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Foreword by the Governor

José Luis Escrivá



2025 and the first half of 2026 have been characterised by an exceptional environment marked by geopolitical and trade tensions, along with a weakening of the multilateral framework. Against this backdrop, the Banco de España's *Annual Report* provides an in-depth analysis of the key developments in international economic activity and, in particular, in the Spanish economy, while also examining some of the main structural challenges.

Following the successive US tariff policy announcements, the Middle East conflict, which erupted in late February 2026, constitutes a materialisation of a new risk in an already strained international landscape. The world economy has proven more resilient than expected in the face of these challenges.

Against this backdrop, although monetary policy easing continued across most developed and emerging market economies, price increases stemming from the Middle East conflict point to a potential shift in policy stance. Moreover, prices of risky assets followed an upward trajectory over 2025, with financial markets exhibiting a broadly muted response since the conflict began.

Four years on from the energy shock triggered by Russia's invasion of Ukraine, the euro area faces this second energy disruption from a position of relative strength, albeit with cross-country disparity. In this context, and following the monetary policy easing of 2025, the new energy shock demands that the response to inflationary pressures be carefully weighed against the risks to economic activity. Amid heightened uncertainty, with the potential for more severe and persistent energy shocks, the systematic use of

scenario analysis is essential to assess the risks to growth and inflation, and to appropriately calibrate the economic policy response

Despite this highly uncertain international environment, the Spanish economy has shown considerable resilience during this period. The current expansionary cycle is characterised by strong employment and migratory flows, coupled with an absence of macro-financial imbalances.

However, this sound performance cannot mask significant vulnerabilities. Prices, particularly in the services sector, have continued to rise at a faster pace than the European average in 2025 and 2026. Moreover, the external sector contributed negatively to growth in 2025, against a background of considerable tariff and geopolitical uncertainty and strong momentum in domestic demand.

Turning to public finances, despite Spain recording a primary surplus in 2025, debt levels remain high. This limits the headroom to meet growing government spending needs associated with population ageing, the digitalisation of the economy, the green transition and new defence spending commitments. It is therefore particularly important to define a medium-term plan that is consistent with correcting imbalances while maintaining growth and social cohesion.

Alongside the overview of the current situation, the report examines two structural challenges facing the Spanish economy: the housing market and productivity as a driver of business growth.

First, recent developments in the housing market are characterised by booming housing demand and price growth, although financial stability risks and vulnerabilities remain muted. Geographically disaggregated data show that the current buoyancy is concentrated in large urban areas and popular tourist areas. The report presents new evidence on housing affordability, whether for purchase or rent, pointing to considerable regional heterogeneity and an especially high cost burden for young people and certain groups, particularly in large cities.

The current situation reflects a significant imbalance between very strong demand and rigid supply, with the analysis focusing on the constraints limiting housing supply growth. Effective housing policy requires close coordination among the relevant public authorities to reduce regulatory and administrative bottlenecks in urban planning and

land policy, and to accelerate and improve the use of the public funds already available. Complementing these, demand-side policies could help mitigate the most vulnerable situations in the short term, but must be carefully designed and evaluated to avoid adverse effects on housing supply over the medium term.

The report further examines the productivity challenge and the financing of business growth as drivers of welfare convergence with the euro area. Drawing on granular firm-level data, the analysis identifies a trend shift in Spanish productivity following the global financial crisis, when the economy began to record positive growth rates exceeding the euro area average, supported by a more efficient allocation of capital and labour across firms. As a result, the share of the most productive firms in each sector has increased, while the proportion of microfirms has declined.

Corporate financing has played an important role in this development. Against a backdrop of deleveraging that has strengthened firms' solvency and liquidity, bank credit allocation has improved, shifting towards the most productive firms in each sector, especially in the microfirms segment, although constraints on access to finance persist for certain groups, such as firms without a credit history and more innovative companies. At the same time, alternative sources of financing have gained ground, although these remain underdeveloped by international standards.

In any event, the productivity gains observed since 2014 remain modest, and the unfavourable productivity gap that has built up relative to the euro area remains very wide. Addressing the persistent regulatory inefficiencies – particularly those related to regulatory fragmentation and complexity, which hinder market unity and the growth of more productive firms – will be essential to cement and build on these gains. At the same time, fully harnessing the adoption of advanced digital technologies – including artificial intelligence – will be key to improving resource allocation and driving business momentum.

José Luis Escrivá

Governor of the Banco de España

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Annual Report: Digest

Chapter 1

Overview

The international environment

In 2025 the global economy proved more resilient than expected in the face of geopolitical and trade tensions.

- Global growth remained robust, in line with 2024, underpinned by investment in new technologies and still favourable financial conditions.
- The gradual disinflation process continued, albeit more slowly in core inflation and with marked heterogeneity across geographical areas.

The global trade environment remains strained and volatile.

- Tariff tensions eased from mid-2025, but effective tariffs remain high and the US legal and political framework has introduced new sources of uncertainty.
- Amid this heightened instability in the transatlantic relationship, the European Union (EU) has stepped up its strategy of openness and diversification, working towards far-reaching trade agreements with different partners.

The new Middle East energy shock has shifted the balance of risks.

- The conflict in the Middle East has caused energy prices to surge, bringing back clear risks to global inflation and economic growth.
- Beyond the energy channel, the closure of the Strait of Hormuz is also disrupting global supply chains in the agricultural, chemical and technology sectors.

The euro area is in a relatively strong position, albeit with cross-country heterogeneity.

- Growth recovered in 2025, driven by domestic demand and marked by substantial disparity across countries.
- Inflation declined over the course of the year, albeit unevenly across components and with persistent services inflation.
- The Middle East conflict has significantly altered the euro area macroeconomic landscape, prompting the European Central Bank (ECB) to revise down its short-term growth projection and revise up its inflation forecast.

Financial markets are reflecting the interplay between resilient activity and heightened geopolitical and trade uncertainty.

- In 2025 long-term interest rates moved unevenly across regions, the euro appreciated in effective terms and risky asset prices generally trended upwards, with only brief interruptions during the April trade tensions.
- Equity markets' reaction to the outbreak of the Iran war was muted, with the most pronounced movements, by comparison with previous shocks, coming in long-term yields.

ECB monetary policy has moved into a more complex phase.

- ECB monetary policy began to ease in 2025, but the energy shock poses a dilemma: responding to inflationary pressures without excessively penalising growth.
- The recent strategic review reinforces the data-dependent approach and places greater emphasis on risk analysis.

European policies have been refocused towards competitiveness, integration and resilience.

- Despite recent progress, the European economy remains constrained by regulatory fragmentation, underdeveloped capital markets and limited capacity to scale up innovative firms.
- In response to these structural frictions and the new geopolitical environment, the EU has advanced a more ambitious economic agenda, centred on strengthening competitiveness, deepening the Single Market and driving financial integration to better channel savings towards investment.

The Spanish economy

The Spanish economy proved notably buoyant in 2025, significantly outperforming the euro area, with an absence of significant macro-financial imbalances.

- GDP grew by 2.8% in 2025, faster than the 1.4% for the euro area overall and the growth recorded in its main economies.
- Private domestic demand was the main driver of growth: private consumption grew by 3.4%, fuelled by spending on durable goods, while productive investment rose by 5.8%, with capital goods standing out.
- Improved financial conditions and strong job creation underpinned the buoyancy of domestic demand, with the unemployment rate at end-2025 falling below 10% for the first time since 2008.
- The expansionary cycle was again marked by considerable immigrant inflows, with the immigrant population estimated to account for around half of GDP growth and more than two-thirds of employment gains in recent years.

Vulnerabilities nevertheless remain.

- The external sector made a negative contribution to growth in 2025 (-0.7 percentage points). This reflects the deterioration in the international environment – marked by tariff and geopolitical uncertainty – together with the imports growth associated with strong domestic demand.
- The goods trade deficit worsened to -3% of GDP, but was offset by a strong performance in both travel and non-travel services exports, resulting in a trade surplus of 3.8% of GDP.
- Following the outbreak of the war in Iran inflation rose to 3.6% in May, reflecting higher energy prices, while services inflation has remained highly persistent.
- The challenge for fiscal policy remains one of addressing the structural deficit amid fresh pressures on expenditure. The general government budget deficit declined to 2.4% of GDP in 2025, although this improvement is largely attributable to temporary factors, with the structural deficit estimated to hold around 3% of GDP.
- The deficit reduction was compatible with net expenditure growth exceeding the 3.7% established under the Medium-Term Fiscal Structural Plan, at a time when fiscal policy must absorb rising expenditure requirements associated with defence, the green transition, demographic ageing and the digitalisation of the economy.

The economic outlook is significantly influenced by global uncertainty and the new energy shock.

- In early 2026 activity continued to show resilience, despite the heightened uncertainty, although projections point to a gradual easing in the pace of growth.
- In the baseline scenario, GDP growth would stand at 2.3% in 2026 and 1.7% in 2027, while the energy shock is expected to raise inflation to 3.6% in 2026, before falling to 2.6% in 2027.

Chapter 2

Housing market challenges: affordability problems and supply-side constraints

The housing market is undergoing an upswing in Spain against a backdrop of economic and demographic growth, with significant price rises, especially in large urban areas.

- The market's current dynamism comes amid a favourable macroeconomic environment and easing financing conditions, which are driving a marked increase in housing demand.
- The upturn is evident in the growth in house purchases, more mortgage lending and higher real purchase prices and rents.
- The cumulative increase in prices has been sustained by the weak supply response to demand that has been bolstered by strong population growth.
- Despite this dynamism, the indicators of financial stability risks and vulnerabilities do not point to the accumulation of macro-financial imbalances of the kind seen in earlier expansionary cycles. The current upswing also has certain distinctive features, such as the rental market expansion and greater regional heterogeneity.

Housing affordability problems are concentrated in large urban areas and among lower-income groups, particularly young people and those born abroad.

- The home ownership rate has fallen since the global financial crisis, while the share of renter households has increased.
- The sharpest rise in rental demand has been among new foreign-born residents and among younger people, who are leaving the family home at a lower rate and whose share of house purchases has fallen.
- These affordability problems have been aggravated by the fact that house prices have risen faster than household income, increasing the cost burden of buying a home and tightening the conditions for doing so in Spain to a greater extent than in the major European economies.
- The housing cost burden, whether to purchase or rent, is particularly high in large cities and among young people and new residents, and shows marked regional dispersion.
- Housing affordability problems are concentrated most in the rental market, especially in new contracts, where rents have risen sharply.

Supply-side constraints are limiting the production of new housing, with growth persistently lagging behind demand.

- There is little capacity in the existing housing stock to increase the supply of residential housing in the urban areas where economic activity is concentrated.
- New housing supply has reacted sluggishly to rising prices; new construction is not increasing at the pace needed to match household formation and non-residential demand.
- Purchases by non-residents and tourism-related uses of housing reduce the stock available for residential use along parts of the Mediterranean coast, on the Balearics and Canaries and in the city centres popular with tourists.

- A shortage of build-ready land, slow urban planning execution and management, and lower density construction hamper housing production capacity.
- The decline in production is also attributable to sector-specific factors, including declining productivity, small firm size, labour shortages and the modest profitability in construction and residential development.

Dysfunctions in the housing market can have significant macroeconomic and social effects.

- Housing affordability problems are transmitted to the wider economy through channels that affect macroeconomic conditions and the distribution of household income and wealth.
- The divergence between rising house prices and household income growth influences access to mortgage credit, consumption decisions and the capacity to save among households facing a higher housing cost burden.
- Persistently high housing cost burdens increase the number of households in situations of social vulnerability and affect the intergenerational distribution of wealth.
- Labour mobility and the efficient allocation of factors of production are constrained, which may lead to losses in aggregate productivity.
- These problems may also weigh on potential growth through their effects on demographics, human capital accumulation and the household saving rate.

The current affordability problems and supply-side constraints point to the need for coordinated structural policies across the tiers of government with responsibilities in this matter to increase the housing stock.

- The analysis highlights that the rigidity of housing supply in Spain is a structural issue, with persistent factors that constrain its ability to respond to demand.
- Policies aimed at improving access to housing should prioritise measures that make more new homes available.
- The division of responsibility for housing policy across different tiers of government requires a high degree of coordination to ensure that measures are effective, especially in land policy and urban planning, where the slow pace of execution hampers housing production.
- The various levels of government are adopting measures that are gradually increasing housing supply, although their scale remains modest relative to existing needs. Taken together, local government is well placed, in budgetary and asset terms, to help finance an expansion of the public housing stock.
- Policies designed to curb demand may, in the short term, contain the growth of non-residential demand and temporarily ease situations of household overburdening and vulnerability. Their design must, however, take account of the possible emergence of unintended effects that could limit any increase in supply, which makes it advisable to monitor and evaluate these measures so that such effects can be identified.

Chapter 3

The productivity challenge and business growth: the role of financing

The trend in Spanish productivity has changed since the financial crisis and the euro area sovereign debt crisis.

- Total factor productivity in Spain has shifted from negative growth rates prior to 2013 to outpacing the euro area as a whole.
- This change is mainly attributable to improvements in the allocation of capital and labour across firms, while the reallocation across sectors has played a more limited role, despite the notable growth in digital sectors and professional services.

There have been some favourable developments in the Spanish business sector, but constraints related to firm size persist.

- Since 2013, the weight of microenterprises has declined, while that of large firms has increased, although the former still represent a relatively high proportion compared with other European countries.
- Productivity levels in Spanish firms are below those in the rest of the euro area across all firm sizes, and the small number of highly productive large firms limits the Spanish productive system's capacity to boost aggregate productivity.

Deleveraging has strengthened Spanish firms' financial position, while the improvement in credit allocation has underpinned productivity gains.

- Spanish firms – particularly SMEs and higher-risk firms – have notably reduced their indebtedness levels and increased the relative weight of own funds since the financial crisis.
- Although access to bank credit is not significantly restricted at present, difficulties persist for firms that are young or innovative or have no credit history.
- Credit has been channelled to a greater extent towards more productive firms since the financial crisis, with the change proving particularly significant in the microenterprise segment.

Alternative financing sources have become increasingly relevant, but they remain underdeveloped.

- Alternative financing (which includes the capital markets and private credit) has seen considerable growth in recent years, helping firms to diversify their funding sources, but it still represents a small share and its use is concentrated among larger or more mature firms.
- Venture capital-backed firms have higher rates of growth, investment and innovation, which underscores their potential for driving productivity. Venture capital plays a particularly key role in financing young and innovative firms.

Despite the progress made, the productivity gap relative to the rest of the euro area is still substantial.

- The negative gap vis-à-vis the rest of the euro area has narrowed from 12% in 2013 to 8% in 2025, underlining the scale of the challenge ahead.
- The slight uptick in productivity growth may not prove sustainable in the absence of further advances in its structural determinants.

Significant inefficiencies in the regulatory environment persist.

- Regulatory complexity and fragmentation across different tiers of government entail high compliance costs, hamper firms' geographical expansion and are associated with significant regional heterogeneity in allocative efficiency metrics.
- Institutional quality is a driver of efficiency in resource allocation and productivity at regional level.

Adopting advanced digital technologies, such as artificial intelligence (AI), offers the opportunity to boost productivity, but it also presents challenges.

- Spanish firms have increased their use of AI significantly in recent years, reaching levels comparable to the euro area average.
- Firms adopting these technologies are, on average, larger and more productive and have more capital and skilled staff.
- The evidence suggests that AI could generate considerable productivity gains, but its overall impact may be hampered by the entry barriers faced by SMEs and the need for complementary investment in training and business reorganisation, with possible effects on employment, especially for more skilled and younger workers.

The evidence points to the importance of public policy design and continuity.

- The public policies implemented in the wake of the global financial crisis (including the restructuring of the financial system, the labour market reforms and the advances in some regulated sectors) appear to have helped improve the allocation of resources and productivity growth, in a more stable and predictable environment for firms.
- However, the considerable regulatory complexity and fragmentation and insufficient R&D&I investment continue to weigh on and may limit firms' ability to fully harness AI.
- Looking ahead, consolidating the progress made and addressing the remaining frictions will be key to sustaining productivity growth and further converging with the euro area.



Chapter 1

Overview

1 A turbulent year for the global landscape

During 2025 and early 2026 the economic environment was marked by rising geopolitical and trade tensions, as well as a progressive weakening of the multilateral framework. Against this background, the outbreak of the conflict in the Middle East in late February 2026 represented a new adverse shock, with important implications for activity, inflation and financial markets. This follows a year in which the global economy exhibited notable resilience, although the current shock intensifies the downside risks to growth and the upside risks to inflation, particularly through the energy channel.

Despite this deterioration in the external environment, both the euro area and the Spanish economy face this shock from a relatively favourable cyclical position, following a 2025 marked by moderate momentum in the euro area and more robust growth in Spain. However, the new scenario poses substantial economic policy challenges, particularly given the considerable uncertainty surrounding the persistence of the shock and its transmission to the broader economy.

Against this backdrop, this chapter analyses recent developments in the international and European environment, the performance of the Spanish economy and the main medium-term outlook and risks.

1.1 Trade tensions in 2025 and the first half of 2026

Trade tensions were one of the main sources of global uncertainty in 2025. While easing in the final stretch of the year, tariff levels remained elevated and uncertainty persisted. In early 2026 changes in the legal framework for US trade policy prompted renewed volatility.

- The tightening of US trade policy significantly increased global uncertainty. In particular, the “reciprocal tariffs” announced in April 2025 not only raised tariff levels but also heightened uncertainty regarding their scope and the potential response of the affected countries (Chart 1.1.a).¹
- The uncertainty partially eased in the final stretch of 2025: agreements reached by the United States with key partners, including the European Union (EU),² together with the temporary truce with China helped stabilise the trade landscape. However, effective tariffs remained high by historical standards and above those observed at end-2024 (Chart 1.1.b).

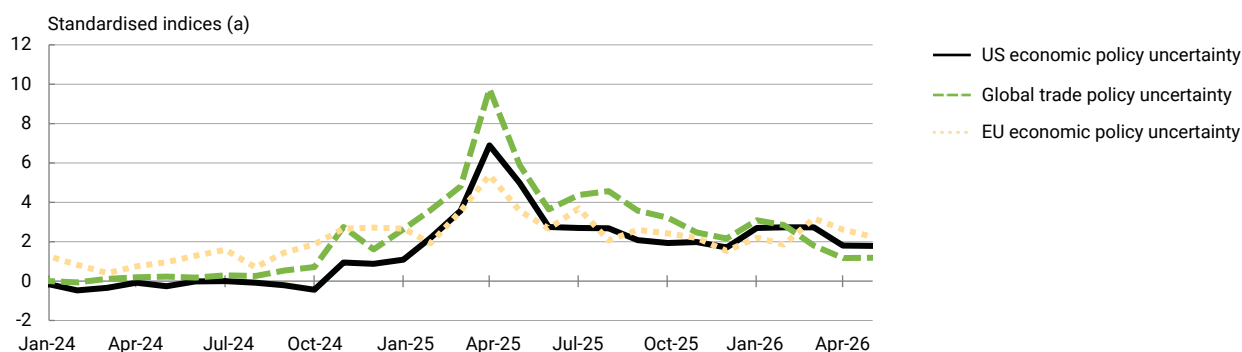
¹ See also the Banco de España *Annual Report 2024*.

² In particular, the agreement with the EU, reached in late July, reduced reciprocal tariffs on European exports to a flat minimum of 15%. Special rules were introduced for certain sectors, such as pharmaceuticals, high-tech products and cars, for which a tariff ceiling of 15% was established. In return, the EU agreed to remove almost all tariffs on US industrial products, to grant the United States preferential access to the European market for a wide range of agricultural products, to reduce non-tariff barriers and to increase purchases of energy and military goods from the United States.

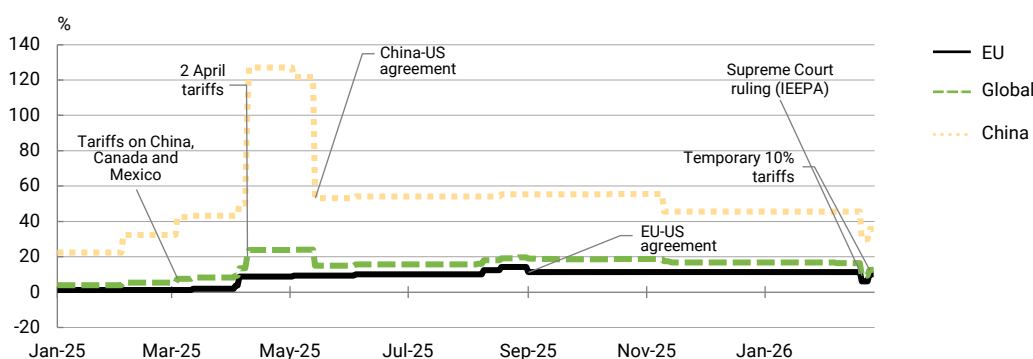
Chart 1.1

Trade tensions and US tariffs have eased since April 2025, but remain very high compared with 2024

1.1.a Developments in economic and trade policy uncertainty (a)



1.1.b Effective tariffs applied by the United States (b)



SOURCES: www.PolicyUncertainty.com, drawing on data from Scott R. Baker, Nicholas Bloom and Steven J. Davis. (2016). "Measuring Economic Policy Uncertainty". *The Quarterly Journal of Economics*, 131(4), pp. 1593-1636, Global Trade Alert and Banco de España calculations.

a Standardised indices with data from 1997.

b The effective tariff borne by a country is calculated by multiplying the tariff on each product by the proportion of such product in the country's total exports to the United States.



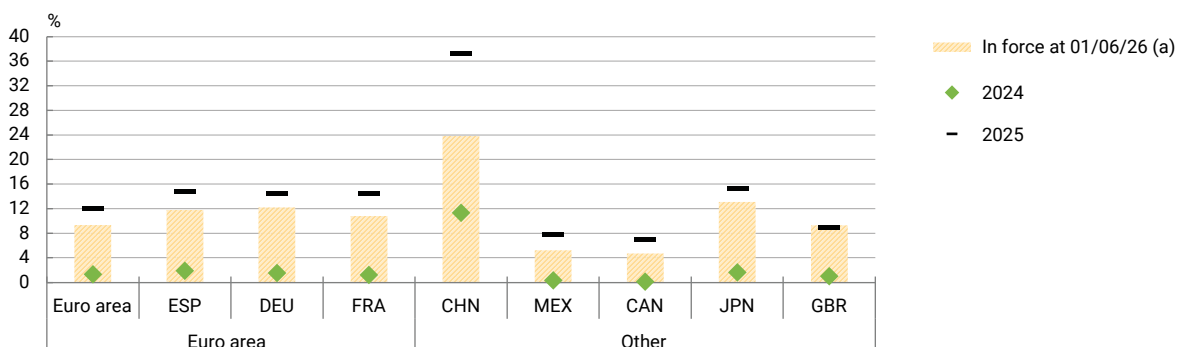
- The tariff landscape shifted again in early 2026. Following the US Supreme Court's ruling against the use of the International Emergency Economic Powers Act (IEEPA) to impose tariffs, the Trump Administration turned to other legal options, introducing a temporary 10% global tariff³ and announcing new tariff measures in various sectors.⁴
- These tariff shifts have had uneven effects across the different economies. While effective tariffs for the euro area and Spain have changed only modestly (declining by around 3 percentage points (pp) compared with December 2025), the recent changes have been more beneficial for countries that previously faced higher levels, such as China (Chart 1.2.a).

³ Section 122 of the Trade Act of 1974 stipulates that these tariffs should be temporary (limited to 150 days, unless extended by an Act of Congress), up to a maximum of 15% and non-discriminatory (i.e. applied to all trading partners equally).

⁴ In addition, in early April the Executive revised the tariff framework for metals, based on legislation that authorises tariffs on national security grounds (Section 232 of the Trade Expansion Act of 1962). It also invoked the same law to announce tariffs of up to 100% on patented pharmaceutical products, effective from July 2026.

Chart 1.2
New US tariff decisions have had uneven effects across countries

1.2.a Effective tariffs applied by the United States (a)



SOURCES: Global Trade Alert and Banco de España.

a Current tariffs include the 10% global tariff under Section 122 (due to expire in July 2026) and the new tariffs on metals and their derivative products. Following the annulment of the reciprocal tariffs, the clause in the EU-US agreement establishing a 15% floor is assumed to be null and void; only the 15% ceiling for sectors subject to Section 232 remains. The 10% tariff under Section 122 acts as a temporary duty and does not reinstate the 15% minimum.



- However, the tariff framework will remain subject to significant uncertainty in 2026 H2. First, the temporary global tariff of 10% will expire on 24 July unless extended by Congress. The uncertainty is further heightened by ongoing judicial proceedings concerning its legal basis, as well as investigations into several countries, including the EU, regarding overcapacity and forced labour practices, which could lead to further tariffs. In the case of the EU, uncertainty will also hinge on the formal adoption and final content of the trade agreement with the United States.

Amid increased uncertainty in the transatlantic relationship, the EU has stepped up its strategy of openness and diversification.

- Accordingly, the EU has renewed its efforts to reach agreements with various partners (such as Mercosur, India and Indonesia), seeking to improve access to markets and reduce vulnerabilities (see [Box 1.1](#)).
- At the same time, cautious progress has been made on the trade agreement with the United States: in May the Council Presidency and the European Parliament reached a provisional agreement over its implementation. The text, pending formal endorsement by the European Parliament, strengthens EU safeguards against potential breaches by the United States and makes its application conditional on the United States honouring its commitments.⁵

⁵ The Commission may suspend, in whole or in part, the application of the agreement should the tariff reductions cause serious damage to EU industry and should the United States breach its commitments or discriminate against European operators. It may also suspend concessions for steel and aluminium products if at 31 December 2026 the United States continues to apply a tariff rate higher than 15% on steel and aluminium derivative products imported from the EU. A sunset clause has also been included, whereby the agreement expires if not renewed by 2029.

1.2 Resilience of the global economy in 2025

In 2025 the global economy proved more resilient than expected in the face of geopolitical and trade tensions, as well as the significant uncertainty surrounding US economic policies. This resilience was underpinned by both demand-side factors and relatively favourable financial conditions.

- The global growth rate held at 3.4% in 2025 (Table 1.1), exceeding the levels expected in April 2025, at the height of the global trade tensions. The adverse effects of protectionist policies and uncertainty were partially offset by strong investment in new technologies, especially in the United States, where investment in information technologies reached record highs in terms of GDP (4.5%), exceeding the levels of the dot-com boom. This investment momentum in turn gave particular impetus to exports in Asian economies, largely driven by technology products.⁶
- In tandem, against a backdrop of gradual monetary policy easing, economic activity also benefited from generally benign financial conditions throughout the year, despite temporary bouts of financial market volatility.

Similar to 2024, global activity performed unevenly across geographical areas.

- The advanced economies grew by 1.9% in 2025, slightly higher than in the previous year (1.8%). Notable within this group was the United States, where GDP grew by 2.1% (2.8% in 2024), influenced in the final stretch of the year by the temporary impact of the Federal Government shutdown. US output growth was underpinned by private consumption, despite the slowing pace of job creation, and buoyant business investment, particularly linked to the roll-out of artificial intelligence (AI).
- China again posted GDP growth of 5%, supported by industrial production and exports, which have sidestepped the adverse impact of US tariffs thanks to diversification towards other markets, including the euro area. However, economic momentum remained constrained by weak domestic demand. In particular, the prolonged real estate downturn continued to weigh on investment and household confidence. House price declines persisted into 2025 across many cities, while real estate investment contracted further. Against this background, the household saving rate remains very high, well above pre-pandemic levels.
- In Latin America, growth in 2025 was similar to that recorded in 2024 (2.4%). The region's resilience was underpinned by a progressive reduction in global uncertainty, improved terms of trade and favourable financial conditions.⁷

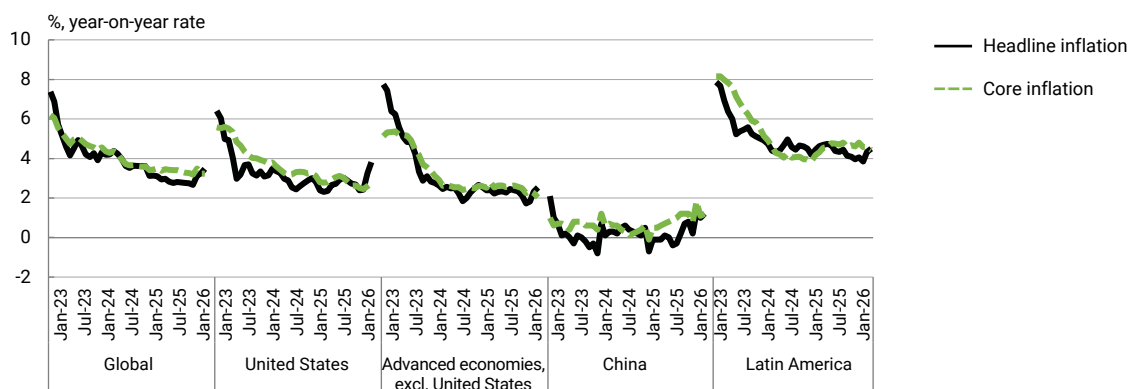
⁶ According to International Monetary Fund (2026), in 2025 technology products accounted for around 80% of exports growth in Asian economies excluding China. The share of sales of such goods to the United States was notable (around 30% of the total increase). For China, technology accounted for slightly over 50% of the increase in exports, while exports to the United States declined amid higher bilateral tariffs between the two countries.

⁷ Banco de España (2026a).

Table 1.1
Global growth exceeded forecasts in 2025

%	2024	2025	2025 IMF forecast (April 2025)
Global	3.4	3.4	2.8
Advanced economies	1.8	1.9	1.4
United States	2.8	2.1	1.8
Euro area	0.9	1.4	0.8
Emerging market economies	4.5	4.4	3.7
China	5.0	5.0	4.0

SOURCE: IMF (*World Economic Outlook*, April 2024 and April 2026).

Chart 1.3
The gradual disinflation process continued in 2025, albeit more slowly in the core component, against a background of relatively contained energy commodity prices until the Middle East conflict
1.3.a Inflation


SOURCES: National statistics, LSEG Datastream and Banco de España calculations.



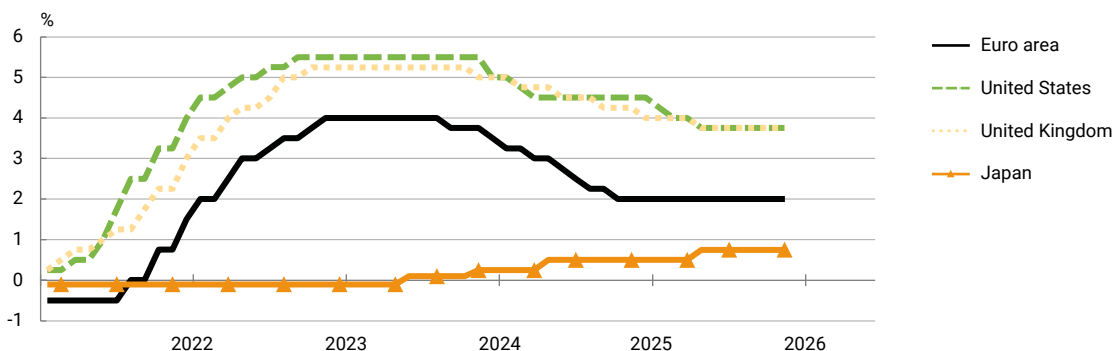
The gradual disinflation process continued in 2025, albeit more slowly in core inflation and unevenly across geographical areas.

- Average global inflation was 2.7% in December 2025, compared with 3.6% at end-2024 (Chart 1.3.a). The global core inflation rate, meanwhile, declined more gradually (by 0.2 pp to 3.4%), influenced by the services component.
- Inflation developments varied across regions. Headline inflation in the United States fell from 2.9% at end-2024 to 2.7% in December 2025, while core inflation fell by 0.6 pp to 2.6%. The disinflation process was shaped by the pass-through of tariffs, which pushed up goods inflation. In China, price pressures remained subdued overall, amid a persistent decline in

Chart 1.4

In 2025 monetary policy easing continued in most major global economies, with the exceptions of Japan and Brazil

1.4.a Policy interest rates in developed economies (a)


SOURCES: National central banks and LSEG.

a Monthly data at month-end. Latest observation: 02/06/26.


producer prices. Nevertheless, headline inflation picked up in the final stretch of 2025, reaching 0.8% in December (0.1% at end-2024), while core inflation rose from 0.4% to 1.2%. The average inflation rate in Latin America fell in 2025 H2, ending the year at 4% on aggregate for the main inflation-targeting economies (down by 0.5 pp on end-2024).

Broadly speaking, the central banks of the main developed and emerging market economies continued to ease their monetary policy stance over 2025.

- This was the general pattern in the main advanced economies (Chart 1.4.a). Indeed, the US Federal Reserve and the Bank of England lowered their policy rates by 75 basis points (bp) in 2025. Monetary easing also continued in the emerging market economies, with the exception of Brazil, where the tightening cycle initiated in September 2024 continued into the first half of 2025.

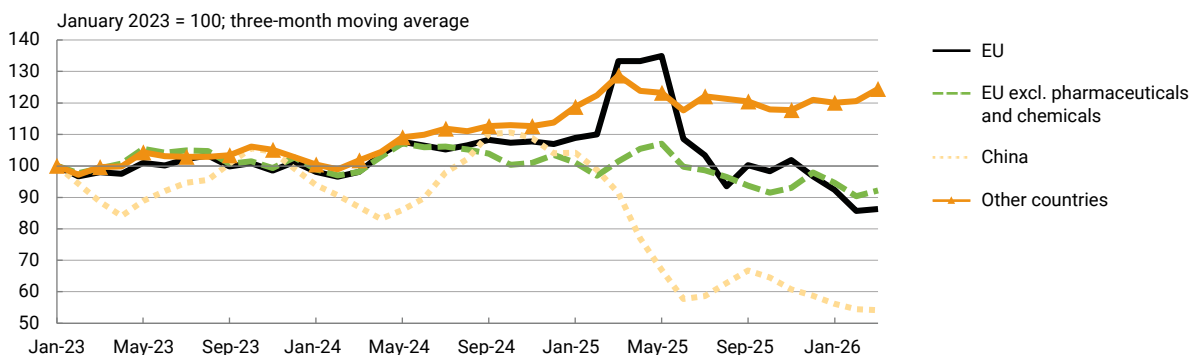
To date, tariffs have had a limited impact on global trade and prices, although this could change as their effects materialise more fully.

- Broadly speaking, firms' greater capacity to pre-empt developments (reflected in stockpiling and the widespread use of long-term contracts with pre-agreed prices and volumes) and the delayed implementation of new tariffs have mitigated and deferred the pass-through of tariffs to trade flows and prices.
- Moreover, the available evidence suggests that the economic burden of the tariffs imposed by the Trump Administration has fallen on US firms and consumers to a far larger extent than foreign exporters. Available empirical estimates indicate that, to date, importing firms

Chart 1.5

Exports to the United States from China and the EU fell, following a sharp increase associated with frontloading ahead of new tariffs

1.5.a US imports, by country of origin



SOURCE: Trade Data Monitor. Latest data: March 2026.



have absorbed between 90% and 100% of tariffs, with partial pass-through to consumers.⁸ However, the pass-through of tariffs to prices may increase over time.

- One of the clearest consequences of tariffs has been the sharp fall in US imports from China, extending the trend that began after the first trade war of 2017-2019 (Chart 1.5.a). As a result, China's share in US imports now stands below 10%, roughly half the level seen a decade ago.⁹ At the same time, China has been redirecting some of these trade flows to third markets, including, to some extent, European destinations (see Section 1.3).
- Meanwhile, US imports from the EU have declined slightly, although recent developments have been shaped by the frontloading of exports (particularly in the chemical and pharmaceutical sectors) during 2024 H1 (Chart 1.5.a).

1.3 Higher EU imports from China: trade diversion or a more structural trend?

The protectionist stance of US trade policy has raised concerns about a possible diversion of Chinese trade flows towards third countries, particularly European economies.

- The increase in EU imports from China, alongside a downward correction in their prices, is already clearly evident in the recent data. In December 2025 the volume of imports from China was up by 14% compared with a year earlier, while import prices were 7% lower (Charts 1.6.a and 1.6.b). This contrasts with the dynamics observed in imports from other countries.

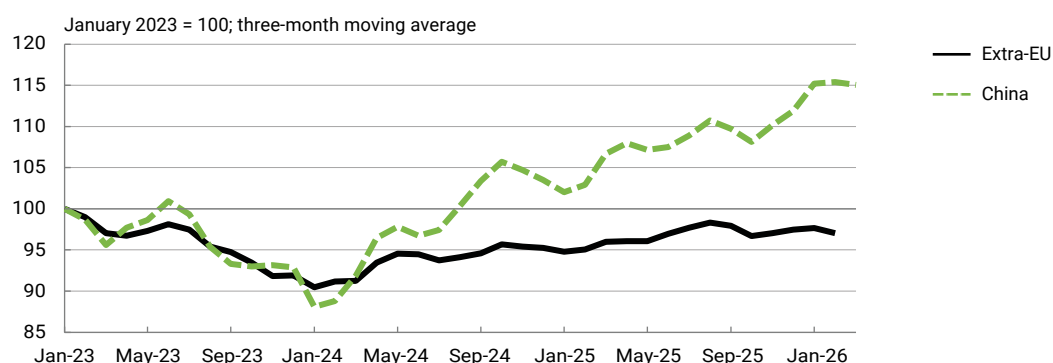
⁸ Gopinath and Neiman (2026); Amiti, Flanagan, Heise and Weinstein (2026); Hinz, Lohmann, Mahlkow and Vorwig (2026); and Schaefer, Gerland and Tirpák (2026).

⁹ Some of these flows have been channelled to the United States indirectly via third countries such as Vietnam and Mexico.

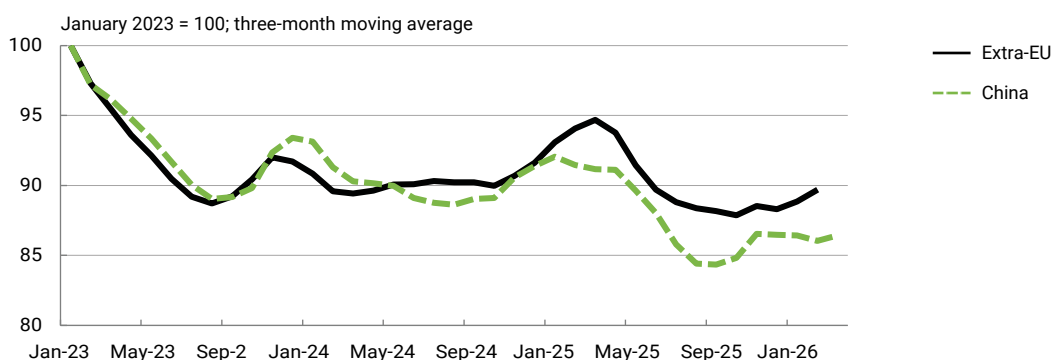
Chart 1.6

Since 2024 EU imports from China have grown far more than those from the rest of the world

1.6.a Volume of EU imports (a)



1.6.b EU import prices (a)



SOURCE: Eurostat.

a Volume indices adjusted for calendar and seasonal effects and unit value indices of EU imports.



— Against this background, the European Commission has recently launched a specific mechanism to monitor import flows,¹⁰ with an explicit mandate to identify potential signs of trade diversion towards Member States. At the same time, the EU authorities¹¹ have proposed activating additional trade defence instruments aimed at protecting the steel sector against potential disruptions from such diversion.¹²

However, it is difficult to gauge the extent to which these dynamics are a direct result of US tariffs, rather than other factors such as overcapacity in certain sectors, China’s industrial policy or competitiveness gains in the Asian economy.

¹⁰ European Commission (2025).

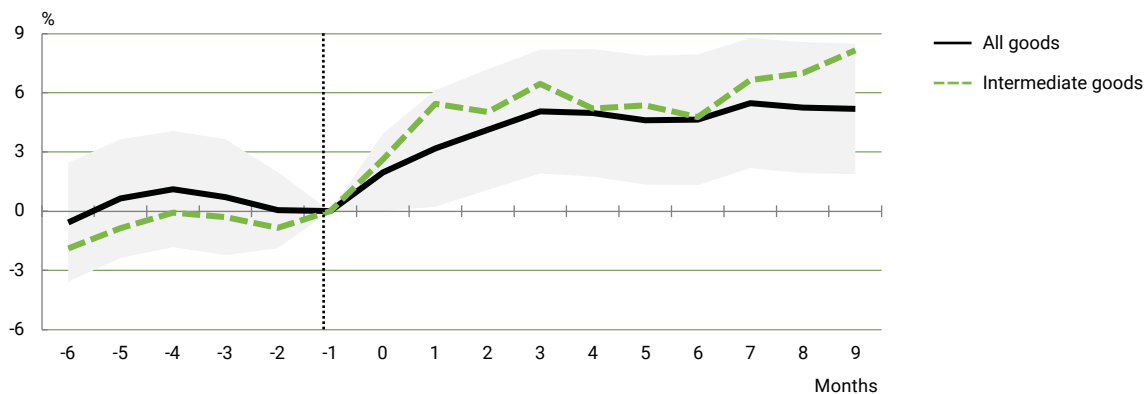
¹¹ In the same vein, other advanced economies, such as Canada and the United Kingdom, have recently introduced quota-based import restrictions in sensitive sectors, to safeguard them against a potential rerouting of Chinese exports.

¹² The [new European legislative proposal](#) seeks to protect the EU steel industry against global overcapacity by reducing tariff-free import quotas and doubling duties on imports in excess of those quotas.

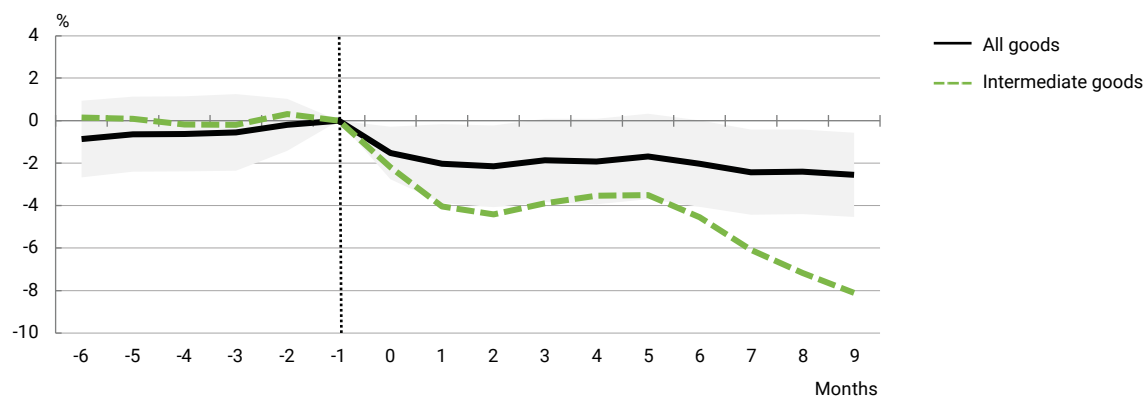
Chart 1.7

First US-China trade war (2017-19): diversion of Chinese exports towards the EU and limited impact on prices, albeit with cross-sector heterogeneity (a)

1.7.a Import volume



1.7.b Import prices



SOURCE: Balteanu, Moreno and Viani (2026).

a Impact of US tariffs on the volume and price of EU imports from China, with 90% confidence intervals, estimated using local projections and a difference-in-differences (DiD) approach, following Arindrajit Dube, Daniele Girardi, Oscar Jordà and Alan M. Taylor. (2025). "A Local Projections Approach to Difference-in-Differences." *Journal of Applied Econometrics*, 40(7), pp. 741-758. <https://doi.org/10.1002/jae.70000>. For visualisation purposes, the series are presented as a three-month centered moving average. Sample: January 2017-July 2019. Monthly data.



- According to the evidence available for the first US-China trade war, in 2018 and 2019 the EU experienced some trade diversion associated with a limited rerouting of Chinese exports, together with a moderate downward impact on import prices.
- For instance, a recent Banco de España study used granular trade data to identify the causal effect of US tariffs on China on the EU's purchases from China in the period 2018-19.¹³ On average, these tariffs were found to have increased the volume of European imports from China by around 4% across the affected products, while reducing their prices by less than 2% (Charts 1.7.a and 1.7.b). These impacts were also highly heterogeneous across sectors, with larger repercussions for capital goods and intermediate goods.

13 Balteanu, Moreno and Viani (2026).

- As yet, the direct empirical evidence for the current episode remains very limited. The available analyses suggest that the measures introduced in 2025 are likely to have a modest effect, with minimal trade diversion (or restricted to certain products) and a moderate macroeconomic impact.¹⁴ However, identifying causal links is more challenging due to the successive tariff changes, simultaneous adjustments to tariff structures across multiple countries and possible anticipation effects, alongside still limited data availability.
- Beyond the direct impact of tariffs, recent developments in imports from China may also reflect more structural factors. These include overcapacity in certain sectors, Chinese industrial policy and the competitiveness gains made by the Asian economy, which could have deflationary implications and reinforce competitive pressures on European producers.

1.4 The conflict in the Middle East and its implications for the global and European economies

Energy commodity prices have risen very sharply since the outbreak of the conflict in the Middle East, with spot price increases of around 40% for oil and 50% for European natural gas.

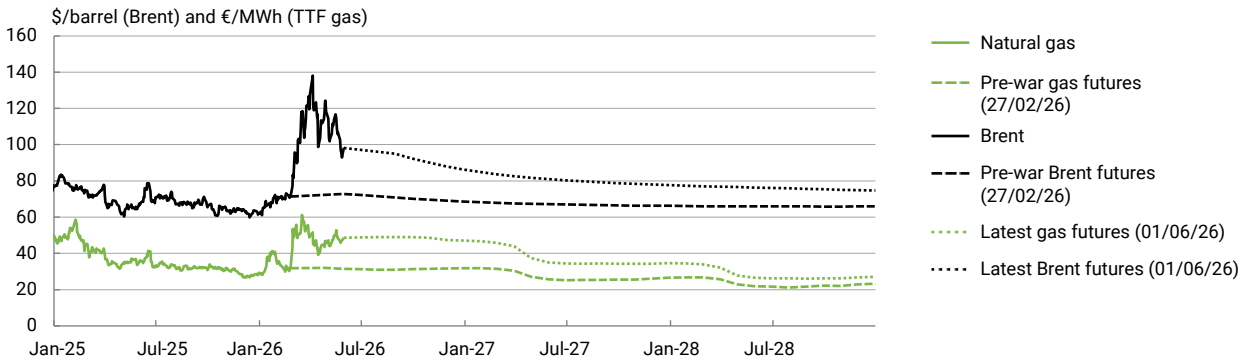
- Despite the high levels observed at the outset of the conflict (around \$120 per barrel for oil and €60 per megawatt hour (MWh) for European natural gas), prices remained, in real terms, below the peaks recorded in previous episodes, such as 2008 for oil and the summer of 2022 for natural gas. Moreover, oil and natural gas prices eased over the course of May, trading at close to \$100 per barrel and €50 per MWh, respectively (Chart 1.8.a).
- However, the initial price movements were exceptionally large. Indeed, the percentage changes recorded in the first month of the conflict stood in the 99th percentile of their historical distribution for oil and in the 93rd percentile for natural gas (Charts 1.8.b and 1.8.c). In the case of oil, the movements were more pronounced than in past geopolitical episodes, whereas for gas they were second only to the tensions prompted by the invasion of Ukraine. All of this comes against a backdrop of heightened volatility, adding to the uncertainty regarding future price developments.
- That said, futures point to a gradual easing of tensions in 2027 and 2028, in line with a partial normalisation of geopolitical conditions. Specifically, implied prices for mid-2027 were around \$80 per barrel for oil and €35 per MWh for gas. However, these levels also reflect a more persistent shock than initially expected at the start of the conflict, suggesting that, even were the Strait of Hormuz to reopen, the return to normal could be gradual due to bottlenecks in ports and shipping routes, the time required to reopen affected wells and facilities, and the rebuilding of oil inventories.

A key distinguishing feature of this conflict relative to previous episodes is the risk of a prolonged interruption to energy supplies, owing to the near standstill of transit through the Strait of Hormuz.

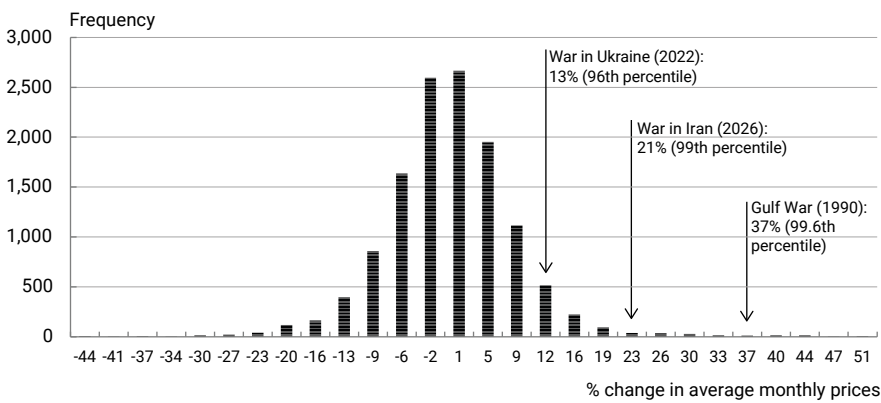
14 Le Roux and Spital (2026) and Schulte, Enders, Esser and Strobel (2026).

Chart 1.8
Sharp increase in energy commodity prices after the start of the war in Iran

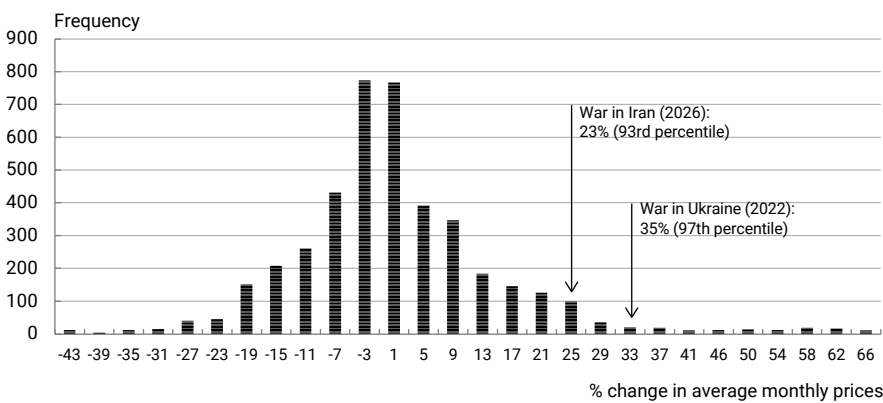
1.8.a Spot and futures prices: oil and TTF natural gas



1.8.b Percentage change in real oil prices (Brent) after one month



1.8.c Percentage change in real TTF natural gas prices after one month



SOURCES: LSEG and Banco de España calculations based on bi-weekly percentage changes in energy prices.



- Since the start of the hostilities, traffic in the Strait of Hormuz – a transit route for around 19% of global seaborne oil trade and 20% of global liquefied natural gas (LNG) exports – has declined by around 90%.¹⁵

¹⁵ The Strait of Hormuz offers limited scope for diversion to alternative shipping routes. Even if rerouting were feasible, 14% of global oil supply would still be affected.

Table 1.2
Supply-side policy response to past geopolitical shocks

Event	Supply disruption	Duration	Use of strategic reserves	Reserve release flows	Impact: oil price	Impact: inflation	Policy response and effectiveness
	(mb/d)	(months)	(volume)	(mb/d)			
1973-74 oil embargo	~4.5 (shortage for embargoed countries)	~5	None (IEA established in 1974)	N/A	↑ ~300%	US CPI moved into double digits (~12% in 1974); global stagflation.	Fuel rationing, lowered speed limits, fuel substitution in industry (limited short-term effect); the crisis led to the creation of the IEA (1974) for future coordination.
1978-79 Iranian Revolution	~4.8 (Iranian production collapses; ~7% globally)	~12	None	N/A	↑ >100%	US CPI again rises above 10% (~13% in 1980); global inflation surge and recession.	No direct supply relief available; the Fed (Chairman Volcker) implemented aggressive rate hikes to contain inflation (ending stagflation but triggering a deep recession).
1990-91 Gulf War	~4.3 (exports halted from Iraq and Kuwait)	~6	IEA (supply increased by up to ~2.5 mb/d)	~2.0 (of reserves, planned)	↑ ~110%	US CPI increased by between 1 pp and 2 pp (to ~5.4% in 1990); contributed to the brief 1990-91 recession.	Coordinated IEA release and subdued demand stabilised the market (up to 2 mb/d from reserves); rapid military victory in Kuwait ended the supply disruption, allowing prices to fall.
2022 Russia-Ukraine War	Potentially up to ~3 mb/d; < 1 mb/d net real loss (Russian supply diverted)	Ongoing (height of disruption: 2022 Q1-Q2)	~IEA; 240 mb	~1.0	↑ ~50%	Global inflation reached 40-year highs (United States ~9% and euro area ~10% in 2022).	Unprecedented US-led Strategic Petroleum Reserve release (~1 mb/d) helped contain oil prices; Europe imposed an oil price cap and diversified gas supply, averting worst-case energy shortages in late 2022.
2026 Iran conflict (Strait of Hormuz)	~18 (Gulf flows halted; ~10 mb/d net global supply lost)	Ongoing (started in March 2026)	400 mb (IEA; coordinated deployment)	~2.0 (max. sustainable reserves)	↑ ~50% to date	+0.8 pp (United States) and +1.1 pp (euro area) to annual inflation if oil remains above \$100.	No near-term solution: a 400 mb release covers < 10% of lost flows; only a ceasefire can meaningfully restore supply. Central banks face stagflation risks (higher inflation, weaker growth).

SOURCE: Banco de España.

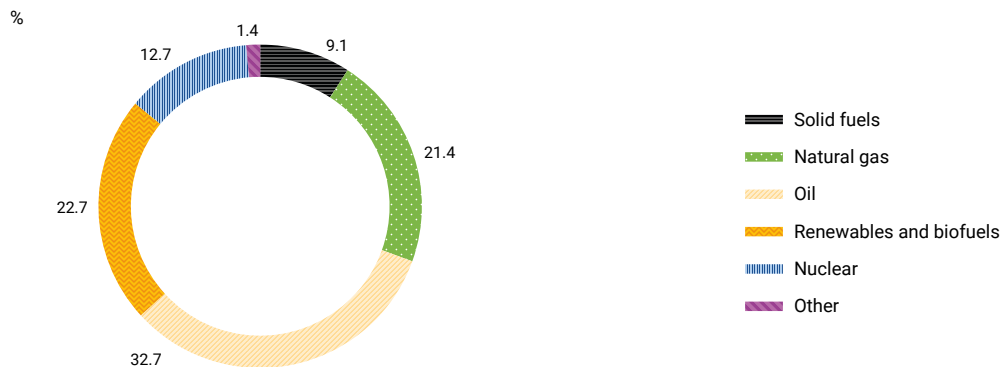
NOTE: mb/d stands for millions of barrels per day.

- This reduction, together with the partial destruction of infrastructure and storage reaching capacity (forcing the temporary closure of some wells), is likely to have affected roughly 13% of global oil supply and around 20% of LNG supply, with potentially lasting effects on productive capacity.
- The release of strategic reserves announced by the International Energy Agency has helped partially mitigate tensions, but its scope is limited relative to the scale of the supply disruption. The maximum release capacity (estimated at approximately 2 million barrels/day for 200 days) is far smaller than the supply shock and considerably short of comparable interventions in the past (Table 1.2).

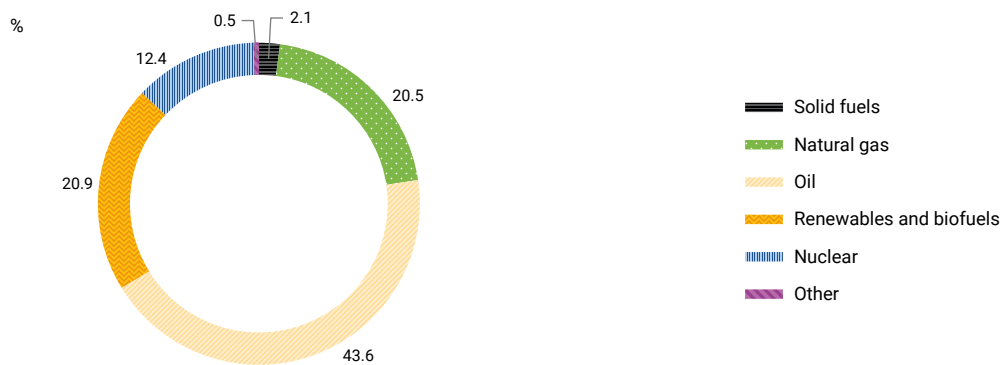
European economies face this energy shock from a more resilient position, although they are still heavily reliant on fossil fuels.

Chart 1.9
The EU overall remains highly dependent on fossil fuels (a)

1.9.a EU



1.9.b Spain



SOURCE: Eurostat.

a Primary consumption is not available in Eurostat. Calculated as gross domestic consumption minus non-energy uses in both the energy sector and final consumption. Data for 2024.



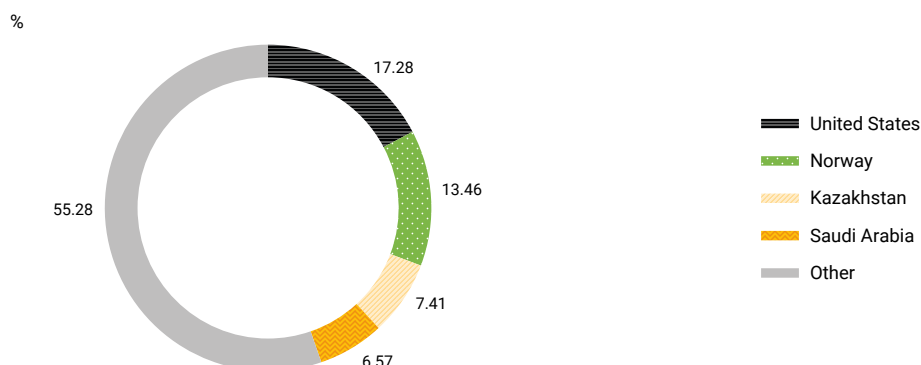
- In recent years, European countries have markedly reduced their primary energy consumption, reflecting energy efficiency gains and changes in demand patterns following the pandemic. In 2024 the EU’s primary energy consumption was down by a cumulative 10.6% since 2019, with a somewhat more moderate reduction in Spain (around 6.3%). This has coincided with a broad-based increase in the share of renewable energy in the energy mix.
- However, fossil fuels still account for 63% of total energy consumption in the EU and 66% in Spain (Charts 1.9.a and 1.9.b). This persistence reflects, in part, the still low level of electrification in the economy as a whole, especially in the transport sector. In aggregate terms, Spain’s electrification rate stands at around 25%, slightly higher than the EU average of 23%.¹⁶
- Similarly, the composition of EU and Spanish energy imports by main supplier country has changed significantly in recent years due to Russia’s invasion of Ukraine. Between 2019 and

16 By contrast, the industrial sector electrification rate is 33% in the EU compared with 31% in Spain.

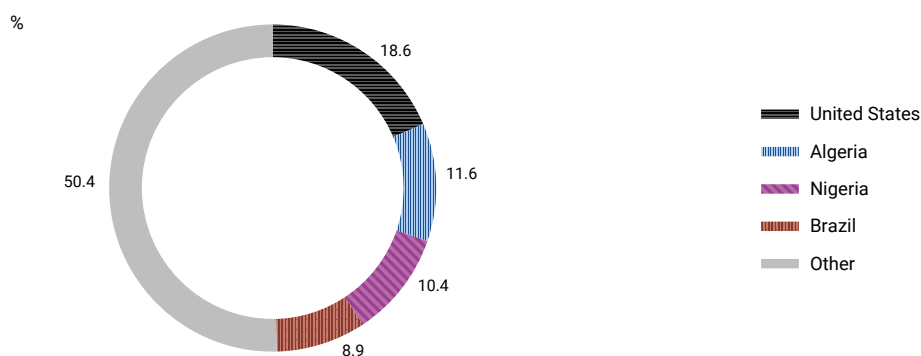
Chart 1.10

The composition of energy product suppliers in the EU and Spain has changed significantly in recent years

1.10.a Largest extra-EU suppliers of energy products in 2024. EU (a)



1.10.b Largest extra-EU suppliers of energy products in 2024. Spain (a)



SOURCE: Eurostat.

a Primary consumption is not available in Eurostat. Calculated as gross domestic consumption minus non-energy uses in both the energy sector and final consumption. Data for 2024.



2024, the EU substituted energy imports from Russia via three avenues: a marked increase in energy supplies from the United States and Norway, increased roles for other established non-European partners (Algeria, Kazakhstan, Saudi Arabia and Libya) and diversification of supplier countries (Charts 1.10.a and 1.10.b). Spain’s non-EU energy supplier map has undergone a similar change, with the United States playing a growing role as main energy partner and Brazil emerging as a key supplier.

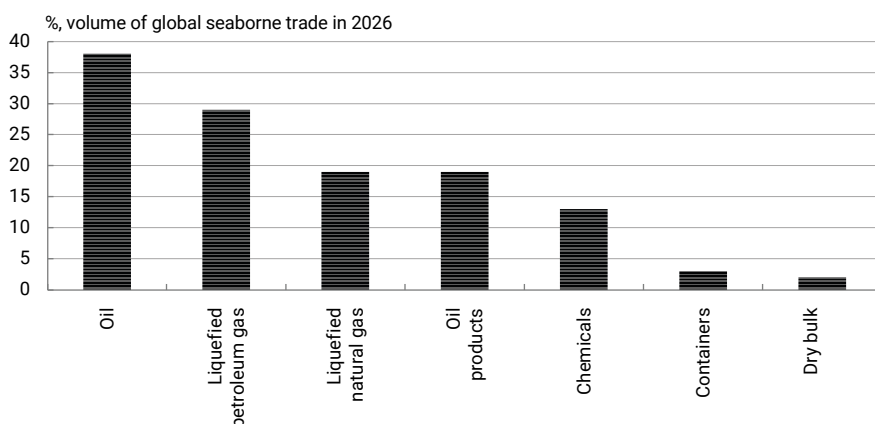
Beyond the energy shock, the closure of the Strait of Hormuz is also causing significant disruptions in the global supply chains of other key products for the agricultural, chemical and technological sectors.

- In particular, close to one-third of global fertiliser trade (including urea, ammonia and phosphates) has come to a standstill, while lower sulphur production in the Gulf, which accounts for around 45% of global supply, is further tightening agricultural nutrient markets.

Chart 1.11

The closure of the Strait of Hormuz affects trade not only in oil and natural gas, but also in fertilisers and chemicals

1.11.a Percentage of global seaborne trade that transited the Strait of Hormuz one week before the conflict (a)



SOURCE: UNCTAD, drawing on data for 2026 provided by Clarksons Research.

a In 2024 around 20 million barrels per day (mb/d) of oil were transported through the Strait, equivalent to about 25% of global seaborne oil trade. Oil and condensate accounted for 14 mb/d, while oil products accounted for 6 mb/d.



These shocks raise production costs in the primary sector and rekindle food inflation risks, especially in economies that are highly reliant on imported fertilisers (Chart 1.11.a).

- On the technological front, the potential disruption to neon supplies (essential for advanced lithography) from Iran and the 25%-30% reduction in global helium supply caused by temporary production shutdowns in Qatar threaten to create significant bottlenecks in the semiconductor industry.

The European economy is vulnerable to potential disruptions in global supply of certain non-energy inputs exported by Middle Eastern countries.

- Specifically, for certain goods (such as fertilisers, other chemical compounds and aluminium) there is pronounced supply scarcity in the EU internal market (measured as extra-EU imports relative to total imports), as well as reduced substitutability of extra-EU imports with EU exports i.e. there is not enough EU export capacity to replace imports in the event of an abrupt interruption of trade flows.
- For some of these products, the EU's direct exposure to suppliers in the Middle East is significant, ranging from 12% to 20% in 2024, underscoring a significant vulnerability in European supply chains (Table 1.3). Moreover, where the Middle East is a major global supplier of a particular product, the EU may remain exposed to potential conflict-related disruptions even if its direct exposure to Middle East is limited. These disruptions could materialise, for instance, if other countries choose to impose export restrictions (as is already happening with some fertilisers) or if the conflict leads to significant global price increases (Table 1.3).

Table 1.3

The EU is vulnerable to supply disruptions in non-energy goods produced in significant quantity in the Middle East

	Middle East's share in EU imports (%)	Middle East's share in global exports (%)
High EU vulnerability (a)		
Phosphoric acid	20	6
Phosphate fertilisers	17	12
Nitrates and nitrites	16	10
Raw aluminium	12	18
High indirect exposure (b)		
Ammonia	0.5	23
High-purity iron	0.7	21
Semi-finished steel products	1.0	11

SOURCE: Banco de España.

a Products (defined at HS 4-digit level) to which the EU is deemed highly vulnerable, based on Single Market scarcity and low substitutability indicators defined by the European Commission (extra-EU imports/total imports > 0.5; low substitutability indicator > 1), and for which the Middle East's share in total EU imports (intra- + extra-EU) exceeds 10%.

b Products exceeding the European Commission's thresholds for scarcity and low substitutability indicators, and for which the Middle East's share in global exports exceeds 10%.

On balance, the conflict in the Middle East is currently the main determinant of the global balance of risks, with adverse effects on activity and exerting upward pressure on inflation, particularly in net energy-importing regions.

- The conflict has skewed the balance of risks to the downside for global growth and to the upside for inflation. Its potential repercussions are subject to considerable uncertainty, which, given the course of the conflict and negotiations, has generated an asymmetric balance of risks, with adverse scenarios more likely to materialise. Price trajectories and the magnitude of the impact on activity (especially in net energy-importing economies) will depend on how long the Strait of Hormuz remains closed beyond what was expected at the start of the conflict, how lasting the damage to energy infrastructure proves and the ability of markets to rebalance trade flows.
- The impact of the conflict mainly hinges on three transmission channels. First, higher energy commodity prices and supply chain disruptions constitute a negative supply shock, driving up the costs of energy-intensive goods and services in particular. This pushes up inflation and erodes purchasing power. Second, this impact may be amplified if second-round price and wage effects materialise, the probability of which is greater if inflation expectations become de-anchored. Lastly, uncertainty, coupled with expectations of more restrictive monetary policy, could trigger an abrupt repricing in financial markets, which would tighten financial conditions and weigh on aggregate demand.
- To date, the macroeconomic impact of this shock has been tempered by measures adopted in a broad range of countries, the extraordinary release of oil inventories and strong

investment in new technologies. Overall, there has been a broad-based increase in inflation, while monetary policy expectations point to a tighter stance in the main economic areas.

1.5 International markets in 2025 and 2026 H1

Over the course of 2025, financial market developments reflected the interplay between resilient economic activity and heightened geopolitical and trade uncertainty. Against this background, long-term interest rates moved unevenly across regions, the euro appreciated in effective terms and prices of risky assets generally trended upwards, with only brief interruptions during the April trade tensions.

- In the euro area, the 10-year overnight index swap (OIS) rate¹⁷ stood at 2.7% at end-2025, up 46 bp on a year earlier. This was associated with higher expectations for long-term policy rates and, in particular, the rising term premium (i.e. the compensation investors demand for holding long-term debt in their portfolios) (Chart 1.12.a).
- Long-term government bond yields rose unevenly across euro area countries (Chart 1.13.a). This increase was sharpest in Germany, partly influenced by expansionary government spending packages, and in France, shaped by the political environment. By contrast, the equivalent Spanish bond yield rose more moderately. All told, the spread between the Spanish and German 10-year sovereign bonds narrowed by almost 26 bp over 2025, to around 43 bp at year-end. In Italy, meanwhile, the yield barely changed over the course of the year. The more subdued developments in Spain and Italy reflected improved risk sentiment, consistent with upgrades to their sovereign credit ratings.¹⁸
- By contrast, the 10-year US Treasury yield fell by 40 bp over the course of the year (Chart 1.13.a). This was driven by a downside revision to policy rate expectations, although this effect was partially offset by the higher term premium (Chart 1.12.b) amid growing concerns and uncertainty surrounding the Trump Administration's trade policy. In any event, the term premium stands at moderate levels by historical standards, although well above the exceptionally low levels reached during the Federal Reserve's balance sheet expansion.
- In tandem, equity market valuations rose overall in 2025, albeit temporarily interrupted in April by the bout of turbulence triggered by the tariff announcements. Stock market indices rose in both Europe (particularly in Spain) and the United States. Over the year as a whole, the EURO STOXX climbed by 21%, the IBEX 35 by 49% and the US S&P 500 index by 16% (Chart 1.13.b). The shares of the main US tech firms, known as the "Magnificent Seven", gained 22% in 2025 (323% cumulative since end-2022), driven by positive sentiment around AI developments.

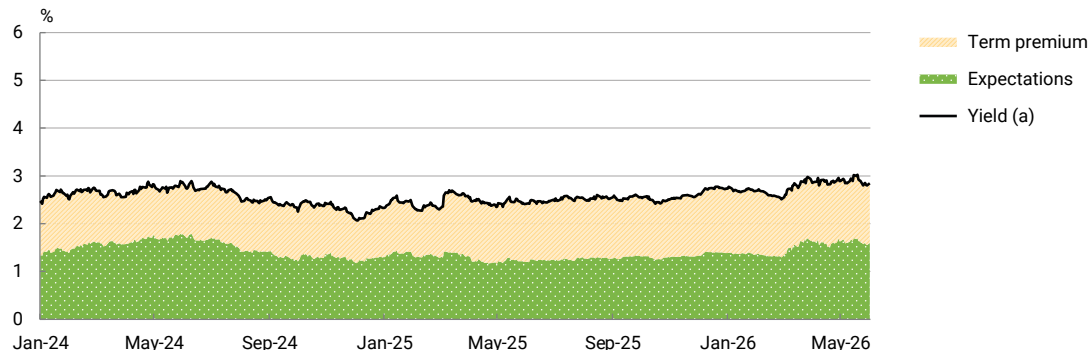
¹⁷ The OIS rate is considered the benchmark rate for euro area risk-free interest rates. The OIS rate is the fixed leg of an interest rate swap contract where the floating leg is the overnight euro short-term rate (€STR).

¹⁸ S&P, Moody's and Fitch all upgraded Spain's rating in September 2025. For Italy, in May 2025 Moody's lifted its outlook from "stable" to "positive", in September Fitch raised its rating to BBB+, in October DBRS upgraded its rating to A (low) and in November Moody's improved its rating to BBB, while in January 2026 S&P raised its outlook from "stable" to "positive".

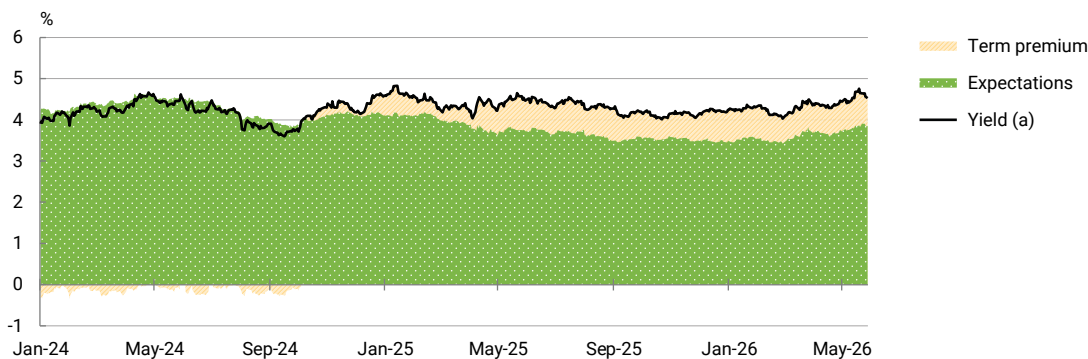
Chart 1.12

Mixed developments in long-term yields in the euro area and the United States, although the term premium rose in both regions

1.12.a Breakdown of the euro area 10-year OIS yield



1.12.b Breakdown of the US 10-year Treasury yield



SOURCES: Bloomberg Data License, Federal Reserve Bank of New York and Ricardo Barahona and María Rodríguez-Moreno. (2024). "Estimating the OIS term premium with analyst expectation surveys". Documentos Ocasionales, 2410, Banco de España. <https://doi.org/10.53479/36253>; Latest observation: 01/06/26 (Chart 1.12.a) and 28/05/26 (Chart 1.12.b).

a Estimated by the model and broken down into expectations and the term premium.

- In foreign exchange markets, the euro appreciated by 6% in nominal effective terms in the full-year 2025, driven by its gains against the dollar (13%) (Chart 1.13.c). The euro also strengthened vis-à-vis the pound sterling (5%) and the Japanese yen (13%). The euro's strong appreciation against the US dollar is consistent with the narrowing of the two-year interest rate spread. The relationship between these variables was only briefly disrupted during the bout of financial tensions linked to the April tariff announcement.

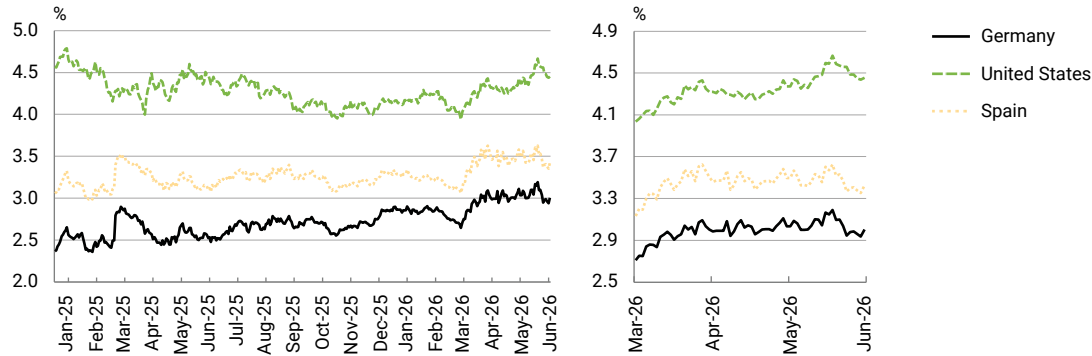
The outbreak of the war in Iran shifted global financial market dynamics, triggering another supply shock with inflationary implications.

- Fears of stronger inflationary pressures were reflected in a spike in market-based indicators of inflation expectations (especially over the short term) for both the United States and the euro area (Chart 1.14.a).

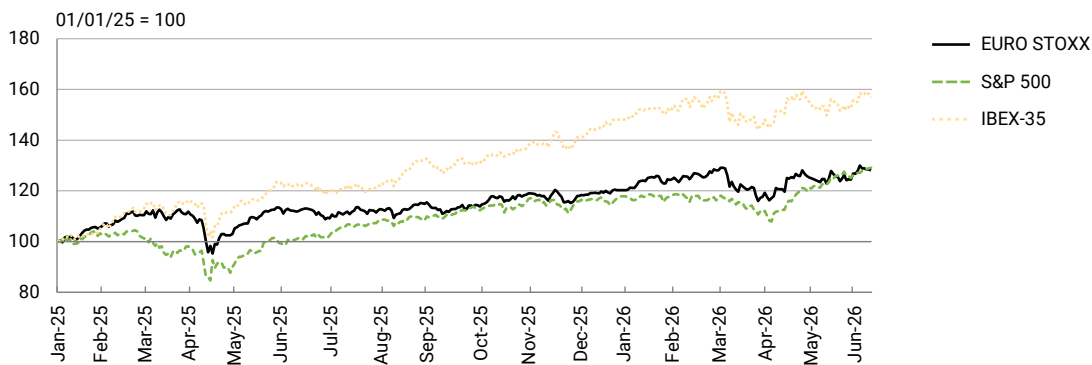
Chart 1.13

The escalation of trade tensions in April 2025 and, more recently, the war in the Middle East have shaped developments in global financial markets

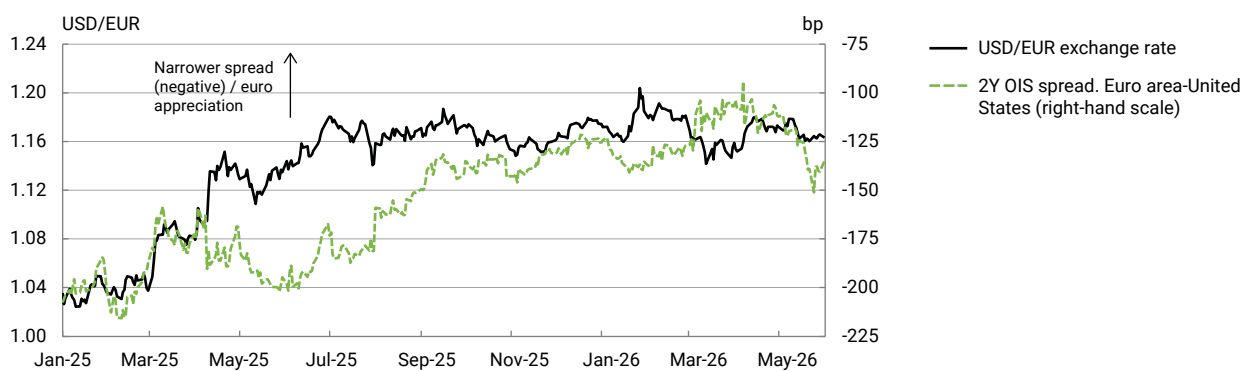
1.13.a 10-year sovereign yields



1.13.b Stock market indices



1.13.c Euro area-US yield spread and bilateral exchange rate



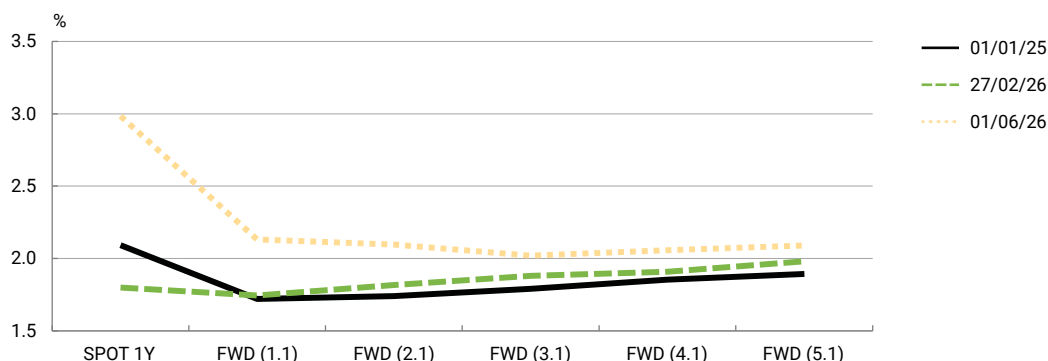
SOURCES: Bloomberg Data License and LSEG Datastream. Latest observation: 01/06/26.

- Against this background, at the global level expected policy rate paths were revised up and market rates increased (particularly at shorter maturities), with declines in some equity indices and spikes in volatility.

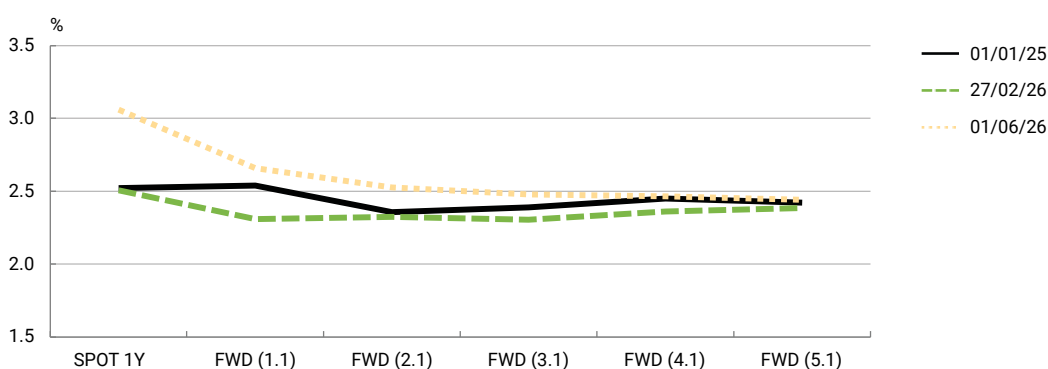
Chart 1.14

Market-based indicators of inflation expectations increased following the start of the war in Iran, amid rising energy prices

1.14.a Inflation compensation (a). Euro area



1.14.b Inflation compensation (a). United States



SOURCE: Bloomberg Data License.

a Calculated using inflation-linked swaps. The 1Y spot rate is the market-implied inflation compensation over the next year. Forwards (FWD(i,1)) are the market-implied inflation compensation for a one-year period starting in year i.

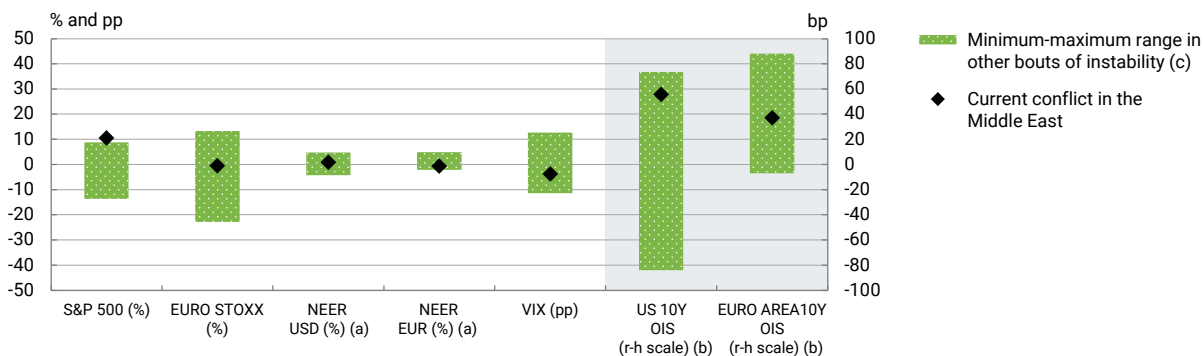
However, beyond the initial reaction, a comparative analysis of the conflict in the Middle East relative to past episodes of geopolitical instability and severe supply shocks points to a subdued response from risky asset prices.

- Compared with previous episodes, the most pronounced movements came in long-term yields (Chart 1.15.a). For instance, between the start of the conflict and the cut-off date for this report, 10-year German and US bond yields rose by 36 bp and 51 bp, respectively, while yields in Japan increased by 56 bp to levels not seen since 1997. In any event, spreads between euro area 10-year sovereign yields and the OIS rate have changed only moderately, narrowing by 1 bp in Germany and Spain, and widening by 10 bp in Italy.
- The equity market reaction has been muted in the euro area and the United States, both in absolute terms and relative to past episodes, with cross-region heterogeneity. Although the S&P 500 fell briefly after the outbreak of the war, it has since risen by 10.5%. Meanwhile, the EURO STOXX, which is more exposed to the shock due to the region’s greater reliance on

Chart 1.15

The effects of the war in Iran on financial markets have been limited compared with past episodes of geopolitical instability and supply shocks

1.15.a Change in equity and foreign exchange markets (left-hand scale) and in risk-free rates (right-hand scale). Includes the change since the war in the Middle East began and the minimum-maximum range in other bouts of instability



SOURCE: Bloomberg Data License. Latest observation: 01/06/26. The changes recorded in the current conflict in the Middle East are calculated relative to 27/02/26.

- a NEER: nominal effective exchange rate.
- b The OIS (overnight index swap) rate is considered the benchmark rate for euro area risk-free interest rates. It is the fixed leg of an interest rate swap contract where the floating leg is the overnight €STR (euro area) or the Fed Funds Rate (United States) that will be applicable in the future (in this case, in 10 years).
- c Minimum-maximum range in other bouts of instability, after 66 working days: Gulf War (02/08/90); 9/11 attacks (11/09/01); war in Afghanistan (07/10/01); COVID-19 (21/02/20); invasion of Ukraine (24/02/22); Twelve-Day War with Iran (from 13/06/25 to 24/06/25).

energy imports, is down by 0.6% relative to pre-conflict levels. These aggregate developments are consistent with more pronounced equity price declines for firms in the sectors most affected by the shock. For instance, in the EURO STOXX, the real estate sector and the tourism sector (which includes airlines) have fallen by 14.6% and 6.4%, respectively, since the war began.

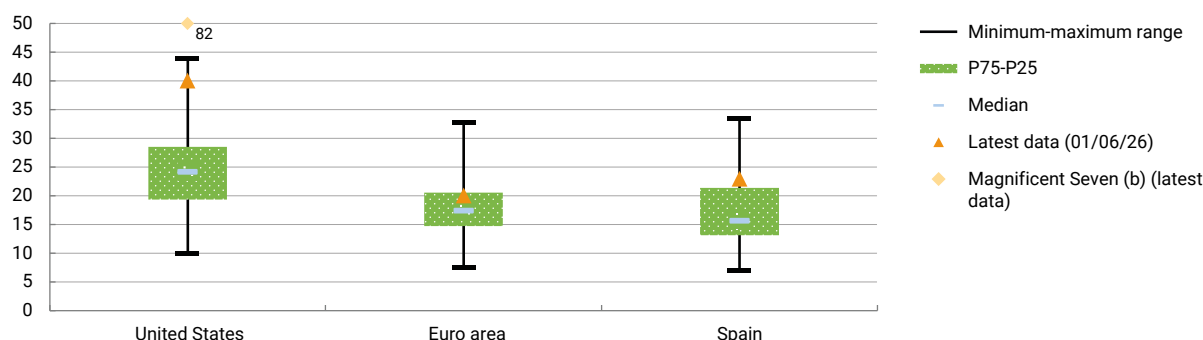
- The VIX index, which measures the implied volatility of the S&P 500 index, experienced a sharp but temporary spike after the outbreak of the conflict. It is worth noting that implied volatility had already been on an upward trajectory since early 2026, driven by factors such as high technology sector valuations, growing concerns around private credit, territorial tensions over Greenland and tariff disputes. In any event, at the cut-off date for this report the VIX index stood at subdued levels by historical standards and below those observed before the start of the conflict in the Middle East.
- In foreign exchange markets, the US dollar appreciated after the war broke out – supported by the United States’ position as an energy producer – and reclaimed its traditional safe-haven role. In nominal effective terms the US currency has recorded a cumulative appreciation of 0.9%, while the euro stands 0.7% below pre-war levels.

Overall, the main risk for international financial markets is a potential abrupt correction in risky asset prices, amid elevated uncertainty and high valuations, particularly for AI-related firms.

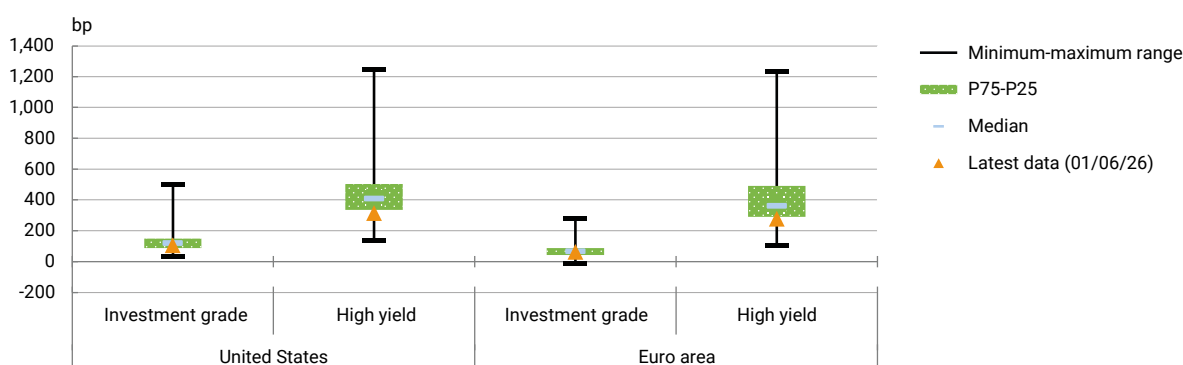
Chart 1.16

High valuations persist in some fixed income and equity market segments, particularly for major technology companies

1.16.a CAPE (a)



1.16.b Corporate spreads (c)



SOURCES: Banco de España, Bloomberg Data License and LSEG Datastream. Latest observation: 01/06/26.

- a Drawing on monthly stock market index series constructed by Datastream since 1985 for the euro area and the United States and since 1977 for Spain. The cyclically adjusted price-to-earnings (CAPE) ratio is calculated as the value of the stock market index in real terms (adjusted for CPI) divided by a 10-year moving average of the index firms' earnings in real terms.
- b Amazon, Apple, Google, Meta, Microsoft, Nvidia and Tesla.
- c Corporate spreads over the swap curve. Monthly series data since 1998.

- Certain risky asset valuations remain high by historical standards. In particular, equity risk premia have held below their historical median, especially in the United States.¹⁹ Stock market valuation ratios (which measure a firm's share price relative to its earnings) are also at historically high levels, particularly in the United States and for the Magnificent Seven (Chart 1.16.a). Against this background, there are significant AI-related market risks stemming from both strong optimism regarding the growth of AI and its potential adverse impact on the most exposed sectors.
- At the same time, in corporate credit markets, spreads in the high-yield segment remain well below their historical median (Chart 1.16.b).

19 Banco de España (2026b).

- Meanwhile, tensions have been recorded in private credit markets in recent months. Defaults and liquidity problems in certain segments (causing some funds to limit or suspend redemptions) have prompted valuation corrections for the main private credit investment funds.²⁰ A potential flare-up in these tensions could spread to other markets, given the strong financial interconnectedness.

²⁰ Banco de España (2026b).

2 Moderate acceleration in euro area growth in 2025, while the Iran war shock poses new challenges

Despite the adverse international environment, euro area economic growth accelerated in 2025, driven mainly by domestic demand. This reflected an improvement in the domestic economic cycle, as inflation and financial conditions gradually returned to normal.

- Euro area GDP grew by 1.4% in 2025, the highest rate in the last three years (0.9% in 2024 and 0.4% in 2023).
- The main growth driver was private consumption, which contributed 0.8 pp (0.1 pp more than in 2024), underpinned by higher real disposable income thanks to robust nominal wage growth, easing inflation and still-favourable employment developments. Investment regained momentum and contributed 0.6 pp to growth, an improvement of 1.2 pp on the previous year. Conversely, external demand detracted 0.6 pp from GDP growth, consistent with the weakening of the external environment.

However, this aggregate performance masked a high degree of cross-country heterogeneity.

- The Irish²¹ and the southern European economies grew at a brisker pace, compared with a more sluggish performance in Germany and eastern European countries (Chart 1.17.a).
- In particular, following two years of contraction, Germany grew by 0.2%, well below the euro area average, partly reflecting structural competitiveness challenges stemming from the country's productive system and related to rising energy costs and increased competition from China. These factors were only partially mitigated by the fiscal stimulus measures announced.
- By contrast, the stronger growth in southern Europe was driven by momentum in tourism, private consumption and employment, along with the implementation of projects linked to the Recovery and Resilience Facility.

Meanwhile, inflation continued to moderate over 2025 and early 2026.

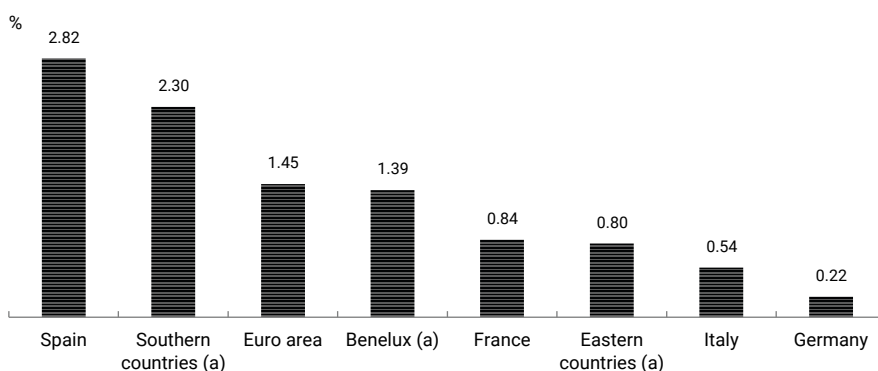
- In 2025 the annual average headline inflation rate declined to 2.1%, from 2.4% in 2024. This disinflation was uneven across components. For instance, energy prices fell, while food inflation remained relatively high (at 2.8%, down just 0.1 pp on 2024).
- As for core components, services inflation remained highly persistent, standing at 3.4% in 2025, despite slowing 0.6 pp on the previous year. However, this stickiness was partly offset by low non-energy industrial goods inflation, which fell to 0.6%, its lowest level since the pandemic.

²¹ Ireland grew by 12.3% in 2025.

Chart 1.17

In 2025 GDP developments diverged across euro area countries, with Spain leading the group

1.17.a 2025 GDP growth rate. Euro area countries



SOURCES: Eurostat, Eurosystem, Banco de España and Refinitiv Datastream.

a Southern countries: Portugal, Greece, Cyprus, Malta and Croatia. Benelux: Netherlands, Belgium and Luxembourg. Eastern countries: Austria, Finland, Slovenia, Slovakia, Estonia, Latvia and Lithuania.



Wage growth progressively moderated in 2025.

- In particular, growth in euro area compensation per employee remained relatively stable in 2025 (average of 3.9%), amid a marked slowdown in negotiated wage growth (to 2.8% from 4.5% in 2024). This reflected normalising wage demands after workers recovered the purchasing power lost during the previous inflationary episode.
- However, this slowdown was partially offset by surprisingly high wage drift in some countries, partly related to statistical effects associated with one-off payments in 2024, which underpinned aggregate wage growth.
- At the same time, improved productivity growth helped to contain unit labour costs, while profit margins (as measured by unit profits) recovered somewhat, in line with the economic cycle.

The euro area began 2026 in a relatively strong cyclical position, marked by moderate but steady growth and inflation close to the target, albeit with signs of persistence in some components.

- Activity indicators for 2026 Q1 pointed to continued growth, with GDP rising by 0.1% quarter on quarter (0.2% excluding the significant Ireland-related volatility).
- On the price side, headline inflation stood at 1.9% in February 2026, very close to the European Central Bank's (ECB) target, reflecting an easing in the most volatile components, particularly energy. Services inflation remained high (3.4% in February).

The outbreak of the conflict in the Middle East significantly altered the euro area macroeconomic landscape.

- The conflict led to downward revisions to the short-term growth outlook and upward revisions for inflation in both the March and June 2026 ECB/Eurosystem staff macroeconomic projections. This new shock is being felt primarily through the energy channel, affecting inflation, growth and financial conditions. Compared with the December 2025 projections, the June 2026 Eurosystem staff projections revised down GDP growth by 0.4 pp for 2026 (to 0.8%) and by 0.2 pp for 2027 (to 1.2 %), while inflation was revised upwards by 1 pp for 2026 (to 2.9%) and by 0.4 pp for 2027 (to 2.2%).
- The first euro area inflation data to emerge following the outbreak of the conflict confirm the surge in the energy component, climbing from -3.1% year-on-year in February to 5.1% in March and 10.8% in April.
- The high degree of uncertainty surrounding these assumptions underscores the importance of considering alternative scenarios to the baseline, envisaging a more intense and protracted energy shock, as well as stronger indirect and second-round effects on inflation, under the standard assumption that monetary and fiscal policies remain unchanged relative to the baseline.
- For instance, under the adverse scenario (assuming a sharper and persistent increase in energy prices), GDP growth would be 0.1 pp lower than under the baseline scenario in 2026 and 0.3 pp lower in 2027, while headline inflation would be 0.2 pp higher in 2026 and 0.7 pp higher in 2027. The impact would be more pronounced and persistent under the severe scenario, which assumes an even larger increase in energy prices than the adverse scenario. In this case, relative to the baseline scenario GDP growth would be lower by 0.3 pp in 2026 and 0.9 pp in 2027, while inflation would be markedly higher, by 0.9 pp in 2026 and 3 pp in 2027.

3 The European policy response to a changing geopolitical landscape

Against this backdrop of significant uncertainty, euro area economic policies have evolved in line with the cyclical changes and in response to the risks arising from the energy shock. This section examines the recent stance of economic policies and their implications for the macroeconomic scenario.

3.1 ECB monetary policy

In 2025 the ECB's monetary policy continued the gradual loosening that began in 2024. This reflected easing inflation and the view that monetary policy was still too tight.

- During the first half of 2025 the Governing Council cut the three key ECB interest rates on four occasions. Overall, policy rates were lowered by 100 bp, bringing the deposit facility rate to 2% in June. These decisions were taken in light of the growing body of evidence that inflation was moving consistently towards sustained convergence with the medium-term target of 2%.
- In 2025 H2 the Governing Council kept interest rates unchanged, viewing them to be at appropriate levels to ensure the sustainable convergence of inflation towards 2%. This decision was attributable to easing domestic price pressures, resilient economic activity and a strictly data-dependent approach amid an uncertain global environment.

The gradual normalisation of the Eurosystem balance sheet, initiated in 2022, continued in 2025.

- At end-2025 the balance sheet amounted to €6.3 trillion, down from €6.4 trillion a year earlier, mainly reflecting the sustained decline in securities holdings under the asset purchase programme (APP) and the pandemic emergency purchase programme (PEPP).
- Securities held for monetary policy purposes fell to €3.7 trillion, down by €0.5 trillion compared with end-2024, reducing these securities' share in total assets to 60%. Banks continued to make limited use of Eurosystem refinancing operations. By contrast, other financial assets on the balance sheet increased, mainly attributable to the rise in gold prices.
- On the liabilities side, credit institutions' reserve holdings decreased significantly, while the volume of banknotes in circulation remained virtually unchanged. Other liabilities, including government deposits and revaluation accounts, increased moderately.

Against this backdrop, the 2025 strategic review has strengthened the ECB's operational framework for responding to adverse shocks and a more uncertain inflationary environment.

- On 30 June 2025 the Governing Council published the results of its regular monetary policy strategy review. Narrower in scope than the 2021 review, it focused on incorporating the lessons from the far-reaching changes in the inflation environment.
- The assessment reaffirmed the symmetric 2% inflation target over the medium term as the cornerstone of the ECB's strategy, along with its medium-term orientation, which provides the flexibility needed to preserve price stability in a highly uncertain environment.
- The Governing Council also underscored the need to respond to significant and protracted deviations with appropriately forceful or persistent monetary action to avoid a de-anchoring of inflation expectations, and noted the importance of systematically incorporating risks, uncertainty and scenario analysis into decision-making.
- Within this framework, policy rates remain the main monetary policy instrument, complemented, where necessary, by the rest of the available toolkit.

Given the high degree of uncertainty over the magnitude, persistence and spread of the uptick in inflation, the energy shock poses a difficult challenge for ECB monetary policy, namely the need to distinguish between transitory shocks and more persistent inflationary pressures.

- The challenge for the ECB posed by the ongoing energy shock lies in distinguishing between transitory shocks and larger and more persistent inflation deviations. Given that monetary policy cannot directly influence energy prices, the focus should be on monitoring whether the shock spreads to core inflation through indirect or second-round effects.
- The ECB strategy review approved last year allows for a graduated, data-dependent response: from "looking through" small, temporary shocks to acting decisively if deviations from the 2% target become more pronounced or persistent. The key going forward will be to manage risks and ensure inflation expectations remain anchored in a highly uncertain environment.
- Against this background, at its June meeting the ECB Governing Council decided to raise interest rates by 25 bp, underscoring the persistence of inflationary pressures in an environment characterised by geopolitical uncertainty. The institution acknowledged that the prolonged conflict in the Middle East continues to intensify upside risks to inflation and downside risks to growth. The Governing Council emphasised that the impact will depend on the duration of the energy shock and its transmission to core inflation, while reiterating its data-dependent approach and commitment to anchoring inflation expectations.

3.2 Boosting the competitiveness of the European economy

European policy design has recently been guided by the roadmap set out by the Letta and Draghi reports, which propose a broad set of measures to strengthen productivity and revitalise the

Single Market. These initiatives are a response to a relative deterioration in European competitiveness amid rising global competition.

- The European Commission has incorporated the reports' findings into its priorities via the Competitiveness Compass, which is structured into several cross-cutting action areas (such as regulatory simplification and fully leveraging the Single Market) and around three key pillars for enhancing competitiveness: fostering innovation, accelerating the green transition and strengthening economic security.

Among these areas, regulatory simplification has emerged as a key priority.

- In European business surveys, firms consistently identify regulatory complexity as a constraint on their activity, against a background of growing global competition.²² In particular, regulatory instability and fragmentation across EU Member States increase uncertainty, raise compliance costs and delay or discourage investment decisions.
- The European Commission has pursued regulatory simplification through omnibus packages, which combine amendments to multiple legal acts in a single instrument. So far, ten such packages have been put forward. In principle, these packages are an effective means of eliminating obsolete or redundant provisions and improving regulatory coherence.²³

Deepening the Single Market is another key priority.

- The main proposal to eliminate these obstacles is to create an optional European corporate framework that would co-exist alongside national company law. The framework is often referred to as the “28th regime” and was termed “EU Inc.” by the Commission in its March 2026 proposal for a regulation.
- While open to all types of businesses, the legal framework of EU Inc. is primarily tailored to innovative start-ups and scale-ups. Accordingly, it streamlines start-up requirements, timelines and costs, and introduces the “once-only” principle, whereby firms only have to submit their information to public authorities once, allowing said information to be subsequently used by the different competent administrations. The framework also provides for automatic recognition across all Member States, thereby facilitating cross-border expansion.
- The proposal reflects a trade-off between legal ambition and political feasibility: it rules out the introduction of specific labour and tax rules, given their limited prospects of passing the legislative process, and, while introducing certain elements of harmonisation in insolvency proceedings, maintains the primacy of national law.

²² Banco de España (2025a).

²³ For banking regulation, a distinct approach to simplification is being pursued. As detailed in [Box 1.2](#), the European Commission plans to publish a report on the competitiveness of the European banking system in the summer of 2026, to serve as a basis for future regulatory proposals.

The European Commission has also launched specific initiatives to strengthen innovation, accelerate the climate transition and reduce external dependencies.

- Among the innovation initiatives, strategies have been proposed to foster an environment conducive to business creation and subsequent scale-up, and to promote the uptake of technologies such as AI and robotics.
- To support decarbonisation, the proposals include the Clean Industrial Deal, aimed at promoting the transition to low-carbon technologies, and the Affordable Energy Action Plan, which seeks to bring down energy costs.
- The recently announced Industrial Accelerator Act aims to align the reduction of external strategic dependencies and acceleration of the climate transition with efforts to strengthen the EU's production capacity.

3.3 Driving European capital market integration and simplifying the regulatory and supervisory framework

In March 2025 the Commission published the savings and investments union (SIU) action plan, seeking to more efficiently connect European savings with productive investments. The plan addresses the underutilisation of European savings and the need to enhance capital allocation within the EU.

- The evidence available shows that greater European capital market integration can yield significant positive effects, both by lowering the cost of capital and broadening the pool of agents inclined to finance innovative projects.²⁴
- From a corporate finance perspective, the SIU initiatives include a review of the securitisation framework (aimed at freeing up banks' balance sheet capacity) and strengthening regulatory incentives for insurers and pension funds to invest in certain alternative asset classes, such as private capital, venture capital and infrastructures.
- On the supply side of financing, the Commission found that, despite a high level of savings among European households, a disproportionately large share is held in low yield bank deposits, which contribute little to financing the economy. Given its limited regulatory competences in this area, the Commission has mainly issued recommendations to Member States, focused on complementary pension systems, the introduction of simple savings and investment products, and promoting financial literacy.
- With regard to pension systems, the non-binding recommendations to Member States concerning second-pillar pensions include the auto-enrolment of workers in occupational

²⁴ Venditti, Caivano, Cova, Pallara and Pisani (2025).

pension schemes. The Commission also proposes a review of the existing frameworks for Institutions for Occupational Retirement Provision (IORPs), aimed at reducing excessive risk aversion in portfolios and better aligning fund managers' incentives and responsibilities. With regard to third-pillar pensions, the Commission has proposed a review of the Pan-European Personal Pension Product (PEPP), to loosen rules around costs and investment portfolios, and make them more attractive to a broader range of investors.

- As for savings and investment accounts, it has recommended certain common design principles, including beneficial tax treatment conditional on holding investments over a long-term horizon. This initiative is closely linked to the strategy to promote financial literacy, which is seen as key to channelling more household savings into productive investment.

At the same time, the Commission has made progress towards financial market integration and supervisory convergence. In addition, the Markets Integration and Supervision Package (MISP), put forward in December 2025, envisages an ambitious set of measures to reduce European financial market fragmentation and enhance supervisory convergence across Member States.

- In particular, the package advances the interoperability and integration of market infrastructures and establishes a single regulatory framework that will facilitate cross-border activities.
- The Commission has also included its digital financial innovation agenda in the MISP. The uptake of digital technologies is regarded as a necessary condition for European financial markets to scale up and be globally competitive. To this end, the package extends the scope of the distributed ledger technology (DLT) pilot regime and seeks to ensure the adaptability and neutrality of the European regulatory framework to any emerging technologies.
- Another goal of the package is more efficient financial market supervision, with greater convergence among supervisors and, in some cases, a transfer of powers to the European level for the supervision of cross-border and systemically important groups.

For its part, the Eurosystem has advanced complementary initiatives aimed at simplifying and streamlining banking supervision.

- These initiatives aim to reduce unnecessary complexity while preserving supervisors' capacity to address emerging risks. The aim is to strengthen the resilience of the European banking system and enhance its integration and competitiveness, against a backdrop marked by rising uncertainty and increasingly prominent non-traditional risks.
- In this context, the Banco de España has launched an internal review structured around a cross-cutting working group, to identify areas for improvement and develop concrete proposals for the regulatory and supervisory framework (see [Box 1.2](#)).

In addition, in response to the European Commission's targeted consultation, the Eurosystem has published its proposals to increase the competitiveness of the EU banking sector.

- In the Eurosystem's²⁵ view, the banking sector's competitiveness is hampered by unnecessary complexity and fragmentation across countries. In this setting, strengthening competitiveness demands deeper integration and creating the conditions that allow banks to achieve economies of scale and diversify their operations, rather than pursuing deregulation.
- The Eurosystem calls for synchronised progress across key elements to complete the banking union, including concrete measures for establishing a European Deposit Insurance Scheme (EDIS), with a clear implementation timeline. The euro area should operate more as a single jurisdiction, in which capital and liquidity flow freely across banking groups and all deposits are protected equally.
- Initiatives aimed at simplifying the regulatory framework should address undue complexity without undermining resilience. The reforms implemented since the global financial crisis have been instrumental in restoring confidence in euro area banks, strengthening resilience without restricting their ability to finance the economy.

Lastly, the scarcity of euro-denominated safe assets represents an important constraint on the development of European capital markets and their infrastructures, and on strengthening Europe's financial and monetary autonomy.

- The European debate over safe assets has gained renewed momentum in the current environment, marked by higher common financing needs, limited fiscal space at domestic level and heightened geopolitical uncertainty. There is broad consensus that the euro area continues to face a structural shortage of euro-denominated safe assets, which constrains financial integration, weakens collateral markets and undermines resilience to episodes of financial stress.
- Moreover, amid the current geopolitical uncertainty, an increased supply of euro-denominated safe assets would reinforce Europe's financial autonomy and help channel investors' growing global demand for diversification. It would also promote the euro's international role and cement its standing as a global reserve currency.²⁶
- The feasibility of such an instrument will depend essentially on its design. To fulfil its systemic role it would need to achieve sufficient scale, deep liquidity, credible backing and demonstrate resilience in times of stress, which raises significant institutional challenges. Accordingly, three broad approaches are typically identified in policy and academic debates:²⁷ increased issuance at the EU level, extending temporary programmes such as

²⁵ European Central Bank (2026).

²⁶ The Eurosystem is pursuing various initiatives to increase the euro's international appeal and strengthen European monetary sovereignty, including the digital euro project, a redesign of liquidity lines for non-euro area central banks, a review of wholesale central bank money settlement services and connecting its instant payment system (TIPS) with other countries.

²⁷ See, for example, Lane (2026), Blanchard and Ubide (2026) and Brunnermeier, Langfield, Pagano, Reis, Nieuwerburgh and Vayanos (2017).

NextGenerationEU (the most politically viable option, but limited in scale in the short term); converting part of the existing national debt (more effective in achieving scale, but subject to important legal and political constraints); and a sequential approach involving a gradual combination of both.

4 The Spanish economy's robust growth in 2025

Amid high global uncertainty, associated with trade and geopolitical tensions, economic growth in Spain proved notably resilient in 2025 and the early months of 2026, and continued to significantly outpace that of the euro area.

- GDP grew by 2.8% in 2025 (Chart 1.18.a). This figure is down somewhat on 2024 (3.5%), although it remains well above that of the euro area as a whole (1.4%) and, in particular, that of its major economies (Germany (0.2%), France (0.8%) and Italy (0.5%)).²⁸ This growth stood above the potential growth estimates (slightly higher than 2%), with the output gap increasing to around 1.5 pp (Chart 1.18.b).²⁹
- GDP growth in 2025 was marginally above the Banco de España's forecast (2.7%) at the beginning of the year³⁰ and the analysts' consensus estimate. This slight positive surprise was mainly due to the greater growth in services exports and investment, which was partially offset by the pick-up in imports.
- This growth arose amid continued demographic buoyancy, with population growth of 0.9%, underpinned by considerable immigrant inflows. As a result, GDP per capita grew more moderately (1.8%; 2.4% in 2024), albeit, once again, above the figure for the euro area as a whole (1.1%).
- The information available on activity in 2026 Q1 shows that growth remains robust (a quarter-on-quarter rate of 0.6%), despite the energy shock associated with the conflict in the Middle East having compounded uncertainty over the global economy in early 2026.
- The current projections³¹ expect the Spanish economy's rate of growth to gradually decelerate, affected by an international setting marked by the conflict in the Middle East. Under this scenario, GDP growth would stand at 2.3% in 2026 and at 1.7% in 2027. The energy shock associated with the war in Iran is a key factor conditioning the outlook for the Spanish economy. It is expected to cause the inflation rate to rise to 3.6% in 2026, before falling to 2.6% in 2027.
- In any event, the high unpredictability of the severity and duration of the war in the Middle East has cast a high level of uncertainty over the global economy, introducing significant risks to the outlook for both the global and the Spanish economy, which could give rise to more adverse scenarios. The Spanish economy is nevertheless facing this shock while in an expansionary cycle, driven by a range of factors that are likely to help sustain relatively robust

²⁸ Among the euro area countries, in 2025 only Ireland (12.3%), Malta (4%), Cyprus (3.8%), Croatia (3.4%) and Lithuania (2.9%) recorded higher GDP growth than Spain.

²⁹ Compared with the negative gap in 2025 in the euro area as a whole (-0.4% according to European Commission estimates).

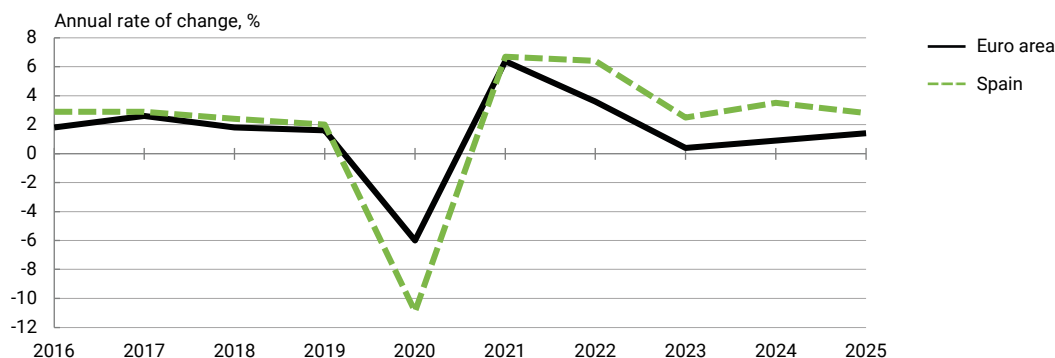
³⁰ Banco de España (2025a).

³¹ Banco de España (2026c).

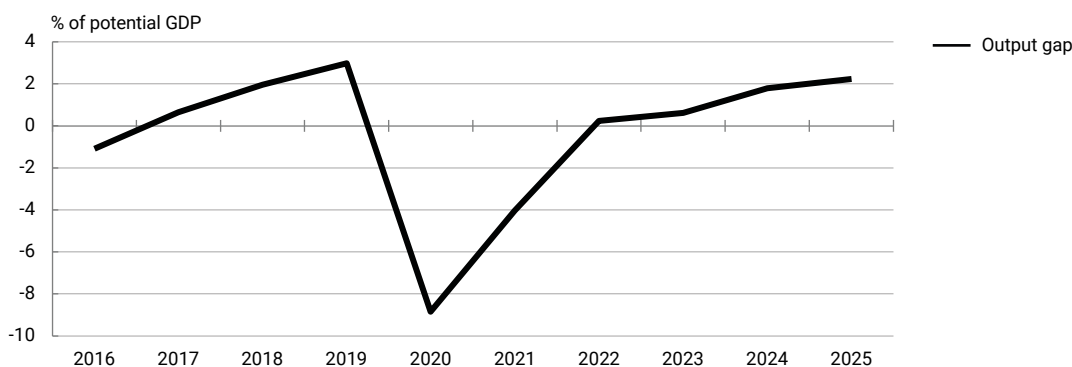
Chart 1.18

Real GDP growth slowed to 2.8% in 2025, remaining above the euro area figure (1.4%) and widening the positive output gap

1.18.a GDP



1.18.b Output gap



SOURCES: Eurostat, INE and Banco de España.



growth over the coming years. Spain’s relatively lower exposure to the impact of the energy shock, thanks to the recent increase in the share of renewable energy sources in the country’s energy mix, means that electricity prices are less dependent on natural gas price developments (see Box 1.3).

4.1 Improved financial conditions as an underpinning of economic growth in 2025

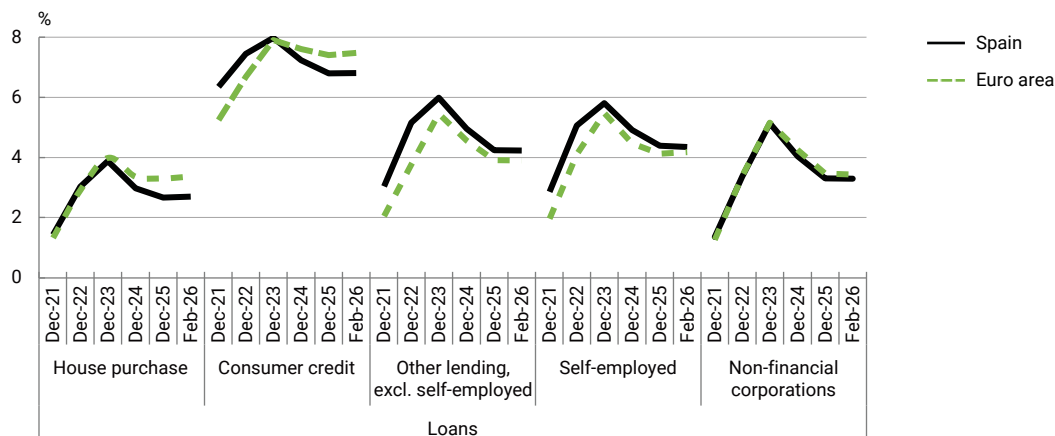
Bank interest rates gradually declined in 2025 and tended to stabilise in early 2026, amid an improvement in access to finance, although this has deteriorated slightly since the outbreak of the war in Iran. Overall, improved financial conditions drove the growth in activity, but this impetus began to ease in early 2026.

- In 2025 the cost of borrowing from banks continued to decrease across the board. These declines were somewhat more marked in consumer credit granted to households and in

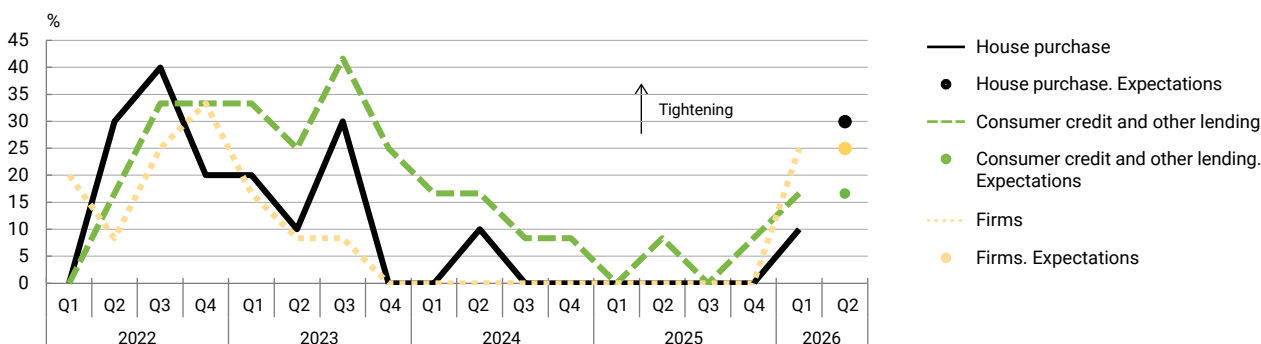
Chart 1.19

The cost of credit ceased to decline in the early months of 2026 and households' and firms' access to credit showed signs of deterioration

1.19.a Interest rates on new bank loans (a)



1.19.b Change in credit standards in Spain. EPB (b)



SOURCES: ECB and Banco de España.

- a Narrowly defined effective rates, i.e. excluding related costs, such as repayment insurance premiums and fees, and adjusted for the seasonal and irregular components.
- b EPB. The banks responded between 19 March and 7 April, at least 20 days after the outbreak of the war in Iran. Percentage of banks reporting a tightening minus the percentage of banks reporting an easing.



loans of up to €1 million extended to firms (Chart 1.19.a). However, in early 2026 bank interest rates stabilised and in Spain they held below those of the euro area across all segments except for lending to sole proprietors. Spreads over market rates (at the corresponding terms) remain below those observed between 2013 and 2019.

- Turning to access to financing, credit standards were virtually unchanged according to the Bank Lending Survey (EPB, by its Spanish initials), while terms and conditions eased slightly (Chart 1.19.b). The Survey on the Access to Finance of Enterprises signalled an improvement in access to bank finance, thanks to favourable changes in firms' financial position and banks' greater willingness to lend. However, following the outbreak of the war in Iran both surveys reported a tightening in loan supply and in financing conditions.

Amid the gradual improvement in financial conditions, the stock of lending to households grew at a faster pace than lending to firms.

- New lending to households was very strong in 2025, growing by 20.6%, most notably in loans for house purchase (25.3%) and consumer credit (20.7%). This momentum passed through to the outstanding stock of credit, which recorded year-on-year increases of 4.1% in mortgage lending and 12.9% in consumer credit in February 2026.
- By contrast, lending to the corporate sector grew more moderately (11% in the case of firms and 3.5% in that of the self-employed), with the outstanding stock of lending to this segment increasing by around 3% in 2025.

4.2 Private domestic demand as a driver of growth

Private consumption continued to grow robustly in 2025, driven by the momentum of durable consumption and underpinned by labour income growth, while the saving rate remained high by historical standards, cementing private consumption's role as the main driver of growth in domestic demand.

- In 2025 household consumption grew by 3.4%, up slightly on the 2024 figure and the average since 2017.³² This growth was driven by the improvement in financial conditions and the momentum of household income and wealth.³³
- By type of goods, the increase in spending on durable goods stood out (+10%), while spending on services eased to 2.8% (Chart 1.20.a). Over a somewhat broader time scale, in the Spanish economy's current expansionary cycle consumption growth has been underpinned by the rise in spending on recreation activities, which grew 8% in 2024, accounting for 21.9% of total consumption (1.6 pp higher than in 2017).
- Real household income is likely to decrease as a result of the impact of the conflict in the Middle East on energy prices, in line with events following the outbreak of the war in Ukraine in 2022, although the tax cuts to fuels and electricity under Royal Decree-Law 7/2026 should ease the conflict's impact (see Box 1.4).

The microeconomic evidence available shows that since 2017 the saving rate has grown across the board, against a backdrop of greater uncertainty, high inflation and relatively tight financial conditions, helping to bolster households' financial position in recent years.

- The household saving rate remained at high levels in 2025 (12%, below the 14.9% recorded in the euro area as a whole, but well above its historical average since 1999 (8.7%)). The slight decline in

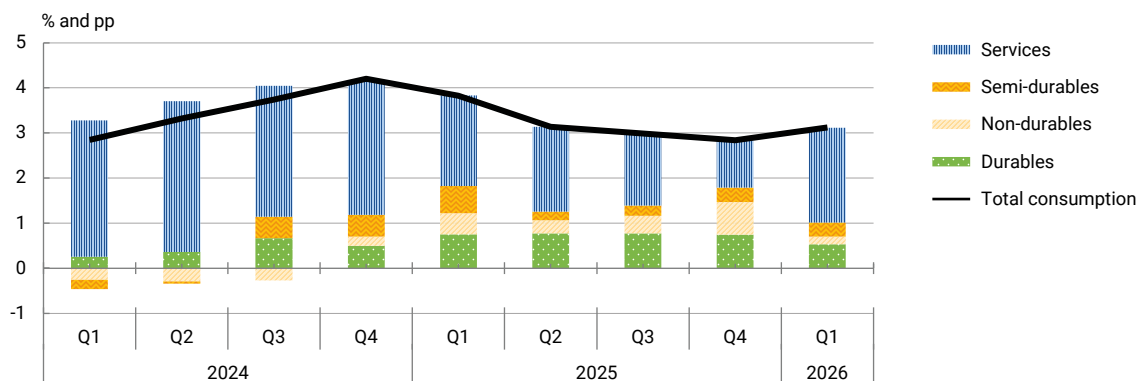
³² Excluding 2020 and 2021 due to those years being heavily affected by the pandemic, private consumption grew at an average of 2.6% between 2017 and 2024.

³³ Since 2021-22 growth in household income and net wealth has been observed above all in the lower end of the two distributions, on Spanish Survey of Household Finances (EFF, by its Spanish initials) data.

Chart 1.20

The increase in private consumption was driven by growth in durable consumption

1.20.a Year-on-year rate of growth in domestic final consumption of households and contributions of groups of goods and services (a)



SOURCE: INE (Quarterly National Accounts).

a The contribution of each component to total consumption is calculated using the quarter-on-quarter rates of change of chain-linked volume indices, adjusted for seasonal and calendar effects using the weights of each component at current prices.



the saving rate in 2025 (0.7 pp) meant that consumption continued to grow despite disposable income increasing somewhat more slowly than in the previous two years (2.7% in real terms).

- Microeconomic data from household surveys³⁴ confirm that the increase in the saving rate is widespread across population groups (Table 1.4). In the period 2017-25, this increase was attributable to factors typically associated with an environment of greater uncertainty, higher inflation and tighter financial conditions.³⁵ In this period, the composition of savings shifted towards time deposits, savings accounts and equity holdings (the latter above all among the wealthiest households), thereby contributing to the increase in financial wealth, according to the EFF 2024.
- This sound financial position was reflected in a decline in the household debt ratio to 68.1% of gross disposable income, close to the low recorded at the beginning of the 21st century and around 14 pp below the figure for the euro area as a whole. In addition, the EFF shows a reduction in both the proportion of indebted households and the median value of debt since 2022, above all among the least wealthy households.
- An indicator of household financial vulnerability also points in this direction. At end-2025 this indicator, defined as the arithmetic mean of debt servicing capacity, leverage, financing, income and labour market activity, stood 0.6 standard deviations below its average since 2005, reflecting a favourable financial position (Chart 1.21.a).³⁶

³⁴ For further details, see Anghel, Barceló and Villanueva (2019).

³⁵ Along these lines, European Central Bank (2025) points to both cyclical and behavioural factors having contributed to the saving rate remaining stable at an elevated level.

³⁶ The asset quality of banks' lending to households also improved, with a decline in non-performing and stage 2 loans. For more information, see Banco de España (2026b).

Table 1.4
The increase in the saving rate between 2017 and 2024 was broad-based across population groups

%

	Increase in saving rate (2017-24) (a)	Aggregate contribution to increase
Educational attainment		
< Secondary	17.9	6.0
Secondary	15.0	3.3
Higher	12.0	5.3
Age		
< 34	19.4	1.2
35-44	8.3	1.3
45-54	16.0	3.8
55-64	15.4	3.6
> 65	13.9	4.3
Country of birth		
Spain	15.4	13.1
Other	16.4	2.4
Home tenure status		
Owner with a mortgage	15.4	7.7
Owner without a mortgage	12.6	3.7
Tenant/free use	16.0	3.3
TOTAL	14.4	

SOURCES: INE (Living Conditions Survey and Household Budget Survey) and Banco de España.

a Saving is defined as the annual difference between household disposable income and spending. Spending is taken from the Household Budget Survey and includes all spending except imputed rents for owner-occupied housing. Income is taken from the Living Conditions Survey (2018 and 2025). The table shows the changes in the aggregate saving rate (calculated from surveys) between 2017 and 2024. Each group's contribution is calculated by multiplying the change shown in the columns by each group's share in aggregate income.

Productive investment rose in 2025, confirming a considerable recovery in recent years, driven by investment in capital goods and in intangible assets. This momentum has helped boost the economy's growth and productive capacity.

- In 2025 gross fixed capital formation grew considerably (+5.8%, compared with 3.6% in 2024). The rise in investment in capital goods stood out (+7.4%), although both intangible investment and investment in other construction also grew at rates above 5%.
- In particular, the momentum of intangible investment has driven economic growth, insofar as there is a positive association between investment in information and communication technology – tangible and intangible assets alike – and growth in GDP per capita.³⁷ Firm-level information from the Central Balance Sheet Data Office suggests that recent investment growth has been driven by young and higher productivity firms.³⁸

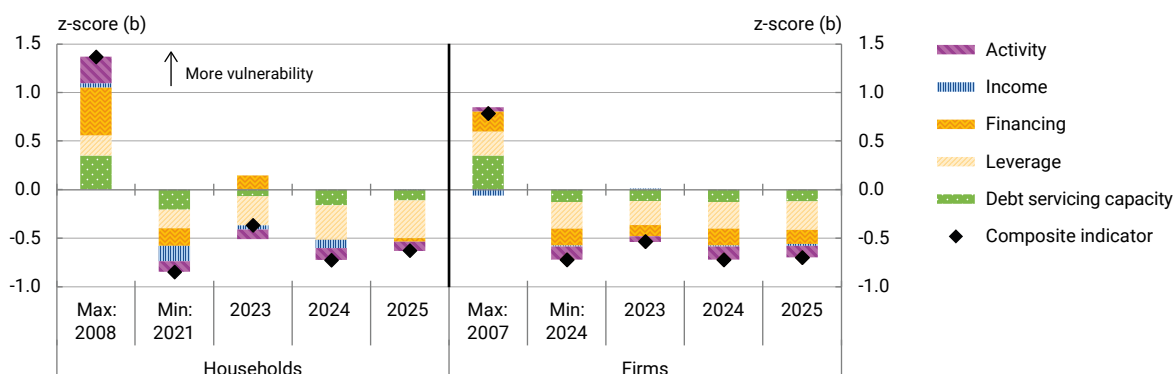
³⁷ Filip, Pérez González and Setzer (2026) find that differences in the breakdown of investment help to explain the uneven economic growth across EU Member States over the period 1996-2021.

³⁸ In particular, on data to 2024, firms up to five years old that make investments have increased their median investment rate by 10 pp, compared with a rise of some 7 pp in older firms. Chapter 3 of this report analyses in depth the link between investment and productivity at firm level.

Chart 1.21

Households' aggregate financial vulnerability stands at historically low levels

1.21.a Composite indicator of households' and firms' vulnerability (a)



SOURCES: European Commission, INE and Banco de España.

- a Positive (negative) values indicate higher (lower) financial vulnerability than the average for the reference period (2005-2025 Q4). For more details on the composition of the indicator, see Box 2 of the *Report on the financial situation of households and firms*. Second half of 2024.
- b At each date, the z-score shows the number of standard deviations (above or below) between the indicator and the mean for the period 2005-2025 Q4 in full.



- Firms' favourable financial position contributed towards the sound performance of investment and led to a slight reduction in the debt ratio, to 311% of gross operating surplus (GOS) at end-2025, below its average since 2000 (424%) and in line with the euro area figure. At end-2025, an indicator of financial vulnerability – with a similar definition to that for households – stood close to its all-time low at 0.7 standard deviations below its average since 2005, likewise depicting a sound financial position for firms.

Residential investment gained momentum in 2025, reflecting the sharp rise in housing demand amid limited supply.³⁹

- These developments were underpinned by the improvement in households' purchasing power, associated with employment gains and higher real income, population growth, the gradual shift towards smaller households and the attractiveness of housing investment. Overall, these factors drove housing demand. Thus, residential investment grew by 5.1% in 2025, to stand at 5.8% of GDP, slightly higher than the euro area figure (5.4%).
- This growth in demand, against a backdrop of weak supply, passed through to house prices. As a result of the mismatch between supply and demand, house prices continued to grow at a high rate (12.7% in 2025, the largest annual rise since 2007). Prices – particularly those for second-hand homes – accelerated to double-digit growth rates across all regions in 2025. As a result, in 2025 house prices were 20% higher than their 2007 level, although in real terms they were approximately 17% below the 2007 peak.

³⁹ Chapter 2 of this report analyses recent housing market developments in depth.

4.3 The external sector's negative contribution to growth in 2025

In contrast to recent years, the external sector made a negative contribution to Spanish economic growth in 2025, essentially reflecting the rise in goods imports.

- Excluding the pandemic years, the negative contribution (-0.7 pp) to economic growth in 2025 is the first of its kind since 2018. This was the result of: (i) the deterioration in the international environment, marked by uncertainty and US tariffs, and (ii) the strong momentum of domestic demand, especially in the components with the highest import content.

While goods exports grew by 1.1%, goods imports rose by 6.1% in 2025.

- Goods exports were affected by weak domestic demand in the Spanish economy's main trading partners (France, Germany and Italy) and the US tariffs, all of which weighed particularly on sales abroad of goods such as vehicles and fuels (Chart 1.22.a). This weakness was partially offset by market and product diversification, most notably in the sound performance of chemicals and chemical products exports, above all to eastern European and Asian countries (Chart 1.22.b).
- Goods imports rose in 2025, driven by the strong growth in the components of domestic demand with a high import content and by the appreciation of the euro.⁴⁰ The rise was widespread across products and origins, most notably the considerable increase in imports from China (13.8%) (Chart 1.23.a), whose penetration increased more in Spain than in the euro area as a whole.
- Overall, the goods trade deficit worsened in 2025 to stand at -3% of GDP (-2.1% in 2024), as a result of the increase in the deficit with the United States and China and the decline in the trade surplus with the euro area.

In contrast to weak goods trade, trade in services continued to perform very favourably, with travel and non-travel services exports growing considerably.

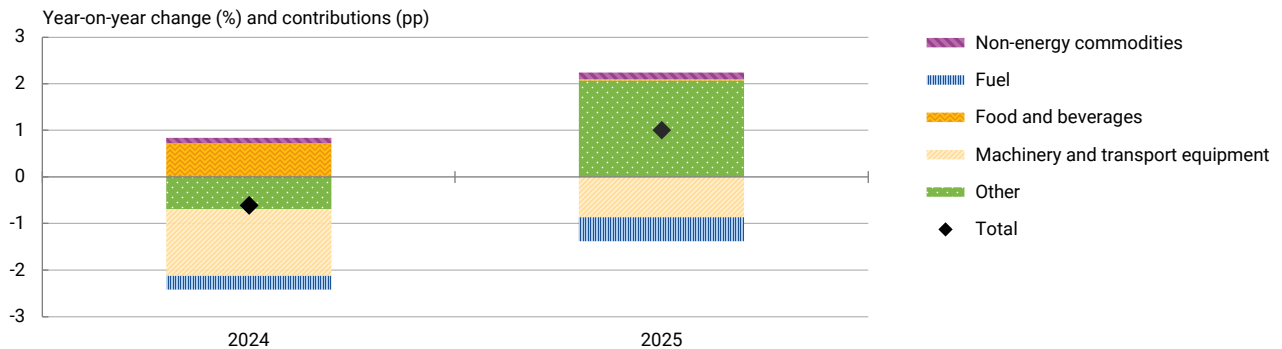
- As in previous years, non-travel services exports continued to perform favourably, growing by 11.1%. As a result, they accounted for 8.7% of GDP, their highest figure of the last 25 years. **Box 1.5** analyses the recent developments in these exports and their determinants, which are associated both with structural factors – including most notably digital infrastructure,

⁴⁰ In 2025 Spain's competitiveness – measured by labour costs and consumer prices – deteriorated slightly compared with the euro area, slipping by less than 1%. By contrast, the indicator based on industrial producer prices pointed to a slight improvement of around 1%. However, compared with non-euro area industrialised countries, the deterioration – by around 2% – in Spain's competitiveness was more broad-based across all cost and price indicators. This was mainly spurred by the euro appreciating in 2025 by 2.2% against the currencies of the non-euro area industrialised countries and 3.6% against a broader basket of currencies comprising 40 non-euro area countries.

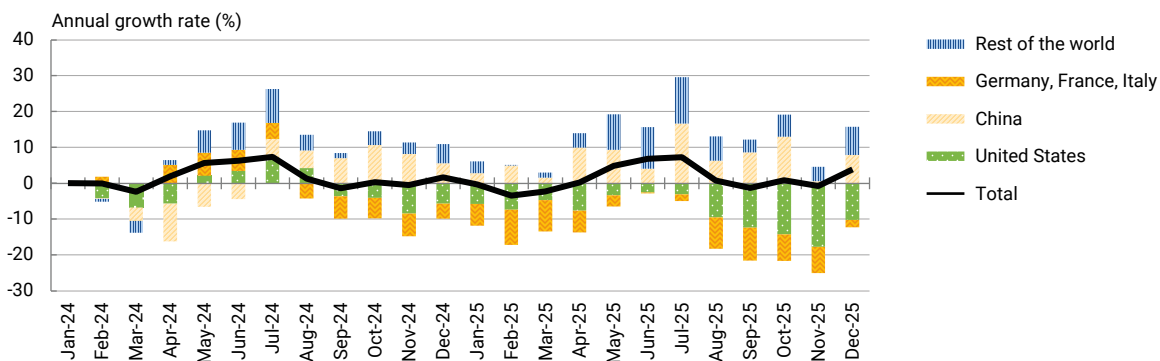
Chart 1.22

Goods exports grew weakly in 2025, weighed down by vehicles and fuels

1.22.a Contributions to the annual rate of real goods exports



1.22.b Real goods exports, by destination



SOURCES: Ministerio de Economía, Comercio y Empresa, Banco de España and INE.



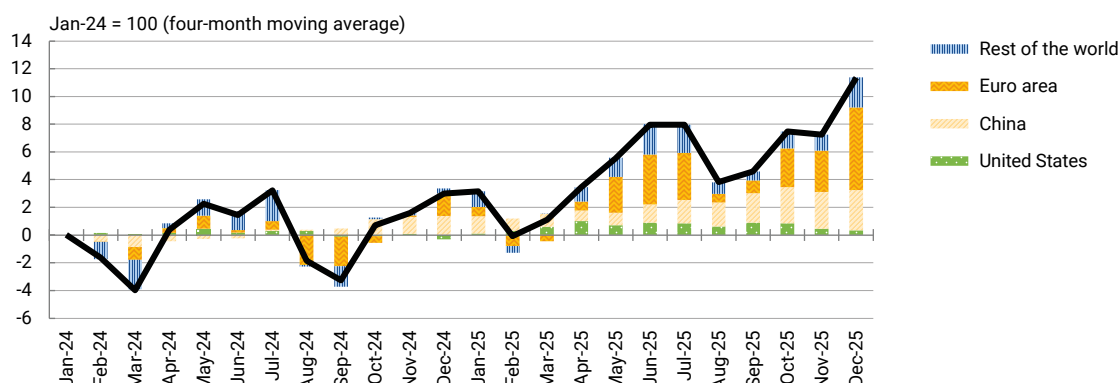
connectivity and teleworking trends – and with more conjunctural ones, due to the competitiveness gains of recent years.

- Turning to travel services, Spain’s share of global tourists (6.3%) consolidated above that observed between 2016 and 2019 (5.9%) thanks to the ongoing geographical and seasonal diversification. The increase in arrivals (3.2%) was mainly driven by the non-summer months, regions that account for a lower share of tourist arrivals and non-traditional source markets (Chart 1.23.b). Tourism expenditure grew faster in 2025 (6.8%) than the increase in tourist numbers.
- This offset the goods trade deficit, resulting in a trade surplus in Spain of 3.8% of GDP in 2025 (down 0.4 pp on 2024).
- Looking ahead to 2026, external sector developments are shrouded in a high level of uncertainty. The conflict in the Middle East considerably raises the uncertainty over global

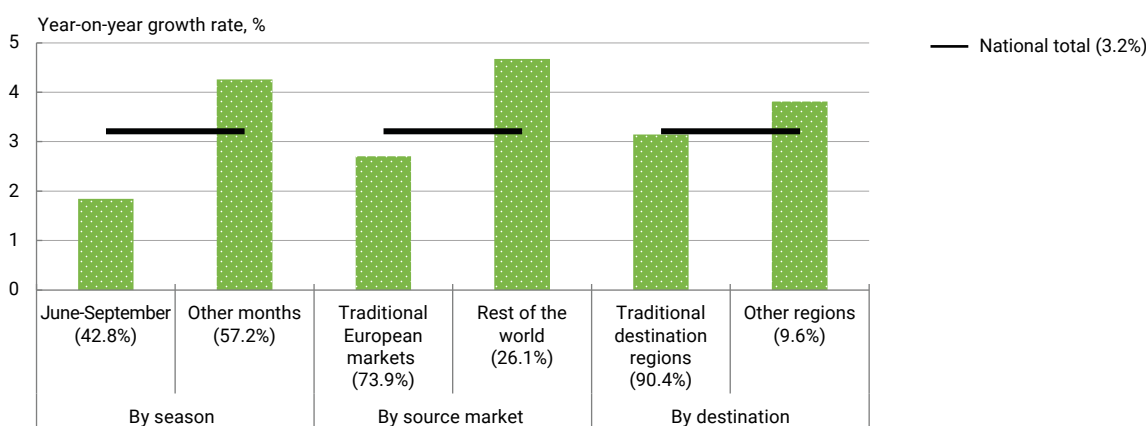
Chart 1.23

Goods imports recorded strong growth in 2025, while the geographical and seasonal diversification of tourist arrivals continued

1.23.a Real goods imports, by origin



1.23.b Growth in tourist arrivals in 2025 (a)



SOURCES: ECB, Ministerio de Economía, Comercio y Empresa, INE and WTO.

a The share of each category in total tourist arrivals to Spain is provided in brackets.



tourism in 2026, although some tourism flows could be diverted to Spain. Middle East⁴¹ countries account for close to 5% of total international tourism, with a small – albeit growing – share of tourists from Europe and America who could travel to Spain instead.⁴² The conflict could also have an impact on some of Spain’s Mediterranean competitors (Türkiye, Tunisia or Egypt). In past conflicts some tourism flows were diverted to Spain. However, factors such as exchange rates, higher fuel prices (which could hit air transport in particular) and the decline in agents’ income could mitigate this effect.

41 The Middle East includes Syria, Lebanon, Israel, Palestine, Jordan, Iraq, Iran, Kuwait, Saudi Arabia, Bahrain, Qatar, United Arab Emirates, Oman and Yemen.

42 Specifically, according to the World Economic Forum’s Travel & Tourism Development Index 2024, “Safety and security” is one of the tourism competitiveness pillars that sets Spain apart from its direct Mediterranean competitors.

4.4 The labour market

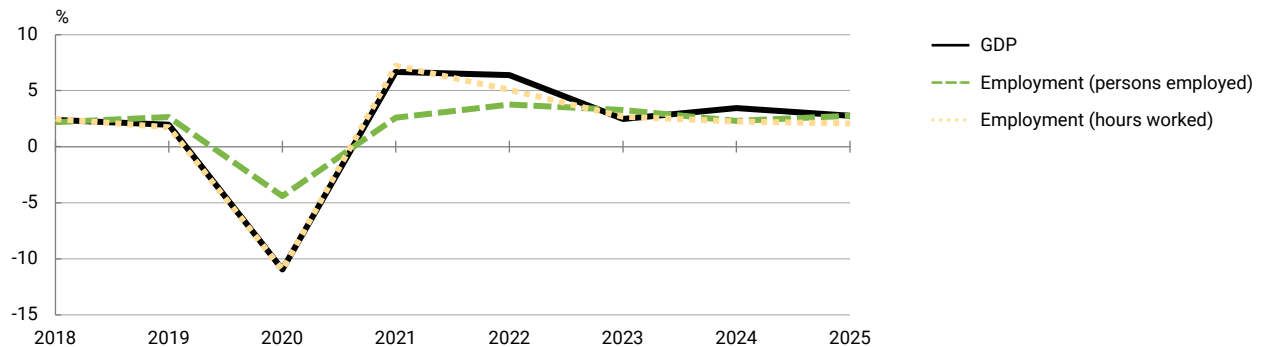
The Spanish labour market's momentum continued in 2025, extending the expansionary phase of recent years. Employment growth has been one of the main factors underpinning the Spanish economy's growth in this period.

- On Quarterly National Accounts figures, the number of persons employed grew by 2.7%, up 0.4 pp on 2024 (Chart 1.24.a). Total hours worked grew by 2.1%, prompting a fall in hours worked per person employed (-0.7%), suggesting that some of the adjustment associated with the cyclical downturn has arisen in the intensive margin.
- On the latest information, employment continued to perform favourably in 2026 Q1. In particular, the Spanish Labour Force Survey (EPA, by its Spanish initials) reported seasonally adjusted quarter-on-quarter growth of 0.5%, similar to that recorded by social security (0.6%), although both figures have eased compared with end-2025. This deceleration was compatible with high employment growth in March and April according to social security registration data, evidencing some resilience to the energy shock associated with the conflict in the Middle East, thanks, above all, to the robust performance of residential construction and tourism-related services.
- By sector, services remained the main driver of job creation in 2025. Over a broader time scale, since 2017 there has been a shift in the sectoral breakdown of employment, with construction and – within services – healthcare activities, information and communication, professional, scientific and technical activities and transportation and storage accounting for a larger share.⁴³
- The performance of employment has resulted in an easing of the growth in productivity per person employed, down to zero in 2025 following the 1.1% recorded in 2024. Per hour worked, productivity growth (0.7%) was in line with the average since 2013. Chapter 3 analyses the recent developments in productivity in Spain in more detail.
- Employment gains were accompanied by a significant rise in the labour force (1.7%), driven by population growth (1.3% in terms of the population over age 16) (Chart 1.24.b) and the increase in labour force participation, particularly among older workers and the foreign-born population.
- The unemployment rate continued on the downward path of prior years, ending 2025 below 10% for the first time since 2008 (Chart 1.24.c), although it edged up to 10.8% (10.3% in seasonally adjusted terms) in 2026 Q1. In any event, the unemployment rate remains high compared with other countries and there continue to be significant differences across regions and age groups.

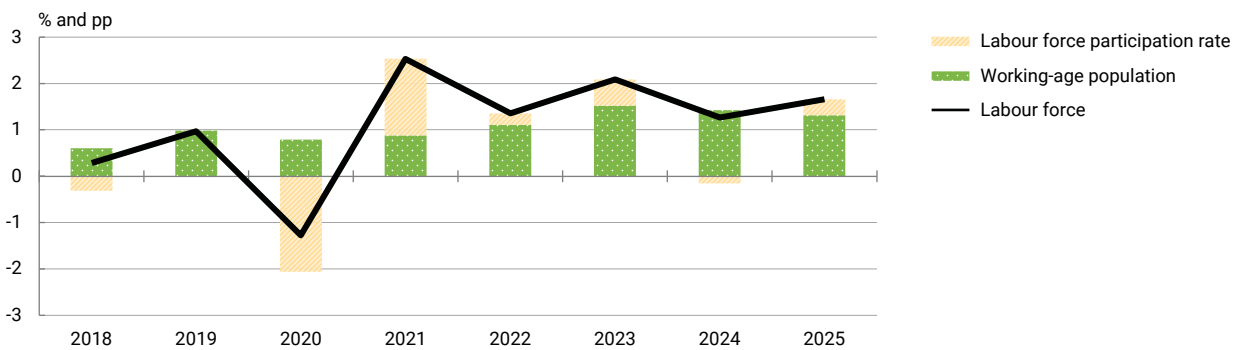
⁴³ Meanwhile, the sectors whose shares of employment have decreased the most are trade, activities of households as employers of domestic personnel, agriculture, education and manufacturing.

Chart 1.24
Employment growth continued to lower the unemployment rate

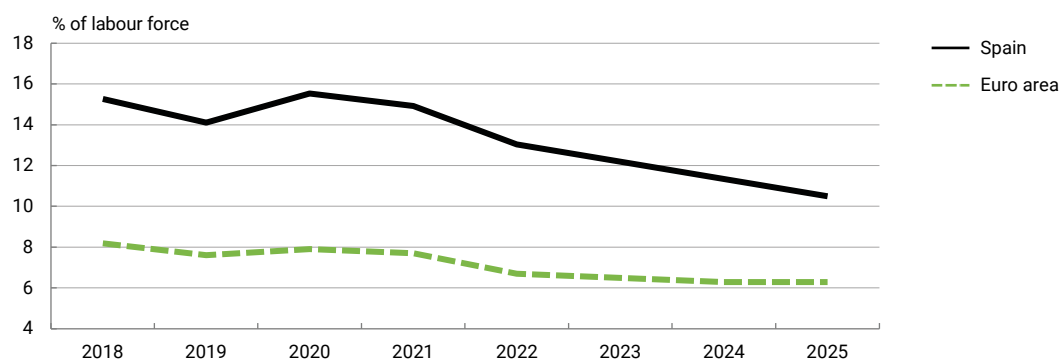
1.24.a GDP growth and employment



1.24.b Contribution to the year-on-year growth rate of the labour force



1.24.c Unemployment rate



SOURCES: INE and Eurostat.



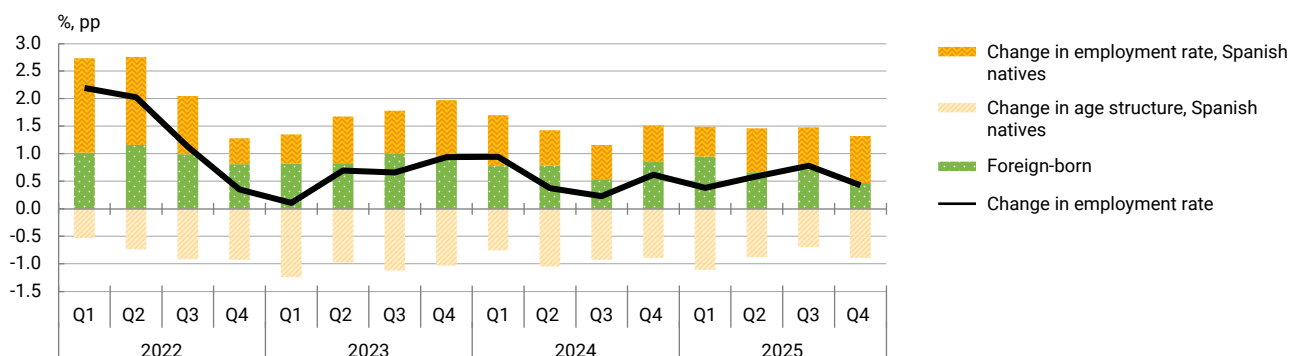
The improvement in the labour market was boosted by demographic and labour force participation factors. Immigration and the rise in the employment rate of Spanish natives offset the negative effect of gradual population ageing on the employment rate.

- Over the last four years, the employment rate has risen by an average of 0.8 pp per year (Chart 1.25.a), despite the negative contribution (-0.9 pp) of the composition effects

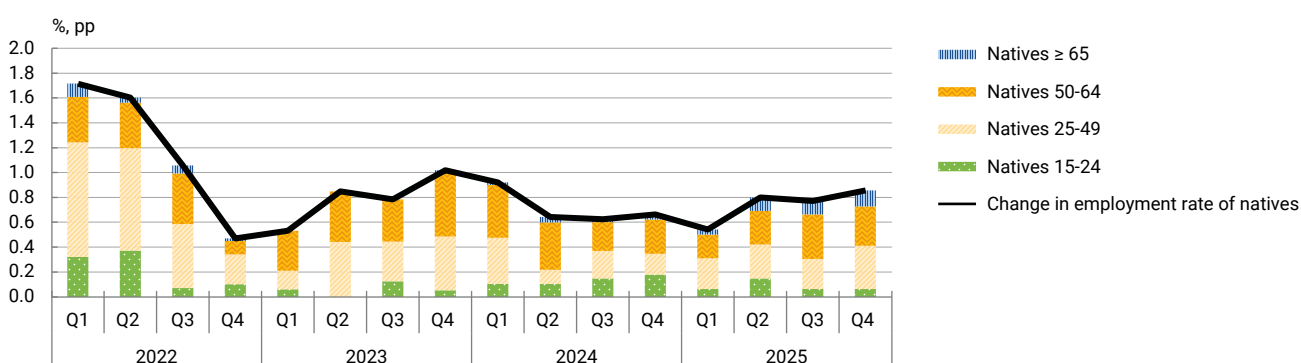
Chart 1.25

The employment rate has risen thanks to immigration and older native cohorts

1.25.a Decomposition of the year-on-year change in the employment rate



1.25.b Decomposition of the year-on-year change in the employment rate of Spanish natives



SOURCE: INE (EPA).



associated with population ageing. This growth reflects the positive impact associated with foreign-born workers (+0.8 pp), but also the increase in the employment rates of Spanish natives (+0.8 pp), which has been concentrated among adults and, above all, the over-50s (Chart 1.25.b).

- International comparisons show that the labour force participation rates of young people and older adults are lower than in other European countries. For instance, among young Spanish people (15-24), the labour force participation rate is 30.5%, below the figure in France (43.2%), Germany (56.7%) and the Netherlands (85%). Despite the recent improvement, Spain's labour force participation rate among the over-65s remains lower (4.1%) than in Germany (10.9%) and the Netherlands (14%).
- In terms of the unemployment rate, the main differences are concentrated among young people, of whom 23% are jobless in Spain, well above the rates in Germany (6.5%) and the Netherlands (8.6%), albeit in line with those of France (21.6%) and Italy (20.6%).

Looking ahead, public policies will play a key role in reducing structural unemployment, in particular by better adapting formal education to labour market needs and by better designing active and passive labour market policies.

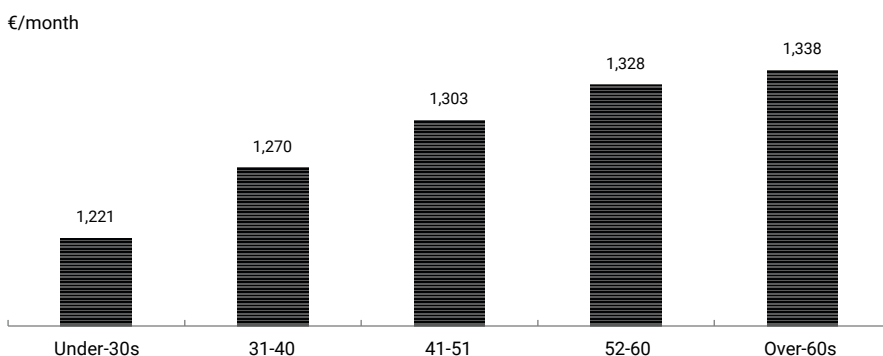
- In this respect, bolstering training and reskilling policies is essential so that workers' skills are better aligned with firms' needs, amid intense technological and demographic shifts, thereby increasing the employability of the jobless and reducing the persisting mismatches between labour demand and supply. With regard to vocational training, many small and medium-sized enterprises' (SMEs) limited administrative, organisational and tutoring capabilities are a key factor that might be slowing down the effective implementation of the dual system and generating significant differences across both regions and student profiles. In addition, the university education financing system should be reviewed to boost its ability to foster excellence.
- In terms of active labour market policies, the recent reform of non-contributory unemployment benefits is heading in the right direction, but may need some tweaks (such as to the unlimited-duration benefit for the over-52s) to strike a balance between protecting the unemployed's income and incentivising active job-seeking (see [Box 1.6](#)).
- In this respect, the employment support supplement – which aims to encourage the return to work and reduce inactivity traps by rendering unemployment benefits partially compatible with employment – could help get the unemployed back to work. Since November 2024 it has been mandatory for non-contributory unemployment benefits and applied by default for contributory unemployment benefits of over 12 months.⁴⁴ Its temporary and tapering nature seeks to encourage transitions to employment by maintaining a certain level of protection.
- However, on data to December 2025, the employment support supplement is not very prevalent among contributory benefit recipients (0.1% of those of over one year), being somewhat more so among recipients of non-contributory unemployment benefits (3.5%). This difference suggests that the incentive to work is too weak. Among the non-contributory benefit recipients, the older the recipient, the lower the supplement's relative prevalence, declining from 5.8% for the unemployed aged 40-49 to 1.2% for the over-60s.
- Evidence from the EFF 2022 suggests that older unemployed workers, in particular the over-50s, have a higher reservation wage (Chart 1.26.a). This profile, combined with the lower expected probability of finding work among this group, points to the employment support supplement potentially having a larger impact on the older group. Among the younger unemployed, whose reservation wages are lower, the supplement's potential impact on the decision to return to employment could be smaller. These findings suggest that the impact of these measures could differ across groups, highlighting the need to continue assessing their design.

44 Although in this case its application can be suspended in order to maintain entitlement to the benefit.

Chart 1.26

Older unemployed persons have a higher reservation wage

1.26.a Reservation wage: for what gross monthly wage would you be willing to work?



SOURCE: Banco de España (EFF 2022).

4.5 The role of immigration in the Spanish economy's current expansionary cycle

As was the case between 2005 and 2008, in the current expansionary cycle Spain has once again been a top destination for immigrants, spurred by a more flexible reception framework than in other European countries. Migratory flows have played a key role in the recent buoyancy of the Spanish economy, particularly via employment and labour supply. In addition, the evidence available suggests that they have not reduced job opportunities for Spanish-born workers.

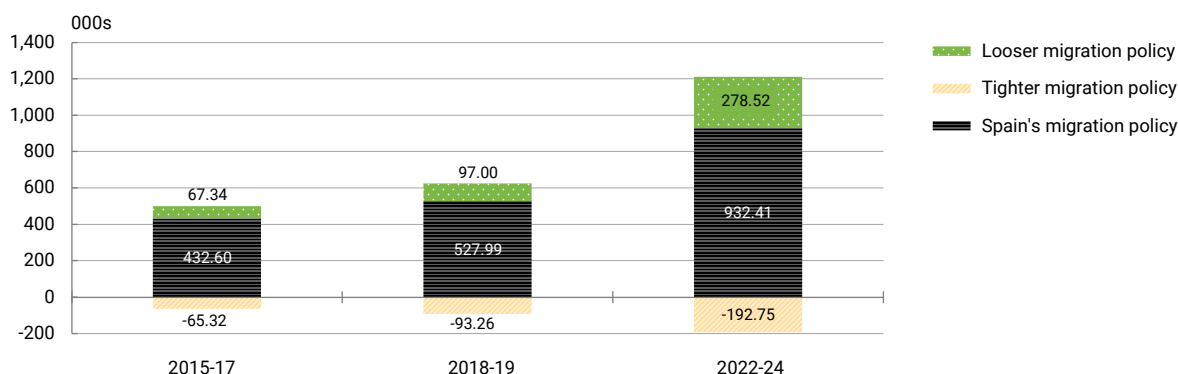
- Immigration has made a significant contribution to the Spanish economy's recent momentum, although estimating its aggregate impact is complex and would require a general equilibrium perspective. An approach based on accounting breakdowns indicates that, in the period 2022-25, the immigrant population accounted for around half (1.7 pp) of GDP growth and just over two-thirds of employment gains. In GDP per capita terms, immigration has contributed 0.5 pp to the annual average growth (2.7%).
- Various recent papers point to the importance of specific host country factors in attracting migratory flows to Spain. In particular, Banco de España analysis⁴⁵ shows that, together with the push factors linked to social and economic conditions in the countries of origin, variables specific to the host country explain a very significant part of the recent inflows to Spain.
- To quantify the impact of migration policies on immigrant inflows, counterfactual exercises were performed that compare different regulatory frameworks by simulating the impact of

45 Sastre, Suárez-Varela, Cuadrado and Di Stefano (2025). This evidence is consistent with the findings of Fernández-Huertas Moraga (2025), who decomposes the change in the flows to Spain and concludes that the pull factors are responsible for 57% of this change, more than in other Organisation for Economic Co-operation and Development countries.

Chart 1.27

Tighter or looser migration policies would change immigrant inflows to Spain

1.27.a Annual average immigrant inflows to Spain (a)



SOURCES: United Nations, OECD, ILO, Migrant Integration Policy Index (MIPEX) and Banco de España.

a Estimates obtained using the Poisson pseudo-maximum likelihood method in a "structural gravity" model. The theoretical framework underpinning these models is immigrants' maximisation of utility (random utility maximisation model), which depends on the benefit they obtain if they decide to migrate and the costs entailed by that decision. The model includes bilateral fixed effects between countries of origin and destination, time-varying fixed effects characterising the countries of origin and explanatory variables capturing characteristics of the countries of destination over time. The dependent variable is bilateral migration flows between the country of origin and the country of destination. The explanatory variables refer to economic conditions such as real wages and the unemployment rate and, as social determinants, an indicator of migration policy covering three of the eight MIPEX areas (ease of acquiring nationality, residence permits and family reunification), immigrant networks from the same country of origin already established in the country of destination and the degree of demographic ageing in the country of destination, measured by the ratio of the population aged 55-64 to that aged 15-24. The data used in the estimation cover the period 2008-19. The key explanatory variable for this counterfactual exercise is migration policy in Spain, Austria (chosen as the destination country with the tightest migration policy within the EU) and Portugal (chosen as the destination country with the loosest migration policy within the EU). The sum of the bilateral flows estimated by the model with Spain as the destination country is obtained, together with the same sum in the counterfactual scenarios in which Spain had Austria's or Portugal's migration policy since 2014. The black segment corresponds to the flows estimated by the model with Spain as the destination country using Spain's migration policy, while the green and yellow segments show the difference between this scenario and the counterfactuals.



tighter and looser policies than the Spanish ones. The results show that tighter (looser) policies have a significant impact on gross immigrant inflows, lowering (raising) them by around 20% (Chart 1.27.a).

- In terms of the composition of migratory flows, according to census micro data,⁴⁶ compared with the influx of the early 2000s, the share of immigrants from Latin America has grown at the expense of those from other EU countries. In educational attainment terms, the percentage of tertiary-educated immigrants has risen, although there has also been a slight increase in those with no more than a primary education (Chart 1.28.a). This is important because a high proportion of immigrants to Spain have traditionally had a low level of educational attainment, consistent with the presence of relatively unselective inflow channels, irregular flows and ex post legalisation processes.⁴⁷
- The strong migratory flows have not absorbed job opportunities for the Spanish-born, although they have fostered a sectoral reallocation of national employment. In particular,

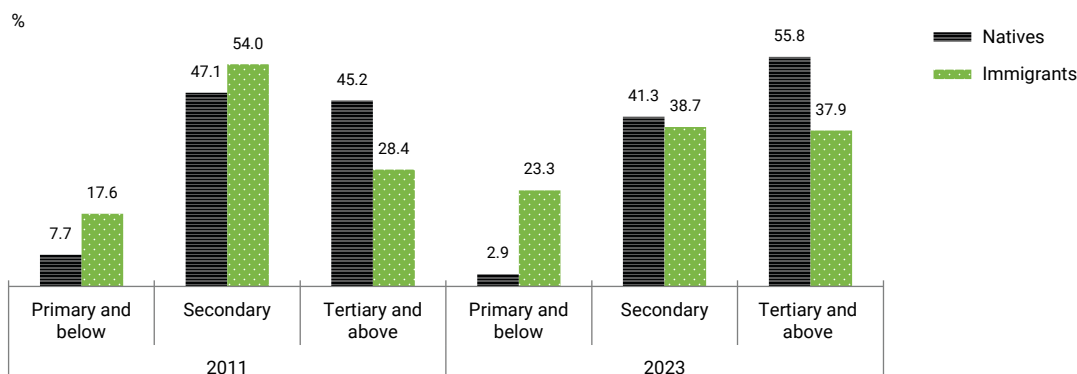
⁴⁶ See Anghel, Antón, Jimeno and Lacuesta (2026) for more details.

⁴⁷ Fernández-Huertas Moraga (2021).

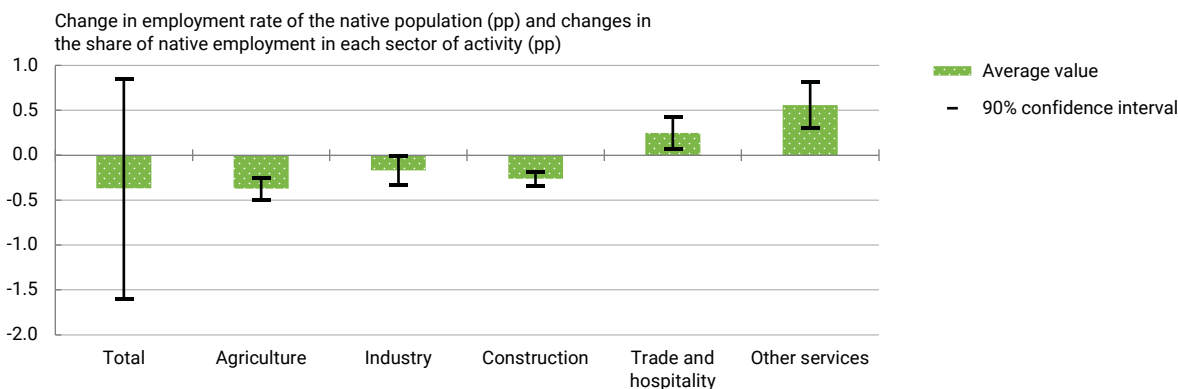
Chart 1.28

The proportion of tertiary-educated immigrants has risen, but recent immigrant flows have not had an adverse impact on natives' employment

1.28.a Educational attainment among natives and recent immigrants in 2011 and 2023 (a)



1.28.b Impact on native employment of the proportion of immigrants in the working-age population (b)



SOURCE: INE (Population and Housing Census 2011, Annual Population Census 2023, EPA and the continuously updated municipal population register 1999-2025).

- a Recent immigrant inflows are defined as the population of people born outside Spain and that have entered the country in the six years prior to the year of the census.
- b The chart depicts the results of the equations estimated using two-stage least squares at province-year level to identify the causal effect of immigration on the labour outcomes of the native population and on the sectoral composition of native employment. The explanatory variable is the share of immigrants in the province's working-age population (*ImmShare_pt*), which is expressed using a shift-share instrument constructed drawing on historical settlement patterns by country of origin and the specific aggregate immigration shocks by country of origin, following the methodology in Card (2001). Data on employment, labour force participation, unemployment and the sectoral composition are drawn from the EPA, while the information on the stock and flows of immigrants by province and country of origin is obtained from the continuously updated municipal population register. The analysis covers the period 1999-2025 and the standard errors are grouped at province level.



using an empirical approach that isolates the exogenous component of migratory flows,⁴⁸ it is estimated that the rise in immigration has not had statistically significant effects on the

⁴⁸ In this exercise, the share of immigrants in the working-age population of the province is estimated using a shift-share instrument constructed drawing on historical settlement patterns by source country and the specific aggregate immigration shocks by source country, following the methodology in Card (2001). Two-stage least squares at province-year level are used to estimate the impact on the aggregate employment rate and Spanish nationals' shares of employment by sector. Data on employment, labour force participation, unemployment and the sectoral composition are drawn from the EPA for the period 1999-2025, while the information on the stock and flows of immigrants by province and source country is obtained from the continuously updated municipal population register. The controls in the two-stage equations include (i) a broad range of provincial controls that change over time, (ii) provincial and time fixed effects and, (iii) in certain specifications, provincial linear trends to absorb persistent structural patterns.

employment rate of Spanish-born workers. However, analysing the sectoral breakdown reveals a reallocation process whereby, because of migratory flows, Spanish-born workers tend to account for a smaller share of employment in agriculture, industry and construction, and gradually concentrate in services sub-sectors (Chart 1.28.b).

Recent changes in migration policies have increased the tools available to improve the selection and labour market integration of immigrants, although there are challenges remaining.

- At the upper end of the distribution by occupation, the share of permit approvals linked to Entrepreneurs Law 14/2013 in total residence permits has risen to account for more than 10%.⁴⁹ This rise reflects the increase in permits for management jobs and highly skilled staff and the rapid expansion of digital nomads, which began to represent a significant share of new permits in 2024.
- In addition to selection, some migration policies may favour social and labour market integration. In this respect, the 2022 reform of residence permits based on social integration or family ties (*por arraigo*, in Spanish) has been an important factor behind the higher number of permits granted⁵⁰ (Chart 1.29.a), which has driven the transition to formal employment of non-EU migrants that already resided in Spain before obtaining residence (Chart 1.29.b),⁵¹ in particular in sectors such as construction and hospitality.⁵²
- Overall, the successive reforms of the migration framework have provided significant scope for improving selection and integration by adapting migratory flows to labour demand, although its implementation continues to pose challenges. At the lower end of the distribution, the list of hard-to-fill jobs is still not a useful tool for identifying needs and encouraging the use of regular migration channels.⁵³ In addition, other avenues could be explored such as earmarking funds to training workers in source countries to cover needs in both markets and thus boost channels that combine temporary regular migration with local employment in the source country.⁵⁴ Thus, the employment gap for immigrants remains high, standing at around 20 pp for the most recent influx in 2025. This initial gap is larger for immigrants from

49 There is a strong correlation between authorisations of this type of visa and the inflow of skilled immigrants by province.

50 Almost 200,000 initial authorisations per year on average in 2023-24 versus an average of 35,000 in the period 2014-19, during which they barely grew.

51 Estimations using a difference-in-differences model, with provincial data, that explains the growth in social security registrations based on the change in residence permit approval rate relative to the population in each province. The same regressions for the EPA, which includes formal and informal employment, do not reveal statistically significant changes.

52 Agriculture and domestic help do not show increases in non-EU foreign nationals registered with social security. This may suggest that these sectors are gateways for illegal immigration, but that once they have been legalised they are unable to retain immigrants. Neither is a change in transportation observed. This could mean that the problems of validating and officially recognising qualifications may also be a bottleneck in lower-skilled sectors that nonetheless require some form of qualification.

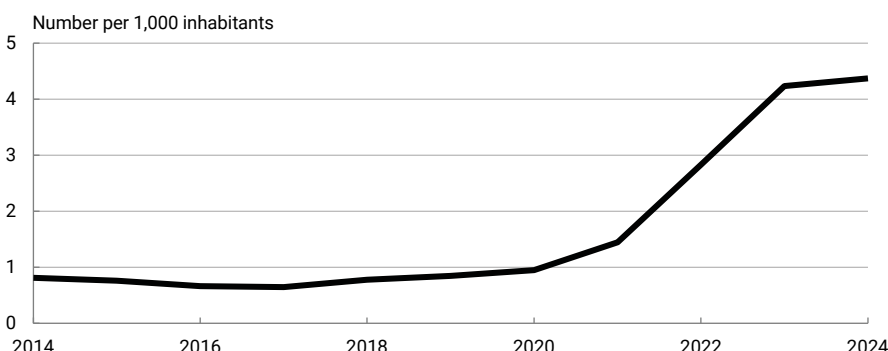
53 While the National Public Employment Service prepares indicators for hard-to-fill jobs drawing on detailed information on vacancies, job offers, contracts and mobility at regional level provided by the regional public employment services, the catalogue has yet to produce a significant number of hires of workers abroad. The bulk of the arrivals of foreign workers through legal channels has arisen to date via other arrangements, such as the National Public Employment Service's "negative certificates" (certificate of non-receipt of unemployment benefits), seasonal employment schemes (collective management of hiring in the country of origin) and bilateral agreements.

54 World Bank (2025).

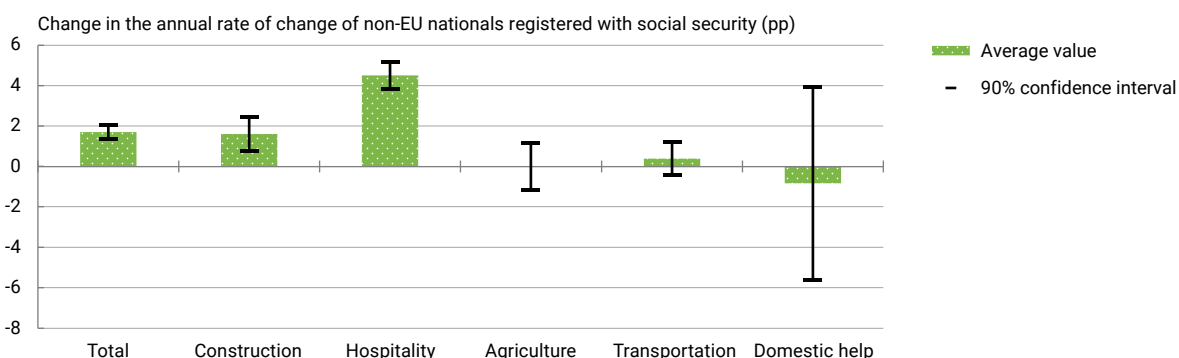
Chart 1.29

Residence permits *por arraigo* influence the formal employment of non-EU nationals (a)

1.29.a Residence permits *por arraigo*



1.29.b Impact of changes in the rate of residence permits *por arraigo* in 2022 on non-EU nationals' formal employment (b) (c)



SOURCE: Ministerio de Inclusión, Seguridad Social y Migraciones.

- a Royal Decree 629/2022 of 26 July 2002 amending the Implementing Regulations of Organic Law 4/2000 on the rights, freedoms and social integration of foreigners in Spain, following the reform by Organic Law 2/2009, adopted by Royal Decree 557/2011 of 20 April 2011.
- b Formal employment is defined as being registered with social security.
- c The equations are estimated using ordinary least squares at province-year level to identify the causal effect of changes in the rate of residence permits *por arraigo* on the number of non-EU nationals registered with social security. The key explanatory variable is the change in such rate, defined as the number of authorisations per 1,000 inhabitants of the 2014 population. The dependent variable is the change in non-EU nationals registered with social security overall and by sector.



Africa and Asia and has widened in recent years compared with the gap for the pre-2008 immigrants.⁵⁵ Policies that could reduce these gaps include eliminating bottlenecks in the validation and official recognition of non-university qualifications in regulated professions where demand exceeds the supply of national workers, as well as promoting mechanisms for the recognition of prior work experience in the source country and in Spain.

4.6 The inflation differential with the euro area and persistent services inflation

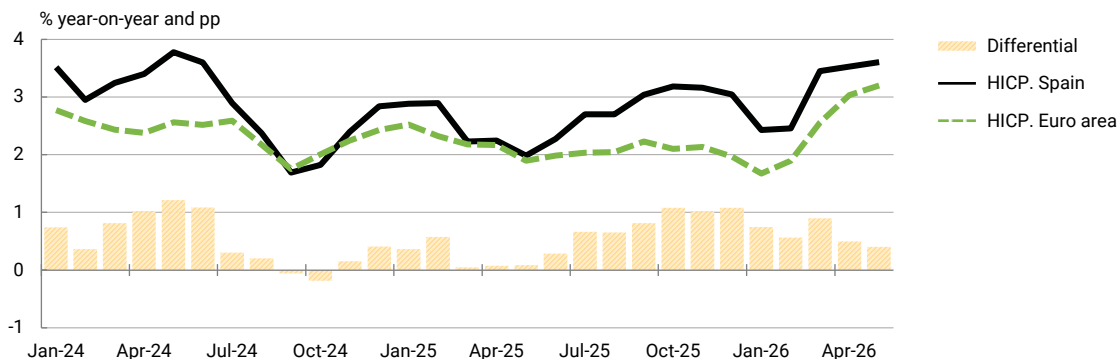
In the context of the gradual disinflation process in Spain and in the euro area in recent years, the Spanish economy has recorded a positive inflation differential since the end of 2023, reflecting factors associated with energy and stickier services inflation alike.

55 Anghel, Antón, Jimeno and Lacuesta (2026).

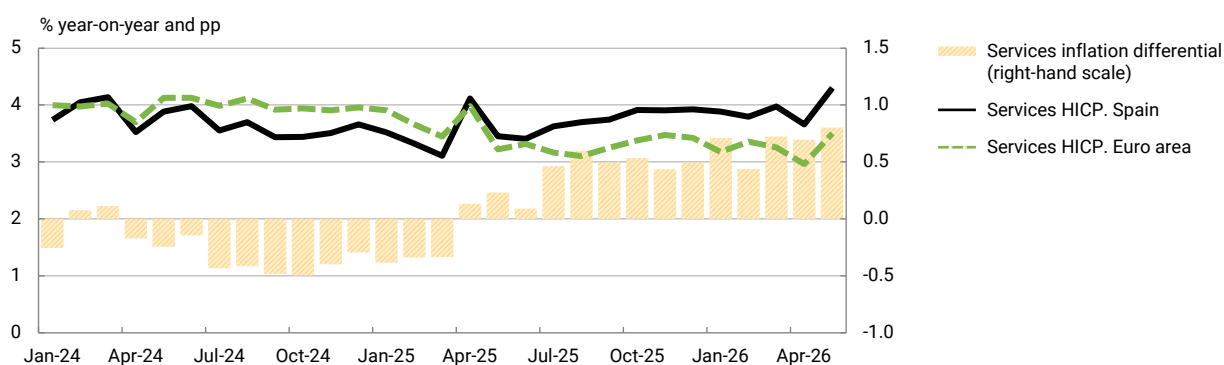
Chart 1.30

The inflation differential between Spain and the euro area has remained positive over the last two years. Services prices are proving highly sticky in both areas

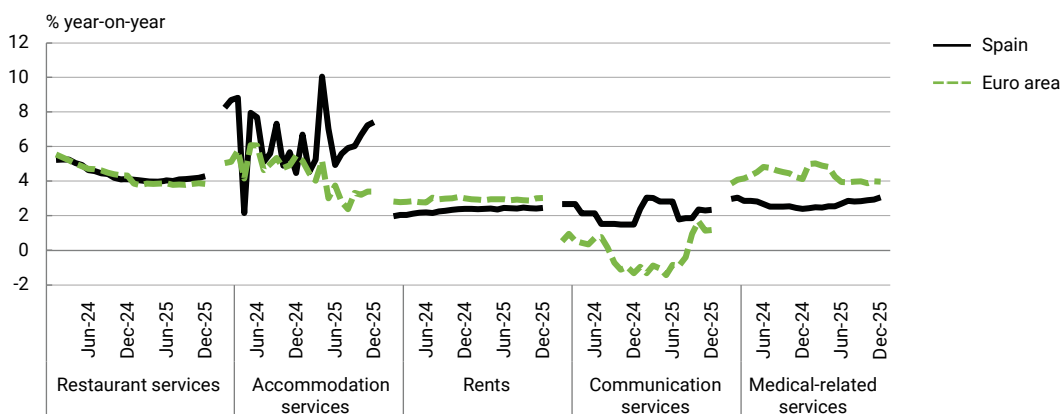
1.30.a HICP in Spain and the euro area: changes and differential



1.30.b Services HICP in Spain and the euro area: differential



1.30.c Services HICP in Spain and the euro area: change in selected aggregates



SOURCES: Eurostat, INE and Banco de España.



— In the wake of the outbreak of the war in Iran, headline inflation has risen in Spain and in the euro area (reaching 3.6% and 3.2%, respectively, in May (Chart 1.30.a)), as a result of higher energy prices.⁵⁶

⁵⁶ Due to this rise in energy prices, the Spanish Government adopted tax measures to reduce the impact of the higher prices of the energy commodities that directly affect headline inflation.

- Prior to this increase, services had begun to contribute positively to the inflation differential since April 2025 (Chart 1.30.b), although energy had been its main driver. The positive energy inflation differential in Spain was attributable to taxes returning to normal following the measures adopted to dampen the rise in prices stemming from the war in Ukraine.⁵⁷ In addition, food prices decelerated less sharply in Spain than in the euro area, which contributed to the headline inflation differential up to summer 2024.

Services inflation is highly persistent, in line with the euro area, albeit with some country-specific features in Spain.

- In Spain services inflation averaged 3.6% in 2025, just above the rate recorded in the euro area (3.4%), but higher than the rates in some of the major economies, such as France and Italy (2.2% and 2.9%, respectively). Services inflation is relatively broad-based, with more than 30% of its subclasses recording increases above 4% in recent quarters, both in Spain⁵⁸ and in the euro area.
- However, within the services sector, developments in Spain and the euro area vary somewhat. Notable among the items making the largest contributions to services inflation in Spain in 2025 – and whose contribution exceeded that observed in the euro area – are restaurant services, accommodation services, transport services and communication services (Chart 1.30.c). By contrast, rents, health-related services, package holidays, insurance and other services have made smaller contributions to services inflation in Spain.
- By historical standards, services inflation was high in Spain in the early years of the Economic and Monetary Union, with a differential with the euro area of around 1 pp, mainly attributable to restaurant services prices and, to a lesser extent, domestic services.
- Compared with that period, the prices of food services, recreational and cultural services and health-related services have, in recent years, followed a similar path to that of the beginning of the 21st century. By contrast, the prices of accommodation services and package holidays have risen more in the current period (Chart 1.31.a). Insurance and communication services prices have also risen more than in that period, while education, rents, transport services and household services have risen more moderately.

A decomposition of relative contributions shows that supply-side factors have played a somewhat more prominent role than demand-side factors in explaining services inflation.

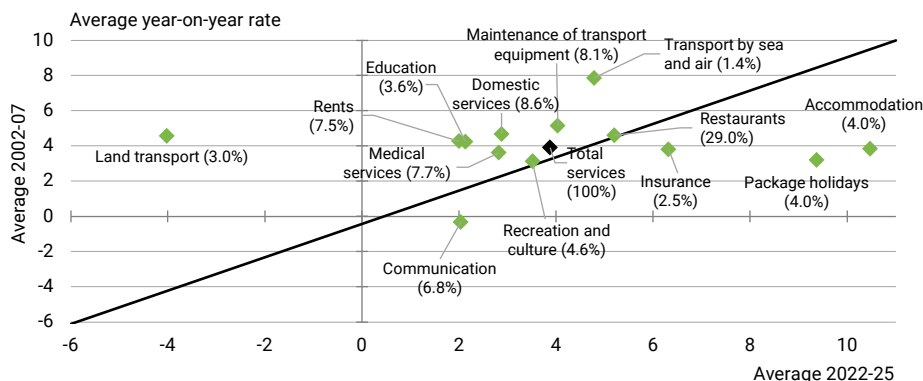
⁵⁷ Between 2022 and 2023 the excise duty on electricity was cut to 0.5%, before gradually returning to normal between 2024 and 2025 (rising to 2.5%, 3.8% and 5.11% in January 2024, March 2024 and January 2025, respectively). In addition, the VAT rate on electricity was lowered to 5% in 2022 and 2023 and, depending on the cost per MWh of electricity, was 10% or 21% in 2024 (the VAT rate on electricity was 21% between March and June and 10% in the other months). In January 2025 the VAT rate on electricity returned to normal (21%). The VAT rate on gas was also cut to 5% between 2022 and 2023 and subsequently raised to 10% in January 2024 and its normal rate (21%) in April of that year.

⁵⁸ In Spain the subcomponents that grew above 4% in 2025 H2 accounted for just over 40% of the services consumption basket.

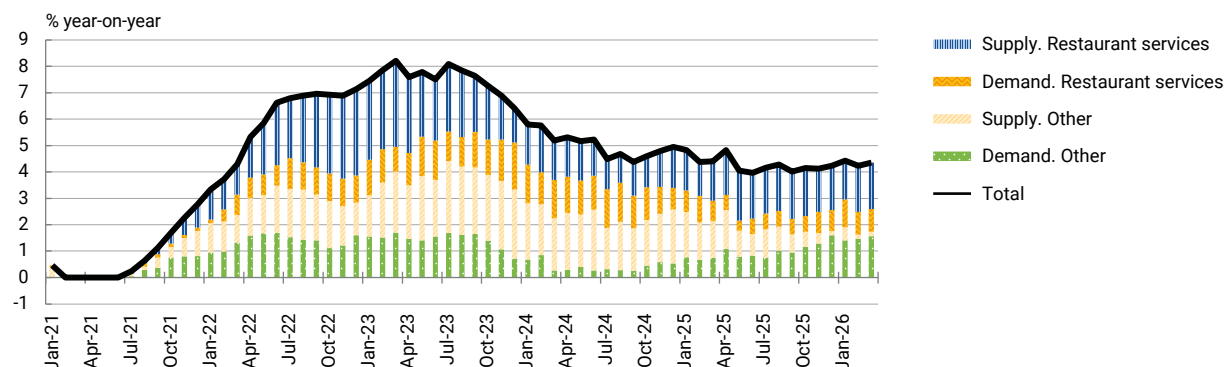
Chart 1.31

The current services inflation episode bears similarities to that of the early 21st century. In the current episode, supply-side factors have been key to its persistence

1.31.a Services HICP: changes in aggregates in 2002-07 and 2022-25 (a)



1.31.b Decomposition of services inflation. Services considered in the model for Spain (b)



SOURCES: Eurostat, INE and Banco de España.

- a The weight of each aggregate in total services in 2025 is provided in brackets.
- b Services inflation is decomposed based on the methodology proposed by Shapiro (2024). The services index excludes those classes whose price changes are regulated or occur infrequently (12% of services) and those for which no quantity measure was found for matching to the corresponding HICP class (29% of services). Overall, 59% of the services consumption basket is considered.



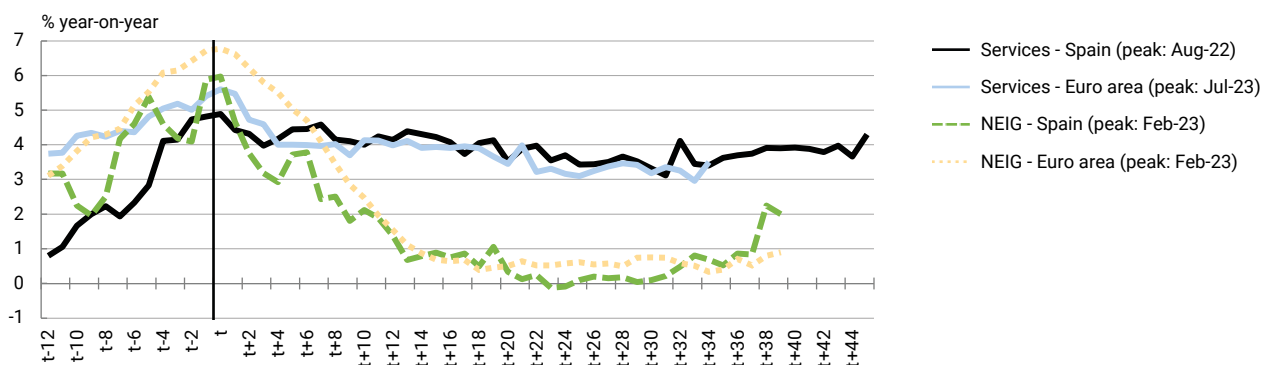
— Based on the approach proposed by Shapiro (2024),⁵⁹ supply-side factors are found to have played a significant role in services price developments between 2021 and 2025, although their contribution has followed a downward path since services inflation peaked in 2023. Demand-side factors made a substantial – albeit somewhat smaller – contribution over this period (Chart 1.31.b). A sizeable share of the supply-side contribution to services inflation is related to developments in restaurant services prices, whose dynamics have a more pronounced impact on services because of the weight of this component in the consumption

59 The methodology proposed in Shapiro (2024) is based on identifying – using the proposed model – those shocks that affect activity and prices in the same direction (demand shocks) or in opposite directions (supply shocks). Granadal, Pacce and Sánchez García (2026) apply the model to Spain.

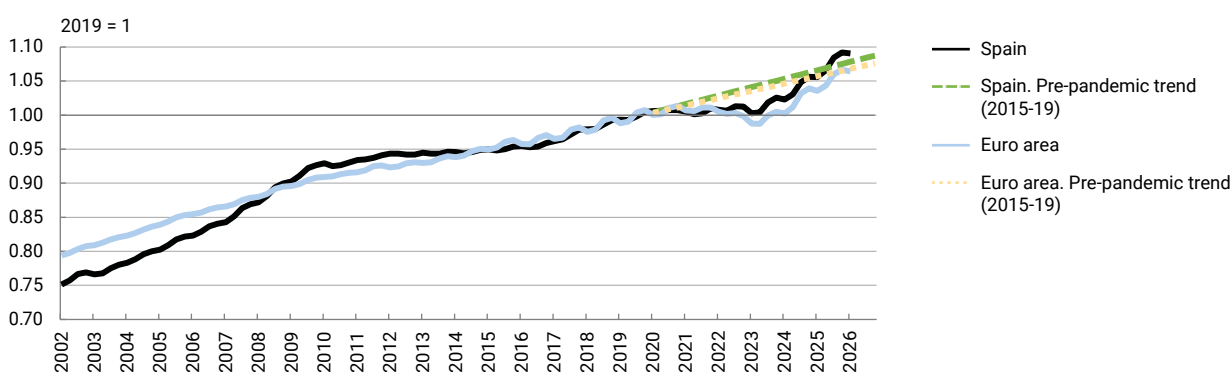
Chart 1.32

The downward stickiness of services inflation contrasts with the course of NEIG prices

1.32.a Services and NEIG HICP: inflation before and after the recent peak (a)



1.32.b Relative prices of services over NEIG (b)



SOURCES: Eurostat, INE and Banco de España.

- a The month in which the aggregate recorded its peak year-on-year increase in the recent period is provided in brackets. In all cases it coincides with the peak since January 2002, except for services in Spain (where the peak was 4.9% in May 2002).
- b Ratio of services HICP to NEIG HICP using 2019 as the base year. Six-month moving averages. The pre-pandemic trend is estimated using data for the period 2015-19.



basket.⁶⁰ In this respect, restaurant services prices appear to be particularly affected by supply-side factors.⁶¹

The high persistence of services inflation contrasts with the path of non-energy industrial goods (NEIG) prices in both Spain and the euro area.

- In the most recent period NEIG inflation peaked in Spain and the euro area in February 2023, and since mid-2024 the inflation rates have been very subdued,⁶² in contrast to the stickiness of services inflation (Chart 1.32.a).

⁶⁰ Using the same methodology to decompose supply and demand-side factors produces similar results for the euro area.

⁶¹ Various activity trackers related to food and beverage service activities signal drops in activity. In this respect, the services sector production index, electricity consumption and employment (measured using the EPA) in the food and beverage services sector recorded negative year-on-year rates in 2025.

⁶² Albeit with some exceptions in Spain in recent months, linked, above all, to the volatility of clothing and footwear inflation.

- In any event, the relative price level of services over NEIG has shown a clearly positive trend since the beginning of the century (Chart 1.32.b). In the 2000s, the relative price level increased more in Spain than in the euro area, although developments were similar in subsequent years. This upward trend was only briefly interrupted at the onset of the surge in inflation following the COVID-19 pandemic, reflecting supply chain disruptions that pushed up NEIG inflation. After this brief interruption, relative price developments were similar in Spain and the euro area, although in 2025 the gap between NEIG and services inflation became somewhat more pronounced in Spain.

Amid severe shocks to input prices since late 2021, profit margins help explain some of the difference in NEIG and services price developments, as labour costs moved in parallel.

- Higher unit labour costs (ULCs) in sectors related to the production of NEIG and services do not appear to have played a dominant role in the differences in inflation across these components. ULCs followed a very similar path in market services and in manufacturing (Chart 1.33.a). However, given that labour accounts for a larger share of total costs in services than in manufacturing,⁶³ the divergence in the relative price level of services over NEIG somewhat reflects observed wage dynamics. In any event, the similarity in the increase in total labour costs in both sectors was also observed during the period of elevated services inflation (2002-07).
- As mentioned above, the surge in inflation in 2022 was associated with the impact of post-pandemic supply bottlenecks and the war in Ukraine on intermediate input and energy costs.⁶⁴ Initially, firms appear to have absorbed part of these higher costs by reducing their profit margins – particularly in manufacturing and some services sectors, such as trade and hospitality (Chart 1.33.b).⁶⁵ Since then, as part of the intermediate cost shock unwound (and financial conditions gradually eased), firms have restored their profit margins, doing so more markedly in some market services sectors – particularly those where strong demand has allowed for greater price increases, such as tourism-related activities (trade and hospitality).

Overall, since the end of 2021 the cumulative contribution of labour costs and firms' profits to the gross value added (GVA) deflator of the market economy has been in line with their respective shares in GVA.

- During the inflationary episode observed since 2021, both labour costs and profits have made similar contributions to the GVA deflator of the market economy. Initially (up to the end of 2023), the pace of growth of this deflator was driven primarily by an increase in unit GOS (Chart 1.33.c) and, to a much lesser extent, by ULCs, in keeping with wages' greater rigidity in response to rising prices. Subsequently, in 2024 and 2025, the growth rate of ULCs became

⁶³ According to the *Estadística Estructural de Empresas* (Structural Business Statistics) for 2024, in manufacturing labour costs account for 14% of a unit of output, but 33.3% in (non-financial) market services.

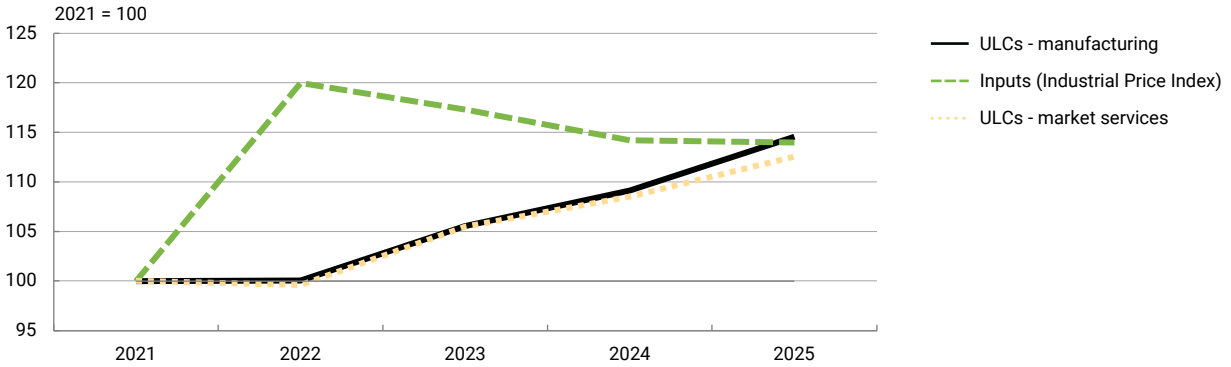
⁶⁴ Banco de España (2023).

⁶⁵ In addition, firms had to cope with the higher borrowing costs prompted by monetary policy tightening, which also affected their price setting decisions.

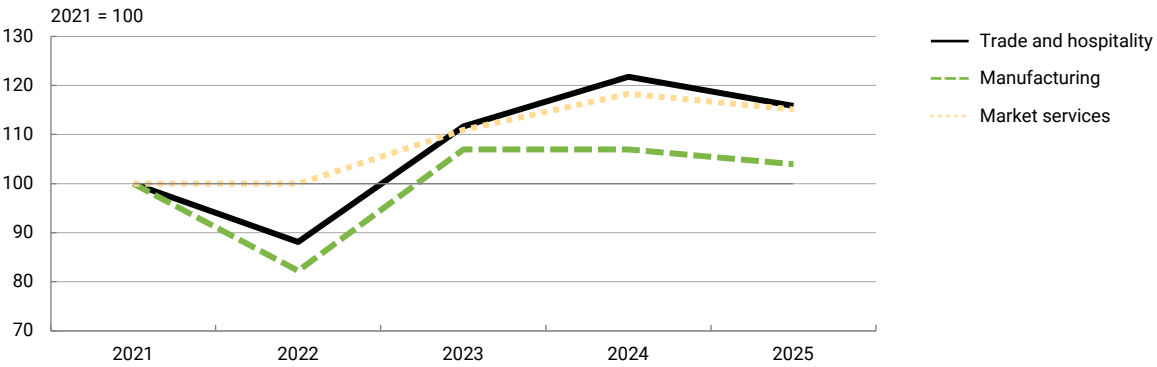
Chart 1.33

Firms' profit margins initially absorbed part of the 2022 inflationary shock. Their subsequent recovery has been stronger in some services sectors

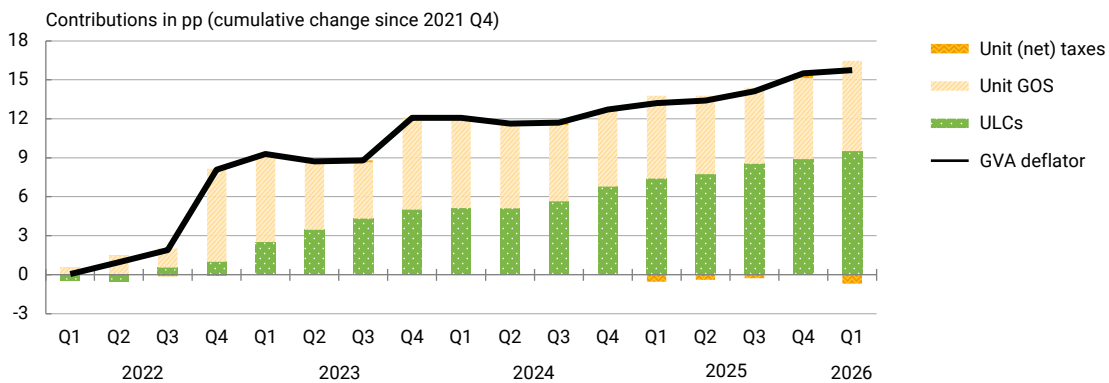
1.33.a Cost pressures



1.33.b Profit margins in market services and in manufacturing (a) (b)



1.33.c Decomposition of the GVA deflator. Market economy



SOURCES: AEAT, INE and Banco de España.

- a Calculated as the ratio of gross operating profit to total sales, which, in turn, are proxied by tax authority data on VAT returns and personal income tax withholdings. Current population.
- b "Market services" excludes wholesale trade of fuel, gas and electricity, financial and insurance activities, recreation activities and other services. "Manufacturing" excludes the manufacture of refined petroleum products. Trade is consistent with the definition of market services.



Table 1.5
Breakdown of GVA deflator developments in manufacturing and market services (periods 2022-23 and 2024-25)

	GVA deflator (average year-on-year growth)		ULCs (contribution to change in the deflator)		Unit GOS and unit taxes (contribution to change in the deflator)	
	2022-23	2024-25	2022-23	2024-25	2022-23	2024-25
Manufacturing	4.9	2.1	1.5	2.4	3.4	-0.3
Market services	5.2	2.0	1.5	1.8	3.7	0.1
Trade, transportation and accommodation and food services	4.6	2.8	1.2	1.5	3.4	1.3
Information and communication	2.2	2.5	0.2	3.4	2.0	-1.0
Financial and insurance activities	25.6	-0.8	1.3	1.1	24.3	-1.9
Real estate activities	3.4	1.6	0.3	0.1	3.1	1.5
Professional, scientific, technical, administrative and support service activities	3.2	1.0	1.9	3.1	1.3	-2.1
Arts and recreation, repair of household goods and other services	1.8	2.8	0.8	2.8	1.0	-0.1

SOURCES: INE and Banco de España.

more pronounced and replaced unit GOS as the main driver of domestic inflation. In 2025 ULCs in the market economy increased by 4.0%, accelerating compared with 2024 (3.1%).

- This pattern – where unit GOS contributed more to the GVA deflator in 2022-23, followed by a recovery in the contribution of ULCs in the subsequent two years – has been fairly widespread across sectors and is observed in both manufacturing and market services. However, the strength of the contribution of ULCs to deflator growth in the most recent period varies somewhat across services sectors, with information and communication and professional and scientific activities seeing ULCs make a stronger contribution (Table 1.5).

4.7 Wage growth in 2025 allowed for a recovery in purchasing power

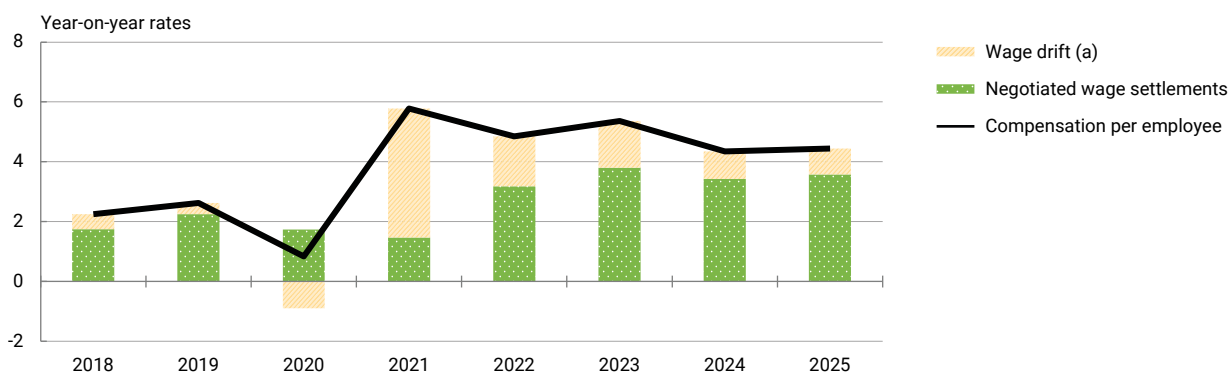
Growth in compensation per employee has remained elevated in the market economy, reflecting both negotiated wage settlements in collective bargaining agreements and an additional contribution from wage drift.

- In particular, compensation per employee has grown by more than 4% over the past two years, while negotiated wage settlements have stood at around 3.5% (Chart 1.34.a), above the benchmark set in the fifth Employment and Collective Bargaining Agreement (3% for 2025). Information from the collective agreements signed in previous years points to wage settlements for 2026 moderating somewhat, with negotiated wage increases of around 2.9% to April.

Chart 1.34

In a tight labour market, compensation per employee continues to grow at around 4%

1.34.a Compensation per employee, negotiated wage settlements and wage drift



1.34.b Ratio of vacancies to jobseekers (b)



SOURCES: Banco de España, INE, Indeed Data Portal, Ministerio de Trabajo y Economía Social and Eurostat.

- a** Wage drift is defined as the difference between the change in compensation per employee and the change in negotiated wage settlements in collective agreements.
- b** Seasonally adjusted data. The ratio of vacancies to jobseekers is calculated using data on vacancies in the Quarterly Labour Costs Survey (QLCS) up to 2025 Q3 and by constructing a measure of jobseekers using EPA data. Jobseekers are calculated as the weighted sum of the short-term unemployed, the long-term unemployed, the economically inactive who want to work, the economically inactive who do not want to work and employees, weighting each group according to their relative probability of finding work. Projections are depicted for 2025 Q4 and 2026 Q1, calculated on the basis of a linear regression model where the dependent variable is the standardised number of vacancies in the QLCS and the independent variable is the standardised vacancy index of the Indeed employment portal, assuming a value for jobseekers in 2026 Q1 equal to the average for 2025. The vacancy data from Indeed are daily data to 6 February 2026. The quarterly time series is constructed by averaging the daily values.



- The recent rise in inflation associated with the energy shock following the outbreak of the conflict in the Middle East is expected to have a limited impact, at least in the short term, on negotiated wage increases. The significant inertia in collective bargaining – reflected in the predominance of collective bargaining agreements spanning more than one year – means that around 70% of the workers covered by collective agreements have already negotiated their wage increases for 2026. In addition, the impact of wage indexation clauses has been smaller in recent years than in the past.⁶⁶
- Wage growth has been relatively widespread across sectors, although the most notable increases in compensation per employee in 2025 were recorded in agriculture (5.7%),

⁶⁶ Izquierdo and Herrera (2022).

construction (4.8%) and market services (4.7%). Real compensation per employee increased by 1.4% in 2025, marking a recovery in purchasing power following the inflationary shock that began in mid-2021 (standing, in real terms, 3.8% above its level at that time).

Recent wage developments are taking place amid significant labour market tightness.

- One measure that proxies this tightness is the ratio of vacancies to jobseekers, as it reflects the extent to which jobseekers (comprising the unemployed, the employed and the economically inactive) compete for available vacancies. This ratio has increased significantly, from around 1.3 vacancies per 100 jobseekers in 2020 to levels close to 3 since 2023, and is showing no signs of moderating (Chart 1.34.b).

Immigration to Spain may have helped ease labour market tightness somewhat, but estimating this impact is subject to significant methodological challenges.

- First, the inflow of immigrant workers increases labour supply, which may exert downward pressure on wages for certain employment segments or skill levels. Second, immigration can also have positive effects on the wages of the native-born through complementarities, by enabling specialisation in higher productivity or value-added tasks. Empirically identifying these effects is particularly complex in the above-mentioned setting characterised by the sectoral reallocation of native workers, making it difficult to isolate the direct impact of immigration on actual wages.
- An initial exercise seeking to establish the relationship between the strength of migratory flows and developments in native workers' wages shows that, on average, wages have not fared much differently in the provinces that have received a larger number of immigrants than in those that have received fewer immigrants.⁶⁷

⁶⁷ However, this aggregate result may be consistent with an easing of wage pressures in provinces with higher levels of immigration, insofar as the above-mentioned shift in the composition of native employment towards higher value-added tasks may, at the same time, have increased the average wage. It is also possible that the effects of immigration may vary across different groups of native workers, with differentiated impacts along the wage distribution and depending on specific characteristics or occupations.

5 The challenge of tackling the structural budget deficit

5.1 Revenue and expenditure growth

In 2025 the general government budget balance improved amid strong growth in revenue and government spending. The improvement is largely attributable to temporary factors, while there have been no structural changes in the budgetary position compared with the pre-COVID-19 situation.

- Government revenue grew by 7.5% year-on-year in 2025 (Chart 1.35.a), driven by the rise in tax revenue (9.6%). This strong growth was due to the expansion of macroeconomic tax bases, the discretionary measures adopted⁶⁸ and the effect of fiscal drag on personal income tax.
- Meanwhile, government expenditure increased by 5.5% year-on-year, also above its historical average. This occurred despite a significant decline in temporary expenditure items (related to the October 2024 flash floods in Valencia and to various court rulings), which fell from 0.9% of GDP in 2024 to 0.4% in 2025. Excluding these items, expenditure would have grown by 6.7% year-on-year.
- As a result, the budget deficit declined by 0.8 pp in 2025, to 2.4% of GDP. The primary balance was in equilibrium (-€16 million) and, excluding temporary factors, would even have been a primary surplus (Chart 1.35.b). These favourable developments contrast with the much more limited fiscal consolidation in the euro area (where the deficit decreased from 3.0% in 2024 to 2.9% in 2025), although public debt in Spain (100.7% of GDP) remains above the euro area average (87.8% of GDP).
- However, the improvement in Spain's budget balance in 2025 is largely attributable to temporary factors. In addition to a 0.5 pp decline in extraordinary expenditure, temporary revenue rose by 0.2 pp – owing to the cap of 50% on the deduction of losses at subsidiaries under corporate income tax, which cannot be deducted at present but may be carried forward over the next ten years – and a further impulse of 0.2 pp stemming from the business cycle.
- Indeed, the reduction in the budget deficit in 2025 was compatible with net expenditure growth⁶⁹ exceeding the commitment of 3.7% under the Medium-Term Fiscal Structural Plan (MTP) (Chart 1.35.c).⁷⁰

68 The main measures that increased tax revenue in 2025 are: the full normalisation of VAT rates on energy and food, the excise duty on electricity and the tax on electricity generation; the reinstatement of the cap on offsetting tax loss carryforwards under corporate income tax and the temporary extension of the 50% cap on the deduction of losses at subsidiaries, likewise under corporate income tax; and the increase in social security contributions due to the phasing-in of the latest pension reform.

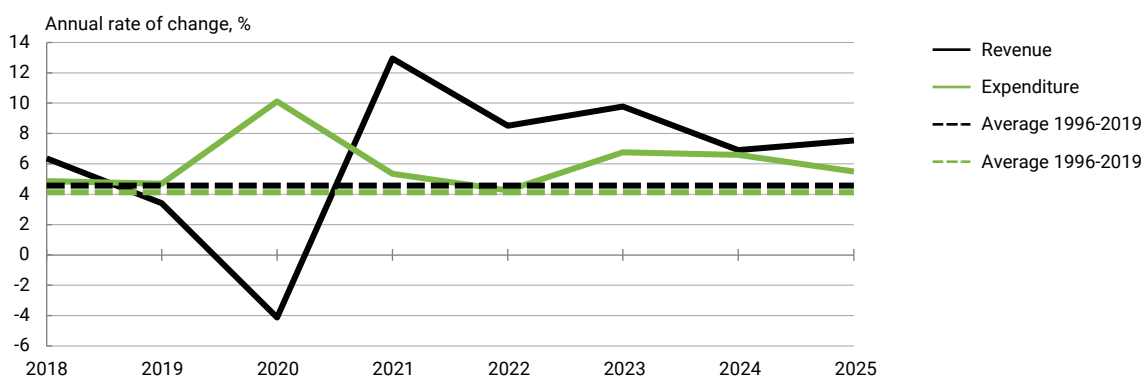
69 Net expenditure is defined as government expenditure net of interest expenditure; cyclical elements of unemployment benefit expenditure, expenditure on EU programmes fully matched by revenue from EU funds, and adjusted for discretionary revenue measures.

70 For an analysis of compliance with the fiscal rules, see Section 5.2 below.

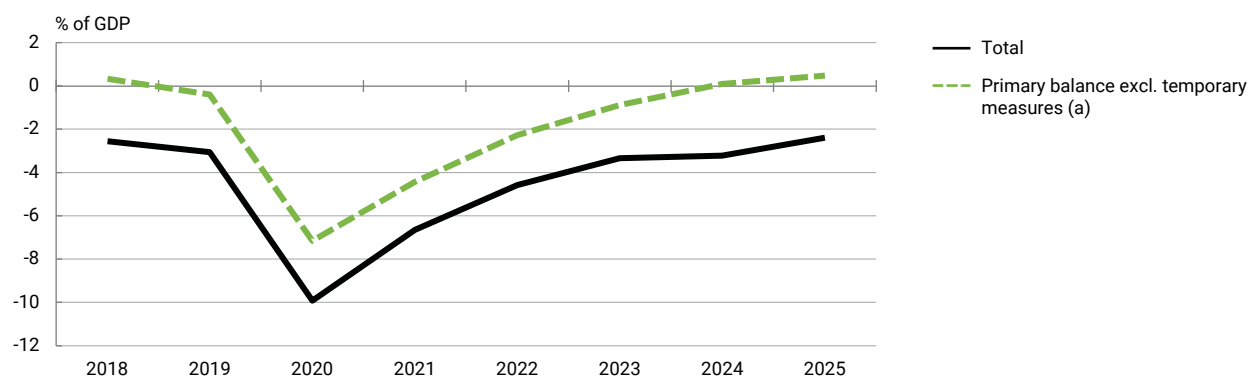
Chart 1.35

In 2025 the budget balance improved due to the strong growth in government revenue and lower temporary spending

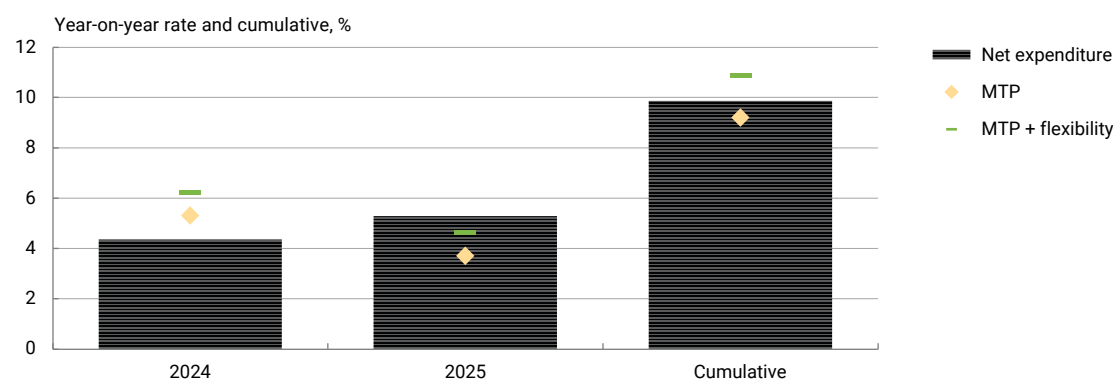
1.35.a Government revenue and expenditure



1.35.b Budget balance



1.35.c Net expenditure growth



SOURCES: IGAE and *Annual Progress Report 2026*.

NOTE: The data for 2025 on temporary measures estimated by the European Commission and on net expenditure growth remain forecasts until the publication of the Commission's projections in May and the *Annual Progress Report 2026*.

a Excluding temporary measures estimated by the European Commission.



- In structural terms (in other words, adjusted for the economic cycle and one-off factors), Spain's budget deficit is estimated to remain close to the average levels recorded in the pre-pandemic years, at around 3% of GDP. Since then, both revenue and expenditure have increased markedly as a share of GDP, as discussed in detail in [Box 1.7](#).

5.2 Assessment of the first year under the new European fiscal governance framework

The first year of consolidation under Spain's MTP resulted in net expenditure growth above the committed level, but within the margins of flexibility under the EU's fiscal framework.

- Spain's MTP was approved by the EU Council in January 2025 and sets out a downward trajectory for maximum net expenditure growth, averaging 3% over the full adjustment period (2025-31) and 3.4% over the period covered by the MTP (2025-28). Fiscal consolidation began after a 2024 in which net expenditure grew by 4.1%, less than the 5.3% set out in the MTP, thereby frontloading the consolidation envisaged for 2025-31 and facilitating the achievement of the targets.
- According to the *Annual Progress Report 2026* submitted by the Spanish Government in April, net expenditure growth in 2025 exceeded the level under the MTP (4.8%, compared with 3.7%). However, the deviation would fall within the permitted limits, taking into account the leeway under the new European fiscal rules and the Spanish Government's request to activate the national escape clause for higher defence spending.⁷¹ Furthermore, in cumulative terms, since 2023 actual net expenditure growth has been in line with the commitments under the MTP (Chart 1.35.c).⁷²
- Despite the marked increase in expenditure, compliance with the MTP target in 2025 owes to the use of the margins of flexibility and the high estimated impact of the tax and social security contribution hikes (0.9 pp of GDP). In addition, the greater flexibility under the escape clause for defence expenditure also means that Spain should comply with its commitments under the MTP for 2026.⁷³ By contrast, in 2027 general government will face stronger growth in several spending items, such as public sector wages (reflecting the multi-year agreement with trade unions) and social benefits (due to the increase in the consumer price index this year), with no scope for further flexibility. The *Annual Progress Report 2026* does not include any new measures to underpin compliance with the MTP targets for those years. This makes them less credible and fails to ease the uncertainty over Spain's public finances. In the same vein, while the report details the implementation of the reforms that allowed the fiscal adjustment period to be extended from four to seven years, it does not quantify the extent to which these reforms have contributed to their original objective of improving fiscal sustainability over the medium term.
- In addition, this first year under the new European framework has revealed certain difficulties in assessing it, such as the uncertainty surrounding the measurement of net expenditure growth. At the earliest, this figure is not available until April of the year following

71 This clause allows for net expenditure growth above the committed level in the period 2025-28 in the amount defence expenditure increases relative to 2024 (up to 1.5% of GDP). According to the *Annual Progress Report*, in 2025 defence expenditure (according to the Classification of the Functions of Government, COFOG) increased by 0.1 pp of GDP relative to 2024, from 0.9% to 1%, allowing for 0.3 pp more growth in net expenditure.

72 At the cut-off date for this report, the European authorities still need to validate this estimate of net expenditure growth, assess it and adopt the relevant decisions.

73 The Commission's related guidelines allow for greater flexibility if the escape clause is activated: in addition to disregarding the higher defence expenditure, deviations from the MTP will only be analysed cumulatively (from 2023), while the limits on annual deviations in net expenditure no longer apply.

the reference year and even these estimates are subject to revision over time. In particular, the Spanish evidence points to the estimated impact of discretionary revenue measures and the volume of extraordinary expenditure changing significantly over time. This hampers the assessment of fiscal policy and poses risks to achieving the objective of long-term fiscal sustainability. Furthermore, the flexibility raises some questions over how much the new rules will remedy the historical issue of the procyclicality of fiscal policy.

- Against this background, the current budgetary position, combined with the recent high uncertainty and the expected future spending needs, warrants making fiscal policy more predictable. This strategy should be structured around medium-term projections accompanied by sufficiently detailed measures to ensure the achievement of these goals.⁷⁴

5.3 Fresh pressures on government expenditure amid high public debt

Fiscal policy faces the challenge of accommodating fresh pressures on expenditure. Geopolitical tensions have prompted higher government expenditure on defence, which adds to the structural pressures associated with the green transition, demographic ageing and the digitalisation of the economy. The impulse from defence spending is estimated to have positive macroeconomic effects in the short term.

- Against a backdrop of heightened geopolitical tensions, Spain has reaffirmed its commitment to increase defence spending to 2% of GDP. This represents a significant additional rise compared with the latest available data for 2025 (1% of GDP, according to the *Annual Progress Report 2026*).⁷⁵
- An analysis of historical data on Ministry of Defence contracts linked to defence investment⁷⁶ shows that, given the inherent complexity of these processes, the impact of higher defence spending on economic activity materialises with a lag of between two and three years, peaks after around four and a half years and is transitory in nature. Over a seven-year horizon, the average fiscal multiplier of this investment would amount to between 0.6 and 0.7 (Chart 1.36.a).
- Moreover, the existing literature suggests that the macroeconomic effect is more persistent when the increase in expenditure is concentrated in research and development-related items.⁷⁷

74 Under the previous European fiscal governance framework, annual updates to stability programmes incorporated budget forecasts for the year under way and, at least, the following three years, depending on the required time horizon. By contrast, the monitoring reports under the current European framework are generally limited to including budget forecasts for the current year.

75 At the NATO Summit in The Hague (June 2025), the Allies committed to investing 5% of GDP in defence and security-related spending over the medium term. In the national accounts, defence spending may be lagged compared with the NATO figure due to methodological reasons. In particular, investment in capital goods is recorded in the national accounts when such goods are handed over to general government, not when the commitment is made or the budget is executed.

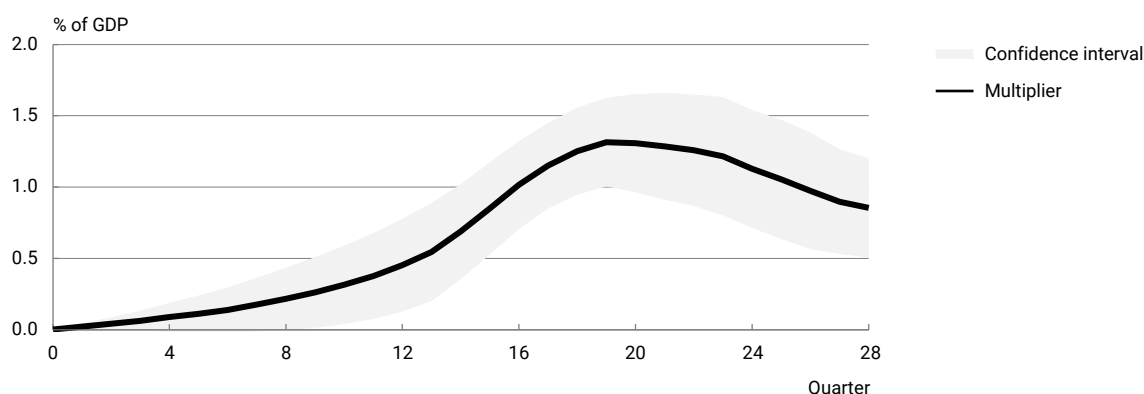
76 Alloza, Durá, Domínguez-Díaz and Varotto (2026).

77 Antolín-Díaz and Surico (2025) show that US defence spending has more persistent effects when the composition of government expenditure shifts towards research and development.

Chart 1.36

The impact of defence spending on economic activity would materialise in the medium term and be temporary

1.36.a Defence spending multiplier



SOURCE: Alloza, Durá, Domínguez-Díaz and Varotto (2026).

In the absence of a medium-term fiscal policy strategy, how these new spending pressures will be funded and, therefore, their impact on public debt dynamics remain unclear. This makes headway with medium-term budgetary planning all the more advisable.

- The lack of a sufficiently detailed medium-term fiscal strategy makes it difficult to anticipate clearly how the new spending pressures will be funded, because there is a lack of specificity over how much will be covered by higher public revenue (for example, via taxes) or by greater recourse to debt. This somewhat shrouds the future course of the budget deficit and public debt in uncertainty, highlighting the importance of continuing to make headway with more structured, medium term-focused budgetary planning.

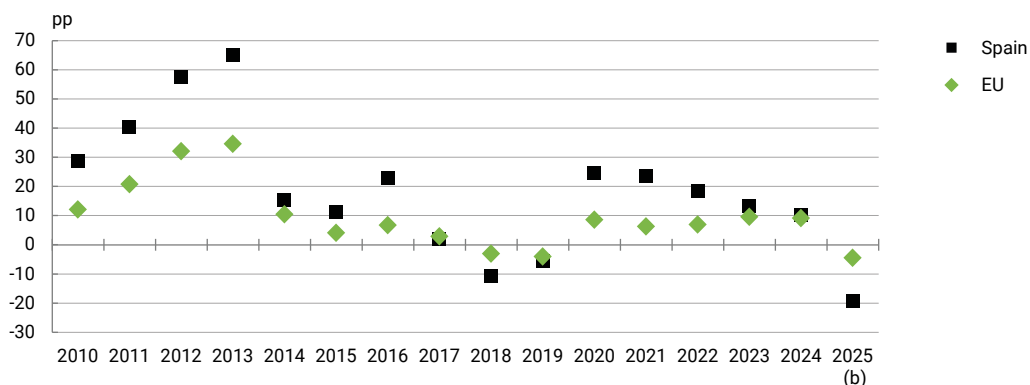
In upswings, medium-term forecasts of public debt tend to be biased downwards.

- Based on International Monetary Fund projections for the period 2010-24,⁷⁸ public debt tends, on average, to be underestimated because of forecast errors. This bias increases the longer the projection horizon and is largely explained by factors associated with the debt dynamics themselves, beyond GDP forecast errors.
- According to this analysis, the prevailing macroeconomic conditions when the projections are prepared have a significant bearing on both the size and sign of public debt forecast errors. In particular, Chart 1.37.a depicts a highly pronounced cyclical pattern: during expansionary phases (such as 2005-08 and 2015-19) projections tend to underestimate the debt ratio, whereas in recessions or amid high uncertainty (such as after the global financial crisis or during the pandemic) forecast errors are concentrated in overestimations. This recurring pattern underlines the case for stronger medium-term budgetary planning,

78 Estefanía-Flores and Ghomi (2026).

Chart 1.37
Five-year-ahead debt-to-GDP forecast errors

1.37.a Forecast errors. EU average and Spain (a)



SOURCE: Estefanía-Flores and Ghomi (2026), drawing on debt projections published by the IMF.

- a The errors shown in year t reflect the errors in the public debt forecast made in year t-5.
- b Forecast errors are calculated using the vintage from October of the following year for the actual debt levels; for 2025 the April 2026 vintage is used, as it is the most recent one available.



especially in expansionary phases, when projection bias may lead to an overly favourable assessment of fiscal sustainability – a particularly relevant consideration in the current context of growing pressures on expenditure.

6 The Spanish economy's external balance in 2025

The Spanish economy's net lending remained high in 2025, supported by elevated saving by firms and households.

- The continued high level of net lending in 2025 (4% of GDP, down 0.3 pp on 2024) mainly reflected the large current account surplus (2.9% of GDP). The primary income deficit decreased by 0.1 pp to -0.9% of GDP, owing to the smaller weight of interest rates, while the secondary income deficit increased slightly to -0.8% of GDP, due to the rise in remittances and flows from EU linked to the Recovery and Resilience Facility. The capital account also made a positive contribution (1% of GDP) to the Spanish economy's net lending, although this contribution was down 0.1 pp on 2024 (Table 1.6).
- The Spanish economy's net lending was underpinned by firms (1.2% of GDP) and households (2.9% of GDP), both of which recorded high saving levels (17.2% of GDP and 7.6% of GDP, respectively). The decline in the Spanish economy's net lending compared with 2024 was due to the reduction in households' net lending (by 1 pp),⁷⁹ which was offset, first, by the increase in firms' net lending and, second, by the 0.8 pp improvement (to -2.4% of GDP) in general government net borrowing. The financial account once again recorded a sizeable surplus (4% of GDP), reflecting the high net lending of the Spanish economy.

In 2025 the negative net international investment position (NIIP) deteriorated slightly to 44.8% of GDP, as did the gross external debt-to-GDP ratio.

- The 3.8 pp increase in the negative NIIP in 2025 compared with 2024 was due in part to valuation effects associated with the appreciation of the euro against the US dollar and price changes. By institutional sector, the deterioration in the negative NIIP was mainly explained by the increase in the general government sector's negative NIIP (by 3 pp, to -43% of GDP), while the Banco de España improved its negative NIIP by 2.6 pp to -8.1% of GDP. The non-financial private sector's negative NIIP increased (-20.8% of GDP, up 0.9 pp on 2024): the negative NIIP of non-financial corporations (-38.4% of GDP, down 2.3 pp on 2024) was partially offset by the positive NIIP of households and non-profit institutions (17.4% of GDP, up 1.4 pp on 2024).
- The negative NIIP excluding the Banco de España increased more markedly (by 6.4 pp), to -30.2% of GDP. By functional category, the negative NIIP in portfolio investment increased by 3.9 pp (to -26.5% of GDP), while the positive NIIP in other investment declined by 1.4 pp to 3.1% of GDP.
- As regards foreign direct investment (FDI), the negative NIIP increased by 1.2 pp (to -13.6% of GDP). By country, the United Kingdom remained the main destination for Spain's outward

⁷⁹ Despite the decline in households' net lending, in 2025 their savings stood 3.2 pp above the levels observed in the period 2014-19.

Table 1.6

The Spanish economy's net lending capacity was again positive in 2025 (4% of GDP), albeit slightly lower than in 2024. The negative NIIP rose slightly to 44.8% of GDP

1.6.a Net lending (+)/net borrowing (-) of the Spanish economy

	Net lending (+)/ net borrowing (-)	Energy balance	Non-energy goods balance	Services balance	Income balance	Capital account
2000-19 average	-2.0	-2.9	-1.6	4.0	-2.0	0.5
2020	1.2	-1.4	0.8	2.1	-0.7	0.4
2021	1.6	-2.2	0.5	2.7	-0.2	0.9
2022	1.3	-4.0	-0.4	5.3	-0.5	0.9
2023	3.9	-2.4	0.1	6.2	-1.1	1.1
2024	4.3	-2.3	0.1	6.3	-1.0	1.1
2025	4.0	-1.9	-1.0	6.7	-0.9	1.0

1.6.b Net lending (+)/net borrowing (-) of the Spanish economy, by institutional sector

	Net lending (+)/ net borrowing (-)	General government	Households	Financial corporations	Non-financial corporations
2000-19 average	-2.0	-3.8	-0.6	2.0	0.5
2020	1.2	-9.91	8.25	2.52	0.37
2021	1.6	-6.65	5.10	2.69	0.51
2022	1.3	-4.59	0.66	2.95	2.31
2023	3.9	-3.34	2.79	2.46	1.94
2024	4.3	-3.22	3.93	2.00	1.60
2025	4.0	-2.39	2.88	2.25	1.21

1.6.c Change in and breakdown of IIP, by functional category

	Net IIP	Net IIP excl. the Banco de España	FDI excl. the Banco de España	Portfolio investment excl. the Banco de España	Other investment excl. the Banco de España	Derivatives	Reserves
2000-19 average	-75.0	-69.08	-9.59	-42.78	-19.99	-0.22	3.51
2020	-83.7	-53.89	-17.16	-41.92	-0.12	-0.55	5.87
2021	-69.2	-41.95	-16.47	-33.09	1.87	-0.86	6.59
2022	-56.2	-31.78	-14.78	-22.89	-0.41	-0.04	6.34
2023	-49.3	-34.45	-13.57	-24.35	-2.81	0.04	6.23
2024	-41.0	-23.77	-12.32	-22.61	4.48	0.17	6.51
2025	-44.8	-30.20	-13.56	-26.50	3.13	0.27	6.46

SOURCES: Banco de España and INE.

FDI, with a cumulative stock of 7.2% of GDP, followed by the United States (6.5%). In turn, the United States was the main foreign investor in Spain (8.3%), followed by the United Kingdom (7.5%), Germany (6.7%) and France (6.6%).

- Lastly, gross external debt⁸⁰ increased slightly, by 0.6 pp, to 163.5% of GDP, owing mainly to the rise in the external debt of the general government sector (by 3 pp) and of monetary financial institutions (by 2.8 pp), which was partly offset by the decline in the external debt of the Banco de España (by 3.6 pp) and of other resident sectors (by 0.5 pp). External debt mainly comprises long-term instruments (52% of the total) and is mostly accounted for by public sector entities.

⁸⁰ Gross external debt comprises all of a country's liabilities to the rest of the world that entail a future payment obligation. It therefore excludes equities (shares and other equity and investment fund shares or units), financial derivatives and gold bullion.

References

- Alloza, Mario, Pau Durá, Rubén Domínguez-Díaz and Iacopo Varotto. (2026). "The Macroeconomic Effects of Defence Expenditure: Evidence from Spain". Documentos de Trabajo, Banco de España. Forthcoming.
- Amiti, Mary, Chris Flanagan, Sebastian Heise and David E. Weinstein. (2026). "Who Is Paying for the 2025 U.S. Tariffs?". *Liberty Street Economics*, Federal Reserve Bank of New York, 12 February. <https://doi.org/10.59576/lse.20260212>
- Anghel, Brindusa, Cristina Barceló and Ernesto Villanueva. (2019). "The household saving rate in Spain between 2007 and 2016: decomposition by population group and possible determinants". *Economic Bulletin - Banco de España*, 4/2019, Analytical Articles. <https://repositorio.bde.es/handle/123456789/10792>
- Anghel, Brindusa, Fernando Antón, Juan Francisco Jimeno and Aitor Lacuesta. (2026). "Capítulo 3. Características y asimilación laboral de la nueva ola de inmigrantes en España". In Raquel Carrasco and Raymond Torres (coords.), *La inmigración en España: retos, impacto and políticas*. Fundación de las Cajas de Ahorros (Funcas), Estudios de la Fundación. Serie Economía and Sociedad, 111. <https://www.funcas.es/libro/la-inmigracion-en-espana-retos-impacto-y-politicas/>
- Antolin-Diaz, Juan, and Paolo Surico. (2025). "The long-run effects of government spending". *American Economic Review*, 115(7), pp. 2376-2413. <https://doi.org/10.1257/aer.20231278>
- Arjona, Roman, William Connell García and Cristina Herghelegiu. (2023). "An enhanced methodology to monitor the EU's strategic dependencies and vulnerabilities". *Single Market Economics Papers*, 14, European Commission. <https://doi.org/10.2873/768035>
- Balteanu, Irina, Maximiliano Moreno and Francesca Viani. (2026). "Flooded by China? Trade diversion due to US tariffs during Trump's first mandate". Documentos de Trabajo, Banco de España. Forthcoming.
- Banco de España. (2023). "Chapter 3. The current episode of price pressures in the euro area, the monetary policy response and its effects". In Banco de España, *Annual Report 2022*, pp. 140-180. https://www.bde.es/f/webbe/SES/Secciones/Publicaciones/PublicacionesAnuales/InformesAnuales/22/Files/InfAnual_2022-Cap3_En.pdf
- Banco de España. (2025a). "Macroeconomic projections and quarterly report on the Spanish economy. March 2025". *Economic Bulletin - Banco de España*, 2025/Q1. <https://doi.org/10.53479/39321>
- Banco de España. (2025b). "Box 5. A preliminary analysis of the increase in temporary sick leave in Spain". In Banco de España, *Annual Report 2024*, pp. 156-159. <https://doi.org/10.53479/39868>
- Banco de España. (2026a). *Report on the Latin American economy. First half of 2026*. <https://doi.org/10.53479/43002>
- Banco de España. (2026b). *Financial Stability Report. Spring 2026*. <https://doi.org/10.53479/43188>
- Banco de España. (2026c). *Macroeconomic projections and quarterly report on the Spanish economy. June 2026*. <https://doi.org/10.53479/43546>
- Blanchard, Olivier, and Ángel Ubide. (2026). "Eurobonds: Despite objections, they are more needed than ever". *Realtime Economics*, Peterson Institute for International Economics, 7 May. <https://www.piie.com/blogs/realtime-economics/2026/eurobonds-despite-objections-they-are-more-needed-ever>
- Boeckelmann, Lukas, Lorenz Emter, Vanessa Gunnella, Karin Klieber and Tajda Spital. (2025). "China-US trade tensions could bring more Chinese exports and lower prices to Europe". *The ECB Blog*, 30 July. <https://www.ecb.europa.eu/press/blog/date/2025/html/ecb.blog20250730~833a22650e.en.html>
- Brunnermeier, Markus K., Sam Langfield, Marco Pagano, Ricardo Reis, Stijn Van Nieuwerburgh and Dimitri Vayanos. (2017). "ESBies: safety in the tranches". *Economic Policy*, 32(90), pp. 175-219. <https://doi.org/10.1093/epolic/eix004>
- Card, David. (2001). "Immigrant Inflows, Native Outflows, and the Local Labor Market Impacts of Higher Immigration". *Journal of Labor Economics*, 19(1), pp. 22-64. <https://doi.org/10.1086/209979>
- Charalambakis, Evangelos, Bruno Fagandini, Lukas Henkel and Chiara Osbat. (2022). "The impact of the recent rise in inflation on low-income households". *ECB Economic Bulletin*, 7/2022. https://www.ecb.europa.eu/press/economic-bulletin/focus/2022/html/ecb.ebbox202207_04~a89ec1a6fe.en.html
- European Central Bank. (2025). *ECB Economic Bulletin*, 8/2025. <https://www.ecb.europa.eu/press/economic-bulletin/html/eb202508.en.html>

- European Central Bank. (2026). *Eurosystem response to the EU Commission's targeted consultation on the competitiveness of the EU banking sector*. <https://www.ecb.europa.eu/press/consultationresponse/pdf/ecb.conresp202604.en.pdf>
- European Commission. (2021). "Strategic dependencies and capacities". Commission Staff Working Document, SWD(2021) 352, European Commission. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021SC0352>
- European Commission. (2025). "Monitoring trade diversion". https://policy.trade.ec.europa.eu/enforcement-and-protection/trade-defence/monitoring-trade-diversion_en
- Estefanía-Flores, Julia, and Morteza Ghomi. (2026). "Debt Forecast Errors over Business Cycles". Documentos de Trabajo, Banco de España. Forthcoming.
- Fernández-Huertas Moraga, Jesús. (2021). "Inmigración and políticas migratorias en España". Estudios sobre la Economía Española, 2021/10, Fedea. <https://ideas.repec.org/p/fda/fdaeee/eee2021-10.html>
- Fernández-Huertas Moraga, Jesús. (2025). "The Second Spanish Immigration Boom". IZA Discussion Paper Series, 18185, Institute of Labor Economics. <https://docs.iza.org/dp18185.pdf>
- Filip, Daniela, Diego Pérez González and Ralph Setzer. (2026). "Investment Composition and Growth: The Role of Intangible and Tangible ICT Capital in the EU and Other Economies". Forthcoming.
- Gopinath, Gita, and Brent Neiman. (2026). "The Incidence of Tariffs: Rates and Reality". NBER Working Paper Series, 34620, National Bureau of Economic Research. <https://doi.org/10.3386/w34620>
- Granadal, Victoria, Matías Pacce and Isabel Sánchez García. (2026). "Descomposición de la inflación en el área del euro and España entre perturbaciones de oferta and de demanda". Documentos Ocasionales, Banco de España. Forthcoming.
- Hinz, Julian, Aaron Lohmann, Hendrik Mahlkow and Anna Vorwig. (2026). "America's Own Goal: Who Pays the Tariffs?". *Kiel Policy Brief*, January. <https://www.kielinstitut.de/publications/americas-own-goal-who-pays-the-tariffs-19398/>
- International Monetary Fund. (2025). "Chapter 1. Global prospects and policies". In *World Economic Outlook*. April 2025. <https://www.imf.org/-/media/files/publications/weo/2025/april/english/ch1.pdf>
- International Monetary Fund. (2026). "Chapter 1. Global prospects and policies". In *World Economic Outlook*. April 2026. <https://www.imf.org/-/media/files/publications/weo/2026/april/english/ch1.pdf>
- Izquierdo, Mario, and José Luis Herrera. (2022). "Box 6. Recent indexation clauses: an analysis". In Banco de España, "Quarterly Report on the Spanish Economy". *Economic Bulletin - Banco de España*, 3/2022, pp. 56-57. <https://repositorio.bde.es/handle/123456789/23354>
- Lane, Philip R. (2026). "Expanding the supply of euro safe assets". European Central Bank. <https://www.ecb.europa.eu/press/key/date/2026/html/ecb.sp260422~0242ad3585.en.html>
- Le Roux, Julien, and Tajda Spital. (2026). "Global trade redirection: tracking the role of trade diversion from US tariffs in Chinese export developments". *ECB Economic Bulletin*, 1/2026. https://www.ecb.europa.eu/press/economic-bulletin/focus/2026/html/ecb.ebbox202601_01~fde39c8d00.en.html
- Sastre, Teresa, Marta Suárez-Varela, Pilar Cuadrado and Enrica Di Stefano. (2025). "Factors affecting migratory flows to Spain and other advanced economies". *Economic Bulletin - Banco de España*, 2025/Q2, 08. <https://doi.org/10.53479/39845>
- Schaefer, Stefan, Lisa Gerland and Marcel Tirpák. (2026). "Where do the costs of higher US tariffs fall?". *ECB Economic Bulletin*, 2/2026. https://www.ecb.europa.eu/press/economic-bulletin/focus/2026/html/ecb.ebbox202602_01~e0af0d74d5.en.html
- Schulte, Patrick, Almira Enders, Andreas Esser and Felix Strobel. (2026). "From tariffs to trade flows: Diversion effects and China's exports to the EU". CEPR VoxEU Column, 27 February. <https://cepr.org/voxeu/columns/tariffs-trade-flows-diversion-effects-and-chinas-exports-eu>
- Shapiro, Adam Hale. (2024). "Decomposing Supply- and Demand-Driven Inflation". *Journal of Money Credit and Banking*, 58(2), pp. 365-388. <https://doi.org/10.1111/jmcb.13209>
- World Bank. (2025). *Global Skill Partnerships*. <https://gsp.cgdev.org/>
- Venditti, Fabrizio, Michele Caivano, Pietro Cova, Kevin Pallara and Massimiliano Pisani. (2025). "The economic impact of European capital market integration". Occasional Papers, 957, Banca d'Italia. <https://www.bancaditalia.it/pubblicazioni/qef/2025-0957/index.html?com.dotmarketing.htmlpage.language=1&dotcache=refresh>

Box 1.1
BENEFITS OF THE EUROPEAN UNION'S RECENT TRADE AGREEMENTS

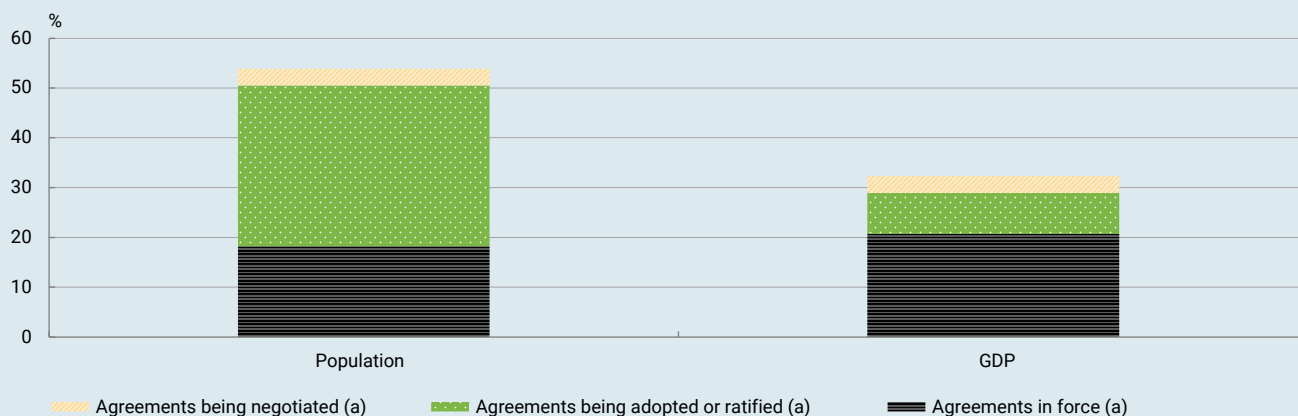
In recent years and against an increasingly uncertain geopolitical backdrop, the European Union (EU) has stepped up its trade negotiation agenda as part of a strategy aimed at diversifying alliances and reducing strategic dependencies. This agenda seeks to strengthen economic ties with a wide range of trade partners (including Mercosur, India, Indonesia and Australia, in addition to various South-East Asian economies) that, according to the aggregation considered in this box, account for around 35% of the world's population and close to 10% of global GDP (Chart 1).

In particular, the recent agreements with Mercosur, India, Indonesia and Australia are broad in scope and include deep tariff liberalisation, the reduction of non-tariff barriers, commitments linked to services and digital trade, reciprocal access to public tenders and provisions on investment, sustainability and regulatory cooperation (Table 1). However, the degree of openness in these areas varies significantly across agreements, from broader commitments (as in the case of Australia) to narrower approaches (for example, the agreement with India).

Nevertheless, all these agreements improve access to large and highly dynamic markets, boost integration with strategic value chains – including those related to critical raw materials, advanced manufactured goods and green technologies – and establish predictable legal frameworks for trade and investment over the long term.

These agreements should boost bilateral trade flows between the EU and its trade partners considerably. Specifically, in the case of the EU-Mercosur agreement, the available estimates point to a sizeable increase in trade between the two blocs (around 37% in the long term). First, these gains would reflect the reduction in tariff barriers: the agreement eliminates tariffs on more than 90% of traded products over a period of 15 years. This would lower Mercosur's effective tariff on imports from the EU from 11% to close to 1%, and the EU's effective tariff on imports from Mercosur from 4% to 2%. Second, the gains would also reflect the decrease in non-tariff barriers thanks to the simplification of customs processes and improved access to public procurement and domestic service markets. Overall, these effects would materialise

Chart 1
Trade partners as a percentage of the global economy



SOURCES: European Commission and Banco de España.

a The economies have been classified according to the information available on the European Commission's website. The agreements being negotiated include Malaysia, the Philippines, Tajikistan, Thailand and the United Arab Emirates. The agreements being adopted or ratified include Australia, India, Indonesia, Kyrgyzstan, Mercosur (Argentina, Brazil, Paraguay and Uruguay), Uzbekistan and all the Economic Partnership Agreements being adopted or ratified with African, Caribbean and Pacific countries and regions (Benin, Burkina Faso, Burundi, Cape Verde, The Gambia, Guinea, Guinea-Bissau, Haiti, Liberia, Mali, Mauritania, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Togo and Uganda). The agreements in force include Albania, Algeria, Andorra, Antigua and Barbuda, Armenia, Azerbaijan, the Bahamas, Barbados, Belize, Bosnia and Herzegovina, Botswana, Cameroon, Canada, Chile, Colombia, the Comoros, Costa Rica, Côte d'Ivoire, Dominica, the Dominican Republic, Ecuador, Egypt, El Salvador, Eswatini, the Faroe Islands, Fiji, Georgia, Ghana, Grenada, Guatemala, Guyana, Honduras, Iceland, Israel, Iraq, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kosovo*, Lebanon, Lesotho, Liechtenstein, Madagascar, Mauritius, Mexico, Moldova, Montenegro, Morocco, Mozambique, Namibia, New Zealand, Nicaragua, North Macedonia, Norway, the Palestinian Authority, Panama, Papua New Guinea, Peru, Samoa, San Marino, Serbia, Seychelles, Singapore, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Saint Lucia, the Solomon Islands, South Africa, South Korea, Suriname, Switzerland, Trinidad and Tobago, Tunisia, Türkiye, Ukraine, the United Kingdom, Vietnam and Zimbabwe. *The designation of Kosovo is without prejudice to positions on its status and is in line with United Nations Security Council Resolution 1244 (1999) and the Opinion of the International Court of Justice on its declaration of independence.

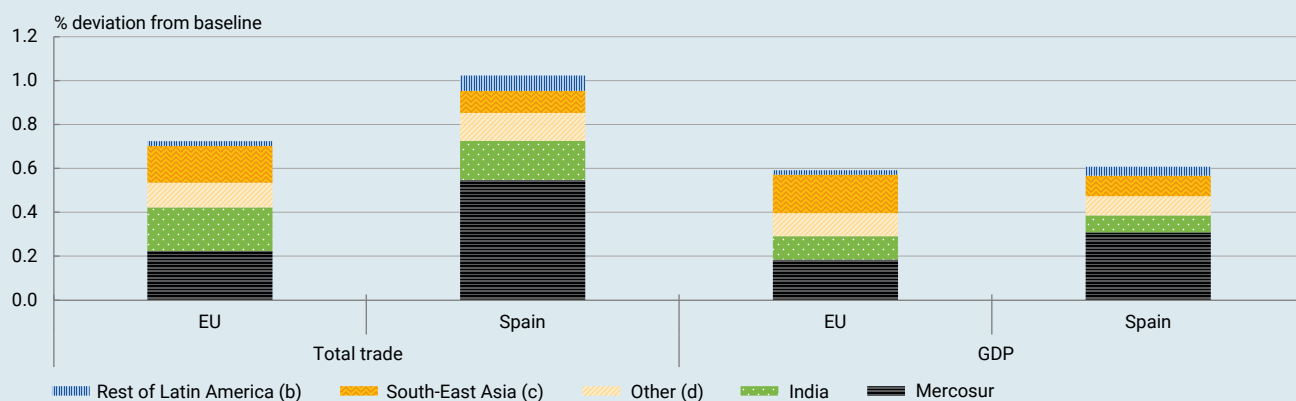
Box 1.1

BENEFITS OF THE EUROPEAN UNION'S RECENT TRADE AGREEMENTS (cont'd)
Table 1
 Trade agreements signed by the EU or in force from 2025

Trade partner	Type of agreement	Contents of the agreement								
		Elimination or reduction of tariffs (> 90% of products)	Time frame to reduce tariffs	Tariff-rate quotas for sensitive agricultural products	Safeguard mechanism	Reduction of tariffs on imports of critical raw materials and related products	Liberalisation of trade in services	Reciprocal access to public tenders	Cooperation on technical and phytosanitary barriers	Investment
Australia	New agreement	Elimination	Up to 5 years	✓	✓	✓	✓	✓	✓	✓
Chile	Modernisation of previous agreement	Elimination	Up to 7 years	✗	✗	✓	✓	✓	✓	✓
India	New agreement	Reduction	Up to 10 years	✓	✓	✓	✓	✓	✓	✓
Indonesia	New agreement	Elimination	Up to 5 years	✓	✓	✓	✓	✓	✓	✓
Mercosur	New agreement	Elimination	Up to 15 years	✓	✓	✓	✓	✓	✓	✓
Mexico	Modernisation of previous agreement	Elimination	Up to 10 years	✗	✗	✓	✓	✓	✓	✓

SOURCES: European Commission and devised by authors.

NOTE: The tariff reduction time frame indicates the upper limit for most products. "Safeguard mechanism" refers to the existence of a clause allowing for the temporary reintroduction of tariffs or the suspension of tariff reductions where trade liberalisation leads to sudden import surges that cause, or threaten to cause, serious injury to domestic producers.

Chart 2
 Expected effects on global trade and GDP (a)

SOURCE: Banco de España.

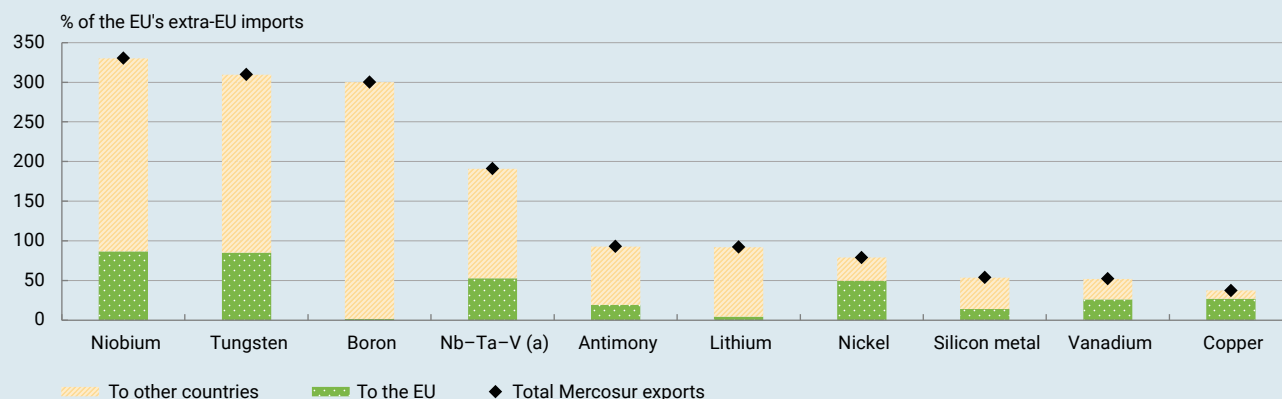
- a** The quantitative trade model, based on Allen, Treb, Costas Arkolakis and Yuta Takahashi (2020). "Universal Gravity". *Journal of Political Economy*, vol. 128 (2). <https://www.journals.uchicago.edu/doi/full/10.1086/704385>, was implemented using the algorithm in Campos, Rodolfo G., Iliana Reggion and Jacopo Timini. (2025). "ge_gravity2: a command for solving universal gravity models". *The Stata Journal*. https://rolf-campos.github.io/publication/sj-2025-ge_gravity2/sj-2025-ge_gravity2.pdf. The expected reductions in trade barriers under the EU-Mercosur agreement are based on the estimates in Timini, Jacopo, and Francesca Viani. (2022). "A highway across the Atlantic? Trade and welfare effects of the EU-Mercosur agreement." *International Economics*, vol. 169, pp. 291-308. <https://doi.org/10.1016/j.inteco.2022.02.003>. The effects of the other agreements on trade barriers are constructed by scaling up the estimated effect of the EU-Mercosur agreement using a specific scaling factor, standardised in all cases in relation to that agreement. This factor has three components: (i) the initial level of bilateral trade barriers, proxied by tariffs imposed, to capture the potential pre-agreement scope for liberalisation; (ii) the agreement's effective coverage, constructed by assigning to each major sector (agriculture, mining and quarrying and manufacturing) a liberalisation intensity that reflects the presence of partial exclusions or liberalisations, weighted by the importance of each sector in the bilateral trade of reference; and (iii) a measure of the agreement's depth and enforceability, capturing reductions in non-tariff barriers. The expected effect on bilateral trade under each agreement is therefore obtained by directionally scaling the effect of the EU-Mercosur agreement using this relative factor, which is also defined at the directional level.
- b** Rest of Latin America: Chile and Mexico.
- c** South-East Asia: Indonesia, Malaysia, the Philippines and Thailand.
- d** Other: Australia, Kyrgyzstan, New Zealand, United Arab Emirates, Uzbekistan, Tajikistan and the African, Caribbean and Pacific countries and regions that have Economic Partnership Agreements pending renewal.

Box 1.1

BENEFITS OF THE EUROPEAN UNION'S RECENT TRADE AGREEMENTS (cont'd)

Chart 3

Mercosur exports of critical and strategic raw materials and share exported to the EU (2023)



SOURCES: Banco de España, drawing on CEPII-BACI, and European Commission (2023).

a Nb-Ta-V refers to niobium, tantalum and vanadium in the mining stage. The analysis of the critical and strategic raw materials is based on bilateral trade flows corresponding to Harmonised System 6-digit codes in European Commission. (2023). *Study on the critical raw materials for the EU 2023 – Final Report*. <https://op.europa.eu/en/publication-detail/-/publication/57318397-fdd4-11ed-a05c-01aa75ed71a1>. Mercosur includes Bolivia. The chart depicts, for each mineral, Mercosur exports as a percentage of the EU's extra-EU imports. A value greater than or equal to 100% denotes that Mercosur exports can cover all EU imports.

under a framework that preserves sanitary and technical standards and protects geographical indications, and is further supported by a safeguard system – alongside limited tariff concessions and tariff-rate quotas – designed to minimise potential abrupt adjustments, above all in agricultural products in the case of the EU.

When considering the effect on overall trade and output, the relative importance of each agreement depends not only on the specific reductions in tariff and non-tariff barriers, but also on the importance of the partner for EU and Spanish trade and the size of its economy. For the EU as a whole, the most important agreements in this respect would be those with Mercosur, India and various South-East Asian economies (Chart 2). For Spain, however, the Mercosur agreement stands out in particular, as it would account for over half of the expected gains. This is due to the importance of the region in Spain's trade (4%, twice the EU average).

The implications of these agreements are not just limited to their aggregate economic effects; in some cases they also have major strategic benefits. In this regard, the Mercosur agreement may boost the diversification of Europe's supply of the critical raw materials needed for the digital and energy transitions, by eliminating various non-tariff barriers, such as minimum pricing, export taxes and non-automatic import licensing. At the same time, the agreement could strengthen certain productive ties between the two blocs and encourage the development of refining processes that will help diversify Europe's supply (for example, by eliminating "tariff escalation", that is, higher tariffs on processed goods than on raw materials). Against this backdrop, it should be noted that Mercosur's current exports of critical and strategic raw materials have the potential to cover in full or in part the EU's extra-EU imports (Chart 3).

Box 1.2

THE REGULATORY AND SUPERVISORY SIMPLIFICATION AGENDA: HEADWAY MADE BY THE BANCO DE ESPAÑA

The far-reaching regulatory and supervisory reforms undertaken in the wake of the global financial crisis have contributed to the development of a considerably more robust and resilient European banking system. However, the gradual build-up of rules, procedures and institutional frameworks has given rise to an increasingly complex framework that may affect the system's competitiveness and its ability to support economic growth effectively.

Against this backdrop, simplifying the regulatory and supervisory framework has cemented itself as a priority on the European agenda, in order to maintain the high standards reached while improving the financial system's integration and competitiveness.¹ The main authorities, agencies and bodies have contributed to this review process from their respective areas of competence. Both the European Central Bank (ECB) and the European Banking Authority (EBA) established high-level task forces and published reports² on the simplification and efficiency of the European framework. The Banco de España launched an internal review process conducted by a cross-departmental working group, which has identified areas for improvement and prepared specific proposals for the regulatory and supervisory framework. This has served as a basis for channelling technical contributions in the main European and international fora, thereby strengthening the Banco de España's active role in the simplification agenda.

The proposals are structured around five major areas:

- **Supervisory procedures.** In addition to the initiatives already announced by the Single Supervisory Mechanism (SSM),³ the Banco de España proposes the further simplification and streamlining of current supervisory procedures, to make them more predictable and stable and boost their efficiency and effectiveness. In particular, it welcomes the supervisory review and evaluation process shifting from an approach that is overly focused on capital requirements to a more risk-based approach that more systematically incorporates qualitative components and improves the framework's ability to address emerging risks. It also advocates streamlining the use of supervisory expectations and guidelines, maintaining their function as a common reference and

avoiding excessive detail that generates unnecessary complexity or results in further binding requirements. Lastly, it is important to strengthen the role of joint supervisory teams to optimise and speed up supervisory processes, to thus move towards more efficient and risk-based banking supervision.

- **Legislative complexity.** There is scope to reduce the legislative complexity associated with the proliferation of delegated acts, which stems from the difficulty lawmakers face to reach consensus over primary (level 1) legislation and the attendant accumulation of mandates in technical standards and guidelines (levels 2 and 3). This situation may generate a significant burden for banks and authorities, without proportional improvements in legislative quality or supervisory effectiveness. Accordingly, the Banco de España has advocated the deprioritisation, elimination and simplification of prudential mandates to streamline them, and the optimisation of certain processes under the resolution framework. At the same time, it is in favour of prioritising structural improvements, such as the EBA's Pillar 3 Data Hub project⁴ and the review of the Single Rulebook, to achieve a more consistent and efficient European regulatory framework.
- **Capital requirements and resolution framework.** The Banco de España proposes simplifying the European capital requirements and resolution framework, maintaining the levels of resilience achieved but eliminating specific components that add unnecessary complexity, thereby simultaneously boosting its alignment with international standards. On the capital requirements front, there is scope to further simplify the design, shifting to a two-tier structure: a single microprudential capital buffer comprising the main existing requirements, which would increase the transparency and predictability of its calibration; and a macroprudential buffer resulting from merging the countercyclical capital buffer and the systemic risk buffer. Similarly, under the resolution framework, there is considerable room to streamline the current requirements' design, without watering them down. In

1 The European Commission launched the strategy in March 2025 and plans to publish a report on the banking system and the single market in 2026, following the public consultation launched in early 2026 on the banking sector's competitiveness.

2 In December 2025 the ECB published the proposals of the High-Level Task Force on Simplification. In October the EBA published its report on the efficiency of the regulatory and supervisory framework.

3 In December the SSM published a report that set out the ongoing agenda for more effective, efficient and risk-based European banking supervision.

4 This data hub will enable, drawing on the information that institutions already report, the centralised preparation and dissemination by the EBA of the information that banks disclose to the market.

Box 1.2

THE REGULATORY AND SUPERVISORY SIMPLIFICATION AGENDA: HEADWAY MADE BY THE BANCO DE ESPAÑA (cont'd)

this respect, the current framework could be replaced with a single requirement based on a proportion of the bank's assets in the form of capital and subordinated debt. Alternatively, it could shift to the widespread use of the requirements that are now applied to global systemically important institutions.

- **Proportionality for small and non-complex institutions.** There is scope to strengthen and extend the principle of proportionality under the current regulatory and supervisory framework, and thus adapt the requirements to the circumstances of small and non-complex institutions. Given their smaller size and lower complexity and risk profiles, the consistent application of regulatory and supervisory obligations generates unnecessary burdens without benefitting the system's stability. Therefore, the Banco de España advocates an approach that, while maintaining risk sensitivity, adapts the obligations to these institutions' specific operational profiles and simplifies certain capital, liquidity and supervisory procedure requirements.
- **Financial reporting requirements.** Institutions have seen their reporting obligations increase significantly in recent years. Two-thirds of this information is requested on the basis of consistent criteria at European level. In addition to contributing to European initiatives to streamline reporting, the Banco de España has

conducted an extensive review of information requests based on a cost-benefit analysis of the usefulness and possible duplication of the information requested at national level. This process has already resulted in significant reductions, via the publication of Banco de España Circular 1/2025 and a forthcoming circular to be published in mid-2026. Both initiatives are expected to eliminate approximately half of the financial reporting requirements at national level. At the same time, to continue with this drive, the governance arrangements applicable to future information requests have also been strengthened.

These technical stances have been developed as part of the debate under way in Europe on how to boost the European banking sector's competitiveness, led by the European Commission. This debate, which also includes other key components, such as the need to complete the banking union, will result in a report that the Commission plans to publish in the third quarter of 2026 (following the public consultation launched at the beginning of the year) and which will serve as the basis for a legislative proposal in early 2027. This initiative will enable progress to be made towards a simpler, more consistent and predictable regulatory and supervisory framework that boosts the financial system's ability to contribute to European competitiveness, without undermining the levels of soundness and resilience achieved to date.

Box 1.3

THE IMPACT OF NATURAL GAS PRICES ON ELECTRICITY PRICES IN EUROPEAN ECONOMIES

Increases in natural gas prices on international markets, by raising the generation costs of combined cycle power plants, are eventually reflected in the electricity prices of European economies. Since this technology dominates price setting on wholesale electricity markets, its marginal costs have traditionally been fully passed through to average electricity prices. Given that 2 MWh of natural gas are required to generate 1 MWh of electricity, an increase of €10 in the price of natural gas has tended to result in an increase of €20 in the average market price of electricity.

In the context of the current energy shock, which has significantly raised the international prices of energy commodities, particularly natural gas, this direct relationship with electricity prices is an additional channel through which the energy shock is passed through to European economies. However, in recent years, this relationship has begun to weaken in the Spanish market, thanks to the rising contribution of renewables to the energy mix.

The increasing share of wind and solar generation has meant that, for a growing number of hours each day, electricity prices are determined by technologies with

Chart 1 Spanish wholesale electricity prices are becoming less dependent on natural gas prices (a)

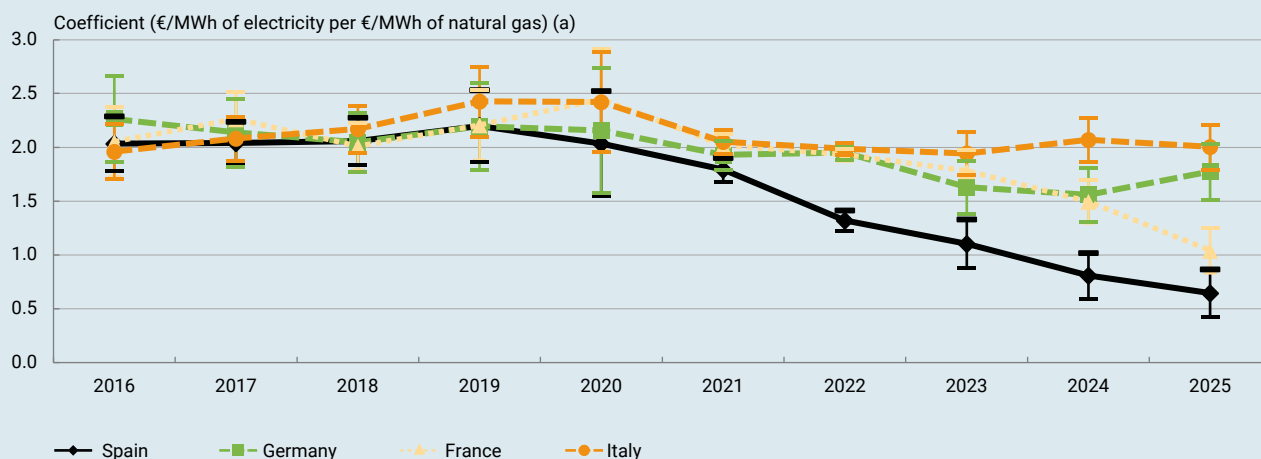
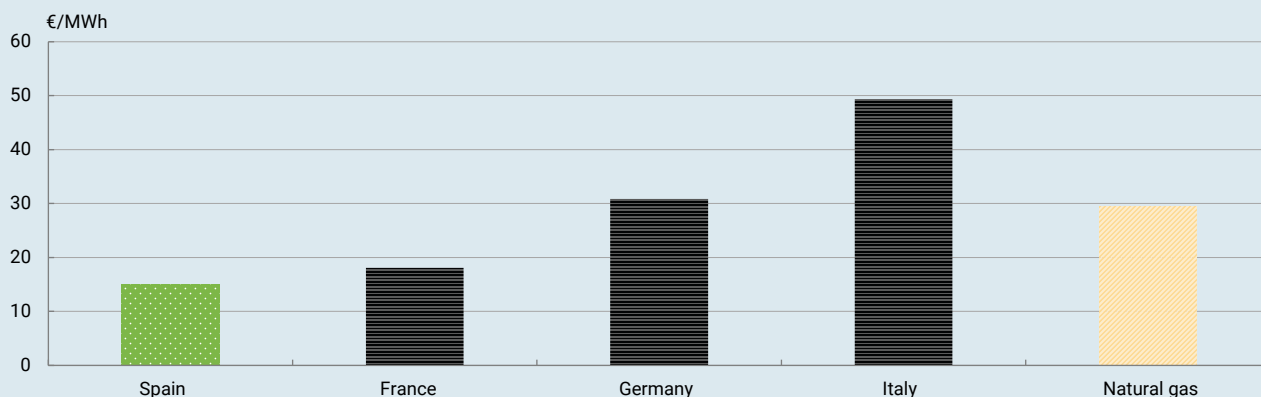


Chart 2 Electricity and natural gas futures prices until 2027 (b)



SOURCES: ENTSO-E, OIMP, MIBGAS AND EEX.

- a Estimated coefficients of the regression $\text{Electricity price} = \beta * \text{natural gas price} * \text{year} + \gamma * \text{CO2 price} + \epsilon$, using weekly data. 95% confidence intervals.
- b Difference between the average quarterly baseload electricity futures with maturities between 2026 Q2 and 2027 Q1 and the average natural gas futures for the same period. Difference between prices negotiated between 23 February and 19 March.

Box 1.3
THE IMPACT OF NATURAL GAS PRICES ON ELECTRICITY PRICES IN EUROPEAN ECONOMIES (cont'd)

lower marginal costs than natural gas generation. Consequently, wholesale electricity prices in Spain are becoming progressively less sensitive to changes in international natural gas prices.

Chart 1 shows, for the four largest euro area economies, the estimated coefficients of the relationship between changes in wholesale electricity prices and changes in natural gas prices since 2016. Until 2021, the sensitivity of electricity prices to natural gas prices hardly varied (standing at around two as a result of the technical requirement mentioned above). Since 2022, however, the pass-through of gas prices to average electricity prices in Spain has steadily declined. Part of this decline was due to the Iberian exception mechanism (in force in 2022 and 2023), which capped electricity prices when natural gas prices surged as a consequence of the war in Ukraine. This pass-through has continued to diminish over the last two years owing to the greater share of renewable technologies in electricity generation and the resulting displacement of fossil fuels as marginal technologies. By contrast, the pass-through of natural gas prices to electricity prices has remained broadly unchanged in the other large euro area economies, with the exception of France.

Thus, according to these estimates, up until 2021, a €10/MWh increase in the price of natural gas led to a €20/MWh rise in the price of electricity on the Spanish wholesale

market, while today the same change would entail an increase of between €5 and €10 in the average price of electricity.

This shift has been reflected in recent electricity price developments. Specifically, until 2021, the price paid by Spanish industry was very similar to that paid by its European peers. From 2022 onwards, however, a significant price gap has opened up between Spain and the rest of the euro area. The progressive decoupling of electricity prices from natural gas prices driven by the greater share of renewable technologies has resulted in a cumulative increase in industrial electricity prices in Spain between 2021 and 2025 H1 (€40/MWh) that is roughly half the average increase recorded in other European economies (around €80/MWh).

These differences have also been reflected across European countries in the response of electricity prices to the recent increase in natural gas prices following the outbreak of the conflict in Iran in late February. Thus, faced with an increase of around €30 in natural gas futures in the weeks following the start of the Iran war,¹ electricity futures in Spain are pricing in an increase of somewhat less than €15 (Chart 2). This increase is smaller than those seen in the other major European economies, especially in Italy and Germany, where electricity generation is more dependent on fossil fuels.

¹ On data to 19 March.

Box 1.4

FISCAL RESPONSES TO INFLATIONARY ENERGY SHOCKS: PAST EXPERIENCE AND RECENT DEVELOPMENTS

The war in Iran, with its impact on fossil fuel prices and the energy system as a whole, has triggered a significant increase in the price of energy. These developments are similar to the inflationary surge in 2022 following the Russian invasion of Ukraine and have significant implications for macroeconomic stability and the development and well-being of households and firms. They particularly affect the most vulnerable groups and those with greater exposure to energy-cost increases.

This box analyses the experience of 2022, from a comparative international perspective, with an ex-post analysis of the measures implemented. It also describes the measures currently being implemented in Spain, by [Royal Decree-Law 7/2026](#),¹ and in other countries.

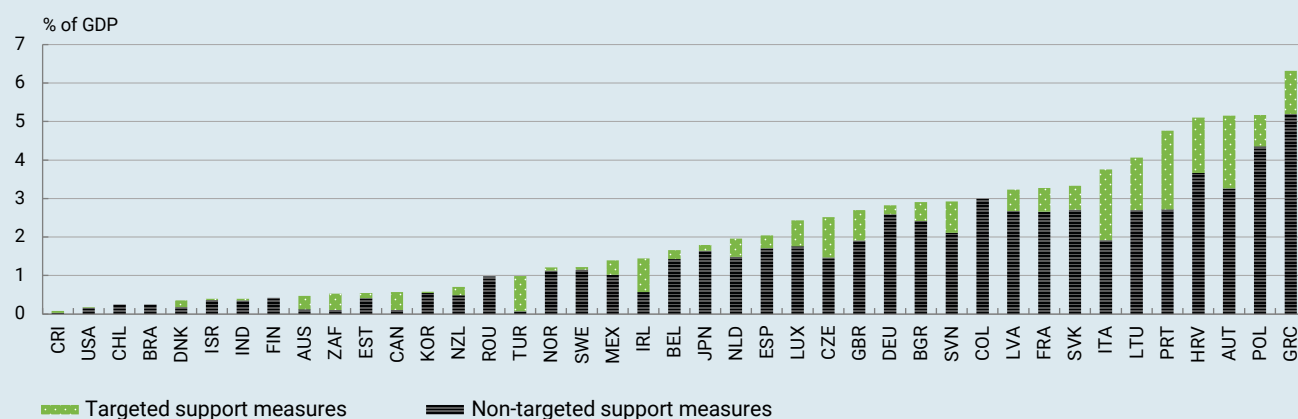
The fiscal measures adopted in a context of rising inflation driven by energy shocks can be assessed with reference to the recommendation to implement targeted, temporary and tailored measures² that ensure a balance between their benefits (protection of particularly hard-hit or vulnerable agents and containment of price increases) and costs (their direct budgetary cost and distortion of price signals, which may impede a reduction in the consumption of more expensive energy products).

The inflationary episode of 2022 from an international perspective: fiscal measures and distributional effects

During the inflationary episode of 2022 and 2023, OECD countries' fiscal responses were highly heterogeneous in terms of their size and design (Chart 1). Within Europe, there were significant differences: while Denmark and Finland adopted the smallest packages (around 0.4% of GDP), Poland and Greece implemented the largest (5.2% and 6.3% of GDP, respectively). In Spain, measures amounted, overall, to around 2% of GDP.

Only a minority of the measures implemented were targeted at vulnerable groups or those especially hard hit by the energy shock, the rest (around 74%) being non-targeted measures, often in the form of reductions in taxes on particular goods. However, in some countries targeted measures represented a larger share of all measures, this being the case, in Europe, in Ireland, Denmark, Italy and Portugal (where targeted measures represented between 43% and 61% of their fiscal packages). In others by contrast, targeted measures represented only a small part (less than 10%) of all those implemented, as was the case in Romania, Finland, Sweden, Norway and Germany. In Spain, it is estimated that around 16% of the measures were targeted.

Chart 1
Fiscal cost of support measures in 2022-23 (a)



SOURCE: OECD Energy Support Measures Tracker.

a Measures are considered to be non-targeted if their main beneficiaries are all households, firms or energy consumers.

1 Royal Decree-Law 7/2026, of 20 March 2026, which approves the Comprehensive Crisis in the Middle East Response Plan.
 2 European Commission. (2026). "Commission proposes actions to protect Europeans from the fossil energy crisis and accelerate the shift to clean, homegrown energy"; European Central Bank. (2026). "Economic, financial and monetary developments". *ECB Economic Bulletin*, 2/2026; Organisation for Economic Co-operation and Development (OECD). (2026). "Energy prices are spiking again. New relief measures, old lessons". Policy brief, 13 April.

Box 1.4

FISCAL RESPONSES TO INFLATIONARY ENERGY SHOCKS: PAST EXPERIENCE AND RECENT DEVELOPMENTS (cont'd)

Focusing on fiscal measures that had a direct impact on households, recent evaluations of the repercussions of the 2022 inflationary episode for the major euro area economies³ and for the EU27 as a whole⁴ show that fiscal policies had a significant compensatory effect on the loss of household purchasing power, although differences are observed both across countries and across households within each country.

These evaluations rely on microsimulation methods to incorporate both price and income growth, as well as the policy measures implemented, whose impact on households is estimated using EU-SILC (European statistics on income and living conditions) survey data. The results are presented in accordance with two complementary metrics. First, the change in purchasing power, defined as growth in prices net of price measures minus effective income growth, taking into account income-transfer measures. Second, a measure of the welfare impact, based on the concept of compensating variation (the income households require to be able to maintain their previous level of consumption), which considers the capacity of households to absorb part of the shock through a reduction in their saving rate.

The results, summarised in Table 1, show that, for the set of countries analysed, purchasing power declined by 2.4 percentage points (pp), this reduction being cushioned by the effect of the price measures (+1.5 pp) and income measures (+0.9 pp) adopted. In the absence of any measures, the decline in purchasing power would have been larger (-5.2 pp), as prices without measures increased more than incomes without measures. In welfare terms, the reduction would have been smaller (-0.8% of disposable income) as households were able to absorb part of the shock by reducing their saving.

By country, the results are more heterogeneous: some, such as France (+0.8 pp), saw increases in purchasing power, while in others, such as Germany (-4.7 pp), the loss was very marked, or, as in the case of Italy (-2.3 pp), more moderate.⁵ Spain stands in a middle-ranking position in terms of purchasing power (-1.7 pp), slightly above the EU27, ahead of Germany, close to Italy and behind France.

This favourable position is mainly explained by the greater effectiveness of price-reduction measures in Spain (+2.1 pp contribution), given that income measures had a very limited impact (+0.1 pp), markedly lower than in the EU27 (+0.9 pp) and in Italy (+2.3 pp). In terms of welfare, however, Spain's position deteriorates relative to the European average: the compensating variation amounts to -1.5% of disposable income, compared with -0.8% for the EU27 as a whole, placing Spain between Germany (-2.1%) and Italy (-0.3%). This divergence between the two metrics suggests that, although price measures effectively reduced the cost of the consumption basket, Spanish households had less scope with regard to their savings to cushion the real welfare shock, as they devote a larger share of their income to consumption.

It is also important to note that there are significant differences in the distributional impact of the measures within each country, according to household characteristics. The effects differ, either because the measures depend on household characteristics by design, or because consumption patterns – and thus the benefits of price reductions – vary across households. In terms of purchasing power, the impact for the EU27 as a whole displays a progressive pattern: the lowest income decile experienced an increase in purchasing power (+1.5 pp), while the highest decile recorded losses, mainly as a result of targeted income measures. In contrast, in welfare terms, the inflationary shock – together with the policies implemented – had a negative effect across all deciles, with the lowest income decile experiencing a welfare loss of -2.7% of disposable income for the EU27 as a whole.

In the case of Spain, the distributional impact of the fiscal policies implemented in 2022 differs from the European average. In terms of purchasing power, the lowest income decile recorded a larger decline (-2.4 pp) than the average for Spanish households (-1.7 pp), in contrast to the progressive pattern observed in the EU27. In welfare terms, the loss (measured by the compensating variation) amounts to -6.3% of disposable income for the lowest decile, well above the average loss in Spain (-1.5%) and

3 Antonio F. Amores, Henrique Basso, Johannes Simeon Bischl, Paola De Agostini, Silvia De Poli, Emanuele Dicarolo, Maria Flevotomou, Maximilian Freier, Sofia Maier, Esteban García-Miralles, Myroslav Pidkuyko, Mattia Ricci and Sara Riscado. (2025). "Inflation, Fiscal Policy, and Inequality: The Impact of the Post-Pandemic Price Surge and Fiscal Measures on European Households". *Review of Income and Wealth*, 71(1).

4 Maria Flevotomou et al. (2026). "Fiscal Policy and High Inflation in 2022". Forthcoming. This paper and the previous one are both the result of collaboration between the Eurosystem, the Banco de España and the European Commission's Joint Research Centre.

5 Countries also experienced differences in the intensity of the inflationary shock in 2022, which ranged from 6% in France to 20% in Estonia. Also, within each country, lower-income households faced higher price increases owing to the composition of their consumption basket. See Evangelos Charalampakis, Bruno Fagandini, Lukas Henkel and Chiara Osbat. (2022). "The impact of the recent rise in inflation on low-income households". *ECB Economic Bulletin*, 7/2022.

Box 1.4

FISCAL RESPONSES TO INFLATIONARY ENERGY SHOCKS: PAST EXPERIENCE AND RECENT DEVELOPMENTS (cont'd)
Table 1
 Impact of measures implemented in 2022 on household purchasing power and welfare

	EU27	Spain	Germany	France	Italy
Change in purchasing power (pp) (a)					
All households	-2.4	-2.1	-4.1	0.8	-1.3
Due to price measures	1.5	2.1	0.4	2.6	2.9
Due to income measures	0.9	0.1	0.9	0.3	2.3
Rest (price growth less income growth, in both cases without measures)	-4.8	-4.3	-5.4	-2.2	-6.5
Decile 1 (lowest 10% of households by income)	1.5	-2.4	-1.6	1.3	15.4
Due to price measures	1.6	3.1	0.4	2.7	3.1
Due to income measures	4.0	1.1	2.4	1.7	12.4
Rest (price growth less income growth, in both cases without measures)	-4.1	-6.6	-4.5	-3.0	-0.1
Change in welfare (compensating variation, % disposable income) (b)					
All households	-0.8	-1.5	-2.1	2.0	-0.3
Due to price measures	1.2	1.9	0.3	1.7	2.5
Due to income measures	0.9	0.1	0.9	0.3	2.3
Rest (price growth less income growth, in both cases without measures)	-2.9	-3.4	-3.3	0.0	-5.1
Decile 1 (lowest 10% of households by income)	-2.7	-6.3	-4.8	1.0	7.9
Due to price measures	2.5	5.1	0.5	3.0	5.8
Due to income measures	4.0	1.1	2.4	1.7	12.4
Rest (price growth less income growth, in both cases without measures)	-9.2	-12.5	-7.8	-3.6	-10.3

SOURCE: Banco de España based on Flevotomou et al. (2026). "Fiscal Policy and High Inflation in 2022". Forthcoming.

- a Change in purchasing power: an indicator defined as the difference between the growth rate of prices net of the measures adopted and the actual growth rate of household incomes, incorporating the effects of measures implemented through income transfers.
- b Change in welfare (compensating variation): measure based on the microeconomic concept of compensating variation, defined as the additional income needed for households to reach the level of utility associated with their prior consumption pattern, taking into account the heterogeneity of saving rates and, therefore, of responses to the price and income changes.

the average loss for the same decile in Europe (-2.7%), pointing to a concentration of the welfare impact on the most vulnerable households. These effects are partly explained by the relatively small size of the targeted income measures implemented in Spain, although those that were implemented were particularly efficient, as they were highly concentrated among recipients of the minimum income scheme and non-contributory pensions,

and would thus have mitigated the impact of the shock on these groups.⁶

The fiscal measures implemented in 2026 in Spain and in Europe in response to the war in Iran

The Spanish Government approved a package of fiscal measures (Royal Decree-Law 7/2026), the details, duration and budgetary impact of which are shown in Table 2.⁷

6 A recent formal exploration of the differential impact on welfare of price-reduction and income-support measures, for the case of Spain, is presented in Myroslav Pidkuyko and Raffaele Rossi. (2026). "Fiscal Policy during the Cost-of-Living Crisis". Documentos de Trabajo, Banco de España. Forthcoming. The authors show that, although both instruments generate welfare gains compared to when no fiscal measures are implemented, income-targeted transfers are significantly more effective.

7 For further details and an estimation of the impact of this package of measures on activity and inflation, see Banco de España. (2026). *Macroeconomic projections and quarterly report on the Spanish economy. March 2026*.

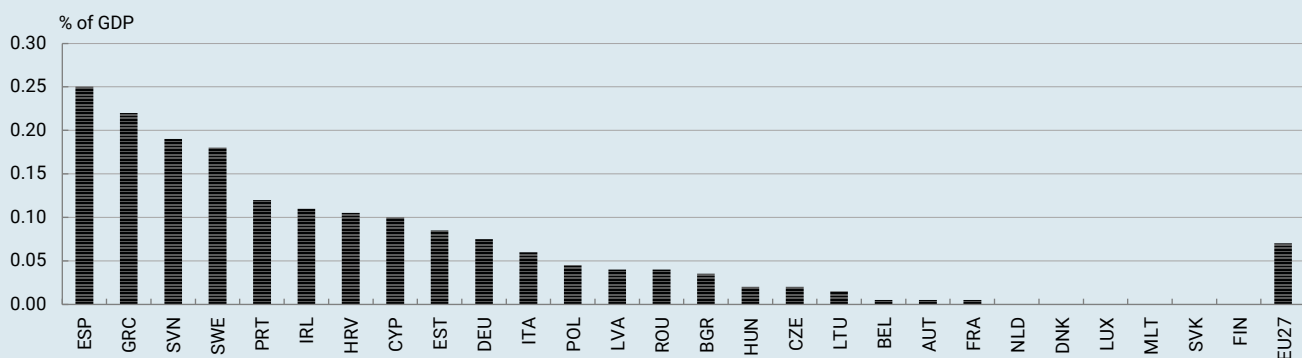
Box 1.4

FISCAL RESPONSES TO INFLATIONARY ENERGY SHOCKS: PAST EXPERIENCE AND RECENT DEVELOPMENTS (cont'd)
Table 2
Fiscal support measures contained in Royal Decree-Law 7/2026 (a)

	Amount (% of GDP)	Date effective
Reduction of energy taxes (b)	0.11	
Reduction in the rate of VAT on fuels (from 21% to 10%)		30.6.2026
Reduction in the rate of VAT on electricity, gas and firewood (from 21% to 10%)		31.5.2026
Reduction in excise duty on hydrocarbons		30.6.2026
Reduction in excise duty on electricity (from 5.11% to 0.5%)		31.5.2026
Abolition of IVPEE (c)		30.6.2026
Subsidies, direct aid and other measures	0.15	
Additional reduction of €0.20/l of diesel for transport, agriculture and livestock sectors		30.6.2026
Aid for industrial and energy sectors (d)		30.12.2026
Transfers to primary sector and maritime transport (e)		30.12.2026
Energy-consumer protection measures (f)		30.12.2026
Personal income tax deductions for the acquisition of electric vehicles: Auto+ programme		30.12.2026
TOTAL	0.26	

SOURCE: Banco de España.

- a** The measures included in this table are presented in Royal Decree-Law 7/2026, which also includes other measures with no direct budgetary cost (e.g. those funded through the Recovery and Resilience Facility).
- b** The reduction in VAT and in excise duties on hydrocarbons and electricity may cease to be effective in June, depending on the April CPI figures.
- c** The abolition of the IVPEE is accompanied by a compensatory subsidy for companies in the electricity sector.
- d** This package of measures also includes a zero tariff for underground gas storage, effective until March 2027.
- e** This package of measures also includes aid for maritime transport services, effective until June 2026.
- f** This package of measures also includes making electricity and natural gas contracts more flexible, effective until June 2026.

Chart 2
Fiscal cost of support measures in 2026 (a)

SOURCE: Banco de España based on European Commission estimates (Spring 2026 Economic Forecast).

- a** Measures adopted or announced are included with details from 1 March 2026 until the forecast closing date (4 May). Actions to mitigate the impact of high energy prices on households and firms are included, while others, such as energy transition investments, are excluded. Only measures with a direct budgetary impact are considered

A first set of measures consists of a broad-based reduction in energy taxes, with an estimated budgetary impact of around 0.15% of GDP. These measures include a reduction in the rate of VAT on fuels, electricity, gas and

firewood from 21% to 10%, as well as cuts in excise duties on hydrocarbons and electricity and the abolition of the tax on the value of electricity production (IVPEE, by its Spanish initials). They will generally remain in force until

Box 1.4

FISCAL RESPONSES TO INFLATIONARY ENERGY SHOCKS: PAST EXPERIENCE AND RECENT DEVELOPMENTS (cont'd)

30 June 2026, although some expired on 31 May, as a result of the developments in the April consumer price index (CPI).

A second group of measures includes, among other actions, a set of subsidies and direct aid schemes targeted at energy-intensive sectors, with an estimated budgetary impact of around 0.14% of GDP. These measures include rebates of €0.20 per litre of diesel for the transport and primary sectors until June 2026, along with various forms of support for industry and the energy sector until December 2026, such as reductions in network access charges for electricity-intensive industries, a zero levy on gas storage and increased CO₂ compensation. Additional provisions, until the end of 2026, include support for the agricultural and fisheries and maritime transport sectors, various measures to protect energy consumers, an extension of the heating subsidy and personal income tax deductions for the purchase of electric vehicles.

The measures adopted bear close similarities to those implemented during the 2022-23 inflationary episode, insofar as they are broadly applicable, they are based on subsidies to particularly hard-hit industries and their primary aim is to contain price increases. Although it is still too early to quantify the impact of the current energy shock on households, its nature suggests it will have distributional effects comparable to those observed in the previous episode.^{8,9}

From an international perspective, the Spanish response is consistent with a broadly observed pattern across

OECD countries. According to the OECD,¹⁰ as of early April 2026, 26 of its member countries had implemented at least one support measure in response to the energy shock stemming from the conflict in Iran, with reductions in fuel taxes, VAT and excise duties being the most common interventions. Targeted income-support measures have been used to a lesser extent: approximately two-thirds of the measures announced are temporary, with explicit expiry dates, while only around one-third are targeted in scope and primarily aimed at the sectors most exposed to rising fuel prices, such as agriculture and road haulage.

Within the European context, Member States have committed in total around €14.5 billion¹¹ in fiscal measures to mitigate the impact of the shock, with notable differences in their scale and design. Chart 2 shows that Spain has mobilised the largest amount of resources relative to GDP – around 0.25%, according to European Commission estimates – followed by Greece, Slovenia, Sweden and Portugal. As in the 2022-23 episode, non-targeted measures – essentially broad-based reductions in energy taxes – account for around 75% of the total fiscal cost at the European level.

Cross-country comparisons reveal common patterns, with tax reductions accounting for a large share of the response in Spain, Germany and Italy, whereas France appears to have prioritised, in its initial fiscal response, regulatory instruments and agreements with the private sector (Table 3). In Spain, measures to support the hardest-hit industrial sectors are also particularly prominent, which

- 8 The impact of inflation on households is complex and not limited to the change in consumer prices. Its distributional effect also depends on other channels, such as the behaviour of household income (Chrysa Leventi, Alberto Mazzon and Fabrice Orlandi. (2024). "Indexing wages to inflation in the EU: fiscal drag and benefit erosion effects". EUROMOD Working Paper Series, 02/24, Centre for Microsimulation and Policy Analysis), the fiscal measures adopted (Antonio F. Amores, Henrique Basso, Johannes Simeon Bischl, Paola De Agostini, Silvia De Poli, Emanuele Dicarolo, Maria Flevotomou, Maximilian Freier, Sofia Maier, Esteban García-Miralles, Myroslav Pidkuyko, Mattia Ricci and Sara Riscado. (2025). "Inflation, Fiscal Policy, and Inequality: The Impact of the Post-Pandemic Price Surge and Fiscal Measures on European Households". *Review of Income and Wealth*, 71(1)), the effect of fiscal drag (Esteban García-Miralles, Maximilian Freier, Sara Riscado, Chrysa Leventi, Alberto Mazzon, Glenn Abela, Laura Boyd, Baiba Brusbārde, Marion Cochard, David Cornille, Emanuele Dicarolo, Ian Debattista, Mar Delgado-Téllez, Mathias Dolls, Ludmila Fadejeva, Maria Flevotomou, Florian Henne, Alena Harrer-Bachleitner, Viktor Jászberényi-Király, ... Lara Wemans. (2026). "Fiscal drag in theory and in practice: A European perspective". *European Economic Review*, 185(105275)) and the net wealth channel (Clodomiro Ferreira, José Miguel Leiva, Galo Nuño, Álvaro Ortiz, Tomasa Rodrigo and Sirenia Vazquez. (2026). "The heterogeneous impact of inflation on households' balance sheets". *SERIEs*, 17, pp. 31-53; Filippo Pallotti, Gonzalo Paz-Pardo, Jiri Slacalek, Oreste Tristani and Giovanni L. Violante. (2024). "Who bears the costs of inflation? Euro area households and the 2021-2023 shock". *Journal of Monetary Economics*, 148, Supplement (103671)).
- 9 For an analysis of the distributional impact of the policies implemented in 2022 and 2023, see Esteban García-Miralles. (2023). "Support measures in the face of the energy crisis and the rise in inflation: an analysis of the cost and distributional effects of some of the measures rolled out based on their degree of targeting". *Economic Bulletin - Banco de España*, 2023/Q1, 15; for an evaluation of the distributional impact of the measures of Royal Decree-Law 7/2026, see Spanish Independent Authority for Fiscal Responsibility. (2026). *Report on the Initial Budget of the General Government 2026*, 5/26, 15 April.
- 10 OECD. (2026). "Energy prices are spiking again. New relief measures, old lessons". Policy brief, 13 April.
- 11 European Commission. (2026). "Policy measures in EU Member States to address the 2026 energy price shock".

Box 1.4

FISCAL RESPONSES TO INFLATIONARY ENERGY SHOCKS: PAST EXPERIENCE AND RECENT DEVELOPMENTS (cont'd)
Table 3
Fiscal support measures implemented in Spain, Germany, France and Italy in response to the war in Iran

Spain (a)	A broad package of temporary energy tax cuts, including reductions in VAT and excise duties on fuels, gas and electricity.
	A set of direct aid measures and subsidies, including professional diesel rebates and transfers to specific sectors (transport and primary sectors, and energy-intensive industries).
	Measures to protect vulnerable consumers and fiscal stimulus measures in areas such as electric mobility.
Germany	Regulatory measures aimed at limiting increases in fuel market prices (restrictions on the frequency of price rises and strengthening of the sanctioning framework).
	A temporary, broad-based reduction in excise duties on fuels.
France (b)	Regulatory and market supervision measures (including inspections at petrol stations) to contain price increases.
	Promoting the role of private agents in stabilising fuel prices through voluntary caps, limits on speculation and penalties for unjustified mark-ups
	Relatively targeted measures to support economic activity, including tax deferrals, emergency loans and specific fuel aid schemes.
	Instruments aimed at alleviating liquidity pressures on firms, in particular small and medium-sized enterprises (SMEs).
Italy	A temporary reduction in excise duties on fuels (€0.25/l), which has been extended, as the main containment instrument.
	Strengthening of fuel market supervision, with measures to curb speculative behaviour and sanction unjustified increases in mark-ups.

SOURCE: Banco de España.

a For further details, see Table 2.

b At the end of May, France announced a package of support measures targeted at households, the details of which are still to be specified.

may partly explain the higher weight of fiscal measures in the overall response.

In conclusion, the fiscal measures set out in Royal Decree-Law 7/2026, which are similar in design to those implemented in 2022 and 2023 and those adopted in other European countries, tend to place greater emphasis on

non-targeted instruments, such as tax reductions. However, a proper assessment of their macroeconomic and distributional effects will only be possible at a later date, when more complete information is available on the evolution of the conflict, its impact on energy prices and the final set of measures adopted to mitigate its effects on economic agents.

Box 1.5
INTANGIBLE INVESTMENT AND THE GROWTH IN NON-TRAVEL SERVICES EXPORTS IN SPAIN

Over the past decade, growth in exports¹ of non-travel services has emerged as one of Spain's most significant structural economic transformations. This item's contribution to the current account surplus turned positive after the 2008 recession (Chart 1). Data for 2025 show that this trend is continuing, with the contribution increasing by 0.6 percentage points (pp).

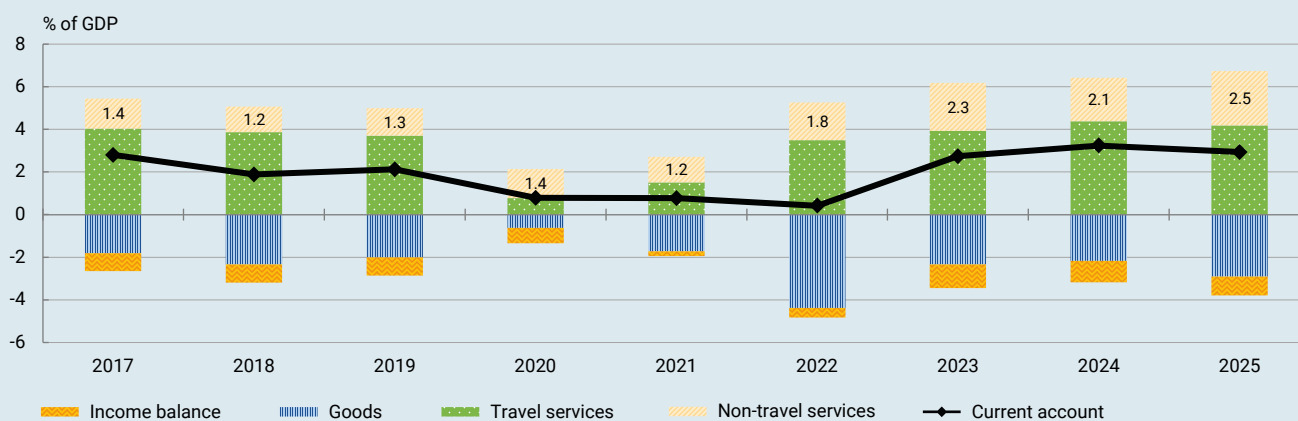
In 2025 non-travel services exports accounted for 7.1% of GDP – slightly less than in the euro area as a whole, where they exceeded 8% of GDP – and have overtaken travel services, which represented 6.2% of GDP. The most dynamic components were telecommunications and technical activities (architecture, engineering, trade and waste management), which are characterised by high value added and high productivity. In 2025 exports of technical services represented 1.7% of GDP in Spain (compared with 1.2% in the euro area), while telecommunications exports accounted for 1.4% (compared with 2.1% in the euro area). Since 2019, consulting, and management and financial services have each grown by around 0.2 percentage points (pp), reaching

0.9% and 0.5% of Spanish GDP, respectively, in 2024. By destination, non-travel services exports are mainly to European Union (EU) countries, although the US market, while still relatively small, has gained importance in recent years.

These developments have been driven by a surge in global demand for services, particularly digital services. Between 2017 and 2024 world exports of these services increased by 50 pp, with digital services rising even more sharply (by close to 80 pp) over the same period (Chart 2.a). This expansion has been favoured by the technological advances of recent decades, which have led to profound changes in the world economy, enabling the growth and diversification of services exports. At the same time, the growing integration of services into goods trade and the increasing complexity of global value chains have fostered the internationalisation of non-travel services. At the European level, the reduction of barriers to trade in services² following the implementation of various regulations has also played a key role.

Chart 1

Over the past decade, growth in exports of non-travel services has emerged as one of Spain's most significant structural economic transformations

1.a Current account balance in Spain


SOURCE: Banco de España.

1 In this box, the term "exports" refers to the receipts recorded in the Balance of Payments (BoP) and not to the exports recorded in the National Accounts (NA). Although there are no differences between the total for services in the BoP and services in the rest-of-the-world account of the NA, travel services purchased through travel agencies and tourism expenditure for business purposes are classified differently, and this may generate discrepancies between the two statistics' travel and non-travel services series.

2 Since the Services Directive (2006), known as the "Bolkenstein Directive", which laid the foundations for the single market for services, numerous EU-wide regulations have been implemented in different areas (capital markets, the digital single market and public procurement) that have fostered cross-border trade in services. However, barriers to trade in services persist.

Box 1.5

INTANGIBLE INVESTMENT AND THE GROWTH IN NON-TRAVEL SERVICES EXPORTS IN SPAIN (cont'd)

Spain has especially benefited from this environment. Although Spain's share of the global non-travel services market remains relatively small – at around 2%, in line with Italy's – it has been increasing, most notably in information, financial and other non-digital services (Chart 2.b). This contrasts with developments in other European countries, such as Italy, France and Germany, which have not been able to increase their relative shares in the international non-travel services market.

In addition, Spain's non-travel services sector has seen gains in competitiveness in recent years which, measured on the basis of the terms of trade (Chart 3.a), have far

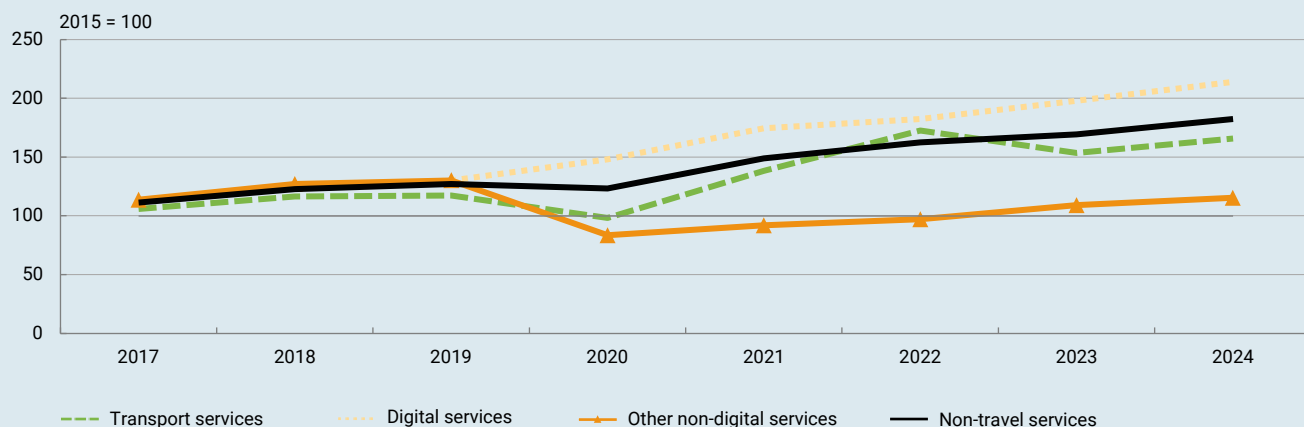
outpaced those in travel services. These developments appear to be underpinned by a better relative performance of productivity in non-travel sectors. Indeed, Spain's relative productivity vis-à-vis the euro area has risen more markedly for professional and administrative services than for the economy as a whole (Chart 3.b).

This sharp growth in the non-travel services sector is linked to a surge in intangible investment. Specifically, between 2019 and 2023 investment grew more strongly in these sectors than in the rest of the economy (Chart 4), driven – to a greater extent than in other sectors – by intangible investment.

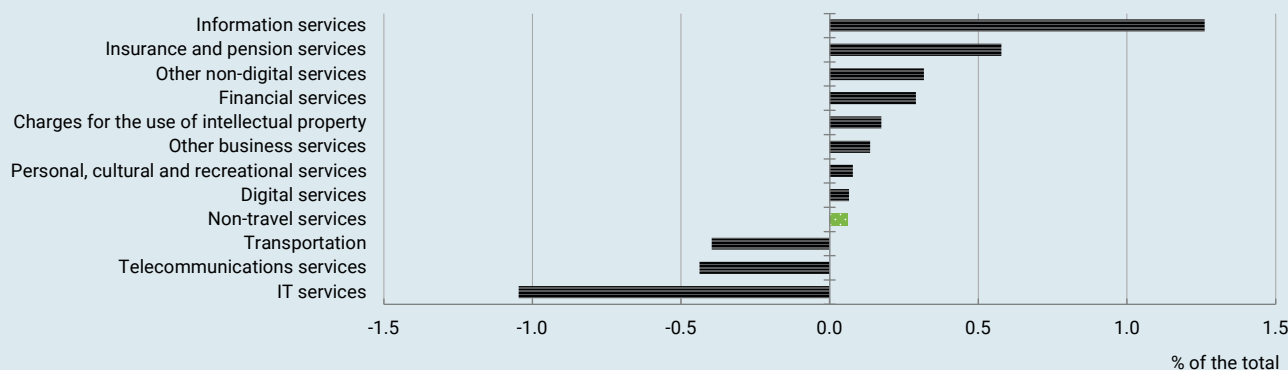
Chart 2

The surge in global demand for services, especially digital services, has been one of the main drivers of growth in non-travel services exports, both in Spain and worldwide

2.a Global nominal exports of services



2.b Change in Spain's share in global exports of non-travel services (2019 vs 2024)



SOURCE: WTO.

Box 1.5

INTANGIBLE INVESTMENT AND THE GROWTH IN NON-TRAVEL SERVICES EXPORTS IN SPAIN (cont'd)

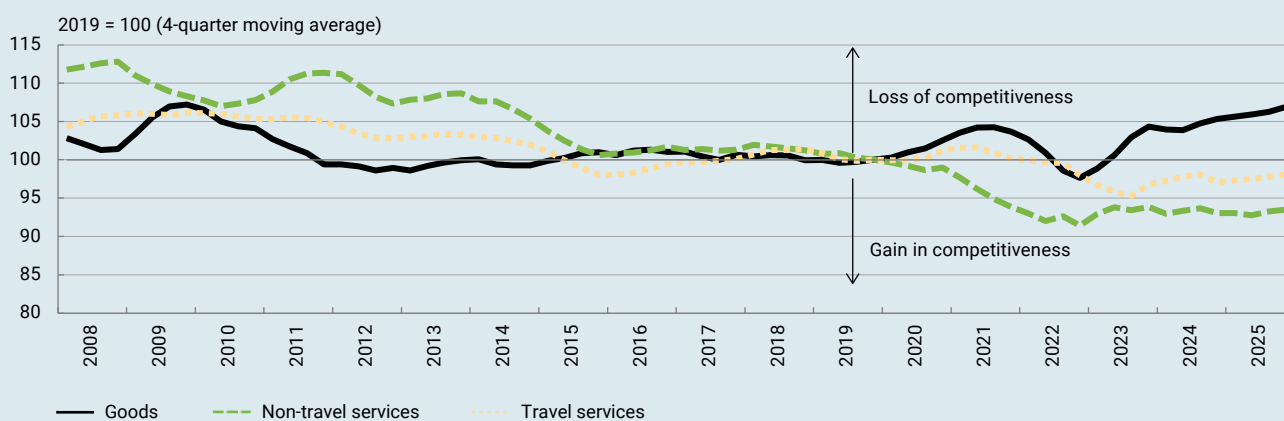
Drawing on firm-level data, it is possible to analyse the link between productivity gains and the rise in business investment in non-travel services sectors in Spain and other European countries. In the most recent period, the relationship between productivity and investment has strengthened for these services in Spain more markedly

than in the rest of the economy³ and relative to other European countries. In particular, between 2019 and 2023 the relationship between increases in investment and productivity growth among Spanish firms in the non-travel services sector intensified significantly (Chart 5), particularly compared with firms in other economic sectors.

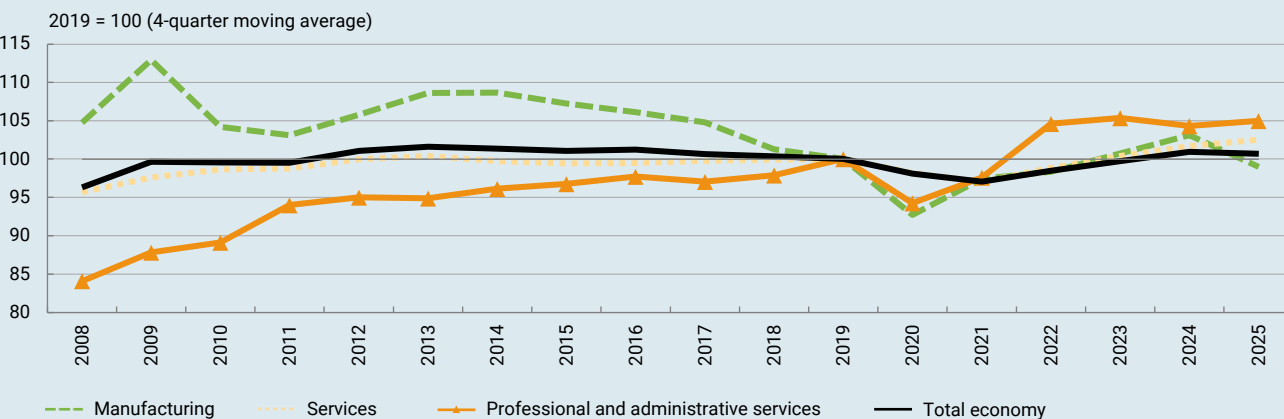
Chart 3

In recent years, non-travel services sectors have seen notable gains in competitiveness, unlike goods, which have experienced declines

3.a Terms of trade (a)



3.b Spain/euro area relative productivity (in hours worked)



SOURCES: INE and Banco de España.

a The terms of trade are defined as the ratio between export and import prices. Increases (decreases) in the terms of trade imply losses (gains) in competitiveness.

3 For further details, see Chapter 3 of this Report.

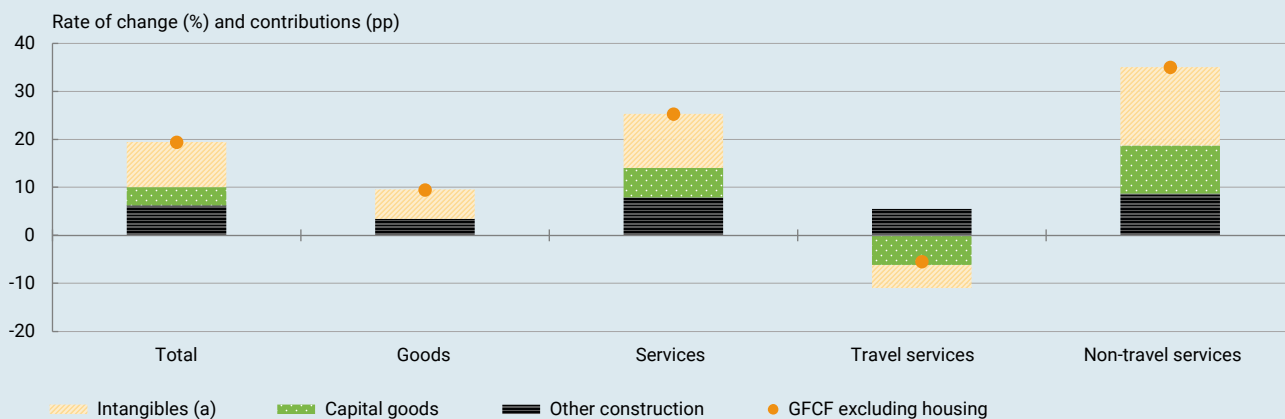
Box 1.5

INTANGIBLE INVESTMENT AND THE GROWTH IN NON-TRAVEL SERVICES EXPORTS IN SPAIN (cont'd)

Chart 4

The structural shift in the non-travel services sector is closely linked to the surge in intangible investment

4.a Change in GFCF in Spain between 2019 and 2023, by sector



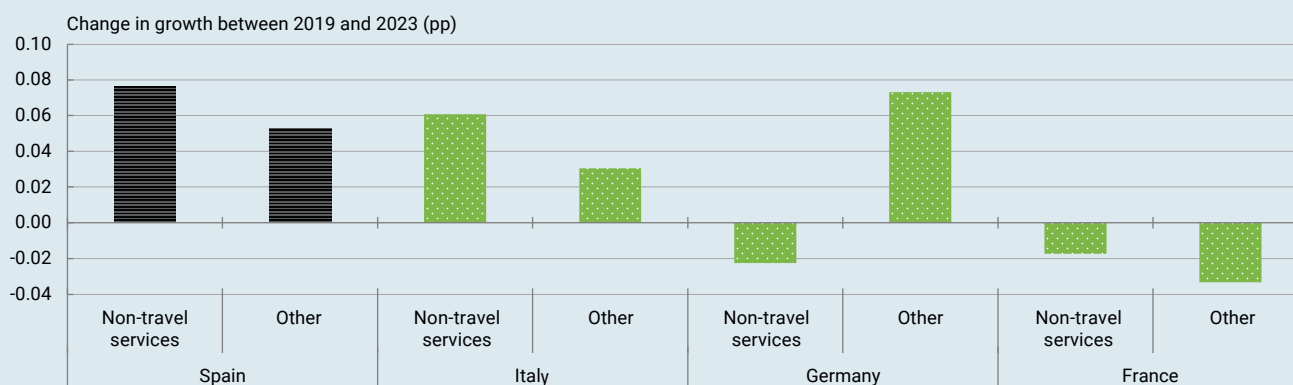
SOURCES: INE and Banco de España.

a For simplicity, "intangible" includes the item "cultivated biological resources". This item accounts for a negligible part of investment.

Chart 5

Between 2019 and 2023, the link between investment growth and productivity strengthened more among Spanish firms than among firms in other European countries. This pattern was even more pronounced among firms in non-travel services sectors

5.a Growth in business investment and TFP, by country (a)



SOURCE: Banco de España.

a The dependent variable is investment growth and the variable of interest is TFP. Fixed effects for firm size and sector-year are included.

Box 1.6

SPAIN'S UNEMPLOYMENT BENEFIT ASSISTANCE FOR INDIVIDUALS AGED OVER 52/55

In 1984, a non-contributory unemployment benefit was introduced for the over-55s,¹ and was later extended to include individuals over the age of 52. It differs from other unemployment protection schemes in two ways: its duration is indefinite until retirement age is reached, and retirement contributions are paid by the public employment services.

This benefit was introduced in a macroeconomic and labour market environment very different from that prevailing today. In the wake of the oil crisis in the mid-1970s, the integration of young people into the labour market was notably weak and the youth unemployment rate remained very high (Chart 1). This was a source of considerable concern and prompted a series of legislative changes, among them the benefit analysed in this box, which offered protection to older individuals who lost their jobs, and measures that facilitated young people's access to vacant positions.

Since its introduction, this benefit has undergone various changes concerning eligibility, the benefit amount, age of entitlement and the contribution base, especially in the latter two variables. Specifically, the minimum entitlement age was lowered to 52 in 1989, raised again to 55 in 2012 and ultimately reduced back to 52 in 2019. As for the contribution base, it initially stood at 100% of the minimum wage, but following the creation of the IPREM (multipurpose public indicator of income) in 2004, the benefit amount (linked to the IPREM) and the contribution base (linked to the minimum wage) began to diverge. Moreover, in 2007 the contribution base was increased to 125% of the minimum wage, reduced back to 100% in 2012 and again increased to 125% in 2019. However, the benefit has retained its two defining features: indefinite duration and the payment of retirement contributions by the public employment service. This despite the differences between the conditions at the time it was introduced and those prevailing today, the latter shaped by an extended period of economic growth and a marked increase in unemployment rates among the over-55s

following the global financial crisis (Chart 2), which have yet to fully return to earlier levels.

These conditions may have a negative effect on beneficiaries' incentives to return to work. In this respect, of the beneficiaries who did not work in 2021, only 8.9% returned to work for at least one day in 2022, well below the figure (29.9%) observed for recipients of contributory unemployment benefits. This low probability of returning to employment persists over time: in 2024, the majority (55%) of beneficiaries had started to receive the benefit before reaching the age of 55 (Chart 3).

Meanwhile, re-employment prospects also depend on other socioeconomic factors. Specifically, as Chart 4 shows, the existence of household income other than the beneficiary's reduces incentives to return to work.² In addition, older individuals – who are closer to retirement – are less likely to return to employment, as are women.

The literature has causally examined the relationship between receipt of this benefit and re-employment rates, drawing on the changes over time in the age threshold for eligibility. Domènech-Arumi and Vannutelli (2025)³ have found that the 2012 increase in the age threshold from 52 to 55 led to a rise in the number of affected workers returning to employment, especially among the younger individuals within the cohort. Arranz and García-Serrano (2022)⁴ found evidence of strategic behaviour on the part of firms and workers exploiting this regulatory reform, with some layoffs being delayed until workers reached older ages following its introduction.

However, since these studies analyse the benefit as a whole, the extent to which the disincentive effect is attributable to the benefit's indefinite duration or to the associated retirement contributions cannot be established. In this regard, a substantial body of literature associates prolonged unemployment assistance with low re-employment rates. For Spain, Guillamón, Izquierdo and Puente⁵ (2026) have developed a microsimulation model

- 1 This benefit complements the standard, contributory unemployment benefit, which has no age requirement, a maximum duration of 30 months and is payable to unemployed individuals who have exhausted or are not eligible for contributory benefits because they have not contributed for the minimum required period.
- 2 Since 2019, eligibility for the subsidy has been assessed individually, so household income may differ substantially across recipients depending on other sources of income within the household.
- 3 Gerard Domènech-Arumi and Silvia Vannutelli. (2025). "Bringing Them In or Pushing Them Out? The Labor Market Effects of Pro-Cyclical Unemployment Assistance Changes". *The Review of Economics and Statistics*, 107(2), pp. 324-337.
- 4 José M. Arranz and Carlos García-Serrano. (2022). "La evaluación del impacto de las políticas públicas: el caso de las políticas del mercado de trabajo". *Papeles de Economía Española*, 172, Fundación de las Cajas de Ahorros (Funcas).
- 5 Cristina Guillamón, Mario Izquierdo and Sergio Puente. (2026). "Duration vs. Replacement Ratio: A Microsimulation Analysis of Unemployment Benefits". Forthcoming.

Box 1.6

SPAIN'S UNEMPLOYMENT BENEFIT ASSISTANCE FOR INDIVIDUALS AGED OVER 52/55 (cont'd)

for contributory unemployment benefits that links their parameters (duration and amount) to the probability of returning to work. Their findings indicate that while both parameters disincentivise the return to work, the duration effect is of a greater order of magnitude.⁶

By contrast, the literature has paid little attention to the specific role that retirement contributions could play. In

this respect, the regulatory reforms introduced over time provide an opportunity to analyse their impact. Until 2004 the benefit was set at 80% of the minimum wage, while contributions were based on 100% of the minimum contribution base, resulting in an over-contribution ratio of 1.25 relative to the benefit amount (Chart 5). Since the introduction of the IPREM that year, this ratio increased significantly, reflecting stronger growth in the minimum

Chart 1
Unemployment and long-term unemployment rates, youth (aged 16-29)



Chart 2
Unemployment and long-term unemployment rates, ages 55+



Chart 3
Distribution of beneficiaries of the unemployment benefit for over-52s in 2024, by age at first receipt (b)

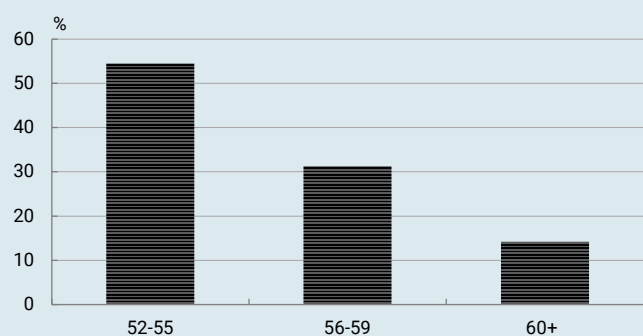
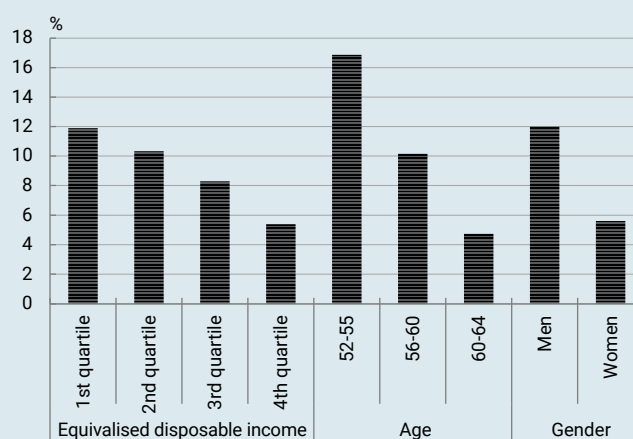


Chart 4
Probability of finding employment in 2022 among recipients in 2021 of the unemployment benefit for over-52s (c)



SOURCES: INE, Tesorería General de la Seguridad Social, IEF/AEAT and Banco de España.

- a Long-term unemployed are defined as individuals who have been seeking employment for at least one year.
- b Based on micro data from the social security administrative labour record (MCVL, by its Spanish initials).
- c Individuals aged 52-64 not in employment in 2021. Equivalised gross disposable income is found using the modified OECD equivalence scale. Household Panel prepared by the Institute for Fiscal Studies and tax authorities (IEF/AEAT).

⁶ Other related papers for Spain include Yolanda Rebollo-Sanz. (2012). "Unemployment insurance and job turnover in Spain". *Labour Economics*, 19(3), pp. 403-426, and Yolanda F. Rebollo-Sanz and Núria Rodríguez-Planas. (2020). "When the Going Gets Tough...: Financial Incentives, Duration of Unemployment, and Job-Match Quality". *The Journal of Human Resources*, 55(1), pp. 119-163.

Box 1.6
SPAIN'S UNEMPLOYMENT BENEFIT ASSISTANCE FOR INDIVIDUALS AGED OVER 52/55 (cont'd)

wage relative to the IPREM, along with the increase in the contribution base to 125% of the minimum wage. The changes in the associated contribution, not observed in the amount of the benefit, provide a basis for estimating the differential effect of over-contribution on the probability of returning to employment.

This estimate is based on the model developed by Guillamón, Izquierdo and Puente (2026), extended to incorporate the effects of unemployment benefits, thus distinguishing between the standard contributory unemployment benefit, the non-contributory unemployment benefit of indefinite duration for individuals aged over 52/55, and the over-contribution associated with the latter.⁷ Once the model has been estimated, a microsimulation is performed for all recipients of the indefinite-duration benefit aged 55. For each individual,

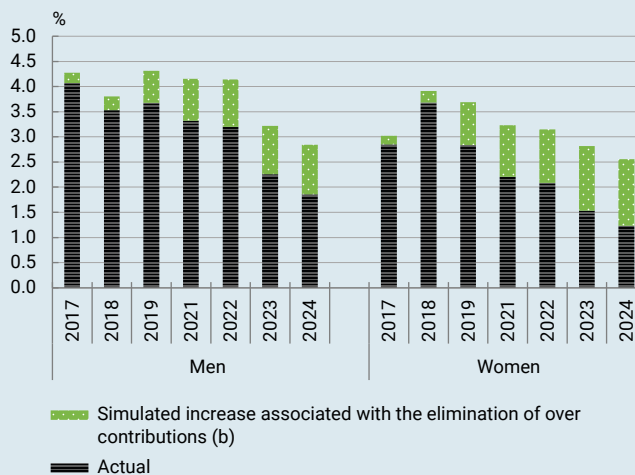
the observed over-contribution is replaced by a counterfactual one, in which the contribution base is lowered until it equals the amount of the benefit (i.e. 80% of the IPREM). The results are shown in Chart 6. They suggest that the probability of returning to work would have been somewhat higher, with an especially pronounced effect among women, for whom it may even have doubled in recent years.⁸ This stronger effect appears to reflect both the increase in the minimum wage in 2019 and the rise in the contribution base to 125% of the minimum wage.

The above findings suggest that the disincentive to return to work stemming from the non-contributory unemployment benefit for individuals aged over 52/55 could, to a significant extent, be largely attributed to the over-contribution that this benefit entails. However, this evidence

Chart 5
Ratio of the contribution base to the unemployment benefit for over-52s/55s



Chart 6
Probability of returning to work the following month among 55-year old beneficiaries of the contributory benefit



SOURCES: INE, Tesorería General de la Seguridad Social, IEF/AEAT and Banco de España.

- a** Ratio of the contribution base applied to beneficiaries of the unemployment benefit assistance for individuals aged over 52/55 (100% or 125% of the minimum wage, depending on the period) to the benefit amount received (80% of the IPREM). In 2007, the change in the contribution base to 125% of the minimum wage took place in late November; accordingly, the chart includes data only from 2008 onwards. In 2019, the change occurred in February and is therefore reflected for the full year. In 2012, the change in the contribution base to 100% of the minimum wage took place mid-year; accordingly, the ratio for that year is calculated as the average of the two values (112.5%).
- b** Simulation based on an extension of the model in Guillamón, Izquierdo and Puente (2026), excluding 2020.

7 Specifically, three variables are calculated: the amount of the standard contributory benefit, the amount of the unlimited-duration benefit and the latter's contribution base. In all three cases, the variables are rescaled by the wage earned in the previous job. The three variables are also interacted with individual-level characteristics such as gender or education, giving rise to different estimates for each person.

8 Chart 6 shows average effects, whereas the microsimulation exercise provides a different probability increase for each individual. For instance, for women in 2024, the average probability increase of 1.33 percentage points (pp) shown in the chart stems from a wider distribution, where the 5th and 95th percentiles are equal to 0.85 pp and 3 pp, respectively.

Box 1.6

SPAIN'S UNEMPLOYMENT BENEFIT ASSISTANCE FOR INDIVIDUALS AGED OVER 52/55 (cont'd)

should be interpreted with caution, as the data used to isolate the effect of over-contribution from the benefit's other features relate only to changes in the minimum wage independent of the IPREM and to changes in the contribution base from 100% to 125% of the minimum wage. These changes are small relative to the differences

in replacement rates observed across individuals, making it difficult to accurately estimate the isolated effect of over-contributions. Accordingly, some of the estimated effects ascribed in this exercise to over-contribution may in fact be associated with other features of the benefit, such as its indefinite duration.

Box 1.7

DEVELOPMENTS IN GOVERNMENT REVENUE AND SPENDING IN THE WAKE OF THE PANDEMIC

Both government revenue and expenditure in Spain have increased markedly since the outbreak of the COVID-19 pandemic, rising as a share of GDP. Specifically, between 2019 and 2025 revenue rose by 3.2 percentage points (pp) relative to GDP, while expenditure grew by 2.5 pp. If funds from the Recovery and Resilience Facility (RRF) are included, these increases stand at 4.0 pp and 3.3 pp respectively (Charts 1 and 2). Government revenue in Spain reached 42.9% of GDP in 2025, with spending at 45.3% (Table 1).

In that same period, government expenditure as a share of GDP grew even more sharply in the broader euro area¹ (4.5 pp on average, including the RRF) than in Spain, while government revenue also grew (1.6 pp), but to a lesser extent than in Spain. As a result, average euro area expenditure stood 1.4 pp of GDP above the level in Spain (4.6 pp if the comparison is made with the euro area aggregate), while on the revenue side there was some convergence between Spain and the euro area average, although the euro area level remained 1.8 pp higher (4.0 pp if comparing with the euro area aggregate). As a result, the gap between the general government balances in the two regions narrowed, with the euro area balance deteriorating

markedly (from -0.5% to -2.9% of GDP), while Spain's improved somewhat (from -3.1% to -2.4%).

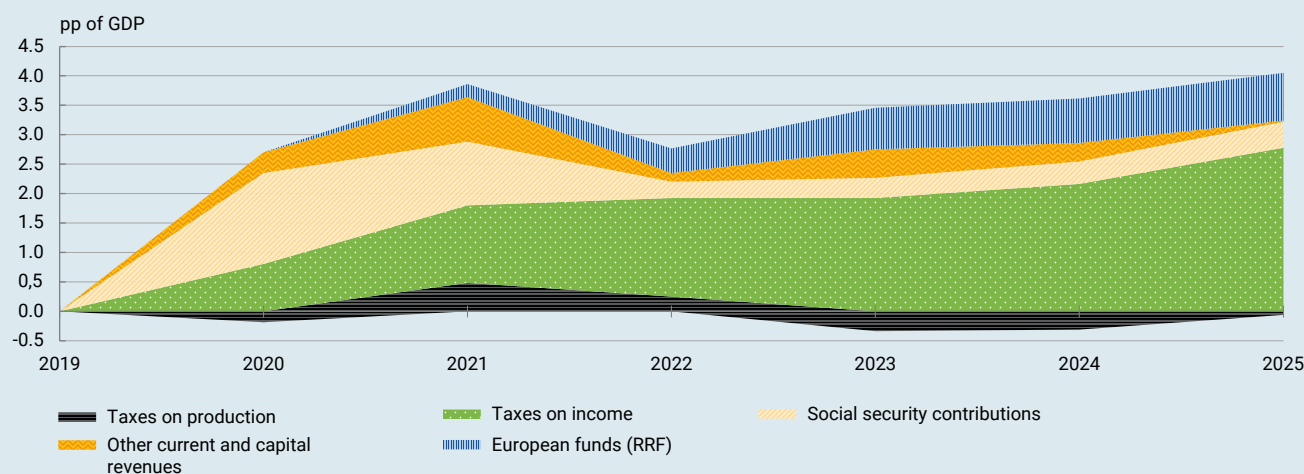
This box analyses the main drivers and components behind these developments in public revenue and expenditure in Spain and assesses their persistence to gauge their future trajectory.²

An analysis of recent developments in government revenue shows that the significant increase observed since 2019 has been driven mainly by direct taxes, followed by social security contributions. This, in turn, reflects both a robust increase in tax bases, outpacing GDP growth, and the impact of discretionary measures and of fiscal drag.

Chart 1 highlights the growth in income taxes, which rose by 2.8 pp of GDP between 2019 and 2025. Of this rise, 1.7 pp is accounted for by personal income tax, with a further 1.0 pp owing to corporate income tax. Social security contributions also increased their share by 0.4 pp, while taxes on production saw their share decline by 0.1 pp, with other current and capital revenue staying stable relative to GDP. RRF funds contributed 0.8 pp to revenue in 2025.

Of the factors underlying these developments (broken down according to the methodology set out in García-

Chart 1
Developments in revenue relative to GDP since 2019. Breakdown by components



SOURCES: Banco de España and IGAE.

1 Arithmetic mean of the revenue-to-GDP and expenditure-to-GDP ratios of the euro area countries.
 2 For further details, see Esteban García-Miralles and Juan Manuel Scarilli. "Public revenue and spending in the wake of the pandemic". Documentos Ocasionales, Banco de España. Forthcoming. This report combines a highly disaggregated examination of available information on revenue and expenditure with a range of modelling techniques that draw on tax micro data and models to break down the determinants of government revenue.

Box 1.7

DEVELOPMENTS IN GOVERNMENT REVENUE AND SPENDING IN THE WAKE OF THE PANDEMIC (cont'd)

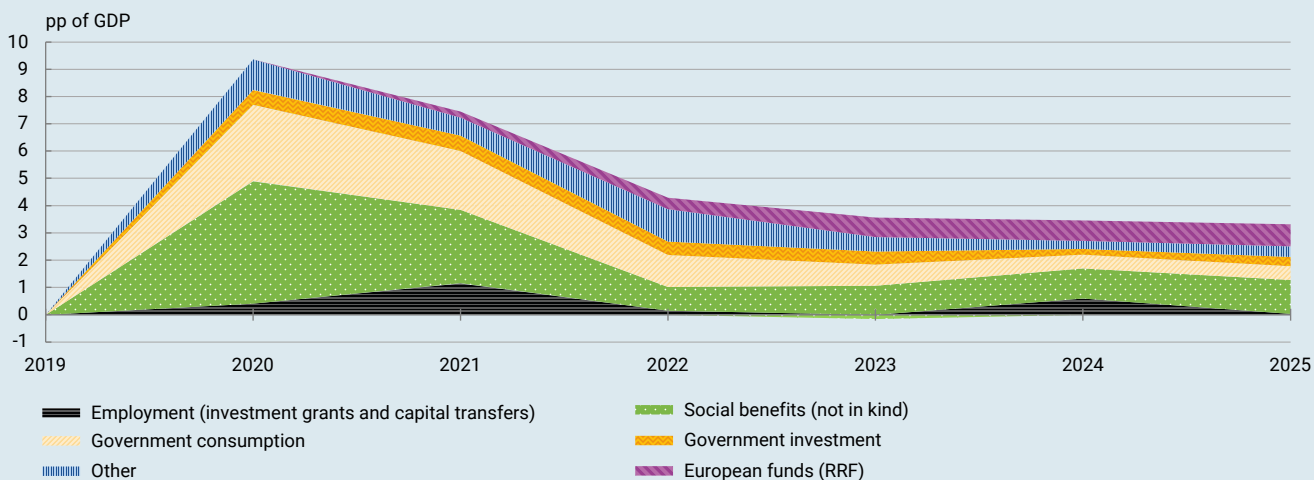
Miralles and Martínez Pagés, 2023)³, three stand out. First, tax bases grew faster than GDP as economic growth during this period was concentrated in components that are more heavily taxed, accounting for 1.5 pp of the increase between 2019 and 2025. Accordingly, the strong performance of tax

bases over this period appears closely linked to the economic cycle. This is consistent with the fact that certain taxes, such as personal and corporate income taxes, tend to respond more strongly to the business cycle (with elasticities above one, or high tax buoyancy).⁴

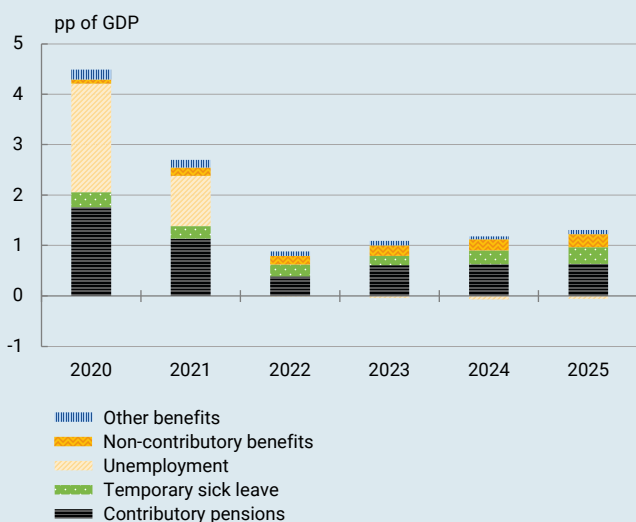
Chart 2

Since the pandemic, government expenditure has increased as a share of GDP, driven in particular by social benefits (notably on temporary sick leave) and persistently high spending on intermediate consumption

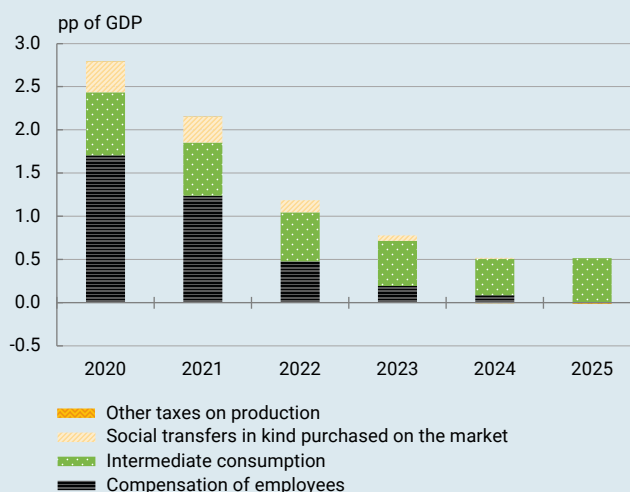
2.a Developments in government spending relative to GDP since 2019. Breakdown by components



2.b Developments in social benefits relative to GDP since 2019. Breakdown by components



2.c Developments in government consumption relative to GDP since 2019. Breakdown by components



SOURCES: Banco de España and IGAE, based on García-Miralles and Scarilli (2026).

3 Esteban García-Miralles and Jorge Martínez Pagés. (2023). "Government revenue in the wake of the pandemic: tax residuals and inflation". *Economic Bulletin - Banco de España*, 2023/Q1, 16.

4 Vincent Belinga, Dora Benedek, Ruud de Mooij and John Norregaard. (2014). "Tax Buoyancy in OECD Countries". IMF Working Papers, WP/14/110, International Monetary Fund.

Box 1.7

DEVELOPMENTS IN GOVERNMENT REVENUE AND SPENDING IN THE WAKE OF THE PANDEMIC (cont'd)

Second, effective personal income tax rates rose during the period owing to fiscal drag, reflecting the fact that tax parameters were not fully updated in line with household

income growth or inflation. This accounts for 1.2 pp of the rise in the revenue-to-GDP ratio.⁵ In the absence of measures to reverse the increase in average effective

Table 1
Government revenue and expenditure as a percentage of GDP

pp of GDP	2019	2020	2021	2022	2023	2024	2025
Total government revenue	39.0	41.5	42.8	41.7	42.1	42.3	42.9
Income and wealth taxes	10.3	11.1	11.6	12.0	12.2	12.5	13.1
Personal income tax (including non-resident individuals)	7.9	8.8	8.6	9.0	9.0	9.1	9.6
Corporate income tax (including non-resident legal entities)	2.1	2.0	2.6	2.7	2.8	2.9	3.1
Other income and wealth taxes	0.3	0.4	0.4	0.3	0.4	0.4	0.4
Taxes on production	11.4	11.2	11.9	11.7	11.1	11.1	11.3
VAT (including Canary Islands general indirect tax)	6.5	6.3	6.8	6.8	6.4	6.4	6.8
Taxes on products (excise duties, transfer tax, stamp tax, etc.)	3.2	3.1	3.3	3.1	2.8	2.9	3.1
Other taxes on products and imports	1.7	1.9	1.9	1.7	1.8	1.7	1.5
Social security contributions	12.8	14.4	13.9	13.1	13.2	13.2	13.3
Other current and capital receipts	4.4	4.8	5.2	4.6	4.9	4.7	4.4
European funds (RRF)	0.0	0.0	0.2	0.4	0.7	0.8	0.8
Average euro area revenue	43.1	43.0	43.3	43.2	43.3	44.3	44.7
Aggregate euro area revenue	46.5	46.6	46.9	46.5	45.9	46.5	46.9
Total government expenditure	42.0	51.4	49.5	46.3	45.4	45.5	45.3
Social benefits	15.7	20.2	18.4	16.6	16.8	16.8	17.0
Contributory pensions	12.2	14.0	13.4	12.6	12.9	12.9	12.9
Temporary sick leave	0.8	1.1	1.0	1.0	0.9	1.0	1.1
Unemployment	1.5	3.7	2.5	1.5	1.5	1.4	1.5
Non-contributory benefits	0.3	0.4	0.5	0.5	0.5	0.6	0.6
Other benefits	0.9	1.0	1.0	0.9	0.9	0.9	0.9
Government consumption	18.6	21.4	20.7	19.7	19.3	19.1	19.1
Compensation of employees	10.7	12.5	12.0	11.2	10.9	10.8	10.8
Intermediate consumption	5.1	5.9	5.8	5.7	5.7	5.6	5.6
Social transfers in kind purchased on the market	2.6	3.0	2.9	2.8	2.7	2.6	2.6
Government investment	2.2	2.8	2.8	2.7	2.7	2.4	2.6
Investment grants and capital transfers	0.8	1.2	1.9	0.9	0.6	1.3	0.8
Extraordinary items (a)	0.1	0.2	1.1	0.1	0.0	0.8	0.3
Other	0.7	0.9	0.8	0.8	0.6	0.6	0.5
Other	4.8	5.9	5.4	6.0	5.3	5.1	5.2
Subsidies	1.0	1.9	1.4	1.9	1.4	1.2	1.2
Effective interest paid	2.3	2.2	2.1	2.3	2.4	2.4	2.4
Other transfers and current accounts	1.5	1.8	1.9	1.7	1.6	1.5	1.6
Total expenditure of European funds (RRF)	0.0	0.0	0.2	0.4	0.7	0.8	0.8
Capital expenditure, of which:	0.0	0.0	0.2	0.3	0.5	0.6	0.7
Gross fixed capital formation	0.0	0.0	0.0	0.1	0.3	0.3	0.3
Average euro area government expenditure	42.2	49.6	47.4	45.2	45.5	46.0	46.7
Aggregate euro area government expenditure	47.0	53.6	52.0	49.9	49.4	49.5	49.9

SOURCES: Banco de España, IGAE and Eurostat.

a Capital transfers related to the COVID-19 pandemic, natural disasters and court decisions.

5 See Sofía Balladares and Esteban García-Miralles (2026) for a more detailed analysis of this phenomenon in Spain over the recent period. "Fiscal Drag with Microsimulation: Evidence from Spanish Tax Records". *Fiscal Studies*, pp. 1-25. Similarly, Esteban García-Miralles et al. (2026). "Fiscal drag in theory and in practice: A European perspective". *European Economic Review*, 185(105275) documents this phenomenon across Europe, identifying Spain as one of the countries where it has been most predominant.

Box 1.7

DEVELOPMENTS IN GOVERNMENT REVENUE AND SPENDING IN THE WAKE OF THE PANDEMIC (cont'd)

rates, the impact will be structural and, unless further adjustments are made, effective rates will continue to climb.⁶

Third, other revenue measures contributed around 0.8 pp.⁷ These included, in particular, higher social contributions linked to the pension reform, the temporary levy on banks and the cap on corporate income tax relief for subsidiaries' losses.

Government spending, meanwhile, had been on a declining path in the years prior to the COVID-19 pandemic, following the measures adopted in response to the 2008 financial crisis and the subsequent economic recovery.⁸ The pandemic, however, marked a turning point and led to higher spending across nearly all components.

Since 2019, the expenditure-to-GDP ratio has risen by 2.5 pp, excluding RRF-related spending, which added a further 0.8 pp (Chart 2.a).

The increase is spread across a wide range of items, although social benefits, government consumption and, to a lesser extent, domestically financed government investment account for the bulk of the rise (2.1 pp).

Table 2 shows the increase in expenditure relative to GDP up to 2024 (the latest year available in this case) broken down by function. As can be seen, most of the rise is concentrated in social welfare (1.4 pp), economic affairs (0.9 pp), health (0.4 pp) and general public services (0.4 pp). By sub-sector, the share of total spending by the central government grew (0.7 pp), in contrast to those of local government (-0.5 pp) and social security funds (-0.3 pp). For regional governments, spending shares rose in housing, health, general public services, and public order and safety, while declining in economic affairs and education.

A disaggregated analysis of the main expenditure items is therefore essential in assessing the persistence of their recent increase.⁹

First, social benefits other than social transfers in kind stand out, having risen by 1.3 pp of GDP between 2019 and 2025 (Chart 2.b). Of this increase, 0.6 pp is due to higher contributory pension spending, 0.3 pp to the rise in temporary sick leave (a phenomenon that is very pervasive in Spain, across all regions, age groups and sectors of activity)¹⁰ and 0.3 pp to non-contributory benefits (chiefly the minimum income scheme). By contrast, spending on unemployment benefits declined by 0.1 pp of GDP between 2019 and 2025, reflecting the fall in the unemployment rate.

Second, government consumption increased by 0.5 pp of GDP between 2019 and 2025 (0.6 pp including spending associated with the RRF). Despite the increases recorded during the pandemic appearing temporary, they have proven relatively persistent in some components. This is particularly true of intermediate consumption (Chart 2.c), which rose by 0.7 pp between 2019 and 2020,¹¹ with most of that increase (0.5 pp) maintained through to 2025. This contrasts with the other components of government consumption, where the sharp increase recorded in 2020 faded in subsequent years.

A more detailed analysis, using data up to 2024, allows the components driving the increase in government consumption in general and intermediate consumption in particular to be broken down by function.¹² Between 2019 and 2024, government consumption increased by 0.6 pp of GDP. Slightly more than half of this increase reflects higher healthcare spending (0.3 pp). Within this category,

6 However, effective tax rates are already at historically high levels, which could point to downward adjustment in the context of future tax reforms.

7 Other factors not explicitly captured by the model drove a 0.3 pp reduction in the revenue-to-GDP ratio.

8 Francisco Martí and Javier J. Pérez. (2015). "Spanish Public Finances through the Financial Crisis". *Fiscal Studies*, 36(4), pp. 527-554.

9 It should be noted that all the measures adopted in response to the health and economic crisis caused by the COVID-19 pandemic were temporary. Their budgetary impact raised government expenditure by 3.9 pp, 2.9 pp and 0.5 pp in 2020, 2021 and 2022, respectively, with these effects coming to an end in 2023. Accordingly, the rise in government expenditure observed since 2019 appears to be linked more to structural policy decisions than to temporary measures that have gradually become permanent.

10 Banco de España. (2025). "Box 5. A preliminary analysis of the increase in temporary sick leave in Spain". See Banco de España, *Annual Report 2024*, pp. 172-175 According to the study on temporary sick leave published by the Independent Authority for Fiscal Responsibility (AIReF by its Spanish acronym) as part of the second phase of the 2022-2026 Spending Review, the incidence of sick leave due to common contingencies increased by almost 60% between 2017 and 2024, with musculoskeletal and respiratory illnesses particularly prevalent. The largest cumulative increases are observed in infectious diseases (the incidence rate has doubled) and in mental health conditions (up by 80%). Mental health conditions also show the longest average durations, at 98.5 days in 2024. See AIReF. (2025). *Incapacidad temporal. Estudio*.

11 A similar pattern was observed in the wake of the financial crisis, when intermediate consumption rose by 0.7 pp of GDP between 2007 and 2009, before falling back to its 2007 level by 2017. However, spending on compensation of employees never returned to its pre-crisis level.

12 Although the classification of the functions of government (COFOG) data used in Table 2 do not provide a breakdown of RRF spending, a Banco de España estimate is used, which is net of such expenditure. In any event, RRF-linked expenditure in government consumption is estimated at less than 0.1 pp of GDP in each year of the period shown.

Box 1.7

DEVELOPMENTS IN GOVERNMENT REVENUE AND SPENDING IN THE WAKE OF THE PANDEMIC (cont'd)

the most persistent components are employee compensation (almost 0.2 pp and especially concentrated in outpatient services)¹³ and intermediate consumption in hospital services (0.2 pp). The increase in government consumption outside the healthcare sector is largely explained by the rise in intermediate consumption related to economic affairs (0.1 pp) and social welfare (0.1 pp), along with the contribution of other items (0.1 pp).

Third, government investment rose by 0.3 pp of GDP between 2019 and 2025. This increase effectively doubles to 0.7 pp if RRF-related spending is included.

Lastly, spending on other items rose by 0.4 pp of GDP over this period, reflecting overall developments in several components, notably higher subsidies (0.2 pp) and higher effective interest rates (0.1 pp).

Having characterised recent expenditure dynamics, it is important to assess their degree of persistence. The nature of the components showing the strongest growth, combined with an analysis of persistence based on their

historical behaviour, suggests a degree of inertia, especially on the expenditure side.

In particular, social benefits are shaped by the demographic ageing process and by rising spending associated with temporary sick leave. In this regard, the AIReF notes that this increase may reflect both cyclical factors, linked to scarring effects of the pandemic and pressures in primary care, and more structural elements stemming from the design of these benefits.¹⁴

Government consumption is especially relevant for assessing the fiscal policy stance and its persistence, as it is one of the expenditure categories with scope for discretionary adjustment in the short term. In this case, the components of government consumption showing the strongest growth are linked to certain healthcare services that have not returned to their pre-pandemic share of GDP. Moreover, this increase is concentrated in items that display greater inertia, such as employee compensation and intermediate consumption in outpatient services.

Table 2
Government expenditure, by function and sub-sector. 2019-24

Function classification	2019					2024				
	General government	Central government	Social security funds	Regional government	Local government	General government	Central government	Social security funds	Regional government	Local government
	% of GDP	% of spending				% of GDP	% of spending			
01 General public services	5.4	64.0	0.2	18.1	17.7	5.8	64.5	0.3	18.8	16.4
02 Defence	0.8	100.0	–	–	–	0.9	100.0	–	–	–
03 Public order and safety	1.8	53.3	–	23.4	23.3	1.8	52.2	–	24.6	23.2
04 Economic affairs	4.2	38.9	5.1	32.3	23.6	5.1	42.2	3.9	31.6	22.4
05 Environmental protection	0.9	6.4	–	21.5	72.1	1.0	12.7	–	22.3	65.0
06 Housing and community amenities	0.4	1.1	–	36.6	62.3	0.5	2.6	–	40.7	56.7
07 Health	6.1	3.8	2.2	92.8	1.2	6.5	3.5	1.9	93.7	0.9
08 Recreation, culture and religion	1.2	16.4	–	22.8	60.7	1.2	17.6	–	22.6	59.8
09 Education	4.0	3.4	0.0	91.3	5.3	4.1	4.0	0.0	90.7	5.2
10 Social protection	17.3	10.1	80.4	5.9	3.6	18.7	9.9	80.3	6.4	3.4
TOTAL	42.0	22.0	33.9	32.5	11.5	45.5	22.7	33.7	32.6	11.0

SOURCES: IGAE and Banco de España.

13 A comparison of healthcare and education is instructive: both sectors account for around a quarter of public employment and a similar share of total employee compensation. Between 2019 and 2024, public employment in education increased by 18%, above the overall rise in public employment (10%), yet its compensation as a share of GDP remained stable. By contrast, employment in healthcare rose by 8%, while employee compensation increased its share of GDP by 0.2 pp. Lastly, pharmaceutical spending remained stable as a share of GDP over the period, unlike in earlier phases.

14 As a result, social welfare spending rose by 1.4 pp above its 2019 level, mainly driven by social benefits other than social transfers in kind (1.2 pp).

Box 1.7

DEVELOPMENTS IN GOVERNMENT REVENUE AND SPENDING IN THE WAKE OF THE PANDEMIC (cont'd)

Government investment (2.6% of GDP excluding RRF-related spending) remains below its historical average (3.4% since 1995) and faces upward pressures in the future owing to defence commitments.

Within the remaining expenditure categories, the increase in subsidies is particularly noteworthy. The rise is the result of various measures aimed at mitigating the effects of the energy crisis, including the public transport subsidies that were introduced in 2022 and have been subsequently extended.

The analysis presented in this box documents a significant increase in the size of general government, as measured by revenue and expenditure ratios as a percentage of GDP (Table 1). On the expenditure side, the analysis indicates a high

degree of inertia in spending growth in the absence of measures to alter its trajectory, with increases concentrated to a large extent in social benefits, government consumption – particularly in healthcare spending – and government investment. The revenue dynamism observed reflects a combination of factors linked to the economic cycle and more persistent factors in the longer term linked to discretionary measures – in particular the incomplete indexation of personal income tax, which has contributed significantly to higher tax receipts. These trends¹⁵ underline the need to define a detailed and granular medium-term fiscal strategy that takes into account both recent developments in these components and emerging spending needs in areas such as defence, climate change and digitalisation.

15 This assessment is consistent with results obtained using the European Commission and the Eurosystem's methodology, which breaks down revenue into the cyclical component (linked to the position of the economy in the cycle) and the structural component. The results suggest that, since 2019, the cyclical component of revenue and expenditure has played a relatively limited role, accounting for around 20%-30% of the observed increase.



Chapter 2

Housing market challenges: affordability problems and supply-side constraints



Chapter 2

Takeaways

- Housing affordability problems and constraints on supply growth are currently the main challenges facing the Spanish housing market.
- This market is undergoing an upswing in an environment of economic expansion, demographic growth and easing financing conditions.
- Compared with previous housing market upturns, there are some distinctive features to the current phase, notably the expansion of the rental market and greater regional heterogeneity in house price dynamics and real estate activity.
- Despite this buoyancy, indicators of financial stability risks and vulnerabilities linked to the real estate market do not point to the accumulation of macro-financial imbalances of the kind seen during the housing boom of the 2000s.
- Housing demand – for residential purposes as well as alternative uses such as tourism and purchases by non-residents – is rising quickly, in contrast to the sluggish response in supply, and is steadily pushing up both purchase prices and rents.
- The cumulative increase in prices, outpacing household income, has raised the cost burden of purchasing a home and this increase has been larger in Spain than in the major European economies.
- Housing affordability challenges, whether purchasing or renting, are most pronounced in the large cities and among young people and new residents, where there are nascent signs of overburdening and social vulnerability.
- The level of this cost burden shows marked regional dispersion, with the most severe housing affordability problems concentrated in a number of urban areas.

- Housing supply has been slow to react to rising prices: new construction is not rising at the pace of household formation and non-resident housing demand.
- The rigidity of new housing supply reflects both structural and cyclical factors that jointly constrain housing production.
- Key supply-side constraints include the scarcity of build-ready land, slow execution and urban planning management problems.
- These planning-related constraints are compounded by declining productivity, the small size of firms and labour shortages, and lower profitability in residential construction than in other activities.
- Dysfunctions in the housing market can have a wide range of adverse macroeconomic and social effects.
- The analysis of current housing market conditions points to the need for structural policies to increase housing supply, particularly in urban planning and land management. Their effectiveness requires coordination across the three tiers of government with responsibility for housing matters.

1 Introduction

The housing market is of particular economic and social importance. Macroeconomic conditions and financial stability can be affected by the aggregate significance of this market in terms of activity, given its relative contribution to employment and investment and its close links with bank lending. In addition, developments in both house purchase and rental prices, along with conditions in other markets, such as the labour market and financial markets, drive household consumption and saving decisions, young people's ability to leave the family home, firms' investment decisions and the geographical location choices of workers and firms.

Housing affordability problems can, therefore, be at the root of a wide range of adverse economic and social effects. These effects range from constraints on economic growth and productivity to greater sensitivity of consumption and investment to house price developments, distributional effects created by inefficiencies in the housing market and distortions in intergenerational wealth accumulation. The importance of these issues justifies the analytical effort devoted by the Banco de España to monitoring this market.¹

Housing affordability and bolstering supply are currently the main challenges facing Spain's housing market. This chapter takes stock of the housing market, focusing on these two key dimensions.² First, it documents affordability in a market whose buoyancy is reflected in sustained growth in real house prices. However, heterogeneity in prices and household income translates into significant differences, across groups and across geographical areas, in housing affordability (whether to own or rent). Housing affordability problems are widespread across European economies, but are particularly pronounced in Spain, where affordability in the owner-occupied housing market has deteriorated more markedly over the past four decades. Second, the chapter analyses the constraints on the capacity of residential housing supply to respond to booming demand and rising prices. These restrictions lie at the root of affordability problems and may give rise to a wide range of adverse macroeconomic effects, as well as distributional effects that, in turn, affect macroeconomic stability. Lastly, the analysis presented here provides the basis for discussing the role of public policy, distinguishing between structural measures aimed at increasing housing supply and demand-side policies designed to ease short-term pressures on housing affordability.

¹ See [The Banco de España's analysis priorities for 2025-30](#).

² See [Chapter 4 of the Banco de España Annual Report 2023](#) for a detailed assessment of the housing market.

2 An overview of the housing market

The housing market entered a recovery phase in 2014, followed by an upswing that intensified from 2022.³ This growth has been characterised by very strong demand in a favourable macroeconomic environment, albeit with marked geographical heterogeneity. In 2025 the housing market boom was reflected in rises in the main market indicators (transactions, mortgage lending, residential investment and prices), driven by demographic growth and the easing of financing conditions since 2024.

However, this dynamism is not uniform across regions; instead, it is concentrated in a small number of urban areas where demand pressures are greatest. These differences are reflected in diverging trends in real purchase prices and rents, as well as in the location of real estate activity. Despite the vigour of the current housing market upswing, it has not so far displayed the macro-financial imbalances seen in earlier expansionary episodes. In particular, the indicators that signal financial stability risks and vulnerabilities associated with developments in the real estate market remain contained.

2.1 Recent developments in a context of economic growth

The current housing market boom has not been accompanied by a deterioration in the risk and vulnerability indicators that would point to an accumulation of macro-financial imbalances.

- The indicators used by the Banco de España to monitor the vulnerabilities and risks to financial stability associated with the housing market suggest that the risks are contained (Chart 2.1). In 2025 Q4, the synthetic indicator of risks to financial stability stood at a level similar to that recorded in 2001 and below the values recorded both at the start of the property boom of the 2000s and at its peak prior to the global financial crisis that began in 2007.⁴
- Developments in the synthetic indicator of risks in credit conditions, residential housing activity and households' net worth suggest that the current growth in the housing market is not being driven by an accumulation of imbalances. The component of the synthetic indicator that captures possible house overpricing relative to its long-run determinants is on a rising path, although current levels are in line with those seen in 2004. Moreover, this indicator's movements largely reflect the decoupling of prices from household income in a context of supply rigidity.⁵

House purchases continued to grow in 2025, although a gradual slowdown led transaction volumes to stabilise at high levels.

³ See Lajer, López-Rodríguez and San Juan (2024) for a detailed analysis of developments in the Spanish residential housing market in recent decades and how it fits into the international context.

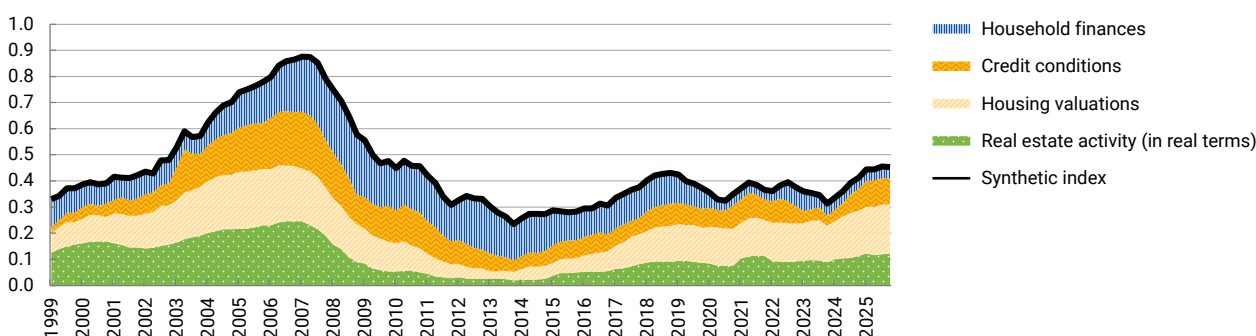
⁴ Alves, Broto, Gil and Lamas (2023) and Banco de España (2026).

⁵ The housing valuation indicator accounts for housing prices in relation to an estimate of their long-term level, but does not account for the upside impact on prices of short-term supply-side constraints.

Chart 2.1

Real estate risks to financial stability are contained

2.1.a Synthetic index of vulnerabilities and risks in the real estate market (a)



SOURCES: Banco de España and INE. Latest observation: December 2025.

a The synthetic index ranges from 0 to 1. Higher (lower) values indicate the presence of higher (lower) imbalances, i.e. risks and vulnerabilities. The synthetic index comprises a set of individual indices that proxy household finances, credit conditions (such as the volume of mortgage lending and lending standards for new loans), housing valuations, and real estate activity indicators on both the supply and demand sides (see Alves, Broto, Gil and Lamas (2023) for further details).



- More than 750,000 homes were bought in 2025, a figure comparable to the 12-month cumulative number of transactions in 2008 Q1. However, taking into account Spain's population growth over this period, transactions in 2025 represented 3.8% of households, compared with an average of 5.5% during the 2004-07 property boom.
- House purchases rose by 12.1% in 2024 against a backdrop of monetary easing and economic expansion. This dynamism slowed gradually in 2025, from year-on-year growth of 14.7% in Q1 to 0.6% in Q4. As a result, house purchases increased by 5.1% year-on-year in 2025, with 90% of transactions involving second-hand homes.⁶

The buoyancy of house purchases has been underpinned by growth in mortgage lending, helped by the improvement in financing conditions since 2024.

- The flow of new mortgage lending to households rose by 27.5% in 2025 and the number of mortgages increased by 14.0%. Of these mortgages, 84.4% were to buy a main residence, with 80.0% of those being first-home purchases and the remainder corresponding to households moving their principal residence. Among the remaining transactions, 1.2% financed buy-to-let purchases, while 14.4% financed purchases for other purposes, such as second homes.⁷

⁶ House purchases by legal entities accounted for 10% of the total in 2025, in line with the average since 2020 (General Council of Notaries). Sales by these entities, excluding companies whose core business is real estate, accounted for 16% of all housing transactions.

⁷ These percentages are calculated using information on loan purpose from the Banco de España's Central Credit Register. See the 2025 Central Credit Register Report for more details.

- Robust mortgage flows saw this financing ratio stand at 4% of GDP in the final quarter of 2025, an increase of 0.6 percentage points (pp) relative to 2024. Despite this increase, the faster pace of repayments in 2025 meant that households continued to reduce their debt overall. Specifically, the stock of household credit for house purchase fell to 30% of GDP, 10 pp lower than in 2019, and close to the 10th percentile of the historical series.⁸
- Around 52% of house purchases in 2025 were financed with a mortgage – below the 70% recorded at the peak of the property boom in 2007, but a recovery from the levels of around 45% seen at the end of the property market adjustment in 2013.
- The easing of financing conditions has contributed to the growth of mortgage lending since mid-2024 and to the increase in fixed-rate mortgages, which accounted for 80% of new loans in 2025. The transmission of monetary policy to rates on new bank loans has cut financing costs by a cumulative 150 basis points (bp), with this decrease concentrated mainly from 2023 Q4 (the peak of the latest monetary tightening episode) to 2025 Q1. In narrowly defined effective rate terms, the average rate on new mortgages fell from 3.3% in 2024 to 2.75% in 2025 (*2025 Central Credit Register Report*).⁹ At the same time, indicators of credit standards point to an easing in mortgage lending criteria in 2024 and 2025. For example, the average term of new mortgages rose by 2.7% to 25.4 years and the loan-to-value (LTV) ratio rose by 1.2% to 66.4%. Even so, lending standards for new mortgages remain relatively prudent and are tighter than in previous upturns.¹⁰

The response of housing supply has been limited relative to the strength of demand.

- Residential housing investment increased by 5.1% in 2025 and stood at 5.8% of GDP in the final quarter of the year. This largely reflects the rise in indicators of housing starts and residential building permits, which rose from around 110,000 dwellings at end-2023 to around 140,000 in 2025.
- The surge in housing demand and the increase in real house prices, a sustained rebound in residential investment and housing output might have been expected. However, residential investment remains below its average in other periods of strong housing demand (Chart 2.2)¹¹ and the number of completed homes in 2025 (92,000) represented a decline of 9%. This suggests the existence of supply frictions that are limiting the elasticity of its response to rising prices.

In a context in which housing supply is not growing at the pace of demand, real house prices have accelerated.

⁸ Banco de España (2026).

⁹ Data up to May 2026 point to a turning point in this trend, with mortgage rates for house purchase rising, largely reflecting the impact of the conflict in Iran (see Chapter 1).

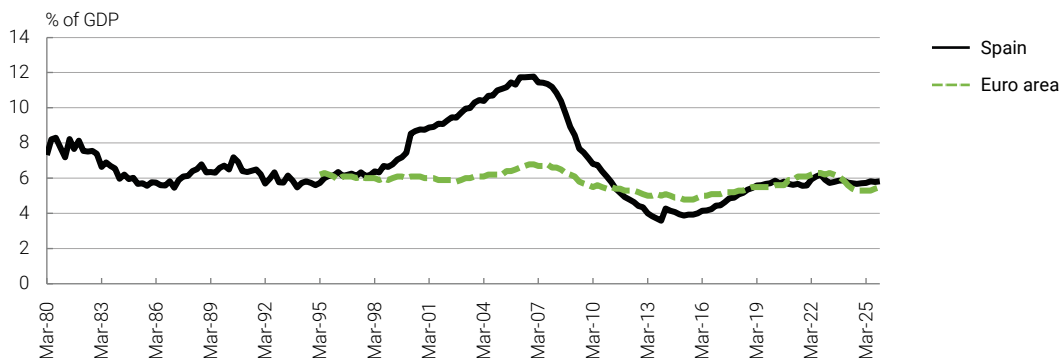
¹⁰ See Banco de España (2026) for a detailed analysis of developments in residential mortgages and lending standards.

¹¹ For example, average residential investment in the 1980s and 1990s stood at around 6.5% of GDP.

Chart 2.2

The share of residential investment in Spain has been recovering since 2014, although it is still relatively low in the context of the past four decades

2.2.a Residential investment as a share of GDP



SOURCE: Banco de España, drawing on data from INE and Eurostat. Latest observation: 2025 Q4.

- Real purchase prices rose by an average of 9.7% in 2025,¹² compared with increases of 5.5% in 2024 and 0.4% in 2023. This dynamism was driven by the price of existing homes, which rose by 10.0% in 2025, outpacing the 8.4% increase recorded for new homes. This reflects the gap between demand and supply growth, with the sustained widening of that gap acting as one of the drivers of price increases.¹³
- The increase in real house prices since 2014 has pushed prices to historically high levels relative to the past five decades (Chart 2.3). For example, real prices in 2026 Q1 were 12.2% below the peak observed in the third quarter of 2007. However, the increase in house prices since 2014 is also explained by the cumulative growth in households' real gross disposable income of 15% up to 2025 (5.5% in per capita terms).
- In the rental market, the prices of new contracts have risen substantially since 2019, with real year-on-year growth reaching 4.6% in 2024, in contrast to the more subdued growth in rents for existing contracts, which have increased by an average of 0.4% per year since 2019. In addition, new houses entering the market command rents significantly above market averages. Specifically, in 2020 new homes were rented at prices 6.2% above the average for rental housing, compared with 16.5% in 2024. Leading rent indicators, based on the asking rents posted on real estate portals,¹⁴ point to real growth of 5% in 2025.

¹² This includes price growth for both new and existing homes. Throughout this chapter, real prices are calculated by deflating nominal price indicators using the consumer price index (CPI).

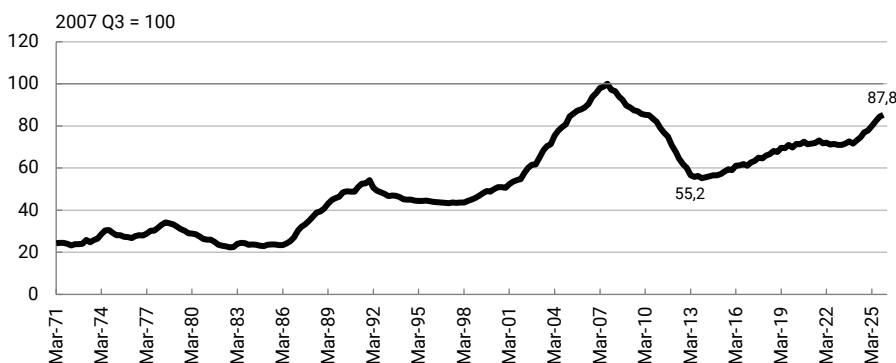
¹³ San Juan (2023).

¹⁴ Developments in these indicators offers an early insight to price dynamics, although they should be treated with caution, as they have not been subject to statistical treatment equivalent to that applied to the house price data published by the National Statistics Institute (INE).

Chart 2.3

Real house prices have been recovering since 2014, and have been accelerating since 2024

2.3.a Real house prices



SOURCE: Banco de España, drawing on data from INE and BIS. Latest observation: 2026 Q1.

a Real house prices are drawn from the INE's house price index dating from 2007 Q1, and a linked historical series from the BIS dating from 1971. These prices are deflated using the consumer price index.



The recent buoyancy of the housing market has taken place in a favourable macroeconomic environment, with strong demographic growth that has bolstered housing demand.

- In 2025 housing demand was buoyed by significant employment growth (up by 3.1% in terms of the average annual increase in full-time equivalent jobs) and by growth in households' real disposable income (up by 2.5%). At the same time, households' financial position improved gradually against a backdrop of monetary easing, owing both to the decline in their outstanding debt and to increases in their financial assets and the valuation of their real estate holdings.
- Large migration inflows resulted in population growth of 0.9% in 2025. Demographic changes have driven demand for both rented and owner-occupied housing through the formation of new households. The data show 240,000 new households were formed in 2025. This amounts to growth of 1.2%, slightly below the annual average of 1.3% between 2021 and 2025. Non-resident demand is in addition to this, with 30,000 house purchases by non-residents in 2025. This contrasts with the fall in housing production in 2025 (-9%), thereby widening the gap between faster household formation and non-resident demand on the one hand and the supply of new homes on the other (see Section 4).

2.2 An overview of geographical heterogeneity and developments over time

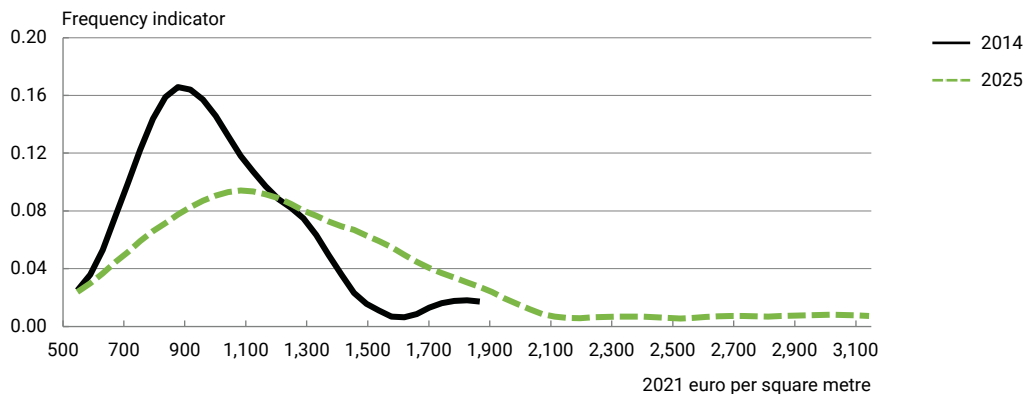
Spain's housing market has been characterised by a high degree of territorial heterogeneity, with developments since 2014 reflecting this market's local nature.

- The cumulative growth of real house prices at aggregate level is distributed very unevenly across the country. This heterogeneity can be easily illustrated by looking at the geographical

Chart 2.4

Real house prices show significant heterogeneity across urban areas and their current territorial dispersion is greater than at the beginning of the housing market recovery in 2014

2.4.a Distribution of real house prices per square metre in urban areas between 2014 and 2025 (a)



SOURCE: Banco de España, drawing on data from the General Council of Notaries and INE.

a The chart compares the distribution of average real house prices per square metre in the 65 urban areas in the common fiscal territory in 2014 and 2025. For each year, a kernel density is estimated based on observations of the average price per square metre. The prices are shown in real terms, deflating nominal prices using the consumer price index, with 2021 taken as the baseline (2021 = 100).



distribution of developments in real house prices between 2014 and 2025 (see the [interactive annex](#)). In addition, [Box 2.1](#) documents heterogeneity in the cumulative growth of real house prices since 2014 in Spain’s six most populous urban areas,¹⁵ using an experimental repeat sales indicator.

- Geographical evidence on real house prices highlights the local nature of this market. The recovery in prices since 2014 has varied widely across regions and provinces, with the strongest increases in areas where economic activity and population growth are concentrated (Madrid, Barcelona) or where non-resident demand is concentrated (along the Mediterranean coast and on the Balearics and Canaries).
- This heterogeneity is especially pronounced in the urban areas where market momentum is concentrated.¹⁶ In Spain’s six large cities there are notable differences both in average prices and in their trajectories, even at district level.
- This evidence illustrates a key point for analysis and public policy design, and one that is widely observed at global level: there is no single housing market, rather, there are multiple geographically segmented markets. Compared with previous upturns, the recovery in Spain’s housing market since 2014 has been characterised by greater heterogeneity in market dynamics and a more localised concentration of house price increases.

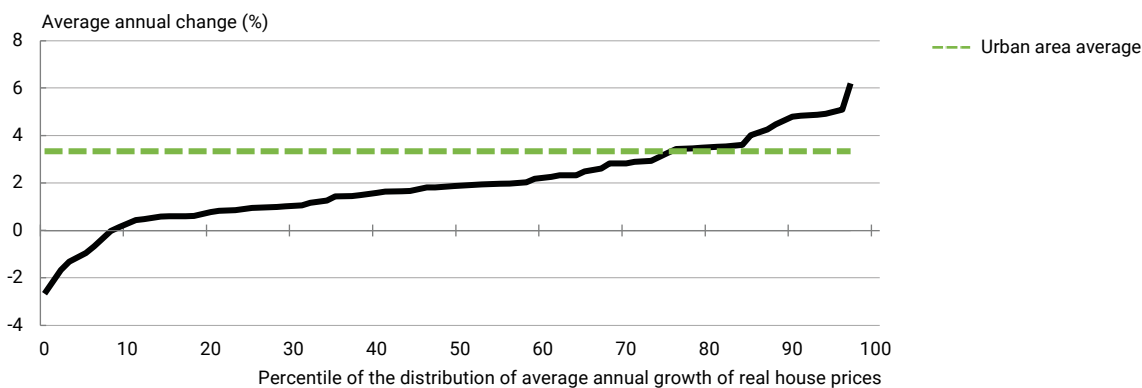
¹⁵ Madrid, Barcelona, Valencia, Seville, Zaragoza and Malaga.

¹⁶ Throughout this chapter, the term “urban area” refers to the functional urban area (FUA) concept. According to Eurostat, an FUA consists of a densely inhabited city and a less densely populated commuting zone whose labour market is highly integrated with the city. In Spain, 70 FUAs were defined in 2023, which account for nearly 68.5% of the population. For more methodological details, see Eurostat (2019).

Chart 2.5

Real house price developments between 2014 and 2025 show significant heterogeneity across urban areas, with a small number seeing growth far above the national average, while other less dynamic ones experienced stagnation or declines

2.5.a Distribution of average annual growth in real house prices in urban areas between 2014 and 2025 (a)



SOURCE: Banco de España, drawing on data from the General Council of Notaries and INE.

a The chart orders the 65 urban areas in the common fiscal territory by the average annual increase in real house prices per metre between 2014 and 2025. The real price is calculated by deflating nominal prices using the consumer price index, with 2021 taken as the baseline (2021 = 100). The horizontal axis shows the percentile of each urban area in the distribution ordered by real price growth.



Territorial dispersion in house prices has intensified since 2014, reflecting growth concentrated in a small number of urban areas.

- The distribution of real house prices per square metre across different urban areas shows an increase in both the mean and median price between 2014 and 2025 (Chart 2.4). This increase is due in large part to the fact that the top decile of urban areas with the highest prices recorded levels far above those of 2014, while in a significant share of areas real prices remained unchanged or fell relative to 2014 levels.
- This territorial dispersion in real house prices is the result of significant differences in average annual price growth between 2014 and 2025 (Chart 2.5). Specifically, in the top decile of the distribution of this growth across urban areas (seven urban areas), average annual growth rates range from 4.5% to 6.2%. By contrast, in the bottom decile (six urban areas), annual real price growth is zero or negative, ranging from 0% to -2.6%. Overall, the average growth rate across urban areas stood at 3.3%.

Aggregate market growth is dominated by a small number of urban areas.

- Madrid and Barcelona alone accounted for 55% of the aggregate increase in real house prices across urban areas in the common fiscal territory¹⁷ between 2014 and 2024, above what would be expected in view of their share of transactions (40% of house purchases, as shown in Table 2.1), and well above their share of the population (24%).

¹⁷ The analysis of the concentration discussed in this section is not carried out for Spain as a whole, but only for the 65 urban areas in the common fiscal territory in 2014-24. For further details, see Curci, Khametshin and López-Rodríguez (2026a).

Table 2.1
Price growth and house purchases are concentrated in a small number of urban areas, led by Madrid and Barcelona

Contribution of geographical areas to growth in aggregate real house prices and house purchases between 2014 and 2024 (%) (a) (b)

Geographical unit	Top 1		Top 2		Top 5%		Top 50%	
	Prices	Purchases	Prices	Purchases	Prices	Purchases	Prices	Purchases
Urban areas	34.9	24.9	54.6	40.8	60.1	45.0	94.6	89.0
Municipalities	25.4	14.2	34.7	19.3	72.2	58.2	98.7	96.6
Districts	3.2	1.1	6.0	2.2	57.5	38.9	96.8	92.6
Census tracts	0.5	0.2	0.9	0.4	35.9	24.7	88.7	78.9

SOURCE: Banco de España, drawing on data from Colegio de Registradores.

- a** The table shows the distribution of the cumulative contribution between 2014 and 2024 of each geographical unit to aggregate growth in both real house prices and the volume of house purchases, for the 65 urban areas in the common fiscal territory and for the municipalities, districts and census tracts within these urban areas. The aggregate house price index is calculated as the ratio of the average price per square metre in 2024 to that in 2014 across all urban areas. Geographical units are ranked from highest to lowest according to their individual contribution to the growth of real prices. This contribution is obtained by combining local price growth with a weight that reflects the relative importance of each unit in the total value of the residential market, measured as the product of the price per square metre and the number of purchases. The table presents the cumulative sum of the contributions of the units with the highest contribution (Top 1, Top 2, Top 5%, and Top 50%) to the growth of the aggregate index and, separately, their cumulative share in total house purchases. For further details, see Curci, Khametshin, and López-Rodríguez (2026).
- b** The Top 1 group consists of Madrid both at the urban area and municipality levels, while the Top 2 group comprises Madrid and Barcelona at both levels. In the Top 5% category (defined as the top 5% of geographical units with the highest contribution), 31% of the districts and 45% of the census tracts are within the urban area of Madrid, compared with 18% and 20%, respectively, within Barcelona's. The Top 50% category comprises the geographical units whose contribution is above the median of the distribution.

- The concentration of activity in the housing market is also very high when analysed at census tract (the smallest geographical unit) level. 5% of census in the urban areas under consideration accounted for 36% of the cumulative increase in prices in those areas between 2014 and 2024 and comprised one quarter of house purchases.
- A greater degree of geographical concentration in activity means that local determinants become more important than aggregate factors in explaining changes in that activity and, in particular, in the aggregate house price.

Rent growth shows a territorial pattern similar to that of purchase prices, although the increase in recent years has been concentrated in city centres, in areas with greater tourist appeal and in new rental contracts.

- The geographical distribution of changes in real rents between 2014 and 2024 illustrates their cross-regional heterogeneity (see the [interactive annex](#)). While the increase in prices between 2014 and 2024 has varied widely across regions and provinces, the largest discrepancies emerge when examining differences across urban areas.
- In recent years, the strongest increase in real rents has been recorded in the urban areas of Valencia and Malaga, followed by Madrid and Barcelona, where the highest average real rent levels are found. These developments are largely owing to higher rents in the central districts of the large cities and in areas with lower household income, where home ownership is less affordable. [Box 3.2](#) complements this evidence with an analysis of real rent growth in the large urban areas between 2019 and 2024 and documents heterogeneity between the dynamics of rental flows and the stock of rental housing.

The current upswing in the housing market displays distinct features that set it apart from previous housing upswings, particularly the boom in the 2000s.

- Current housing market growth is not being underpinned by more lending or a loosening of lending standards, which helps to avoid the build-up of financial imbalances. The indicators that signal financial stability risks and vulnerabilities associated with real estate market developments in the current boom remain contained, unlike the imbalances recorded at the peak of the previous boom between 2004 and 2007.
- Growth in activity in the residential market has not accelerated significantly – the relative weight of employment in construction and property development and the sector's contribution to gross value added are both below their historical averages over the past four decades. This is reflected in housing production growth that has consistently risen more slowly than the number of households, in contrast to what was seen in the 1980s and, in particular, in the 2000s (see Section 4).
- House purchases have reached levels not seen for almost two decades, although the population grew by 8.5% and the number of households increased by around 3 million between 2007 and 2025. The number of households has risen relatively faster than the population, owing to a gradual decline in average household size.¹⁸ This pushes housing demand above demographic growth, marking a departure from the historical relationship between population growth and housing demand seen in previous upturns. Moreover, in the current cycle, this demand for residential housing is being boosted in some regions by a significant non-resident component, from foreign citizens and from the emergence of alternative uses for housing, such as for tourist dwellings.
- The rental market is of particular importance during the current housing upswing (see Section 3). Whereas this form of housing tenure played an almost residual role in previous booms, since 2007 a large share of new households (whether formed by young people leaving the family home or by newly arrived residents) have sought to live in rented housing. This increase in demand has taken place in an underdeveloped rental market, creating upward pressure on housing prices. That pressure is evident both in rents, given supply growth that is slower than demand growth, and in purchase prices, since the latter may in turn be fuelled by investor demand for second-hand housing.
- Current housing market momentum is especially concentrated in the large urban areas and in regions with greater tourist appeal. This degree of concentration is higher than that recorded during the property boom of the 2000s, when growth in housing market activity (house purchases and construction) and prices was more geographically widespread across Spain.¹⁹ The concentration of the housing market increased substantially during the property

¹⁸ The average household size fell from around 2.9 in 2001 to 2.75 in 2007 and to around 2.5 in 2025 (INE 2026a, 2026b). This fall is driven partly by the rise in single-person households, of which there were 5.6 million at the beginning of 2026, compared with 4.2 million in 2011 (INE 2013).

¹⁹ See Curci, López-Rodríguez and Khametshin (2026a) for a description of the indicators that make it possible to quantify the Spanish housing market's degree of geographical concentration and how it changed between 2004 and 2024.

market adjustment between 2008 and 2013, as well as in the subsequent recovery led by the urban areas with more robust economic growth (Madrid and Barcelona). Since 2022, this recovery has spread to other urban areas, where a significant part of the recent increase is also concentrated (Malaga, Valencia and the Balearics and Canaries).

3 Housing affordability

There was a sustained increase in the share of owner-occupied housing in Spain up to the global financial crisis. As a result, Spain came to have one of the highest proportion of households owning their main residence among advanced economies. However, housing affordability problems are gradually eroding home ownership rates and also contributing to a decline in the share of young people moving out of the family home.

This section describes the deterioration in the affordability of home ownership and the expanding role of renting since the global financial crisis. Affordability problems are especially pronounced in the large urban areas, where the cumulative increase in real house prices has outpaced growth in household net income. This dynamic has shifted housing demand towards the rental market. Although the supply of residential rental housing has increased markedly over the past decade, it has not been enough to contain rents. As a result, a high proportion of renter households are overburdened, spending a very large share of their net income on housing. The high rent burden, which makes it harder for young people to leave the family home and affects immigrants' location choices, is especially severe in city centres.

3.1 Developments in housing tenure in Spain

Housing tenure in Spain is undergoing a structural shift, with a decline in owner-occupation and a sustained rise in renting since the global financial crisis.

- Home ownership rates rose gradually in the second half of the 20th century and up to the economic crisis that began in 2008. For example, between 1970 and the early 2000s it increased by almost 20 pp (Table 2.2) to stand above 80% in 2007 (INE, 2025b).
- The increase in the share of renter households since 2008 is reflected in the fall of the home ownership rate, which was 73.3% in 2025.²⁰ The proportion of renter households rose by 6.3 pp between 2007 and 2025, to 20.2%, near where it stood in 1981. To this should be added the 6.5% of households living in housing provided by family members. This figure has remained relatively stable over time and is in line with the average for this type of arrangement between 1970 and 2025.
- Changes in housing tenure have gone hand in hand with changes in the sociodemographic composition of households living in owner-occupied and rented housing. While these changes are also the result of population ageing, [Box 2.3](#) draws on the Survey of Household Finances to show how the characteristics of households living in owner-occupied and rented housing have changed over the last two decades in terms of age, income, educational attainment and country of birth.

²⁰ See Khametshin, López-Rodríguez and Pérez (2024) for a detailed discussion of the growth in Spain's rental market between the global financial crisis and 2023.

Table 2.2
The percentage of owner-occupiers fell in the wake of the economic crisis that started in 2008

Distribution of residential housing by tenure type (%)

Year	Rented	Rent-free and other arrangements (a)	Owner occupied
1970	30.1	6.5	63.4
1981	20.8	6.1	73.1
1991	15.2	6.5	78.3
2001	11.4	6.5	82.2
2011	13.5	7.6	78.9
2021	16.1	8.4	75.5

SOURCE: INE (Population and Housing Censuses).

a "Other" includes housing rented below market price, such as social or affordable rental housing. Only the stock of housing used as a main residence is considered.

The sharpest drop in home ownership rates has occurred among young people

- Between 2007 and 2025 the share of households with a reference person under the age of 30 relative to total renter households increased by 15.4 pp, with the proportion of renters among such households standing at 54.7% in 2025. For households with a reference person aged between 30 and 44, the increase was 17.8 pp, with the share of renters reaching 37.1%.
- This increase in renting among younger households contributes, through changes in housing tenure flows, to the gradual decline in the proportion of households in Spain that own their main residence.
- Even so, that decline remains limited because young people account for a shrinking share of the overall population. Accordingly, the proportion of owner-occupied housing in Spain is still among the highest in the euro area, where the average stands at 64.7%, compared with 73.6% in Spain in 2025. Spain's rate is now below that of Italy (77.1%), but still significantly above those of France (61.4%) and Germany (47.2%).

The decline in the accessibility of home ownership for young Spaniards has coincided with a substantial fall in the rate at which young people leave the family home.

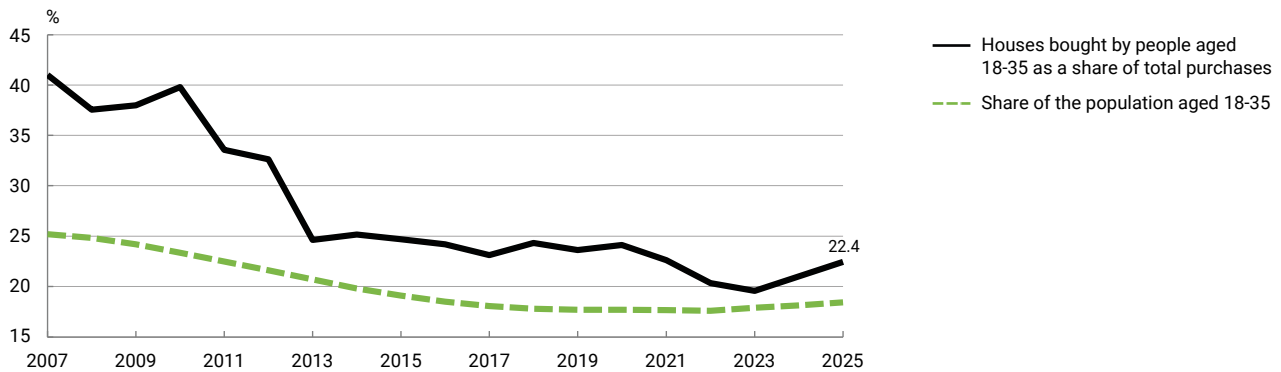
- 31.5% of people aged 35 and under had moved out of the family home in 2024, 13.5 pp lower than in 2007. This falls to 13.4% when considering only those aged 30 and under.
- The average age at which young people leave the family home in Spain was 30.4 in 2024, compared with 26.2 in the European Union (EU). The figure for Spain is in line with those for Portugal (28.9), Italy (30.1) and Greece (30.2), although it is higher than in France (23.5) and Germany (23.9).²¹

²¹ For more details, see "Young people - housing conditions" by Eurostat.

Chart 2.6

House purchases by young people have declined significantly over the last two decades, outpacing the decline in their share in the population

2.6.a Homes owned by people aged 18-35



SOURCE: Banco de España, drawing on data from the General Council of Notaries and INE.

The delay in leaving the family home and the rise in renting are reflected in an increase in the average age of home buyers.

- The proportion of houses bought by those aged 18-35 fell by almost 20 pp between 2007 and 2025 to 22.4% of house purchases by Spanish residents (Chart 2.6).
- Progressive population ageing contributes to this decline, but purchases fell relatively more than the decline in this age group's share of the population.
- This explains much of the increase in the average age at which Spanish residents buy a home,²² which has risen by 5.7 years since 2007 to stand at 46.8 in 2025.

Aggregate indicators that approximate the potential cost burden of purchasing a house point to a tightening of conditions over the past forty years and to a greater relative deterioration in Spain's position in the international context.

- The Organisation for Economic Co-operation and Development's (OECD) price-to-income indicator²³ approximates developments in the potential cost burden on a representative household of purchasing a house (Table 2.3).
- In Spain, this indicator has risen by almost 88.6% between 1980 (the baseline) and 2025.

²² Calculations of the average age of home buyers can be made from 2007 onwards, as that is the earliest year in the General Council of Notaries' digitalised database.

²³ This indicator is calculated as the ratio of the nominal price of residential housing to household disposable income per capita in a reference year. The ratio's numerator is adjusted annually in line with the national house price index and the denominator in line with household disposable income as recorded in the National Accounts. The indicator is expressed as an index, with the value for 1980 normalised to 100.

Table 2.3

Among advanced economies, Spain stands out for the cumulative increase over the past four decades in the cost burden of buying a home

The potential cost burden on households of purchasing a house (1980 = 100) (a)

	1980	1985	1991	2000	2007	2015	2025
France	100	82.3	94.5	78.8	128.7	116.8	109.1
Germany	100	85.1	73.4	65.3	53.2	56.3	60.7
Italy	100	70.4	92.9	74.9	104.4	88.7	78.5
Spain	100	90.1	155.6	121.6	230.2	151.0	188.6
United States	100	86.2	85.5	81.5	96.9	76.6	97.4
Euro area	100	85.7	98.3	92.7	111.5	101.6	110.0
OECD	100	87.0	92.4	81.8	95.7	84.4	96.7

SOURCE: OECD (2026).

a The indicator is calculated as the ratio of the residential house price index to household net disposable income per capita according to National Accounts data. An increase in this ratio indicates a higher potential cost burden for households wishing to purchase a home.

Although it declined until the year Spain joined the European Economic Community, it rose significantly from 1986 to 1991 and, after a correction between 1992 and 1995 and a period of relative stability thereafter, accelerated from 2001 onwards, peaking in 2007 with the housing market boom of the 2000s.

- The correction in the Spanish real estate market between 2008 and 2014 led to a marked improvement in house affordability up to 2015, when house prices entered a recovery phase during which they rose faster than household disposable income.
- In 2025, the price-to-income ratio stood 18.1% below its 2007 peak, at levels comparable to the average cost burden in 2004-05, but still 40.0% higher than the levels recorded in the 1990s.
- From a long-run perspective since 1980, home ownership affordability in Spain has deteriorated more than in the OECD, the euro area and the major European economies. This has occurred despite the increase in real household net disposable income per capita – which almost doubled over the period – but at a slower pace than real house prices – which have more than tripled over the last 45 years.²⁴ Among the major European economies, this contrasts with Italy and Germany, where household net income has increased by more than real house prices.²⁵ Accordingly, although housing affordability is a widely shared problem across in Europe, home ownership in Spain has become relatively less affordable over the past four decades because the growth of real house prices has outpaced that of real household income.

²⁴ Over the same period, mortgage financing conditions also improved, with longer maturities and lower interest rates, and there were changes in the tax incentives associated with buying a house (Lajer, López-Rodríguez and San Juan, 2024).

²⁵ In Germany, stronger growth in household net income relative to house prices reduced the cost burden of buying a home by 40% between 1980 and 2025, while in Italy it fell by 20%.

Table 2.4
The burden of purchasing a house is high relative to income, particularly in the large cities and their urban areas

Years of average net income required to purchase a home by non-owner households, 2024 (a)

	Spain			City					
	Total	Under-35s	Foreigners	Madrid	Barcelona	Valencia	Seville	Zaragoza	Malaga
In the municipality of residence	6.8	7.1	7.6	9.7	9.0	6.7	7.2	5.7	10.0
In the urban area of residence (b)				8.4	7.2	5.9	6.4	5.6	9.7

SOURCE: Banco de España, drawing on data from the Household Panel (AEAT, INE and Fiscal Studies Institute) and General Council of Notaries.

- a** The potential cost burden of purchasing a house (i.e. the cost burden in terms of years of net income required) is calculated as the average house purchase price divided by the average net yearly income of non-homeowner households. For Spain as a whole, the average price is calculated as a weighted average of prices in municipalities in the common fiscal territory. The weighting is based on the distribution of non-homeowner households across those municipalities. For each municipality and household type, the average income of non-homeowner households in 2024 is obtained by updating their average income in 2023 in line with the growth rate of average gross income between 2023 and 2024 for all individuals residing in those municipalities.
- b** The average price in an urban area is calculated as a weighted average of prices in that area's municipalities. The weighting is based on the distribution of non-homeowner households across those municipalities.

3.2 The purchase cost and rent burden

Granular indicators of the potential cost burden of buying a house are higher for people who live in rented housing or in housing provided by family members.

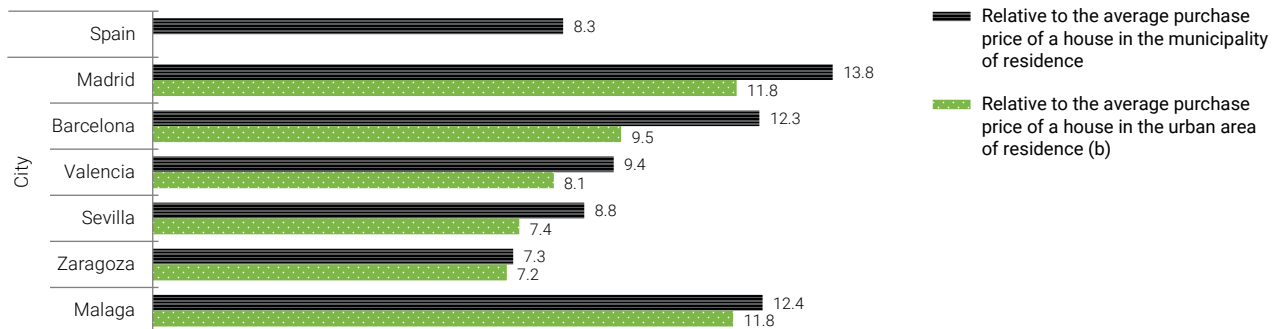
- The price-to-household net income ratio²⁶ (which approximates the potential cost burden of buying a house in terms of the number of years of average net income required) stood at 4.3 years on average in 2024 for all households.
- This indicator rises to 6.8 years when only considering households living in homes they do not own (i.e. those renting or living in accommodation provided by others) (Table 2.4). Buying a home would place the greatest burden on lower-income first time buyers, such as foreign-born households (7.6 years) and young households (7.1 years).²⁷
- These indicators of the potential cost burden of buying a house have stood at high levels since 2016, but are now showing a slight downward trend. That decline reflects changes in the composition of non-homeowner households. Specifically, average income has risen among households living in rented accommodation and, at the same time, their relative weight in the population as a whole has increased. This is partly explained by the fact that a larger share of higher-income households are finding it difficult to afford housing and are therefore remaining in the rental market for longer before buying their own home.

²⁶ This is calculated using the average price of house purchases recorded by the General Council of Notaries. Data on net income and place of residence are drawn from the Household Panel (AEAT, INE and Fiscal Studies Institute). The average house price is adjusted in line with the distribution of households across the municipalities in the common fiscal territory for which household income data are available from 2016 onwards.

²⁷ A “young household” is defined as one whose reference person is under 35, while a “foreign-born household” is one whose reference person was born outside Spain.

Chart 2.7
Young people living in the family home face serious difficulties in accessing owner-occupied housing without family support
2.7.a The potential cost burden of purchasing a house for young people living in the family home in 2024 (a)

Years of household average net income needed to buy a house


SOURCE: Banco de España, drawing on data from the Household Panel (AEAT, INE and Fiscal Studies Institute) and the General Council of Notaries.

- a** The potential cost burden of purchasing a house is calculated as the ratio between the average purchase price and the average annual net income of a hypothetical household comprising two young people living in the family home, without any change in their income. Young people living in the family home are defined as young non-homeowners living in a home owned by at least one parent, grandparent, etc. For Spain as a whole, the average price is calculated as a weighted average of prices in the municipalities in the common fiscal territory. The weighting is based on the distribution of young non-homeowners who have not left the family home across those municipalities. For each municipality and household type, the average income of non-homeowner households in 2024 is obtained by updating their average income in 2023 in line with the growth rate of average gross income between 2023 and 2024 for all individuals residing in those municipalities.
- b** The average rent in an urban area is calculated as a weighted average of prices in that area's municipalities. The weighting is based on the distribution of young non-homeowners who have left the family home residing in those municipalities.



The cost burden of purchasing a house is highly heterogeneous across regions and is particularly high in the large cities where economic activity is concentrated.

- Among households in the six largest cities (those with populations above 500,000), non-homeowner households in Malaga, Madrid and Barcelona faced the greatest potential cost burden in 2024 (Table 2.4). In these cities, buying a house would require between nine and ten years of income, which is, on average, around 68% higher than in Zaragoza, 43% higher than in Valencia and 33% higher than in Seville. The geographical distribution of the cost burden of buying a house in 2024 illustrates its heterogeneity across urban areas, provinces and autonomous communities (see the [interactive annex](#)).
- Moving to another municipality within the same urban area could reduce this burden, although it would nevertheless remain high. In Barcelona, for example, the potential cost burden can be cut substantially (by 20%) were a household to relocate and buy a home elsewhere within the city's urban area. Among the large cities where the burden of buying a home is greatest, there is a significant improvement associated with moving within the urban area in Madrid, Valencia and Seville, where the potential cost burden can be cut by around 12%, but the effect is very limited in Malaga and Zaragoza, where the average reduction is 2.5%.

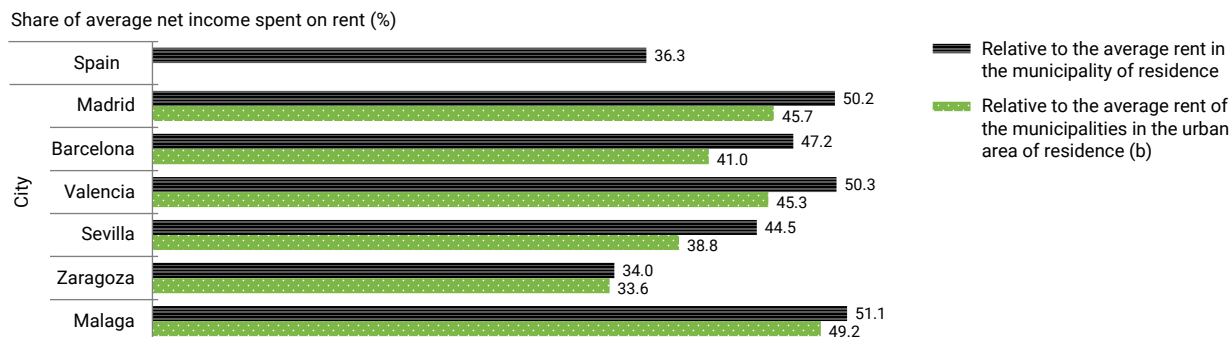
Young people who work and have not left the family home face serious difficulties in buying their own house without family support.

- In 2024, young earners living in homes owned by relatives faced, on average, a purchase cost burden amounting to around 8.3 years of their net income, assuming that they form

Chart 2.8

Young people who wish to move out of the family home to rented housing face spending a large share of their income on rent, especially in large cities

2.8.a Potential rent burden for young people living in the family home in 2024 (a)



SOURCE: Banco de España, drawing on data from the Household Panel (AEAT, INE and Fiscal Studies Institute) and AEAT.

- a The rent burden is calculated as the ratio between the average rent and the average net income of a hypothetical household comprising two young people living in the family home, without any change in their income, and residing in the same municipality. Young people who have not left the family home are defined as young non-homeowners living in a home owned by at least one parent, grandparent, etc. For each municipality and household type, the average income of non-homeowners living in the family home in 2024 is obtained by updating their average income in 2023 in line with the growth rate of average gross income between 2023 and 2024 for all individuals residing in those municipalities.
- b The average rent for an urban area is calculated as a weighted average of rent prices in that area's municipalities. The weighting is based on the distribution of young non-homeowners who have left the family home across those municipalities.



two-person households without any change in their income (Chart 2.7). The burden is substantially higher in Madrid and Barcelona, where the burden can represent between 12.3 and 13.8 years of household net income.

- Moving elsewhere within an urban area would ease the burden of buying a house for young people who still live in the family home. Nevertheless, it remains very high, with prices representing more than 7.2 years of net income in all six of Spain's large urban areas.

The sustained rise in house prices above the growth of household income is making it harder to secure a mortgage to buy a first home.

- New mortgages granted in 2025 for the purchase of a household's first main residence were extended under prudent lending criteria by historical standards.²⁸ This is reflected, for example, in the small proportion of such loans with an LTV above 80% or a debt-service-to-income (DSTI) ratio above 35% (Chart 2.8). Such lending standards for mortgages help limit the probability of future defaults.
- Analysis of the economic and financial position of households living in rented accommodation suggests that a very large proportion would need to take on high levels of debt in order to finance a home purchase with a mortgage. In particular, the simulations performed show that just 10%-15% of these households would have sufficient savings for an LTV ratio below

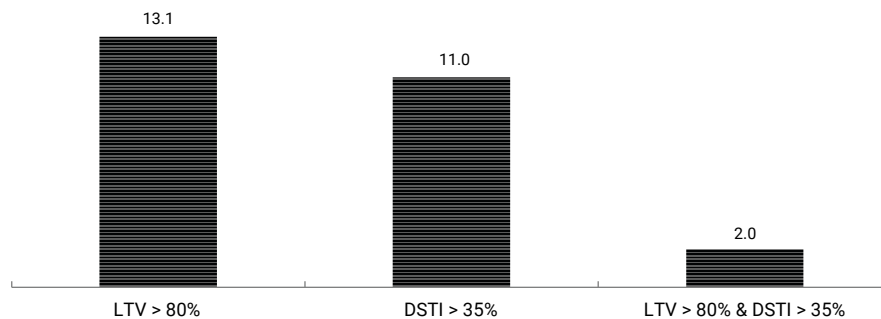
28 For more details, see Banco de España (2026). Section 4 presents a historical overview on developments in mortgage lending standards, while Section 6 discusses the benefits and costs associated with loosening lending standards to a greater or lesser degree.

Chart 2.9

The share of higher-risk mortgages for the purchase of a main residence remains limited

2.9.a Mortgages for the purchase of a main residence by risk threshold (a) (b)

% of all mortgages granted for the purchase of a main residence


SOURCE: Banco de España.

- a** Mortgages granted to households in 2025 for the purchase of a main residence. This takes account of houses at market price and the first home purchase. The three categories depicted are mutually exclusive.
- b** A loan is considered high relative to the value of the collateral when the LTV ratio exceeds 80%. A mortgage instalment is considered high when the DSTI ratio exceeds 35% of the household's net income.



80% or sufficient income for a DSTI ratio below 35% if they wished to buy a home with a mortgage in the urban area in which they reside.²⁹ High levels of indebtedness entail greater default risk and, under current lending standards, loans with ratios above these thresholds are uncommon (Chart 2.9).

- Among renter households that cannot take on a mortgage while keeping indebtedness contained,³⁰ almost one third could pay mortgage instalments using less than 35% of their net income, but their assets are insufficient to bring the LTV ratio below 80%. At the same time, more than half of households are constrained on both the income and savings fronts, while just 4% have sufficient savings but insufficient income.³¹

Tight mortgage conditions may help to explain the rise in gifts as a means of facilitating access to owner-occupied housing.

- In 2025 30,500 dwellings were given by parents to their children, reinforcing the growing trend in such transactions. This represented a 61% increase over 2019, with a total of 175,000 homes gifted by parents to their children between 2019 and 2025.³² In addition, cash gifts

²⁹ The simulation is carried out for all non-homeowner households using granular data on their net income and net assets, as well as average house prices in 2024 drawn from the data of the General Council of Notaries and the Household Panel (AEAT, INE and Fiscal Studies Institute). A mortgage term of 25 years and a market average interest rate are assumed.

³⁰ This definition of a constrained household assumes the application of prudent lending criteria based on LTV and DSTI ratios, although banks may grant loans above these thresholds or take other lending standards into account when determining whether a loan is prudent.

³¹ For a complementary analysis of limitations faced by renter households' access to mortgages, see Box 4.1 in Banco de España (2026).

³² Data provided by the General Council of Notaries.

Table 2.5
Renter households spend a significant share of their net income on rent particularly in the large cities

Percentage of average household net income spent on rent in 2024 (a)

	Spain			City					
	Total	Under-35s	Foreigners	Madrid	Barcelona	Valencia	Seville	Zaragoza	Malaga
Average rent burden	26.7	27.4	27.9	31.6	32.4	30.2	31.3	24.1	34.5

SOURCE: Banco de España, drawing on data from the Household Panel (AEAT, INE and Fiscal Studies Institute) and AEAT.

a The rent burden is calculated as the ratio between the average rent in the census tract in which non-homeowner households reside and their average income. For each census tract and household type, the average income of non-homeowner households in 2024 is obtained by updating their average income in 2023 in line with the growth rate of the average gross income between 2023 and 2024 for all households residing in that census tract.

from parents to children tripled in that same period, reaching around €5.5 billion in 2025, with an average amount of nearly €90,000. Such monetary transfers are encouraged by favourable tax treatment in some regions.

- Cash gifts are one mechanism that helps to reconcile constrained access to mortgages for young households with the continued growth of mortgages for house purchases, with prudent credit standards. These monetary transfers, which numbered more than 62,000 in 2025, ease both savings constraints and income constraints, thereby facilitating young people’s access to mortgages. In 2025, 12.3% of mortgages for the purchase of a main residence were granted to people under the age of 30 – up by 20.7%, with an average LTV of 72.5% and an average mortgage term of 28.2 years (*2025 Central Credit Register Report*).

Renter households bear a high housing cost burden in terms of the share of their net income they spend on rent.

- The average rent burden for renter households stood at 26.7% of their average net income in 2024 (Table 2.5). This figure is kept high owing to the rent burden on the main groups in the rental market – namely young people and foreign-born households. **Box 3.4** analyses the effect that higher real rents may have both on the internal mobility of Spanish residents between Spanish provinces and on the arrival and location of immigrants across the country. Although the average burden is high across much of the country, in 2024 it exceeded 30% in five of the six large Spanish cities (Table 2.5). The average rent burden across all the municipalities in the six large urban areas is also heavy and its geographical distribution displays a lower degree of dispersion than the potential cost burden of buying a house in 2024 (see the [interactive annex](#)).

A significant proportion of households that do not own their main residence are overburdened or are facing social vulnerability when trying to access rental housing.

- In 2024 32.5% of households that did not own their main residence (households renting on the private market, households living in homes provided to them by someone else, and those in social housing) would have spent more than 30% of their net income on housing if they

Table 2.6
A significant share of renter households spend more than 30% of their net income on rent

Overburden indicator, % of renter households (a)

	Spain			City					
	Total	Under-35s	Foreigners	Madrid	Barcelona	Valencia	Seville	Zaragoza	Malaga
Overburdened households	32.5	34.2	34.4	41.3	43.5	39.6	46.8	23.8	46.7

SOURCE: Banco de España, drawing on data from the Household Panel (AEAT, INE and Fiscal Studies Institute) and AEAT.

a The overburden indicator is defined as the share of households with a rent burden exceeding 30% (rent as a percentage of net income). The rent burden is calculated as the ratio between the average rent in the census tract in which non-homeowner households reside and their average income. For each census tract and household type, the average income of non-homeowner households in 2024 is obtained by updating their average income in 2023 in line with the growth rate of the average gross income between 2023 and 2024 for all households residing in that census tract.

had paid market rents (Table 2.6). This figure stood above 40% in large cities such as Seville (46.8%), Malaga (46.7%), Barcelona (43.5%) and Madrid (41.3%).

- Eurostat data for 2025 (Eurostat, 2026) show that the proportion of overburdened households in the private rental market is higher in Spain than in the main euro area economies. Specifically, on a gross income basis,³³ 26.8% of households in Spain were overburdened, compared with 18.7% in France, 22.3% in Italy and 13.2% in Germany. Relative to the euro area as a whole, the share of overburdened renter households in Spain in 2021-25 was between 19.5 pp and 10 pp higher. Once again, although housing affordability is a problem across many European economies, it is particularly acute in the Spanish rental market.

The potential rent burden is one factor limiting young people’s ability to leave the family home, especially in the large cities.

- In 2024 young people seeking to leave the family home and form a two-person household, without any change in their income, faced spending 36.5% of net income on housing. This potential burden is 9 pp above the average borne that year by young people who had already moved out into rented accommodation. For young people wishing to leave the family home and rent, the potential burden would, on average, amount to nearly 50% of their net income in Barcelona, Madrid, Malaga and Valencia (Chart 2.9).
- Moving elsewhere in their urban area could ease this, although in many of the major urban areas they would still face spending more than 40% of their net income on housing.

The cost burden on renter households depends on the performance of their income relative to their housing costs and this contrast is particularly stark among new rental contracts.

³³ Eurostat defines the housing cost overburden rate in the rental market as the share of households spending more than 40% of their disposable income on housing costs (including rent and basic utilities, such as water, electricity and gas). On average, this threshold is similar to an overburden threshold measured as 30% of net income and only considering rent costs.

- Developments in rents are shaped by regulations that have differing impacts on the flow and the stock of residential rent contracts. National legislation governs annual updating of rents and sets maximum limits on them in line with the [Rental Housing Benchmark Index](#) (IRAV, by its Spanish acronym). In addition, municipalities designated as experiencing housing pressure in the regions of Catalonia, the Basque Country, Navarre and Galicia (A Coruña) have introduced rent controls linked to the state benchmark system for residential rental (SERPAVI, by its Spanish acronym), which cap rent levels in new contracts.³⁴
- The evidence presented in [Box 2.2](#) on the impact of prices on the stock and flow of rental housing suggests that prices rise when a new contract is signed, whereas rent revisions during an existing contract's term are below inflation. For example, in 2024 the average price for houses new to the rental market was 16.5% higher than the average rent for the existing rental stock, and this gap was wider in comparison with previous years (it stood at an average of 9.5% in 2020-23). By contrast, the rents of new contracts for properties already on the market rose by an average of 4.6% in 2024 in real terms. These figures stand in contrast to annual rent revisions on existing contracts, where real prices fell by 0.1% in 2024 and by an annual average of 1.7% between 2020 and 2024.
- This evidence points to landlords pricing in expected future rental income at the time contracts are signed. Such pricing behaviour aims to hedge against regulations that could cap increases below inflation and reduce the expected real return of the rental agreement. At the same time, it worsens affordability for new market entrants, who face a greater rent burden when signing a rental contract, even though that burden may ease in real terms over time.

³⁴ Caps on rent levels in new contracts apply depending on the type of landlord (for example, a major institutional landlord or a legal entity) or where the dwelling has entered the rental market for the first time (with a five-year lookback period).

4 Housing supply constraints

The constraints limiting growth in housing supply are the main factor underlying Spain's current housing affordability problems. Over the last decade, housing supply has responded insufficiently to rising demand, giving rise to a persistent mismatch between the two and contributing to the sustained rise in house prices.

This section first documents the capacity of the existing housing stock to absorb rising residential demand and how it has developed recently in relation to demographic trends. That analysis is complemented by a review of the availability of development land. The overview highlights the slow pace of both legally designating land as available for development and executing urban planning. These factors highlight the limited elasticity of the housing supply, especially in urban areas with the fastest growth in demand and increasing alternative non-residential uses of housing, for example as tourist dwellings or seasonal rentals.

This section goes on to examine the factors that may underlie this limited supply response. Here, the evidence points to a combination of structural constraints (both public and private) reinforced by cyclical factors. From a structural standpoint, the residential development and construction sector is characterised by firms that are too small, a sustained fall in productivity and modest profitability, all of which jointly weigh on investment capacity. These factors are compounded by shortcomings in the regulatory framework and in administrative procedures, which hinder and delay the production of build-ready land and the construction of houses. These constraints on residential investment are aggravated when combined with cyclical factors such as the recent rise in production costs and specialised labour shortages.

4.1 The capacity of the housing stock

The capacity of the existing housing stock to absorb new residents is shrinking steadily and is already low in the provinces in which economic activity is concentrated.

- The number of dwellings in the housing stock used for residential purposes grew by 1.2 million between 2021 and 2025. It is estimated that at least 60% of that increase came from homes that had already been built, but were previously used for alternative purposes (e.g. as second homes or left vacant).
- The capacity of the existing housing stock to increase the supply of residential housing is highly heterogeneous across provinces (Table 2.7). Provinces facing less demographic pressure have ample scope to absorb new residents, since a large part of their housing stock is used for non-residential purposes. By contrast, in the provinces in which economic activity is concentrated, this capacity is limited in the absence of new housing construction, with the maximum share of the current housing stock available to boost supply standing between 10% and 14% in the five provinces with the least slack in housing availability.

Table 2.7

Provinces with stronger economic activity have a smaller pool of existing homes that could potentially be used to increase residential housing supply

Availability of existing non-residential housing in 2025

Spain as a whole and provinces (a)	% of the housing stock
Madrid	9.9
Bizkaia	11.6
Barcelona	11.9
Gipuzkoa	13.7
Araba	13.9
Spain	27.1
Ourense	49.8
Zamora	50.5
Soria	54.1
Teruel	55.2
Ávila	58.2

SOURCE: Banco de España, drawing on data from the Cadastre, AEAT, INE and Ministerio de Transportes and Movilidad Sostenible.

a The table includes the top and bottom deciles of provinces (those with the highest and lowest availability, respectively), based on the distribution of existing housing potentially available for residential use in 2025.

- Based on existing housing, the provinces of Madrid and Barcelona have the capacity to increase residential supply by 300,000-350,000 households at most.³⁵ This housing availability is even lower in the provincial capitals.
- The scope for repurposing housing for residential use is limited, since the non-residential housing supply is currently being used for tourist and seasonal rentals, and second homes (whether owned by Spanish residents or non-residents), and other houses stand empty (and in an unknown condition and largely located outside major urban areas).³⁶

Since 2011, the housing stock has been growing more slowly than net household formation, although this gap between supply and demand has widened at a faster pace since 2021.

- In Spain, the housing stock grew faster than net household formation between 1982 and 2010 (Chart 2.10). This made it possible to renew the housing stock and supported growth in second homes, though it also led to overbuilding in some areas during the property boom of the 2000s.
- The correction in the housing market brought housing production below net household formation between 2011 and 2020. This process absorbed some of the surplus produced in the first decade of the 2000s, according to [estimates published by the Ministry of Transport](#)

³⁵ In 2021-25, it is estimated that 90,000-95,000 dwellings in each of these provinces were made available for residential use (having originally been used for alternative purposes), helping to absorb strong demographic growth.

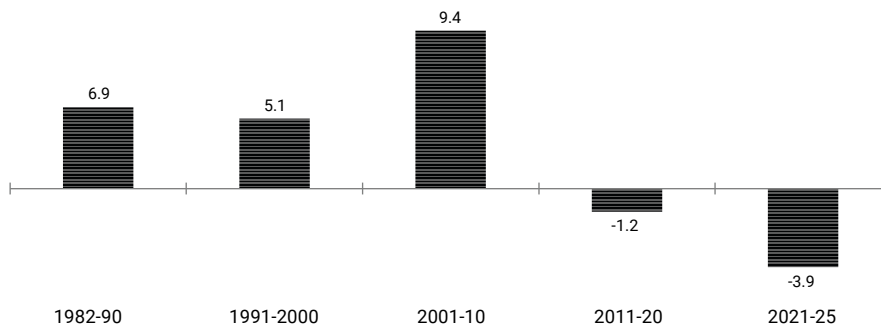
³⁶ The latest update to the number of vacant homes was carried out in 2020 (INE, 2021). At that time, it was estimated that more than 3.8 million houses were vacant, of which 400,000 were in municipalities with less than 250,000 inhabitants.

Chart 2.10

Net household creation grew faster than the housing stock from 2011 onwards

2.10.a Accumulated shortfall between new housing construction and net household formation (a)

Number of dwellings as a % of average number of households in the period



SOURCE: Banco de España, drawing on data from INE and Ministerio de Transportes and Movilidad Sostenible.

a The indicator is calculated, for each period considered, as the difference between the number of residential units completed and the change in the number of resident households.



and Sustainable Mobility, although 450,000 unsold homes still remain. A substantial share of these would not match demand preferences owing to their location and condition.³⁷

- The gap between new housing production and net household formation widened between 2021 and 2025, with 52.5% of the accumulated gap (750,000 homes) concentrated in just six provinces: Madrid, Barcelona, Alicante, Valencia, Murcia and Malaga. This trend has also contributed to the gradual ageing of the housing stock, which requires [refurbishment and improvements in energy efficiency](#).

The slowdown in new housing production has also been visible across the euro area since 2020, reflecting macro-financial conditions common to all countries.

- Residential construction permits across the EU recovered in the wake of the pandemic, rising by 16.5% in 2021. They then fell by 3.6% in 2022 and declined even further in 2023, with a drop of 19.6%. New construction stabilised in 2024, before growing by 5.6% in 2025.
- This pattern shows considerable heterogeneity across euro area economies, in which the increase in housing starts in 2005 (up by 8.8%) is the result of buoyant activity in the larger economies, such as France (16.5%), Germany (12.2%) and Spain (11.5%), in contrast with steep falls in the Netherlands (-13.0%), Italy (-4.0%) and Greece (-23.5%).
- The recovery in residential construction in the EU in 2025 comes against a backdrop of rising real house prices (up by 3%) and subdued housing production relative to the resident

³⁷ The number of houses built during the housing boom of the 2000s that have not been sold has been stable since 2018, despite strong demand, suggesting that these homes do not match household preferences.

population. The 1.6 million homes started in the EU in 2025 amount to 3.5 per 1,000 inhabitants. Among the major economies, these ratios vary widely, from low levels in Italy (0.9), moderate levels in Germany (2.2), Spain (2.8) and the Netherlands (3.8), to the highest levels in France (4.8) and Poland (7.8).³⁸

- Residential investment in Spain rose in 2025, although it remains below its historical average during earlier expansionary phases, such as those of the 1980s and 1990s (see Section 2). One factor behind this is the inelasticity of residential housing supply. Aggregate estimates at the international level place Spain in the lower-middle range in terms of housing supply responsiveness.³⁹ More specifically, Spain's long-run elasticity is estimated at around 0.45, indicating a relatively limited supply response to price increases and one that is broadly in line with countries such as Italy and France. This elasticity is estimated to be above 1 in the United States, Canada and Sweden and below 0.2 in countries such as the Netherlands and Switzerland. However, these estimates, which are based on long-run macroeconomic models, do not adequately capture either territorial heterogeneity or short-term constraints such as potential bottlenecks in construction and urban planning. They should therefore be regarded as an upper bound on the current responsiveness of housing supply in Spain.

Among the large euro area economies – with the notable exception of Germany – demographic growth since 2020 has outpaced housing production.

- Spain and Portugal stand out among the economies where growth in new housing construction has not matched the increase in resident households (Chart 2.11). In Portugal, the cumulative housing shortfall between 2021 and 2025 is estimated at around 300,000 units, equivalent to 6.6% of resident households in 2025. In Spain, the cumulative gap over the same period (750,000 units) reached levels almost double that in Italy (400,000 units). Relative to the number of resident households in 2025, the cumulative housing shortfall was markedly higher in Spain (3.7%) than in Italy (1.5%) or France, where it did not change. Germany is the only large euro area economy where housing production (up by 225,000 homes) increased by more than the growth in resident households (up by 0.5%) during this period.
- In Spain, net household formation remained strong in 2025 at 240,000, broadly in line with the annual average of 245,000 between 2021 and 2024. This growth in housing demand contrasts with a 9% fall in the gross increase in the housing stock, with 92,000 new dwellings completed in 2025. As a result, the cumulative housing shortfall widened to around 750,000 units between 2021 and 2025.

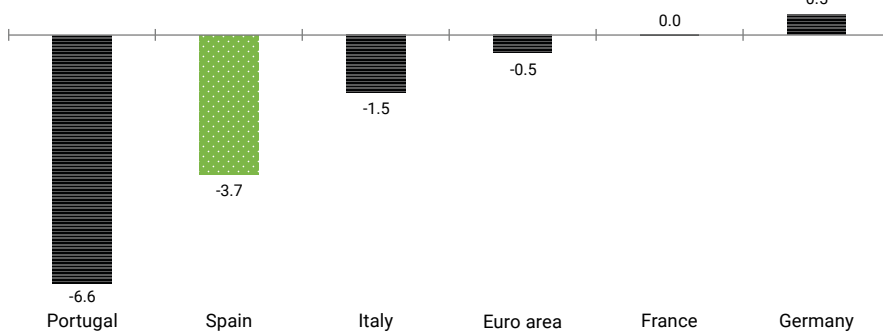
The construction of new housing requires development land on which to build and completion depends on regulations and urban planning, which varies across municipalities.

38 Recent developments in construction activity in Europe appear to have been driven by rising construction costs and interest rates and by tighter lending standards. See, for example, Battistini and Gareis (2024) and Gareis (2026).

39 Caldera and Johansson (2013) and Cavalleri, Cournède and Özsöğüt (2019).

Chart 2.11
The imbalance between growth in households and housing production can be seen in all the major euro area economies except Germany
2.11.a Accumulated shortfall of new housing between 2021 and 2025 (a) (b)

% of the stock of resident households in 2025


SOURCE: Banco de España, drawing on data from Eurostat, INE and Ministerio de Transportes and Movilidad Sostenible.

- a** For the euro area, Germany, France, Italy and Portugal, the housing shortfall is calculated as the sum of the differences, in each year between 2021 and 2025, between residential units approved two years earlier (to account for estimated construction time) and net household creation.
- b** For Spain, the housing shortfall is calculated as the sum of the difference, in each year between 2021 and 2025, between residential units completed and net household creation.



- Spain’s large cities have substantial reserves of development land, although it still has to go through complex planning procedures before it can be built on.⁴⁰ Across Spain as a whole, according to the Ministry of Housing and Urban Agenda’s 2025 Urban Information System (Sistema de Información Urbana), urban plans for housing construction on development land represent housing equivalent to 53% of the average size of an existing city.
- Development land in these areas in the whole of Spain, together with municipal urban plans (which determine the capacity to build housing on that land) could accommodate 7 million houses. Across the six large urban areas, home to 36% of households, the number of dwellings that could be built but have not yet been delivered is around 1.1 million (16% of the total).⁴¹ Whether this housing is actually delivered depends on lengthy and complex regulatory processes of land development and is influenced by the capacity of the construction and property development sectors to increase residential investment (see Section 4.2).
- There is considerable territorial heterogeneity in the relative availability of land that can be used for building, in the expected timelines for developing build-ready land and in the potential housing that could be built on such land under urban plans. For example, in the Barcelona urban area, according to the Urban Information System, this figure stands at around 120,000

⁴⁰ Particularly noteworthy among these reserves is development land in designated development areas, i.e. land on which houses can potentially be built and which is already at various stages of the planning process, with housing envisaged but not yet built.

⁴¹ The potential number of houses envisaged in the capitals of the six large urban areas is just 320,000 (4.5% of the total), even though these municipalities are home to 16% of households.

units (5.9% of its current resident households), compared with 550,000 in Madrid (19% of households) and 163,000 in Seville (27% of households).

The surge in demand for residential housing has not been accompanied by an acceleration either in land development or in urban planning management that might bolster construction of the envisaged units.

- A territorial analysis of changes in regulatory land categories between 2019 and 2025, based on Urban Information System data, suggests that there have been no significant changes in the classification of urban land at national level.⁴² Specifically, in aggregate terms, consolidated urban land and development areas have barely expanded. As a result, in Spain's six large urban areas there was very little or no increase in the number of dwellings envisaged in their development areas between 2019 and 2025.⁴³
- In many urban areas, the limited development of build-ready land available for construction is paired with slow planning processes resulting in a low construction execution rate of the units envisaged in urban plans. For example, according to the 2025 Urban Information System, the share of planned units that have been developed stands at 28.0% in Seville, 35.0% in Madrid and Malaga, and 46.6% in Zaragoza.

Urban planners have the option of choosing the construction density of new housing on land currently undergoing urban transformation.

- According to municipal urban plans, the number of units envisaged for build-ready land in development areas indicates a lower average planned density than that currently seen on consolidated urban land. These consolidated areas largely correspond to cities that have already been built. For example, in the urban areas of Valencia, Zaragoza and Seville, housing in consolidated areas is around 1.7 times as dense as that planned in the development areas.⁴⁴ That ratio rises to between 2 and 2.5 in the cases of Barcelona, Madrid and Malaga. This partly reflects the dense construction in large urban areas in Spain in the second half of the 20th century.⁴⁵
- Building more densely is one option available to municipalities with scarce land if they wish to bolster housing construction. For example, if housing in the development areas of Spain's six large urban areas were built at densities comparable to those of consolidated urban land

42 The Urban Information System estimates development areas, the number of dwellings envisaged and completed units using satellite imagery. This entails a certain degree of statistical uncertainty when images are outdated.

43 For example, based on the latest Urban Information System data, the increase in planned dwellings has been estimated at 730 in Barcelona, 1,776 in Malaga and 3,662 in Valencia.

44 This estimate is based on how consolidated urban land is used according to information provided by the Cadastre on the number and surface area of homes built on that land.

45 For example, municipalities in the Barcelona and Valencia urban areas are among the densest in Europe. Nevertheless, at the European level, Spanish urban areas are more dispersed and the construction density in the periphery falls further relative to that of the centre. As a result, the density of the Madrid and Barcelona urban areas is lower than that of the Paris, London, Brussels and Athens urban areas (Eurostat – Statistical Atlas, Eurostat (Population density by metropolitan region) and OECD).

within those same areas,⁴⁶ this would yield around 0.5 million additional planned dwellings. 67% of these would be concentrated in the Madrid urban area, with 21% in the Barcelona urban area. In a theoretical maximum scenario, assuming dense construction, if development areas were assumed to be capable of achieving the same density as the average of consolidated areas, between 1 million and 1.2 million additional units could be built in the six large urban areas.

- Building more densely is one way by which municipalities can boost housing supply by making more intensive use of development land. Even so, enlarging urban areas and increasing their density requires proper planning and financing of transport infrastructure (both public and private) and of public amenities such as education and healthcare services. Otherwise, population growth driven by additional housing construction without these investments would generate severe congestion costs in urban areas.

Although non-residents account for a modest share of total house purchases, these transactions are concentrated in tourist areas along the Mediterranean coast and on the Balearics and Canaries.

- Between 2021 and 2025, house purchases by non-residents accounted for 7.4% of the total, equivalent to an annual average of 50,000 dwellings.⁴⁷ These figures exceed those recorded at the peak of the real estate boom in the 2000s. In 2007, for example, there were 30,000 such purchases, representing 3.8% of the total. Over the last two decades, the highest share was recorded in 2013, when these transactions accounted for 11.5% of house purchases (35,000 dwellings) amid a decline in overall housing demand.
- These purchases are particularly significant in areas along the Mediterranean coast and on the Balearics and Canaries, where demand for second homes is concentrated. In 2025, for example, non-residents accounted for 33.3% of total purchases in the province of Alicante, 27.9% in Malaga, 23.0% in the Balearic Islands and 20.3% in Santa Cruz de Tenerife. In the provinces of Madrid and Barcelona, major hubs of economic activity and housing demand growth, the relative share of these purchases was much lower, at 1.6% and 2.2% of total purchases, respectively.
- Non-residents' market share is almost 3.6 pp higher in the current upswing than in 2007 (the peak of the previous real estate boom). However, this increase is concentrated in a small group of provinces (Table 2.8).

Tourist dwellings play a particularly important role in certain urban areas and account for a significant share of the rental market in tourist areas.

⁴⁶ Density tends to decline with distance from the urban area's centre, so this estimate assumes that development areas, which are located increasingly further from the centre, would see lower density construction in line with the gradient of the average decrease observed in the urban areas.

⁴⁷ Data from the General Council of Notaries indicate that sales of homes owned by non-resident foreigners also account for a significant share of transactions (6.8% of the total in 2025), limiting the increase in the stock of such properties.

Table 2.8
Purchases by non-residents are gaining ground in the Spanish housing market, particularly in the Balearics and Canaries and along the Mediterranean coast

Market share of house purchases by non-residents (pp)

Spain as a whole and provinces (a)	Market share in 2025	Increase in market share between 2007 and 2025
Alicante	33.3	16.6
Malaga	27.9	13.6
Balearic Islands	23.0	13.3
S. C. de Tenerife	20.3	12.5
Las Palmas	14.9	7.9
Girona	14.7	8.5
Castellón	5.6	3.7
Spain	7.4	3.6

SOURCE: Banco de España, drawing on data from Ministerio de Transportes y Movilidad Sostenible.

a The table includes those provinces where the increase in the market share of house purchases by non-residents between 2007 and 2025 exceeded that recorded for Spain as a whole.

- The expansion of tourist housing – a factor which was absent during the real estate boom of the 2000s – has added upward pressure to housing demand. Estimates of the number of such dwellings (INE, 2026d) suggest that they increased between 2021 and 2024 to around 400,000 units. Regulatory restrictions on this type of activity in some regions and a shift towards alternative uses, such as seasonal rentals, could explain its decline to an estimated 355,000 tourist dwellings on average in 2025.
- On aggregate, although tourist housing represents a small proportion of the housing stock (1.5%), it accounts for around 10% of the rental market. Moreover, the prevalence of this activity and its potential effects on the residential market vary widely across regions. Specifically, the proportion of tourist housing is particularly high in certain urban areas on the Balearics and Canaries and along the Mediterranean coast (Chart 2.12). Within these urban areas, these dwellings are concentrated in districts where they account for a very significant share of the rental market. This can be seen, for example, in the historic centres of Malaga and Seville, as well as in cities such as Barcelona and Madrid, where aggregate urban-area figures would suggest that this activity remains limited in scale.⁴⁸

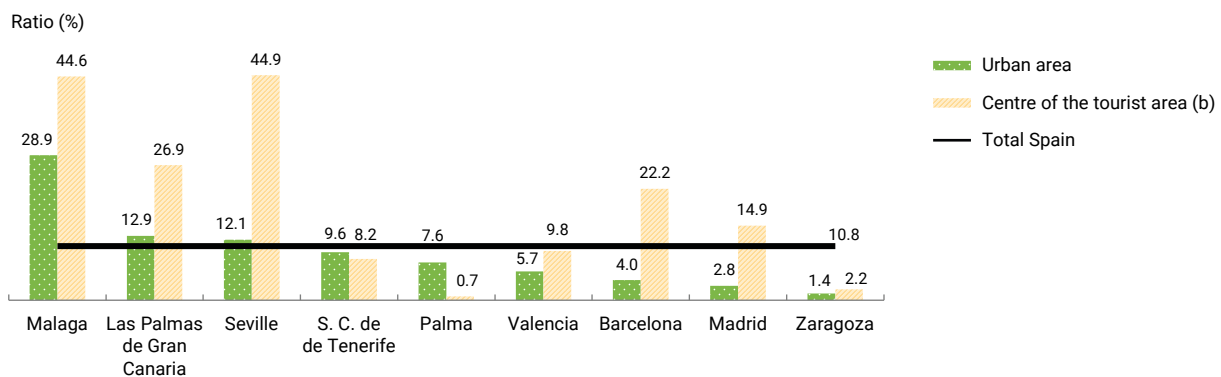
Dwellings used for tourism-related and other non-residential purposes account for a particularly large share of the housing stock in the provinces along the Mediterranean coast and on the Balearics and Canaries.

- The combined stock of both dwellings owned by non-resident foreigners and tourist dwellings amounted to nearly 900,000 units in 2025, equivalent to 3.3% of Spain's housing stock (Table 2.9).

⁴⁸ In Palma de Mallorca, restrictions on tourist housing help explain the low share of this activity in the city centre.

Chart 2.12
Tourist dwellings play a significant role in the rental market in tourist areas

2.12.a Share of tourist dwellings in the rental market in 2025 (a)



SOURCE: Banco de España, drawing on data from INE and AEAT.

- a In this analysis, rental housing includes residential rentals owned by individuals and tourist rentals, but no information is available to include other relevant categories, such as seasonal or room rentals and residential rentals owned by corporations.
- b The centre of a tourist area is defined as the census tracts of the capital of an urban area that are nearest to the census tract with the highest concentration of tourist dwellings. The tourist area is defined by using a radius based on a relative distance from this centre.



Table 2.9
Tourist dwellings and properties owned by non-residents are concentrated along the Mediterranean coast and in the Balearics and Canaries

Percentage of tourist dwellings and properties owned by non-residents relative to the total housing stock (a)

Spain as a whole and provinces	% of tourist dwellings and properties owned by non-residents in 2025
Spain	3.3
Cadiz	3.4
Castellón	3.6
Tarragona	4.2
Murcia	4.3
Almería	5.0
Las Palmas	7.4
S. C. de Tenerife	9.1
Balearic Islands	10.9
Girona	10.9
Malaga	14.1
Alicante	14.5

SOURCE: Banco de España, drawing on data from INE, Ministerio de Transportes y Movilidad Sostenible and AEAT.

- a Includes those provinces where the share of these dwellings exceeds the average for Spain as a whole.

- In certain provinces, such non-residential housing units are much more prevalent. For example, they account for up to 14% of the total housing stock in Alicante and Malaga.
- While these dwellings used by non-residents contribute to economic activity, their gradual increase reduces the supply of residential housing. In markets where residential demand is

strong and supply relatively scarce, non-residential demand may add pressure to house prices and rents.⁴⁹

The stock of residential rental properties has grown significantly since 2007, particularly in areas with greater economic dynamism.

- The number of residential rental properties has increased by almost 90% (an estimated 1.6 million units) between 2007 and 2025, reaching around 3.3 million private rented dwellings.
- The number of residential rental properties surged during the 2007-13 real estate market adjustment. Over that period, the rental stock grew at an average annual rate of 6.5% – a cumulative increase of around 600,000 homes. After 2014, growth slowed but remained robust, with an average annual increase of 4%, adding around 1 million residential rental properties by 2025. The increase in the residential rental stock between 2007 and 2025 was concentrated in four regions: Catalonia (23.6%), Madrid (20.4%), Valencia (14.4%) and Andalusia (13.2%).
- In regions where renting is more prevalent, growth in the rental stock has been uneven in recent years. Between 2020 and 2025, for example, it increased very sharply in the region of Valencia, at an average annual rate of 13.7%. Over the same period, growth in the Madrid region's rental housing stock accelerated, at an average annual rate of 6.4%, compared with 2.8% in 2014-19. By contrast, in Catalonia annual growth in the rental stock slowed from an average of 6.7% between 2014-19 to 3.6% in 2020-25, although this region still has the highest ratio of households living in private rented dwellings (23.2% compared with 16.4% in Spain as a whole).

4.2 Main factors limiting housing supply

The productivity of Spain's construction sector has followed a downward trend over recent decades, pointing to persistent structural factors.

- The decline in labour productivity in Spain's construction sector varies depending on the measure used. Output per hour worked fell by 13% between 2013 and 2025. Gross value added (GVA) per worker in 2025 stood around 25% below productivity in the economy as a whole.
- Productivity shortfalls are also observed in measures of total factor productivity (TFP) that take into account capital intensity (Comin, Quintana, Schmitz and Trigari, 2025). According

⁴⁹ See, for example, evidence of the effects of tourist housing on residential property prices in Barcelona in García-López, Jofre-Monseny, Martínez-Mazza and Segú (2020), and Los Angeles in Koster, Van Ommeren and Volkhausen (2021), as well as evidence of the impact of foreign buyers on house prices in England and Wales in Sá (2025). Badarizna and Ramadorai (2018) show that demand from foreign investors for safe-haven assets drives up house prices in major global cities such as London. Coven (2025) analyses the role of institutional investors in the US housing market and finds that they increase purchase prices and reduce home ownership rates, but expand rental supply and lower rental prices thanks to their greater efficiency.

to these measures, TFP declined by around 20% between 1995 and 2023, in contrast to other productive sectors, where TFP has recovered in the most recent period (see Chapter 4).

- Industrialised construction – based on the factory production of components that are subsequently assembled on site – has considerable potential to raise productivity and shorten construction times. However, sectoral reports suggest that in Spain it currently accounts for only around 2% of construction activity, well below the levels observed in other European countries.⁵⁰

The decline in construction-sector productivity is a widespread phenomenon worldwide, but it has been more pronounced in Spain.

- Various papers document significant falls in labour productivity in the US construction sector since 1970.⁵¹ Productivity in this sector in 2020 was comparable to that in 1948, with real value added per worker 30% below its 1970 level (Yeh, 2025).
- This decline in US productivity is also observed when productivity is measured in terms of completed dwellings per worker or when adjusting prices to account for improvements in the quality of the dwellings produced (Goolsbee and Syverson, 2025; D’Amico, Glaeser, Gyourko, Kerr and Ponzetto, 2024).
- The reduction in the construction sector’s TFP, accounting for capital intensity, can also be seen between 1995 and 2023 in the main euro area economies – Italy (-4.2%), Germany (-9.0%), France (-13.5%) and Spain (-20.0%). However, the deterioration in construction productivity relative to other productive sectors is less marked in these countries than in Spain, where the negative TFP divergence between the sector and the rest of the market economy began earlier and lasted for longer.
- The widespread international decline in construction-sector TFP is likely due to a combination of factors, including the intensive use of lower-skilled production factors, limited technological adoption and resource misallocation. Allocation of resources takes place in a fragmented sector made up of a large number of small firms operating in a complex regulatory environment and in a highly procyclical activity. The combination of these elements makes it more difficult for the most productive firms to grow and for production factors to be allocated efficiently, thereby reducing aggregate TFP.

Aggregate productivity in the construction sector is weighed down by the small size of the firms engaged in residential construction and development.

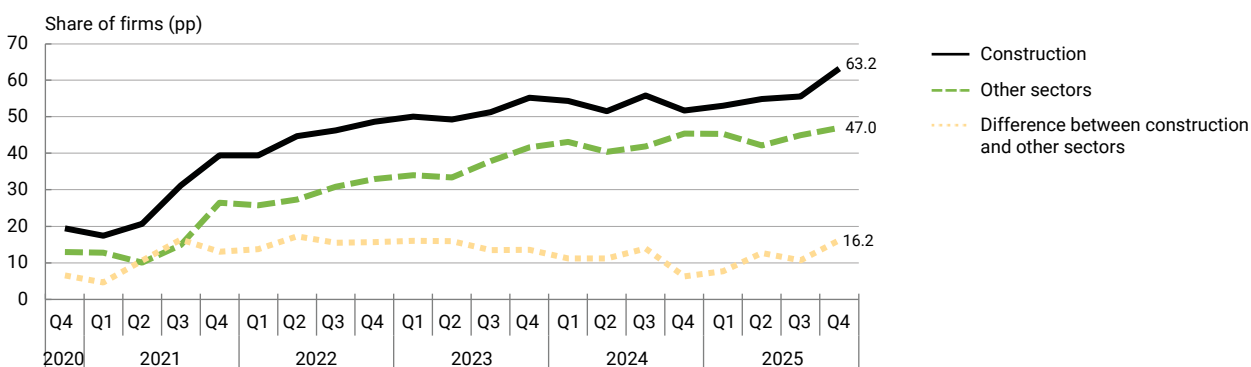
⁵⁰ According to sectoral reports and studies by professional associations, this figure stands close to 10% in Germany and the Netherlands and somewhere between 30% and 40% in the Nordic countries (Sweden, Norway and Finland).

⁵¹ Measurement problems associated with deflators in the construction sector – which may not take into account improvements in construction quality – help to explain part of this decline. However, according to the analysis by Garcia and Molloy (2025), in the best of the scenarios adjusting these measurements would leave the US construction sector’s productivity flat.

Chart 2.13

Construction firms are facing growing difficulties in finding skilled labour

2.13.a Firms reporting labour shortages as a constraint on activity



SOURCE: Banco de España (EBAE).



- Spain's residential construction and development sector is dominated by small and medium-sized enterprises (SMEs) and, in particular, by small firms. According to the [Central Business Register \(DIRCE\)](#), 95% of firms whose main activity is the construction of residential buildings are microenterprises with fewer than 10 employees, accounting for 40%-45% of employment and 25%-30% of the GVA generated by this activity. Large firms with more than 250 employees – which represent 0.1% of the total – account for only 10%-15% of employment and 25%-30% of GVA.
- The relative scarcity of large firms, combined with the predominance of microenterprises, results in structural constraints on the residential construction sector in terms of productivity, investment capacity and the adoption of industrialised construction.

Productivity problems are compounded by growing difficulties faced by the construction sector in filling vacancies with specialised labour.

- In 2025 Q4, 63% of firms in the construction and real estate development sector participating in the [Banco de España Business Activity Survey \(EBAE\)](#) reported that labour shortages were a constraint on their activity. The second most frequently cited limiting factor was economic policy uncertainty (52.0% of firms in this sector), while insufficient demand was the least relevant factor (7.9%).
- The share of firms reporting labour shortages as a constraint has been growing steadily since 2020 Q4, when it stood at around 20% in the construction sector. Moreover, the proportion of firms constrained by labour shortages in this sector is significantly higher than in other sectors, with a gap of between 10 pp and 15 pp over 2021-25 (Chart 2.13).
- In 2026 Q1 social-security registered workers in the construction sector accounted for around 7% of the total and stood at levels comparable those observed in 1999, when they

represented 11.5% of total employment. Labour availability constraints tend to translate into upward pressure on firms' labour costs and difficulties in reorganising their processes and improving efficiency, with adverse effects on productivity.

[Rising labour and material costs have contained firms' profits in the construction sector, especially in residential construction.](#)

- Residential construction costs rose markedly in cumulative terms between 2020 and 2025, against a backdrop of supply chain tensions and rising demand for labour in the sector. The residential component of the construction cost index – weighted by labour and material input costs – increased by almost 35% between the beginning of 2020 and end-2025. Compensation per employee in the construction sector has picked up since 2023, with an average annual increase of 5% over 2023-25.
- Profit margins in the construction sector – proxied by gross operating profit as a percentage of sales – have gradually recovered since 2017. For example, the margin on sales for this sector – which includes both residential construction and other construction activities –⁵² increased from 4.0% in 2019 to 8.1% in 2025. These levels are below those for the overall economy (8.9% in 2024) (see, for example, [Profit Margins Watchdog 2026](#) and [Spanish Tax Agency 2026](#)) and their increase since 2020 appears to have been constrained by rising costs, especially among SMEs.
- Margins on sales within the construction sector vary significantly between firms whose main activity is the construction of residential buildings and firms engaged in property development (Table 2.10). Tax data for 2021-24 point to an average annual gross margin of 5.1% for residential construction and 9.5% for real estate development. In net terms, these margins fall to 3.5% and 4.6%, respectively. This evidence points to particularly narrow margins on sales in residential construction, which could create stronger incentives to reallocate resources from this sector towards alternative activities with higher margins.

[The production capacity of the residential construction sector is hampered by scarce land availability, sluggish urban planning processes and limited access to the electricity grid.](#)

- The data discussed in Section 4.1 show that, although there is a considerable stock of development land, there have been no significant changes in its stage of development or in urban planning execution, nor a significant increase in the amount of consolidated urban land in major urban areas in the recent period. Based on SIU data for 2025, 71% of municipalities had not changed their Urban Planning Programmes since 2008. Since these programmes are the only way of changing how land can be used and how much floor area can be developed on it, they are the primary determinant of potential housing output. At the same time, the slow

52 These activities include the construction of both residential and non-residential buildings, real estate development linked to such construction, civil engineering and specialised construction activities.

Table 2.10

Profit margins and profitability in the residential development and construction sector are recovering; however, these indicators remain contained overall compared with other sectors

	2021	2022	2023	2024
Construction of residential buildings				
ROE (%)	4.5	7.8	7.5	8.7
ROA (%)	1.4	2.4	2.6	3.2
Gross profit to sales (%)	4.9	5.5	6.4	6.6
Net profit to sales (%)	2.5	3.7	3.6	4.2
Leverage ratio	3.28	3.26	2.90	2.72
Asset turnover	0.55	0.65	0.73	0.75
Real estate development				
ROE (%)	1.7	1.6	0.9	2.3
ROA (%)	0.5	0.6	0.4	1.0
Gross profit to sales (%)	4.1	7.0	9.9	12.7
Net profit to sales (%)	4.3	4.3	2.8	7.1
Leverage ratio	3.16	2.79	2.35	2.34
Asset turnover	0.12	0.13	0.13	0.14

SOURCE: Banco de España, drawing on data from AEAT.

NOTE: ROE is defined as the ratio of total net profit to net own funds. ROA is defined as the ratio of total net profit to total assets. Gross profit is defined as the sum of sales and other operating income, net of purchases, other operating expenditure and staff expenses. Net profit is defined as gross profit, net of depreciation, adjusted for subsidies, impairments and operating provisions, as well as for net financial revenue and corporate income tax. The leverage ratio is defined as the ratio of total assets to total net own funds. Asset turnover is defined as the ratio of total turnover to total assets. Real estate development includes activities related to the development of residential and non-residential building projects by securing the financial, technical and physical resources required to carry out such projects with a view to their subsequent sale.

pace of urban development execution under approved plans limits housing production on land classified as developable under the urban-planning framework in force.

- Land development processes are lengthy and complex in Spain. According to the “Public consultation on land development for housing” launched by the National Commission on Markets and Competition (CNMC), transforming land into build-ready plots can take over a decade, due to the multiplicity of procedures and approval levels.⁵³ These time frames include various stages relating to changes in land classification, urban planning, development planning and actual urbanisation. Among the main bottlenecks in this process are the preparation of urban planning programmes, sectoral reports, coordination of powers across different public administrations, and local authorities’ limited capacity to manage urban planning.
- In addition to the constraints on the availability of build-ready land, the construction sector is facing increasing difficulties in delivering new housing because of problems in connecting developments to the electricity grid. These issues are reportedly limiting or delaying the development of residential projects. According to information published in 2025 by the

⁵³ According to studies carried out by sectoral stakeholders, the transformation and management of development land until it is build-ready takes, on average, between 10 and 15 years, and may exceed 20 years in certain regions (Colliers and Spanish Association of Developers and Builders, 2024).

Association of Electric Power Companies, in compliance with CNMC Circular 1/2024, more than 80% of distribution network nodes are saturated. This prevents new demand from being connected and therefore limits housing production.⁵⁴

The challenges and uncertainties associated with urban development processes increase the riskiness of residential activity, exacerbating productivity and firm size problems.

- The international literature suggests that restrictive land-use regulations and constraints on residential construction reduce firm size and productivity in the residential sector (D'Amico, Glaeser, Gyourko, Kerr and Ponzetto, 2024).
- Urban planning regulations that delay or constrain housing production reduce project scale and hinder the development of larger projects. The higher likelihood of housing construction delays and restrictions increases uncertainty, meaning that developers have an incentive to undertake smaller-scale projects.
- Greater uncertainty may lower the expected return on investment and contribute to reducing the size of firms whose main activity is residential development and construction. A sector dominated by smaller firms is less able to harness economies of scale or invest in technological and process innovation. The aggregate result of these constraints is lower firm-level productivity for the sector as a whole.

Low profitability in the residential construction and development sector appears to have curbed the increase in residential investment despite sustained house price growth.

- Profitability in the residential construction sector began to recover in 2014, albeit from negative starting levels reached in the aftermath of the global financial crisis. Specifically, firms whose main activity is the construction of residential buildings increased their return on equity (ROE) from negative levels between 2011 and 2017 to an average of 2.7% in 2018-20.⁵⁵ Profitability has continued to recover thereafter, reaching 8.7% in 2024 (Table 2.10),⁵⁶ and stands around 6 pp below its 2004-07 average.⁵⁷ The return on assets (ROA) for residential construction also remains subdued, at below 3.2% in 2024. These developments have taken place amid a gradual reduction in the sector's high leverage and an increase in asset turnover.
- Returns in the real estate development sector as a whole remain low. In 2021-24 these firms' average ROE stood at 2%, with an ROA below 1%. This sector is also deleveraging, suggesting greater use of internal own funds. In addition, asset turnover remains low, possibly because

54 Reports from business associations in the development sector estimate that around 50% of the sector's connection requests in 2024 were granted.

55 The profitability and profit margin calculations for the residential construction and real estate development sector in this section are based on data from the Spanish Tax Agency taken from corporate income tax returns.

56 This profitability is around 5 pp below the average ROE of the residential construction sector in the major euro area economies, according to Cardoso, Doménech and Lores (2026).

57 Calculations for the profitability comparison with the pre-crisis period are based on the information contained in the profit and loss accounts of non-financial corporations available through the Banco de España Central Balance Sheet Data Office.

the long duration of land development and urban planning processes leads to a greater accumulation of this type of assets.

- Overall, the residential construction and development sector is characterised by a combination of narrow profit margins and profitability limited by a greater need for own funds and low asset turnover. The effects of this combination are amplified in a highly capital intensive (in land and fixed assets) sector and help to explain the lag in housing investment despite sustained house price growth.

Although lower returns on investment tend to check lending for residential construction and development, new lending flows point to greater dynamism in the recent period, in line with the sector's gradual recovery in profitability.

- The stock of bank lending for construction and real estate development activities stood at 5.8% of GDP in 2025, with average annual output of around 95,000 units since 2020. This ratio is lower than in the 1990s, when it stood at 9.0% of GDP with an average annual output of 265,000 open-market housing units, and in the 2000s, when it reached 26.0%, with an average annual output of 545,000 open-market housing units.
- The gradual and sustained deleveraging of the construction and real estate development sector since its 2008 peak (when leverage stood at 42.5% of GDP) has been compatible with greater dynamism in new lending flows to residential activity from 2017 onwards.
- In 2025 flows of new bank lending to activities linked to residential property construction and development are estimated at between 1.0% and 1.7% of GDP, depending on the purpose of the loans⁵⁸ included in the Banco de España Central Credit Register. This level of financing is in line with the average annual level between 2018 and 2025, with lending related to rental activity standing out in 2025 (0.5% of GDP), alongside housing construction.

The high return on residential rental investment has boosted supply since 2008, although returns are lower in the large cities and relative to alternative investments.

- The stock of residential rental housing has been expanding since 2007 (see Section 3.1), with an average annual increase of around 95,000 units between 2021 and 2025. This increase is driven by dwellings purchased and made available for rent by individuals, who account for over 90% of the rental market.⁵⁹ Ownership of dwellings let as main residences remains unconcentrated (Table 2.11).
- Investment in the residential rental market has increased driven by profitability and unrealised capital gains associated with the revaluation of real house prices since 2015. Gross rental

⁵⁸ The narrowest estimate (1% of GDP) does not include lending for land preparation activities (2% of the total), construction of other buildings (2%), real estate agent activities (4%), property management and administration (6%) or renting of properties on behalf of others (30%).

⁵⁹ Khametshin, López-Rodríguez and Pérez (2024).

Table 2.11

Ownership of dwellings rented as main residences is predominantly distributed among landlords who do not concentrate significant market shares on aggregate

Ownership structure of dwellings owned by individuals rented as main residences in 2024 (a)	% of total individual landlords	% of total dwellings owned by individuals rented as main residences
1 dwelling	76.1	50.7
2 dwellings	15.0	21.8
3-5 dwellings	7.5	18.9
6-10 dwellings	1.2	6.2
11 or more dwellings	0.2	2.4

SOURCE: Banco de España, drawing on data from AEAT.

a Real estate assets owned by individuals and rented as main residences in the common fiscal territory. Owners are classified by ranges according to the number of dwellings they own, irrespective of the ownership share they hold in those dwellings. The number of dwellings includes those not divided into separately registered units, which may reduce the total number of dwellings owned by landlords.

yield (GRY)⁶⁰ is estimated at 5.2% per year between 2020 and 2024, albeit with significant regional heterogeneity. In the large cities, 2024 data show that GRYS were lower in Barcelona (4.1%) and Madrid (4.5%) than in Valencia (5.7%) and Zaragoza (6.0%). These GRY differences may reflect different levels of risk associated with residential letting, as well as strong demand for rental properties from households facing constraints in accessing home ownership. Overall, ex post total rental yield, which takes into account both GRY and house price growth, stood at 9.5% per year in real terms over 2020-24.

- These returns on investment in the residential rental market are not adjusted for risk, inflation⁶¹ or tax treatment⁶² and should be compared with investments in alternative assets. The recovery in real estate prices that began in 2015 has pushed the total return on residential rental investment above that on bank deposits and euro area sovereign bonds. More recently, since 2023, stock market indices and dividend payments have been particularly profitable, with average returns above 20%. The inflationary surge of 2022-23 appears to have reduced GRYS on current rents. In the large cities with lower average GRYS, this may encourage a shift towards alternative uses with greater pricing flexibility, such as room and seasonal rentals.⁶³

⁶⁰ This return is calculated as the ratio of the average annual rent to the average house price (both per square metre), based on rent data from the Spanish Tax Agency and house price data from the General Council of Notaries.

⁶¹ Nominal returns between 2020 and 2024 are reduced in real terms by an average annual CPI increase of 3.5%.

⁶² Rental income from properties used as a tenant's main residence benefit from a general 50% reduction in personal income tax for contracts signed from 2024 onwards. This reduction represents savings equivalent to 0.5 pp of GRY for taxpayers in the first band of personal income tax and between 1.25 pp and 1.5 pp for the higher bands. This tax treatment is more favourable than that applied to other real estate income or to dividends subject to double taxation.

⁶³ Statistics published by the property portals indicate that in 2025 [advertisements for room rentals increased by around 20%](#) and [advertisements for seasonal rentals did so by 35%](#). These rental arrangements are gradually gaining importance in the rental market. For example, [room rentals in shared flats have become one of the primary routes for young people to leave the family home](#).

5 Macroeconomic implications of housing market dysfunctions

Dysfunctions in the housing market can generate a wide range of adverse economic and social effects. This section summarises the main channels through which these problems can be transmitted to the wider economy. These channels are the financial channel, through an increase in risks associated with credit allocation and household indebtedness; aggregate effects on household consumption and the economy's saving rate; distributive changes arising from affordability problems; and the impact of these problems on demographics and on the spatial reallocation of factors of production (labour and capital), which could lead to productivity losses.

Through these mechanisms, housing market conditions can undermine macro-financial stability and weigh on economic growth. In addition, inefficiencies in this market may have distributional effects that entrench social vulnerability and distort the intergenerational distribution of wealth. These effects, in turn, affect macroeconomic developments and long-term economic growth. The significance of these effects, or of their possible materialisation in the Spanish economy, justifies the adoption of the public policies discussed in Section 6.

5.1 Effects on macro-financial stability and economic growth

Housing affordability problems could lead to an easing of credit standards and the emergence of financial stability risks and vulnerabilities if credit market imbalances build up and household debt rises.

- Macro-financial risks associated with the housing market depend crucially on the interaction between real estate prices, mortgage credit and household indebtedness. Historical evidence shows that real estate credit booms in advanced economies are associated with greater risks to financial stability, deeper recessions and slower recoveries (Jordà, Schularick and Taylor, 2016). Moreover, credit growth is one of the main predictors of financial instability, while increases in household indebtedness are associated with lower GDP growth and higher unemployment in the medium term (Mian, Sufi and Verner, 2017).
- Housing affordability problems may lead to a build-up of imbalances when credit standards are eased as house prices rise and the value of mortgage collateral increases. However, in the current housing market upswing in Spain there is so far no evidence of an expansion in credit (whether mortgage or developer lending) that could sustain or feed back into house price growth, nor of any easing of credit standards (see Section 2).⁶⁴

House prices affect households' financial position and the sensitivity of consumption to economic cycle changes.

64 For more details, see Banco de España (2026).

- Housing affordability problems affect household saving and consumption decisions. In particular, a high housing cost burden increases the proportion of households whose consumption is stifled by housing costs. As a result, an increase in the number of households facing budget constraints – both in the rental market and among indebted homeowners – would make aggregate consumption and economic activity more sensitive to potential changes in house prices or the cyclical position of the economy. In addition, uncertainty about whether rent will be adjusted when contracts are renewed could lead renting households to increase precautionary saving. Evidence for Spain indicates an inverse relationship between household consumption and housing cost burden, especially when this burden exceeds 30% of household income.⁶⁵
- When house prices grow faster than household income, households taking out mortgage credit may become more highly leveraged. More indebted households tend to show stronger consumption responses to house price changes and have more fragile financial positions.⁶⁶ Accordingly, a correction in house prices can amplify weakness in aggregate consumption when households have taken on mortgages with lower liquidity and higher debt burdens.⁶⁷

Persistent housing affordability problems increase social vulnerability among households and alter the intergenerational distribution of wealth.

- The high housing cost burden faced by certain groups makes them socially and economically vulnerable. In Spain, overburdened and socially vulnerable households are concentrated particularly in the rental market and the lowest income quintiles. Within this segment, young people and the foreign-born population stand out as especially vulnerable, particularly in large urban areas (see Section 3).
- An increase in social vulnerability in the housing market may exacerbate household segregation by income, both across and within urban areas, limiting lower-income households' access to certain locations.⁶⁸ Across urban areas, the most productive ones, where house prices are typically higher, may become affordable mainly to higher-income and more highly skilled households, weakening regional convergence.⁶⁹ Within urban areas, vulnerable households' reduced ability to move to neighbourhoods with better job opportunities may hinder social mobility and increase the intergenerational persistence of inequality.⁷⁰
- A sustained rise in housing prices affects households' lifetime wealth accumulation. A high rent burden may constrain households' ability to save and prolong the time needed to

65 Box 2.1 in Banco de España (2025) estimates, based on information from the Spanish Survey of Household Finances (EFF), that households spending more than 30% of their income on rent for their main residence consume 15% less than otherwise similar households that own their home and spend less than 10% of their income on mortgage payments.

66 Iacoviello (2005) and Koga and Matsumura (2020).

67 The transmission of monetary policy to consumption is also affected by housing tenure status. Mortgaged households are the most sensitive to interest rate changes (Cloyne, Ferreira and Surico, 2020).

68 Moretti (2013), Diamond (2016) and Couture, Gaubert, Handbury and Hurst (2024).

69 Ganong and Shoag (2017).

70 Chetty, Hendren and Katz (2016) and Chetty and Hendren (2018).

accumulate sufficient capital to purchase a home. Likewise, a sustained increase in house prices – if income does not grow at the same pace – may lead to higher levels of household indebtedness among those purchasing a home using mortgage credit. In this respect, data from the Banco de España’s Survey of Household Finances show that, in recent decades, young households have accumulated less net wealth (both financial and real estate) than previous generations. This reduced lifetime asset accumulation driven by current housing affordability problems increases the vulnerability of today’s younger cohorts to possible adverse macroeconomic shocks.

- Until recently, Spain had displayed a moderate degree of wealth inequality by international standards.⁷¹ This largely reflected the broad prevalence of home ownership, rising real estate prices and the high share of households holding other real estate assets. However, recent trends point to a substantial decline in home ownership and in young people leaving the family home (see Section 3), coinciding with significant rental expenditure among these groups. These developments are reducing their ability to save and accumulate both financial and real-estate assets, and point to substantial changes in the intergenerational distribution of wealth.

Housing affordability problems may adversely affect demographics and human capital accumulation, reducing the economy’s potential growth.

- The heavy cost burden of both renting and purchasing a home delays young people’s decisions to leave the family home (see Section 3).⁷² High rent burdens and difficulties in accessing housing tend to delay household formation and influence decisions about having children,⁷³ in a country that already has one of the lowest birth rates in Europe. This may, in turn, weigh on long-term economic growth, against a backdrop of progressive population ageing.
- Housing affordability problems among young people could also dampen potential growth by taking away opportunities to accumulate human capital. In particular, the housing cost overburden faced by young people may reduce their ability to invest in education or to relocate to cities with better education or employment opportunities, which would enable them to build knowledge through both formal education and the development of work-related skills.

Workers’ location choices and firms’ investment decisions are affected by housing affordability constraints, potentially reducing aggregate productivity.

- An efficient functioning of the housing market – and the rental market in particular – supports worker mobility and the efficient geographical allocation of skills. This helps to match

71 Anghel et al. (2018).

72 Goehausen and Thomsen (2024).

73 Dettling and Kearney (2014) document falling birth rates in the face of rising house prices in metropolitan areas in the United States among non-homeowners. House price increases also appear to reduce fertility intentions in Australia (Atalay, Li and Whelan, 2021).

workers' skills to firms' labour demand, fosters learning and human capital accumulation, and contributes to lowering unemployment.⁷⁴ When the housing market does not restrict the potential size of larger urban areas, firms can grow more over their life cycle and become more productive by benefiting from agglomeration economies.⁷⁵

- In Spain housing affordability problems hamper worker mobility and reduce the inflow of immigrant workers into areas that have experienced the largest house price increases (see [Box 2.4](#)). The most productive urban areas – which tend to have higher house prices – may fail to reach their optimal size because of constraints on the supply of residential housing. This inelastic housing supply hampers an efficient spatial allocation of labour and limits the wage gains in larger urban areas, giving rise to losses in aggregate productivity and well-being.⁷⁶ For example, lower-paid or lower-qualified workers may be unable to access housing in urban areas with the highest prices, but where firms and public administrations require their skills to operate.

74 Blanchflower and Oswald (2013), De la Roca and Puga (2017) and Causa and Pichelmann (2020).

75 Porcher, Rubinton and Santamaría (2023) and Budí-Ors (2026).

76 Hsieh and Moretti (2019) and Diamond and Moretti (2021).

6 Public policy measures

This chapter's analysis indicates that the current rigidity of housing supply in Spain is structural, with persistent factors limiting its ability to respond to demand. These factors include constraints on the development of build-ready land and the complexity of urban planning and land management processes, which curtails the production of potential dwellings and prolongs expected delivery times. The housing regulatory framework is established jointly by the different tiers of government with responsibilities in this matter: central, regional and, in particular, local government. This distribution of housing-policy powers across the different tiers of public administration requires a high degree of coordination to ensure that their actions are effective and the housing market functions properly.

This section first examines a set of actions taken by the various tiers of government aimed at increasing housing supply, the inelasticity of which is the main reason behind housing affordability problems. It then analyses the main demand-side mitigation measures – in both the purchase and rental segments – which aim to ease the housing cost burden and protect vulnerable households. Because these demand-side measures entail risks stemming from potential unintended effects, they need to be carefully designed and complemented by supply-side policies, the effectiveness and implementation of which materialise over the medium to long term.

6.1 Main actions to boost housing supply

Increasing housing supply is a complex challenge that requires the deployment of different measures to ease the multiple frictions and bottlenecks preventing its expansion. Although no single action can, by itself, substantially raise supply in the short term, urban planning and land policies stand out as central factors limiting and delaying housing construction. This section reviews the government actions that, taken together, could increase the supply of residential housing.

The need to expand the supply of residential housing calls for closer coordination among the public administrations responsible for housing, especially in urban planning and land policy.

- Housing policy powers are highly decentralised in Spain, with local and regional governments playing a major role in decision-making. Effective housing policy requires coordination in the allocation of powers across public administrations in order to avoid unilateral measures from being neutralised or having only a limited impact.
- Policy coordination is especially important in urban planning and, above all, in land policy where responsibilities are shared across all three tiers of government. Regulatory complexity, overlapping administrative procedures and legal uncertainty contribute to delays in urban development and housing production (see Section 4). Against this backdrop, municipalities' management of urban planning is a key determinant of housing supply.

- Greater regulatory coordination and simplification are needed to reduce regulatory and administrative bottlenecks in urban planning policy. For example, streamlining procedures by eliminating duplicate reporting requirements across public administrations, increased resources and support from regional governments for smaller municipalities to accelerate urban planning management, and introducing fast-track procedures and parallel processing of project stages would all help to boost housing supply.

The public housing stock is growing at a moderate pace from a low starting point, and faces substantial residential demand from households facing housing affordability problems.

- The analysis in Section 3 shows that the gap between income growth and house prices limits – or even prevents – access to housing for certain groups. As a result, a considerable share of residential housing demand – particularly from young people who have not left the family home and from lower-income households – either lacks the financial capacity to access housing under market conditions or faces excessive housing cost burdens in the rental market. In this context, social rental housing at below-market rents is a widely used economic policy tool in advanced economies to meet this housing demand.⁷⁷
- From the 1980s to the 2010s, housing policies implemented by central, regional and local administrations in Spain devoted significant resources to financing public housing construction. More than 1.3 million subsidised dwellings were built using public funds between 1991 and 2015, largely through time-limited public subsidy schemes under which these dwellings were sold to public programme beneficiaries at below-market prices.
- As a result of these policies, Spain currently has a small public housing stock – 1.5% of main residences, compared with an average of around 7% in European and OECD economies (Chart 2.14). This initial level of public housing stock limits its ability to absorb situations such as the present one, where a significant share of demand comes from low-income households facing high rent burdens at market prices.

The different public administrations have adopted measures to increase the public housing stock with greater emphasis on affordable rental housing; however, these efforts will take time to materialise, and the number of units under these programmes remains small relative to current housing needs.

- In 2025, 11,000 subsidised dwellings were completed and 15,500 were started. These figures are slightly above the 2015-24 annual average of 9,000 subsidised dwellings, but far below the annual average of 62,000 completions in the 1990s and 56,000 in the 2000s. In terms of tenure status, despite the increase in social rental housing, in 2025 it accounted for only 37.4% of public housing, compared with 49% intended for sale at capped prices.⁷⁸

⁷⁷ See López-Rodríguez and Matea (2020) for a review of international experiences with the development and design of management frameworks and implementation challenges associated with public housing stocks.

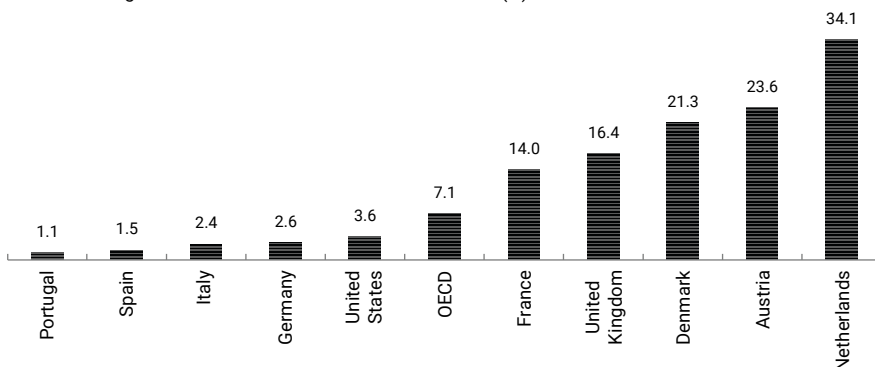
⁷⁸ The remaining share of subsidised housing is classified as “other tenure statuses”.

Chart 2.14

Spain has one of the smallest public housing stocks among advanced economies

2.14.a Public housing stock in advanced economies

Public housing stock as a share of total main residences (%)



SOURCE: Banco de España, drawing on data from INE and Ministerio de Transportes y Movilidad Sostenible, and, for advanced economies, from the OECD for 2022.



- The central government and the various regional and local governments have launched a number of programmes and initiatives to expand the public housing stock. Among those already being implemented are RRF transfers, with €1.2 billion already executed, to build around 20,000 dwellings on public land through public-private partnerships, intended for social or affordable rental housing, over a time frame of at least 50 years. These measures also include financing through [ICO loans](#) totalling €4 billion and complemented by €2 billion in guarantees, for the construction and refurbishment of dwellings for affordable rental housing. Taken together, these actions could support the development of between 40,000 and 45,000 dwellings.
- The central government's expansion of the public housing stock would be channelled through the [State Housing and Land Entity – CASA47](#), created through the restructuring of Sepes. This body will manage the public housing stock, and its assets are built up through the transfer of State-owned dwellings and land from various entities and ministries, as well as from Sareb. As regards Sareb, 40,000 dwellings and 2,400 plots of land have reportedly been incorporated, with an estimated potential to build 55,000 dwellings. Affordable rental contracts from this institution may have a duration of up to 75 years. The initial tenancy agreement would run for 14 years, with seven-year extensions as long as access conditions continue to be met. Rent may not exceed 30% of average income in the territory (subject to different regional caps) and tenants will be eligible if their income is between 2 and 7.5 times the Multipurpose Public Indicator of Income ([IPREM](#)).
- The [State Housing Plan 2026-30](#) could help to increase the public housing stock. This plan, with a budget of €7 billion – 60% funded by the central government and 40% by regional governments – will allocate 40% of its funds to housing construction and purchase. Specifically, it finances the construction of public housing or housing delivered through

public-private partnerships with up to €85,000 per dwelling.⁷⁹ These homes would be designated for permanent social rental, with an indicative maximum rent of €900 per month.⁸⁰ The plan may also finance 70% of the cost of regional governments' purchases of homes from private individuals, whether through rights of first refusal or repurchase, or direct purchase. This percentage rises to 85% in stressed areas, with rent capped at €800.

- The “[España Crece](#)” Fund managed by ICO aims, among other objectives, to mobilise up to €23 billion in financing for the construction of 15,000 dwellings per year. ICO would channel private capital through different financing structures for the construction of affordable rental housing, which are projects with long operating horizons. These schemes would combine long-term loans with rebates and equity instruments to complement private-sector capital.

[Local authorities, which have significant responsibilities regarding housing and a sound budgetary and asset position, could help to increase the public housing stock.](#)

- At end-2025, local authorities held around €48.5 billion in liquid assets – mainly deposits and treasury surpluses – equivalent to 2.6 pp of GDP. Although the expenditure rule limits their room for manoeuvre in budgetary terms, they still have scope to act where they are able to enter into sustainable financial transactions. In addition, local governments may develop affordable housing projects through a range of financial operations, including loans, capital contributions or guarantees to partly publicly owned companies, or through public-private partnerships, provided their design ensures that the investments do not require recurrent transfers or generate losses and that the associated risks do not fall on the public administration.
- Local authorities could strengthen their participation in programmes involving the transfer of build-ready land or in public-private partnerships aimed at delivering affordable rental developments by the private sector under conditions set by the public sector.⁸¹ These arrangements should make it possible to build dwellings without large upfront public outlays, while crowding in private investment to ensure their maintenance and proper management and preserving public ownership of the homes.

[Promoting industrialised construction would help raise productivity in the construction sector and shorten housing production times.](#)

- The limited penetration of industrialised construction in Spain is one factor contributing to the sector's declining productivity (see Section 4). One of the most notable initiatives to promote this activity in 2025 was the approval of the [Strategic Project for Economic Recovery](#)

⁷⁹ This amount rises by 10% if industrialised construction techniques are used and by a further 10% if the construction is located in a stressed area. In municipalities with fewer than 10,000 inhabitants they can be sold, but they retain their status as protected housing.

⁸⁰ Maximum rent for a dwelling with a useful floor area of 85 m², a garage and a 25 m² storage room. This is an indicative figure that may vary depending on the size of the house and associated spaces, based on the maximum prices set out in the State Housing Plan.

⁸¹ See, for example, the [Catalan regional government's Plan 50,000](#).

and Transformation (PERTE) for the Industrialisation of Housing. The objectives of this industrial policy include modernising the sector – by increasing productive capacity and competitiveness – and contributing to the expansion of the affordable housing stock. Specifically, it sets a target of 15,000 industrialised dwellings per year, rising to 20,000 by the end of the implementation period.

- The PERTE has a budget of €1.3 billion over ten years (€1 billion for financing and €0.3 billion for the possible recapitalisation of firms) to help the sector achieve greater scale. These funds are channelled through various public-private financing arrangements designed to leverage private investment under a public framework and using public instruments. Under these arrangements, the programme estimates a significant crowding-in effect, with each euro of public funding mobilising up to €1.40 from the private sector.
- According to the PERTE estimates, industrialised construction would cut building times by between 20% and 60%, while also improving building quality and promoting sustainability and energy efficiency. In addition, the favourable weighting assigned to this type of activity in new tenders for affordable rental housing is intended to ensure stable demand for the industrialised construction sector and allow it to gradually expand.

Housing supply policies for urban areas should adopt a metropolitan perspective, taking into account the proper integration of infrastructure and public transport.

- The availability of build-ready land in Spain is generally greater on the outskirts of large urban areas (see Section 4). Average house prices – for both purchase and rent – also tend to fall with distance from the city centre, bringing down housing cost burdens. However, commuting costs are one of the main factors that limit housing supply growth on the urban fringe.
- The economic literature has pointed out that well-designed infrastructure and public transport can help alleviate housing affordability problems. Specifically, a broad and efficient metropolitan public transport network can expand the potential size of urban areas, reduce congestion and increase housing supply.⁸² Greater investment effort in these transport policies could curb real estate prices and improve housing affordability.⁸³

Refurbishing dwellings is a complementary measure to increase housing supply, although its quantitative scope has so far been smaller than expected.

- Policies for refurbishing existing homes and, in particular, vacant dwellings in poor condition are an alternative way to increase residential housing supply in the short term. This option is particularly relevant in the current context, where expanding the stock of build-ready land is difficult and urban planning bottlenecks delay the construction of new dwellings.

⁸² See Monte, Redding and Rossi-Hansberg (2018) for an analysis of the well-being gains associated with lower commuting costs through better allocation of workers to more productive locations other than their place of residence, where these workers face fewer constraints on housing availability.

⁸³ See AIReF (2020) for a review of the Spanish transport infrastructure investment policy.

- Among its objectives, the Recovery, Transformation and Resilience Plan (RTRP) aimed to carry out 510,000 refurbishments during its implementation period and to reach 300,000 refurbished dwellings by 2030.⁸⁴ However, to date, the data on approved residential housing renovation projects in Spain do not point to a significant increase in this activity. In 2025, the projects approved comprised 24,500 dwellings, in line with the 2020-24 annual average and slightly below the 2010-19 annual average of 26,000 refurbished dwellings.
- This limited momentum in housing refurbishment has occurred despite €3.4 billion in transfers from the RRF for the refurbishment of dwellings and buildings and for the urban regeneration of neighbourhoods. According to the RTRP Observatory of the Independent Authority for Fiscal Responsibility (AIReF), 54% of the available funds (€1.8 billion) had reportedly been formally committed by end-2025. Of the funds still being processed, 85% correspond to regional governments and 15% to local authorities.
- The low execution rate of the RTRP and delays in the realisation of housing renovation projects could be due to the complexity of the institutional governance model and bottlenecks in the public sector. Various tiers of government (regional and local) need to process thousands of files, for both owners' associations and single-family homes, often with limited administrative capacity and resources.
- The State Housing Plan 2026-30 establishes new aid for housing refurbishment. For example, it provides subsidies for structural renovation of buildings (up to €8,000 per dwelling), for refurbishment that reduces energy consumption (up to €20,500 per dwelling) and for the refurbishment of dwellings located in historic centres (up to €30,000). It also introduces grants of up to €30,000 for refurbishing dwellings that have been vacant for more than two years, provided they are placed on the residential rental market at an affordable price within a maximum of five years.

Programmes whereby owners make dwellings available for affordable rental and public schemes that cover certain residential landlord risks are complementary ways to increase supply.

- Public administrations have powers to make arrangements for private owners to transfer their dwellings for use as affordable rental housing.⁸⁵ These arrangements involve transferring the use of a dwelling for a specified period, for example in exchange for a guaranteed fee that may be complemented by tax relief. Public administrations can then incorporate that dwelling into their affordable rental programmes and set the allocation criteria and prices they consider appropriate, while also ensuring that the property is kept in good condition. At a time when the stock of affordable rental housing is expanding too slowly, these schemes could help mobilise vacant housing or homes currently used for

⁸⁴ This ambitious target was justified by the need to improve the liveability conditions and energy efficiency of buildings and dwellings, and was based on a low renovation rate, estimated at 0.1% of the housing stock in Spain, compared with 2% in France, 1.5% in Germany and 0.8% in Italy.

⁸⁵ In Spain, notable examples are the public programmes and cooperatives managing the transfer of housing for social rental housing in Navarre and the Basque Country.

non-residential purposes. The State Housing Plan 2026-30 includes aid for individuals who transfer their dwellings to regional authorities so that they can be rented out at a maximum rent of €600 per month.⁸⁶

- Tenant-protection measures – designed based on various social vulnerability criteria – may have adverse effects on the supply of rental housing if public administrations do not cover certain risks faced by dwelling owners. In other European countries, public guarantee and rent insurance schemes provided by public authorities ensure, under certain circumstances, timely payment of rent to landlords.⁸⁷ These instruments can facilitate access to rental housing for young people or workers with adequate income levels, but without the additional guarantees required to secure a tenancy.

6.2 Demand-side mitigating policies

Housing supply policies typically take effect only over the medium to long-term time. In a context of severe housing affordability problems, demand-side policies can temporarily play a mitigating role in the short term, both by containing non-residential demand and by protecting vulnerable households. However, the design of these mitigation policies must take into account the risks to the residential housing supply if such measures are maintained over time without a significant supply response. These measures should therefore be closely monitored and evaluated to analyse their effects and detect any risks at an early stage.

Regulations limiting the non-residential use of housing may curb demand in areas facing affordability problems, although they reduce activity in other economic sectors.

- Public administrations have adopted measures to contain housing demand associated with non-residential uses (tourist and seasonal housing) through regulations restricting the conditions under which these activities may be carried out. These restrictions may mitigate price increases in areas where such dwellings are concentrated and where residential demand is high relative to supply. However, when designing and implementing these measures, it is important to assess their impact on other sectors of activity, including tourism, hospitality, retail and even higher education.
- House purchases by non-residents and institutional investors are a relevant component of housing demand that contributes to raising prices in stressed markets (see Section 4). The effect of this demand on prices has been documented internationally (see Section 4), and there is evidence of the effects that measures limiting or discouraging such purchases have had in certain markets.⁸⁸

⁸⁶ This aid amounts to €17,000 and could reach €25,000 in stressed areas. A further €12,000 can be granted to finance the renovation or refurbishment of the transferred dwellings.

⁸⁷ See, for example, the experience of the [Visale](#) programme in France.

⁸⁸ Gorback and Keys (2026) document how increases in taxes on foreign homebuyers in various countries altered capital flows toward the United States and affected housing prices in US cities depending on the distribution of foreign-born populations across those cities. Francke, Hans, Korevaar and Bekkum (2023) show how restrictions on foreign purchases of housing in the Netherlands shifted demand toward domestic buyers without affecting purchase prices, but led to higher rents.

Fiscal support for rental demand or house purchases may be ineffective in regions with rigid supply.

- The various tiers of government have introduced support schemes for housing demand through various fiscal policy tools. Among the most prominent are personal income tax benefits – for both house purchase and rental – and vouchers and transfers to tenants to help cover rent.
- These fiscal measures may be less effective where housing supply is rigid. Economic research shows that, when supply is inelastic, demand-side support policies may result in higher prices, effectively transferring public resources to the supply side.⁸⁹ This price pass-through may not be visible in existing rental contracts, but it is likely to be reflected in the pricing of new contracts in areas with rigid supply.⁹⁰

Public guarantee schemes to facilitate home purchase may have a limited impact in the areas facing the greatest affordability problems unless households' financial capacity improves.

- Public guarantees for home purchase financed through mortgage credit are intended to ease the savings constraint faced by potential buyers and make it easier for them to obtain a mortgage. However, these measures are usually conditional on the purchase price of the dwelling not exceeding certain price levels defined for broad territorial areas (for example, at the regional level). In addition, these measures do not reduce households' income constraint. Instead, they tighten it further, since they increase the DSTI ratio of credit applicants without savings. Accordingly, these schemes are less effective in stressed urban areas where prices are higher than the average regional cap and households face heavier housing cost burdens.

Rent controls and contractual protection for tenants limit situations of vulnerability, but their design must account for possible unintended effects on supply when such measures remain in place over time without effective supply-side action.

- Rent controls that cap nominal residential rents are intended to contain the cost burden on renting households and reduce situations of vulnerability. Although such measures are particularly effective in the short term in reducing the burden for tenants with existing contracts, their risk of potential unintended effects, documented in the economic literature and in international evidence, needs to be carefully assessed.⁹¹ In periods of uncertainty and

⁸⁹ The pass-through of tax relief to rental prices has been documented, for example, by Susin (2002) for the United States, Gibbons and Manning (2006) for the United Kingdom, and Laferrère and Le Blanc (2004) and Fack (2006) for France.

⁹⁰ Carozzi, Hilber and Yu (2024) analyse the Help to Buy schemes in the United Kingdom, involving loans of up to 20% of the purchase price (40% in London and its metropolitan area) to buyers. These demand-side support policies led to an increase in housing prices in London, without increasing supply or reducing affordability problems.

⁹¹ For the United States, see, for example, Sims (2007), Autor, Palmer and Pathak (2014) and Diamond, McQuade and Qian (2019). For the recent price control experience in Germany, see studies documenting price increases in unregulated areas (Mense, Michelsen and Kholodilin, 2023) or weaker impacts on prices in lower-income areas (Breidenbach, Eilers and Fries, 2022).

rent volatility, other measures aimed at protecting tenants' contractual conditions – such as contract duration or renewal conditions – may also generate well-being gains by providing security to lower-income households.⁹²

- Price controls that remain in place over time decrease the real income of homeowners. This reduction affects incentives for residential investment and could therefore reduce the supply of new rental housing compared to a situation in which such price controls are not applied. This supply effect could also lead to the reallocation of dwellings to other alternative uses, such as tourist or seasonal rentals, or to the sale of these dwellings. At the same time, the introduction of price caps may create incentives to raise rents for both contracts below the regulatory thresholds⁹³ and new contracts in unregulated market segments. If these risks were to materialise, the short-term well-being gains for vulnerable households arising from price controls would be offset by well-being losses in the medium and long term.

92 For an analysis of the potential welfare gains, see Favilukis, Mabile and Nieuwerburgh (2023). The gains associated with greater protection of tenant's conditions could also have adverse effects, through reduced mobility among these groups (Bingley and Walker, 2001, and Jacob and Ludwig, 2012).

93 Monràs and García-Montalvo (2022) document that price controls in Catalonia between 2020 and 2021 decreased average rents by lowering those above the reference price. However, they also led to increases in rents below the regulatory threshold. Jofre Monseny, Martínez-Mazza and Segú (2023) find that these price controls in Catalonia reduced rents by between 4% and 6%, but appeared to have no short-term impact on the supply of rental housing.

References

- Alves, Pana, Carmen Broto, María Gil and Matías Lamas. (2023). "Risk and vulnerability indicators for the Spanish housing market". Documentos Ocasionales, 2314, Banco de España. <https://doi.org/10.53479/36275>
- Anghel, Brindusa, Henrique Basso, Olympia Bover, José María Casado, Laura Hospido, Mario Izquierdo, Ivan A. Kataryniuk, Aitor Lacuesta, José Manuel Montero and Elena Vozmediano. (2018). "Income, consumption and wealth inequality in Spain". *SERIEs*, 9(4), pp. 351-387. <https://doi.org/10.1007/s13209-018-0185-1>
- Atalay, Kadir, Ang Li and Stephen Whelan. (2021). "Housing wealth, fertility intentions and fertility". *Journal of Housing Economics*, 54, 101787. <https://doi.org/10.1016/j.jhe.2021.101787>
- Autor, David H., Christopher J. Palmer and Parag A. Pathak. (2014). "Housing market spillovers: evidence from the end of rent control in Cambridge, Massachusetts". *Journal of Political Economy*, 122(3), pp. 661717. <https://doi.org/10.1086/675536>
- AIReF. (2020). "Infraestructuras de Transporte". *Evaluación del gasto público 2019*. <https://www.airef.es/wp-content/uploads/2020/09/INFRAESTRUCTURAS/200730.-INFRAESTRUCTURAS.-ESTUDIO.pdf>
- Badarinza, Cristian, and Tarun Ramadorai. (2018). "Home away from home? Foreign demand and London house prices". *Journal of Financial Economics*, 130(3), pp. 532555. <https://doi.org/10.1016/j.jfineco.2018.07.010>
- Banco de España. (2024). "Chapter 4. The Spanish housing market: recent changes, risks and affordability problems". In Banco de España, *Annual Report 2023*, pp. 210-264. <https://repositorio.bde.es/handle/123456789/36494>
- Banco de España. (2025). *Financial Stability Report. Autumn 2025*. <https://doi.org/10.53479/41430>
- Banco de España. (2026). *Financial Stability Report. Spring 2026*. <https://doi.org/10.53479/43188>
- Battistini, Niccolò, and Johannes Gareis. (2024). "Housing investment and the user cost of housing in the euro area". *Economic Bulletin*, 3, European Central Bank. https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202403_04~c293f1d1ae.en.html
- Bingley, Paul, and Ian Walker. (2001). "Housing subsidies and work incentives in Great Britain". *The Economic Journal*, 111(471), pp. C86-C103. <https://doi.org/10.1111/1468-0297.00621>
- Blanchflower, David G., and Andrew J. Oswald. (2013). "Does High Home-Ownership Impair the Labor Market?". *NBER Working Paper Series*, 19079, National Bureau of Economic Research. <https://doi.org/10.3386/w19079>
- Breidenbach, Philipp, Lea Eilers and Jan Fries. (2022). "Temporal dynamics of rent regulations – The case of the German rent control". *Regional Science and Urban Economics*, 92, 103737. <https://doi.org/10.1016/j.regsciurbeco.2021.103737>
- Budí-Ors (2026). "The Life-Cycle of Firms and the Productivity Advantages of Large Cities". Working Papers, Banco de España. Forthcoming.
- Caldera, Aida, and Asa Johansson. (2013). "The price responsiveness of housing supply in OECD countries". *Journal of Housing Economics*, 22(3), pp. 231-249. <https://doi.org/10.1016/j.jhe.2013.05.002>
- Cardoso, Miguel, Rafael Doménech and Félix Lores. (2026). Rentabilidad e inversión en el sector de la construcción en España. *Información Comercial Española, Revista de Economía*, 942. <https://doi.org/10.32796/ice.2026.942.7966>
- Carozzi, Felipe, Christian A. L. Hilber and Xiaolun Yu. (2024). "On the economic impacts of mortgage credit expansion policies: Evidence from help to buy". *Journal of Urban Economics*, 139, 103611. <https://doi.org/10.1016/j.jue.2023.103611>
- Causa, Orsetta, and Jacob Pichelmann. (2020). "Should I stay or should I go? Housing and residential mobility across OECD countries". OECD Economics Department Working Papers, 1626, Organization for Economic Co-operation and Development. [https://one.oecd.org/document/ECO/WKP\(2020\)34/En/pdf](https://one.oecd.org/document/ECO/WKP(2020)34/En/pdf)
- Cavalleri, Maria Chiara, Boris Cournède and Ezgi Özsögüt. (2019). "How responsive are housing markets in the OECD? National level estimates". OECD Economics Department Working Papers, 1589. <https://doi.org/10.1787/4777e29a-en>
- Chetty, Raj, Nathaniel Hendren and Lawrence F. Katz. (2016). "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment". *American Economic Review*, 106(4), pp. 855-902. <https://doi.org/10.1257/aer.20150572>

- Chetty, Raj, and Nathaniel Hendren. (2018). "The impacts of neighborhoods on intergenerational mobility I: Childhood exposure effects". *The Quarterly Journal of Economics*, 133(3), pp. 1107-1162. <https://doi.org/10.1093/qje/qjy007>
- Cloyne, James, Clodomiro Ferreira and Paolo Surico. (2020). "Monetary Policy when Households have Debt: New Evidence on the Transmission Mechanism". *The Review of Economic Studies*, 87(1), pp. 102-129. <https://doi.org/10.1093/restud/rdy074>
- Colliers and Asociación de Promotores y Constructores de España. (2024). "Necesidad de suelo en España 2024". https://apce.es/wp-content/uploads/2024/11/Informe-Necesidad-de-suelo-en-Espana-2024_Nov.-2024_compressed.pdf
- Comin, Diego, Javier Quintana, Tom Schmitz and Antonella Trigari. (2025). "Revisiting Productivity Dynamics in Europe: A New Measure of Utilization-Adjusted TFP Growth". *Journal of the European Economic Association*, 23(4), pp. 1598-1633. <https://doi.org/10.1093/jeea/jvaf003>
- Couture, Victor, Cecile Gaubert, Jessie Handbury and Erik Hurst. (2024). "Income growth and the distributional effects of urban spatial sorting". *The Review of Economic Studies*, 91(2), pp. 858-898. <https://doi.org/10.1093/restud/rdad048>
- Coven, Joshua. (2025). "The Impact of Institutional Investors on Homeownership and Neighborhood Access". <http://dx.doi.org/10.2139/ssrn.4554831>
- Curci, Federico, Dmitry Khametshin and David López-Rodríguez. (2026a). "The Spatial Concentration of Housing Markets in Spain". Working Papers, Banco de España. Forthcoming.
- Curci, Federico, Dmitry Khametshin and David López-Rodríguez. (2026b). "Housing Affordability and Spatial Reallocation of Labor". Working Papers, Banco de España. Forthcoming.
- D'Amico, Leonardo, Edward L. Glaeser, Joseph Gyourko, William R. Kerr and Giacomo A. M. Ponzetto. (2024). "Why Has Construction Productivity Stagnated? The Role of Land-Use Regulation". *NBER Working Paper*, 33188. <https://doi.org/10.3386/w33188>
- De la Roca, Jorge, and Diego Puga. (2017). "Learning by working in big cities". *The Review of Economic Studies*, 84(1), pp. 106-142. <https://doi.org/10.1093/restud/rdw031>
- Detting, Lisa J., and Melissa S. Kearney. (2014). "House prices and birth rates: The impact of the real estate market on the decision to have a baby". *Journal of Public Economics*, 110, pp. 82-100. <https://doi.org/10.1016/j.jpubeco.2013.09.009>
- Diamond, Rebecca. (2016). "The determinants and welfare implications of US workers' diverging location choices by skill: 1980-2000". *American Economic Review*, 106(3), pp. 479-524. <https://doi.org/10.1257/aer.20131706>
- Diamond, Rebecca, Tim McQuade and Franklin Qian. (2019). "The effects of rent control expansion on tenants, landlords, and inequality: evidence from San Francisco". *American Economic Review*, 109(9), pp. 3365-3394. <https://doi.org/10.1257/aer.20181289>
- Diamond, Rebecca, and Enrico Moretti. (2021). "Where is Standard of Living the Highest? Local Prices and the Geography of Consumption". *NBER Working Paper Series*, 29533, National Bureau of Economic Research. <https://doi.org/10.3386/w29533>
- Eurostat. (2019). *Methodological manual on territorial typologies – 2018 edition*. Publications Office. <https://doi.org/10.2785/930137>
- Eurostat. (2026a). "EU statistics on income and living conditions". <https://ec.europa.eu/eurostat/web/income-and-living-conditions/database>
- Eurostat. (2026b). "Statistical Atlas". https://ec.europa.eu/eurostat/statistical-atlas/?lcis=totalPop21&style=gridviz/total-population-21/light&mpc=1&bl=true&mids=Roads,EURONYM,BORDERS,totalPop21&o=1,1,0.7,1&ch=CENSUS,CH_CENSUS_POP,CH_CENSUS_AGE¢er=52.10785,23.49586,4&
- Eurostat. (2026c). "Population density by metropolitan region". https://ec.europa.eu/eurostat/databrowser/view/MET_D3DENS__custom_11725264/default/table?lang=en
- Fack, Gabrielle. (2006). "Are housing benefit an effective way to redistribute income? Evidence from a natural experiment in France". *Labour Economics*, 13(6), pp. 747-771. <https://doi.org/10.1016/j.labeco.2006.01.001>
- Favilukis, Jack, Pierre Mabilbe and Stijn van Nieuwerburgh. (2023). "Affordable Housing and City Welfare". *Review of Economic Studies*, 90(1), pp. 293-330. <https://doi.org/10.1093/restud/rdac024>
- Francke, Mark, Lianne Hans, Matthijs Korevaar and Sjoerd van Bakkum. (2023). "Buy-to-Live vs. Buy-to-Let: The Impact of Real Estate Investors on Housing Costs and Neighborhoods". Working Paper Erasmus University Rotterdam. <https://www.eur.nl/en/media/2023-06-paper-impact-real-estate-investors-housing-costs-and-neighborhoods>

- Ganong, Peter, and Daniel Shoag. (2017). "Why has regional income convergence in the U.S. declined?". *Journal of Urban Economics*, 102, pp. 76-90. <https://doi.org/10.1016/j.jue.2017.07.002>
- García-López, Miquel-Àngel, Jordi Jofre-Monseny, Rodrigo Martínez-Mazza and Mariona Segú. (2020). "Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona". *Journal of Urban Economics*, 119, 103278. <https://doi.org/10.1016/j.jue.2020.103278>
- García, Daniel, and Raven Molloy. (2025). "Reexamining Lackluster Productivity Growth in Construction". *Finance and Economics Discussion Series (FEDS)*, Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econres/feds/can-measurement-error-explain-slow-productivity-growth-in-construction.htm>
- Gareis, Johannes. (2026). "The fundamental drivers of recent developments in euro area housing investment". *Economic Bulletin*, 1, European Central Bank. https://www.ecb.europa.eu/press/economic-bulletin/focus/2026/html/ecb.ebbox202601_04~ff6f689474.en.html
- Gibbons, Stephen, and Alan Manning. (2006). "The incidence of UK housing benefit: Evidence from the 1990s reforms". *Journal of Public Economics*, 90(4), pp. 799-822. <https://doi.org/10.1016/j.jpubeco.2005.01.002>
- Goehausen, Johannes, and Stephan L. Thomsen. (2024). "Early Career Effects of Entering the Labor Market During Higher Education Expansion". IZA Discussion Papers 17487, IZA Network at LISER. <https://www.iza.org/publications/dp/17487/early-career-effects-of-entering-the-labor-market-during-higher-education-expansion>
- Goolsbee, Austan, and Chad Syverson. (2025). "The Strange and Awful Path of Productivity in the US Construction Sector". In *Technology, Productivity, and Economic Growth*. University of Chicago Press. <https://www.nber.org/books-and-chapters/technology-productivity-and-economic-growth/strange-and-awful-path-productivity-us-construction-sector>.
- Gorback, Caitlin S., and Benjamin J. Keys. (2026). "Global Capital and Local Assets: House Prices, Quantities, and Elasticities". *The Review of Economic Studies*. In press. <https://doi.org/10.1093/rfs/hhag040>
- Hsieh, Chang-Tai, and Enrico Moretti. (2019). "Housing constraints and spatial misallocation". *American Economic Journal: Macroeconomics*, 11(2), pp. 1-39. <https://doi.org/10.1257/mac.20170388>
- Iacoviello, Matteo. (2005). "House Prices, Borrowing Constraints, and Monetary Policy in the Business Cycle". *American Economic Review*, 95(3), pp. 739-764. <https://doi.org/10.1257/0002828054201477>
- INE. (2013). 2011 Population and Housing Census. https://www.ine.es/censos2011_datos/cen11_datos_inicio_en.htm
- INE. (2023). Censo de Población y Viviendas 2021. <https://www.ine.es/censos2021/>
- INE. (2026a). Continuous Population Statistics. https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736177095&menu=ultiDatos&idp=1254735572981
- INE. (2026b). Living Conditions Survey. https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176807&menu=ultiDatos&idp=1254735976608
- INE. (2026c). Experimental Statistic. Rental Housing Price Index. https://www.ine.es/experimental/ipva/experimental_precios_vivienda_alquiler.htm
- INE. (2026d). Experimental Statistic. Measurement of the Number of Tourist Dwellings in Spain and their Capacity. https://www.ine.es/en/experimental/viv_turistica/experimental_viv_turistica.htm?L=1
- INE. (2026e). Statistics on Migrations and Changes of Residence. https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736177098&menu=ultiDatos&idp=1254735573002
- Jacob, Brian A., and Jens Ludwig. (2012). "The effects of housing assistance on labor supply: evidence from a voucher lottery". *American Economic Review*, 102(1), pp. 272-304. <https://doi.org/10.1257/aer.102.1.272>
- Jofre-Monseny, Jordi, Rodrigo Martínez-Mazza and Mariona Segú. (2023). "Effectiveness and supply effects of high-coverage rent control policies". *Regional Science and Urban Economics*, 101, 103916. <https://doi.org/10.1016/j.regsciurbeco.2023.103916>
- Jordà, Òscar, Moritz Schularick and Alan M. Taylor. (2016). "The great mortgaging: housing finance, crises and business cycles". *Economic Policy*, 31(85), pp. 107-152. <https://doi.org/10.1093/epolic/eiv017>
- Khametshin, Dmitry, David López-Rodríguez and Luis Pérez. (2024). "El mercado del alquiler de vivienda residencial en España: evolución reciente, determinantes e indicadores de esfuerzo". Documentos Ocasionales, 2432, Banco de España. <https://doi.org/10.53479/36275>

- Koga, Maiko, and Kohei Matsumura. (2020). "Marginal Propensity to Consume and the Housing Choice". Bank of Japan Working Paper Series, 20-E-3, Bank of Japan. https://www.boj.or.jp/en/research/wps_rev/wps_2020/data/wp20e03.pdf
- Koster, Hans R. A., Jos van Ommeren and Nicolas Volkhausen. (2021). "Short-term rentals and the housing market: Quasi-experimental evidence from Airbnb in Los Angeles". *Journal of Urban Economics*, 124, 103356. <https://doi.org/10.1016/j.jue.2021.103356>
- Laferrère, Anne, and David Le Blanc. (2004). "How do housing allowances affect rents? An empirical analysis of the French case". *Journal of Housing Economics*, 13(1), pp. 36-67. <https://doi.org/10.1016/j.jhe.2004.02.001>
- Lajer, Andrés, David López-Rodríguez and Lucio San Juan. (2024). "El mercado de la vivienda residencial en España: evolución reciente and comparación internacional". Documentos Ocasionales, 2433, Banco de España. <https://doi.org/10.53479/36275>
- López-Rodríguez, David, and María de los Llanos Matea. (2020). "Public intervention in the rental housing market: a review of international experience". Documentos Ocasionales, 2002, Banco de España. <https://repositorio.bde.es/handle/123456789/10448>
- Mense, Andreas, Claus Michelsen and Konstantin A. Kholodilin. (2023). "Rent control, market segmentation, and misallocation: causal evidence from a large-scale policy intervention". *Journal of Urban Economics*, 134, 103513. <https://doi.org/10.1016/j.jue.2022.103513>
- Mian, Atif, Amir Sufi and Emil Verner. (2017). "Household Debt and Business Cycles Worldwide". *The Quarterly Journal of Economics*, 132(4), pp. 1755-1817. <https://ideas.repec.org/a/oup/qjecon/v132y2017i4p1755-1817..html>
- Ministerio de Vivienda y Agenda Urbana. (2026). "Sistema estatal de referencia del precio del alquiler de vivienda". <https://www.mivau.gob.es/vivienda/alquiler-bien-es-tu-derecho/serpavi>
- Monràs, Joan, and José García-Montalvo. (2022). "The effect of second generation rent controls: new evidence from Catalonia". *Working Papers*, 1345, Barcelona School of Economics. <https://bse.eu/research/working-papers/effect-second-generation-rent-controls-new-evidence-catalonia>
- Monte, Ferdinando, Stephen J. Redding and Esteban Rossi-Hansberg. (2018). "Commuting, migration, and local employment elasticities". *American Economic Review*, 108(12), pp. 3855-3890. <https://doi.org/10.1257/aer.20151507>
- Moretti, Enrico. (2013). "Real wage inequality". *American Economic Journal: Applied Economics*, 5(1), pp. 65-103. <https://doi.org/10.1257/app.5.1.65>
- OECD. (2026a). "OECD Affordable Housing Database". <https://www.oecd.org/en/data/datasets/oecd-affordable-housing-database.html>
- OECD. (2026b). "OECD Analytical house price indicators". <https://www.oecd.org/en/data/indicators/housing-prices.html>
- OECD. (2026c). "Population and built-up density - Cities and FUAs". https://db.nomics.world/OECD/DSD_FUA_TERR@DF_DENSITY
- Porcher, Charlie, Hannah Rubinton and Clara Santamaría. (2023). "JUE Insight: The role of establishment size in the city-size earnings premium". *Journal of Urban Economics*, 136, 103556. <https://doi.org/10.1016/j.jue.2023.103556>
- Sá, Filipa. (2025). "The effect of foreign investors on local housing markets: evidence from the UK". *Journal of Economic Geography*, 25(3), pp. 329-349. <https://doi.org/10.1093/jeg/lbae043>
- San Juan, Lucio. (2023). The housing supply and demand mismatch and its relationship with house prices *Economic Bulletin - Banco de España*, 2023/Q2, 09. <https://doi.org/10.53479/30289>
- Sims, David P. (2007). "Out of control: What can we learn from the end of Massachusetts rent control?". *Journal of Urban Economics*, 61(1), pp. 129-151. <https://doi.org/10.1016/j.jue.2006.06.004>
- Susin, Scott. (2002). "Rent vouchers and the price of low-income housing". *Journal of Public Economics*, 83(1), pp. 109-152. [https://doi.org/10.1016/S0047-2727\(01\)00081-0](https://doi.org/10.1016/S0047-2727(01)00081-0)
- Yeh, Chen. (2025). "Five Decades of Decline: U.S. Construction Sector Productivity". *Federal Reserve Bank of Richmond Economic Brief. August 2025*, No. 25-31. https://www.richmondfed.org/publications/research/economic_brief/2025/eb_25-31

Box 2.1

HETEROGENEITY IN HOUSE PRICE GROWTH ACROSS SPAIN'S LARGE URBAN AREAS: A FIRST APPROXIMATION BASED ON A REPEAT SALES INDEX

The availability of granular data on house purchases makes it possible to calculate house price indicators for different geographical areas, both for average amounts and price per square metre. These metrics can provide information on the average price of housing transactions in a given period and geographical location. However, such indicators may be biased as a measure of house price developments over time if differences in the characteristics of the properties transacted are not considered. This box sets out experimental results for a second-hand house price index based on the repeat sales methodology – or Case-Shiller index – which provides an alternative measure of house price developments for Spain's six largest urban areas during the housing market recovery period from 2014 to 2024. This index is constructed using granular information on house purchases and their characteristics, digitalised by the General Council of Notaries since 2007.

The calculation of house price changes based on average prices per square metre in different years may be of limited value for assessing house price developments if no statistical treatment is applied. The main problem lies in the composition of the housing transactions used to calculate average prices varying over time and across geographical areas. For instance, if a larger proportion of lower-quality dwellings are bought or sold in a given year, the increase in the average price may be smaller than that obtained when comparing the prices of dwellings with similar characteristics. Similarly, if the proportion of purchases in higher-income geographical areas increases, the average price for a geographical area as a whole could rise by more than the prices in higher-income areas. Therefore, rates of change based on average price indicators per square metre reflect both changes in prices and changes in the composition of housing transactions.

The Spanish National Statistics Institute (INE) compiles the [house price index](#) (HPI) to provide an appropriate measure of changes over time in the prices of new and second-hand open-market housing over time. This index has been available on a quarterly basis since 2007 for all

Spanish regions and for Spain as a whole. The methodology used for the HPI combines stratification – grouping dwellings with common characteristics – and hedonic regression models to control for the observable characteristics of the dwellings. Under this methodological approach, price changes are calculated by keeping constant the observable characteristics of dwellings and weighting the different dwelling types (strata) according to their relative weight in total housing expenditure.¹ This index is the most appropriate for measuring house price developments in Spain and keeps the composition of dwellings constant based on their observed characteristics. However, such price indexes are not available for local geographical units such as municipalities or urban areas.

The literature on price indexes has suggested alternative methods for accurately measuring changes in house prices. This box presents experimental results for one such method – a Case-Shiller-type repeat sales index – for Spain's large urban areas. This approach is based on calculating price differences for the same dwelling sold repeatedly over time and subsequently aggregating the information on price changes across all repeat sale transactions in the market. By comparing the price of the same dwelling at different points in time, it is possible to control for the quality or other time-invariant characteristics of the dwelling, including those that are complex or impossible to measure. The main advantage of this approach is that, by controlling for these characteristics, it limits potential biases stemming from changes in the composition of dwellings. Moreover, it is simple to implement as it requires fewer assumptions and data on dwelling characteristics.²

However, this method also has limitations, most notably the following: (i) the need for long purchase/sale time series to enable a sufficient number of repeat sales to be identified in order to ensure the statistical robustness of the index, since in less liquid markets – with few housing resales – the index may be more volatile and less reliable;³ (ii) the under-representation of new housing in the measurement of prices;

- 1 The HPI's [methodological design](#) is aligned with the European Union's ([Harmonised House Price Index](#)) coordinated by Eurostat. It is a chained Laspeyres index that weights dwellings with common characteristics according to their relative share in total expenditure over the previous two years.
- 2 For methodological details, see Karl E. Case and Robert J. Shiller. (1987). "Prices of single family homes since 1970: New indexes for four cities". *New England Economic Review*, September/October, pp. 45-56; Karl E. Case and Robert J. Shiller. (1989). "The Efficiency of the Market for Single-Family Homes". *American Economic Review*, 79(1), pp. 125-137, and Jan de Haan. (2013). "Repeat Sales Methods". In *Handbook on Residential Property Price Indices (RPPIs)*, International Monetary Fund.
- 3 Granular transaction data are available from 2007, but the results are reported only for the 2014-24 recovery period, for which the sample size is large enough to allow these price indexes to be estimated with statistical reliability.

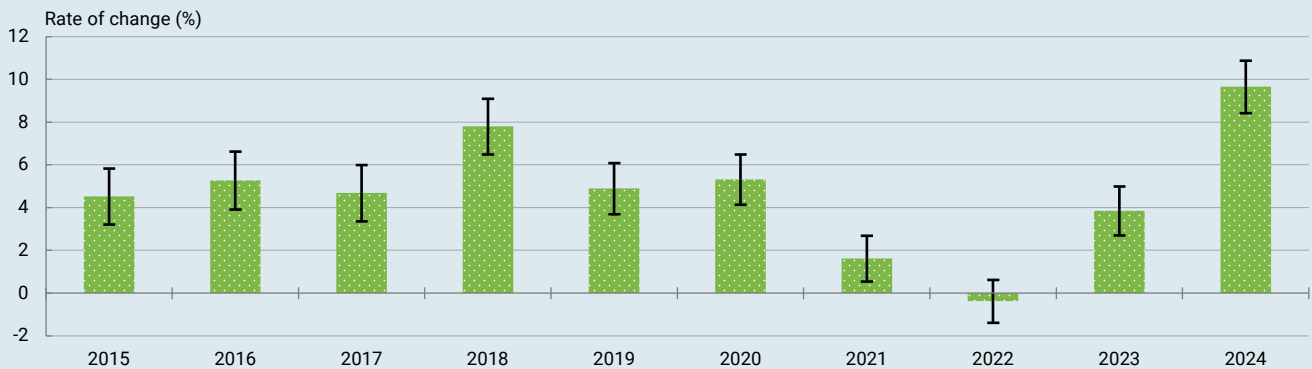
Box 2.1

HETEROGENEITY IN HOUSE PRICE GROWTH ACROSS SPAIN'S LARGE URBAN AREAS: A FIRST APPROXIMATION BASED ON A REPEAT SALES INDEX (cont'd)

Chart 1

Estimated growth in real house prices since 2015 is higher when housing characteristics are taken into account

1.a Annual growth of the Case-Shiller real house price index for Spain (a) (b)


SOURCE: Banco de España on data from the General Council of Notaries.

- a** The Case-Shiller index is estimated based on observations of repeat sales of the same dwelling. For each property, the log change in the price between the current sale and the previous sale is calculated, and a regression with time effects is estimated, using weights that are inversely proportional to the variance of the error component modeled as a function of the time lapsed between the two sales. The sample includes only collective open-market housing and excludes outliers and repeat sales occurring within less than one year. The estimation is based on data for the period 2007-24. The index is deflated by the CPI.
- b** Standard errors and 95% confidence intervals for the price index are calculated using clustering by district where the dwelling is located and by transaction year.

(iii) the difficulty of making adjustments that capture the effects of depreciation or home improvements on prices, or (iv) a possible upward bias in the measurement of house prices during upturns, along with greater short-term volatility, owing to the selection of dwellings that are resold in the most dynamic markets.⁴

The repeat sales index used in this box incorporates a series of assumptions and adjustments to minimise potential biases. Specifically, the index is calculated for collective open-market housing, excluding subsidised housing and single-family homes given their small sample size. Outliers⁵ and repeat sales occurring within less than one year are removed to limit biases stemming from

unobserved changes in housing quality. The index is obtained from the standard estimation of a specification based on the log change in price between two sales of the same dwelling, including indicators for the current and preceding sale periods.⁶ This series is deflated by the CPI in order to obtain real values.

Chart 1 shows the annual change in real house prices in Spain between 2014 and 2024, estimated using the Case-Shiller repeat sales method. Over this period, the average inflation-adjusted rate of increase in house prices was 4.7%. This exceeds the rise in the average price per square metre where no adjustment is made for composition effects.⁷ This differential suggests that there have been significant

4 See Nancy E. Wallace and Richard A. Meese. (1997). "The construction of residential housing price indices: a comparison of repeat-sales, hedonic-regression, and hybrid approaches". *The Journal of Real Estate Finance and Economics*, 14(1), pp. 51-73; Eric Ghysels, Alberto Plazzi, Rossen Valkanov and Walter Torous. (2013). "Forecasting real estate prices". In *Handbook of Economic Forecasting*, 2, pp. 509-580, and Mick Silver. (2016). "How to better measure hedonic residential property price indexes". IMF Working Papers 16/213.

5 Observations corresponding to the top and bottom 1% of price changes, for each interval between repeat sales and for each geographical area, are excluded. Observations with a price per square metre below the 1st percentile or above the 99th percentile of the values observed among transactions in the province of the dwelling's location over the 12 months prior to the transaction are also removed.

6 The latter are included with a negative sign. See, for example, Jan de Haan. (2013). "Repeat Sales Methods". In *Handbook on Residential Property Price Indices (RPPIs)*, International Monetary Fund.

7 In the period 2014-24, the annual rate of change of the real average price per square metre of collective housing, without adjusting for composition effects, stood at an average of 2.1% for the population of transactions as a whole and 3.3% when the sample is restricted to repeat sales.

Box 2.1
HETEROGENEITY IN HOUSE PRICE GROWTH ACROSS SPAIN'S LARGE URBAN AREAS: A FIRST APPROXIMATION BASED ON A REPEAT SALES INDEX (cont'd)
Chart 2

There is a high degree of heterogeneity in house price developments across urban areas

2.a Average annual growth rate of the Case-Shiller real house price index in 2014-24 (a) (b)

SOURCE: Banco de España, with data from the General Council of Notaries.

- a For each urban area, the index is estimated using the repeat sales methodology described in Chart 1, but restricting the sample to the observations for that area.
- b Standard errors and 95% confidence levels for the price index are calculated using clustering by district where the dwelling is located and by transaction year.

changes in the composition of housing transactions over time and across geographical areas, and that failing to account for them would bias house price growth downwards. One possible explanation for this divergence is the presence of quality-adjustment mechanisms in the housing purchased during upward phases in the price cycle, for instance, a higher share of house purchases in municipalities located further away from urban centres in order to lower the average value of house purchases.

The granularity of the available data allows Case-Shiller price indexes to be estimated for the most active urban housing markets, where a sufficient number of repeat sales are identified. This box discusses the results for the urban areas of Madrid, Barcelona, Valencia, Seville, Malaga and Zaragoza.⁸ The experimental nature of these indicators should be emphasised, particularly for urban areas where the number of transactions available for the estimation of price indexes is more limited and confidence intervals around the point estimate are wider. Chart 2 shows the average annual growth of real house prices for the sample of repeat sales dwellings in the six urban areas over the period 2014-24.

The results indicate a high degree of heterogeneity in house price developments across different urban areas, with notable growth in areas where there is strong demand for non-residential housing, such as Malaga, or where residential rental prices have increased markedly, such as Valencia (see Box 3.2). The wider Madrid urban area, which has a significant weight in the national housing market (see Chapter 2, section 2), posted stronger growth than the aggregate index, while growth in the Barcelona area was in line with the average for Spain as a whole. Urban areas subject to lower demographic pressure, such as Zaragoza and Seville, recorded significant increases, albeit below the national average.

Comparing the price changes derived from the Case-Shiller indexes with the increase in average prices per square metre in the repeat sales sample and in the overall population of transactions suggests that composition effects are also material at the local level. For example, in Barcelona the comparison with the repeat sales sample indicates that the average annual rate of change is 2.4 percentage points (pp) higher when using the Case-Shiller

⁸ The average share of transactions included in the repeat sales sample, relative to total transactions in urban areas, ranges from 8.2% in Madrid to 11.9% in Valencia, standing at 8.9% for the overall sample of repeat sales. This share increases over time, reaching 20.1% in 2024, with similar levels across the urban areas analysed in this box. In absolute terms, the total number of repeat sales averages 23,000 per year and reaches 70,000 in 2024; among the urban areas considered, the highest figure is recorded in Madrid, at 10,000, and the lowest in Zaragoza, at 1,000.

Box 2.1

HETEROGENEITY IN HOUSE PRICE GROWTH ACROSS SPAIN'S LARGE URBAN AREAS: A FIRST APPROXIMATION BASED ON A REPEAT SALES INDEX (cont'd)

index, while in Madrid or Malaga this difference is around 1.5 pp. The largest differences attributable to changes in housing composition are observed in Valencia, where they average around 2.9 pp over the period 2014-24.

The results from this experimental statistic point to an important conclusion for the analysis of the housing market in the most recent period. Assessing affordability conditions on the basis of average prices alone would not

capture the different adjustment margins that households may have used in order to access housing. Failing to account for these changes in housing composition would attenuate the increase in the amounts paid by households to purchase a dwelling. According to the results presented in this box, this appears to have been particularly significant in large urban areas, in areas with stronger non-residential demand and where supply constraints are greater.

Box 2.2
RESIDENTIAL RENTAL PRICE DEVELOPMENTS (2019-24): MEASURING THE PRICES OF STOCK AND FLOWS BASED ON TAX SOURCES

Suitable rental price indicators are required for analysing the residential rental market and housing affordability. One of the difficulties of measuring these prices is that the regulation of the rental market leads to rental housing prices being modified heterogeneously over time according to the contract law governing the setting of rental prices. Thus, the average price of the total rental housing units or the rental housing stock in a market may vary because: (i) the prices of contracts in force are updated annually; (ii) new prices are agreed for rollovers at the end of the contracts; (iii) new prices are set for housing units coming onto the market; and (iv) average prices change because housing units leave the rental market. This box presents a breakdown of changes in the average residential rental price for each component.¹ The period 2019-24 is analysed for the whole Spanish economy and the six most populous cities in Spain.²

Residential rental prices and their components are measured based on tax data from the rental housing owners' personal income tax returns. A rental price, in terms of euro per square metre, can be calculated for each rental housing unit from the information in these returns, based on the owners' gross rental income, the days in a year when the housing unit was rented and the floor area of the housing unit.³ As from 2019 this information identifies when the rental contract changes and, thus, isolates the prices of new contract flows.

Chart 1 shows the annual change between 2019 and 2024 in the real average price⁴ for (i) the rental housing stock; (ii) housing with contracts in force with prices that can be updated according to existing legislation; and (iii) housing units covered by new rental contracts. The last component includes situations such as a new price set for a new tenant or for the same tenant in a previous contract.

The average year-on-year rate of change in the real price of the rental housing stock stood at 0.4% between 2019 and 2024, with cumulative growth of 2% during that period. This seems to contrast with developments in house prices which, according to the National Statistic Institute's (INE) [house price index \(IPV\)](#), increased by 8.1% in real terms between 2019 and 2024, with an average annual percentage change of 1.6%. However, the smaller rise in the prices of rental housing stock is due to less buoyant price increases in rental contracts since they are legally capped. Indeed, rent increases in rental contracts dampened real prices by an annual average of -1.7% during that period as they decreased during 2021 and 2022. This contrasts with the buoyant real prices of new contract flows, which grew at a similar rate to house prices. Specifically, the real prices of new contracts grew by 1.4% on average between 2019 and 2024. In addition, these prices show a rising trend from averages of around 0% in 2020-22, to 2.9% in 2023 and 4.6% in 2024. These changes in the real prices of rental flows are consistent with a rental market where supply does not grow enough to meet new demand. Marginal entry prices are increasingly higher, while tenants with contracts in force are temporarily buffered from rent rises for the term of their contracts.

The change in average rental prices is also affected by the composition effects generated by housing entering and leaving the rental market.⁵ One option for quantifying the price effect of this housing rotation is to measure prices in terms of an entry premium and an exit discount. The entry premium is defined as the ratio of the average rent of housing units entering the market to the average rent of housing units that continue to be rented. Similarly, the exit discount is calculated as the ratio of the average rent of housing units leaving the market to the average rent of housing units that continue to be rented.⁶ Additionally, in order to consider the composition

1 The analysis in this box differs from other approaches that measure rental cost such as the [INE's rental housing price index \(RHPI\)](#), where price indices are calculated that keep the composition of rental housing static. By contrast, this box examines how changes in the composition of rental housing affect the average price of the rental housing stock.

2 The area that in this box approximates the whole Spanish economy corresponds to Spain's common fiscal territory. The analysis starts in 2019 since this is the first year with information on new rental contracts.

3 Floor area is also used as a weighting measure for rental housing in average price dynamics.

4 Prices are deflated with the consumer price index. Cumulative inflation in this period is 18.5%, a significant amount which was impacted by the 2022 inflationary process when average inflation was 8.4%.

5 Composition effects are reduced when price changes are calculated between two periods for housing units with contracts in force whose characteristics do not change over time. Nevertheless, the quality of these rental housing units or the terms and conditions of the related contracts may also change in ways that cannot be observed. This will give rise to composition effects that are not accounted for.

6 Changes in entry and exit prices may also reflect other differences in housing composition such as changes in floor area or other non-observable dimensions affecting housing quality.

Box 2.2

RESIDENTIAL RENTAL PRICE DEVELOPMENTS (2019-24): MEASURING THE PRICES OF STOCK AND FLOWS BASED ON TAX SOURCES (cont'd)

effects, these relative prices are calculated taking into account the geographical distribution of housing entering and leaving the rental market. For this purpose, the entry premium and exit

discount are calculated at the census section level and are aggregated at the geographical level for which the corresponding inflow and outflow prices are reported.

Chart 1
Year-on-year change in real prices of residential rental housing (a)

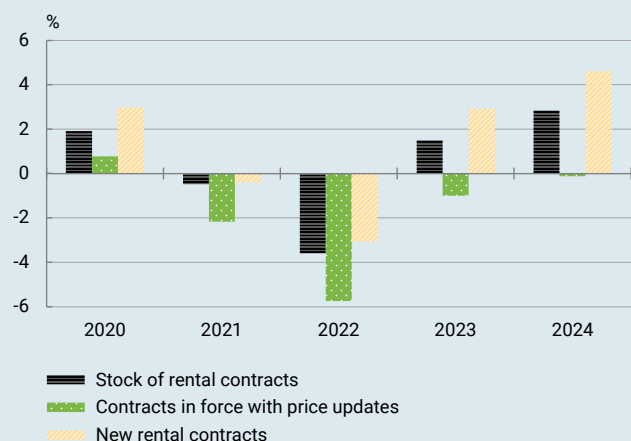


Chart 2
Entry premium and exit discount (b)

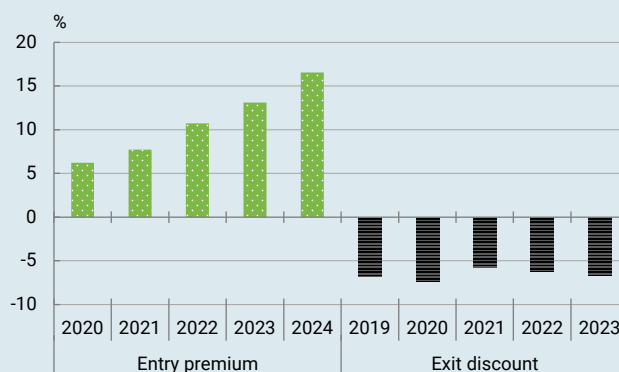
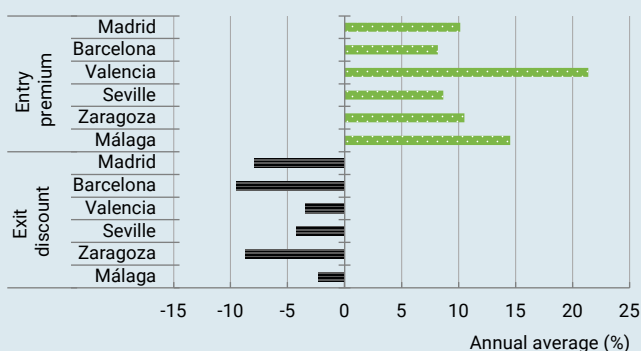


Chart 3
Year-on-year change in real prices of residential rental housing in large cities in the period 2019-24



Chart 4
Entry premium and exit discount in large cities in the period 2019-24



SOURCE: Banco de España, drawing on data from AEAT.

- a Changes in price expressed in euro per square metre. The category of new rental contracts for housing which remains in the rental market includes contracts with new tenants and new prices set with the same tenant in a new contract.
- b The entry premium in period t is calculated as the ratio of the average rent of housing entering the market in period t to the average rent of housing which continues to be rented in periods t and t-1. The exit discount in period t is calculated as the ratio of the average rent of housing leaving the market in period t to the average rent of housing which continues to be rented in periods t and t + 1. Prices in euro per square metre. The geographical composition is adjusted by calculating the entry premium and exit discount for each census section, which are subsequently aggregated by weightings in proportion to the rented floor area of the rental housing inflows and outflows.

7 The entry premium not adjusted for geographical composition was 3.6% in 2024 and the exit discount stood at 17%.

8 Average for the six largest cities, the difference amounts to 1.2 percentage points (pp) for the entry premium and to 0.2 pp for the exit discount, compared with differences of 11.1 pp and 9.4 pp, respectively, for the national aggregate.

Box 2.2
RESIDENTIAL RENTAL PRICE DEVELOPMENTS (2019-24): MEASURING THE PRICES OF STOCK AND FLOWS BASED ON TAX SOURCES (cont'd)

Chart 2 shows the changes in the entry premium and the exit discount at aggregate level adjusted for geographical composition. The entry premium increased from 6.2% to 16.6% between 2020 and 2024, which shows that new rental housing contributes most to the increase in average prices. The exit discount held steady at around 6.5% during this period. Adjustments for geographical composition increase the entry premium and reduce the exit discount compared to the unadjusted estimates.⁷ This implies that most of the discount would be attributable to housing outflows being concentrated in areas with lower prices, whereas housing inflows would be increasingly concentrated in areas with higher average prices. It is also consistent with a residential rental market that is affordable for a larger proportion of higher-income households and less affordable for vulnerable households.

Rental prices in large cities

Chart 3 shows the average annual rates of change between 2019 and 2024 in the average real price of the rental housing stock, of the rent updates of contracts in force and of the new contracts for the six most populous cities in Spain. Chart 4 depicts the entry premium and exit discount for these cities.

The patterns of the changes in the average real price of the rental housing stock (with an average annual rate of change of 0%) and in the different components are similar for Madrid and Barcelona between 2019 and 2024. The most buoyant real prices can be seen in the component of new rental contracts of previously leased housing, which increased by 0.6% per year compared to a 1.9% reduction in contract updates. Barcelona has somewhat lower entry premiums and exit discounts than Madrid, which suggests that the housing entering and leaving the rental market in Barcelona has relatively lower prices. In both cities, the high entry premiums, ranging from 8% to 10.5%, show that it is the new homes coming onto the rental market that support average price rises.

Notably, the city of Valencia has the highest increases, both in terms of price by component and in entry premiums. The real prices of new contracts grew at an annual average of 4.5% and the entry premium exceeded 20%. Similar dynamics, albeit on a smaller scale, are seen in the city of Málaga which has average annual price increases of 2.5% and an entry premium of 14.5%. In both cities the number of new contracts whose prices are higher has increased notably. This, together with more elevated entry prices, has pushed the average price of residential rental stock higher.

The differences between the calculations of the entry premium and exit discount without adjustment and those adjusted for geographical composition are significantly lower for large cities than the differences discussed for the national aggregate.⁸ This fact indicates that the geographical composition of housing inflows and outflows is more significant when constructing national price indicators, while at city level, composition adjustments are less important. This evidence is consistent with the academic literature indicating that the housing market is essentially a local market.

Rental prices have picked up at the same time as the rotation of rented housing has slowed. This decline partly reflects the legislative changes which as from 2019 increased the duration of rental contracts for housing owned by individuals from three to five years.⁹ Thus, the market share of contract rollovers has progressively declined from 25.4% in 2019 to 21.8% in 2023. Similarly, the relative weight of new housing entering the rental market¹⁰ has dropped from 13.3% in 2020 to 11.3% in 2024. The same indicator for housing leaving the market has also decreased, albeit to a lesser degree, from 9.6% in 2019 to 8.6% in 2024. The fall in inflows to the rental market and the increase in both the entry premium and the price of new contracts suggest a decrease in the supply of residential rental housing as opposed to growing demand for rental properties.

⁹ Furthermore, this lower rotation can also be explained by different measures that have extended contracts with vulnerable households since 2021.

¹⁰ The calculation considers its contribution to the total rented floor area.

Box 2.3
HETEROGENEITY IN HOUSEHOLD AFFORDABILITY AND OWNERSHIP: EVIDENCE FROM THE SPANISH SURVEY OF HOUSEHOLD FINANCES (2002-24)

Over the past 25 years, the Spanish real estate market has been characterised by strong variations in real house prices, major changes in mortgage lending conditions and shifts in home ownership patterns. Against this background, it is worth analysing, from a long-term perspective, how the characteristics of households that own their primary residence have changed compared with renter households, and understanding the reasons underlying home ownership decisions.

The first section of this box documents, drawing on the Spanish Survey of Household Finances (EFF), the characteristics – age, income,¹ educational attainment and place of birth – of individuals who either purchased or rented a dwelling in the three years prior to each survey wave. This approach makes it possible to compare how the profiles of individuals exposed to housing affordability conditions have changed across different phases of the Spanish real estate cycle.²

The period under analysis has been marked by a substantial increase in renting among households gaining access to housing. The second section of this box uses data from the three EFF waves conducted between 2020 and 2024 to explore the reasons behind the decision to rent.³ Based on households' responses, these reasons can be grouped into two categories: preference-driven factors and financial constraints limiting access to home ownership. This analysis is conducted for all renter households and describes in detail how these reasons vary by age, income, educational attainment and place of birth (Spain or abroad).

Characteristics of buyers and renters

An analysis of changes in the characteristics of buyers and renters of primary residences between 2002 and 2024 reveals significant shifts in their socio-economic composition over time. Table 1.a shows that home buyers tend to have higher income levels, be older on average and have higher educational attainment, with all three indicators increasing over time.⁴ Moreover, although the

share of homeowners born outside Spain has increased, home ownership remains more widespread among native-born individuals.

Home buyers tend to be concentrated among higher-income groups. For example, in 2002-08 the proportion of buyers in the top quintile of the income distribution (23%) was 4.1 percentage points (pp) lower than the proportion in the bottom two quintiles combined. This composition shifted in 2011-14. The share of buyers in the top income quintile rose steadily to 35% in 2022-24, compared with 17% for buyers in the bottom two quintiles.

Over the period analysed, there was also a sustained decline in the relative share of younger home buyers (under 35) accompanied by a shift towards older buyers. Specifically, the proportion of buyers under 35 fell from 38% to 24%, while the share of those aged over 45 increased. This shift partly reflects the gradual ageing of the population. Indeed, the average age of the population aged 18 and over rose from 46.7 in 2002-08 to 50.1 in 2022-24.

Among recent home buyers, the average age at the time of purchase has followed a similar pattern, increasing from 40.5 in the earlier periods to 43.8 in 2022-24. However, between 2011-14 and 2022-24 the average age of recent buyers rose by around 4 years, compared with 1.8 years for the overall adult population.

In terms of educational attainment, the proportion of recent buyers with a university education also increased sharply over the period under review, rising from 23% in 2002-08 to 39% in 2011-14. It subsequently remained relatively stable, reaching 41% in 2022-24. This increase came at the expense of lower levels of education, with upper secondary education falling from 36% to 32% and education below the upper secondary level falling from 41% to 27% between 2002-08 and 2022-24. The 19 pp increase in the share of university-educated recent buyers between 2002-08 and 2022-24 exceeds that observed

1 The income measure used in this box is total household income in the calendar year preceding that of the survey.
 2 To present the results more easily, the available EFF years have been grouped into different real estate market periods: real estate boom (2002, 2005 and 2008), financial crisis (2011 and 2014), recovery (2017 and 2020) and an expansionary period (2022-24) with notable growth in both house prices and rents.
 3 The EFF included new questions that allow for an analysis of the reasons behind households' home ownership decisions.
 4 This analysis uses a sample of individuals (rather than households) in which ownership of assets and liabilities is allocated to each household member based on the information provided by the household.

Box 2.3

HETEROGENEITY IN HOUSEHOLD AFFORDABILITY AND OWNERSHIP: EVIDENCE FROM THE SPANISH SURVEY OF HOUSEHOLD FINANCES (2002-24) (cont'd)
Table 1
Characteristics of homebuyers and renters
1.a Characteristics of recent buyers (%) (a)

	2002-08	2011-14	2017-20	2022-24
Household income percentile				
Lower than 20	8.7	3.7	5.9	5.8
20-40	18.5	13.3	10.1	11.5
40-80	49.7	47.3	46.8	48.1
80-100	23.1	35.8	37.2	34.6
Age				
Under 35	38.0	36.1	23.0	24.3
35-44	35.2	37.9	37.7	33.9
Over 44	26.8	26.1	39.2	41.8
Education				
Below upper secondary	40.9	31.1	24.8	26.6
Upper secondary	36.5	29.8	33.2	32.2
University studies	22.6	39.0	42.1	41.3
Country of birth				
Foreign-born	12.0	13.3	17.7	21.5
Born in Spain	88.0	86.7	82.3	78.5

1.b Characteristics of recent renters (%) (b)

	2002-08	2011-14	2017-20	2022-24
Household income percentile				
Lower than 20	22.9	20.9	20.2	25.1
20-40	22.5	25.5	23.3	25.9
40-80	45.9	35.7	37.7	38.5
80-100	8.7	17.9	18.8	10.4
Age				
Under 35	53.8	45.4	36.6	32.6
35-44	30.8	32.8	32.9	29.4
Over 44	15.4	21.8	30.5	38.0
Education				
Below upper secondary	35.8	39.5	36.3	31.0
Upper secondary	44.6	34.0	33.8	36.9
University studies	19.5	26.5	29.9	32.1
Country of birth				
Foreign-born	42.5	36.6	38.0	53.4
Born in Spain	57.5	63.4	62.0	46.6

SOURCE: Banco de España (EFF).

- a** Recent buyers are defined as those who purchased their home in the three years preceding each survey wave.
b Recent renters are defined as those whose tenancy began in the three years preceding each survey wave.

Box 2.3
HETEROGENEITY IN HOUSEHOLD AFFORDABILITY AND OWNERSHIP: EVIDENCE FROM THE SPANISH SURVEY OF HOUSEHOLD FINANCES (2002-24) (cont'd)

among the general adult population (8 pp). The proportion of foreign-born individuals among recent buyers also rose over this period (from 12% in 2002-08 to 21% in 2022-24), although this increase was smaller than that for the population as a whole.

Renters' characteristics have also experienced significant changes. While renters tend to be concentrated in the bottom two income quintiles, the share of these income quintiles among recent renters rose by 6 pp over the period analysed, from 45% in 2002-08 to 51% in 2022-24 (Table 1.b). Likewise, the proportion of young tenants declined over the period, with a shift towards older age groups. Among renters whose tenancy began in the three years leading up to each EFF wave, the proportion of individuals under the age of 35 fell from 54% in 2002-08 to 33% in 2022-24, while the percentage of over-44s rose from 15% to 38%. This 21 pp decline in the share of recent renters under the age of 35 is much larger than the decrease in the share of this age group in the overall population (8 pp) over the same period.⁵

The educational attainment and the place of birth of recent renters follow a similar pattern to that of home buyers. For example, among recent renters, the proportion of individuals with a university education increased by around 12.5 pp (from 19.5% to 32.1%) and that of foreign-born individuals rose by 11 pp (from 42.5% to 53.5%). The share of other groups fell slightly in 2022-24, to 37% for tenants with upper secondary education and 31% with education below upper secondary level.

Reasons for renting: constraints or preference?

Since 2020 the EFF has provided household-level information on the reasons behind the decision to rent. Specifically, the survey asks renter households why they opted to rent rather than buy. These responses make it possible to distinguish between preference-based reasons⁶ and reasons related to financial constraints, in terms of liquidity, savings or access to credit.⁷

Table 2.a shows that, over 2020-24, roughly half of all renter households reported exclusively financial constraint-related reasons; 20% mentioned only preference-related reasons, while a further 20% cited a combination of both types of reasons. Overall, 72% of households reported at least one financial constraint-related reason in 2020, a percentage that rose to 75% in 2024.

By age (Table 2.b), in 2024 renter households with a reference person aged between 35 and 44 were more likely than other households to cite only financial constraint-related reasons. By contrast, preference-based reasons alone were relatively more frequent among households with a reference person aged between 45 and 64. Meanwhile, 33% of young renter households reported both types of reasons, the highest proportion across all age groups.

By income (Table 2.b), in 2024 62% of renter households in the bottom quintile of the income distribution reported financial constraint-related reasons alone, while just 13% mentioned only preference-related reasons. In total, 86% of renter households in the bottom quintile reported at least one constraint-related reason limiting their access to home ownership.

The relative importance of financial reasons declines as income rises, dropping from 62% in the bottom income quintile to 18% in the top decile. The opposite is observed for preference-related reasons, which increase from 13% in the bottom quintile to 62% in the top decile. It should be highlighted that, in this top decile, only 9% of households reported both types of reasons, while 11% reported other reasons (for example, being in the process of searching for a home to buy), the importance of which also increases with income.

By educational attainment (Table 2.b), around 70% of tenants across all groups reported financial constraint-related reasons. The actual figure ranges from 80% among households with less than upper secondary education to 75% among those with upper secondary education and 67% among those with a university education. In the latter

5 In addition to population ageing, another contributing factor is the decrease in the rate at which young people leave the family home. For example, the proportion of young people living with their parents has increased from 55% in 2002-08 to 63% in 2022-24.
 6 Preference-driven reasons are captured through three responses: "renting is cheaper than buying", "renting is a more flexible option" and "frequent change of residence".
 7 Constraints related to liquidity, savings or access to credit are associated with three responses: "I do not qualify for a mortgage", "I cannot afford the down payment on a home" and "I would not be able to keep up with mortgage payments".

Box 2.3
HETEROGENEITY IN HOUSEHOLD AFFORDABILITY AND OWNERSHIP: EVIDENCE FROM THE SPANISH SURVEY OF HOUSEHOLD FINANCES (2002-24) (cont'd)

group, the proportion of households renting solely for preference-based reasons is higher (26%) than in the other groups (16.5%–18.6%). Across all groups, around 22% of households stated that they rent for reasons related to both preference and financial constraints. Table 2.b shows that 59% of those born outside Spain cited only financial

constraint-related reasons (compared with 47% among the Spanish-born population), and that preference-based reasons were less common among this group (17% versus 23%). 22% of households in both groups said that they rent for reasons related to both financial constraints and preference.

Table 2
Households' reasons for renting

2.a Reasons for renting rather than buying (%)

	Financial constraints	Preference	Both reasons	Others, including searching for a home
2020	51.9	22.2	19.6	6.3
2022	52.7	19.2	21.0	7.0
2024	52.6	19.8	22.5	5.1

2.b Reasons for renting, by type of household. 2024 (%) (a)

	Financial constraints	Preference	Both reasons	Others, including searching for a home
Age				
Under 35	41.3	14.8	33.3	10.6
35-44	59.9	13.8	22.2	4.2
45-54	52.7	25.1	16.1	6.1
55-64	49.7	27.9	20.5	2.0
Over 64	56.4	19.3	23.2	1.1
Lower than 20	62.3	12.7	24.2	0.7
20-40	49.0	20.9	24.4	5.7
40-80	52.5	19.2	21.6	6.7
80-90	44.4	26.2	19.2	10.2
90-100	18.0	61.7	9.4	10.9
Education				
Below upper secondary	57.4	16.5	23.1	3.0
Upper secondary	53.0	18.6	22.1	6.3
University studies	45.1	26.4	22.3	6.3
Country of birth				
Foreign-born	58.8	16.6	22.6	1.9
Born in Spain	46.6	22.9	22.4	8.2

SOURCE: Banco de España (EFF).

a Age, educational attainment and country of birth are those of the reference person responding to the survey (the household member with the greatest knowledge of the household's finances).

Box 2.4

THE EFFECTS OF HOUSE PRICE GROWTH ON IMMIGRANTS' INTERNAL MOBILITY AND LOCATION CHOICE IN SPAIN

The marked cumulative growth in real house prices in Spain since 2014, both for purchases and rentals, could shape workers' residential location choices. In particular, changes in relative house prices may affect residents' degree of internal mobility across Spain and influence inflows of new residents from abroad and their residential location choices.¹ This box presents a preliminary estimate of the effect that the uneven increase in real house prices across Spanish provinces in the period 2014-24 may have had on both internal and external migration flows.

This box seeks to estimate the effect of changes in real residential rental prices² across Spanish provinces on migration flows to those provinces. To this end, it adopts an empirical approach based on the estimation of different gravity models, separately analysing internal migration and the distribution of new immigrants across Spanish provinces. Using the available data, different migrant groups can be identified according to two age brackets (under-35s and over-35s) and place of birth (Spain or abroad).³

The empirical analysis combines data on internal and external migration flows from the Spanish National Statistics Institute's (INE) Residential Variation Statistics and Statistics on Migrations and Changes of Residence with province-level data on average rental prices provided by the Spanish tax authorities (AEAT). Migration data capture movements of residents across Spanish provinces and inflows from abroad to those provinces. CPI-adjusted real residential rental prices are a useful proxy for how much it costs individuals who change their place of residence to enter the housing market in a given region.

The analysis is conducted in two stages: first, it estimates the effects of rental prices on the composition of migration flows across different destinations and, second, their effect on the intensity of migration flows from each place of origin. In the first stage, bilateral migration flows are estimated, i.e. movements of residents between all possible origin-destination pairs. In the case of internal

mobility, all combinations of Spanish provinces as origin and destination are considered; for external migration, the flows between each country of origin and each Spanish destination province are analysed. This approach identifies substitution effects across destinations by estimating, for the same origin, group of individuals and year, how a relative increase in housing prices in one destination shifts migration flows to other destinations.

The empirical approach takes into account the possible impact of migration networks, which may facilitate mobility and the inflow of new residents. Accordingly, the analysis of migration flows controls for time-invariant characteristics of origins and destinations, and for their interactions with migrant type defined by age bracket and country of birth. In addition, the analysis accounts for the economic conditions and size of the destination, using variables such as average wages and population of the destination province, in order to isolate the effect of house prices from other factors that may also attract migrants to a given destination. Furthermore, it considers origin-specific characteristics in different years and by migrant type. Thus, the effects of real rental housing prices are identified by comparing alternative migration destinations for the same group of individuals, origin and year.

The estimates show that a 1% increase in the average real rental price in one province relative to another destination province reduces the relative flows of internal migration to the province in question by 0.6% (Table 1, column 1).⁴ As for external migration, the findings indicate that a 1% increase in real housing rental prices in one province relative to other provinces reduces the share of immigrant inflows to that province by 0.4% (Table 1, column 2). Overall, these findings point to a relative reallocation of migration flows across Spanish provinces associated with differential rental price growth. These estimates suggest that cumulative increases in real residential housing prices reduce both internal and international migration to provinces with stronger rental price growth.⁵

1 See Edward Glaeser and Joseph Gyourko. (2018). "The Economic Implications of Housing Supply". *Journal of Economic Perspectives*, 32(1), pp. 3-30, and Chang-Tai Hsieh and Enrico Moretti. (2019). "Housing Constraints and Spatial Misallocation". *American Economic Journal: Macroeconomics*, 11(2), pp. 1-39.

2 To simplify, the analysis focuses on rental prices, although house purchase prices in a given region – another tenure dimension associated with mobility – are proportional to rental prices. Accordingly, the effects of house price increases on mobility are captured, to a large extent, by the analysis presented in this box.

3 Since migration flows are count variables, with a high proportion of zeros, Poisson models are used. For methodological details, see Curci, Khametshin and López-Rodríguez. (2026). "Housing Affordability and Spatial Reallocation of Labor". Documento de Trabajo, Banco de España. Forthcoming.

Box 2.4
THE EFFECTS OF HOUSE PRICE GROWTH ON IMMIGRANTS' INTERNAL MOBILITY AND LOCATION CHOICE IN SPAIN
 (cont'd)

Whereas the first stage of the estimation captures the geographical composition of migration flows, the second stage assesses how real rental prices affect aggregate migration flows, examining whether the rise in real rental prices has changed, in aggregate terms, the level of immigration to Spain or the volume of internal movements. This aggregate analysis of migration flows is especially

significant given their magnitude in Spain.⁶ For instance, between 2021 and 2024, 4.7 million new residents arrived in Spain, 2.5 million residents left the country and around 2.7 million residents moved to another province within Spain.⁷ It is therefore interesting to assess the potential aggregate impact of house prices on the composition, destination and volume of these flows.

Table 1

The increase in real rental prices between 2014 and 2024 appears to have affected internal mobility, immigrant inflows and the allocation of migration flows across provinces (a)

Origin of flows	Migration flow substitution		Migration flow levels	
	Spain [1]	Abroad [2]	Spain [3]	Abroad [4]
Log of real rental price at destination	-0.607*** [0.0387]	-0.414*** [0.0774]		
Log of real rental price at origin			0.338*** [0.0804]	
Log of real rental price at destination Internal migrants			-1.775*** [0.465]	
Log of real rental price at destination Immigrants				-5.791* [2.965]
Observacion	115,920	138,577	2,576	3,262
Fixed effects: Origin x Destination x Characteristics	Yes	Yes	No	No
Fixed effects: Origin x Characteristics	No	No	Yes	Yes
Fixed effects: Origin x Characteristics x Year	Yes	Yes	No	No
Fixed effects: Destination x Characteristics x Year	No	No	No	No
Fixed effects: Characteristics x Year	No	No	Yes	Yes
Controls	Yes	Yes	Yes	Yes

FUENTE: Banco de España on data from the Spanish tax authorities (AEAT) and INE.

a The table shows Poisson Pseudo-Maximum Likelihood estimates for internal and international migration flows. The dependent variable is always a migration flow (in levels). Columns [1] and [3] correspond to internal migration within Spain; columns [2] and [4], to immigration to Spain. Columns [1] and [2] estimate bilateral origin-destination flows, whereas columns [3] and [4] estimate total exit or entry flows. The treatment variable is either the logarithm of the real rental price in the Spanish province of destination or origin, according to the specification, or a price index for the usual destinations constructed as the average price weighted by migration network observed between 2004 and 2007. All the regressions include the average wage and the population as controls, both in logarithms. In the bilateral specifications, these variables are specific to the destination province; in the aggregate specifications, they are constructed as weighted averages of the usual destinations. Demographic characteristics are defined by age groups and country of birth. All the regressions include the fixed effects reported in the table. Robust standard effects are shown in brackets. *, ** and *** denote statistical significance at 10%, 5% and 1%, respectively.

4 These results are higher, albeit consistent with, those estimated in Ha Nguyen, Ashwini Arulrajhan, Carlo Pizzinelli, and Ippei Shibata. (2026). "The Impact of House Prices on Internal Migration: The Case of Spain". IMF Working Paper, 26/65. Moreover, the estimates are aligned with the results for the United States in William W. Olney and Owen Thompson. (2026). "The determinants of declining internal migration". *Journal of Urban Economics*, 153.

Box 2.4

THE EFFECTS OF HOUSE PRICE GROWTH ON IMMIGRANTS' INTERNAL MOBILITY AND LOCATION CHOICE IN SPAIN
 (cont'd)

Turning to internal migration, the effects of real rental prices on the aggregate flows from each potential Spanish province of origin to every other Spanish province are analysed. This analysis requires a specification that controls for both time-varying characteristics and fixed characteristics of the provinces of origin, each interacted with migrant type. In the estimated specifications, real rental prices in the province of origin and average prices across all potential destinations, weighted by the distribution of internal migrants (migration network) between 2004 and 2007, act as push and pull factors, respectively.

In the case of external migration, the flows analysed correspond to total immigration to Spain by country of origin and migrant type. The specifications used control for fixed characteristics of migration origin and for determinants that vary over time. These controls are linked to migrant type to isolate the effect of real rental prices in Spain as a pull factor. The key explanatory variable is the average real rental price across Spanish destination provinces, weighted by the distribution of immigrants between 2004 and 2007.

The estimates indicate that a 1% increase in the average real rental price in typical destination provinces of internal

and international migrants –the housing pull factor – reduces migration flows within Spain by 1.8% and migration flows to Spain by 5% (Table 1, columns 3 and 4). In addition, an increase in rental prices in Spanish provinces of origin is associated with a 0.4% rise in migration to other Spanish provinces (Table 1, column 3), consistent with a housing push factor.

These findings suggest that the increase in real rental prices between 2014 and 2024 has shaped the allocation of migration flows and overall internal mobility across Spanish provinces, as well as immigration inflows to Spain. The literature points to productivity losses that may stem from the geographical reallocation of workers driven by differential increases in house prices. These productivity losses arise through two channels. First, if house price growth is stronger in more productive geographical areas, the resulting reallocation of migration flows away from these areas reduces aggregate productivity.⁸ Second, lower migrant inflows weaken the agglomeration effects that increase productivity and wage premia for both existing and new residents, thereby reducing growth in larger urban areas that receive migrants.⁹

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- 5 The estimates are robust when both control function specifications and a Bartik-type instrumental estimation strategy are adopted, based on sectoral labour demand shocks and their differential impact according to the predetermined sectoral distribution of Spanish provinces. The Poisson models' explanatory power of the four specifications that include the fixed effects considered is very high, with a pseudo-R2 statistic (degree of plausibility) that exceeds 95%.
- 6 Jesús Fernández-Huertas. (2025). "The Second Spanish Immigration Boom". IZA Discussion Paper, 18185.
- 7 Over the period 2021-24, Spain ranked first among EU destination countries in terms of the immigrant share of the population, and second in terms of the number of immigrants (with some 5.2 million cumulative arrivals), only behind Germany. France and Italy received around 1.6 million each, while the Netherlands, Poland and Romania received close to 1 million.
- 8 Chang-Tai Hsieh and Enrico Moretti. (2019). "Housing Constraints and Spatial Misallocation". *American Economic Journal: Macroeconomics*, 11(2), pp. 1-39.
- 9 For a review of the literature, see Stuart Rosenthal and Williams Strange. (2004). "Evidence on the nature and sources of agglomeration economies". In *Handbook of Regional and Urban Economics*, vol. 4, pp. 2119-2171. Elsevier, and Gilles Duranton, Laurent Gobillon, and Sébastien Roux. (2010). "Estimating Agglomeration Economies with History, Geology, and Worker Effects". In *Agglomeration Economics*, pp. 15-66. University of Chicago Press. For an estimation of the agglomeration effects in Spain, see Jorge de la Roca and Diego Puga. (2017). "Learning by Working in Big Cities". *The Review of Economic Studies*, pp. 106-142.



Chapter 3

The productivity challenge and business growth: the role of financing



Chapter 3

Takeaways

- After the global financial crisis and the euro area sovereign debt crisis, the trend in productivity in Spain has shifted from negative growth rates to growth outpacing that of other euro area countries.
- This change in trend is mainly attributable to improvements in the efficiency of capital and labour allocation across firms, as reflected in a stronger link between firms' productivity and employment and investment growth. This has led to an increase in the relative share of the most productive firms within each sector and to a reduction in the proportion of microenterprises from 2013 onwards, although they still make up the bulk of Spain's productive system.
- A key factor behind this growth has been the improved allocation of bank credit, which since the financial crisis has increasingly been channelled towards the most productive firms in each sector, particularly microenterprises, compared with the pre-crisis period.
- Nevertheless, these positive developments have been clearly insufficient to close the negative productivity gap built up over recent decades vis-à-vis the rest of the euro area, underscoring the scale of the challenge that remains. Persistent inefficiencies in the regulatory environment, including fragmentation and complexity, remain an important constraint on the growth of the most productive firms and on the efficient reallocation of resources.
- Looking ahead, the ability to sustain stronger productivity growth will depend, among other factors, on harnessing new technologies, particularly artificial intelligence, as levers for business growth.
- From a public policy perspective, the reforms and measures adopted after the global financial crisis and the euro area sovereign debt crisis, especially the restructuring of the financial system and labour market reforms, appear to have helped improve resource allocation, where they have been sustained over time.

1 Introduction

Productivity gains are the only sustainable source of long-term growth in GDP per capita and, in this respect, the Spanish economy has historically performed less favourably than other euro area economies. After the global financial crisis, this challenge came into sharper focus, with the build-up of a significant negative gap from 2000, against a backdrop of high corporate indebtedness, inefficient allocation of the factors of production – capital and labour – and a productive system with a high concentration of small firms. This chapter presents some evidence of the trend shift in productivity following the financial crisis.

From a macroeconomic perspective, there is evidence of a partial reversal, from 2013 onwards, of the accumulated divergence in total factor productivity (TFP) vis-à-vis the euro area as a whole. In particular, this chapter shows that, whereas TFP growth in Spain remained negative until 2013 – unlike in the rest of the euro area – it has since outpaced that of other euro area countries. Nevertheless, considerable uncertainty remains as to whether this slight rebound in TFP is structural or temporary. In any event, it has proved insufficient to fully close the (negative) gap built up relative to the rest of the euro area. This gap, which widened to approximately 12% between 2000 and 2013, is estimated to have narrowed to 8% by 2025. Fully closing that gap would require productivity growth rates over the next 20 years similar to those observed since 2013 – both in Spain and in the rest of the euro area – underscoring the scale of the challenge that remains.¹

From a microeconomic standpoint, the main factor explaining the trend shift in aggregate productivity is the significant improvement in the efficiency of allocating the factors of production – capital and labour – across firms, along with a reduction in the prevalence of small firms. In particular, there is evidence that the positive relationship between firms' productivity and employment and investment growth has strengthened,² with the most productive firms tending to expand more strongly and gain relative weight in the productive system, in contrast to what was observed before 2013.³

A key driver of this trend shift in aggregate productivity and in the efficient allocation of resources across firms is the notable improvement in the allocation of bank credit. More specifically, whereas the pre-global financial crisis period was characterised by a greater concentration of credit in firms with abundant real estate collateral and lower productivity,⁴ the subsequent period shows a closer relationship between productivity and financing, particularly in the case of microenterprises, which are more exposed to information asymmetries and credit

1 The modest narrowing of the negative TFP gap has been accompanied, since 2013, by a decline in capital deepening in Spain, which has constrained growth in productivity per hour.

2 Moreover, the correlation between business profitability and the propensity to invest has increased more than threefold in the post-2013 period (see [Box 3.1](#)).

3 An improvement is also observed from 2013 in the relative TFP of newly created firms and in their pace of growth during their early years of activity.

4 See, for example, Basco, Lopez-Rodriguez and Moral-Benito. (2025).

constraints.⁵ In this context, the restructuring of the financial system and the consolidation of the new regulatory and banking supervision framework may have helped to correct the distortions in credit allocation that built up in the pre-financial crisis period. In addition, public policies aimed at promoting and complementing credit have taken on an important role in easing the restrictions that may affect certain business segments. Alternative sources of financing, such as specialised markets, private credit and venture capital, help diversify financing options and strengthen the resilience of the productive system. They operate as a complement – not a substitute – to bank credit and play a particularly important role in supporting young and innovative firms and enhancing their contribution to growth, innovation and productivity.

This chapter also highlights the persistence of significant inefficiencies associated with the regulatory environment, which continue to constrain the growth of the most productive firms and the more efficient allocation of resources. Specifically, although some indicators relating to the degree of flexibility in product and factor markets point to some improvement since 2013,⁶ considerable regional heterogeneity can be observed in allocation efficiency metrics, alongside an increase in indicators of regulatory density and complexity that may limit firms' geographical expansion.⁷

Looking ahead, productivity growth in the Spanish economy will depend, among other factors, on the extent to which new technologies are adopted and embraced, especially artificial intelligence (AI), whose use by Spanish firms has increased sharply in recent years according to various sources. The evidence analysed suggests that the adoption of these technologies is associated with improvements in productivity and business growth, although the expansion of generative AI (GenAI) poses major challenges, as it may have a significant impact on employment, especially among younger, more highly qualified workers. Against this background, the momentum seen in innovation and digitalisation⁸ in recent years has not been sufficient to bring public and private investment in R&D&I into line with the levels observed in the rest of the euro area. Moreover, aligning the human capital provided by the education system with that demanded by firms remains a major challenge in the current context of the rapid dissemination of AI.

This chapter is structured as follows. After this introduction, Section 2 analyses productivity growth in Spain from both a macroeconomic and a microeconomic perspective. Section 3 examines the role of financing and the allocation of credit across firms as determinants of productivity growth and Section 4 addresses some of the remaining challenges associated with regulatory fragmentation at regional level, and the potential impact of adopting AI on the growth and productivity of Spanish firms. Lastly, Section 5 sets out some public policy considerations.

5 [Box 3.3](#) shows that the practice of relationship banking – based on obtaining soft information through long-standing lender-borrower relationships, and particularly pronounced in the case of credit cooperatives – helps channel more financing to microenterprises by reducing the informational opacity that characterises them. Complementing this analysis, [Box 3.2](#) describes the Banco de España's In-house Credit Assessment System (ICAS BE), which is designed to assess the credit quality of Spanish non-financial corporations and to mitigate the information asymmetries that may hamper some firms' access to financing.

6 For example, the labour market reforms of 2010, 2012 and 2021, whose effects were largely complementary, strengthened internal adjustment mechanisms, reduced labour market duality and facilitated greater labour mobility towards more efficient firms. [Box 3.5](#) analyses the impact of the 2021 labour market reform on firms' productivity.

7 Moreover, the galvanising effect of public procurement for SMEs is limited by the very high and increasing implicit costs of access in Spain relative to the rest of the euro area (see [Box 3.6](#)).

8 [Box 3.4](#) presents a detailed analysis of the impact of the Digital Kit programme on the productivity of Spanish SMEs.

2 Productivity and business structure: from a macro to a micro perspective

Productivity gains are the only sustainable source of long-term economic growth and GDP per capita convergence with the euro area.

- Changes in GDP per capita can be broken down into four factors: productivity per hour worked, hours worked per employee, the employment rate (i.e. the ratio of employed people relative to the working-age population) and the ratio of the working-age population to the total population.
- The contributions from the three employment-related components – hours worked per employee, the employment rate and the share of the working-age population – have an upper bound, since they cannot grow indefinitely. This limits their capacity to sustain GDP per capita growth over the long term, especially in a context marked by population ageing.
- Conversely, the contribution from productivity per hour worked to GDP per capita growth can increase indefinitely. In particular, productivity per hour worked can be broken down into the contributions from capital per hour (which cannot grow indefinitely) and from TFP (i.e. the efficiency with which the different factors of production are combined), whose growth is unlimited and therefore represents the only inexhaustible driver of long-term growth.⁹
- In addition, the persistence of a negative TFP gap relative to the euro area is the key factor behind the lack of convergence of Spain's GDP per capita since 2000 (Banco de España, 2023).
- That said, it should be noted that TFP is a residual indicator whose measurement is subject to significant limitations stemming from factor valuation problems, restrictive assumptions regarding the production function and its sensitivity to distributional issues (Ghosh, 2021).¹⁰

As regards productivity, while the Spanish economy has traditionally recorded a negative gap relative to the rest of the euro area, there are signs that 2013 marked a change in trend.¹¹

- Between 2000 and 2013, productivity per hour worked in Spain grew at an average annual rate of 0.5%, well below the 0.8% recorded in the rest of the euro area. However, between

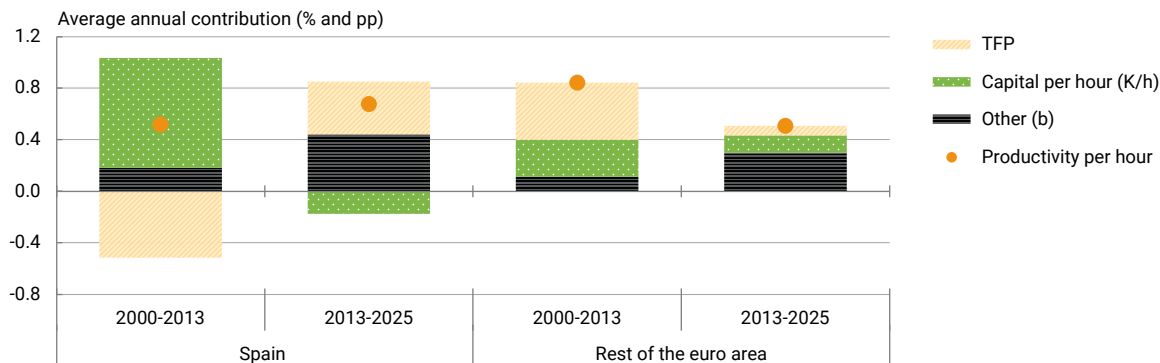
9 Moreover, under general assumptions, TFP may be interpreted as a measure of aggregate efficiency that is directly relevant to welfare, insofar as, along with the capital stock, it serves to summarise the welfare of the representative consumer (Basu, Pascali, Schiantarelli and Servén, 2022).

10 Along these lines, the First Report of the Spanish Productivity Council highlights the need to interpret TFP with caution and to complement it with other productivity indicators, given its reliance on assumptions that are not directly observable and the existing statistical limitations (Consejo de la Productividad de España, 2025).

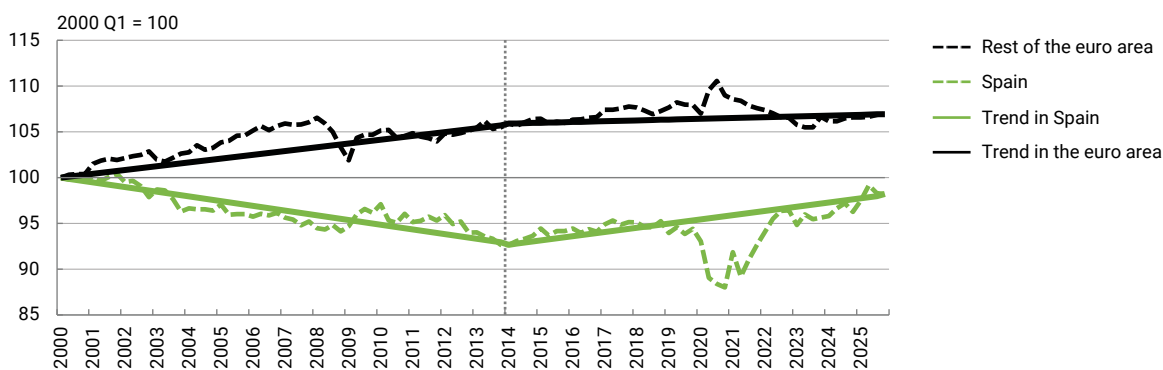
11 The year 2013 is used as a cut-off point to divide the period 2000–25 into two subperiods, as it coincides with the lowest TFP recorded since 2000 and with the end of the economic recession associated with the global financial crisis and the euro area sovereign debt crisis, according to the official dating of the Spanish business cycle by the Spanish Business Cycle Dating Committee of the Spanish Economic Association (ASESEC).

Chart 3.1
The productivity growth gap vis-à-vis the euro area has narrowed since 2013

3.1.a Productivity per hour and contributions (a)



3.1.b Changes in TFP (a)



SOURCE: Banco de España calculations drawing on Eurostat, Ivie, LFS, ESS, European Commission and EUROPROD, based on the methodology of Comin, Quintana, Schmitz and Trigarí (2025).

- a "Rest of the euro area" includes Germany, France, Italy and the Netherlands. The results refer to the market economy, and thus the following sectors are excluded: agriculture (A), real estate activities (L), public administration (O), education (P) and healthcare (Q).
- b Includes capacity utilisation, quality of labour and quality of capital.



2013 and 2025, the average annual growth rate of productivity per hour in Spain rose to 0.7%, while in the rest of the euro area it declined to 0.5% (Chart 3.1.a).¹²

- The narrowing of the negative gap in productivity per hour worked between Spain and the rest of the euro area is mainly due to the trend shift in the performance of TFP observed since 2013. From that year onwards, Spain saw a marked recovery in TFP, while the rest of the euro area experienced a significant slowdown over the same period. In particular, between 2013 and 2025 Spanish TFP grew by around 0.5% on average per year, compared with the declines recorded between 2000 and 2013, averaging -0.5% per year. By contrast, the rest of

¹² These figures refer to the market economy, excluding activities related to non-market services, real estate activities and agriculture. For further details, see Gutiérrez, Marcos-Fernández, Moral-Benito and Veiga-Duarte (2026) and the methodological annex.

the euro area posted average growth of less than 0.1% between 2013 and 2025, well below the average growth of 0.4% recorded between 2000 and 2013 (Chart 3.1.b).¹³

- As regards capital per hour worked, its contribution to the gap in productivity per hour between Spain and the rest of the euro area has moderated the convergence driven by the trend shift in TFP. Specifically, capital per hour shifted from making a positive contribution to growth in productivity per hour in Spain between 2000 and 2013 to a negative contribution from 2013 onwards, owing to the decline in that ratio.¹⁴ However, in the rest of the euro area this contribution held relatively stable in both periods (Chart 3.1.a).

Recent TFP growth has been broad-based across sectors, especially in digital sectors and professional services, while the sectoral reallocation of activity has contributed only marginally to the improvement in aggregate TFP.

- Over the period 2000-13, aggregate TFP accumulated a significant decline, weighed down by accommodation and food services, administrative activities, construction and transportation. By contrast, manufacturing made the largest positive contribution to TFP, alongside more moderate contributions from the wholesale and retail trade and the digital sectors (Table 3.1).¹⁵
- Between 2013 and 2023, aggregate TFP growth turned positive, underpinned by a broader range of sectors. Digital sectors¹⁶ and professional activities made particularly strong contributions (Table 3.1).
- Overall, virtually all sectors contributed to aggregate TFP growth between the periods 2000-13 and 2013-23, particularly the services sectors. The only exceptions were manufacturing – whose contribution had been positive up to 2013 and turned negative thereafter – and construction, which made a similarly large negative contribution in both sub-periods.(Table 3.1).
- Lastly, the process of reallocation across sectors appears to have contributed only marginally to TFP growth since 2013. Indeed, TFP growth since then would have been virtually the same in the absence of changes in sectoral composition (Chart 3.2.a). This contribution contrasts with the period prior to 2013, when the increase in the share of less productive sectors had an adverse effect on aggregate TFP.

¹³ TFP declined significantly in Spain during the COVID-19 pandemic, unlike in the euro area. This can be attributed to two factors. First, survey data point to a smaller drop in capacity utilisation in Spain (-1.5%) than in other countries (-2.9% on average in the rest of the euro area). Second, Spain experienced a sharper contraction in value added in 2020 (-15.6%, compared with -8.1% in the rest of the euro area). This more pronounced decline, combined with a relatively smaller reduction in hours worked – partly due to the role of furlough schemes (ERTEs) – and in capital relative to value added, resulted in a sharper fall in both labour and capital productivity. In any event, these effects normalised after the pandemic, and TFP performed favourably in Spain over the period 2013–25.

¹⁴ The decline observed since 2013 in capital per hour in Spain, with productivity per hour remaining constant, is equivalent to an increase in capital productivity.

¹⁵ For further details, see Gutiérrez, Marcos-Fernández, Moral-Benito and Veiga-Duarte (2026).

¹⁶ Digital sectors include information and communication (J) and the manufacture of electronic products and electrical equipment (C26-C27).

Table 3.1

Between 2013 and 2023, TFP growth was higher across all sectors than in 2000-13, especially in digital sectors and professional services

% share and average annual contributions

Sector (a)	Share of GVA 2023	Contribution 2000-13	Contribution 2013-23
Wholesale and retail trade (G)	22.51	0.10	0.20
Digital (b)	7.68	0.09	0.14
Professional act. (M)	8.59	-0.04	0.14
Administrative act. (N)	6.88	-0.19	0.07
Accommodation and food services (I)	9.97	-0.32	0.03
Other services (R-S) (c)	6.49	-0.03	-0.02
Transportation (H)	7.70	-0.15	-0.03
Manufacturing (C)	20.04	0.27	-0.11
Construction (F)	10.15	-0.19	-0.17

SOURCE: Banco de España calculations drawing on Eurostat, Ivie, LFS, ESS, European Commission and EUROPROD, based on the methodology of Comin, Quintana, Schmitz and Trigari (2025).

a Excluding agriculture (A), real estate activities (L), public administration (O), education (P), healthcare (Q), electricity and gas (D) and financial activities (K).

b Digital sectors include information and communication (J) and the manufacture of electronic products and electrical equipment (C26-C27).

c Other services sectors include arts, recreation and entertainment (R) and other services (S).

The reallocation of resources across active firms within each sector has played a decisive role in Spain's TFP growth since 2013. Specifically, the factors of production – capital and labour – have shifted more markedly towards the most productive firms, thereby fostering a more efficient use of the available resources.

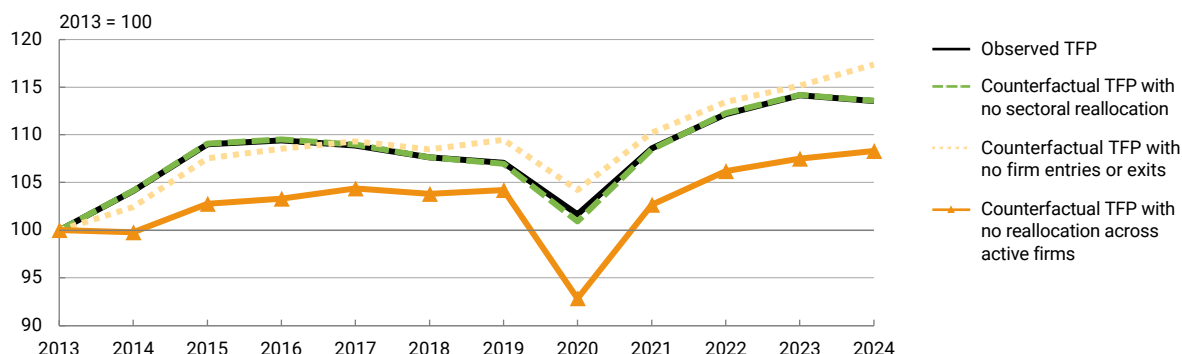
- The reallocation of resources across active firms within each sector accounts for most of the increase in TFP since 2013. In particular, if the relative share of firms operating in the same sector had remained constant at their 2013 levels, aggregate productivity would have increased by roughly half as much between 2013 and 2024 (Chart 3.2.a). That is, among the firms that remained active throughout the period, the increase in the market share of the most productive firms within each sector largely explains the rise in aggregate productivity. The remaining increase in aggregate TFP would be attributable to firms' own productivity growth, since the contribution from sectoral reallocation and the intensive margin was negligible (see Chart 3.2.a).¹⁷ This pattern stands in contrast to the negative contribution to TFP from the reallocation across firms before 2013 (see, for example, Fu and Moral-Benito, 2018).
- The improvement in the allocation of capital and labour across firms since 2013 is reflected in stronger employment and investment growth among the most productive firms (that is, those with higher TFP) within each sector. Thus, the link between productivity and employment growth has quadrupled in the most recent period, while median employment growth has remained broadly unchanged. Whereas before 2013 a 10% increase in TFP was

¹⁷ Specifically, in a counterfactual exercise in which sectoral weights are held constant at their initial levels, and in another counterfactual exercise in which there is no firm entry or exit, aggregate productivity would have followed a path very similar to that observed (Chart 3.2.a).

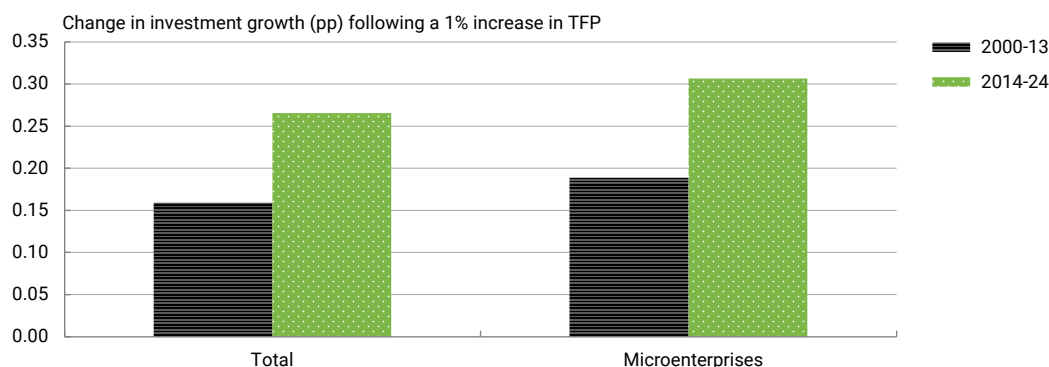
Chart 3.2

The reallocation of resources across active firms within each sector explains the bulk of TFP growth since 2013

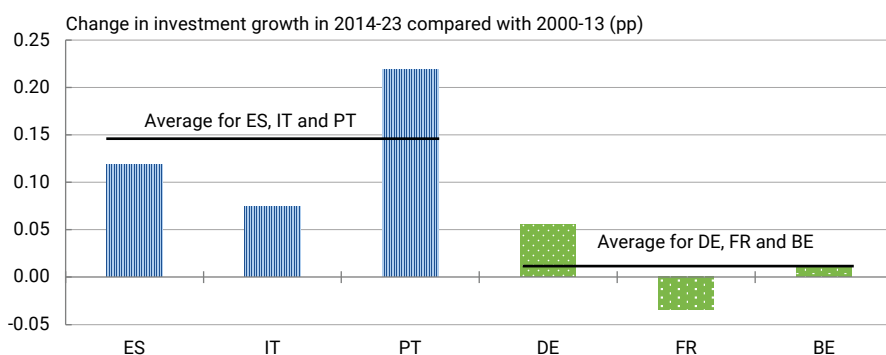
3.2.a Changes in TFP (a)



3.2.b Relationship between Spain's firm-level investment growth and TFP (b)



3.2.c Relationship between firm-level investment growth and TFP, by country (c)



SOURCES: Banco de España (CBI) and Orbis.

- a Observed TFP is derived by aggregating firm-level estimated TFP: first, for four-digit sectors as the value-added weighted sum of firm-level TFP in each sector and, second, as the value-added weighted sum of sectoral TFPs. The “counterfactual TFP with no sectoral reallocation” series replicates the calculation while holding sectoral weights fixed at their 2013 levels. The “counterfactual TFP with no firm entries or exits” series only considers firms included in the CBI database throughout the entire period. The “counterfactual TFP with no reallocation across active firms” series also focuses on firms that remained active throughout the entire period and applies 2013 firm-level weights.
- b The dependent variable is investment growth and the variable of interest is lagged TFP interacted with a period indicator (up to 2013 and from 2014). Fixed effects for size and sector-year are included. A 10% increase in TFP is associated with a 1.6 pp rise in investment growth before 2013 and a 2.7 pp rise thereafter (changes in median investment growth are negligible).
- c The dependent variable is investment growth and the variable of interest is lagged TFP interacted with an indicator for the period 2014-23, thereby capturing differences relative to 2000-13. Fixed effects for firm size and sector-year are included. After 2013, a 10% increase in TFP is associated with investment growth that is 1.5 pp higher in Spain, Italy and Portugal, compared with 0.1 pp in Germany, France and Belgium.



associated with a 0.1 percentage point (pp) rise in employment, this relationship increased to 0.5 pp thereafter. Similarly, the coefficient linking TFP to investment growth has risen from 1.5 pp before 2013 to 2.6 pp thereafter (Chart 3.2.b). In addition, the correlation between profitability and the extensive margin of investment increased more than threefold in the post-2013 period (see [Box 3.1](#)).

- Lastly, an interesting finding is that this shift in the pattern of resource allocation across firms within the same sector is also observed in other southern European countries, such as Portugal and Italy, but not in central and northern euro area economies, such as Germany, France or Belgium (Chart 3.2.c).

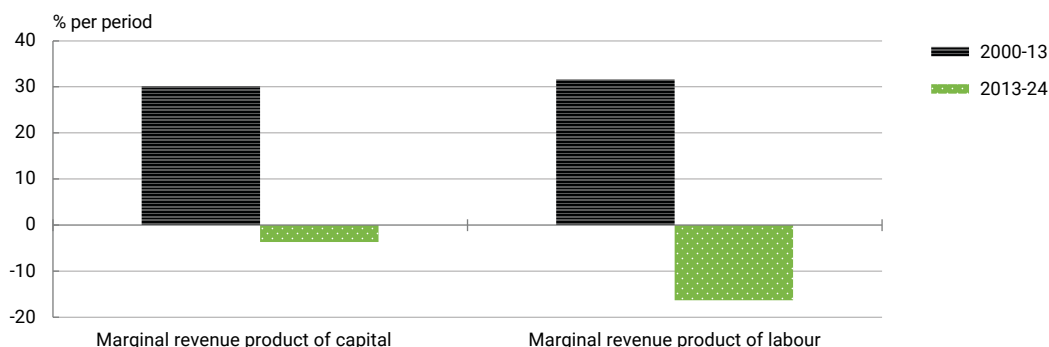
Alternative indicators of changes in allocative efficiency – based on the dispersion of firms’ marginal productivities within the same sector – confirm an improvement in resource allocation across firms in Spain.

- According to the conceptual framework of Hsieh and Klenow (2009), in the absence of frictions, capital and labour would flow towards firms with higher marginal revenue products until these were equalised across firms (in line with the law of diminishing returns), which would reduce the observed dispersion. Accordingly, high and persistent dispersion reflects the presence of frictions that hamper an efficient reallocation process and generate losses in aggregate productivity (for further details, see the methodological annex).
- Against this backdrop, between 2000 and 2013 there was a substantial increase in the dispersion of the marginal revenue products of capital and labour, reflecting that resources were prevented from flowing towards the more productive firms by rising frictions (Chart 3.3.a). Among the factors that the literature identifies as drivers of this dispersion are, inter alia, an inefficient allocation of credit (Gopinath, Kalemli-Özcan, Karabarbounis and Villegas-Sanchez, 2017; Basco, Lopez-Rodriguez and Moral-Benito, 2025) and a deterioration in the functioning of the institutional framework and public intervention (García-Santana, Moral-Benito, Pijoan-Mas and Ramos, 2020).
- However, since 2013, the dispersion of the marginal revenue product of labour has decreased by more than 15%, while that of capital has declined by around 4% (Chart 3.3.a). Moreover, this improvement has been widespread across sectors. In particular, the dispersion of the marginal revenue product of labour (capital) has declined by 27% (10%) in construction, 15% (4%) in manufacturing and 14% (2%) in services. This pattern points to a broad-based improvement in allocative efficiency since 2013, especially in the case of labour (for further details, see Guner, Gutiérrez, Moral-Benito and Ruggieri, 2026).
- In a European comparison, Italy and Portugal also recorded declines in the dispersion of the marginal revenue product of capital, albeit smaller than in Spain, and standing in contrast to the increases observed in the northern European economies (Chart 3.3.b). In terms of the marginal revenue product of labour, dispersion falls markedly in Spain and Portugal, whereas it increases in Germany, France, Belgium and Italy (Chart 3.3.b).

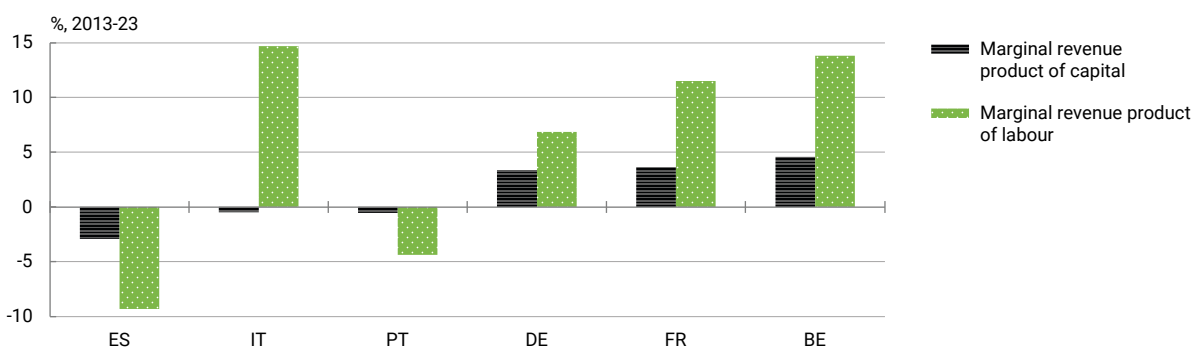
Chart 3.3

The indicators of allocative efficiency for the factors of production (capital and labour) point to a marked improvement

3.3.a Change in the standard deviation of the marginal revenue products of capital and labour in Spain (a)



3.3.b Change in the standard deviation of the marginal revenue products of capital and labour, by country (a)



SOURCES: Banco de España (CBI) and Orbis.

a The dispersion of the marginal revenue products of capital and labour is measured for each four-digit sector. Sector-level results are weighted by value added. The marginal revenue product of capital corresponds to the value added-to-capital ratio, while the marginal revenue product of labour corresponds to the value added-to-employment ratio. For more details, see the methodological annex.



The contribution from firm entries and exits to productivity growth – known as the “extensive margin” – has been negligible since 2013. Nevertheless, since 2013 newly created firms have tended to show greater dynamism in their early years, pointing to potential for a positive contribution in the medium-term as these cohorts increase their weight within the productive system.

- The process of creative destruction depends both on the rate of business births and deaths and on the relative productivity levels of the firms entering and exiting the market.
- First, firm entry and exit rates in Spain held at relatively similar levels before and after 2013. Specifically, the entry rate stood, on average, at around 11.6%, while the exit rate was around 10.3%. Moreover, these business birth and death rates were broadly aligned with those of other main European economies.
- Second, firms entering or exiting the market have lower productivity than incumbent firms. In particular, the productivity of firms created between 2013 and 2024 was, on average, 25%

lower than that of incumbent firms, while firms leaving the market were, on average, 38% less productive than incumbents.

- Overall, the net contribution from firm entries and exits to aggregate productivity growth between 2013 and 2024 was very small, and even slightly negative (Chart 3.2.a).¹⁸ Specifically, a standard decomposition of the different components of the extensive margin (entry and exit), shows that the positive contribution from firms exiting the market, given that they were less productive than incumbent firms, was outweighed by the negative contribution from those entering it, since they are also less productive than incumbent firms.¹⁹
- In any event, it should be noted that firms created since 2013 converge towards the productivity levels of incumbent firms by around their fifth year of operation, whereas firms created before 2013 still displayed a significant negative gap five years after their creation. In other words, the productivity of firms that started operating between 2014 and 2019 rose over the subsequent five years (2019-24), by around 24 pp more than that of incumbent firms, so that from the fifth year onwards, on average, new firms created since 2013 start to make a positive rather than a negative contribution to aggregate productivity growth. This pattern underscores the importance of creative destruction mechanisms and suggests that their aggregate contribution to productivity could increase in the future, insofar as newly created firms – with greater growth and efficiency potential – consolidate their presence and gain relative weight in the productive system.

Spanish firms tend to grow less than their euro area counterparts during their initial years of activity, although those created in Spain since 2013 have posted markedly stronger growth than firms established in the early 2000s.

- The average size of newly created Spanish firms is similar to that of their European counterparts, suggesting that the differences observed in firm size are mainly due to a weaker capacity for subsequent growth. In both Spain and the rest of the euro area, firms have, on average, around two employees in their first year of activity, but once they reach their fifth year European firms have an average of 20 employees, compared with 12 in Spain (Chart 3.4.a).²⁰
- However, the growth capacity of Spanish firms in their initial years of activity has improved notably in recent years. In particular, a comparison of firms established in 2013-14 and

¹⁸ During the 2008-13 global financial crisis, the contribution from the extensive margin to aggregate productivity growth was somewhat larger than that observed after 2013, as a result of an increase in business deaths concentrated among firms with particularly low productivity levels. Nevertheless, even in that period this contribution was small compared with that of resource reallocation across active firms (González, Moral Benito and Soler, 2023). This pattern is consistent with the predominantly financial nature of the crisis, given that tighter credit standards tend to limit the intensity of the extensive margin in the process of creative destruction (Osotimehin and Pappadà, 2017).

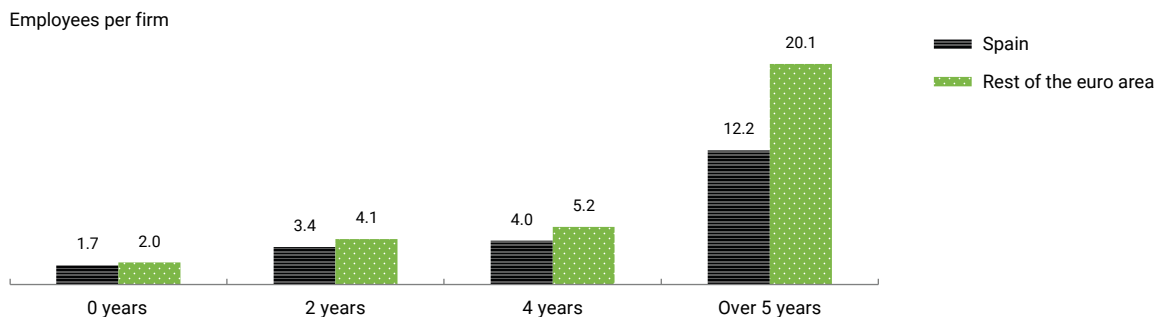
¹⁹ For further methodological details on these breakdowns, see Fu and Moral-Benito (2018). In addition, this pattern is maintained when entrant firms are taken into account up to their third or fifth year of activity, as the gap vis-à-vis incumbent firms remains negative, albeit smaller than in the first year.

²⁰ The economic literature identifies the availability of external financing (Beck and Demirguc-Kunt, 2006) and regulatory barriers and labour market rigidities (Caggese, Cuñat and Metzger, 2019) as possible factors underlying this trend.

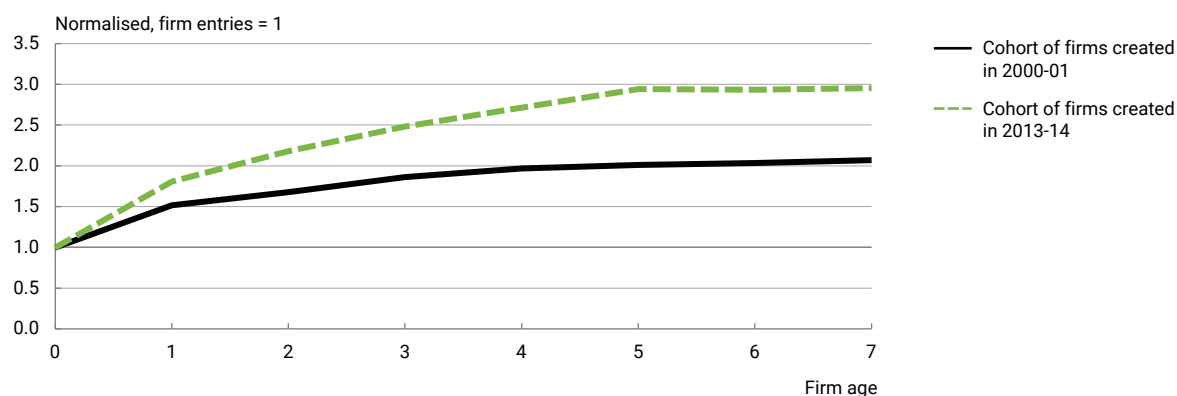
Chart 3.4

Although Spanish firms tend to grow less in their early years than European firms, their growth potential has improved over the past decade

3.4.a Average firm size by firm age (a)



3.4.b Changes in average firm size by firm age (b)



SOURCES: Banco de España (CBI) and Eurostat.

- a** “Rest of the euro area” includes Germany, France, Italy and the Netherlands. The data refer to active firms with employees in 2023.
b Median employment by firm age is calculated at the two-digit sector level and aggregated using value added weights. Two cohorts of Spanish firms are compared: those created in 2000-01 and 2013-14, respectively.



those established in 2000-01 shows that the former tripled their number of employees during the first seven years, while the latter only doubled it over the same period (Chart 3.4.b).

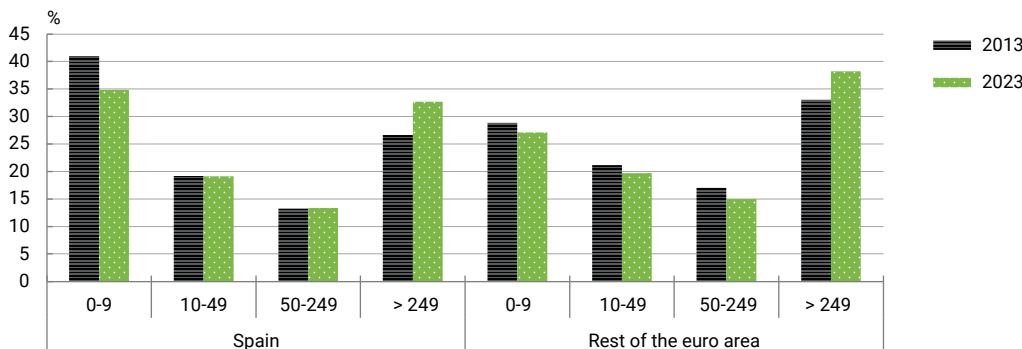
- In addition, in their first year, the productivity of firms created after 2013 is approximately 7% higher than that of firms established earlier. In addition, according to Eurostat data, 52% of firms created in 2000-01 were still operating five years later, but for those established in 2013-14 this percentage is 43%. This stronger business growth – characterised by a combination of higher productivity at the beginning and stricter selection patterns – could explain, at least in part, the greater growth capacity of firms from 2013 onwards.

Against this backdrop, while the relative share of microenterprises in Spain’s productive system decreased appreciably between 2013 and 2023, it remains high compared with the main euro area economies.

Chart 3.5

The share of microenterprises has declined in Spain since 2013, although it remains above that of the rest of the euro area

3.5.a Share in employment by firm size (a)



SOURCE: European Commission.

a "Rest of the euro area" includes Germany, France, Italy and the Netherlands.



- The share of microenterprises (those with fewer than 10 employees) in total employment declined by around 6 pp, from levels close to 41% to approximately 35% (Chart 3.5.a). This decline was accompanied by an equivalent increase in the proportion of large firms, defined as those with more than 249 employees (see the methodological annex). By contrast, the number of employees at SMEs (between 10 and 249) remained practically unchanged throughout the period analysed.
- Although this pattern is also observed in the rest of the euro area, it is less pronounced, in terms of both the decline in the relative share of microenterprises and the increase in that of large firms. That said, the proportion of microenterprises was still 8 pp higher than the euro area average in 2023 (35% vs 27%) (Chart 3.5.a). This gap continues to constrain the productive system's capacity to benefit from economies of scale, invest in innovation and gain access to international markets.

The productivity of Spanish firms is below the European average across all firm sizes – especially in the case of microenterprises and large firms – although the gap narrowed markedly between 2013 and 2023, particularly for SMEs.

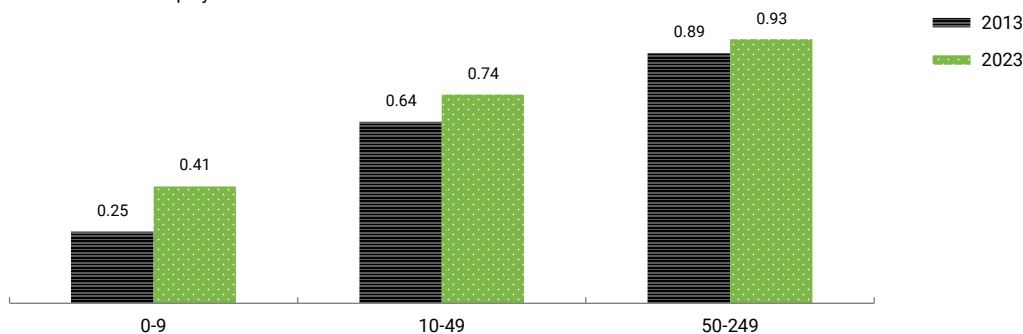
- Smaller firms' productivity levels were significantly below those of larger firms (Moral-Benito, 2018). Specifically, in 2023 the productivity of microenterprises was 60% lower than that of large firms (Chart 3.6.a). This gap narrows as firm size increases, standing at around 7% in the case of medium-sized firms. These differences have nonetheless corrected substantially since 2013, as the gap between microenterprises and large firms has decreased by 16 pp. This development is worth noting, given that the productivity of the average firm with more than 250 employees has also increased by almost 30% since 2013.

Chart 3.6

Although Spanish firms are less productive than their European counterparts, particularly microenterprises and large firms, the gap has narrowed somewhat since 2013

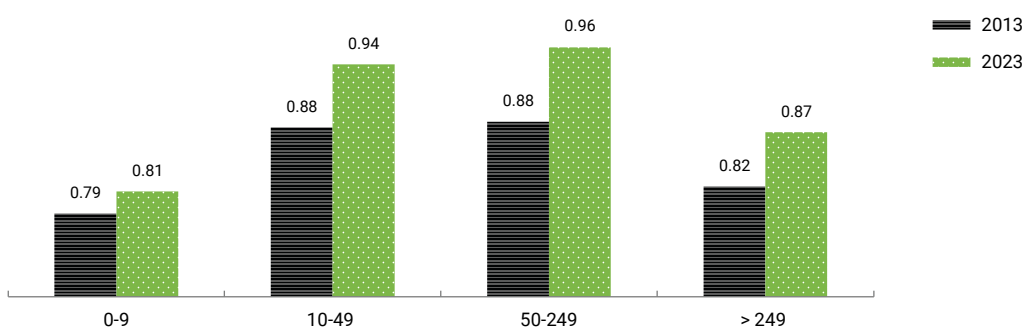
3.6.a TFP of SMEs relative to large firms in Spain (a)

Firms with > 249 employees = 1



3.6.a TFP of Spanish firms relative to the rest of the euro area (b)

Rest of the euro area = 1



SOURCES: Banco de España (CBI) and Orbis.

a Estimated firm-level TFP by firm size (0-9, 10-49, 50-249) relative to firms with more than 249 employees. Estimates are obtained from year-specific regressions in which the dependent variable is the TFP and firm size indicators are included. The results are expressed relative to the omitted category – larger firms –, normalised to 1. The bars show the estimated coefficients for 2013 and 2023. For more details about the estimated TFP at firm level, see the methodological annex.

b Estimated firm-level TFP at Spanish firms relative to firms in Germany, France, Italy and the Netherlands. Estimates are obtained from year- and firm size-specific regressions in which the dependent variable is the TFP and country indicators are included. The results are expressed relative to the omitted category – the rest of the euro area –, normalised to 1. The bars show estimated coefficients for 2013 and 2023.



- A comparison of productivity by firm size between Spain and the rest of the euro area, based on firm-level TFP estimates using Orbis data (see the methodological annex), shows that in 2023 the negative gap was more pronounced in microenterprises (–19%) and large firms (–13%), than in SMEs, where it was very small (around –5%) (Chart 3.6.b). This is also the case when controlling for sectoral composition across different countries and when productivity is measured based on value added per worker using Eurostat data.
- Nonetheless, between 2013 and 2023 the productivity gap between Spain and the rest of the euro area narrowed across all business segments, albeit with considerable heterogeneity. While for SMEs the gap narrowed by around 7 pp (from –12% to –5% in both cases), for microenterprises the degree of convergence was much more limited, at just

2 pp (from -21% to -19%). In the case of large firms, the gap narrowed by 5 pp (from more than -18% to -13%).

Large firms make a key contribution to aggregate productivity. As the literature shows, they account for a substantial share of its growth. Accordingly, Spain's relative shortfall of highly productive large firms vis-à-vis the rest of the euro area highlights the importance of understanding the factors that characterise this type of firm.

- According to the available literature, larger firms contribute disproportionately to aggregate productivity growth, as they lead productivity gains within their sectors, driving technological progress and efficiency (Dorn, Katz, Patterson and Reenen, 2020; De Loecker, Eeckhout and Unger, 2020).
- The negative productivity gap of large Spanish firms vis-à-vis large firms in the rest of euro area is greater than that observed for SMEs (Chart 3.6.b). This indicates that the productivity gap is concentrated primarily at the lower end (microenterprises) and upper end (large firms) of Spain's productive system, pointing to the need to increase both the number and productivity of its leading firms to drive aggregate productivity growth.²¹
- Indeed, between 2013 and 2023 large firms accounted for close to 42% of aggregate TFP growth in Spain, despite representing only around 0.14% of the total number of firms. However, productivity growth in Spain over the period as a whole was similar for SMEs and large firms, suggesting that large firms' sizeable contribution essentially reflects their substantial share of the economy,²² rather than their stronger productivity growth relative to smaller firms. By contrast, the decline in aggregate TFP recorded between 2000 and 2013 was driven almost entirely by the contribution from SMEs, while the contribution from large firms was negligible.
- Understanding what enables a firm to grow and succeed is crucial to narrowing the gap relating to "leading firms" in Spain and increasing their contribution to aggregate productivity. These firms are characterised, among other things, by very high capital investment in their early years, initially operating with close-to-zero profits and relying heavily on external financing at an early stage to sustain their rapid growth (Guntin and Kochen, 2025). These findings imply that financial frictions and other obstacles to growth (for example, difficulties in accessing credit or venture capital) mainly affect firms with a high growth potential and prevent them from reaching their optimum scale.
- Indeed, Guntin and Kochen (2025) quantify that the distortions that deter the entry and expansion of these potentially large firms explain the bulk of the aggregate productivity losses associated with the misallocation of resources. Therefore, encouraging the

²¹ This is also the case when controlling for sectoral composition across different countries and when productivity is measured based on value added per worker using Eurostat data.

²² According to European Commission data, large firms account for approximately 33% of employment and generate around 41% of value added in the Spanish economy as a whole.

emergence and growth of more “top firms”, by means of a favourable financial, technological and regulatory environment, is essential if Spain is to have a larger number of highly productive world-class firms and thereby reduce its relative shortfall vis-à-vis its European counterparts.

3 The role of financing and financial factors that can foster business growth

A well-developed and properly functioning financial system is a key driver of economic growth and productivity, as it helps channel savings more efficiently towards the projects and firms with the highest productive potential.

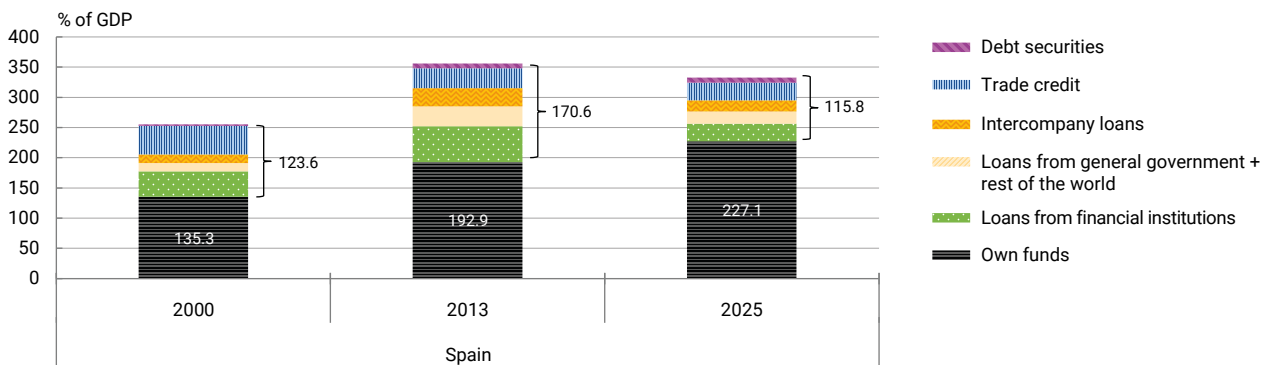
- The available empirical evidence indicates that countries with more developed financial systems have higher long-term growth rates, and that this relationship is not driven by reverse causality alone, but operates mainly through the easing of external financing constraints that limit business growth and investment in innovation (Levine, 2005).
- In this context, the findings set out in the previous section show that the recent improvement in Spain's TFP since 2013 is associated with a more efficient allocation of capital and labour across firms, which in turn has boosted growth among those that are most productive.
- This is particularly significant in the case of SMEs, which, despite accounting for a substantial share of employment and growth potential, have traditionally faced greater constraints in accessing external financing. Ensuring that financing flows are channelled towards the SMEs with the strongest growth potential and innovative capacity is therefore key to strengthening the efficient reallocation of resources and boosting aggregate productivity growth.
- The theoretical and empirical literature has identified various channels through which the structure, availability and quality of financing shape these dynamics, affecting both firms' growth capacity and the reallocation of resources, market entry and exit, and accumulation of intangible assets.
- In light of these findings, this section describes Spanish firms' deleveraging, which has contributed to strengthening their solvency and financial flexibility, and examines how financial factors affect their growth. Particular attention is paid to the improved allocation of bank credit to microenterprises, a segment in which the positive relationship between credit growth and productivity has strengthened markedly since 2013, despite having more pronounced information asymmetries. Lastly, this section analyses alternative sources of financing – including specialised markets, private credit and private equity or venture capital – and their role in complementing bank credit by diversifying firms' financing options, supporting young and innovative firms and boosting their growth and productivity.

3.1 The deleveraging of Spanish firms

The own funds of non-financial corporations have grown strongly since 2000 and gained relative weight vis-à-vis borrowed funds. Meanwhile, although the deleveraging process that began in 2008 was broad-based, it was highly uneven and particularly pronounced among SMEs and

Chart 3.7
Borrowing has declined unevenly across financing sources since 2013

3.7.a Non-financial corporations' liabilities. Spain (a)



SOURCE: Banco de España. Latest observation: 2025 Q4.

a Non-consolidated financial accounts.



higher-risk firms. This reflects not only constraints on the supply of bank loans, but also firms' decisions to strengthen their solvency and liquidity.

- Over the period 2000-25, Spanish non-financial corporations recorded a marked and sustained increase in own funds, which rose from 135.3% of GDP in 2000 to 227.1% in 2025 (Chart 3.7.a). As a result, own funds gained importance as a source of financing, accounting for 66.2% of total liabilities in 2025, compared with 52.3% in 2000.
- By contrast, borrowing declined significantly over the period under consideration. The period can be divided into two distinct phases: one of rising indebtedness, which peaked at 189.3% of GDP in 2007, at the onset of the global financial crisis, followed by a phase of deleveraging. Overall, in non-consolidated terms, total borrowed funds²³ rose from 123.6% of GDP in 2000 to 170.6% in 2013, before declining to 115.8% in 2025. A breakdown by financing source reveals considerable heterogeneity. In particular, trade credit and bank loans fell substantially (by 17.9 pp and 12.5 pp, respectively, between 2000 and 2025), while the remaining items increased. Particularly noteworthy were loans from general government and the rest of the world (5.8 pp), and debt securities and intercompany loans (6.3 pp and 4.2 pp, respectively).
- Although deleveraging was broad-based, it was more marked among smaller firms. Specifically, the ratio of total borrowed funds to total assets for small firms fell by 21.1 pp to 37.6% between 2000 and 2024, compared with declines of only 5.3 pp (to 46.4%) for medium-sized firms, and 1.4 pp (to 49.4%) for large firms (Chart 3.8.a).²⁴ This process is not driven solely by the market exit of the most indebted firms, since a similar pattern is observed in a

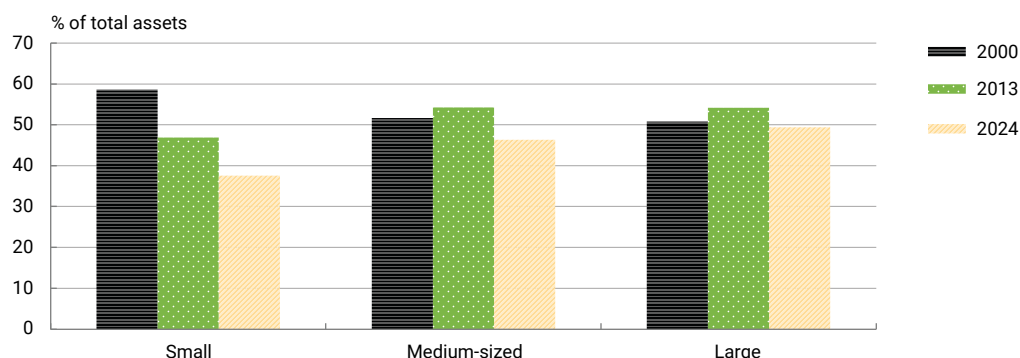
²³ Total borrowed funds comprise both interest-bearing and non-interest-bearing funds.

²⁴ In addition, for both medium-sized and large firms, deleveraging began later, as their total borrowed funds-to-total assets ratios were slightly higher in 2013 than in 2008.

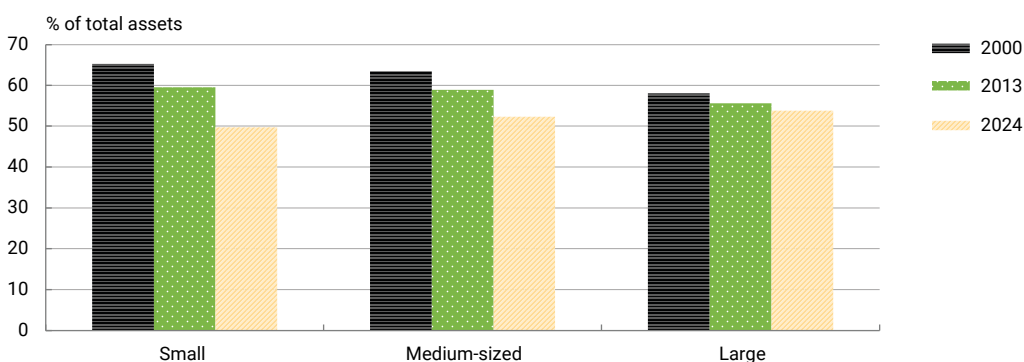
Chart 3.8

Firms, particularly smaller ones, have reduced their reliance on borrowing

3.8.a Borrowing by Spanish firms. Breakdown by firm size (a)



3.8.b Borrowing by euro area firms. Breakdown by firm size (a) (b)



SOURCE: Bank for the Accounts of Companies Harmonized (BACH).

a Small firms are those with a turnover of less than €10 million; medium-sized firms are those with a turnover of over €10 million but under €50 million, and large firms are those with a turnover of more than €50 million.

b Euro area includes Austria, Belgium, France, Italy, Portugal and Spain.



constant sample of firms throughout the period. Moreover, the same metric shows that, throughout the period analysed, Spanish firms were consistently less leveraged than those in the euro area, regardless of size (Chart 3.8.b).

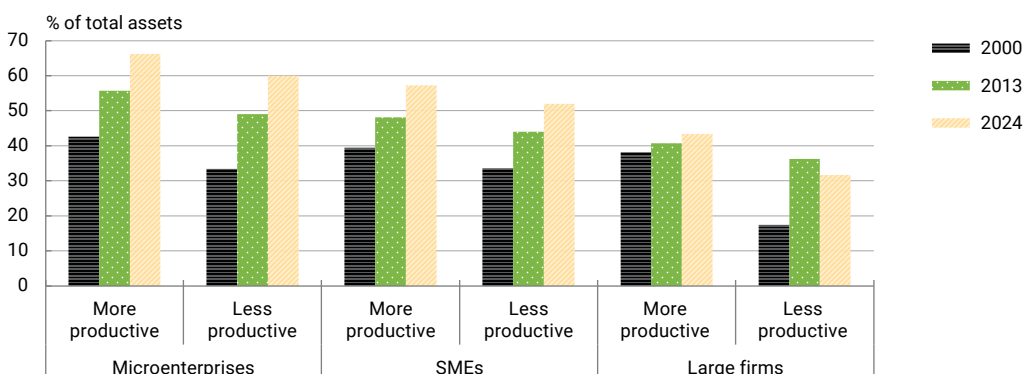
- The deleveraging process was also highly uneven across other dimensions, and more pronounced among firms that initially displayed higher credit risk.²⁵ In addition, liabilities were significantly rebalanced even among firms with access to new external financing, suggesting that deleveraging was not driven solely by supply constraints, but also by firms' decisions to strengthen their financial positions and flexibility. As a result, deleveraging was accompanied by an increase in liquidity.
- These findings are consistent with those of the Survey on the Access to Finance of Enterprises (SAFE). They point to a gradual decline in the percentage of SMEs facing constraints in

²⁵ For more details, see Dejuan Bitria (2026).

Chart 3.9

More productive Spanish firms rely more heavily on own funds for financing

3.9.a Internal financing of Spanish firms, by productivity level (a)



SOURCE: Banco de España.

a See the methodological annex for the definition of enterprise size. More productive firms are those whose TFP exceeds the median productivity of their sector, defined by the two-digit CNAE code.



accessing bank loans,²⁶ which currently stands at its lowest level since the survey began in 2009, and to a fall in the percentage of SMEs seeking this source of financing since mid-2022.

3.2 Allocation of bank credit by firm and bank characteristics

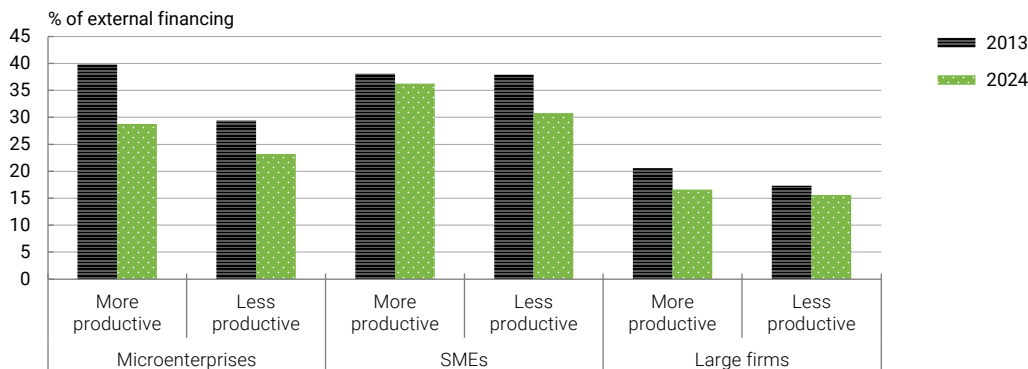
More productive Spanish firms across all size segments resort more to using own funds. As regards external financing, bank credit is used to a larger degree by the more productive SMEs, especially microenterprises.

- Analysis of the relationship between firms' liability structure and their productivity reveals that more productive Spanish firms, regardless of their size, used own funds to a larger extent to finance their activities in the period 2000-24 (Chart 3.9.a). This could reflect a greater capacity to generate capital organically (through retained earnings) or to raise capital from third-party investors. A greater organic capital generation capacity would be consistent with the positive relationship between profitability and productivity documented in Box 3.1, as higher corporate surpluses enable businesses to increase their own funds.
- Meanwhile, bank credit accounts for a larger proportion of external financing for the more productive SMEs than for their less productive counterparts, a gap that is particularly marked among microenterprises, where it stood at 5.6 pp in 2024 (Chart 3.10.a). Given the

26 A firm's access to bank loans is considered constrained if any of the following circumstances apply: (a) its application was rejected; (b) it received only part of the amount requested (less than 75%); (c) it rejected the lender's offer because it considered the interest rate too high; or (d) it did not apply because it expected its loan application to be rejected.

Chart 3.10
Bank credit accounts for a larger share of external financing among more productive SMEs

3.10.a Bank credit of Spanish firms, by productivity level (a)



SOURCE: Banco de España.

a See the methodological annex for the definition of enterprise size. More productive firms are those whose TFP exceeds the median productivity of their sector, defined by the two-digit CNAE code.



informational opacity of this segment,²⁷ this may indicate that more productive microenterprises face fewer constraints in accessing credit. By contrast, bank credit represents a broadly similar share of external financing for large firms regardless of their productivity levels (gap of barely 1 pp in 2024), which could be attributable to these firms' greater ease in raising finance in capital markets.

- External financing is more diversified among larger firms since, unlike smaller enterprises, they have the size needed to issue debt securities as an alternative source of funding.²⁸ By having access to these markets, large firms can expand their financing sources and reduce their vulnerability, especially in periods of tighter bank lending conditions. Indeed, the literature documents that proper diversification of funding sources helps make non-financial corporations more resilient and drives their investment.²⁹

Credit allocation has improved markedly in the aftermath of the global financial crisis and the sovereign debt crisis. The link between credit growth and productivity has become stronger since 2014, especially for firms more exposed to asymmetric information problems. Further, this improvement has not been associated with an increase in banks' risk appetite.

²⁷ See, for example, Berger, Klapper and Udell (2001), Scott and Dunkelberg (2003), Berger and Udell (2006), Berger, Rosen and Udell (2007) and López-Espinosa, Mayordomo and Moreno (2017).

²⁸ In Spain, SMEs face significant barriers to obtaining financing in the bond markets, making them more reliant on bank credit than large firms. This segmentation has limited the coverage of some unconventional monetary policy measures, such as the Corporate Sector Purchase Programme (CSPP), whose effects have been primarily concentrated on larger firms (Alves, Mayordomo and Ruiz-García, 2022). Although SMEs do not directly access the bond markets, the evidence shows that they have benefited indirectly from the ECB's CSPP, which was conducive to a reallocation of bank credit towards smaller firms after it was launched in 2016 (Arce, Mayordomo and Gimeno, 2021).

²⁹ Studies providing such evidence notably include De Fiore and Uhlig (2015), Tengelov (2026) and Bongini, Ferrando, Rossi and Rossolini (2021).

- According to statistical analyses of a large sample of firms and banks for the period 2004-24, credit allocation has improved since the global financial crisis and sovereign debt crisis. These analyses draw on three databases available to the Banco de España (for more information, see the Data sources annex): the Integrated Central Balance Sheet Database (CBI), for firm characteristics; the Central Credit Register (CCR), for information on loans granted to firms by credit institutions; and the In-house Credit Assessment System (ICAS),³⁰ for firms' solvency, measured through their estimated probability of default and credit rating.
- A series of regression analyses have been conducted to examine the relationship between the growth in bank credit and productivity (measured by TFP), allowing it to vary between the periods 2004-13 and 2014-24. The analyses control for differences in observable firm characteristics (probability of default, size, age, sector, province, number of banking relationships, existence of previous troubled loans, affiliation to a business group), unobservable characteristics that are constant over time³¹ and the business cycle,³² to take into account factors that could affect both credit supply and firms' productivity and creditworthiness.
- The following main findings can be drawn from these analyses: the positive relationship between credit growth and productivity observed in the period 2004-13 has become stronger since 2014 (Chart 3.11.a).³³ Thus, a 10% increase in productivity is associated with the credit growth rate being 0.9 pp higher up to 2013 and 2.2 pp higher from 2014 onwards. These effects are more pronounced among firms that are typically more exposed to asymmetric information problems, such as microenterprises, young firms (up to five years old) because of their short track record³⁴ and firms that generally have less collateral to secure bank loans.³⁵ It is worth noting that the improvement in credit allocation towards more productive firms has not been accompanied by increased risk-taking by banks, as the three types of institution reduced their lending in a similar way to firms with higher probabilities of default.

Since 2014, large and medium-sized banks have stepped up their lending to more productive firms. However, credit cooperatives have a stronger relationship with microenterprises, on account of their deeper knowledge of local markets.

30 For more information, see Box 3.2 as well as Gavilá, Maldonado and Marcelo (2020) and Auria et al. (2021).

31 Captured through firm fixed effects.

32 Through the introduction of sector-province-size-year fixed effects.

33 Firms that receive credit in a given year tend to have higher prior average levels of solvency, profitability and productivity than those that do not receive credit. This is consistent with the idea that financial institutions consider information on firms' recent historical performance in their lending decisions. However, this does not imply that the credit is allocated to firms solely on the basis of their initial productivity levels. In particular, the exercise controls for a wide range of observable firm characteristics (including productivity, considered with a one-year lag), which suggests that, even when their prior situation is taken into account, credit growth is positively associated with productivity. Consequently, although part of the relationship observed may be the result of higher productivity firms having easier access to credit, the results are consistent with an improvement in credit allocation towards firms with a better outlook, rather than merely a selection effect based on initial productivity levels.

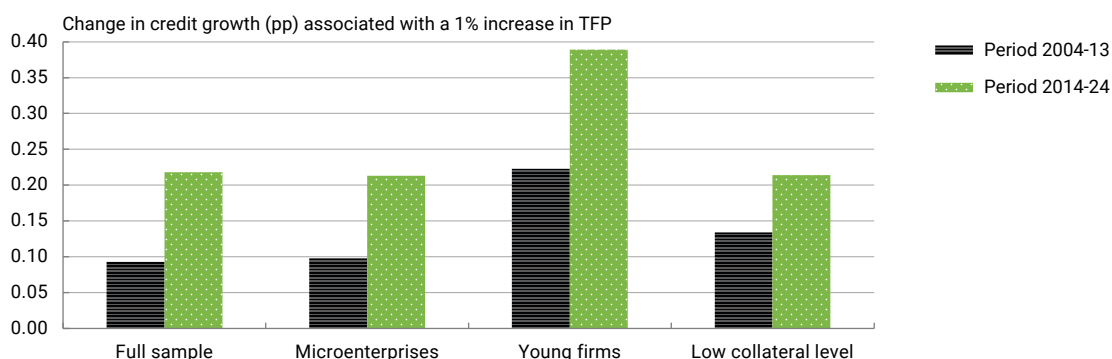
34 See, inter alia, Schiantarelli (1996), Beck, Demirgüç-Kunt, Laeven and Maksimovic (2006) and Banerjee and Blickle (2021).

35 Firms with a low (high) level of collateral are those whose share of tangible assets to total assets is below (above) the median of the sector in which they operate. See, for example, Rajan and Zingales (1995), Hall (2012) and Li, Whited and Wu (2016).

Chart 3.11

The positive link between credit growth and productivity observed in 2004-13 has grown stronger since 2014

3.11.a Link between credit growth and productivity (a)



SOURCE: Banco de España.

a Results from estimating a regression of credit growth on the logarithm of productivity, controlling for other firm characteristics (probability of default, age, size, number of banking relationships, existence of previous troubled loans, affiliation to a business group). All independent variables are lagged by one year. Firm fixed effects and size-industry-province-year fixed effects are also included. Young firms are those created within the last five years, with all others being classified as mature firms. The analysis by age and collateral is restricted to small firms and microenterprises, which are the most affected by asymmetric information problems. Firms with a high (low) level of collateral are those whose share of tangible assets to total assets is above (below) the median of the sector in which they operate. The sample period is 2004-24. All the effects reported are statistically significant.



- To analyse heterogeneity in the relationship between productivity and credit growth across different types of credit institution (credit cooperatives, large banks and medium-sized banks), a number of regression analyses are conducted, again allowing the relationships to vary between the periods 2004-13 and 2014-24. These analyses control for all firm and bank characteristics³⁶ to determine whether the relationships between credit growth, business productivity and probability of default depend on the type of institution.
- The main findings from these analyses are as follows: first, since 2014 large and medium-sized banks have increased their credit supply to more productive firms to a greater extent than credit cooperatives have. However, in the microenterprise segment, where asymmetric information problems tend to be more severe, the relationship between credit and productivity is stronger among credit cooperatives. This may be due to relationship lending,³⁷ a practice characteristic of these institutions that involves obtaining soft information over years of bank-borrower relationships, thereby helping reduce the informational opacity of small enterprises. Box 3.3 also shows that credit cooperatives have decreased their SME lending less than other institutions since the global financial crisis. This greater support is attributable to their deeper knowledge of local markets, as reflected in their lower non-performing loan (NPL) ratios in the microenterprise segment. Second, again since 2014, all three types of institution have made similar reductions in lending to firms with higher probabilities of default.³⁸

36 Through the introduction of bank-year and firm-year fixed effects in the estimations.

37 See, inter alia, Petersen and Rajan (1994), Berger and Udell (1995), Bolton, Freixas, Gambacorta and Mistrulli (2016) and Beck, Degryse, De Haas and Horen (2018).

38 All these results hold true when the sample is restricted to sectors in which cooperatives account for a larger share of lending to SMEs and the self-employed. For more details, see Box 3.3.

Even amid improved financing conditions, barriers to accessing bank finance persist and affect firms with no credit history and more innovative firms, among others.

- Despite the better credit allocation and the absence of widespread supply-side constraints at present (based on the indicators available), certain segments face greater difficulties in accessing bank finance.
- First among these are firms with no prior bank debt, which face greater obstacles because they have no credit history.³⁹ This is exacerbated during periods of macroeconomic uncertainty, when asymmetric information problems worsen, leading banks to prioritise lending to their existing customers. As a result, firms with no prior bank debt are more likely to exit the market than similar firms that already have lending relationships.
- Another segment that suffers greater constraints on access to credit is that of innovative firms. According to the SAFE, in the period 2014-25 the percentage of SMEs that reported constraints when applying for a bank loan was higher among innovative firms (11.9%)⁴⁰ than among other types of firm (9.6%).

Such financing constraints for firms that are innovative or have substantial intangible investments could be eased by public policies, such as the ICO Growth scheme, to support the development of viable firms with profitable investment projects.

- In September 2025 the Official Credit Institute (ICO) launched its ICO Growth scheme, with an allocation of €1 billion. This scheme seeks to complement lending to the private sector under favourable terms to fund the investment projects and working capital needs of solvent SMEs facing higher barriers to external finance due to their specific profile (innovative character, substantial intangible investments, high leverage ratios).
- According to the information available (Table 3.2), firms applying to this scheme exhibit a much higher proportion of intangible asset ownership than in the CBI sample, and they are also more productive, which could be associated with their innovative profile. Moreover, compared with the CBI sample, applicant firms report a larger share of short-term debt within their bank borrowings, and they are more highly leveraged, meaning that the proportion of such firms with no bank debt is much lower. However, their higher indebtedness does not appear to be linked to weaker solvency, as proxied by the proportion of applicant firms with negative return on assets (ROA).
- As well as this scheme, there are other public financing instruments aimed at strengthening the resilience and growth of the productive system. For instance, the Trade Response and Relaunch Plan contains various measures to mitigate the potential adverse effects arising

³⁹ For an in-depth analysis of firms with no previous bank debt in the context of the COVID-19 crisis, see Blanco, García-Posada, Mayordomo and Rodríguez-Moreno (2024).

⁴⁰ A firm is considered innovative if, during the past 12 months, it has launched a new product or service on the market or introduced a new production process, new organisational practices or a new method of marketing its goods or services.

Table 3.2
Although more leveraged, the firms applying to the ICO Growth scheme are more solvent and more productive

Data as at December 2024

	ICO Growth firms	Other firms	Difference (a)
Firms with no bank debt. Proportion (%)	4.2	54.8	-50.5***
Short-term bank debt as a % of total bank debt. Mean (%)	50.4	42.6	7.8***
Leverage (total debt / total assets). Mean (%) (b)	69.8	56.9	12.9***
Firms with ROA < 0 (c). Proportion (%)	10.7	29.1	-18.3***
Firms with intangible assets. Proportion (%)	60.8	21.9	38.8***
Total factor productivity. Logarithm	1.4	1.3	0.1**
Microenterprises. Proportion (%) (d)	43.3	81.7	-38.4***
Small enterprises. Proportion (%) (d)	39.4	10.7	28.7***
Medium-sized enterprises. Proportion (%) (d)	13.3	1.9	11.5***
Age. Mean (years) (b)	16.2	15.2	1.0**

SOURCE: Banco de España (CBI).

- a** *, ** and *** indicate statistical significance at the 90%, 95% and 99% confidence levels, respectively. Statistical significance is calculated using either a test of means or a test of proportions. In the test of means, the null hypothesis is that there are no differences in the means of the respective populations, and equal variances across populations are not assumed. In the test of proportions, the null hypothesis is that there are no differences in the proportions of the respective populations.
- b** Winsorised at the 2.5% level in the right tail to mitigate the influence of outliers.
- c** ROA = (ordinary net profit + financial costs) / total assets.
- d** See the methodological annex for the definition of enterprise size.

from the tariff hikes announced by the United States. It includes a new €5 billion guarantee facility managed by the ICO to support financing for affected firms. Moreover, the allocation to the Fund for the Internationalisation of Enterprise has been raised to €700 million, to further strengthen firms' international presence and diversify their exports. The Plan also increases the cover provided by the Spanish export credit agency (Cesce), allowing the mobilisation of €2 billion for projects affected by the new tariffs. Meanwhile, with an allocated €18 billion, the ICO Businesses and Entrepreneurs Facility seeks to facilitate financing to the self-employed and non-financial corporations, earmarked for investment projects and covering expenses arising from their activity and liquidity needs.

- Lastly, in collaboration with the private sector (banks, investors and rating agencies) and European public institutions, the Spanish Government is currently working towards the creation of a European securitisation platform to promote business financing, especially for SMEs. This platform has received support from several EU countries⁴¹ within the framework of the European Competitiveness Lab, and has three aims: to expand the number of loan originators and countries accessing this market, to develop a broader investor base and to promote cross-border securitisations.

41 Denmark, Finland, France, Germany, Italy, Luxembourg, the Netherlands and Slovenia.

- Nevertheless, the persistence of stronger credit constraints for innovative firms demonstrates that, despite an overall improvement in financing conditions, this segment continues to face specific obstacles in obtaining traditional bank finance, underscoring the need to analyse and promote alternative sources of finance, particularly venture capital, that can complement or replace bank credit.

3.3 The alternative financing ecosystem and venture capital's potential

Although the improvement in bank credit allocation has helped make the financial system more efficient, the structural constraints on access to finance faced by certain firm types remain. Alternative finance has therefore become an increasingly important complement (rather than substitute) to bank credit, helping to further diversify funding sources and make the business sector more resilient.

- On balance, the evidence presented shows that, while bank credit allocation in Spain has improved substantially since the global financial crisis and continues to play a central role in financing more productive firms (especially SMEs), there are constraints in certain segments. Specifically, firms that are young or innovative or have no credit history still face greater difficulties in accessing bank credit. Against this backdrop, alternative financing sources become increasingly relevant to the extent that, as a complement to bank credit, they allow businesses to diversify their funding sources and make them less dependent on the banking system, which helps make the business sector more resilient.
- Among these alternative sources, financing from the capital markets has expanded the access to finance of larger or more mature firms. Overall, in Spain these firms issued a gross volume of debt securities on these markets equivalent to 4.2% of GDP in 2025.
- Within this area, specialised markets, such as the alternative fixed-income market (the MARF) and BME Growth (formerly the MAB), have played an increasing role in channelling funding towards smaller, growth-stage firms. These markets make it easier for firms to both issue debt and raise capital on more flexible terms than on traditional regulated markets, and thus help them further diversify their funding sources. However, since access is subject to requirements regarding size, transparency and compliance costs, these markets are less accessible to firms that are smaller or at an early development stage. Overall, financing obtained on the MARF and BME Growth carries a limited weight in the economy, accounting for an aggregate 0.9% of GDP in 2025.
- Other types of non-bank finance have also flourished in recent years. Private credit channelled through specialist funds has become a key alternative source of such financing, particularly for businesses undertaking expansions, refinancings or acquisitions, as it offers borrowers greater contractual flexibility and is a better fit with their risk profile. In Spain, the volume of private credit has increased sharply since 2021, from around 0.36% of GDP to close to 2% in

2025,⁴² but it is still low compared with bank credit. Measured as a share of GDP, the aggregate private credit market has grown to a size comparable to private equity in recent years, despite private equity accounting for a larger share of GDP than private credit in 2021 (start of the period under analysis).⁴³

- Recent Banco de España analyses⁴⁴ show that the private credit supply is concentrated and characterised by a strong presence of international lenders (mainly non-euro area funds), which diversifies firms' sources of funding but also exposes the market to external factors. On the demand side, private credit is targeted chiefly at firms that are relatively large, younger and with higher investment rates, and are concentrated in tech, professional services, industry and construction sectors, among others. In Spain, these firms have on average lower debt levels and higher liquidity than those financed exclusively through bank credit.
- In addition, the evidence available points to a relationship of complementarity between bank credit and private credit as sources of funding, as a high proportion of firms accessing private credit also have interactions with the banking system. Another key feature of private credit is that it typically involves longer maturities than traditional bank credit, which makes it easier for businesses to adapt their financing structure to the timeframe of their medium and long-term investment projects and thus reduce liquidity strains in the initial phases of the investment cycle.
- Venture capital holds a unique strategic position within this alternative ecosystem. Unlike other forms of financing, venture capital is specifically geared towards young, innovative firms with high growth potential, and it provides funding at early stages when access to bank credit, the capital markets or even private credit is limited. Developing a more balanced financing ecosystem – in which bank credit, the capital markets, private credit, private equity and in particular venture capital complement one another – is key to supporting the growth, innovation and resilience of the Spanish economy.

Despite its importance in fostering innovation, venture capital remains underdeveloped in Spain. The persistent gap with more advanced economies could dampen the growth and competitive capacity of Spain's entrepreneurial ecosystem.

- Venture capital is a type of private funding aimed at start-ups, which are newly created technology and innovation-based firms that show high growth potential. Unlike traditional bank borrowing, venture capital targets a very specific window of the financing cycle, namely the period between when start-ups receive seed funding (from business angels and venture

42 Calculated using a broad measure of private credit, whereby the volume of private credit is defined as that involving non-bank intermediaries specialising in this activity. For further details, see Banco de España (2026).

43 In this setting, the European Commission has launched a public consultation to identify barriers for exiting private equity investments and to assess possible mechanisms (such as a platform for secondary trading of private company shares), to boost development of the private equity market in the EU.

44 Cáceres, Farias, Ruzzier and Xu (2025) and Banco de España (2026).

capital funds themselves) and when they gain access to capital markets or debt at a more advanced stage.⁴⁵ The macroeconomic relevance of venture capital can be observed in the disproportionate contribution made by firms that receive such financing to job creation, patenting and initial public offerings, relative to their share in the total business population.⁴⁶

- However, although venture capital is acknowledged as an important driver of innovation and growth, the European market remains significantly below its potential.⁴⁷ The volume of venture capital transactions as a proportion of GDP in Europe is only a fraction of that observed in the United States and, despite narrowing since 2010, this gap remains sizeable. In the euro area as a whole, venture capital accounted for around 0.2% of GDP in 2024, compared with approximately 0.6% in the United States.⁴⁸ This gap reflects both Europe's shallower investor ecosystem and its more fragmented capital markets. Moreover, Spain lagged behind the euro area average, with such transactions accounting for just 0.15% of GDP (Chart 3.12.a).⁴⁹
- Venture capital-backed firms differ markedly from other businesses, as they are predominantly young, small and concentrated in high technology and knowledge-intensive sectors.
- Drawing on the sample from the PitchBook database, the 1,255 venture capital-backed firms in Spain in 2021 (when the share of venture capital transactions in GDP peaked in Spain) obtained a total of approximately €4,284 million in new venture capital transactions. This would point towards lower average financing than that received by their euro area counterparts in the same year (10,103 firms and €51,029 million) and suggest that, in the extensive margin, Spanish firms access this funding source to a greater extent (3.67%, compared with 1.57% of euro area firms). This pattern would also suggest that the average Spanish firm is smaller than its euro area counterpart.
- In Spain the typical venture capital-backed firm is on average 4.4 years old at the time of the first round of funding, with a median of 3 years. These figures are somewhat higher in the euro area as a whole (average of 5.7 years and median of 4), suggesting that on average Spanish venture capital is directed towards even earlier stages of the business life cycle.

45 Venture capital investors do not just contribute funds, they also provide oversight capacity, contact networks and specialist knowledge, which are key to the development of businesses in the very early stages of their life cycle. For more details, see Gompers and Lerner (2001) and Kortum and Lerner (2000).

46 Kaplan and Lerner (2010).

47 In this setting, the Eureka initiative has developed instruments geared towards making access to private investment easier. Eureka is a European intergovernmental network supporting business R&D&I focused on funding for technological and collaborative projects. Specifically, it organises services and events to bring together innovative SMEs and venture capital funds and investors.

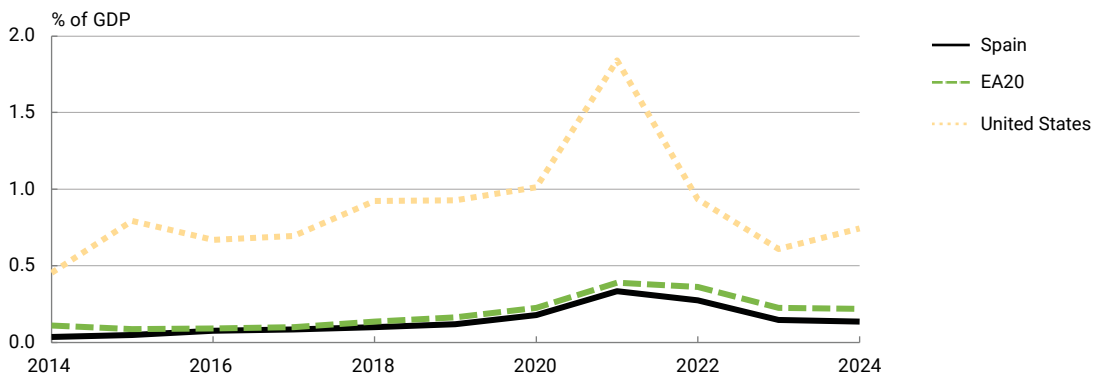
48 The weight of venture capital varies across euro area countries, ranging from 0.59% and 0.42% of GDP in Austria and Finland, respectively, to just 0.09% and 0.03% in Italy and Greece.

49 The combined assets of venture capital funds registered with the National Securities Market Commission (CNMV) grew by 15.6% in 2025, to €56,347 million. Since this report is focused on the size of the recipient firm, the analyses are based on funding received by Spanish firms, regardless of whether the venture capital fund itself is registered in Spain. According to the activity report of Spaincap (an association of private equity and venture capital funds in Spain), the sector as a whole recorded an increase of 11.5% in this type of funding compared with 2024.

Chart 3.12

Despite recent progress, venture capital remains underdeveloped in Spain, with a persistent gap relative to more advanced economies

3.12.a Venture capital investment (a)



SOURCES: PitchBook and Eurostat.

a New venture capital transactions as a percentage of GDP.



- As regards its sectoral distribution, venture capital is primarily aimed at computer programming and related activities in both Spain and the euro area, a sector which accounts for 30% and 27% of transactions, respectively. It is followed, in both cases, by scientific research and development activities (12% in Spain and 11% in the euro area) and other knowledge-intensive services. Wholesale trade also stands out in Spain (6%), while in the euro area, technical and analytical services (5.5%) and publishing activities (5%) are more prominent.
- This sectoral concentration is consistent with the nature of venture capital, which targets firms with high scalability potential and intangibles-based business models.

Venture capital funding acts as a catalyst for business growth, and the evidence available for Spain and the euro area indicates that the rates of growth in assets, turnover and employment are systematically higher among venture capital-backed firms than among their counterparts without such funding.

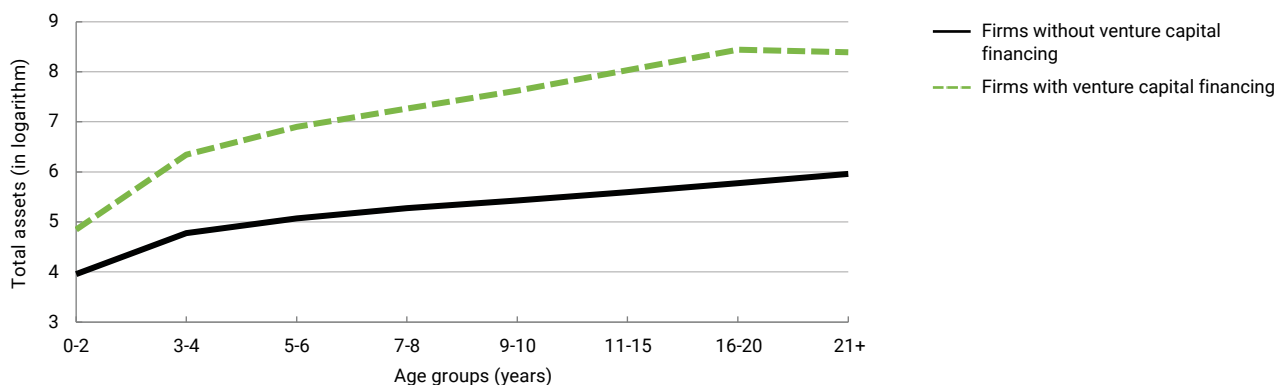
- Chart 3.13 compares the average trajectories of the assets of two groups of firms: those that have received venture capital at some point and those that have not. On average, venture capital-backed firms show systematically higher levels of assets than those of a group of comparable firms (i.e. businesses of the same age operating in the same country and sector) throughout the period analysed. This difference is statistically significant and economically relevant, both in Spain (Chart 3.13.a) and in the euro area as a whole (Chart 3.13.b). The same pattern is observed when analysing turnover or employment.

Venture capital has become a key driver of innovation, and in Spain it is significantly associated with businesses' capacity to develop new products, processes and technological assets. The

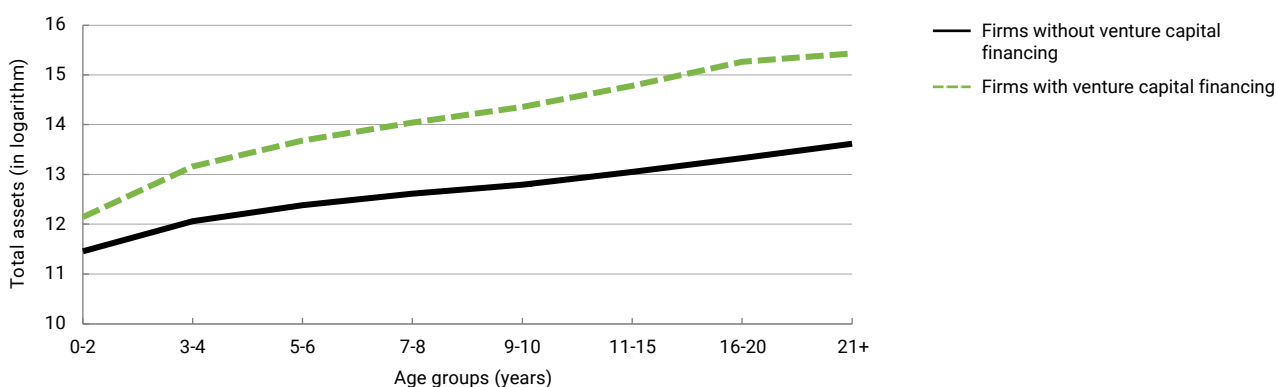
Chart 3.13

Access to venture capital financing is associated with more dynamic growth trajectories over the business life cycle

3.13.a Spain (a)



3.13.b Euro area (a)



SOURCES: Banco de España (CBI), Orbis and PitchBook.

a The dependent variable in the regression model is firm size, defined as the logarithm of total assets. The explanatory variables of interest are as follows: (i) a set of binary variables that take the value 1 when the firm's age, in years, is within a given interval (0-2, 3-4, 5-6, 7-8, 9-10, 11-15, 16-20, and 21 or more); (ii) a binary variable indicating whether the firm received venture capital at any point during the sample period; and (iii) interactions between this latter variable and the age categorical variable. The coefficient on age captures the average size of firms of that age that have not received venture capital ("Firms without venture capital financing"). The sum of the coefficients on age, the venture capital categorical variable and the interaction coefficient captures the average size of firms of that age that have received venture capital ("Firms with venture capital financing"). Sector fixed effects (at the two-digit CNAE level), firm cohort fixed effects and country fixed effects (the latter only in the euro area estimate) are included as controls. The estimation period is 2011-24 for Spain and 2011-23 for the euro area. Standard errors are clustered at the firm level.



empirical evidence shows that Spanish firms that access this funding not only innovate more, but they also markedly step up their investment in the assets underpinning that progress and become more productive.

- The level of venture capital development is directly related to an economy's innovative capacity. International evidence shows that countries with deeper venture capital markets have higher rates of business R&D expenditure, greater patent density and a larger share of firms introducing product or process innovations. Thus, the International Monetary Fund estimates that an increase in venture capital investment equivalent to 1 pp of GDP is associated with significant rises in patent numbers and in firms' innovation intensity.

Table 3.3
Spanish firms that receive venture capital funding are more innovative and productive (a)

	[1]	[2]	[3]	[4]
	Innovative	Cumulative Δ intangibles	Cumulative Δ tangibles	Δ TFP
Receipt of venture capital (year t)	0.237*** (0.019)	0.941*** (0.051)	0.257*** (0.059)	0.113*** (0.024)
Observations	2,275,381	549,217	2,275,381	2,275,381
R ²	0.113	0.085	0.047	0.051

SOURCES: Banco de España and PitchBook.

a Estimates obtained using ordinary least squares (OLS), where the dependent variable captures different dimensions of firm innovation, investment and productivity, and the explanatory variable of interest is a dummy indicating whether firm *i* received venture capital financing in a given year *t*. In column [1], the dependent variable is a dummy variable equal to 1 if the firm is classified as innovative in any of the three years following receipt of venture capital financing, and 0 otherwise. In columns [2], [3] and [4], the dependent variable is the cumulative increase, over the three years following receipt of the venture capital financing, in intangible assets, tangible assets and TFP, respectively, relative to their value in the year the financing is received. All specifications include interactions of fixed effects at the sector (two-digit CNAE code), location (province), size (according to the four categories in the European Commission recommendation) and year levels. Standard errors are clustered at the firm level and reported in parentheses. The sample is restricted to firms in sectors where at least one firm has been classified as innovative but was not innovative at the beginning of the period in which it enters the sample. *** indicates statistical significance at the 1% level.

- In the case of Spain, the microdata available reveal that around 20% of firms with innovative-firm status have received venture capital financing. A regression analysis for Spanish firms confirms this correlation for four metrics of innovation, investment and productivity. A linear probability model estimated on the basis of a panel of firms, with sector, location, size and year fixed effects⁵⁰ yields the following results (Table 3.3):⁵¹
 - A firm that receives venture capital funding in a given year is around 24 pp more likely to acquire innovative-firm status between the following year and the subsequent three years; this effect is both statistically and economically significant.
 - Cumulative intangibles investment over the same time horizon is also significantly higher among venture capital-backed firms. This increase is sharper than that observed for tangible assets, reflecting a stronger drive to invest in the assets directly linked to innovative activities.
 - The cumulative TFP of venture capital-backed firms is 12 pp higher over the same time horizon.
 - These results are robust to different specifications and suggest that venture capital has an impact on Spanish firms' innovative stance that goes beyond the mere selection of innovation-intensive firms.

⁵⁰ Despite the large number of fixed effects, the high number of observations across the various samples, together with the considerable variance of the dependent variables (three-year cumulative changes in intangibles, tangibles and productivity in three of the four specifications), leads to relatively low R² values.

⁵¹ Given that venture capital-backed firms are mostly young, innovative and technology-intensive with a high growth potential, the possibility of selection bias cannot be completely ruled out. Consequently, the results from the analysis should be interpreted with some caution, in terms of correlations as opposed to causal relationships.

The evidence confirms that venture capital drives innovation and business growth, but it also reveals the structural barriers holding it back in Europe.

- The expansion of venture capital continues to be weighed down by market fragmentation, constraints on institutional investors' ability to invest in alternative assets, differences in taxation and the absence of deep exit markets.⁵²
- However, experiences such as that of Sweden⁵³ show that such constraints can be overcome through a stable framework, proper incentives and closer financial integration (Thomadakis, 2025).

⁵² Arnold, Claveres and Frie (2024).

⁵³ Sweden is a singular case in Europe, as in 2024 venture capital investment stood at 0.61% of GDP, a level well above the euro area average and comparable to that of the United States.

4 Main challenges to consolidating productivity growth and convergence with the euro area

Despite marking a turning point for the Spanish economy, the modest growth observed in TFP since 2013 has not been sufficient to fully reverse the negative gap vis-à-vis the euro area accumulated since 2000, underlining the scale of the challenge ahead.

- The improvement observed in Spanish TFP since 2013 is largely attributable to a more efficient allocation of the factors of production (capital and labour) between firms, underpinned by a stronger link between business productivity and bank credit growth compared with the dynamics observed before the financial crisis. Accordingly, since 2013 and for the first time since 2000, productivity in Spain has outpaced the rest of the euro area.
- However, despite this turnaround, TFP growth in Spain has not sufficed to fully bridge the negative gap with the euro area, which is estimated to have narrowed from 12% in 2013 to 8% in 2025. To highlight the scale of the challenge, if this gap is to be completely closed, productivity growth in Spain would have to exceed that of the euro area for close to 20 years, based on the rates observed since 2013.
- In addition, part of the modest productivity growth and the improvement observed in allocative efficiency across firms may be associated with the exit from the financial crisis and the correction of imbalances accumulated during that period. If that is the case, the scope for convergence with the euro area (a process that began in 2013) could taper off in the absence of new reforms and further advances in the structural determinants of productivity.
- Against this background, consolidating and building on the progress already made will require addressing the unresolved structural challenges (not least regulatory fragmentation and complexity at regional level) that continue to hamper market unity and the efficient reallocation of resources, while simultaneously harnessing the adoption of artificial intelligence to foster more buoyant business productivity.

4.1 Regulatory fragmentation and complexity as a constraint on the efficient allocation of resources and business growth

Complex and uncertain regulation entails high fixed costs that hamper business growth and the efficient allocation of resources. But its broader interaction with institutional quality is also fundamental, as this influences how effectively the regulatory framework is applied.

- Regulation can act as a structural barrier to business growth when it introduces high fixed compliance costs, which especially penalise small and young firms (compared with large

firms) and limit their capacity to grow. Particularly noteworthy in this regard is the heavy administrative burden stemming from the number, complexity and length of licencing, authorisation and other regulatory procedures, as well as the duplications across tiers of government.⁵⁴

- Also worthy of mention is regulatory uncertainty, as frequent regulatory changes, overlaps between tiers of government and a lack of inter-administrative coordination heighten firms' risk perception and encourage defensive strategies ("waiting rather than investing"), especially in capital and innovation-intensive projects.
- Although regulation plays a significant role in shaping business performance and the extent to which resources can be allocated flexibly and efficiently, institutional quality in a broader sense is also a key driver. As with regulatory costs and regulatory fragmentation, weak or ineffective institutions can limit the efficient allocation of resources and productivity gains in the long run.
- Regulation and institutional quality are complementary: regulation defines the operating framework in which businesses pursue their activities, while institutional quality influences how the regulatory system itself functions and how effectively it is applied. Consequently, the potential impact of well-designed regulation may be substantially dampened in environments marked by institutional weaknesses.

Nevertheless, while certain economic regulation indicators for Spain have improved since the global financial crisis, other indicators related to perceived institutional quality have worsened somewhat.

- Measuring economic regulation and institutional quality is complex, as it combines both qualitative and quantitative elements. Given this situation, a number of available indicators are analysed with the aim of providing as complete a picture as possible of the changes seen in Spain in recent years. Based on observed developments, economic regulation and institutional quality in Spain have followed divergent trajectories since the financial crisis, reflecting uneven progress between the two.
- On the one hand, drawing on the Organisation for Economic Co-operation and Development's (OECD) Product Market Regulation indicators, which measure regulatory barriers to competition in key sectors,⁵⁵ the evidence suggests that Spain has lowered some regulatory

⁵⁴ In addition, according to the literature, regulatory and tax thresholds can disrupt business decisions, generate bunching around cut-off points and hold back business growth (Almunia and Lopez Rodriguez, 2018). However, recent theoretical evidence shows that the aggregate impact of these distortions to productivity depends on how they affect firm entry: specifically, size-dependent distortions can worsen allocative efficiency and weaken selection mechanisms, but can nevertheless increase aggregate TFP if they induce a sufficiently strong response in the entry margin (Petit, Almunia, Jimeno and Lopez-Rodriguez, 2026).

⁵⁵ Using the Energy, Transport and Communications Regulation (ETCR) indicator, which captures the presence of regulatory barriers to competition in key sectors: electricity and natural gas, telecommunications and transport by air, rail and road. This indicator ranges between 0 (more competition-friendly regulatory framework) and 6 (more restrictive framework).

barriers in product markets, improving its regulatory index by 35% between 2013 and 2023.⁵⁶ This may, in principle, have contributed to a more efficient allocation of resources towards more productive firms.

- On the other, the University of Gothenburg's indicators on institutional quality (measured as citizens' perception of public service quality and impartiality)⁵⁷ show a less favourable performance for Spain, with a cumulative decline of around 4% in the period 2013-23.

The regional dimension of regulatory quality is especially important in Spain, as the regulatory density and complexity indicators show sustained increases and marked cross-region heterogeneity, amid an unclear distribution of powers across tiers of government and inadequate inter-administrative coordination mechanisms.

- Spanish regions have their own regulatory powers and, in recent years, have been particularly active in designing rules and legislation (Mora-Sanguinetti, 2022).⁵⁸ In this context, Lucio and Mora-Sanguinetti (2022) document substantial cross-region differences in the volume, legibility and interconnectedness of regulation, as well as a sustained increase in its complexity, which rose by around 34% between 2013 and 2017.⁵⁹ This suggests that regulatory compliance and adaptation costs may be elevated and not homogeneous across regions.
- However, the main issue does not lie in the decentralisation of powers per se. Rather, it stems from the high density and complexity of regulation resulting from the unclear and, at times, overlapping distribution of powers across different tiers of government within the constitutional framework, as well as from shortcomings in inter-administrative coordination mechanisms.
- This situation has led to a widening geographical divergence that reveals persistent shortcomings in institutional coordination and highlights the importance of clarifying remits, improving inter-administrative cooperation and reducing regulatory fragmentation, to strengthen Spain's market unity and the efficiency of its regulatory and institutional framework.
- Comparative international experience suggests that institutional decentralisation is compatible with simple and coherent regulatory frameworks when they provide for a clear

56 In addition, in the case of Spain, the OECD's indicator of employment protection legislation (EPL) shows a decline in protection during the recent period. Specifically, the EPL indicator improved by 8% between 2012 and 2019, declining from 2.45 to 2.25, suggesting hiring and firing conditions became more flexible for firms.

57 Specifically, its European Quality of Government Index, based on perceptions of survey respondents. Such perceptions may be influenced by factors such as media coverage, social expectations, recent experiences or the political context and should therefore be interpreted as a subjective measure of institutional quality. For more details, see Charron, Lapuente and Bauhr (2024).

58 In this respect, the empirical evidence suggests that greater regulatory intensity is negatively related to business dynamism at regional level (Mora-Sanguinetti and Pérez-Valls, 2021).

59 Similar developments can be observed in the quality of government indicators, with the cross-region dispersion having risen notably since 2013 (by around 40% up to 2023).

delimitation of powers and effective mechanisms of mutual recognition and inter-administrative coordination. Accordingly, the fragmentation observed in Spain does not appear to stem from the degree of decentralisation, but rather from how administrative regulation is structured across different tiers of government (Arnal, 2026).

Against this backdrop, the notable heterogeneity in allocative efficiency both across Spanish regions and in the broader European context underscores the importance of the regional dimension for a proper understanding of productivity dynamics at national level.

- Based on the analysis presented in this chapter, improvements in allocative efficiency (understood as the capacity to reallocate resources towards higher productivity firms within each sector) are considered the main factor behind the turnaround in Spanish TFP and have also been widespread across sectors and regions.⁶⁰
- However, the allocative efficiency metrics were still highly heterogeneous across the regions in each country within Europe in 2023, suggesting that the regional dimension is still a key determinant of the allocation of factors of production. Specifically, there are notable differences in the levels of allocative efficiency (even within a sector of activity) across regions in the same country, pointing to the coexistence of heterogeneous production environments under a single national institutional framework.⁶¹
- The regional dimension is key to explaining the variability in allocative efficiency in European countries, especially in the case of labour and in Spain. The findings show that, for capital, the sectoral dimension predominates, with the regional dimension playing a more limited role; for labour, by contrast, the regional dimension is more relevant than the sectoral one, particularly in Spain and Portugal (Chart 3.14.a).⁶²
- Overall, this evidence suggests that geographical frictions affect labour allocation more strongly than capital allocation, in line with Gorodnichenko, Revoltella, Svejnar and Weiss (2020), who use a similar approach to analyse the contribution of heterogeneity across EU countries and sectors. This points to the existence of frictions that hamper an efficient allocation of the factors of production (in particular, labour), even within countries that have nationally integrated markets. In the absence of such frictions, the marginal revenue products

60 From a long-term standpoint, the literature has underscored the role of the structural change across sectors (that is, the reallocation of resources between activities with different productivity levels) as a key determinant of aggregate productivity (Missos, Koratzanis and Rodousakis, 2025), complementing the intra-sector reallocation mechanisms observed over the last few years that are highlighted in this chapter.

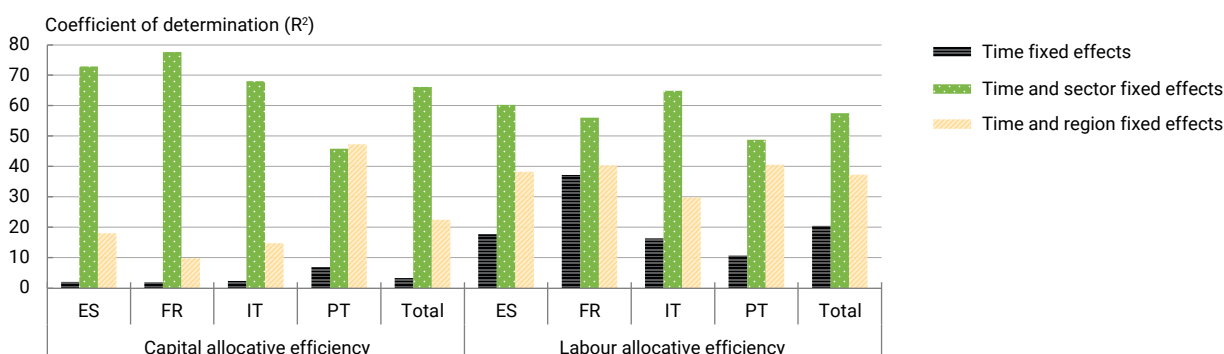
61 However, according to the empirical evidence at regional level, other aspects, in particular productivity per hour worked and the productive and sectoral structure, also play a key role in explaining geographical heterogeneity in productivity. In this respect, regional analysis highlights that differences in sectoral specialisation, internal composition of services and regional resilience during the economic cycle go a long way to explaining the divergent productivity dynamics observed across Spanish regions (Manera, Navinés Badal, Franconetti, Quetglas and Pérez-Montiel, 2026).

62 To determine the importance of the sectoral and regional dimensions as determinants of allocative efficiency, a regression is estimated at sector-region-year level (for each country), and the increase in the coefficient of determination (R^2) is compared when sector-year and region-year fixed effects (which capture the sectoral and regional dimensions, respectively) are added sequentially.

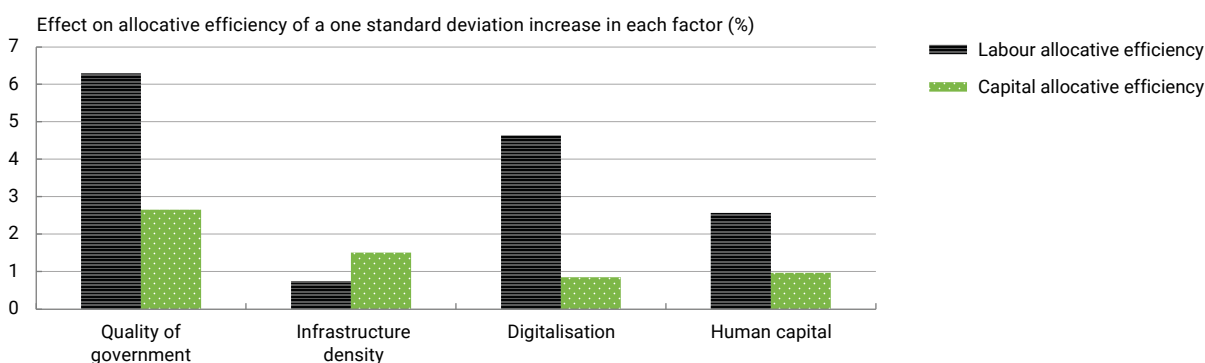
Chart 3.14

Regional factors are key to explaining the heterogeneity in allocative efficiency and productivity

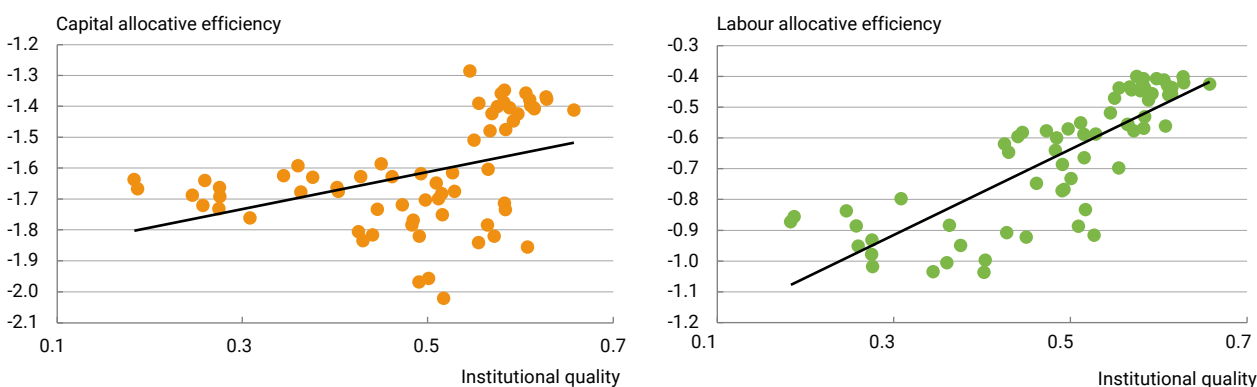
3.14.a Contribution of sector and region to variability in allocative efficiency (a)



3.14.b Factors correlated to greater allocative efficiency of resources at regional level (b)



3.14.c Relationship between allocative efficiency and institutional quality at regional level (c)



SOURCES: Orbis BvD, *European Quality of Government Index* (Charron, Lapuente and Bauhr, 2024), Eurostat and Banco de España.

- a The coefficient of determination (R^2) is the proportion of the variation in the dependent variable that is explained by the regression model. Results based on the analysis of the increase in R^2 in regressions where the dependent variable is the allocative efficiency of capital and labour for each sector-region-year. The regressors consist of different sets of fixed effects: time, time-sector and time-region.
- b Results from regressions in which the dependent variable is the allocative efficiency of capital and labour for each sector-region-year. Allocative efficiency is proxied by the dispersion of the marginal productivities of capital and labour, with the sign inverted so that lower (more negative) values indicate lower allocative efficiency (greater dispersion). The regressors are lagged by one year, and controls for GDP per capita and population, as well as sector-time and country fixed effects, are included. For interpretation and comparison purposes, increases in regional factors are measured in standard deviations, and the effects are expressed as a percentage of the average value of the dispersion of capital and labour in the sample.
- c Each observation in the chart corresponds to the time-sector average for each region. Allocative efficiency is proxied by the dispersion of the marginal productivities of capital and labour. Greater dispersion implies lower allocative efficiency (see the methodological annex). In these charts, the sign is inverted so that lower (more negative) values indicate lower allocative efficiency.



should be equal across regions in each sector, reducing regional heterogeneity in allocative efficiency metrics.

Regional differences in institutional quality also play an especially important role in explaining the heterogeneity in allocative efficiency across European regions.

- To identify the specific regional factors that help explain heterogeneity in allocative efficiency across European regions, a regression is estimated in which allocative efficiency is the dependent variable and the explanatory variables are regional indicators capturing various types of structural difference. These indicators act as proxies⁶³ for different factors, including institutional quality, the degree of regional digitalisation, the level of human capital and infrastructure density.⁶⁴
- The results show that institutional quality⁶⁵ has the largest effect and is the most robust of all the factors considered. According to these results, an improvement of one standard deviation in institutional quality is associated with allocative efficiency increasing by 3% for capital and by approximately 6% for labour (compared with rises of 4% in the case of digitalisation improvements, the factor with the second largest coefficient estimate) (Chart 3.14.b).
- In addition, when considering only the institutional quality variable, a positive relationship can be observed with the degree of allocative efficiency. In other words, higher institutional quality is associated with greater allocative efficiency and, therefore, higher productivity. In quantitative terms and from a purely statistical perspective, institutional quality on its own explains around 45% of the cross-region variability in the allocative efficiency of labour, compared with 7% in the case of capital (Chart 3.14.c).

In the case of Spain, regulatory fragmentation across regions and the absence of a fully integrated internal market may be constraining businesses' geographical expansion and warrant coordination initiatives such as "Regime 20".

- Spain's persistent internal regulatory barriers and the resulting absence of an effective single market have been a recurring concern, prompting a number of initiatives aimed at reinforcing internal market integration. These initiatives have notably included Law 20/2013 of 9 December 2013 (Law to Ensure Market Unity) and, more recently, Regime 20, which seeks

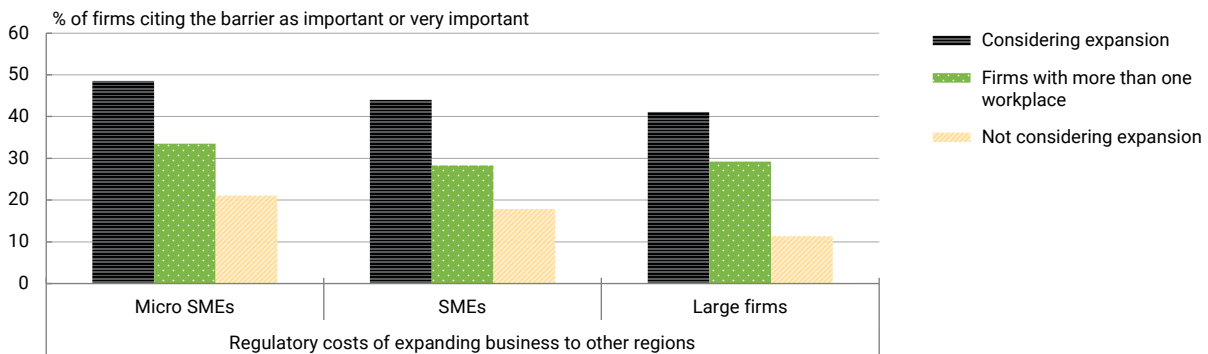
⁶³ Different regional indicators are used as proxies for these dimensions. Institutional quality is measured using the University of Gothenburg's European Quality of Government Index. Digitalisation is measured using the proportion of households with internet access (Eurostat). Infrastructure density is measured as the number of kilometres of railway track for every 10,000 inhabitants (Eurostat). Human capital is proxied by the higher education rate among those aged 18-24 (100 minus the early school leavers rate) (ARDECO).

⁶⁴ In addition, the regression controls for country and sector-time fixed effects, and for GDP per capita and population, to isolate the specific effect of the regional factors. All the independent variables are included with a lag, except for population. For more details, see the methodological annex.

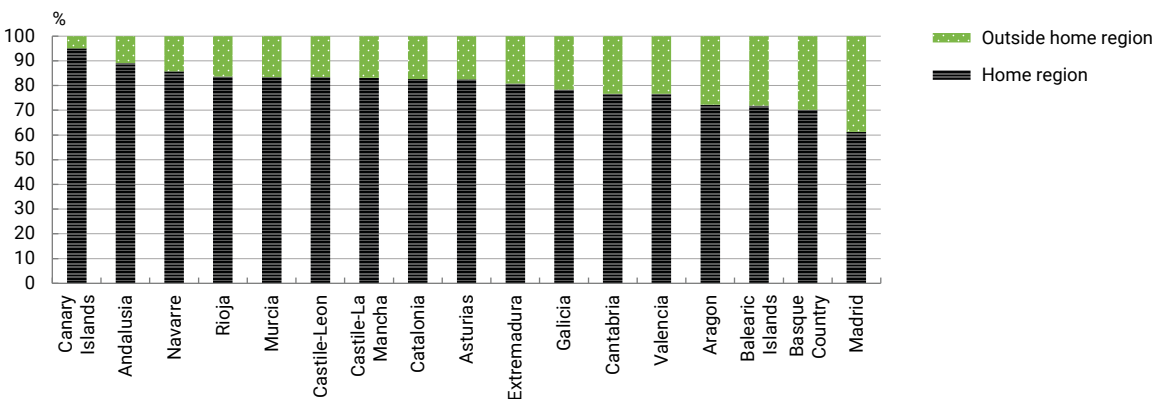
⁶⁵ The European Quality of Government Index measures citizens' perception of the quality and impartiality of public services, as discussed in Charron, Lapuente and Bauhr (2024).

Chart 3.15
Administrative barriers constrain firms' growth

3.15.a Barriers to firms' growth (a)



3.15.b Percentage of employment of multilocalised firms, by geographical location and region



SOURCES: INE and Banco de España.

a Results based on the following question: "Please rate the importance of the following barriers to your firm's growth - Regulatory costs of expanding business to other regions". Response options: "Very unimportant", "Unimportant", "Important", "Very important".



to pursue – by means of inter-administrative cooperation – the integration objectives previously sought by Law 20/2013,⁶⁶ after the principle of nationwide validity was annulled (for further details, see Lacuesta, Valkov and Vera, 2026).

- Data from the Banco de España Business Activity Survey (EBAE) indicate that firms perceive regulatory barriers as a significant obstacle to expansion outside their home region. Indeed, around half of SMEs considering an expansion of their activity cite the regulatory costs associated with operating in other regions (such as administrative duplication, permits or licences) as a significant barrier (Chart 3.15.a).

⁶⁶ In contrast to a prescriptive regulatory approach, Regime 20 is built around voluntary coordination among central, regional and local authorities, and fosters the identification of administrative barriers, the development of common solutions (such as standard regulation, administrative standards and best practice guidelines) and their gradual adoption by the competent authorities. Its ultimate aim is to reduce frictions from regulatory fragmentation and facilitate firms' geographical expansion, particularly in activities more sensitive to regulatory heterogeneity, without modifying the existing distribution of powers. For further details, see Consejo de la Productividad de España (2025).

- A more in-depth analysis of the decisions taken by Spanish firms on the geographical location of their employment can be conducted using the [Business Multilocalisation Viewer \(ViME\)](#), a new source of granular data on the location of business establishments.⁶⁷
- First, drawing on employment data for firms with multiple establishments (multilocalised companies), most workers of these firms are based in establishments within the home region, while employment in other regions is significantly lower. Thus, in most regions, over 80% of the employment of such firms is concentrated in the home region, reaching values of close to 95% in the Canary Islands and around 90% in Andalusia (Chart 3.15.b).
- Second, a marked difference can be observed in the location of employment by multilocalised companies between neighbouring municipalities when these are in different regions. Specifically, a comparison is made between the employment established by multilocalised companies in municipalities adjacent to the head-office municipality within the same region, with that established in a neighbouring municipality located in a different region.⁶⁸ The results show that, on average, the employment established by a firm in a neighbouring municipality is approximately 16% lower when that municipality is in a different region. Moreover, this difference rises to approximately 23% in the case of firms in the services sector, whose activities are especially sensitive to regulatory fragmentation issues, such as administrative duplication, permits or licences. This evidence is consistent with the presence of administrative barriers associated with regional boundaries, which may act as a constraint in firms' decisions about the geographical location of employment. This does not necessarily imply lower aggregate employment growth, but rather a different geographical distribution of establishments and employment that could dampen improvements in allocative efficiency.

4.2 The adoption of artificial intelligence as an opportunity to foster more buoyant business productivity

Looking ahead, business dynamics and productivity developments will hinge on firms' ability to adopt and harness advanced digital technologies, including artificial intelligence (AI).

- AI is emerging as a general-purpose technology with potentially extensive effects on efficiency and the organisation of production, although empirical evidence suggests that the productivity returns from AI are neither immediate nor uniform, since they require further investment in intangible capital, internal reorganisation and human capital, which may delay their aggregate impact (Brynjolfsson, Rock and Syverson, 2019).
- A large body of research also documents that the adoption and productivity benefits of AI are skewed towards larger, more capital-intensive companies which are better organised

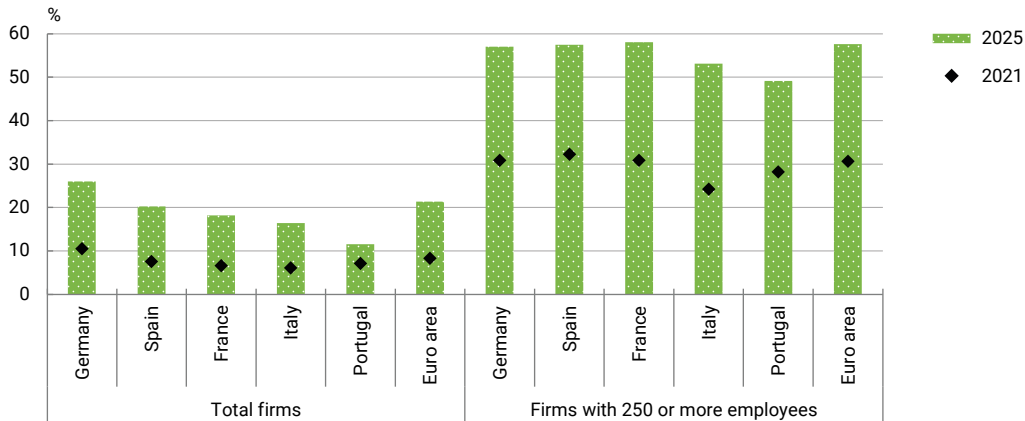
⁶⁷ ViME provides information on the number of staff and municipality of each firms' different establishments, for 2022-24 (for more details, see the methodological annex).

⁶⁸ This approach is inspired by the literature on international trade (Santamaría, Ventura and Yeşilbayraktar, 2020).

Chart 3.16

The percentage of firms using AI technologies has doubled in the period 2021-25, both in Spain and in other euro area countries. Over half of the AI adopters are very large firms with 250 or more employees

3.16.a Proportion of firms using AI (a)



SOURCE: Eurostat (ETICCE).

a Firms with 10 or more employees.



and have more data available, while SMEs face higher entry barriers. This pattern could widen productivity dispersion between large firms and SMEs, by limiting the aggregate impact of AI and amplifying existing differences in terms of efficiency and scale across firms (Baslandze et al., 2026).

- However, the latest evidence, based on the actual deployment of generative AI (GenAI), shows substantial productivity gains, with particularly pronounced effects for less experienced workers and firms, suggesting that AI plays a significant role in disseminating best practices (Brynjolfsson, Li and Raymond, 2025).⁶⁹
- In this context, analysing Spanish firms’ adoption of AI, its uses and the barriers to its implementation makes it possible to assess the extent to which these technologies can become a driver of aggregate productivity growth or, conversely, an additional factor of divergence across firms.

Spanish firms have increased their use of AI very significantly in recent years, in line with other euro area countries.

- According to the INE’s Survey on the Use of Information and Communications Technologies and E-Commerce in Enterprises (ETICCE), between 2021 and 2025 the proportion of firms in Spain with ten or more employees adopting AI technologies increased from 8% to 20% (Chart 3.16.a).⁷⁰

⁶⁹ Recent evidence from Europe indicates that the advantages of adopting AI are greater at firms subject to fewer financial constraints with better access to finance for the additional investment required, which underlines the role of financial conditions and competition in their productive effects coming to fruition (European Investment Bank, 2026).

⁷⁰ For more details on this database, see the Data sources annex.

- The upward trend in firms' AI adoption is also observed in other euro area countries, including Germany, France and Italy (Chart 3.16.a). In Germany, for example, the percentage of firms with ten or more employees using AI increased from 11% in 2021 to 26% in 2025 according to the ETICCE.
- Thus, in 2025, the percentage of firms with more than ten employees in Spain that used AI (20%) was in line with the euro area average (21%). In terms of specific countries, the percentage in Spain is slightly lower than in Germany (26%) and higher than in France, Italy and Portugal (18%, 17% and 12%, respectively) (Chart 3.16.a).
- According to other sources, such as the Banco de España Business Activity Survey (EBAE), the use of AI technologies in Spain has risen very significantly between 2024 and 2026,⁷¹ with widespread increases across firm sizes and branches of activity: the proportion of SMEs using AI has virtually doubled and it has been adopted by well over two-thirds of large firms. This confirms that these technologies have grown quickly across the productive sector.
- At the same time, the increase in AI use by Spanish firms between 2024 and 2026 has coincided with a broad-based reduction in the main obstacles to its adoption, especially among SMEs, with significant declines in the perceived importance of costs, shortages of skilled staff and legal uncertainty. This points to an increasingly favourable environment for the uptake of these technologies. Nevertheless, despite this positive trend, the shortage of workers with the necessary skills remains a relevant constraint for around half of the firms.

Firms adopting AI technologies are larger, more productive, more capital intensive and have a higher share of skilled workers. These differences have remained largely unchanged in recent years.

- Companies adopting AI technologies are, on average, larger. In particular, the median adopter employs 1.6 times more employees and generates almost twice as much value added as the median non-adopter (Table 3.4). Thus, more than half of AI adopters are large firms with 250 or more employees, both in Spain and in other euro area countries.
- The adopters are more capital intensive – their capital stock per employee is 17% higher – and they have higher TFP (Table 3.4). The median AI adopter has a lower share of labour in value added (the ratio of labour costs to value added is around 4 pp lower) and a larger share of highly skilled workers (above 8 pp more than non-adopters), which is consistent with an AI bias towards complex tasks that complement human capital.⁷²

71 Specifically, the EBAE results for 2026 Q1 are compared with those obtained in previous surveys (Fernández-Cerezo, Hidalgo and Izquierdo, 2026).

72 These results are obtained by combining the ETICCE micro data with those of the Banco de España's Central Balance Sheet Data Office along with data on employees registered with Social Security. This combination, provided by the ES_DataLab data laboratory, provides additional information for most of the companies included in the ETICCE (almost 65% of them). Moreover, these results are in line with the analysis of Aghion, Bunel, Jaravel, Mikaelson, Roulet and Sogaard (2025) for AI adopters in France.

Table 3.4
Characteristics of firms adopting AI technologies (a)

	Firms using AI technologies					Firms not using AI technologies					Firms that considered using AI but do not, due to a lack of expertise (b)		
	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025	2023	2024	2025
% of firms (c)	7.8	11.6	8.6	10.9	18.3						78.4	80.7	80.8
Employment (full-time equivalents)	28	26	34	29		17	18	19	19		21	28	
Value added (thousands of euro)	1,164	1,274	1,809	1,777	1,498	690	780	872	954	976	1,019	1,380	1,166
Labour productivity (thousands of euro/employee)	41.4	42.3	45.3	50.2	53.1	37.1	39.6	42.1	45.4	46.8	44.0	50.0	48.0
TFP log	1.6	1.5	1.4	1.6	1.4	-0.3	-0.1	-0.2	-0.1	0.1	0.5	0.1	0.1
Capital intensity (thousands of euro/employee)	24.8	20.6	17.3	17.7	19.6	17.2	16.4	15.9	17.5	17.0	20.0	22.0	16.0
Share of labour in value added	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Low-skilled employees (%)	5.3	7.2	6.1	5.0		14.0	14.7	16.6	16.1		10.2	9.5	
High-skilled employees (%)	9.0	8.3	8.3	9.5		1.7	1.6	2.0	1.3		7.7	5.2	
Firm age (years)	19	19	20	19	21	21	20	22	22	23	14	13	12

SOURCES: INE (ETICCE), Banco de España (Central de Balances) and Seguridad Social.

- a** The figures reported are the median values calculated using the sample weights of the INE's ETICCE. A sample of firms with ten or more employees, which is common to the ETICCE, the Central Balance Sheet Data Office and Social Security, is used. The Social Security data are available up to 2023.
- b** Includes the sample of firms that answers "Yes" to the question: "Has your firm ever considered using any of the AI technologies listed in the previous question?" and, furthermore, specifies that the reason for not using any of the AI technologies is: "lack of relevant expertise at the firm". These two questions are included in the survey as from 2022-23. The proportion of firms is calculated relative to the total firms that have ever considered using any of the AI technologies.
- c** The share of firms with ten or more employees using AI technologies in the ETICCE total sample is 8.4% (2021), 12% (2022), 9.1% (2023), 11.7% (2024) and 19.4% (2025).

- These differences between the companies adopting and not adopting AI technologies described above remained remarkably stable over the period 2021-25 (Table 3.4).

The areas where AI is used at Spanish companies mainly target improving operational efficiency, and the firms also perceive that AI adoption requires organisational changes and further investments in human capital.

- According to the ETICCE, Spanish firms concentrate their use of AI in specific and clearly defined areas covering sales and marketing, production processes and logistics, administration and security, and R&D activities. This is a clearly selective rather than broad-based pattern. AI is most commonly used in administrative and security processes, with around half of the adopters applying it in these areas, whereas only approximately 10% report using it simultaneously across all four areas, suggesting that AI adoption remains focused on specific uses rather than being integrated across the organisation.
- Drawing on the EBAE, AI adoption by Spanish firms responds primarily to internal improvement targets, rather than growth strategies, and is concentrated especially on enhancing the

quality and reliability of processes and on task automation, both in the case of predictive AI and GenAI. By contrast, motivations such as cost reduction, broadening product ranges or increasing output and sales carry relatively less weight. Additionally, these patterns are similar across SMEs and large firms, indicating that their use of AI is focused primarily on operational and organisational efficiency.

- Moreover, as reported by the EBAE, incorporating AI poses important organisational challenges, particularly in terms of training, internal reorganisation and task reallocation. Specifically, AI adoption is driving a significant increase in training needs, specialised recruitment and organisational change at firms, especially among large firms, where a large majority plan to improve their workforce training and recruit more highly skilled staff over the next three years, while these expectations are significantly lower among SMEs.

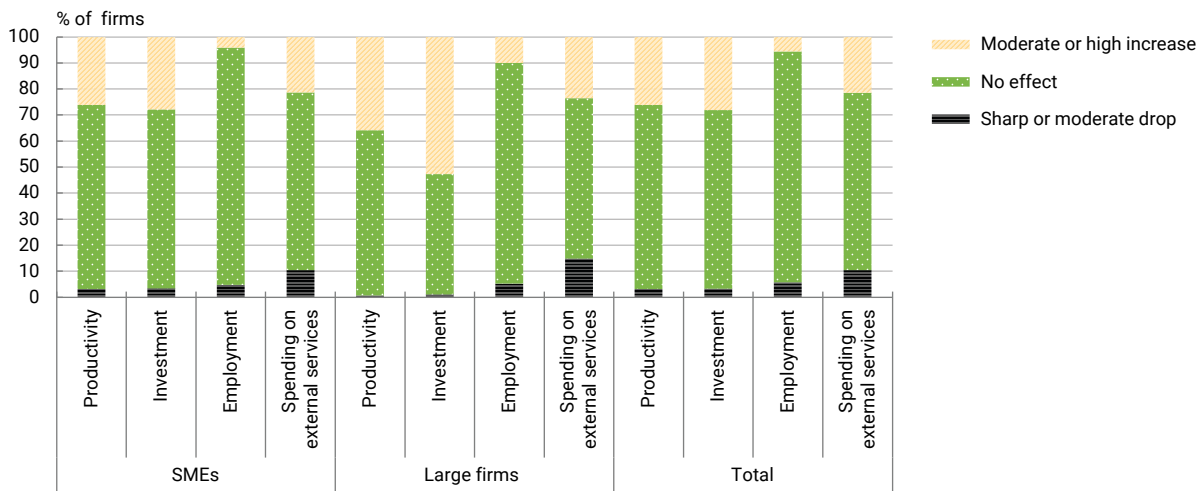
Spanish firms report that the effects on productivity and employment have been limited to date, although their medium-term expectations indicate that the effects already observed will intensify.

- According to the EBAE, the impact of AI adoption on employment has so far been limited. Most of the firms surveyed report that its introduction has had no significant effects in the last three years (close to 89%), while the percentage of firms that reduced or increased headcount was close to 6% in both cases (Chart 3.17.a).
- Turning to productivity, firms – especially larger firms – report having experienced positive effects. In particular, over 25% of firms report having seen productivity gains in this period, although they were somewhat lower at SMEs than at large firms. This difference could be related to smaller businesses being at a more incipient phase in the use of these technologies.⁷³
- As for the expected effects on employment over the next three years, while most SMEs do not expect changes in jobs associated with repetitive or routine tasks (83%), a high proportion of large firms anticipate reductions in this type of job (44%). By contrast, jobs with a higher analytical content could benefit, especially at large firms, where employment in this type of occupations is expected to increase by around 20%. Managerial posts would be the least affected by AI adoption (Chart 3.17.b).
- Over the next three years, large firms expect a greater positive impact on productivity than SMEs. Specifically, 61% of large firms expect productivity gains, as opposed to 27% of SMEs.
- However, it is still too early to identify the effects of AI on employment and productivity, due to the current limitations of available data and the dynamic nature of the technology adoption process. Investments in AI and the associated organisational changes tend to generate upfront costs that are immediately reflected, while their positive impacts on employment and productivity materialise with a lag, leading to a J-curve dynamic.

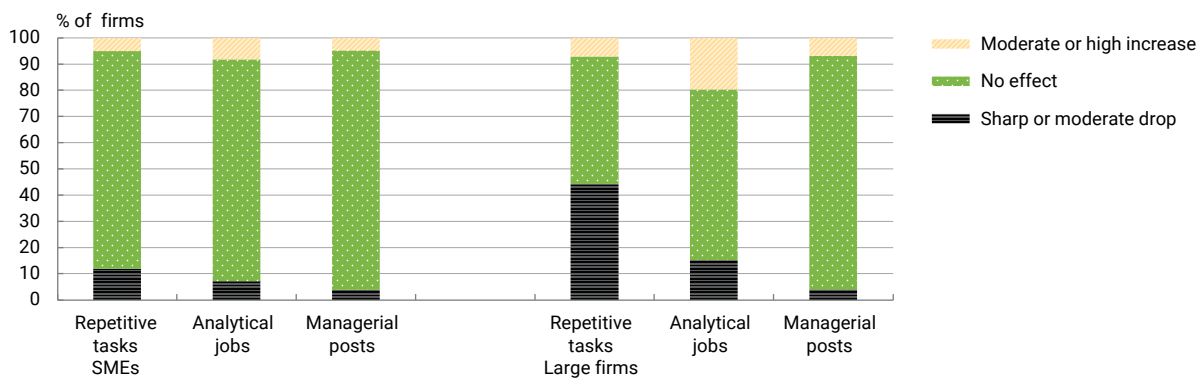
⁷³ Also, the impact in terms of spending on external services such as marketing agencies, translation services and legal advice is somewhat more uneven. Close to 21% of firms increased their spending and around 11% saw it decrease.

Chart 3.17
AI use has significant effects on employment and productivity

3.17.a Impact of AI in the last three years by size



3.17.b Perception of the change in the number of employees in different groups



SOURCE: Banco de España (EBAE).



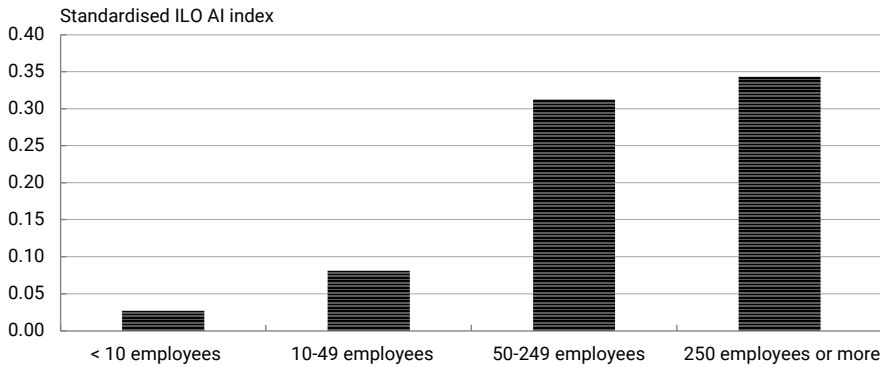
In any event, there is growing concern that youth employment, particularly in highly skilled segments, is more exposed to the disruptive effects of AI use.

- Unlike earlier technological innovations, which essentially automated routine tasks, GenAI is capable of producing text, code, images and creative content and, therefore, can replicate or assist with non-routine cognitive tasks traditionally associated with highly skilled occupations. Thus, highly skilled workers could be the most exposed to having a significant part of their tasks automated.
- Young people could also be particularly exposed to the disruptive effects of AI for two reasons: first, because firms tend to adjust their requirements more quickly through new hires and second, because young workers tend to occupy entry-level or support roles, which may include tasks that can be automated or assisted by AI.

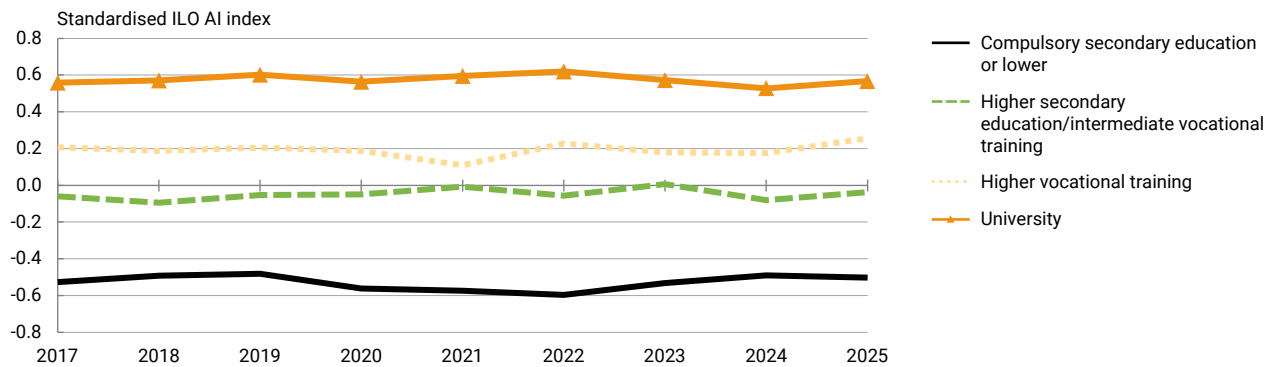
Chart 3.18

Exposure to AI among Spanish young people has remained stable in recent years, although it reveals strong heterogeneity by educational attainment level

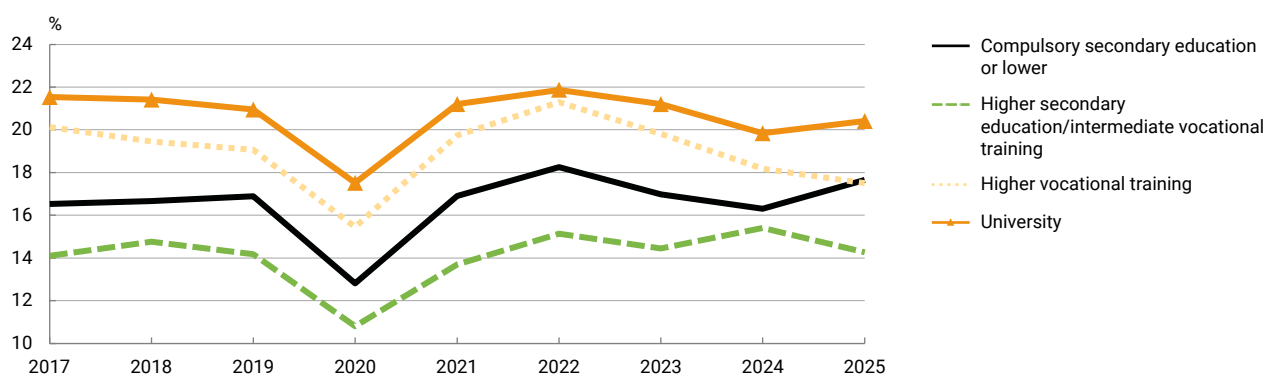
3.18.a Average exposure to AI among Spanish young people according to firm size in the period 2023-25 (a)



3.18.b Average exposure to AI among young people who have just started working by educational attainment level (b)



3.18.c Hiring rate of young people by educational attainment level (c)



SOURCES: INE, ILO and Banco de España.

- a The ILO 2025 index is standardised at occupation level (mean 0, variance 1) prior to it being merged with the micro data from the LFS annual subsample, using occupation as the linking variable. The average exposure of young employed people aged 20-28 who are working in each firm size category is calculated.
- b The ILO 2025 index is standardised at occupation level (mean 0, variance 1) prior to it being merged with the quarterly micro data of the LFS, using occupation as the linking variable. The annual average for each educational attainment level is calculated for employees aged 20-28 who have been in their job for half a year at most.
- c The hiring rate is defined as the percentage of young people aged 20-28 and of each educational attainment level who have been in their job for half a year at most relative to the total young people of that age group and educational attainment level.



- The available evidence on the potential impact of GenAI is recent, growing and still not conclusive.⁷⁴ On the one hand, some studies indicate the possible negative effects of the expansion of GenAI on youth employment (see, for example, Brynjolfsson, Chandar and Chen (2025) and Hosseini Maasoum and Lichtinger (2025)). On the other hand, other research finds it will have zero or even positive effects (see, for example, Humlum and Vestergaard (2025), Chandar (2025), Gimbel, Kinder, Kendall and Lee (2025)).

In the case of the Spanish labour market, there is still no significant impact on youth employment dynamics, although young people are notably exposed to GenAI.

- Exposure to GenAI among Spanish young people (aged 20-28) reveals strong heterogeneity by educational attainment level, field of studies and firm size.⁷⁵ In particular, exposure is significantly higher among university graduates or young people with higher education qualifications (especially in business, administration and law, followed by ICT), whereas young people who have completed compulsory secondary education, higher secondary education or intermediate vocational training are concentrated in less exposed occupations; higher vocational training occupies an intermediate, but still relatively elevated, position. Moreover, exposure clearly increases in proportion to firm size, it is lower at smaller firms and substantially higher at larger ones (Chart 3.18.a), a pattern consistent with the larger firms adopting more technology.
- As regards the occupational breakdown of new labour market entrants, average exposure to GenAI remains unchanged at all educational attainment levels, with no discernible break after GenAI emerged in 2022 (Chart 3.18.b). In particular, recently hired young university graduates (the most exposed group) continue to occupy jobs with a similar degree of exposure to that observed in previous years, suggesting that so far there has been no shift in new hires towards less exposed occupations. This is also borne out when analysing the composition of youth employment by firm size.
- As for the strength of hiring, the rate at which young people are hired according to educational attainment level does not point to a change of pattern attributable to the growth of GenAI as from 2022 (Chart 3.18.c). This would be consistent with the absence of a significant impact of GenAI on the recruitment of the young people most exposed to the adoption of AI by firms. However, this evidence is purely descriptive and should be interpreted with caution, as the possible effects of GenAI adoption may take longer to materialise, and there may be other factors driving aggregate developments in new hires by educational attainment level.

⁷⁴ Albanesi, Dias da Silva, Jimeno, Lamo and Wabitsch (2025) show that, before the widespread deployment of GenAI, between 2014 and 2019 European countries experienced a relative increase in occupations more exposed to AI, especially among young, skilled workers.

⁷⁵ For further details on the preparation of the GenAI exposure index, see the Methodological Annex.

5 Some concluding remarks

The increase in TFP is the main source of growth and convergence in GDP per capita with the euro area, especially in a future setting of demographic ageing (which is likely to weigh on the contribution of employment to per capita income growth).

As documented in this chapter, following a weak performance in the 2000s and the resulting opening up of a highly significant negative TFP gap vis-à-vis the euro area, the Spanish economy experienced a change in trend following the global financial crisis. Specifically, Spain's TFP has embarked on a path of convergence, which has also helped GDP per capita resume the convergence process with the rest of the euro area that had come to a halt before the onset of the financial crisis. However, uncertainty remains as to the structural or temporary nature of this improvement and, moreover, productivity growth in Spain would need to outpace that of the euro area for around 20 years (at rates similar to those observed since 2013) to fully close the negative gap existing since 2000, which highlights the scale of the challenge pending.

Against this background, the recent improvement in productivity and the allocation of resources across firms in Spain may stem from a diverse set of factors, many of which can be considered partly exogenous to public policy decisions, such as the reallocation of productive resources after the financial crisis and the pandemic, and global economic developments. However, it is highly likely that the raft of public policies and structural reforms implemented in the wake of the global financial crisis has also played a significant role. Some of them have shown a certain degree of institutional continuity over the past 15 years.

First, the restructuring of the financial system and the consolidation of the new regulatory and banking supervision framework have helped to correct the distortions in credit allocation that built up over the previous decade, leading to financing being channelled more efficiently towards more productive firms with higher growth potential.

Second, the labour market reforms of 2010, 2012 and 2021, with largely complementary effects, have contributed to facilitating internal adjustment mechanisms, reducing labour market duality and promoting both greater job stability and a more efficient reallocation of labour towards more productive uses and firms. These effects have been bolstered by developments in migration policies over the last decade, which have helped to mitigate certain labour supply constraints. In keeping with these developments, indicators relating to the degree of flexibility in the labour market suggest a noticeable improvement since 2010. Thus, the fact that these reforms have been maintained and not substantially reversed has helped to shape a more flexible, stable and predictable labour market regulatory framework for firms.

Third, since the global financial crisis and, more recently, with the launch of the Next Generation EU (NGEU) programme, there has been greater continuity and ambition in policies aimed at fostering digitalisation and innovation. This impetus, underpinned by Spain's high level of digital connectivity (the [DESI index](#) positions it among the leaders in Europe), has translated into

increased dynamism in investment in intangible assets and a sustained expansion of investment in R&D&I. Nevertheless, despite these advances, a significant negative gap persists relative to other European countries in terms of public and private investment drive, which continues to be one of the main remaining challenges, especially in the coming years, when the impetus from the NGEU will gradually fade.

It can be tentatively assumed from the above that policies fostering production factor mobility across firms, coupled with sufficient institutional stability and continuity over time, contribute to creating more flexible and certain rules of the game for economic decisions, that favours a more efficient allocation of factors of production and greater momentum in productivity. In any event, it should be noted that the relationship between the different policies and actual productivity developments should be interpreted with caution. Empirical identification of causal effects is complex, different policies interact with each other and many of them are rolled out gradually. Accordingly, it is worth noting that this chapter does not present a formal analysis of the causal link between the different policies and productivity developments.

Looking ahead, the scope for convergence with the euro area could taper off in the absence of new reforms and further advances in the area of public policies. It is therefore worth highlighting two areas where public policies could play a decisive role in fostering productivity growth. First, shortcomings in the quality of the regulatory framework and coordination across the different tiers of government, in a context of highly dense and fragmented regulations which are applied differently across geographical areas – with the housing market as a paradigmatic example (see Chapter 2 of this report) – constitute a bottleneck that constrains SME growth and the efficient allocation of resources. Second, significant mismatches persist between the human capital supplied by the education system and that demanded by firms, which are becoming increasingly important in a setting of rapid diffusion of AI, and within an institutional environment characterised by insufficient stability and consensus regarding education policy in Spain. Addressing these mismatches will be key to ensuring that AI adoption effectively translates into widespread productivity gains and complements employment, by facilitating the organisational changes and investments needed to enhance workers' skills.

Data sources annex

EUROPROD-UA is a database of TFP growth rates adjusted for factor quality, capacity utilisation and non-zero profits, developed by Comin, Quintana, Schmitz and Trigari (2025) and maintained by the Banco de España. It covers the five largest euro area countries (Germany, France, Spain, Italy and the Netherlands) which together account for approximately 80% of euro area GDP. It provides annual series from 1995 with sectoral breakdowns (of close to 25 industries in the corporate sector) and aggregated quarterly series since 1998.

The **Integrated Central Balance Sheet Database (CBI)** is the main source for microeconomic analysis in Spain, with economic and financial information on Spanish non-financial firms and groups. This database integrates both data reported directly by firms and information obtained from the Spanish Mercantile and Property Registrars' Association (CORPME), a collaborator of the Banco de España data laboratory (BELab). The resulting data set provides a homogeneous structured repository that supports the Banco de España's analyses and publications on the business sector. The inclusion of annual accounting data on Spanish non-financial corporations means that firm-level productivity, investment, employment and profitability series can be constructed as from 1995.

ORBIS Historical (Bureau van Dijk) is one of the most widely used business databases in academic economic research owing to its near-universal coverage: it aggregates standardised accounting information on more than 400 million companies worldwide and constructs representative firm-level samples across multiple countries with comparable variables. It also uses the mercantile registers in different countries as a primary source, which ensures international data consistency. Consequently, for Spain, Orbis uses exactly the same information source as the CBI, which guarantees consistency between the two databases regarding Spanish firms' accounting data. Its use is well established in the literature on productivity and resource allocation.⁷⁶ Orbis provides detailed information for each firm on value added, total compensation of employees, fixed assets, cost of materials, sector of activity and year of incorporation.⁷⁷ For the analysis, we used information from Spain, Germany, France, Italy, Belgium, Portugal and the Netherlands.

For the analysis of the regional dimension based on Orbis, and due to the need for good region-sector coverage in the various countries and years analysed, the period 2013-23 is considered for the Spanish, Italian, French and Portuguese economies. This selection responds to three criteria: (i) the four economies offer sufficient data coverage to construct precise measures of economic activity at the region-sector level; (ii) they display regional dynamics that broadly

76 See, for example, Gopinath, Kalemli-Özcan, Karabarbounis and Villegas-Sanchez (2017) and Kalemli-Özcan, Sørensen, Villegas-Sánchez, Volosovych and Yeşiltaş (2024).

77 The main advantage of Orbis vis-à-vis national administrative sources is that it compares countries using a uniform methodology, controlling for sectoral breakdown and firm size, which makes it particularly suitable for quantifying productivity gaps between Spain and the rest of the euro area. Its most widely known limitation is the uneven coverage across countries and the bias towards larger firms, although this is mitigated when the analysis focuses on economies where the obligation to deposit accounts is widespread, such as the European countries analysed in the report.

approximate the comparable macroeconomic aggregates of the European regional accounts compiled by Eurostat; and (iii) they are peer economies for which a direct comparison with Spain is particularly relevant.

The [Central Business Register \(DIRCE\)](#) managed by the INE provides information on business demography, including stocks of active firms broken down by size and sector, together with entry and exit rates. This source is used to analyse business birth and death dynamics based on both the aggregate data published on the website and the firm-level micro data file.

[Eurostat](#) provides harmonised data on value added by employee and the employment structure by firm size for the whole euro area which are habitually used for international comparisons. In addition, Eurostat's five-year business survival rates serve as a reference for assessing the dynamism of the productive system. The European Commission draws on Eurostat's information and has published detailed employment series by firm size since 2008.

The [Central Credit Register \(CCR\)](#) is an administrative database managed by the Banco de España, gathering detailed information on financial institutions' credit exposure to their customers that includes loans, credit, guarantees and other financial commitments. The CCR provides a comprehensive and consistent picture of the indebtedness of natural and legal persons vis-à-vis the Spanish financial system, drawing on the information reported monthly by the institutions. This database is a key tool for both the Banco de España's supervisory tasks and economic analysis, since it studies changes in access to credit, firms' financial exposure and financial transmission mechanisms. Its virtually universal coverage and high degree of disaggregation at debtor and entity level make the CCR a widely used source in research on financial constraints, business investment and financial stability in Spain.

The [Survey on the Access to Finance of Enterprises \(SAFE\)](#) is an essential reference for analysing the financial conditions of European non-financial corporations, especially small and medium-sized enterprises, which constitute the core of its sample. Conducted jointly by the European Central Bank and the European Commission, the survey collects direct information from around 11,000 firms on their recent financial situation, their financing needs, the sources used and their perception of the availability of external financing. Its common methodology and European coverage provide a uniform analysis of access to finance across countries and over time.

[BACH \(Bank for the Accounts of Companies Harmonized\)](#) is the main European reference for the comparative analysis of the economic and financial position of non-financial corporations, since it provides a harmonised data set from the central banks and central balance sheet data offices of 12 EU countries (Austria, Belgium, Croatia, France, Germany, Hungary, Italy, Luxembourg, Poland, Portugal, Slovakia and Spain). It comprises significant annual series of balance sheets, profit and loss accounts and ratios which are presented as both absolute and relative values, along with statistical distributions that characterise firm heterogeneity by activity and size. It was constructed through the collaboration of the ECCBSO (European Committee of Central Balance Sheet Data Offices), in which the Banco de España participates. The breakdown by more than 100 sectors and several firm sizes makes BACH a structured and homogeneous

repository that has underpinned European analyses of productivity, profitability, financial structure and business performance since 2000.

[iBACH \(Individual BACH\)](#) provides access to firm-level harmonised micro data that serve as the basis for the construction of the aggregate BACH statistics. These micro data are currently only available for a small group of countries (Austria, Belgium, France, Italy, Portugal, Slovakia and Spain).

The [Financial Accounts of the Spanish Economy \(FASE\)](#) are part of the system of national accounts and are the core reference for analysing the financial positions and flows of resident institutional sectors. This framework integrates information from multiple statistical and administrative sources, consistently reconstructing the financial assets and liabilities of households, corporations, general government and financial institutions, as well as the underlying transactions and revaluations. The harmonised structure of the FASE, with breakdowns by instrument and by counterpart sector, provides a systematic repository underpinning the Banco de España's analyses of the financing of the economy, the accumulation of financial wealth and cross-sector interlinkages.

[PitchBook](#) is an internationally renowned commercial database specialising in private capital markets, with a particular focus on venture capital and private equity. It provides highly granular information at firm, transaction and investor level, including funding rounds, amounts and valuations, investor types, investment dates, fund characteristics and exit events. The database covers a broad set of privately owned global companies and follows the full cycle of corporate financing, from the initial rounds of venture capital to acquisitions and IPOs. Thanks to its extensive coverage and standardised financial and investment information, PitchBook is a widely used source for both academic research and institutional analysis to study the role of venture capital in corporate financing, innovation and business growth.

The [Business Multilocalisation Viewer \(ViME\)](#) is a database developed and maintained by the Banco de España that analyses the territorial presence of firms in Spain based on their multi-location structure. ViME provides information on the geographical distribution of business activity across regions and provinces, differentiating between the location of firms' registered offices and their production facilities. This tool facilitates the study of the territorial dimension of the business sector and economic activity, as well as the analysis of spatial concentration, the geographical diversification of firms and the regional organisation of production, and is used to support the Banco de España's analyses of production structure and regional dynamics.

[Tenders Electronic Daily \(TED\)](#) is the EU's official public procurement database and is the electronic format of the EU's Supplement to the Official Journal of the European Union (OJEU) on public procurement procedures above specific contract value thresholds. Managed by the Publications Office of the European Union, TED comprehensively includes procurement, prior information and contract award notices published by Member States' public administrations. The database provides highly granular information at contract level, including the contracting authority, the subject matter and contract type, the award procedure, CPV codes, the estimated

and awarded value, the number of tenders received and the identity of the successful tenderer. Thanks to its harmonised coverage and standardised notice formats (eForms), TED performs comparable analyses of public procurement activity and the competitive intensity of award processes across countries and over time, and is a widely used source in economic research on public procurement, competition and resource allocation at European level.

The [Survey on the Use of Information and Communications Technologies and E-Commerce in Enterprises \(ETICCE\)](#), produced by the INE, supports the identification of AI-adopting firms. Specifically, firms that report using at least one of the AI technologies included in the survey, and that responded affirmatively (“yes”) to that question, are considered adopters. These technologies include, among others, text mining, language recognition and/or generation, image recognition, machine learning techniques, process automation and autonomous robotics. As a result of the availability of micro data integrated through the [ES_DataLab](#) initiative, it is possible to analyse, with a high level of disaggregation, the adoption of AI technologies by Spanish firms and its effects on productivity and employment. Specifically, the information from the ETICCE is integrated with the economic and financial data from the Central Balance Sheet Data Office and with detailed information on employment drawn from the Social Security system. This process of matching administrative and statistical sources, that is facilitated by the ES_DataLab data laboratory, provides additional information for most firms included in the survey (specifically for around 65% of them). Consequently, the characterisation of firms is significantly richer than that obtained exclusively from ETICCE micro data. The main variables of interest analysed include the total number of employees, the proportion of highly skilled workers, defined as those classified under social security contribution groups 1 and 2, and the degree of capital intensity, measured as the ratio of capital stock to the number of workers. The share of labour in value added, labour productivity, defined as the ratio of value added to the number of employees, and, finally, TFP are also examined. The latter is proxied by a production function that uses information on business earnings, labour costs and capital stock.

Methodological annex

Aggregate and sectoral TFP – Comin, Quintana, Schmitz and Trigari (2025)

Aggregate TFP is measured following the EUROPROD-UA methodology based on Comin, Quintana, Schmitz and Trigari (2025). Its main methodological change relative to standard growth accounting is threefold: it estimates unobserved fluctuations in factor utilisation based on capacity utilisation surveys, it measures factor elasticities as total cost shares rather than sales shares in order to incorporate the existence of positive profits and it constructs sectoral aggregation weights that are consistent with these assumptions. The basic data are from Eurostat, the Labour Force Survey (LFS), the Structure of Earnings Survey, the Valencian Institute of Economic Research (Ivie) and the European Commission's Business and Consumer surveys.⁷⁸

TFP in EUROPROD is measured exclusively for the market economy, excluding those sectors with high levels of public ownership (public administration (O), education (P) and healthcare (Q)), since a significant part of their output is non-commercial, i.e. there is no economically relevant price allowing a transaction to be observed. Similarly, the agricultural sector (A) is also excluded, due to its high volatility associated with external factors, as is the real estate activities sector (L), most of whose output relates to imputed rents, making it difficult to interpret productivity.

The sectoral series are constructed using a similar logic on an annual basis. Their contributions to aggregate TFP are calculated using the Baqaee and Farhi methodology (2020), which attaches weightings to the sectors according to their cost-based Domar weights. This weighting assigns more weight to upstream sectors in the production network, as productivity gains in these sectors spread more markedly.

Definition of enterprise size

According to the European Commission and the classification used at Eurostat (based on [Recommendation 2003/361/EC](#)), enterprises are grouped by number of employees as follows:

- Micro SMEs: fewer than ten employees.
- Small enterprise: between ten and 49 employees.
- Medium-sized enterprise: between 50 and 249 employees.
- Large enterprises: 250 or more employees.

⁷⁸ For more details, see the EUROPROD-UA [website](#).

Firm-level TFP – Wooldridge (2009)

TFP measures how efficiently a production unit transforms inputs – mainly capital and labour – into output. In formal terms, it is defined as the residual of a production function that relates a firm's output to its observable inputs, thus capturing the component not explained by factor accumulation and associated with elements such as technological efficiency, management quality and internal organisation. Estimating this magnitude requires identification of the parameters of that production function, which poses important methodological challenges, especially because of the possible simultaneity between factor use decisions and unobserved productivity.

Against this background, business TFP is estimated by assuming the Cobb-Douglas production function using the Wooldridge semi-parametric method (2009), which corrects the simultaneity bias between a firm's production inputs and its unobserved productivity. Intermediate inputs are used to proxy for unobserved productivity, which makes it possible to consistently identify the production function. The production-function parameters from which TFP is derived are estimated at the two-digit sector level.

Measurement of allocative efficiency – Hsieh and Klenow (2009)

Efficiency in the allocation of resources is measured on the basis of the theoretical framework of Hsieh and Klenow (2009). The starting point is the observation that, in a frictionless theoretical framework, the marginal revenue product of capital (MRPK) and the marginal revenue product of labour (MRPL) of firms operating with similar technologies in the same sector should be equal. Therefore, a greater dispersion of these marginal returns across firms in the same sector indicates that frictions prevent the efficient allocation of factors of production. Operationally, the MRPK is proxied as the logarithm of the ratio of value added to physical capital, and the MRPL as the logarithm of the ratio of value added to total wages. The dispersion is measured by the standard deviation of these indicators across firms within each country-sector-year.

This methodology has been applied in recent reports by the International Monetary Fund (IMF, 2022) to analyse allocative efficiency in advanced economies, in previous papers by the Banco de España (Fu and Moral-Benito, 2018) and in academic articles (Albrizio, González and Khametshin, 2026; and Gopinath, Kalemli-Özcan, Karabarbounis and Villegas-Sánchez, 2017, among many others), reflecting its acceptance as a standard tool for analysing the efficiency of resource allocation. However, this metric has certain limitations that need to be taken into account when interpreting the results. First, the approximation of marginal returns using accounting ratios is subject to measurement errors, stemming from both data quality and the allocation of factors of production. Second, the theoretical framework assumes homogeneous technologies within each sector, which may not reflect properly the actual technological heterogeneity across firms. Furthermore, imperfect competition, increasing returns to scale or differences in market structure may lead to dispersion in marginal returns without necessarily implying allocative inefficiency. Therefore, this metric should be interpreted with caution, as a

relative model-reliant measure which is useful for comparative analysis and time variation, but is not without uncertainty.

Extensive margin analysis (firm entry and exit)

The extensive margin analysis assesses the contribution that business births and deaths make to aggregate TFP dynamics. That contribution depends on two factors: market entry and exit rates, and productivity differentials between firms entering or exiting the market and incumbent firms. A firm is considered an entrant in the year it is created⁷⁹ and an exiter if there are no further observations in the Banco de España's database and the DIRCE's micro data identify it as an exiting firm. In addition, when the DIRCE's aggregate data are used, the entry (exit) rates are calculated as the ratio of total entrants (exiters) in year t to total active firms in $t-1$. Additionally, to proxy the contribution of entries and exits to aggregate TFP developments, the TFP trajectory of firms remaining in the database over the whole period is compared with aggregate TFP developments.

Determinants of heterogeneity in allocative efficiency across European regions

Following the approach of Gorodnichenko, Revoltella, Svejnar and Weiss (2020), Section 4 analyses the determinants of marginal productivity dispersion at region and sector level using regressions in which the dependent variable is the dispersion of the marginal productivity of labour and capital. These specifications include sector and region fixed effects sequentially so as to be able to assess the extent to which sectoral and regional differences help explain resource misallocation. The sectoral breakdown is done at activity level, and the regional aggregation corresponds to Eurostat's NUTS 2 classification. To identify the specific regional factors associated with poorer resource allocation, indicators with sufficient coverage for 2013-23 and having a potential economic link to allocative efficiency are selected. Given the high correlation among many of these variables and the uncertainty surrounding the appropriate specification, model averaging techniques⁸⁰ are used, applied by blocks of similar variables. Those indicators that remain relevant in both methods and in several specifications are retained. Subsequently, individual and joint regressions are estimated, controlling for population and GDP per capita. The explanatory variables are lagged by one year to reduce endogeneity, and the estimations include country and sector-time fixed effects.

Measurement of the degree of exposure of youth employment in Spain to GenAI

Exposure to GenAI is proxied by using the Global Index of Occupational Exposure to GenAI compiled by the International Labour Organisation (ILO) (Gmyrek et al., 2025), which quantifies

79 In any event, the main results remain stable in qualitative terms if firms are defined as entrants during their first three years of activity.

80 Weighted average least squares (WALS) and Bayesian model averaging (BMA) are used. These model averaging techniques are useful for addressing uncertainty about the appropriate specification when there are a large number of possible determinants which are highly correlated. See Magnus, Powell and Prüfer (2010) and Fernández, Ley and Steel (2001).

the average degree to which the tasks of each ISCO-08⁸¹ occupation could be automated by using GenAI tools. This index, based on assessments made with language models, worker surveys and expert validation, is neutral as to whether the technology replaces or complements workers: a higher value indicates that a larger proportion of their tasks have the potential to be performed or assisted by this technology.⁸² This index is then applied to youth employment in Spain using LFS micro data for the period 2017-25, which identify the occupation at the three-digit level according to the CNO-11 classification,⁸³ educational attainment level, field of study, job tenure and firm size.

81 ISCO-08 is the classification of occupations compiled by the ILO. It is structured into four hierarchical levels that enable a comparison of labour data across countries and facilitate studies on the labour market and skills. For more details, see <https://www.ilo.org/publications/international-standard-classification-occupations-2008-isco-08-structure>.

82 To link this index to the LFS, ISCO-08 is mapped to CNO-11, adjustments are made through direct assignments or weighted averages when an occupation corresponds to several categories. The index is then standardised to facilitate comparisons across groups (average zero and standard deviation one).

83 The CNO-11 is the INE's official classification that organises and codes the occupations reported in the LFS according to job type and skills required. For further details, see https://ine.es/daco/daco42/clasificaciones/cno11_notas.pdf.

References

- Aghion, Philippe, Simon Bunel, Xavier Jaravel, Thomas Mikaelson, Alexandra Roulet and Jakob Søgaaard. (2025). "How Different Uses of AI Shape Labor Demand: Evidence from France". *AEA Papers and Proceedings*, 115, pp. 62-67. <https://doi.org/10.1257/pandp.20251047>
- Albanesi, Stefania, António Dias da Silva, Juan F. Jimeno, Ana Lamo and Alena Wabitsch. (2025). "AI and Women's Employment in Europe". *AEA Papers and Proceedings*, 115, pp. 46-50. <https://doi.org/10.1257/pandp.20251044>
- Albrizio, Silvia, Beatriz González and Dmitry Khametshin. (2026). "A tale of two margins: Monetary policy and capital misallocation". *European Economic Review*, 185(105278). <https://doi.org/10.1016/j.euroecorev.2026.105278>
- Almunia, Miguel, and David Lopez-Rodriguez. (2018). "Under the Radar: The Effects of Monitoring Firms on Tax Compliance". *American Economic Journal: Economic Policy*, 10(1), pp. 1-38. <https://doi.org/10.1257/pol.20160229>
- Alves, Pana, Sergio Mayordomo and Manuel Ruiz-García. (2022). "Corporate financing in fixed-income markets: the contribution of monetary policy to lowering the size barrier". *Documentos Ocasionales*, 2209, Banco de España. <https://repositorio.bde.es/handle/123456789/23391>
- Arce, Óscar, Sergio Mayordomo and Ricardo Gimeno. (2021). "Making Room for the Needy: The Credit-Reallocation Effects of the ECB's Corporate QE". *Review of Finance*, 25(1), pp. 43-84. <https://doi.org/10.1093/rof/rfaa020>
- Arnal, Judith. (2026). "Diecisiete mercados en busca de unidad: el futuro del mercado interior español en manos de las Comunidades Autónomas". Colección Apuntes, 2026/08, Fedea. https://documentos.fedea.net/pubs/ap/2026/ap2026-08.pdf?utm_source=wordpress&utm_medium=actualidad&utm_campaign=estudio
- Arnold, Nathaniel G., Guillaume Claveres and Jan Frie. (2024). "Stepping Up Venture Capital to Finance Innovation in Europe". IMF Working Papers, WP/24/146, International Monetary Fund. <https://doi.org/10.5089/9798400280771.001>
- Asturias, Jose, Manuel García-Santana and Roberto Ramos. (2019). "Competition and the Welfare Gains from Transportation Infrastructure: Evidence from the Golden Quadrilateral of India". *Journal of the European Economic Association*, 17(6), pp. 1881-1940. <https://doi.org/10.1093/jeea/jvy039>
- Auria, Laura, Markus Bingmer, Carlos Mateo Caicedo Graciano, Clémence Charavel, Sergio Gavilá, Alessandra Iannamorelli, Aviram Levy, Alfredo Maldonado, Florian Resch, Anna Maria Rossi and Stephan Sauer. (2021). "Overview of central banks' in-house credit assessment systems in the euro area". *Occasional Paper Series*, 284, European Central Bank. <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op284~bbce5257bf.en.pdf>
- Autor, David, David Dorn, Lawrence F. Katz, Christina Patterson and John Van Reenen. (2020). "The Fall of the Labor Share and the Rise of Superstar Firms". *The Quarterly Journal of Economics*, 135(2), pp. 645-709. <https://doi.org/10.1093/qje/qjaa004>
- Banco de España. (2015). "Chapter 3. Growth and reallocation of resources in the Spanish economy". In Banco de España, *Annual Report 2014*, pp. 33-62. <https://repositorio.bde.es/handle/123456789/6247>
- Banco de España. (2023). "Chapter 2. Robust and sustainable growth and convergence with the euro area: challenges and opportunities". In Banco de España, *Annual Report 2022*, pp. 73-136. <https://repositorio.bde.es/handle/123456789/29663>
- Banco de España. (2024). "Chapter 2. Structural challenges facing the Spanish economy". In Banco de España, *Annual Report 2023*, pp. 91-159. <https://repositorio.bde.es/handle/123456789/36537>
- Banco de España. (2026). "Box 3.2. Analysis of the private credit market in Spain". In Banco de España, *Financial Stability Report. Spring 2026*, pp. 78-83. https://www.bde.es/f/webbe/Secciones/Publicaciones/InformesBoletinesRevistas/InformesEstabilidadFinancera/26/FSR_2026_1_Box3_2.pdf
- Banerjee, Ryan, and Kristian Blickle. (2021). "Financial frictions, real estate collateral and small firm activity in Europe". *European Economic Review*, 138(103823). <https://doi.org/10.1016/j.euroecorev.2021.103823>
- Baqae, David Rezza, and Emmanuel Farhi. (2020). "Productivity and Misallocation in General Equilibrium". *The Quarterly Journal of Economics*, 135(1), pp. 105-163. <https://doi.org/10.1093/qje/qjz030>
- Baslandze, Salomé, Zachary Edwards, John R. Graham, Ty McClure, Michael Sparks, Brent Meyer, Sonya Ravindranath Waddell and Daniel Weitz. (2026). "Artificial Intelligence, Productivity, and the Workforce: Evidence from Corporate Executives". Working Paper Series, 2026-4, Federal Reserve Bank of Atlanta. <https://doi.org/10.29338/wp2026-04>

- Basco, Sergi, David Lopez-Rodriguez and Enrique Moral-Benito. (2025). "House Prices and Misallocation: The Impact of the Collateral Channel on Productivity". *The Economic Journal*, 135(665), pp. 1-35. <https://doi.org/10.1093/ej/ueae075>
- Basu, Susanto, Luigi Pascali, Fabio Schiantarelli and Luis Serven. (2022). "Productivity and the Welfare of Nations". *Journal of the European Economic Association*, 20(4), pp. 1647-1682. <https://doi.org/10.1093/jeea/jvac002>
- Beck, Thorsten, and Asli Demirgüç-Kunt. (2006). "Small and medium-size enterprises: Access to finance as a growth constraint". *Journal of Banking & Finance*, 30(11), pp. 2931-2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009> <https://www.sciencedirect.com/science/article/pii/S0378426606000926>
- Beck, Thorsten, Asli Demirgüç-Kunt, Luc Laeven and Vojislav Maksimovic. (2006). "The determinants of financing obstacles". *Journal of International Money and Finance*, 25(6), pp. 932-952. <https://doi.org/10.1016/j.jimonfin.2006.07.005>
- Beck, Thorsten, Hans Degryse, Ralph De Haas and Neeltje van Horen. (2018). "When arm's length is too far: Relationship banking over the credit cycle". *Journal of Financial Economics*, 127(1), pp. 174-196. <https://doi.org/10.1016/j.jfineco.2017.11.007>
- Berger, Allen N., Leora F. Klapper and Gregory F. Udell. (2001). "The ability of banks to lend to informationally opaque small businesses". *Journal of Banking & Finance*, 25(12), pp. 2127-2167. [https://doi.org/10.1016/S0378-4266\(01\)00189-3](https://doi.org/10.1016/S0378-4266(01)00189-3)
- Berger, Allen N., and Gregory F. Udell. (1995). "Relationship Lending and Lines of Credit in Small Firm Finance". *The Journal of Business*, 68(3), pp. 351-381. <https://doi.org/10.1086/296668>
- Berger, Allen N., and Gregory F. Udell. (2006). "A more complete conceptual framework for SME finance". *Journal of Banking & Finance*, 30(11), pp. 2945-2966. <https://doi.org/10.1016/j.jbankfin.2006.05.008>
- Berger, Allen N., Richard J. Rosen and Gregory F. Udell. (2007). "Does market size structure affect competition? The case of small business lending". *Journal of Banking & Finance*, 31(1), pp. 11-33. <https://doi.org/10.1016/j.jbankfin.2005.10.010>
- Blanco, Roberto, Miguel García-Posada, Sergio Mayordomo and María Rodríguez-Moreno. (2024). "Access to credit and firm survival during a crisis: The case of zero-bank-debt firms". *Journal of Financial Intermediation*, 59(101102). <https://doi.org/10.1016/j.jfi.2024.101102>
- Bolton, Patrick, Xavier Freixas, Leonardo Gambacorta and Paolo Emilio Mistrulli. (2016). "Relationship and Transaction Lending in a Crisis". *The Review of Financial Studies*, 29(10), pp. 2643-2676. <https://doi.org/10.1093/rfs/hhw041>
- Bongini, Paola, Annalisa Ferrando, Emanuele Rossi and Monica Rossolini. (2021). "SME access to market-based finance across Eurozone countries". *Small Business Economics*, 56(4), pp. 1667-1697. <https://doi.org/10.1007/s11187-019-00285-z>
- Brynjolfsson, Erik, Bharat Chandar and Ruyu Chen. (2025). "Canaries in the Coal Mine? Six Facts about the Recent Employment Effects of Artificial Intelligence". Stanford Digital Economy Lab. https://digitaleconomy.stanford.edu/wp-content/uploads/2025/11/CanariesintheCoalMine_Nov25.pdf
- Brynjolfsson, Erik, Danielle Li and Lindsay Raymond. (2025). "Generative AI at Work". *The Quarterly Journal of Economics*, 140(2), pp. 889-942. <https://doi.org/10.1093/qje/qjae044>
- Brynjolfsson, Erik, Daniel Rock and Chad Syverson. (2019). "Artificial Intelligence and the Modern Productivity Paradox: A Clash of Expectations and Statistics". In Ajay Agrawal, Joshua Gans and Avi Goldfarb (eds.), *The Economics of Artificial Intelligence*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226613475.003.0001>
- Cáceres, Esther, Martin Farias, Gianmarco Ruzzier and Clara Xu. (2025). "Analysis of the private credit market in Spain". *Financial Stability Review - Banco de España*, 49, Autumn. https://www.bde.es/f/webbe/GAP/Secciones/Publicaciones/InformesBoletinesRevistas/RevistaEstabilidadFinanciera/25/1_FSR49_Credito.pdf
- Caggese, Andrea, Vicente Cuñat and Daniel Metzger. (2019). "Firing the wrong workers: Financing constraints and labor misallocation". *Journal of Financial Economics*, 133(3), pp. 589-607. <https://doi.org/10.1016/j.jfineco.2017.10.008>
- Chandar, Bharat. (2025). "Tracking Employment Changes in AI-Exposed Jobs". https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5384519
- Charron, Nicholas, Victor Lapuente and Monika Bauhr. (2024). "The Geography of Quality of Government in Europe: Subnational variations in the 2024 European Quality of Government Index and Comparisons with Previous Rounds". QoG Working Paper Series, 2024(2), Department of Political Science, University of Gothenburg. <https://www.gu.se/en/quality-government/qog-data/data-downloads/european-quality-of-government-index>
- Comin, Diego, Javier Quintana, Tom Schmitz and Antonella Trigari. (2025). "Revisiting Productivity Dynamics in Europe: A New Measure of Utilization-Adjusted TFP Growth". *Journal of the European Economic Association*, 23(4), pp. 1598-1633. <https://doi.org/10.1093/jeea/jvaf003>

- Consejo de la Productividad de España. (2025). *I Informe del Consejo de la Productividad de España. Crecimiento de la productividad: situación, distribución y el papel de la inversión y de la regulación de los mercados de productos*. <https://portal.mineco.gob.es/RecursosNoticia/mineco/prensa/noticias/2026/I-informe-anual-CPE.pdf>
- Czarnitzki, Dirk, Gastón P. Fernández and Christian Rammer. (2023). "Artificial intelligence and firm-level productivity". *Journal of Economic Behavior & Organization*, 211, pp. 188-205. <https://doi.org/10.1016/j.jebo.2023.05.008>
- De Fiore, Fiorella, and Harald Uhlig. (2015). "Corporate Debt Structure and the Financial Crisis". *Journal of Money, Credit and Banking*, 47(8), pp. 1571-1598. <https://doi.org/10.1111/jmcb.12284>
- De Loecker, Jan, Jan Eeckhout and Gabriel Unger. (2020). "The Rise of Market Power and the Macroeconomic Implications". *The Quarterly Journal of Economics*, 135(2), pp. 561-644. <https://doi.org/10.1093/qje/qjz041>
- Dejuan Bitría, Daniel. (2026). "El proceso de desapalancamiento de las sociedades no financieras españolas en el período 2007-2024". Documentos Ocasionales, Banco de España. Forthcoming.
- European Central Bank. (2021). "Key factors behind productivity trends in EU countries". Occasional Paper Series, 268, European Central Bank. <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op268~73e6860c62.en.pdf>
- European Investment Bank. (2026). "AI adoption, productivity and employment: Evidence from European firms". EIB Economics Working Papers, 2026/02, European Investment Bank. <https://doi.org/10.2867/1772538>
- Fernández, Carmen, Eduardo Ley and Mark F. J. Steel. (2001). "Model uncertainty in cross-country growth regressions". *Journal of Applied Econometrics*, 16(5), pp. 563-576. <https://doi.org/10.1002/jae.623>
- Fernández-Cerezo, Alejandro, Ignacio Hidalgo and Mario Izquierdo. (2025). "Adoption of artificial intelligence in Spanish firms: an initial analysis based on the Banco de España Business Activity Survey". *Economic Bulletin - Banco de España*, 2025/Q2, 06. <https://doi.org/10.53479/39725>
- Fu, Chenxu, and Enrique Moral-Benito. (2018). "The evolution of Spanish total factor productivity since the global financial crisis". Documentos Ocasionales, 1808, Banco de España. <https://repositorio.bde.es/handle/123456789/8776>
- García-Santana, Manuel, Enrique Moral-Benito, Josep Pijoan-Mas and Roberto Ramos. (2020). "Growing like Spain: 1995-2007". *International Economic Review*, 61(1), pp. 383-416. <https://doi.org/10.1111/iere.12427>
- García-Santana, Manuel, and Marta Santamaría. (2024). "Governments' Home Bias and Efficiency Losses: Evidence from National and Subnational Governments". CEPR Discussion Paper Series, 19256, Centre for Economic Policy Research. <https://cepr.org/publications/dp19256>
- Gavilá, Sergio, Alfredo Maldonado and Antonio Marcelo. (2020). "The Banco de España in-house credit assessment system". *Financial Stability Review - Banco de España*, 38, Spring, pp. 95-122. <https://repositorio.bde.es/handle/123456789/13555>
- Ghosh, Jayati. (2021). "Interrogating the holy grail of productivity growth". *Real-World Economics Review*, 96, pp. 119-126. <https://www.paecon.net/PAEReview/issue96/Ghosh96.pdf>
- Gimbel, Martha, Molly Kinder, Joshua Kendall and Maddie Lee. (2025). "Evaluating the Impact of AI on the Labor Market: Current State of Affairs". The Budget Lab at Yale. <https://budgetlab.yale.edu/research/evaluating-impact-ai-labor-market-current-state-affairs>
- Giovanni, Julian di, Manuel García-Santana, Priit Jeenas, Enrique Moral-Benito and Josep Pijoan Mas. (2025). "Buy Big or Buy Small? Procurement Policies, Firms' Financing, and the Macroeconomy". Staff Reports, 1006, Federal Reserve Bank of New York. https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr1006.pdf?sc_lang=en
- Gmyrek, Pawel, Janine Berg, Karol Kamiński, Filip Konopczyński, Agnieszka Ładna, Balint Nafradi, Konrad Rosłaniec and Marek Troszyński. (2025). "Generative AI and jobs: a refined global index of occupational exposure". ILO Working Papers, 140, International Labour Organization. <https://doi.org/10.54394/HETP0387>
- Gompers, Paul, and Josh Lerner. (2001). "The Venture Capital Revolution". *Journal of Economic Perspectives*, 15(2), pp. 145-168. <https://doi.org/10.1257/jep.15.2.145>
- González, Beatriz, Enrique Moral-Benito and Isabel Soler. (2023). "Schumpeter meets Goldilocks: the scarring effects of firm destruction". *SERIEs*, 14, pp. 555-577. <https://doi.org/10.1007/s13209-023-00273-3>
- Gopinath, Gita, Şebnem Kalemli-Özcan, Loukas Karabarbounis and Carolina Villegas-Sanchez. (2017). "Capital Allocation and Productivity in South Europe". *The Quarterly Journal of Economics*, 132(4), pp. 1915-1967. <https://doi.org/10.1093/qje/qjx024>

- Gorodnichenko, Yuriy, Debora Revoltella, Jan Svejnar and Christoph T. Weiss. (2020). "Resource Misallocation in European Firms: The Role of Constraints, Firm Characteristics and Managerial Decisions". NBER Working Paper Series, 24444, National Bureau of Economic Research. <https://www.nber.org/papers/w24444>
- Guner, Nezih, Eduardo Gutiérrez, Enrique Moral-Benito and Alessandro Ruggieri. (2026). "The Rise and Fall of Misallocation: From Firms to Aggregate Productivity in Spain 2003-2023". Mimeo, Banco de España.
- Guntin, Rafael, and Federico Kochen. (2025). "The Origins of Top Firms". CEMFI Working Papers, 2516, Centro de Estudios Monetarios y Financieros. https://ideas.repec.org/p/cmfi/wpaper/wp2025_2516.html
- Gutiérrez, Eduardo, Alberto Marcos-Fernández, Enrique Moral-Benito and Rubén Veiga-Duarte. (2026). "Las fuentes del crecimiento en España y las principales economías europeas: productividad total de los factores y heterogeneidad sectorial". Documentos Ocasionales, Banco de España. Forthcoming.
- Hall, Thomas W. (2012). "The collateral channel: Evidence on leverage and asset tangibility". *Journal of Corporate Finance*, 18(3), pp. 570-583. <https://doi.org/10.1016/j.jcorpfin.2011.12.003>
- Hosseini Maasoum, Seyed Mahdi, and Guy Lichtinger. (2025). "Generative AI as Seniority-Biased Technological Change: Evidence from U.S. Résumé and Job Posting Data". SSRN. <https://doi.org/10.2139/ssrn.5425555>
- Hsieh, Chang-Tai, and Peter J. Klenow. (2009). "Misallocation and Manufacturing TFP in China and India". *The Quarterly Journal of Economics*, 124(4), pp. 1403-1448. <https://doi.org/10.1162/qjec.2009.124.4.1403>
- Humlum, Anders, and Emilie Vestergaard. (2025). "Still waters, rapid currents: Early labor market transformation under generative AI". NBER Working Paper Series, 33777, National Bureau of Economic Research. <https://doi.org/10.3386/w33777>
- International Monetary Fund. (2022). "Spain Country Report: Selected Issues". IMF Country Report, 23/34, International Monetary Fund. https://www.astrid-online.it/static/upload/imf_/0000/imf_spain_selected-issue_1_23.pdf
- Kalemli-Özcan, Şebnem, Bent E. Sørensen, Carolina Villegas-Sanchez, Vadym Volosovych and Sevcan Yeşiltaş. (2024). "How to Construct Nationally Representative Firm-Level Data from the Orbis Global Database: New Facts on SMEs and Aggregate Implications for Industry Concentration". *American Economic Journal: Macroeconomics*, 16(2), pp. 353-374. <https://doi.org/10.1257/mac.20220036>
- Kaplan, Steven N., and Josh Lerner. (2010). "It Ain't Broke: The Past, Present, and Future of Venture Capital". *Journal of Applied Corporate Finance*, 22(2), pp. 36-47 <https://doi.org/10.1111/j.1745-6622.2010.00272.x>
- Kortum, Samuel, and Josh Lerner. (2000). "Assessing the contribution of venture capital to innovation". *RAND Journal of Economics*, 31(4), pp. 674-692. <https://web.mit.edu/rgibbons/www/venture.capital.pdf>
- Lacuesta, Aitor, María Valkov and Micol de Vera. (2026). "Un análisis de los mecanismos de protección de los operadores económicos establecidos por la Ley de garantía de la unidad de mercado". Documentos Ocasionales, 2609, Banco de España. <https://doi.org/10.53479/43005>
- Levine, Ross. (2005). "Finance and Growth: Theory and Evidence". NBER Working Paper Series, 10766, National Bureau of Economic Research. <https://www.nber.org/papers/w10766>
- Li, Shaojin, Toni M. Whited and Yufeng Wu. (2016). "Collateral, Taxes, and Leverage". *The Review of Financial Studies*, 29(6), pp. 1453-1500. <https://doi.org/10.1093/rfs/hhw008>
- López-Espinosa, Germán, Sergio Mayordomo and Antonio Moreno. (2017). "When does relationship lending start to pay?". *Journal of Financial Intermediation*, 31, pp. 16-29. <https://doi.org/10.1016/j.jfi.2016.11.001>
- Lucio, Juan de, and Juan S. Mora-Sanguinetti. (2022). "Drafting 'better regulation': The economic cost of regulatory complexity". *Journal of Policy Modeling*, 44(1), pp. 163-183. <https://doi.org/10.1016/j.jpolmod.2021.10.003>
- Magnus, Jan R., Owen Powell and Patricia Prüfer. (2010). "A comparison of two model averaging techniques with an application to growth empirics". *Journal of Econometrics*, 154(2), pp. 139-153. <https://doi.org/10.1016/j.jeconom.2009.07.004>
- Manera, Carles, Ferran Navinés Badal, Javier Franconetti, Miquel Quetglas and José A. Pérez-Montiel. (2026). "Regional outlook on labor productivity in Spain, 2000-2022". Documentos Ocasionales, 2605, Banco de España. <https://doi.org/10.53479/42546>
- Missos, Vlassis, Nastos Koratzanis and Nikolaos Rodousakis. (2025). "Structural change and productivity growth: empirical insights for the EU27". *Economía Política*, 43, pp. 37-64. <https://doi.org/10.1007/s40888-025-00385-y>

- Mora-Sanguinetti, Juan S. (2022). "Las cuatrocientas mil normas de la democracia española. Cuantificación e impacto de la complejidad normativa de España". *Revista de las Cortes Generales*, 114, pp. 231-253. <https://doi.org/10.33426/rcg/2022/114/1722>
- Mora-Sanguinetti, Juan S., and Ricardo Pérez-Valls. (2021). "How does regulatory complexity affect business demography? Evidence from Spain". *European Journal of Law and Economics*, 51, pp. 203-242. <https://doi.org/10.1007/s10657-020-09650-w>
- Moral-Benito, Enrique. (2018). "Growing by learning: firm-level evidence on the size-productivity nexus". *SERIEs*, 9, pp. 65-90. <https://doi.org/10.1007/s13209-018-0176-2>
- Osoimehin, Sophie, and Francesco Pappadà. (2017). "Credit Frictions and The Cleansing Effect of Recessions". *The Economic Journal*, 127(602), pp. 1153-1187. <https://doi.org/10.1111/ecoj.12319>
- Petersen, Mitchell A., and Raghuram G. Rajan. (1994). "The Benefits of Lending Relationships: Evidence from Small Business Data". *The Journal of Finance*, 49(1), pp. 3-37. <https://doi.org/10.1111/j.1540-6261.1994.tb04418.x>
- Petit, Borja, Miguel Almunia, Juan F. Jimeno and David Lopez-Rodriguez. (2026). "Firm Entry and the TFP Paradox of Productivity-Dependent Distortions". Mimeo. https://borjapetit.github.io/files/papers/2026_tfpparadox.pdf
- Rajan, Raghuram G., and Luigi Zingales. (1995). "What Do We Know about Capital Structure? Some Evidence from International Data". *The Journal of Finance*, 50(5), pp. 1421-1460. <https://doi.org/10.1111/j.1540-6261.1995.tb05184.x>
- Santamaría, Marta A., Jaume Ventura and Uğur Yeşilbayraktar. (2020). "Borders within Europe". NBER Working Papers, 28301, National Bureau of Economic Research. <https://doi.org/10.3386/w28301>
- Schiantarelli, Fabio. (1996). "Financial constraints and investment: methodological issues and international evidence". *Oxford Review of Economic Policy*, 12(2), pp. 70-89. <https://doi.org/10.1093/oxrep/12.2.70>
- Scott, Jonathan A., and William C. Dunkelberg. (2003). "Bank Mergers and Small Firm Financing". *Journal of Money, Credit and Banking*, 35(6), pp. 999-1017. <https://www.jstor.org/stable/3649868>
- Tengulov, Angel. (2026). "The Value of Borrowing Diversity: Evidence from the Financial Crisis of 2007-2009". SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2361401
- Thomadakis, Apostolos. (2025). "Learning from Sweden: a blueprint for building resilient European capital markets". CEPS In-Depth Analysis, 2025-07, Centre for European Policy Studies. <https://cdn.ceps.eu/wp-content/uploads/2025/06/2025-07-CEPS-Swedish-capital-markets.pdf>
- Wooldridge, Jeffrey M. (2009). "On estimating firm-level production functions using proxy variables to control for unobservables". *Economics Letters*, 104(3), pp. 112-114. <https://doi.org/10.1016/j.econlet.2009.04.026>

Box 3.1

A DESCRIPTION OF SPANISH FIRMS' RETURN ON PRODUCTIVE CAPITAL

Business profits and profitability levels play a key role in economic developments, as they are the driver of new productive investments. When companies report profits and maintain suitable profitability levels, they have the resources to reinvest in their operations, improve their infrastructure, drive innovation in products and services and increase their competitiveness. This reinvestment capacity is essential for business growth and thus for job creation and the economic development of society. Moreover, a business environment with comparatively appealing profitability levels attracts new domestic and foreign investors looking for investment opportunities. This virtuous circle promotes new project development, the diversification of the productive system and better quality standards and improved social well-being. This box analyses the return on firms' productive capital in the period 2000-24 and the heterogeneity underlying these dynamics, in order to identify the more profitable types of firms and sectors with greater growth potential, as well as their weaker and more vulnerable counterparts.

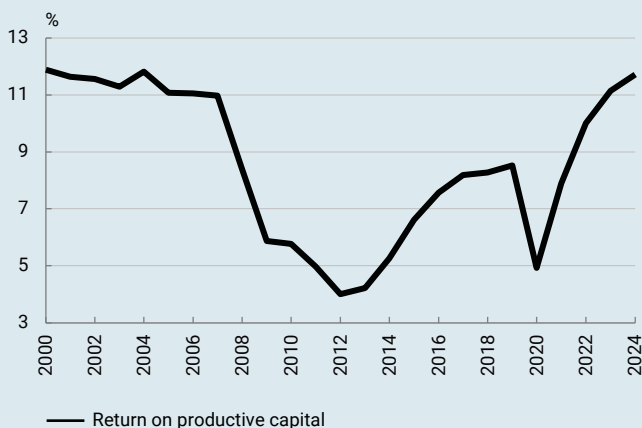
Additionally, Spanish firms' profitability is compared with that of firms in some European countries. Lastly, the box analyses the degree to which profitability influences business investment decisions in the period analysed.

The return on productive assets can be calculated in different ways, which may differ depending on the analytical approach adopted. This box uses one of the most common definitions which is, moreover, consistent with economic theory. Specifically, return on productive capital is measured as the ratio of ordinary profit (excluding financial revenue)¹ to productive assets, defined as tangible and intangible assets (excluding financial assets) and inventories.²

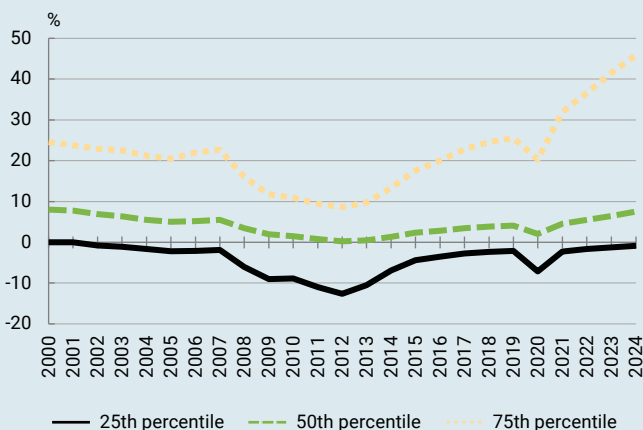
Drawing on this definition, Chart 1.a shows aggregate profitability from 2000 to 2024 for the whole sample of the Integrated Central Balance Sheet Database (CBI).³ There are five clearly different sub-periods. Initially, profitability levels remained notably stable at around 12% until 2007. Subsequently, as a result of the global financial crisis

Chart 1
Description of Spanish firms' return on productive capital

1.a Aggregate developments (2000-24)



1.b Distribution by percentile



SOURCE: Banco de España (CBI) and BACH.

- 1 Ordinary profit is all ordinary revenue relating to the firm's productive activity minus the expenses required to perform that activity (including the depreciation of tangible and intangible assets). Financial income (mainly interest and dividends) is excluded, since the financial transactions of some non-financial corporations do not constitute their core business. For this reason, holding and parent companies have also been excluded.
- 2 This definition is compatible with other approximations of business profitability, such as that used in Chapter 3 of this report, where the numerator of this ratio is profit or loss for the year (after tax) and the denominator is total assets. This box focuses on the ordinary return on productive assets, excluding financial assets.
- 3 The CBI is a sample containing annual information on nearly 900,000 non-financial corporations. It is highly representative, although somewhat biased towards larger companies.

Box 3.1

A DESCRIPTION OF SPANISH FIRMS' RETURN ON PRODUCTIVE CAPITAL (cont'd)

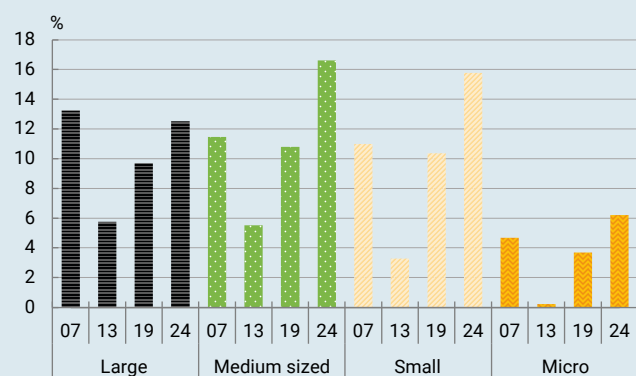
business profitability declined sharply, bottoming out at around 4% in 2012. Its gradual recovery from 2013 onwards was halted by the impact of the pandemic in 2020, which triggered a sharp decline in that year. Next, a fresh period of growth began, which pushed the return on productive capital back to 12% in 2024 (according to the latest available information), on a par with its pre-financial crisis level.

Aggregate profitability developments sum up suitably the average performance in the corporate sector. However, this shared pattern coexists with high cross-firm

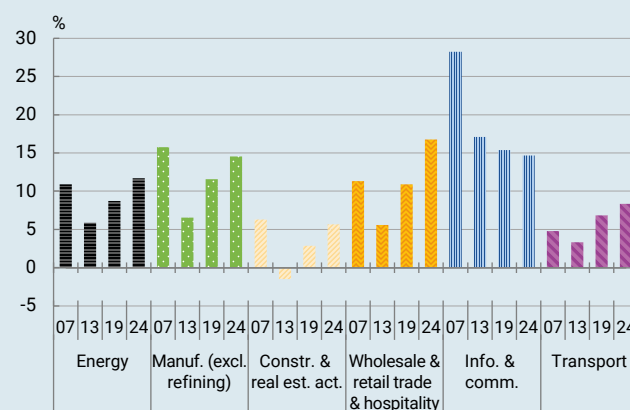
heterogeneity that is evident when analysing the distribution of profitability, as measured by the 25th, 50th and 75th percentiles. Thus, the pattern observed is very similar to that of the aggregate ratio, although the median firm has somewhat lower profitability levels, while the 25th and 75th percentiles depict sharper changes (Chart 1.b). Likewise, profitability has been more dispersed in recent years, suggesting that the profitability gap between the most profitable firms (75th percentile) and those at the lower end of the distribution (25th percentile) has widened in the recent period.

Chart 2 Spanish firms' return on productive capital. Breakdown by size, sector and productivity quintile

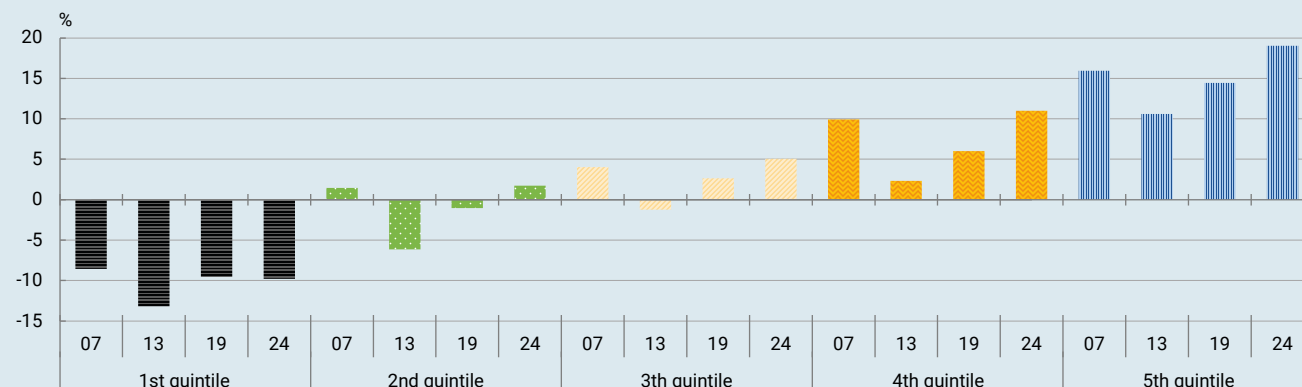
2.a Breakdown by size (a)



2.b Breakdown by sector



2.c Breakdown by TFP quintile (b)



SOURCES: Banco de España (CBI) and BACH.

- a Enterprise size is defined according to Commission Recommendation 2003/361/EC which classifies enterprises as microenterprises, small, medium-sized or large based on staff numbers, turnover and balance sheet total.
- b The quintiles are calculated each year by sector (CNAE two-digit code). TFP is calculated by firm-level production functions using the Wooldridge method (2009).

Box 3.1
A DESCRIPTION OF SPANISH FIRMS' RETURN ON PRODUCTIVE CAPITAL (cont'd)

The analysis by sector and size shows that the level of the ratio varies considerably, although it performs similarly over time. The breakdown by size shows that microenterprises are systematically the segment with the lowest profitability. Meanwhile, the largest firms – the most profitable at the beginning of the period analysed – had already been overtaken by small and medium-sized enterprises before the pandemic started. However, this difference is amplified notably in the post-pandemic period, when profitability recovered particularly strongly at small and medium-sized enterprises (Chart 2.a).⁴ By sector, the return on capital differs notably, with relatively high figures in manufacturing, wholesale and retail trade and hospitality, and information and communication services. Over time, the latter would be the only sector not to follow the general pattern as a result of its continually declining profitability levels (Chart 2.b). This appears to be the result of the profound changes in this sector in the period analysed, which have led to a progressive narrowing of its margins against a backdrop of appreciable increases in its productive capital.⁵ Also, profitability in the wholesale and retail trade and hospitality sector in the most recent period has risen notably to around 50% higher than its levels in the period 2000-07.⁶

Furthermore, when firms are classified by productivity levels, clearly different behaviours can also be observed.⁷ Thus, Chart 2.c, which shows the profitability of firms by productivity quintile, reveals that more productive firms have higher profitability levels. Likewise, the general pattern observed over time is similar to that of the aggregate ratio, except for in the first quintile, which includes the least productive firms. This group not only records consistently negative values, but also performs less favourably than the other groups, with the result that its profitability in 2024 deteriorated slightly relative to that

recorded in 2019. Equally, there is a noticeably stronger recovery in profitability at firms in the highest quintiles (the most productive firms) in the recent period, suggesting that after the global financial crisis and, particularly, the pandemic, the positive relationship between a more efficient allocation of resources and higher profitability appears to have intensified.

Furthermore, when comparing the return on capital in Spain and in certain neighbouring economies – Portugal, France, Italy and Belgium – similar cross-country patterns emerge, although the return on capital fluctuates to different degrees. Thus, initially the levels of return on productive capital varied noticeably and were higher in France and Belgium – at around 14% – in 2007 (Chart 3). However, this cross-country gap has been narrowing significantly, prompting return on productive capital to converge with the result that they ranged from approximately 10% to 12% in 2024 in the five countries analysed.

Finally, the relationship between the return on capital and the probability of firms recording zero or positive net investment was analysed by estimating a linear probability model that controls for other typical determinants of investment, such as debt burden, indebtedness, sales growth and TFP, as well as for year and firm fixed effects. The results in Chart 4 show a positive and statistically significant correlation between firms' profitability in the previous year and their investment decisions that has intensified in the most recent period (2013-24) and appears to have been reflected across all firm sizes. Overall, these findings confirm that return on capital is an important determinant of firms' investment decisions and has played a particularly significant role in the post-global financial crisis recovery phase, by contributing to the expansion of productive activity.

4 Enterprise size is defined according to Commission Recommendation 2003/361/EC, which classifies enterprises as microenterprises, small enterprises, medium-sized enterprises or large firms based on staff numbers, turnover and balance sheet total.

5 The liberalisation of the telecommunications sector between 2000 and 2024 had a significant impact on its profitability. In addition, the usual measures of return on productive assets were affected by a succession of significant mergers and corporate restructuring, which appears to have inflated intangible assets through substantial goodwill, and by the large infrastructure investments required by the new technologies introduced. See, for example, Emanuele Tarantino, Chiara Atzeni, Chiara Cirignaco, Dominik Erharter and Hans Zenger. (2026). "An analysis of the EU telecom sector's ability to remunerate its cost of capital". VoxEU Column, 29 January.

6 After the pandemic, the wholesale and retail trade sector and, particularly, the hospitality sector have seen a gradual increase in margins amid elevated demand, which would largely explain the higher profitability of these firms. For more details, see the regular reports of *Observatorio de Márgenes Empresariales*.

7 Firms are classified as more or less productive based on their relative total factor productivity (TFP) position according to their sector each year, as defined by the Spanish National Classification of Economic Activities (CNAE) two-digit code. This means that firms in each quintile and year may be different. TFP is calculated by estimating firm-level production functions using the Wooldridge method (see M. Wooldridge (2009). "On estimating firm-level production functions using proxy variables to control for unobservables". *Economics Letters*, 104(3), pp. 112-114).

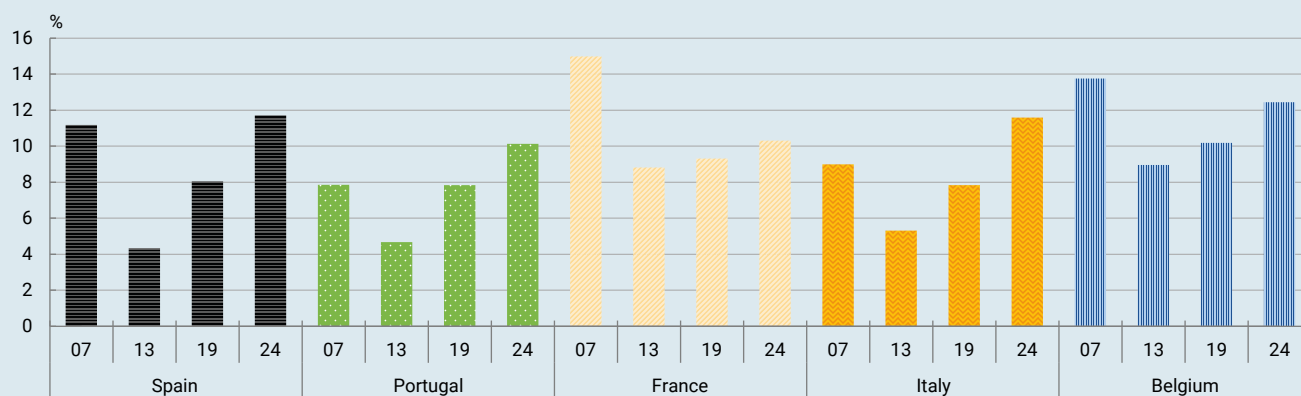
Box 3.1

A DESCRIPTION OF SPANISH FIRMS' RETURN ON PRODUCTIVE CAPITAL (cont'd)

In short, aggregate return on productive capital moves in line with the different phases in the business cycle and in recent years has stood at similar levels to their pre-financial crisis ones. However, while this analysis is necessary to understand developments in the corporate sector as a whole, it should be supplemented by other analyses that take into account the heterogeneity of this sector. This box addresses some of these aspects and reveals, for example, that smaller and less productive firms seem to have

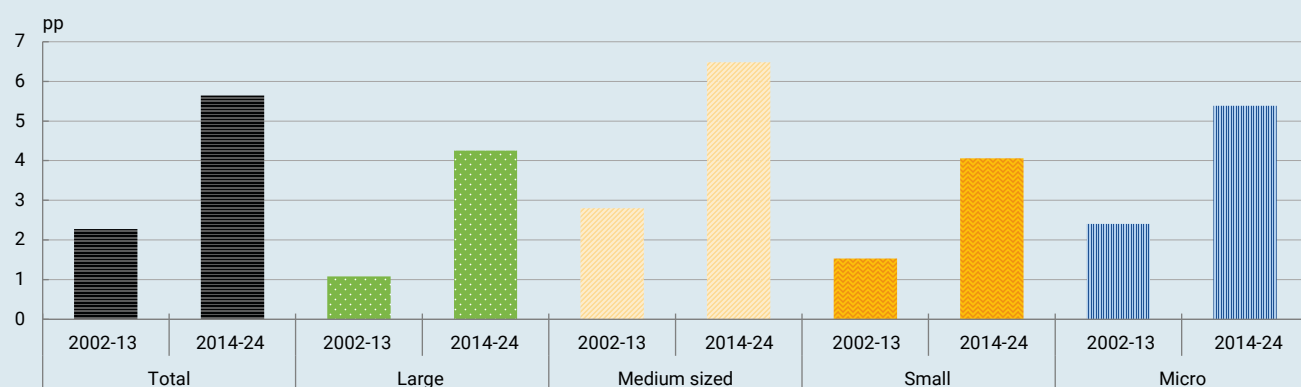
systematically recorded lower return on capital, that the gap between the most and least profitable firms seems to have widened in recent years, and that there are significant differences in levels of return on productive capital across sectors and neighbouring countries in Europe. Lastly, the regression analysis conducted in this box confirms that there is a positive correlation between firms' profitability and their propensity to invest, which has also intensified in the most recent period.

Chart 3
International comparison of return on productive capital



SOURCES: Banco de España (CBI) and BACH.

Chart 4
Relationship between business profitability in a given year and the probability of recording positive net investment in the subsequent year (a)



SOURCES: Banco de España (CBI) and BACH.

a Marginal impacts obtained by estimating a linear probability model using the fixed effects method for the period 2000-24 (excluding 2020) with standard errors adjusted and clustered at firm level. However, since information up to the two years immediately before is required to construct the explanatory variables, the estimation begins in 2002. The estimation is made using CBI data. All the regressions control for sector, year and firm size. The variable which has to be explained takes a value of one if the net investment is greater than or equal to zero and a value of zero in the opposite case. The explanatory variables are profitability, debt burden, indebtedness, year-on-year sales growth and TFP, all of which are lagged. The coefficients are interpreted as the change in the probability of investing (in pp) in response to a one unit change in profitability. These coefficients, except in the case of large and medium-sized firms in the period 2002-13 are significant at 5%.

Box 3.2
THE BANCO DE ESPAÑA IN-HOUSE CREDIT ASSESSMENT SYSTEM

The Banco de España has an in-house credit assessment system (ICAS) called ICAS BE,¹ designed to assess the credit quality of public and private Spanish non-financial corporations (hereafter, firms).

Role in Eurosystem monetary policy

ICAS BE ratings are primarily used within the Eurosystem's monetary policy framework, specifically in relation to collateral. In particular, the ICAS BE is the main credit assessment source used by monetary policy counterparties to determine whether loans extended to Spanish firms meet the minimum credit quality requirement to be eligible as collateral in Eurosystem refinancing operations. The ICAS BE thereby supports collateral availability for financial institutions, ultimately contributing to a more efficient transmission of monetary policy to the real economy.

The ICAS BE's importance as a rating source in the Eurosystem's collateral framework has grown markedly in recent years,² as reflected in the growth in the share of non-marketable assets pledged by Spanish counterparties, which rose from 25% in 2022 to 37% in 2025. Similarly, the percentage of banks using the ICAS BE as their main rating source when pledging non-marketable assets has risen by more than 20 percentage points, to over 40% in 2025.³

Rating system typology

The ICAS BE comprises two distinct rating systems, which differ primarily in the type of firms assessed and whether an analyst is involved in the rating process.

The Full-ICAS (F-ICAS BE) is used for large firms (around 600 in total) and combines a statistical model with an expert model, enabling case-by-case assessments by specialist analysts. The Statistical-ICAS (S-ICAS BE), meanwhile, is aimed at SMEs and provides ratings for approximately 900,000 firms through a fully automated process that requires no analyst involvement.

The systems were also launched at different moments in time. The F-ICAS BE has been used as an accepted rating

source within the Eurosystem collateral framework since the late 1990s. The S-ICAS BE, on the other hand, is more recent, having been authorised in 2020 as part of the measures approved by the Eurosystem in response to the COVID-19 crisis.

Both rating systems draw on a broad set of data sources. These notably include the economic and financial data contained in firms' financial statements, along with information from the Banco de España's Centralised Credit Register (CCR), which, among other aspects, provides details on firms' bank loan repayment behaviour.

Rating scale

The ICAS BE assessment process produces a credit rating for each firm using a master scale comprising 21 rating categories. Each category corresponds to a range of probabilities of default (PDs) over a one-year horizon, meaning it can be directly mapped to the harmonised credit quality steps (CQS) scale established for the Eurosystem collateral framework (Table 1). For example, an ICAS BE rating of 5+ is associated with a PD of between 0.40% and 0.77%. This maps to CQS 4 on the Eurosystem scale, whose PD ranges from 0.40% to 1%.

Predictive power for default risk

Since each credit rating is associated with a PD over a one-year horizon, these PDs can be compared with the default rates observed over the subsequent 12 months. For SMEs, the ICAS BE has consistently proven highly effective at sorting and quantifying firms' default risk. This is illustrated in Chart 1.a, which shows for each rating class the actual default rates between 2019 and 2025 for SMEs rated by the ICAS BE (solid line), together with the PD range predicted a year earlier, defined by its minimum and maximum values (broken lines).

In particular, two key aspects are evidenced. First, the ICAS BE correctly sorts firms by their default risk, given the monotonically increasing relationship between risk classes and default rates:⁴ lower ratings translate into higher default rates in the following 12 months. Second,

1 For a more detailed description of the ICAS BE and its rating system, see Sergio Gavilá, Alfredo Maldonado and Antonio Marcelo. (2020). "The Banco de España in-house credit assessment system". *Financial Stability Review - Banco de España*, 38, pp. 95-122.

2 Sergio Gavilá, Lola Morales and Rafael Vivó. (2025). "The role of loans and the ICAS BE in the Eurosystem's collateral framework in 2025". *Economic Bulletin - Banco de España*, 2025/Q3, 02.

3 On data at April 2025, a total of 17 banks pledge non-marketable assets, of which 14 use the ICAS BE, with seven using it as their main rating source.

4 The definition of default used aligns with the requirements for ICASs and is based on Article 178 of Regulation (EU) No 575/2013 (CRR). For more information on the ICAS definition of default, see Aria et al. (2021). "Overview of central banks' in-house credit assessment systems in the euro area". *Documentos Ocasionales*, 2131, Banco de España.

Box 3.2

THE BANCO DE ESPAÑA IN-HOUSE CREDIT ASSESSMENT SYSTEM (cont'd)

Table 1

Correspondence between ICAS BE risk categories, PDs and Eurosystem CQS

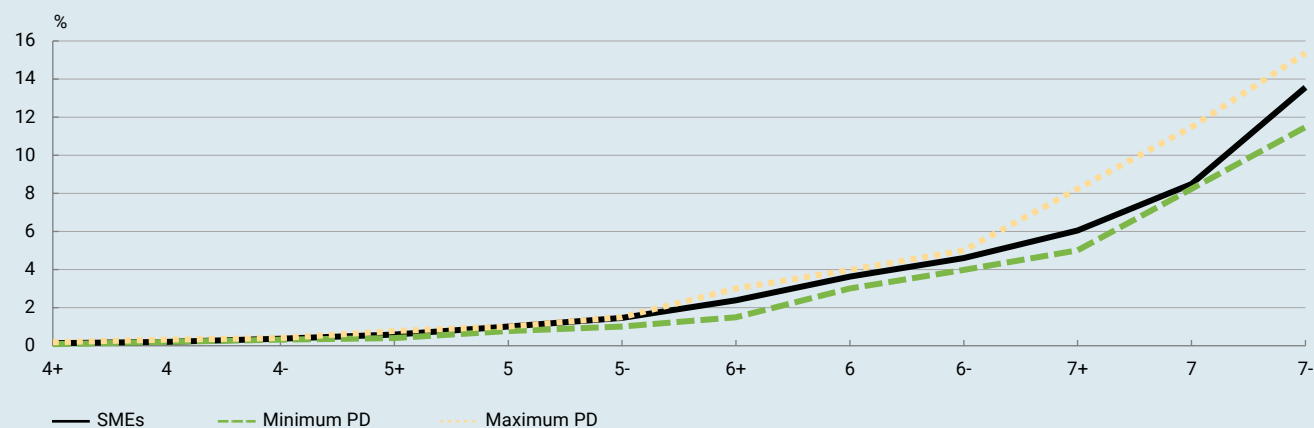
ICAS BE credit rating	CQS						
	1 and 2	3	4	5	6	7	8
	(PD ≤ 0.10%)	(0.10% < PD ≤ 0.40%)	(0.40% < PD ≤ 1.00%)	(1.00% < PD ≤ 1.50%)	(1.50% < PD ≤ 3.00%)	(3.00% < PD ≤ 5.00%)	(PD > 5.00%)
	1, 2+, 2, 2-, 3+, 3 and 3-	4+, 4 and 4-	5+ and 5	5-	6+	6 and 6-	7+, 7, 7-, 8 and D

SOURCE: Banco de España.

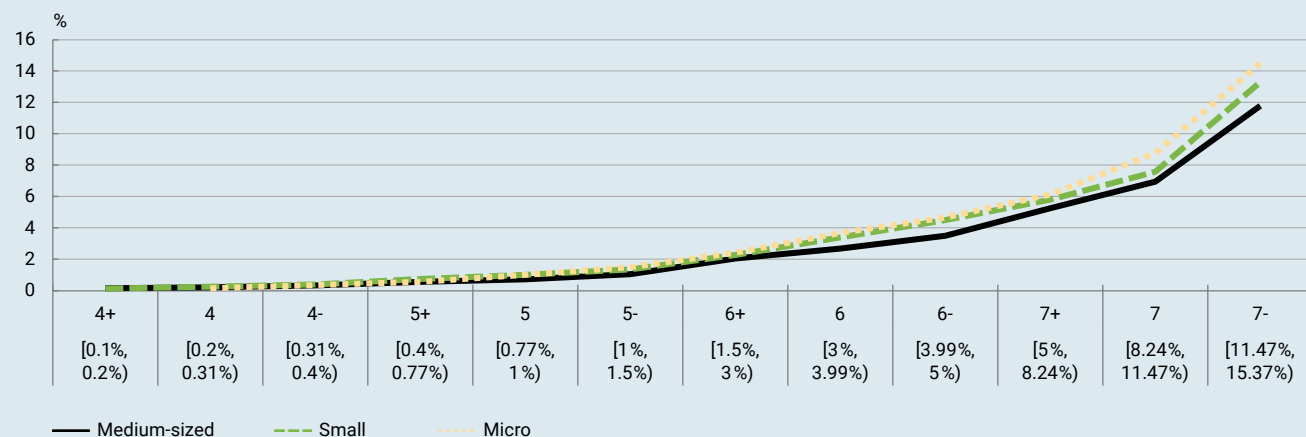
Chart 1

Association between credit rating and the PD observed over the next 12 months

1.a SME default rates, by ICAS BE rating (a) (b)



1.b Default rates, by SME size and ICAS BE rating (a) (b)


SOURCE: Banco de España.

a SMEs are defined as firms with fewer than 250 employees (see methodological annex to Chapter 3 of this report).

b The definition of default used aligns with the requirements for ICASs and is based on Article 178 of Regulation (EU) No 575/2013 (CRR).

Box 3.2

THE BANCO DE ESPAÑA IN-HOUSE CREDIT ASSESSMENT SYSTEM (cont'd)

the ICAS BE appropriately gauges firms' default risk, since the actual default rates for each risk class fall within the PD range predicted one year earlier. These findings also hold true for the different firm sizes, especially for microenterprises (Chart 1.b).

Predictive power for business growth

Beyond its capacity to anticipate SMEs' repayment behaviour, ICAS BE ratings also provide important information on business growth. Chart 2.a shows that higher-rated firms exhibit stronger growth over the following three years, measured using the main firm size indicators: number of employees, turnover and assets. Accordingly, SMEs with a higher level of business solvency, per their ICAS BE rating, tend to record higher growth in subsequent years.

For instance, the turnover of the best-rated firms (4+) increased by around €1 million over the following three years, compared with an increase of just €200,000 for the lowest-rated firms (7-). The difference is even more pronounced in terms of assets and employees: the lowest-rated firms show zero growth, whereas the highest-rated firms increase their assets by around €1 million and their workforce by eight employees.

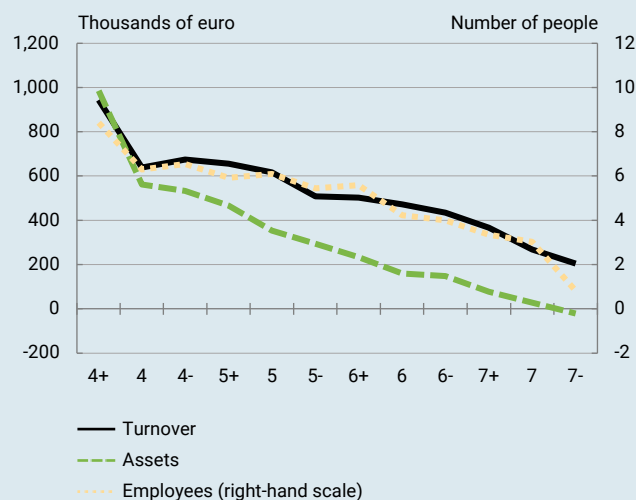
However, the relationship observed in Chart 2.a could be partly influenced by a composition effect, insofar as the distribution of firms by risk class is not consistent in terms of size. To explore this, Chart 2.b breaks down the results by firm size and presents employee developments for micro-, small and medium-sized enterprises, confirming that the positive relationship between higher credit ratings and stronger employment growth holds within each segment.

Implications for corporate financing and reducing information asymmetries

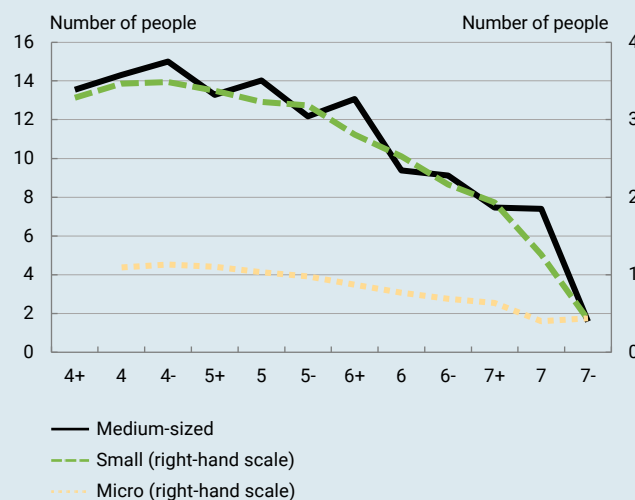
Given its strong predictive power with respect to firms' financial solvency and business growth, there is considerable potential for the ICAS BE to play a significant role in the corporate financing process, beyond the above-mentioned positive effect on financial institutions' operational liquidity stemming from smoother access to Eurosystem financing. Specifically, the independent and objective credit assessment provided by the ICAS BE can help mitigate existing information asymmetries in corporate financing: for financial institutions, it can serve as a valuable complement to their internal credit risk assessment and inform financing decisions; for firms, it can strengthen their negotiating position and support their financial education.

Chart 2
Relationship between firms' credit ratings and business growth

2.a Three-year change in SMEs' turnover, assets and number of employees, by ICAS BE rating (a)



2.b Three-year change in number of employees, by SME size and ICAS BE rating (a)



SOURCE: Banco de España.

a SMEs are defined as firms with fewer than 250 employees (see methodological annex to Chapter 3 of this report).

Box 3.2

THE BANCO DE ESPAÑA IN-HOUSE CREDIT ASSESSMENT SYSTEM (cont'd)

Stronger financial knowledge can help firms identify strengths and vulnerabilities in terms of financial solvency, as well as implement strategies aimed at strengthening their financial position and, consequently, expanding their access to finance and growth opportunities.

Information sharing with firms

To strengthen the quality of ICAS BE credit assessments and optimise the benefits associated with their dissemination, the Banco de España has launched an initiative to share information with the rated firms. As part of this exchange, firms send updated quantitative and qualitative information to the Banco de España,

which in turn provides each firm with its ICAS BE rating report.

This initiative is aligned with Banco de España's institutional objectives as it reinforces its public service role. In particular, it contributes to the Strategic Plan 2030, which includes the "An approachable bank" initiative, aimed at enhancing transparency, accountability and engagement with society. Therefore, the new ICAS BE operational process makes the Banco de España an active and valuable partner for the business sector. This interaction not only enhances firms' understanding of solvency criteria, but also positions the Bank as an accessible and instructive institution, committed to economic development.

Box 3.3
THE ROLE OF CREDIT COOPERATIVES IN THE PROVISION OF FINANCING TO SMALL AND MEDIUM-SIZED ENTERPRISES

This box examines the distribution of lending by credit cooperatives based on their geographical presence, their specialisation in productive sectors, their customer type and their performance since 2017 relative to other banks. The analysis takes into account the structural differences between the balance sheets of the two types of credit institutions, which affect their specialisation and the allocation of credit to non-financial corporations. It also analyses the extent to which the greater flow of financing from credit cooperatives to small and medium-sized enterprises (SMEs) – with a certain bias towards smaller productive units and, especially, the self-employed – can be explained by supply-side factors and whether the flow is stronger in local markets where most credit cooperative activity is concentrated. Lastly, within the SME segment, it examines the risk associated with lending to microenterprises and assesses whether credit cooperatives behave differently from other banks.

While credit cooperatives account for a relatively small share of the Spanish banking system (9.6% of total credit drawn down in 2025), they play a particularly key role for certain segments of the economy. This importance can be assessed from three main perspectives: a geographical standpoint, the sectoral dimension and customer type (see Box 3.2 of the Banco de España's *Supervision Report 2025*).

From a geographical perspective, credit cooperatives are prominent in the least populated provinces, where they make a key contribution to financial inclusion. For instance, in 2025 their market shares exceeded 20% in some provinces (reaching over 50% in Soria and Zamora and around 35% in Teruel, Almería and Cuenca), while in others they were low, at less than 10% – in the most densely populated provinces (Madrid and Barcelona) they even accounted for under 4%. This highlights the elevated heterogeneity at territorial level (Chart 1.a). Over the last 20 years, their market share has increased more markedly in the least densely populated provinces.

Turning to sectoral specialisation, cooperatives play a key role in certain productive sectors, most notably agriculture, which accounted for around 35% of credit cooperative lending in 2025. Their presence was also higher than their average market share in trade (11.5%) and manufacturing (10.8%) (Chart 1.b).

Lastly, by customer type, credit cooperatives are clearly geared towards lending to SMEs and the self-employed. Their market share in the SME segment stood at 11.4% in

2025 (almost 2 percentage points (pp) higher than their average share in total lending), with a clear focus on smaller productive units. Their share of lending to the self-employed was higher still (28%), underscoring their role as key financial intermediaries for this group.

Recently, this specialisation has resulted in greater resilience to business cycle fluctuations. During both the global financial crisis and the subsequent economic upswing (marked by intense deleveraging), credit cooperatives have outperformed other banks: from 2017 to mid-2025 their stock of total lending increased by 32.2%, compared with growth of virtually zero in the rest of the banking sector (1.4%). This higher growth is also seen in lending to SMEs and the self-employed. For instance, lending by credit cooperatives to SMEs barely changed (-2%), in contrast to the decline of 18.9% in lending to SMEs by the rest of the banking system (Chart 1.c). Meanwhile, cooperatives' lending to the self-employed grew by 11.3%, whereas that extended by other banks decreased by 29.2%.

Lastly, credit cooperatives' financial indicators are broadly speaking more favourable than those of the rest of the banking sector. In 2025 their non-performing loan (NPL) ratio was lower (2.4%, versus 3%), and they had higher solvency and liquidity levels. In particular, the common equity tier 1 ratio stood at 20.6%, well above the 13.8% in the rest of the banking sector. Similarly, the liquidity coverage ratio stood at 324%, versus 167% for other banks. Meanwhile, profitability – and also efficiency – was at similar levels, with return on assets of around 0.96%. The better asset quality position – a 0.6 pp difference in the NPL ratio – remained at similar levels to those of 2017 (1 pp).

The greater flow of credit cooperative lending to SMEs owes more to demand and supply-side factors, and cooperatives' presence in areas where their high market share coincides with a prevalence of microenterprises, than to differences purely associated with lending policy. Indeed, as mentioned above, the bulk of cooperatives' business is concentrated in certain regions and economic sectors.

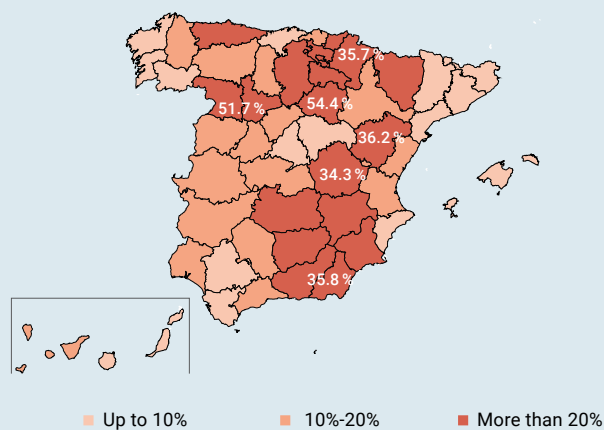
To assess credit cooperatives' supply of credit to different business segments, controlling for the latter's demand, a regression analysis was conducted that studies the relationship between growth in bank lending and credit institution type (cooperatives versus other credit institutions) in the period 2014-24. The model incorporates

Box 3.3

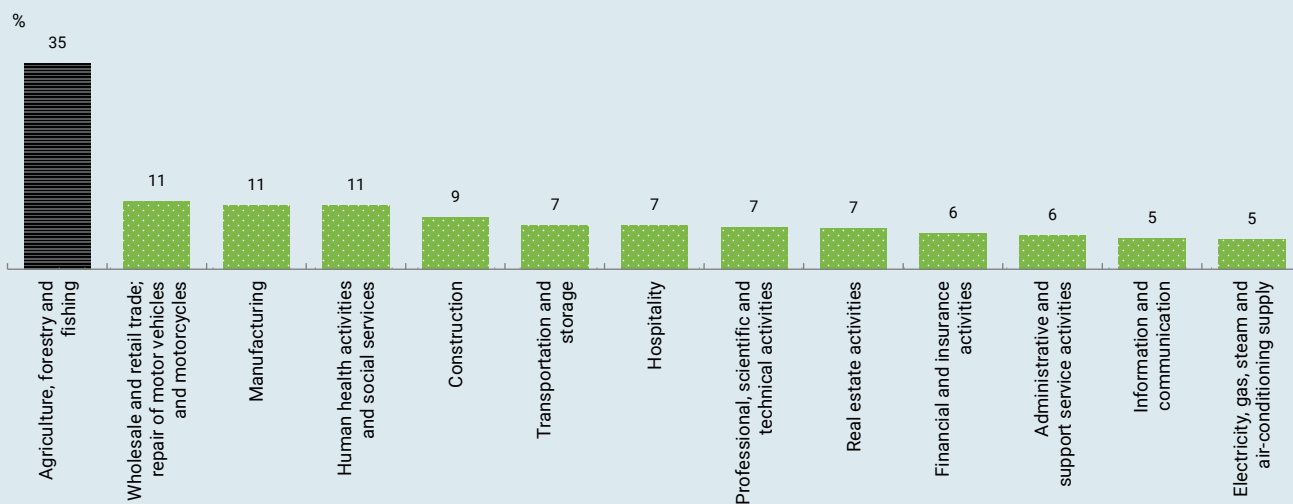
THE ROLE OF CREDIT COOPERATIVES IN THE PROVISION OF FINANCING TO SMALL AND MEDIUM-SIZED ENTERPRISES (cont'd)

Chart 1
Presence of credit cooperatives and credit developments

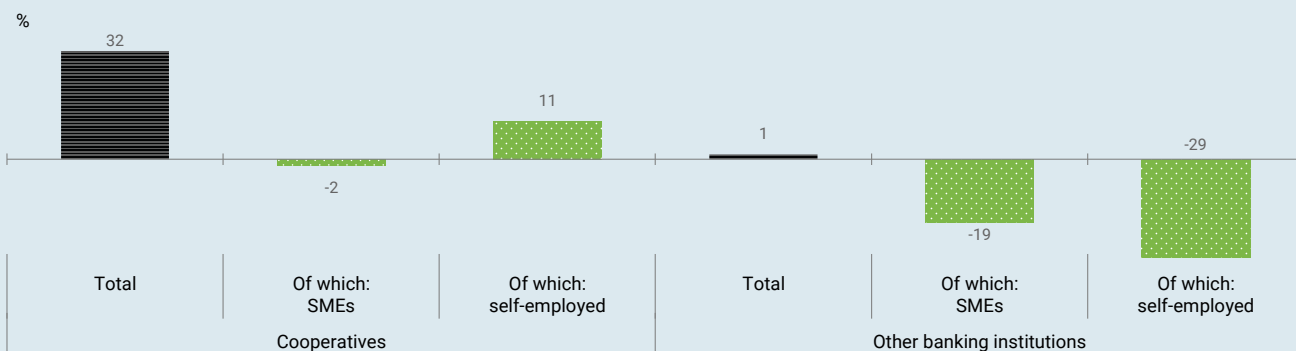
1.a Market share of credit cooperatives, by province. June 2025



1.b Market share of credit cooperatives, by sector. June 2025



1.c Change in stock of lending between December 2017 and June 2025



SOURCE: Banco de España.

Box 3.3
THE ROLE OF CREDIT COOPERATIVES IN THE PROVISION OF FINANCING TO SMALL AND MEDIUM-SIZED ENTERPRISES (cont'd)

firm-year fixed effects, which isolate supply-side factors by comparing changes in credit extended by both types of institutions to the same firm within a segment defined by its size. It also includes bank-year fixed effects to control for the aggregate supply of each institution at any given time and for all the lender's characteristics (for example, size, capital position, liquidity, profitability, etc.).

Column 1 of Table 1 shows the average annual growth in the stock of lending extended by credit cooperatives to different SME segments (microenterprises, small enterprises and medium-sized enterprises) compared with other institutions. The results confirm the descriptive evidence: even when controlling for the same firm's demand, credit cooperatives' lending to SMEs (especially to microenterprises) has declined less than that of other institutions. As indicated in Section 3.2 of Chapter 3 of this report, this pattern is consistent with cooperatives' practice of relationship lending, based on the accumulation of soft information over the course of long-standing lender-borrower relationships, which reduces the financial reporting opacity that characterises small enterprises. To reinforce this interpretation, a further regression analysis is conducted. This regression is similar to the one performed above, but focuses exclusively on microenterprises, where information asymmetries are more pronounced. The estimates confirm this evidence (see column 2).

To check whether this result is due to cooperatives' better knowledge of their local markets (and, therefore, an information advantage), the following exercise is performed (Table 2). For each banking institution, municipalities are classified into two categories: (i) its main market (where most of its corporate lending portfolio is concentrated) and (ii) the other municipalities where it is present. The new model also incorporates firm-year and bank-year fixed effects. The findings are shown in column 2, while column 1, which corresponds to the prior analysis, is included for reference purposes. While credit cooperatives increase their lending to microenterprises outside their main municipality (1.3 pp), they do so much more in their local market (2.2 pp). This is consistent with soft information being more readily available in these areas. The definition of local market is then narrowed further, comparing the municipalities where the cooperative is the main lender (in other words, it has the highest market share) with those that are not its main market or those where, despite being its main market, other institutions have a higher volume of lending to firms. The estimated differential effect in this new exercise, reported in column 3, is even stronger (4.3 pp in the local market, versus 1.4 pp in the others), underscoring the importance of the information component.

Lastly, an analysis is conducted of whether these practices, based on better market knowledge, result in lower risk

Table 1
Lending by cooperatives compared with other institutions, by firm size (a)

	Impact on growth in lending	
	(1)	(2)
Microenterprise x Cooperative	0.039 *** (0.007)	0.014 *** (0.003)
Small enterprise x Cooperative	0.035 *** (0.007)	
Medium-sized enterprise x Cooperative	0.012 * (0.006)	
Observations	2,685,160	2,685,160
R ²	0.371	0.371

SOURCE: Banco de España.

a Results obtained by estimating a regression of growth in lending on interactions between binary variables that denote firm size (microenterprise, small enterprise or medium-sized enterprise) and a binary variable that takes the value 1 if the institution is a credit cooperative. The controls are firm-year and bank-year fixed effects. The sample period is 2014-24. The average growth in lending to firms during that period is -4.82%. The standard errors are grouped at firm-bank and year-sector level. The asterisks denote the level of significance of the coefficients: *** 1%, ** 5% and * 10%.

Box 3.3
THE ROLE OF CREDIT COOPERATIVES IN THE PROVISION OF FINANCING TO SMALL AND MEDIUM-SIZED ENTERPRISES (cont'd)

levels, in keeping with the descriptive evidence presented at the beginning of this box. In other words, whether cooperatives' lower NPL ratio compared with other institutions is explained by the composition of their portfolio or by an information advantage that leads to better borrower selection. To do so, both the ex ante risk and the ex post risk are assessed.

To analyse ex ante risk, the regression model shown in column 1 of Table 2 is expanded, incorporating the three-way interaction between the binary variables that identify cooperatives, microenterprises and lagged probability of default (PD) (from the prior period), in addition to the two-way interaction between PD and the cooperative indicator. The results of the estimation (Table 3) show that cooperatives' credit supply to firms with higher PDs is similar to that of other institutions in all segments (microenterprises and beyond), since the coefficients of the two interactions are very small and not statistically different from zero. This finding is consistent with the

evidence presented in Section 3.2 of Chapter 3 of this report, according to which, since 2014, different types of credit institutions have shown similar risk-taking profiles.

Lastly, to study ex post risk, three (linear) probability models are estimated whose dependent variables are binary variables that indicate the existence (or not) of an NPL in year t+1, t+2 or t+3 (columns 1, 2 and 3 of Table 4, respectively). In all three models, the regressor of interest is the interaction between a binary variable that indicates microenterprise and another binary variable that takes the value 1 if the credit institution is a credit cooperative. In all the specifications the controls are bank-year fixed effects and sector-province-size-year fixed effects, where size refers to microenterprises and small, medium-sized and large enterprises, and sector refers to NACE Rev.2 classes. The latter are included to control for the main business characteristics that might affect the propensity to default on a bank loan. In addition, the sample is restricted to firms with no NPLs or loans in arrears in year t-1, since the

Table 2
Lending to microenterprises by cooperatives, on the basis of their local market (a)

	Impact on growth in credit		
	(1)	(2)	(3)
Microenterprise x Cooperative x Local market		0.022 *** (0.005)	
Microenterprise x Cooperative x Other municipalities		0.013 *** (0.003)	
Microenterprise x Cooperative	0.014 *** (0.003)		
Microenterprise x Cooperative x Main lender in local market			0.043 *** (0.015)
Microenterprise x Cooperative x Other municipalities			0.014 *** (0.003)
Observations	2,685,160	2,685,160	2,685,160
R ²	0.371	0.371	0.371

SOURCE: Banco de España.

a The dependent variable is always credit growth. In column 1 the regressor of interest is the interaction between a binary variable that denotes microenterprise and a binary variable that takes the value 1 if the institution is a credit cooperative. In column 2 the regressors of interest are the three-way interaction between microenterprise, cooperative and a binary variable that takes the value 1 if it is the cooperative's local market (the municipality where the highest percentage of its corporate loan book is concentrated) and the three-way interaction between microenterprise, cooperative and a binary variable that takes the value 1 for the other municipalities where it is present. Column 3 shows a variation of the previous analysis in which the local market is defined as the municipality where the cooperative is the main lender (has the highest market share). In all the specifications the controls are firm-year and bank-year fixed effects. The sample period is 2014-24. The average growth in lending to firms during that period is -4.82%. The standard errors are grouped at firm-bank and year-sector level. The asterisks denote the level of significance of the coefficients: *** 1%, ** 5% and * 10%.

Box 3.3
THE ROLE OF CREDIT COOPERATIVES IN THE PROVISION OF FINANCING TO SMALL AND MEDIUM-SIZED ENTERPRISES (cont'd)

characteristics of this type of firm may differ from the others and may potentially be correlated with their PD. The results of the three specifications are very similar and indicate that microenterprises that borrow from cooperatives are 0.01 pp-0.02 pp less likely to have an NPL. These effects are highly significant, although

relatively smaller than the percentage of observations with NPLs in the three samples (0.76%-0.85%).

This finding could indicate that, thanks to their information advantage in local markets and in the microenterprise segment, as well as a closer relationship with their

Table 3
Risk-taking by cooperatives compared with other institutions: ex ante risk (a)

	Impact on growth in lending
Microenterprise x Cooperative	0.017*** (0.004)
Microenterprise x Cooperative x PD	-0.001 (0.001)
Cooperative x PD	0.000 (0.001)
Observations	2,685,160
R ²	0.371

SOURCE: Banco de España.

a Results obtained by estimating a regression of credit growth on three interactions. The first is an interaction between a binary variable that denotes microenterprise and a binary variable that takes the value 1 if the institution is a credit cooperative. The second is a three-way interaction between the binary variables that identify cooperatives, microenterprises and lagged probability of default. The third is a two-way interaction between lagged probability of default and the binary variable denoting cooperative. In all the specifications the controls are firm-year and bank-year fixed effects. The sample period is 2014-24. The average growth in lending to firms during that period is -4.82%. The standard errors are grouped at firm-bank and year-sector level. The asterisks denote the level of significance of the coefficients: *** 1%, ** 5% and * 10%.

Table 4
Risk-taking by cooperatives compared with other institutions: ex post risk (a)

	Impact on probability of having NPLs		
	(1)	(2)	(3)
Microenterprise x Cooperative	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Observations	3,208,648	2,532,350	2,040,074
R ²	0.107	0.124	0.145

SOURCE: Banco de España.

a The dependent variables are binary variables that denote the existence of an NPL in year t+1, t+2, or t+3 (columns 1, 2 and 3, respectively). The regressor of interest is always the interaction between a binary variable that denotes microenterprise and another binary variable that takes the value 1 if the institution is a credit cooperative. In all the specifications the controls are bank-year fixed effects and sector-province-size-year fixed effects, where size corresponds to microenterprises, small enterprises, medium-sized enterprises and large firms, and sector to the NACE Rev.2 classes. The sample is restricted to firms that had no NPLs or loans in arrears in year t-1. The sample period is 2014-24. The proportion of observations with NPLs is 0.76%, 0.83% and 0.85% in the samples of columns 1, 2 and 3, respectively. The standard errors are grouped at firm-bank and year-sector level. The asterisks denote the level of significance of the coefficients: *** 1%, ** 5% and * 10%.

Box 3.3

THE ROLE OF CREDIT COOPERATIVES IN THE PROVISION OF FINANCING TO SMALL AND MEDIUM-SIZED ENTERPRISES (cont'd)

customers, credit cooperatives are able to better select the firms they lend to and more exhaustively monitor their activities. All this would result in a lower proportion of problem loans among borrowers, in line with the findings in Álvarez-Román, Mayordomo, Vergara-Alert and Vives (2024)¹ and Casado and Martínez-Miera (2025).²

Credit cooperatives' business model also poses specific challenges associated with their geographical concentration and their smaller size. In particular, depopulation and the limited availability of investment opportunities in certain areas may restrict their growth and make them more dependent on the economic

activities specific to their environment, which raises their vulnerability to adverse sectoral or climate shocks. In addition, the small size of some institutions hinders the professionalisation of governance, digitalisation and the development of advanced risk management capabilities. All this against a backdrop in which credit cooperatives complement the key role played in the financial system by larger banks – given their greater geographical and sectoral diversification, their access to wholesale markets and the larger scale of their operations – by funding major projects and absorbing adverse macroeconomic shocks. In doing so, credit cooperatives contribute to stable aggregate credit growth.

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- 1 Laura Álvarez-Román, Sergio Mayordomo, Carles Vergara-Alert and Xavier Vives. (2024). "Climate risk, soft information and credit supply". Documentos de Trabajo, 2406, Banco de España.
 - 2 Alejandro Casado and David Martínez-Miera. (2025). "Banks' specialization and private information". Documentos de Trabajo, 2539, Banco de España.

Box 3.4

THE IMPACT OF THE DIGITAL KIT ON BUSINESS PRODUCTIVITY**Digital Kit scheme**

With an unprecedented budgetary allocation (€3,067 million) and over 900,000 subsidies granted to small and medium-sized enterprises (SMEs) and the self-employed, the Digital Kit scheme is the largest business digitalisation initiative ever launched in Spain. It seeks to boost firms' uptake of digital solutions, strengthen business competitiveness and narrow digital gaps across firm sizes, geographical areas and sectors.

The scheme is financed through Next Generation EU funds from the European Union, within the framework of the Recovery, Transformation and Resilience Plan (RTRP), and is managed by the public enterprise Red.es. For more information on the scheme, see the Red.es [report](#).

Different calls for applications have been aimed at business segments according to the number of workers. Each segment provides for a specific maximum digital voucher amount and a set of eligible solutions, allowing for a more targeted allocation of public resources.

The scheme is structured into five broad segments: segment I comprises firms with between 10 and 49 workers, which are eligible for a digital voucher of up to €12,000; segment II includes firms of between 3 and 9 workers, eligible for a voucher of up to €6,000; and segment III comprises microenterprises and the self-employed (between 0 and 2 workers), which were initially allocated vouchers of €2,000 (subsequently increased to €3,000). More recently, the scheme has been opened up to medium-sized enterprises, with the creation of segment IV, comprising firms with 50-99 workers (eligible for a voucher of up to €25,000), and segment V, for firms with 100-249 workers (eligible for a voucher of up to €29,000). Moreover, an extraordinary call for applications was launched for entities without independent legal status (joint ownerships, civil-law partnerships and shared-ownership agricultural holdings), thus extending the scheme to groups that initially did not qualify.

Rather than direct transfers of monetary grants, the subsidies are provided to beneficiaries in the form of digital vouchers, which are redeemed with accredited suppliers ("agentes digitalizadores adheridos") when they contract services from a predefined catalogue of solutions. This catalogue covers areas such as online presence and e-commerce, customer and process management,

e-invoicing, cybersecurity, secure communications and electronic office tools, with more recent calls also encompassing advanced artificial intelligence-enabled solutions and managed cybersecurity.

Payment is made directly to the provider once the solution has been properly implemented and justified, which reduces liquidity problems for the beneficiary and limits the risk of misuse of funds.

Through its design and a management strategy focused on promoting and facilitating access to the subsidies, the scheme has deliberately sought to lower administrative and digital barriers. This has made it possible to identify and serve firms and self-employed persons that have a lower level of digitalisation (including those without any prior experience in accessing public subsidies) and adapt the level of support to their size and degree of technological development, as well as ensuring a high level of geographical coverage. Indeed, the scheme has reached over 90% of Spanish municipalities, including virtually all rural ones.

Impact assessment

This box discusses the impact of the Digital Kit scheme on beneficiary firms' total factor productivity (TFP). TFP measures the efficiency with which a firm combines its factors of production (capital and labour) to generate output, and is one of the fundamental drivers of long-term economic growth.¹ In this context, this box assesses whether receiving aid for digitalisation has yielded improvements in the recipient SMEs' productive efficiency.

The analysis draws on administrative micro data from Red.es covering all the firms participating in the Digital Kit scheme, across all calls. These records are linked to accounting information from the Banco de España's Integrated Central Balance Sheet Database (CBI), available only up to 2024.

The analysis is limited to firms that implemented the digital solution in 2023, as at least one year of information since treatment is required to estimate the impact. Since financial data are only available up to 2024, firms treated after 2023 are excluded. The resulting sample consists of a panel of over 60,000 firms for the period 2014-24. The pre-treatment period covers 2014-22 and the post-treatment period is 2023-24.

1 For a detailed description of the TFP measurement, see the Methodological annex to Chapter 3 of this report.

Box 3.4

THE IMPACT OF THE DIGITAL KIT ON BUSINESS PRODUCTIVITY (cont'd)

To identify the scheme’s effect on TFP, a difference-in-differences (DiD) approach is used that exploits variation in the effective use of the Digital Kit voucher, with the treatment group including firms that used the subsidy and the control group comprising those that were granted the voucher, but did not use it before it expired.

This design can isolate the impact of the scheme’s effective implementation, by controlling for both eligibility and the applicable regulatory framework, and reduces selection concerns associated with the decision to participate in the scheme.

The scheme’s effect is identified through a comparison of the TFP developments of the two groups before and after the voucher is granted, based on the assumption that their trajectories would have followed parallel trends had the voucher not been used.

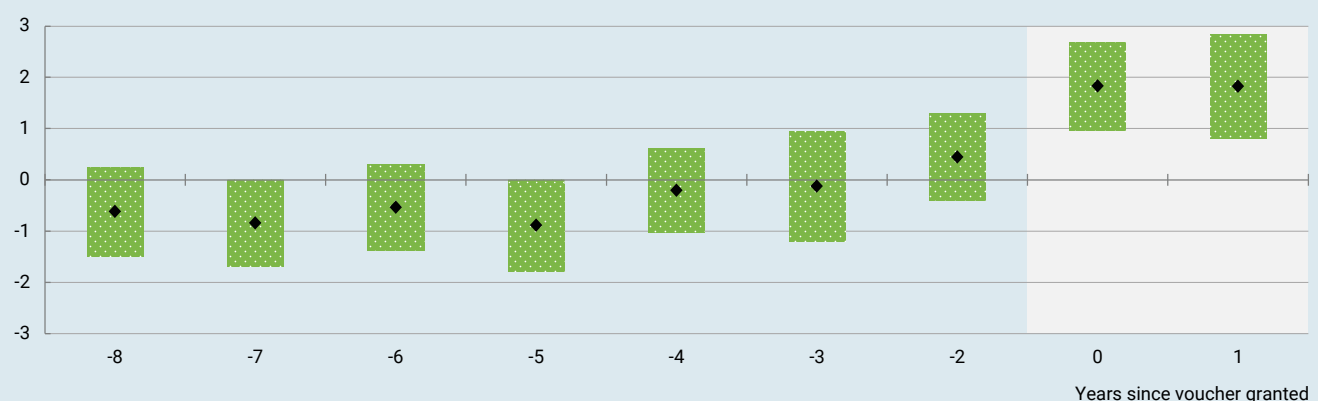
The plausibility of this assumption is assessed through an analysis of the pre-treatment periods. Chart 1 shows the difference in terms of TFP between the two groups in each year relative to the voucher being granted, without correcting for observable characteristics. The coefficients in the years before treatment (years -8 to -2) are systematically close to zero and not statistically significant, supporting the plausibility of the parallel trends assumption.

However, given that the decision to use the voucher – as opposed to letting it expire – could be correlated to observable business characteristics (such as size, financial position or sector of activity), estimation of the scheme’s effect needs to be corrected for possible systematic differences between treated and untreated firms. Firms that are more dynamic or better managed or have greater administrative capacity could, a priori, be more inclined to redeem the voucher, which would introduce a bias into the direct comparison of the two groups.

Specifically, the estimator proposed by Callaway and Sant’Anna (2021) is used, which assigns greater weight to control group firms with similar pre-treatment observable characteristics to those of the beneficiary firms, and less weight to those with less comparable characteristics. This procedure intuitively “rebuilds” a control group whose main variables resemble, on average, those of the treated group before the voucher is granted, such that the subsequent comparison is between equivalent firms.²

Table 1 presents the effectiveness of this reweighting, listing the differences in observable characteristics between groups before and after the adjustment. After reweighting, the control group firms have very similar characteristics to those of the beneficiary firms before

Chart 1
Difference between TFP of treated firms and untreated firms



SOURCES: Banco de España (CBI) and Red.es.

2 Alberto Abadie. (2005). “Semiparametric Difference-in-Differences Estimators”. *The Review of Economic Studies*, 72(1), pp. 1-19; Pedro H. C. Sant’Anna and Jun Zhao. (2020). “Doubly robust difference-in-differences estimators”. *Journal of Econometrics*, 219(1), pp. 101-122; Brantly Callaway and Pedro H. C. Sant’Anna. (2021). “Difference-in-Differences with multiple time periods”. *Journal of Econometrics*, 225(2), pp. 200-230; Liyang Sun and Sarah Abraham. (2021). “Estimating dynamic treatment effects in event studies with heterogeneous treatment effects”. *Journal of Econometrics*, 225(2), pp. 175-199; and Kirill Borusyak, Xavier Jaravel and Jann Spiess. (2024). “Revisiting Event-Study Designs: Robust and Efficient Estimation”. *The Review of Economic Studies*, 91(6), pp. 3253-3285.

Box 3.4

THE IMPACT OF THE DIGITAL KIT ON BUSINESS PRODUCTIVITY (cont'd)

treatment. Before the reweighting, the treated firms are on average slightly larger (in terms of assets, value added and number of workers) and older than the control group. After the reweighting, the differences in observable characteristics are reduced to almost zero, reinforcing the credibility of the counterfactual scenario used to identify the scheme's effect.

Results

The results show that the Digital Kit scheme has a positive and statistically significant impact on beneficiary firms'

TFP. The main estimate, presented in Chart 2.a, indicates that use of the voucher is associated with TFP being approximately 1.2% higher one year later. By construction, the estimator eliminates the shocks common to each period and allows for the existence of permanent differences in levels among firms, such that the estimated effect captures exclusively the variation attributable to use of the voucher.

In the sample, the average amount of the treatment stands at approximately €5,000, implying an increase of around 0.25% in TFP for every €1,000 of subsidy received. To put

Table 1
Observable characteristics in 2021 (a)

Mean value per firm

Variable	Treated firms	Untreated firms (unweighted)	Untreated firms (weighted)	Difference (unweighted)	Difference (weighted)
Value added (ln)	5.7	5.4	5.7	0.3	0.0
Assets (ln)	6.7	6.5	6.7	0.2	0.0
Number of workers (ln)	2.0	1.7	2.0	0.3	0.0
Debt-to-assets ratio	0.2	0.2	0.2	0.0	0.0
Age	21.6	20.8	21.6	0.8	0.0
Number of firms	42,818	14,909	14,909		

SOURCES: Banco de España (CBI) and Red.es.
NOTE: "ln" refers to the natural logarithm.

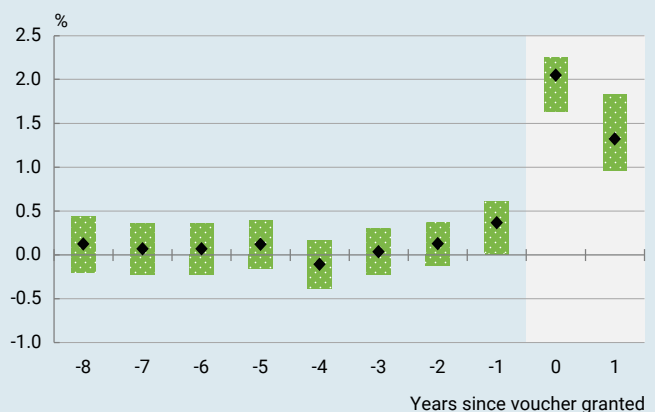
a The table shows averages of observable covariates measured in 2021, before treatment. The "unweighted" columns show means for the control group without weights, while the "weighted" columns report means for the control group using inverse probability of treatment weights. The difference is defined as treated firms minus untreated firms.

Chart 2
Estimated effect of the Digital Kit scheme on beneficiary firms

2.a Estimated effect on TFP



2.b Estimated effect on the proportion of intangible assets



SOURCES: Banco de España (CBI) and Red.es.

Box 3.4
THE IMPACT OF THE DIGITAL KIT ON BUSINESS PRODUCTIVITY (cont'd)

this in context, these firms' TFP grew by around 2% in 2023. In this regard, the Digital Kit's estimated impact accounts for a substantial share of the TFP growth observed among treated firms that year. This suggests that the scheme contributed significantly to the improvement in their productivity, although it was not the sole driver.

This result is robust to different empirical specifications and identification strategies. First, the control group (firms with expired vouchers) is replaced by a group of firms treated in 2025 that have not yet implemented the digital solution within the sample window. The benefit of using this alternative control group is that it comprises firms that decided to participate in the scheme and therefore have similar behavioural profiles to those of the treated group. With this specification, the estimated effect is of a similar or slightly higher magnitude, standing at around 1.6%. Second, Table 2 sets out the results obtained with six alternative estimators, all variants of a doubly robust DiD approach. In all cases, the impact of the treatment ranges from 1.5% to 1.7%.

Overall, the evidence suggests that the Digital Kit scheme has made a significant contribution to improving the beneficiary SMEs' TFP.

Mechanisms

The effects of the scheme materialise through a process of productive transformation that primarily affects how firms organise and combine their resources. Digitalising internal processes, such as e-invoicing and inventory

management, helps reduce operational costs and allows resources to be reallocated to higher value-added activities. This results in a more efficient use of the factors of production, the variable specifically captured by TFP.

In addition, adopting e-commerce and digital presence tools opens up access to larger markets and improves income generation capacity, contributing to economies of scale and a more intensive use of installed capital. In line with this, evidence on the capital-labour ratio confirms the presence of a capital deepening process, attributable to the work-enhancing digital technologies adopted.

These efficiency gains appear to be accompanied by a reshaping of the capital base, with a rising proportion of intangible and digital assets. Although this is not immediately reflected in a higher total stock of intangibles recorded in the accounts (in part due to measurement limitations and the non-capitalisable nature of some solutions), the evidence shows a significant increase in the share of intangibles in total capital. This pattern points to a stronger integration of these assets into the production process (Chart 2.b).

Economic policy implications

Based on the results of this analysis, the Digital Kit scheme has made a significant contribution to improving the beneficiary SMEs' TFP. Although moderate, the magnitude of the estimated effect is economically relevant, given the scheme's extensive coverage and the high number of beneficiary firms.

Table 2
Robustness checks: effect of the Digital Kit on TFP (a)

Estimator	Average effect of treatment	Standard error
dripw	0.017***	0.005
drimp	0.016***	0.005
reg	0.016***	0.005
ipw	0.015***	0.005
stdipw	0.015***	0.005
sipwra	0.016***	0.005

SOURCE: Banco de España.

a The coefficients show the average treatment effect on treated firms, measured as the change in TFP, in logarithms. The asterisks indicate statistical significance at 1%. Robust standard errors. A coefficient of 0.017 implies an increase in productivity of approximately 1.7% associated with effective use of the scheme. The estimators used are: dripw: doubly robust inverse probability weighting estimator; drimp: doubly robust imputation estimator; reg: regression adjustment; ipw/stdipw: inverse probability weighting (standard and standardised); and sipwra: semiparametric inverse probability weighting estimator with regression adjustment.

Box 3.4

THE IMPACT OF THE DIGITAL KIT ON BUSINESS PRODUCTIVITY (cont'd)

Nonetheless, these results should be interpreted with caution. On the one hand, the impact observed may potentially decrease over time, insofar as part of the effects may be attributable to short-lived dynamics (such as diminishing returns on digital investments, convergence with untreated companies or changes in the technological and competitive environment), which could lead to the initial benefits progressively fading. On the other, the total

effect may as yet be underestimated, as the time horizon available does not fully capture the benefits associated with digitalisation (such as process and product innovation, complementarities with human and organisational capital, or learning and scaling effects), which tend to materialise gradually. Monitoring these firms over the coming years will be key to discerning which of these dynamics ultimately predominates.

Box 3.5
THE EFFECTS OF THE 2021 LABOUR MARKET REFORM ON SPANISH FIRMS' PRODUCTIVITY

The use of temporary employment contracts has been widespread across Europe in the recent period, with Spain among the countries with the highest rates. According to Eurostat, temporary contracts accounted for 24.9% of employment in Spain, against the European Union (EU) average of 13.0%. The high level of temporary employment in Spain in recent decades has entailed significant employment volatility, with sharp reactions to economic downturns. This temporary employment also erodes job stability and quality and can therefore constrain firm productivity and growth.

The labour market reform introduced by Royal Decree-Law 32/2021 sought to contain the adverse effects linked to Spain's high proportion of temporary contracts and to bolster job quality and firms' dynamism through measures to increase internal flexibility and training. In particular, Royal Decree-Law 32/2021 restricted the scope for temporary hiring, mainly by removing contracts for specific tasks and services in most circumstances, thereby encouraging permanent hires, whether on an ordinary or seasonal basis. It also envisaged the automatic conversion of temporary contracts into permanent ones when employees had accrued 18 months of service at the same firm over a 24-month period. Following the reform's entry into force, the average temporary employment ratio in Spain fell from 24.9% in 2021 to 14.9% in 2025, narrowing the gap to the EU average of 11.5%.

This box examines how the tighter limits on temporary hiring introduced by the 2021 reform have affected the productivity of Spanish firms.¹

Reducing temporary employment within firms can help raise productivity through three channels. First, greater job stability allows workers to develop task-specific skills and build up more firm-specific human capital. Second, job stability may encourage firms to invest more in employee training. Third, there may be a selection effect whereby firms most accustomed to using temporary contracts are

forced to exit the market when their use is restricted. Since firm closures tend to fall disproportionately on less productive firms and those that make greater use of temporary contracts, this effect could increase aggregate productivity.²

To estimate the reform's potential effect on firm productivity, the identification strategy in this box is based on comparing those firms most affected by the reform because they made greater use of temporary contracts (those with a higher share of such contracts in 2021, in the top quartile of firms by temporary employment ratio) with those less affected because they used temporary contracts more moderately (those in the second and third quartiles). The exercise draws on two data sources: first, the universe of individuals registered with the Social Security system and, second, the Central Balance Sheet Data Office (CBSO) of the Banco de España, which allow the temporary employment ratio of firms to be identified and offer complementary information.³ The Social Security data make it possible to study developments in temporary employment, job creation and job destruction by contract type and job tenure, but they do not contain detailed firm-level balance sheet information. The CBSO, by contrast, offers highly comprehensive information on firms' balance sheets and profit and loss accounts, but its data on firms' employment and its characteristics are not as granular.

Following the reform's entry into force, temporary employment fell markedly across firms that used temporary contracts, although the decline was particularly pronounced among those that had relied on them more. Among firms in the top quartile by temporary contract use, the share of temporary jobs had fallen by around 32 percentage points (pp) on average from January 2022 compared with pre-reform levels. However, in the middle quartiles, the drop was around half that, at 16 pp (Chart 1.a). As a result, the gap in the temporary employment ratio between the firms making greatest use of such

1 Cristina Barceló, Diego Caminero, Federico Tagliati and Ernesto Villanueva. "Firm level responses to sharp changes in the access to Fixed-Term Contracts". Forthcoming.

2 Josep Pijoan-Mas and Paul Roldan-Blanco. (2024). "Dual labor markets and the equilibrium distribution of firms". Documentos de Trabajo, 2442, Banco de España present a theoretical model that makes it possible to analyse how restrictions on temporary hiring trigger the exit of low productivity firms and boost aggregate productivity. Moreover, Joseph G. Altonji and Robert A. Shaktokko. (1988). "Do Wages Rise with Job Seniority?". *The Review of Economic Studies*, 54(3), pp. 437-459 (for the United States) and Jose Garcia-Louzao, Laura Hospido and Alessandro Ruggieri. (2023). "Dual returns to experience". *Labour Economics*, 80(102290) (for Spain) detail the positive relationship between job tenure on the one side and wages and human capital on the other, while Andrea Caggese, Ozan Güler, Mike Mariathasan and Klaas Mulier. (2024). "Heterogeneous Firing Costs, Worker Types, and Productivity: Evidence from a Natural Experiment" show falls in productivity linked to greater employment protection.

3 Note that the two datasets are analysed separately and are not combined in this box because there is no exact firm-level matching between the two sources. The two groups of firms defined according to their use of temporary contracts are identified separately within each dataset and yield very similar estimates of the distribution of firms' temporary employment ratios.

Box 3.5

THE EFFECTS OF THE 2021 LABOUR MARKET REFORM ON SPANISH FIRMS' PRODUCTIVITY (cont'd)

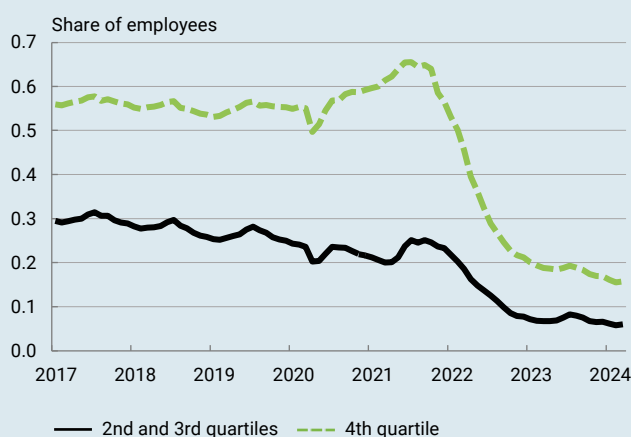
contracts and those making a more moderate use narrowed by 16 pp on average.

The adjustment in employment composition was also more pronounced among firms with a high reliance on temporary contracts. Following the reform's entry into force, these firms reduced their temporary employment by 8 pp relative to those with a moderate share of temporary employment (Chart 1.b). This reduction was offset mainly by greater creation of permanent employment through ordinary contracts (4 pp more than among firms with moderate temporary employment levels), while the contribution of permanent seasonal contracts was relatively limited (1 pp). Overall, firms with a high share of temporary employment prior to the reform reduced such employment by around 3 pp more than firms with a moderate share. This effect is explained entirely by a higher rate of firm exit among firms that depended more on temporary hiring, rather than by decreased temporary employment among firms that remained active in the market, as discussed below.

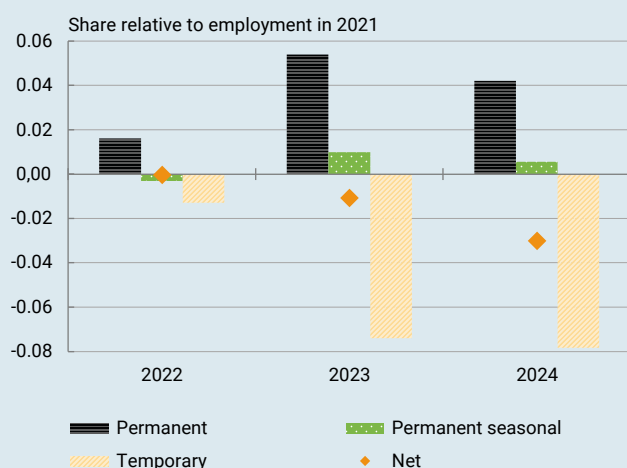
Value added per full-time equivalent is used as an indicator to analyse the effect of the reform on firms' productivity.⁴ Chart 2.a shows how productivity developed differently among firms with a high share of temporary hiring relative to those with a moderate share, benchmarked against each firm's average productivity between 2017 and 2019. The difference in productivity growth was small and not statistically different from zero between 2017 and 2021, suggesting that the two groups showed similar dynamics before the reform. After the 2021 labour market reform, however, firms with a higher share of temporary employment experienced higher productivity growth than those with a moderate share. In 2022, productivity in the group of firms with a high share of temporary employment grew by 1.2 pp more relative to 2017-19 than it did in the group of firms with only a moderate share. The estimated difference in growth was 0.5 pp in 2023 and 0.7 pp in 2024 (Chart 2.a). Over the 2022-24 period (since the reform), the average difference in productivity growth for firms with a high share of temporary employment was around 0.9 pp

Chart 1
Temporary employment ratio and change in employment by contract type

1.a Temporary employment ratio by quartile of temporary contract use



1.b Difference in employment change between firms with intensive and moderate use of temporary contracts by contract type



SOURCE: Ministerio de Inclusión, Seguridad Social y Migraciones (register of employment relationships). See Barceló, Caminero, Tagliati and Villanueva (2025).

4 The CBSO provides data on full-time equivalents. During the pandemic, there were widespread temporary layoffs or short-time work arrangements (known in Spanish as ERTes). Employees furloughed in this way are counted as if they were working, but they do not generate output, which distorts productivity as measured. For comparison purpose, the share of each firm's employees on furlough is estimated, allowing productivity developments across firms to be compared on a like-for-like basis.

Box 3.5

THE EFFECTS OF THE 2021 LABOUR MARKET REFORM ON SPANISH FIRMS' PRODUCTIVITY (cont'd)

(with a standard error of 0.2 pp).⁵ This trend indicates that restricting the use of temporary contracts was associated with a relative improvement in productivity among firms most exposed to the regulatory change.

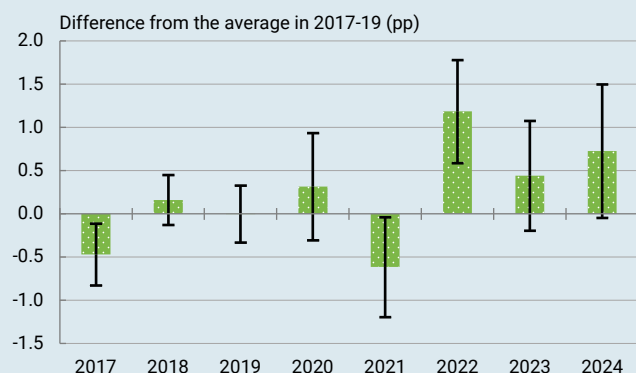
The stronger productivity growth observed among firms most affected by the reform is consistent with the first channel noted earlier, linked to greater job stability and the resulting accumulation of firm-specific human capital. Available estimates put the returns on accumulated human capital for those employed on a permanent contract (proxied by the wage return to job tenure) at around 2% per year worked.⁶ If, between 2022 and 2024, average tenure or experience in the job had increased by an amount equivalent to two years, this would imply (assuming that the wage return on job tenure associated with a permanent contract translates directly and equally into productivity gains) an average increase in productivity of around 4 pp

over the same period. Moreover, firms with a high share of temporary employment recorded an average increase in permanent hiring of 16 pp above firms with a moderate share (Chart 1.a). This mechanism would imply an expected difference in productivity growth of approximately 0.64 pp (calculated as $0.02 \times 2 \times 16$ pp) in favour of the former. This is the same order of magnitude as the estimated difference in productivity between the two groups (0.9 pp).

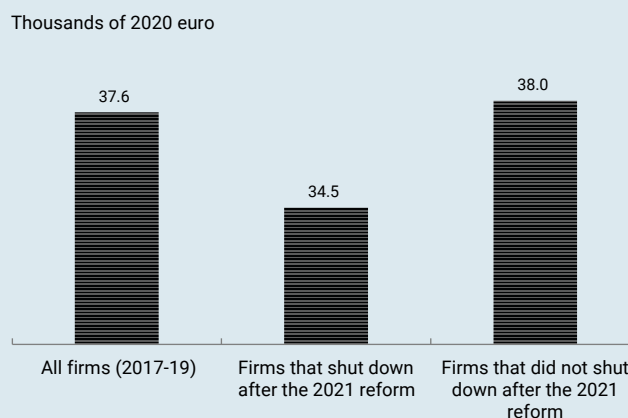
As regards the second channel (firms potentially offering more employee training), there is no evidence of a differential increase in investment in training by firms with a higher share of temporary contracts. That said, training expenditure data are only available for a small subset of the firms covered by the CBSO, which may not be fully representative of the firms analysed here.⁷ As a result, the evidence available does not allow firm conclusions to be drawn regarding this mechanism's impact.

Chart 2
Impact of the reform on productivity across firms according to their use of temporary contracts

2.a Difference in the ratio of value added per employee (ERTE-adjusted) among companies with high and moderate shares of temporary employment



2.b Value added per employee (ERTE-adjusted) across groups of firms with intensive use of temporary contracts



SOURCE: Banco de España (CBSO). See Barceló, Caminero, Tagliati and Villanueva (2025).

5 The regressions' dependent variable is the difference between the logarithm of each firm's productivity in a given year and its 2017-19 average. Explanatory variables include indicators for firm size, sector (at NACE Rev. 2 section level) and year, as well as their interactions. Dummy variables for region are also included. The 2024 estimates should be treated with caution because they do not include the full set of firms covered by the CBSO.

6 See García-Louzao, Hospido and Ruggieri (2023) for an estimate of the wage return associated with job stability.

7 After applying the same consistency filters as in the original sample, only 56 firms remain in the control group, with 21 in the treatment group. The data are available for relatively large firms, with around 150 full-time equivalents, ten times the size of the firms in the sample used in Chart 2.a. The same regression described in footnote 5 is estimated, but with training expenditure as a share of output value taken as the dependent variable.

Box 3.5

THE EFFECTS OF THE 2021 LABOUR MARKET REFORM ON SPANISH FIRMS' PRODUCTIVITY (cont'd)

Lastly, regarding the extensive margin channel and firm exit channel, it should be noted that the estimations of the effect of the reform on productivity presented above are based solely on firms that were active throughout the analysis period, meaning that they only capture developments in productivity within these surviving firms. This approach does not account for the mechanism whereby less productive firms exit the market, which can also help raise aggregate productivity. If firms that relied more heavily on temporary hiring faced higher closure rates after the reform (and if those firms were disproportionately less productive), this selection process would operate as an additional channel not captured by the estimates based solely on surviving firms.

Chart 2.b explores this mechanism. It shows that before 2021 firms with higher shares of temporary hiring that closed after the reform had noticeably lower productivity levels (measured as value added per employee) than surviving firms (€34,500 and €38,000, respectively). In addition, after the reform came into force, the exit rate was higher among firms that were more dependent on temporary employment (10.7% compared with 8.5% among firms with a moderate share of temporary contracts). This combination (higher probability of exit and lower productivity) suggests that these firms' exit from the market contributed to raising average productivity among firms with a high share of temporary employment through a compositional effect, in addition to the productivity gains within surviving firms documented in this box.

Box 3.6

PUBLIC PROCUREMENT AND SME GROWTH

Public procurement is a key instrument of public sector economic intervention, with significant effects on economic activity and aggregate productivity, mainly through its impact on firm growth and the allocative efficiency of resources.

Through public tenders, the public sector channels a significant share of aggregate demand towards private firms, influencing not only the level of economic activity but also the structure and dynamics of the business sector. Beyond its direct impact on sales, public procurement may also significantly affect firm's production, financing and growth decisions, particularly in the presence of financial frictions.¹

To estimate the impact of public procurement on private firms, we conduct a firm-level analysis using data on contract awards in Spain and other comparable euro area countries (for more details, see the data sources annex to Chapter 3 of this report). The results show that being awarded a public contract has dynamic effects on firms' sales to the private sector. Specifically, private-sector sales decline in the year the contract is awarded (crowding-out effect), but increase significantly in subsequent years (crowding-in effect). The inclusion of firm fixed effects means that the estimated effect is identified through intra-firm comparisons of the growth of firms' private-sector sales in periods when they were awarded a contract with periods when they were not.

In Spain the impact of public procurement on private-sector sales is substantially larger for small and medium-sized enterprises (SMEs) than for large firms. This difference is evident both in the initial crowding-out phase and in the subsequent crowding-in phase, with a positive impact of around 7 percentage points (pp) for SMEs, compared with approximately 1 pp for large firms (Chart 1.a). This suggests that public procurement plays a particularly important role as a catalyst for Spanish SME growth, whereas this size-related heterogeneity is not observed in other comparable euro area countries (Chart 1.b).

This pattern is consistent with a mechanism based on financial constraints. When a contract is awarded, firms – and SMEs in particular – must reallocate productive and financial resources in order to fulfil the new public contract. Given their limited access to external financing, this reallocation initially leads to a reduction in activity aimed

at the private sector, giving rise to a crowding-out effect in the short term. In subsequent periods, however, the public contract itself serves as a form of implicit collateral, improving firms' access to external financing. This channel, together with the additional profits generated by the contract itself, strengthens firms' internal financing capacity and enables them to expand production aimed at the private sector once again, giving rise to the crowding-in effect.

Overall, this mechanism supports firm growth in the medium term and shows that public procurement is especially beneficial for SMEs, as they typically face tighter financial constraints. In particular, the possibility of using public contracts as collateral strengthens their access to external financing and their ability to self-finance, thereby expanding their growth opportunities to a greater extent than for large firms. Moreover, insofar as these effects are concentrated among more productive SMEs (which are typically more financially constrained because they are younger and have less collateral), public procurement can help improve allocative efficiency and, ultimately, aggregate productivity.

The impact on Spanish SMEs is also greater in tenders with a higher number of bidders, reinforcing the idea that competitive public procurement design can amplify its effects on allocative efficiency and aggregate productivity.

To identify the types of tenders in which the impact on SMEs is greatest, we examine how the effect varies with the number of bids received in each tender, comparing outcomes for tenders receiving a single bid with those for tenders with a moderate number of bidders (defined as four to six bids).

The results indicate that, for SMEs, the effect of being awarded a public contract on private-sector sales increases with the number of bidders (Chart 1.c). This pattern is consistent with the idea that a higher level of participation in tendering procedures enhances the effects of public procurement on the most financially constrained firms, reinforcing its role as an efficient selection mechanism and a driver of SME growth.

These results underline the role of competition in amplifying the positive effects of public procurement, particularly for SMEs. In light of this evidence, it is

1 Julian di Giovanni, Manuel García-Santana, Priit Jeenas, Enrique Moral-Benito and Josep Pijoan-Mas. (2025). "Buy Big or Buy Small? Procurement Policies, Firms' Financing, and the Macroeconomy". Staff Reports, 1006, Federal Reserve Bank of New York.

Box 3.6

PUBLIC PROCUREMENT AND SME GROWTH (cont'd)

particularly important to analyse recent developments in the participation intensity of public procurement processes and their possible impact on SMEs' access to this market.

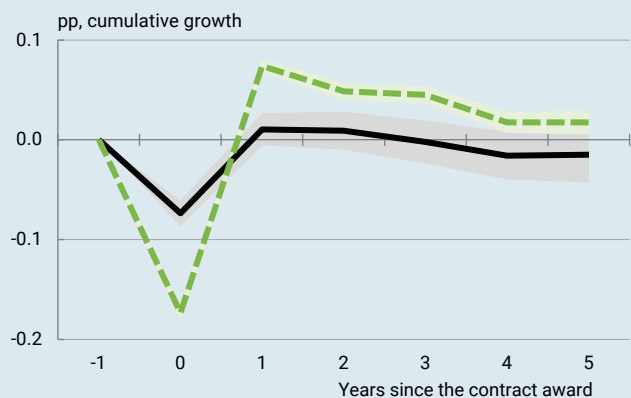
SMEs in Spain face significantly higher – and rising – barriers to entry in public procurement processes than their counterparts in other euro area countries, in a context in which, moreover, the percentage of tenders receiving a single bid has risen steadily since 2013.

Entering the market for public contracts entails an initial fixed cost that is, in relative terms, higher for smaller firms. By way of illustration, in 2019 between 18% and 34% of large firms were awarded at least one public contract, compared with only 2% to 4% of SMEs, pointing to substantially higher barriers to entry for the latter. The evidence shows that this cost is significantly higher in Spain than in the other countries analysed, and that it has increased since 2013.

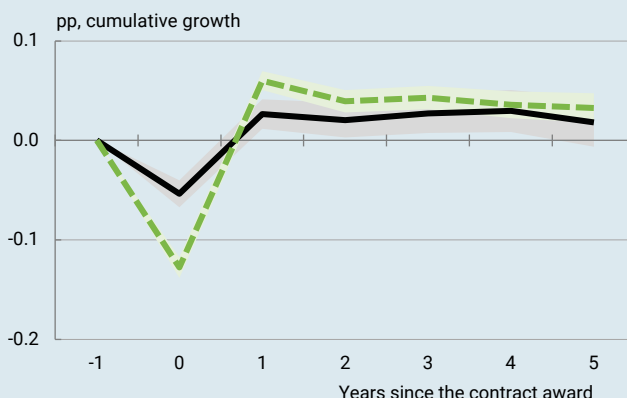
Chart 1

Impact of public procurement on Spanish and European SME growth

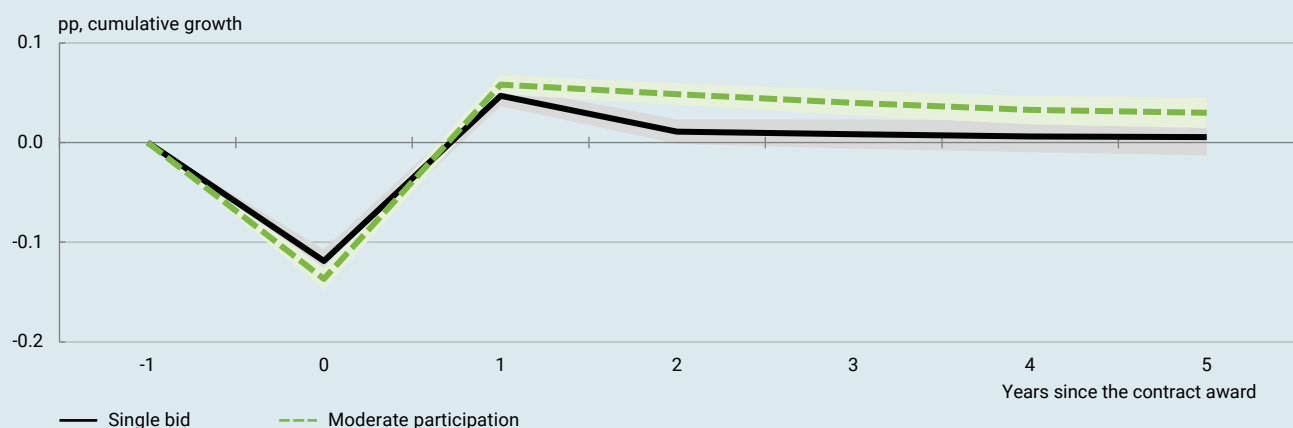
1.a Impact on Spanish firms' sales to the private sector, by firm size (a)



1.b Impact on euro area firms' sales to the private sector, by firm size (a) (b)



1.c Impact on Spanish SMEs' sales to the private sector, by degree of participation (c)



SOURCES: Tenders Electronic Daily and Orbis.

- a SMEs are defined as small and medium-sized enterprises with less than 250 employees (see methodological annex to Chapter 3 in this Report).
- b Only includes Germany, France, Italy, Portugal and Belgium.
- c "Single bid" includes tenders receiving only one bid. "Moderate participation" includes tenders receiving between four and six bids.

Box 3.6

PUBLIC PROCUREMENT AND SME GROWTH (cont'd)

From that year onwards the SME penalty (measured as the average marginal effect of being an SME on the probability of winning a contract, holding other firm characteristics constant) has increased notably in Spain, while comparable dynamics are not observed in other euro area countries (Chart 2.a).

In addition, the percentage of tenders with a single bid in Spain rose from 19% in 2013 to 35% in 2023, an increase somewhat larger than that observed in the other euro area countries analysed (Chart 2.b). These developments point to a decline in the participation intensity of public procurement processes, which is particularly relevant in light of the previous findings showing that the strongest positive effects of public procurement are concentrated in tenders with greater participation – especially for SMEs. Against this backdrop, the increase in tenders receiving a single bid could be limiting the potential of public

procurement for stimulating business growth, especially for smaller firms.

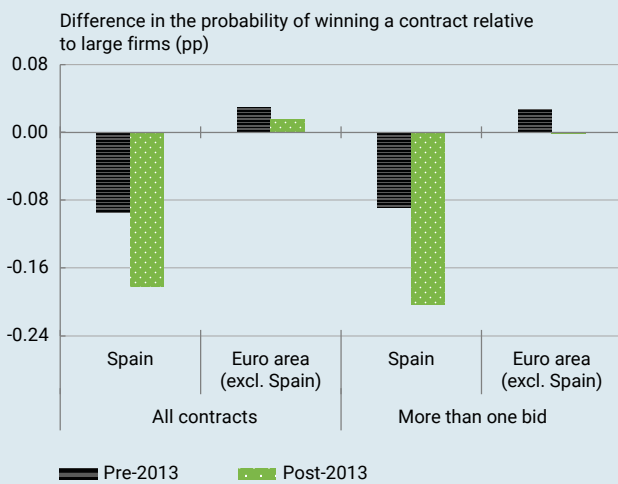
Overall, these patterns suggest that the increase in tenders receiving a single bid and the higher relative cost of accessing the public procurement market for SMEs – which is particularly marked in Spain – may be reducing the capacity of public procurement to foster competition, ease financial constraints and promote business growth.

These barriers to entry for SMEs are particularly concerning in a context in which both local and regional governments in Spain are heavily biased towards awarding public contracts to local firms. Specifically, the evidence shows that local and regional governments alike clearly favour suppliers located within their own jurisdiction, reducing effective competition and potentially amplifying barriers to entry for non-local firms, including many SMEs.²

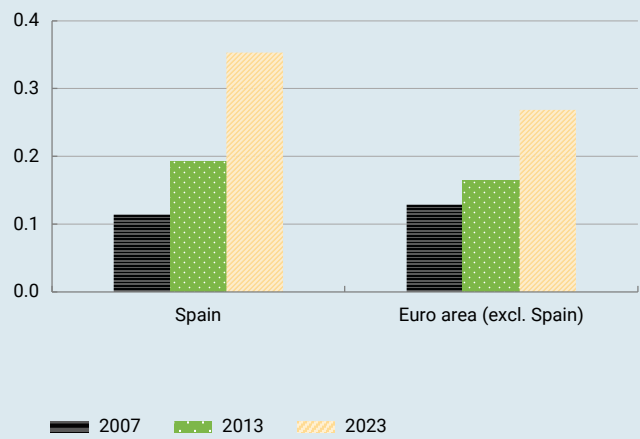
Chart 2

Percentage of tenders receiving a single bid and difficulties faced by SMEs in accessing public procurement

2.a SME penalty in accessing public procurement (a)



2.b Share of tenders receiving a single bid



SOURCES: Tenders Electronic Daily and Orbis.

a The chart shows the average marginal effects of being a small or medium-sized enterprise on the probability of winning a public contract. This probability is estimated using a logit model that controls for age, size, productivity and accumulated experience in public procurement. The model includes country-specific sectoral and time effects and allows coefficients to differ between Spain and the rest of the euro area. The effects can be interpreted as the average difference in the probability of being awarded a contract between SMEs and large firms with comparable observable characteristics.

2 Manuel García-Santana and Marta Santamaría. (2024). "Governments' Home Bias and Efficiency Losses: Evidence from National and Subnational Governments". CEPR Discussion Paper Series, 19256, Centre for Economic Policy Research.

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ACRONYMS AND ABBREVIATIONS

AEAT	Spanish tax authorities	HICP	Harmonised Index of Consumer Prices
AI	Artificial intelligence	HPI	House Price Index
AIReF	Independent Authority for Fiscal Responsibility	HS	Harmonized System
AMCESFI	Spanish Macroprudential Authority	Ibach	Individual BACH
APP	Asset Purchase Programme	ICAS	In-house Credit Assessment System
BACH	Bank for the Accounts of Companies Harmonised	ICO	Official Credit Institute
BCBS	Basel Committee on Banking Supervision	IEA	International Energy Agency
BE	Banco de España	IEEPA	Emergency Economic Powers Act
BIS	Bank for International Settlements	IEF	Spanish Institute of Fiscal Studies
BLS	Bank Lending Survey	IGAE	National Audit Office
CBI	Integrated Central Balance Sheet Database	IIP	International Investment Position
CBQ	Central Balance Sheet Data Office Quarterly Survey	IMF	International Monetary Fund
CBSO	Central Balance Sheet Data Office	INE	National Statistics Institute
CCR	Central Credit Register	IPREM	Multipurpose public indicator of income
CCyB	Countercyclical capital buffer	IPV	House price index
CNE	Spanish National Accounts	IRAV	Rental Housing Benchmark Index
CNMC	National Commission on Markets and Competition	Ivie	Valencian Institute of Economic Research
CNMV	National Securities Market Commission	LFS	Labour Force Survey
CORPME	Spanish Mercantile and Property Registrars' Association	LNG	Liquefied natural gas
CPI	Consumer Price Index	LTP	Loan-to-price ratio
COFOG	Classification of the Functions of Government	LTV	Loan-to-value ratio
CQS	Credit quality step	MRPK	Marginal revenue product of capital
DFR	Deposit facility rate	MRPL	Marginal revenue product of labour
DGS	Deposit guarantee scheme	MWh	Megawatt hour
DIRCE	Central Business Register	NACE	Statistical classification of economic activities in the European Community
DSTI	Debt service-to-income ratio	NCBs	National central banks
EBA	European Banking Authority	NDER	Narrowly defined effective rate
EBAE	Banco de España Business Activity Survey	NFCs	Non-financial corporations
ECB	European Central Bank	NGEU	Next Generation EU
ECBSO	European Committee of Central Balance Sheet Data Offices	NPLs	Non-performing loans
EFF	Spanish Survey of Household Finances	OECD	Organisation for Economic Co-operation and Development
EFSF	European Financial Stability Facility	OIS	Overnight index swap
EIB	European Investment Bank	PD	Probability of default
EONIA	Euro Overnight Index Average	PELTROS	Pandemic emergency longer-term refinancing operations
EPA	Spanish Labour Force Survey	PEPP	Pandemic Emergency Purchase Programme
ERTE	Job retention and short-time work schemes	PMI	Purchasing Managers' Index
ESCB	European System of Central Banks	QNA	Quarterly National Accounts
ESM	European Stability Mechanism	R&D&I	Research, development and innovation
ESRB	European Systemic Risk Board	RHPI	Rental housing price index
ESS	Structure of Earnings Survey	ROA	Return on assets
€STR	Euro short-term rate	RRF	Recovery and Resilience Facility
ETICCE	Use of Information and Communications Technologies and E-Commerce in Enterprises	RTRP	Recovery, Transformation and Resilience Plan
EU	European Union	SAFE	Survey on the Access to Finance of Enterprises
EU27	The 27 countries of the European Union	SERPAPI	State benchmark system for residential rental
EUROSTAT	Statistical Office of the European Communities	SIU	Urban Information System
FASE	Financial Accounts of the Spanish Economy	SMEs	Small and medium-sized enterprises
FDI	Foreign direct investment	SRB	Single Resolution Board
FSB	Financial Stability Board	SRM	Single Resolution Mechanism
FUA	Functional urban area	SSM	Single Supervisory Mechanism
GDI	Gross disposable income	TED	Tenders Electronic Daily
GDP	Gross domestic product	TFP	Total factor productivity
GenAI	Generative AI	ULCs	Unit labour costs
GFCF	Gross fixed capital formation	VAT	Value Added Tax
GOP	Gross operating profit	ViME	Business Multilocalisation Viewer
GOS	Gross operating surplus	WTO	World Trade Organization
GVA	Gross value added		

COUNTRIES AND CURRENCIES

In accordance with the protocol order, the EU Member States are listed using the alphabetical order of the country names in the national languages.

BE	Belgium	EUR (euro)
BG	Bulgaria	BGN (Bulgarian lev)
CZ	Czech Republic	CZK (Czech koruna)
DK	Denmark	DKK (Danish krone)
DE	Germany	EUR (euro)
EE	Estonia	EUR (euro)
IE	Ireland	EUR (euro)
GR	Greece	EUR (euro)
ES	Spain	EUR (euro)
FR	France	EUR (euro)
IT	Italy	EUR (euro)
HR	Croatia	EUR (euro)
CY	Cyprus	EUR (euro)
LV	Latvia	EUR (euro)
LT	Lithuania	EUR (euro)
LU	Luxembourg	EUR (euro)
HU	Hungary	HUF (Hungarian forint)
MT	Malta	EUR (euro)
NL	Netherlands	EUR (euro)
AT	Austria	EUR (euro)
PL	Poland	PLN (Polish zloty)
PT	Portugal	EUR (euro)
RO	Romania	RON (New Romanian leu)

SI	Slovenia	EUR (euro)
SK	Slovakia	EUR (euro)
FI	Finland	EUR (euro)
SE	Sweden	SEK (Swedish krona)
UK	United Kingdom	GBP (Pound sterling)
JP	Japan	JPY (Japanese yen)
US	United States	USD (US dollar)

CONVENTIONS USED

M1	Notes and coins held by the public + sight deposits
M2	M1 + deposits redeemable at notice of up to three months + deposits with an agreed maturity of up to two years
M3	M2 + repos + shares in money market funds and money market instruments + debt securities issued with an agreed maturity of up to two years
Q1, Q4	Calendar quarters
H1, H2	Calendar half-years
bn	Billions (10 ⁹)
m	Millions
mb	Million barrels
mb/d	Million barrels per day
bp	Basis points
pp	Percentage points
...	Not available
—	Nil, non-existence of the event considered or insignificance of changes when expressed as rates of growth
0.0	Less than half the final digit shown in the series