult offspring. Over time, a smaller correlation implies greater intergenerational mobility. In other words, parents' educational attainment has less influence on that of their offspring, thus promoting equality of opportunity
- A recent study by the Banco de España (Grébol, Machelett, Stuhler and Villanueva, 2024) conducts this exercise for Spain, finding that **correlation between parents' level of educational attainment and that of their adult offspring decreased in the second half of the 20th century, leading to more equality of opportunity**
- However, the size of this correlation varies significantly across municipalities and provinces, and these differences have generally persisted over time

**CORRELATION BETWEEN THE YEARS SPENT IN EDUCATION BY PARENTS AND THEIR ADULT OFFSPRING, BY YEAR OF BIRTH (a)**



**CORRELATION BETWEEN THE YEARS SPENT IN EDUCATION BY PARENTS AND THEIR ADULT OFFSPRING, BY MUNICIPALITY CLUSTER (a)**



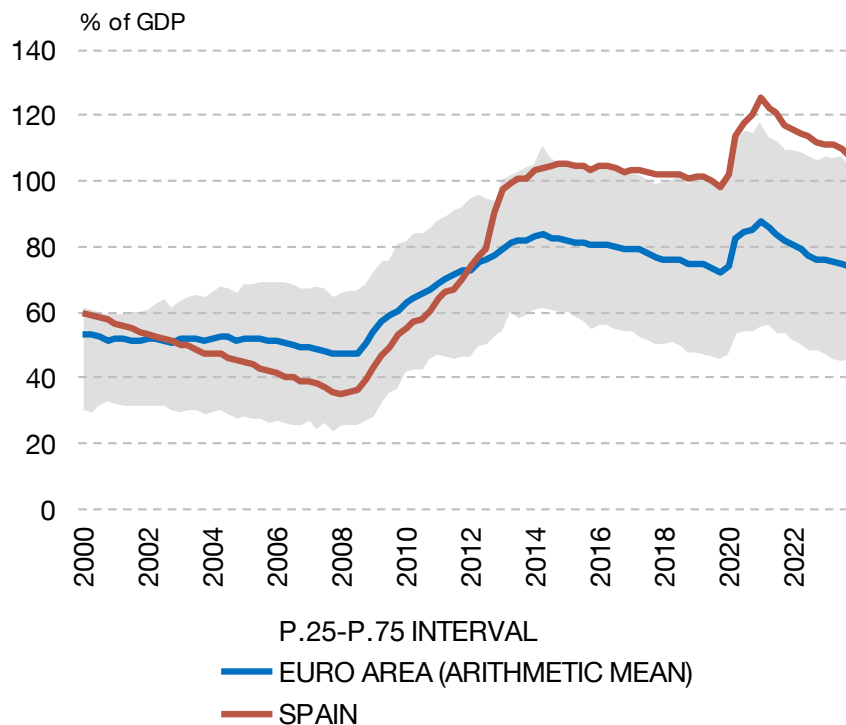
Sources: INE, Census and Banco de España.

(a) For more details on the calculation of the correlation between the years spent in education by parents and children, see Grébol, Machelett, Stuhler and Villanueva (2024).

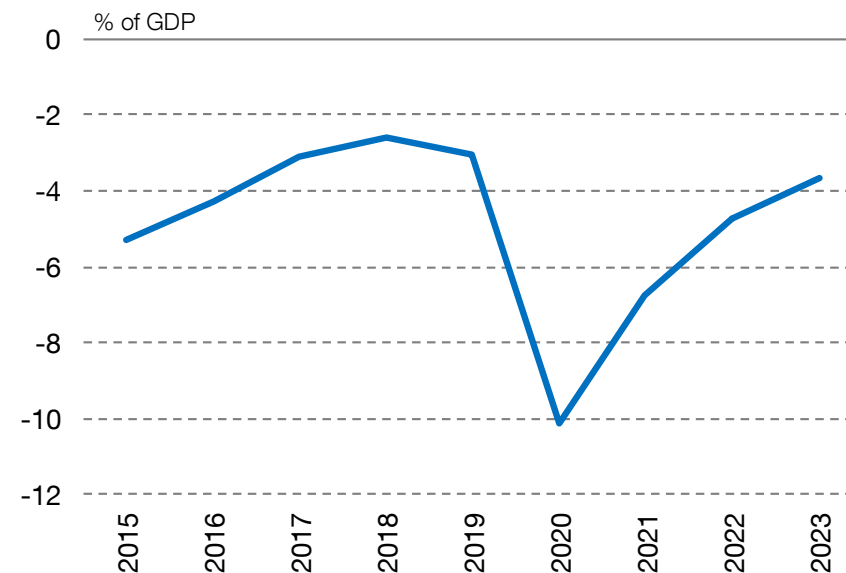
# THE PUBLIC FINANCES IMBALANCE REMAINS VERY HIGH, BOTH BY HISTORICAL AND INTERNATIONAL STANDARDS

- Despite the recent decrease, the **public debt-to-GDP ratio** is 9 pp above its 2019 level and 30 pp (17 pp) higher than the (weighted) arithmetic mean of the euro area
- The **general government deficit** at end-2023 (3.6% of GDP) was below the Government's target (3.9%), but still above its pre-pandemic level (3.1%) and the euro area average in 2023 (3.2%), according to the European Commission's latest projections.

**GENERAL GOVERNMENT DEBT (a)**



**CHANGE IN THE BUDGET BALANCE**



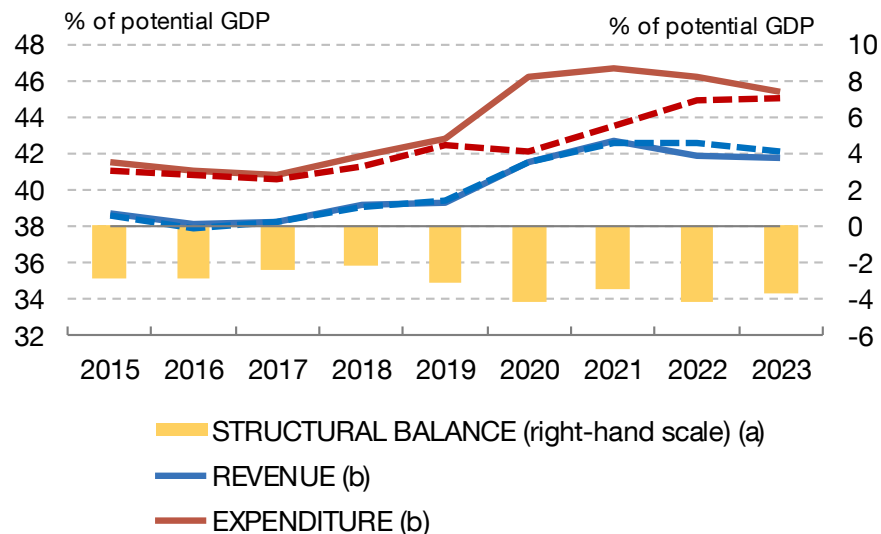
Sources: Eurostat, Comisión Europea, IGAE and Banco de España.  
 (a) November 2023 European Commission estimates for 2023 Q4 (except Spain).



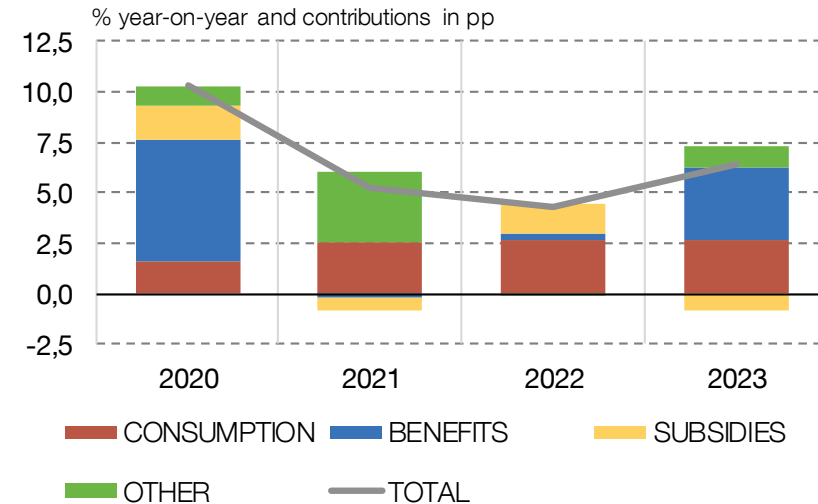
# THE SPANISH GENERAL GOVERNMENT FISCAL IMBALANCE HAS A HIGH STRUCTURAL COMPONENT, WHICH HAS NOT IMPROVED IN RECENT YEARS

- Since 2019, the public revenue-to-GDP ratio has risen sharply in Spain, with **tax revenue and social security contribution growth of 2.5 pp of GDP**. This increase in revenue has placed the ratio slightly above the arithmetic mean of the EU, although it is still almost 3 pp below the weighted EU average
- However, this higher revenue has been more than offset by the **increase in expenditure since the outbreak of the pandemic**, notably including that associated with **social benefits** and **government consumption**
- Overall, a **structural deficit** of close to 3.7% of GDP is estimated for 2023 (around 0.6 pp higher than calculated for 2019)

**PUBLIC REVENUE AND EXPENDITURE.  
CYCLICALLY-ADJUSTED AND EXCLUDING NGEU**



**CHANGE IN PUBLIC EXPENDITURE**



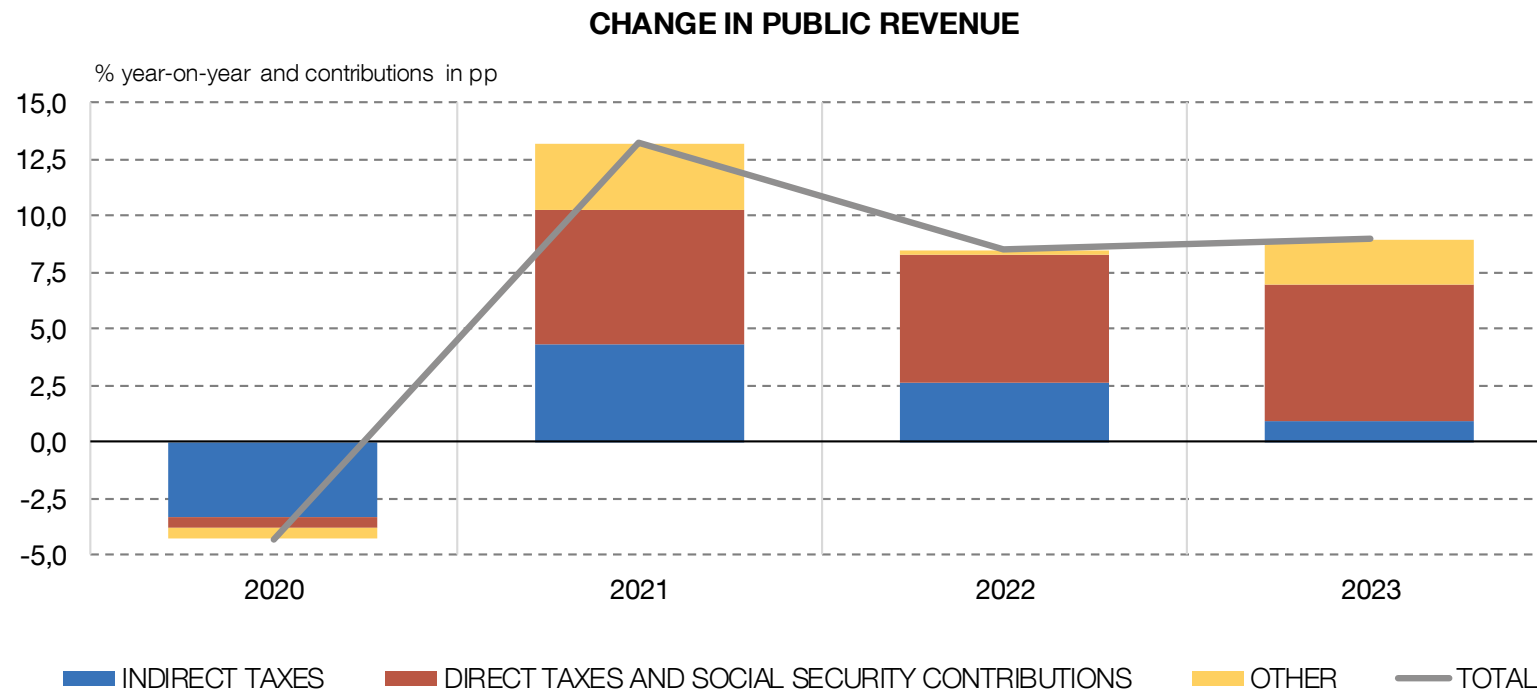
Sources: IGAE and Banco de España.

(a) The structural balance is calculated by deducting from the total balance the cyclical component and the clearly temporary and non-recurring items. According to the Eurosystem's common methodology, items that are temporary but nonetheless increase the deficit and are the result of a discretionary (not forced) decision by the Government are not considered to be non-recurring.

(b) The dotted lines exclude any measures announced as non-permanent.

# A BREAKDOWN OF THE RECENT INCREASE IN PUBLIC REVENUE

- General government funds have increased relative to GDP mainly as a result of strong growth in revenue from personal income tax, corporate income tax and social security contributions, whereas indirect tax revenue has been relatively contained in recent years
  - In Spain, indirect tax revenue as a proportion of total revenue has declined from 32.6% in 2019 to 30.1% in 2023, below the EU/euro area average
- In any event, there is much uncertainty about the transitory or permanent nature of the positive **tax residuals** that remain

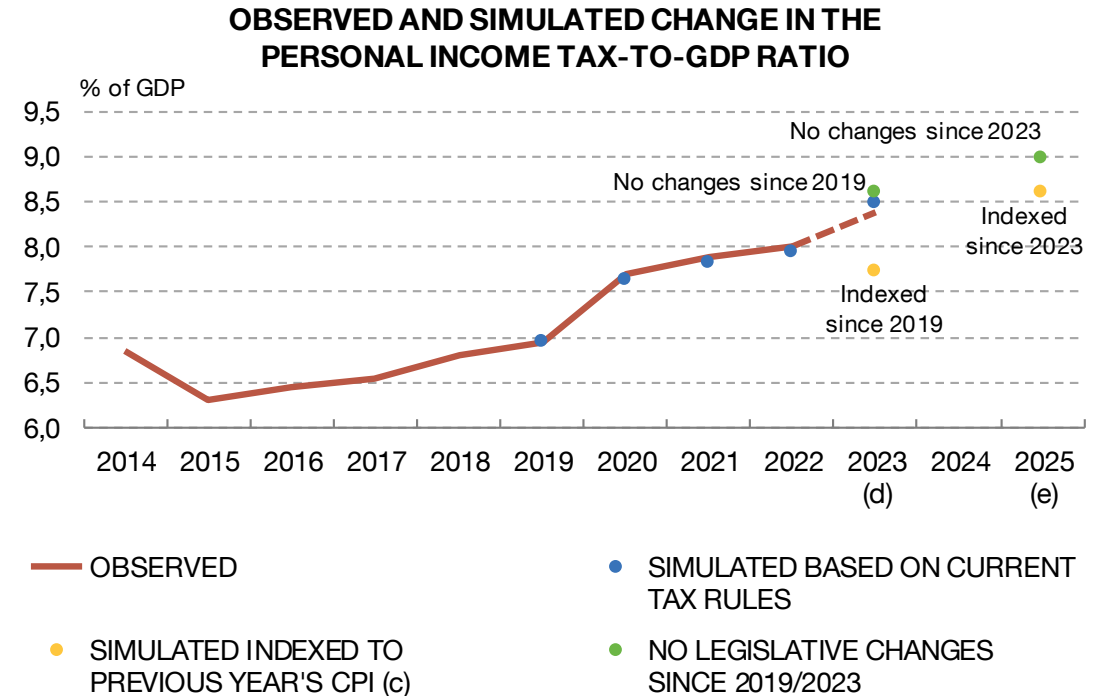
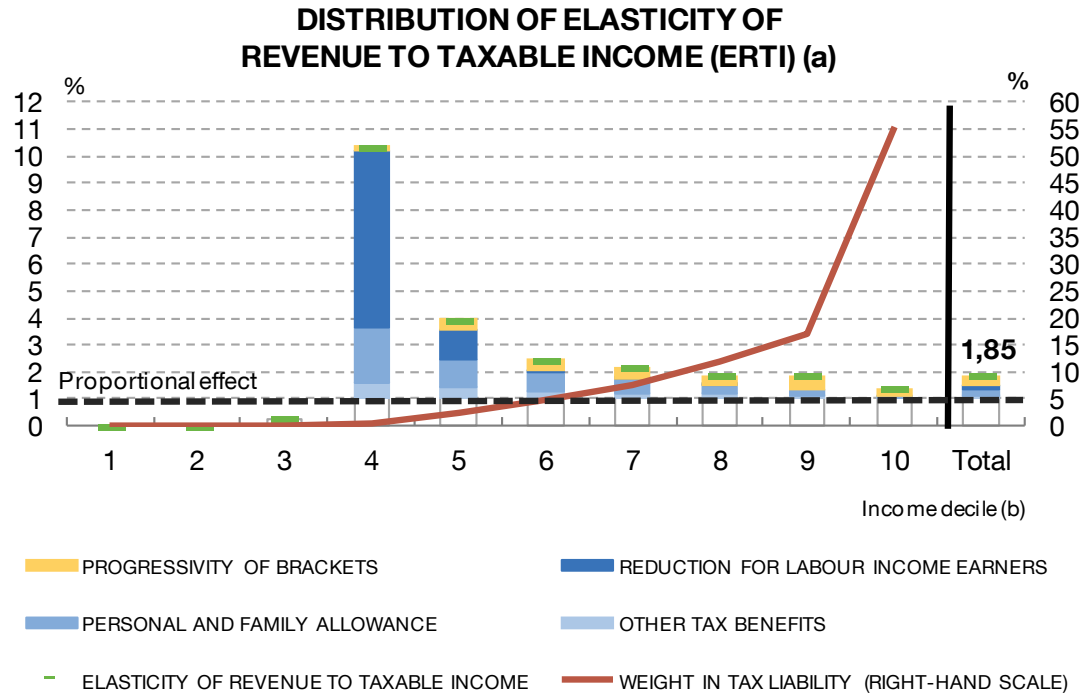


Sources: IGAE and Banco de España.



# BOX 2.1: THE HETEROGENEOUS IMPACT OF INFLATION ON PERSONAL INCOME TAX REVENUE

- **Fiscal drag**, which has an asymmetric impact on different types of households, would explain around half of the increase observed in the personal income tax revenue-to-GDP ratio between 2019 and 2023
- If the current personal income tax rules remain unchanged, **personal income tax revenue could reach 9% of GDP in 2025, up 29% on 2019**

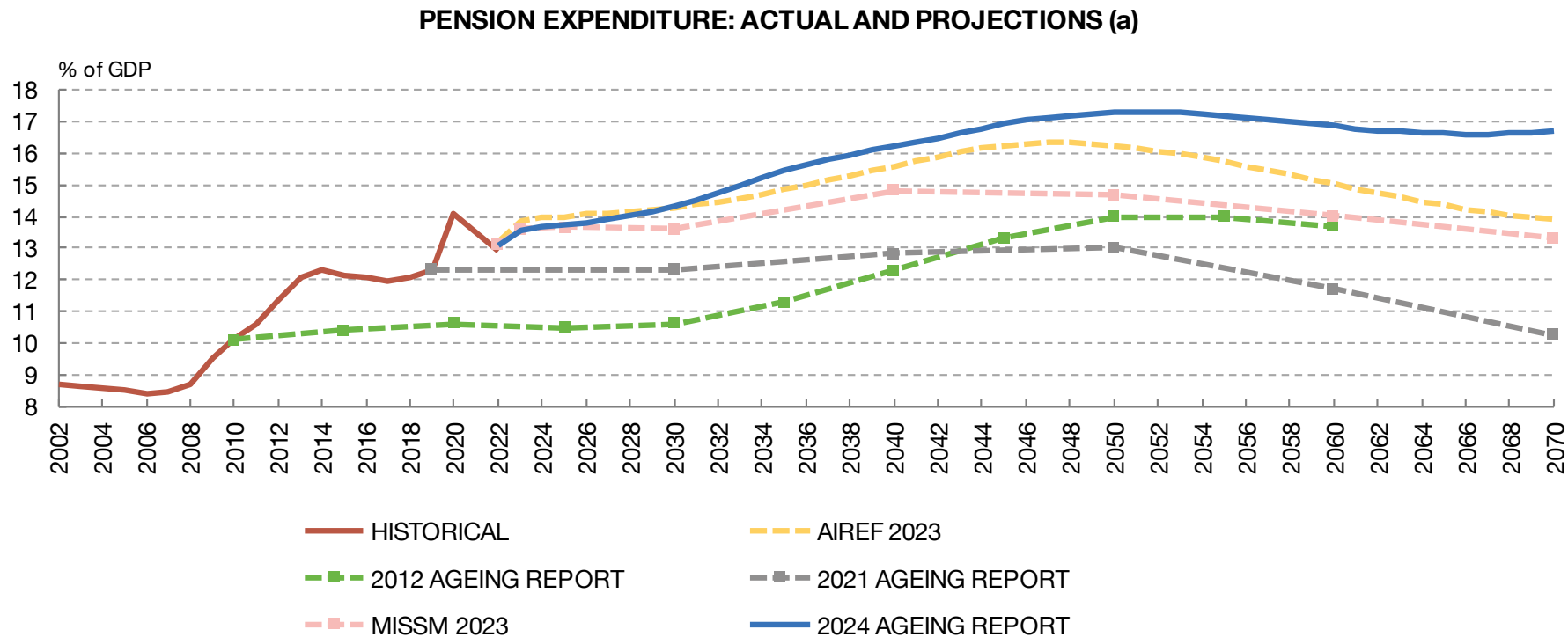


Sources: Ministerio de Hacienda (Instituto de Estudios Fiscales and AEAT) and Banco de España.

**(a)** ERTI is defined as the percentage change in the tax liability triggered by a 1% increase in taxable income. **(b)** Average ERTI in each decile is calculated as the average weighted by each individual's share in total tax liability, such that the average of all deciles weighted by their contribution to total tax liability coincides with aggregate ERTI. **(c)** Personal income tax parameters are indexed every year  $t$ , using the CPI observed between December of year  $t-2$  and November of the previous year  $t-1$ . **(d)** For 2023, growth observed up to 2023 Q3 is extrapolated to the year as a whole. **(e)** For 2025, the Banco de España's macroeconomic projections are used for the different macroeconomic aggregates underlying the tax base.

# PENSION EXPENDITURE HAS BEEN GROWING IN RECENT YEARS AND IS EXPECTED TO CONTINUE TO DO SO IN THE COMING DECADES

- Over the last decade, pension payments have increased by 1.1 pp of GDP, while the number of pensions has grown by just over a million
- Overall, in recent years, actual expenditure levels have exceeded the expenditure projections for this item



Sources: Ministerio de Inclusión, Seguridad Social y Migraciones, IGAE, INE, AIREF and European Commission.

(a) The 2012 and 2021 Ageing Report and Ministry of Inclusion, Social Security and Migration (MISSM) projections are interpolated on the published figures (shown by the squares for the respective years).



# THE BACKSTOP MECHANISM INTRODUCED IN THE NEW REFORM IS DUE TO BE REVIEWED IN 2025

- Between 2021 and 2023 a new pension system reform was implemented. An overall analysis of the main regulatory changes made, albeit one subject to considerable uncertainty, points to **expenditure obligations in the long term that are not fully offset on the revenue side**



- These greater expenditure obligations could be reduced if the **new incentives introduced to postpone retirement** manage to significantly raise the participation rate of older workers
- Although there is considerable uncertainty in this regard, **the analysis conducted by the Banco de España suggests that in order to significantly contain pension expenditure, a very considerable percentage of workers would have to decide to postpone their retirement age**

- Should it be necessary to activate the backstop, **letting funding rely exclusively on higher social security contributions could be detrimental to employment and to the competitiveness of the Spanish economy**



Areas of action

- Deeper analysis of the impact of the **incentives to postpone retirement**
- Study the effects on the labour market and on firms' competitiveness of the **increase in social security contributions**, and the impact on intergenerational equity
- Analyse **alternative measures** to increasing social security contributions, including measures affecting replacement rates, which are above the average for EU countries
- Analyse **developments in private retirement saving**

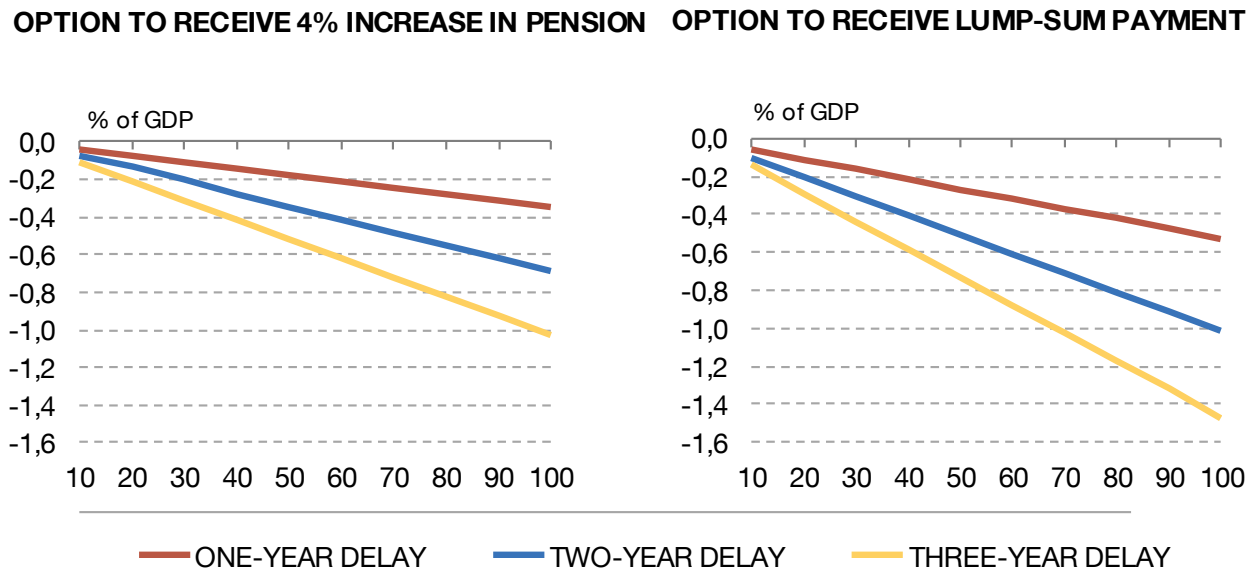




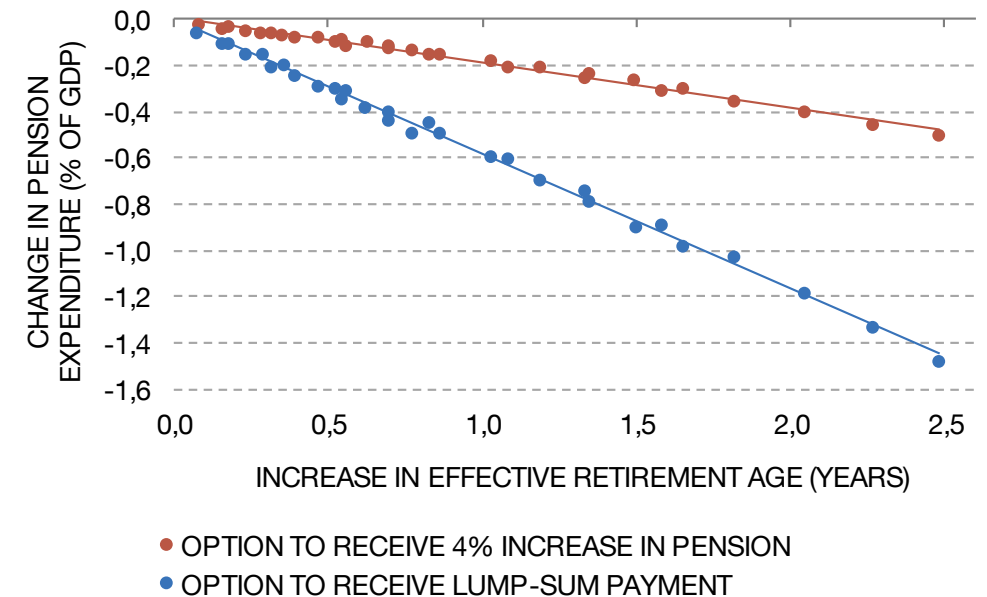
## BOX 2.2: NEW INCENTIVES TO DELAY RETIREMENT AND THEIR IMPACT ON SOCIAL SECURITY PENSION EXPENDITURE

- The effectiveness of the incentives to delay retirement is highly uncertain and depends on workers' decisions about when to leave the workforce and the extent to which a later retirement age translates into lower pension expenditure
- Banco de España simulations: Even under scenarios where the new incentives notably increase the effective retirement age, the reduction in pension expenditure, at least in an initial approximation, would be relatively limited
  - For instance, if half of workers delayed retirement for three years, the saving in pension expenditure in the period 2022-2050 would be 0.5 pp of GDP if these workers were to opt for a higher pension, or 0.7 pp of GDP were they to choose the lump-sum payment
  - Each year of increase in the effective retirement age in 2050 would decrease pension spending by between 0.2 pp and 0.6 pp of GDP in that year

**CHANGE IN AVERAGE PENSION EXPENDITURE IN 2022-2050 COMPARED WITH THE BASELINE PROJECTION, BASED ON THE PERCENTAGE OF PEOPLE WHO DELAY RETIREMENT AND THE TYPE OF INCENTIVE CHOSEN**



**ESTIMATED RELATIONSHIP BETWEEN AN INCREASE IN THE EFFECTIVE RETIREMENT AGE AND THE CHANGE IN PENSION EXPENDITURE IN 2050**

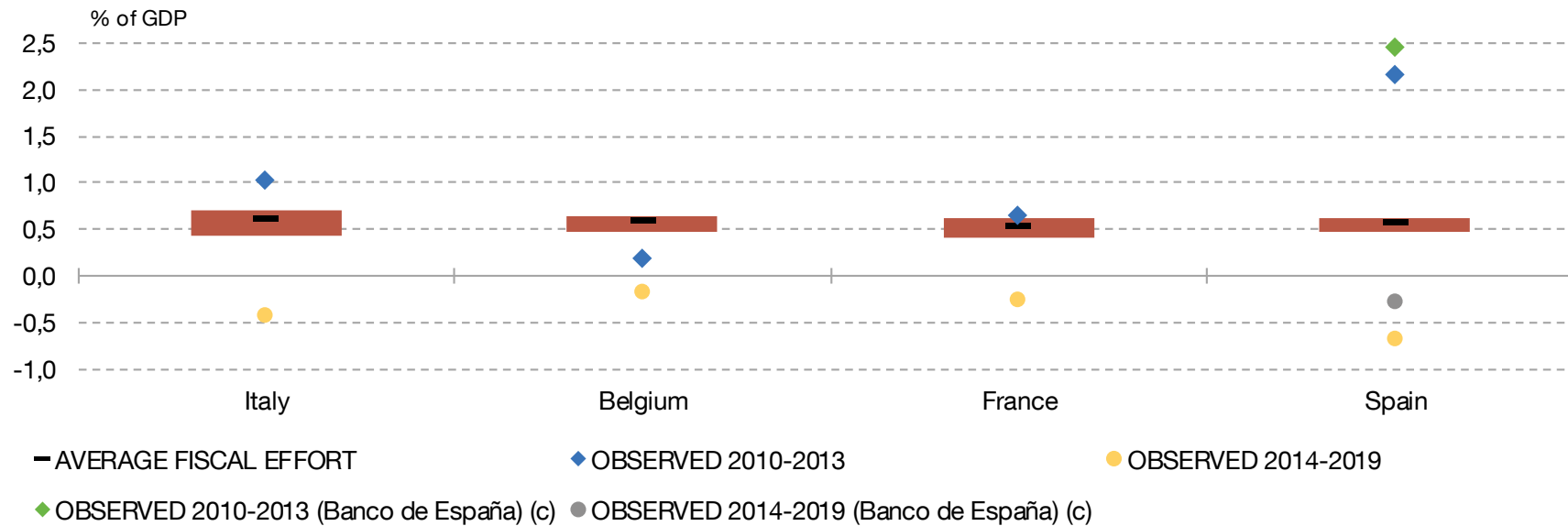


Source: Banco de España.

# THE NEW FISCAL RULES COULD ENTAIL SIGNIFICANT FISCAL ADJUSTMENTS IN THE COMING YEARS FOR SOME COUNTRIES

- Based on a Banco de España debt sustainability analysis tool, it is estimated that, assuming 7-year fiscal consolidation plans, the most indebted EU countries would have to achieve an average annual improvement in their primary structural balance of between 0.4 pp and 0.7 pp of GDP
- Compared with the adjustment that these same countries undertook in the period 2014-2019 (after the European debt crisis but before the pandemic)– this one will require considerable effort

**AVERAGE FISCAL ADJUSTMENT (IN 7-YEAR PLANS) THAT THE FISCAL RULES COULD ENTAIL OVER THE COMING YEARS (a)**



Sources: European Commission and Banco de España.

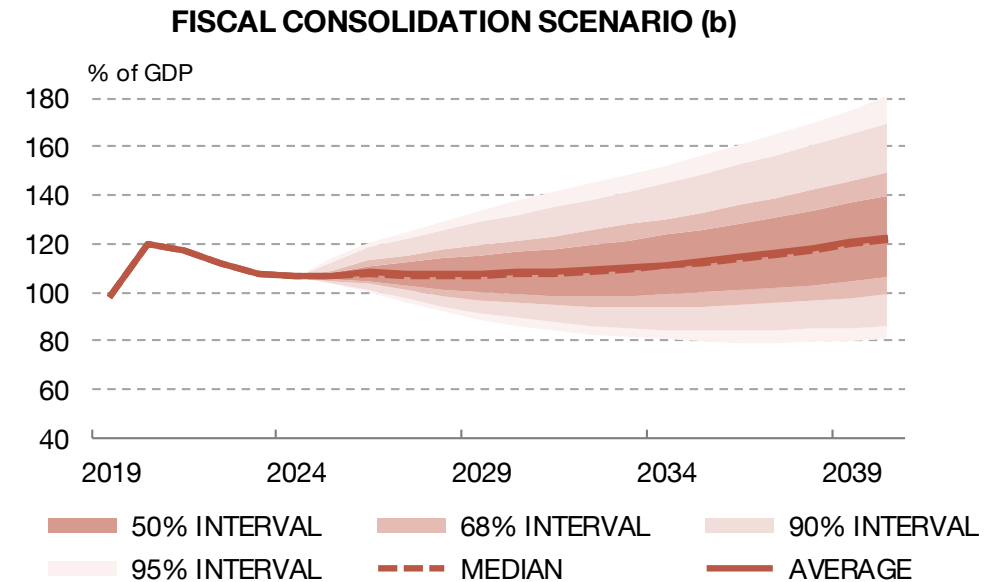
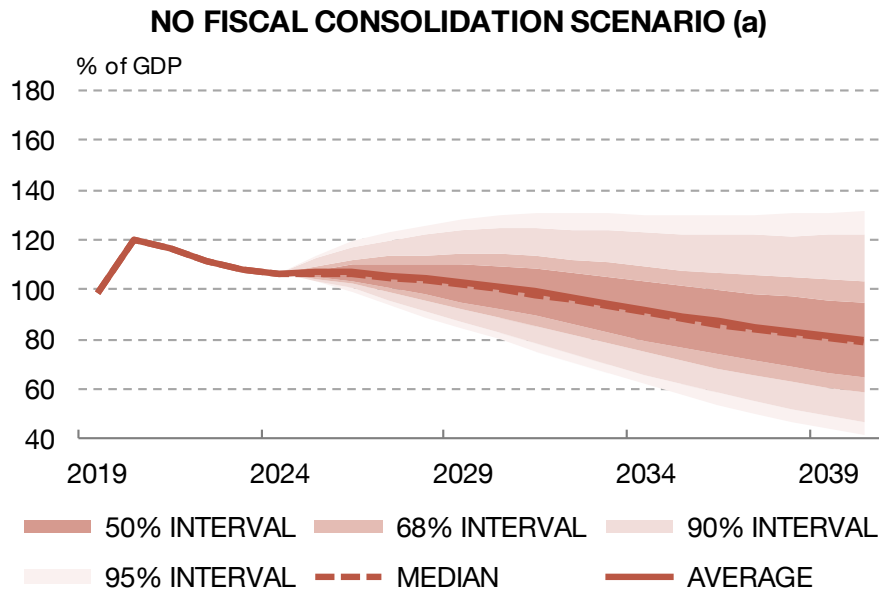
(a) The average annual change in the primary structural balance required to meet the debt and deficit targets under the new European fiscal rules, over a 7-year adjustment period. The range is the difference between the minimum fiscal effort required under the deterministic baseline scenario (Debt Sustainability Analysis) and the maximum effort required under alternative scenarios of lower potential GDP growth and higher interest rates. The observed effort is that estimated by the European Commission during each period.

(b) For Spain, the estimated average fiscal effort differs from the European Commission estimate, primarily owing to the different potential GDP growth estimates used in the calculation.



# A MEDIUM-TERM FISCAL CONSOLIDATION PLAN THAT STRENGTHENS THE SUSTAINABILITY OF PUBLIC FINANCES SHOULD BE IMPLEMENTED WITHOUT DELAY

- According to the analytical tools developed by the Banco de España, in a **no-policy change scenario** (the current economic or fiscal policies remain unchanged), Spanish public debt would remain at levels very similar to current ones in the coming years, before embarking on a continued upward trajectory from 2030
- Conversely, in a **scenario of fiscal adjustment consistent with the new European fiscal governance framework** (which would involve an average annual reduction in Spain's structural imbalance of around 0.5 pp of potential GDP over a period of seven years from 2025), the public debt-to-GDP ratio could embark, in the coming years, on a downward path that would take it to around 80% of GDP by 2040



Sources: INE, AIReF and Banco de España.

(a) The scenario includes a worsening of the primary structural balance up to 2040 owing to the costs of ageing (pensions, health care and long-term care), and illustrates a fiscal policy involving a fiscal effort consistent with the new measures envisaged in the 2023 pension system reform, but with no activation of the automatic mechanism to increase social security contributions to correct deviations in pension expenditure and no additional fiscal consolidation measures.

(b) The scenario includes a worsening of the primary structural balance up to 2040 owing to the costs of ageing (pensions, health care and long-term care) and introduces a fiscal consolidation plan in accordance with the requirements of the new EU fiscal rules.

# DESIRABLE ATTRIBUTES OF A POTENTIAL MULTI-YEAR FISCAL CONSOLIDATION PLAN

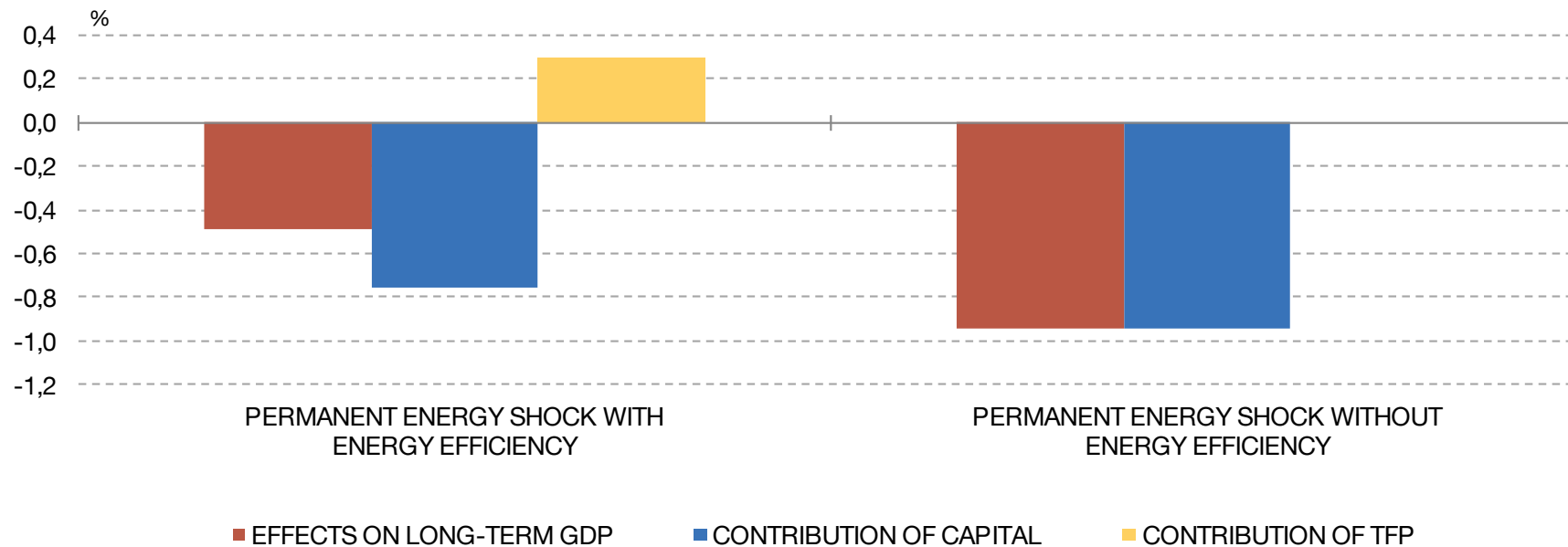
- Based on broad economic, political and social consensus, and actively involving all tiers of general government (central, regional and local) with budgetary responsibility (a reform of the regional financing system remains pending)
- Accompanied by rigorous selection of the investment projects to be financed under the European NGEU programme, along with the design and implementation of ambitious structural reforms to help alleviate some of the shortcomings that have historically characterised the functioning of the Spanish economy
- A review of all expenditure items to identify where efficiency may be enhanced, as well as to optimise expenditure distribution between items to promote more robust and equitable economic growth
- A comprehensive review of the Spanish tax system that assesses whether, overall, the different taxes achieve their objectives in an efficient and effective manner



# IMPROVING ENERGY EFFICIENCY WILL HELP ACHIEVE CLIMATE GOALS AND REDUCE THE GREEN TRANSITION'S NEGATIVE IMPACT ON ACTIVITY

- A recent study by the Banco de España (Domínguez, Hurtado and Urtasun, 2024) has quantified the impact on the Spanish economy's potential GDP of a permanent increase of 30% in imported energy costs
- The findings show that if, in response, firms were to invest more in energy efficiency improvements, the shock to potential GDP could be halved. This lower impact on GDP in the long run would mainly owe to increased energy efficiency investment translating into productivity gains, which in turn would mitigate the fall in private capital investment

ENERGY EFFICIENCY EASES THE IMPACT ON ACTIVITY OF HIGHER ENERGY PRICES (a)



Source: Banco de España.

(a) Results of applying the endogenous growth general equilibrium model to the impact on Spanish potential GDP of a permanent increase of 30% in imported energy costs, according to whether or not investment is made in energy efficiency gains. ←