MR06

MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

NUMBER 479 | JUNE 2023

ECONOMIC & FINANCIAL ENVIRONMENT

FINANCIAL MARKETS
Is monetary policy managing to cool economic activity? A first assessment

INTERNATIONAL ECONOMY
New economic scenario: a change of outlook for international economies and markets?

SPANISH ECONOMY
New economic scenario: the outlook improves for Spain

The 2023-2026 Stability Programme: reduction of Spain's budget deficit through economic growth

DOSSIER: THE GOLDEN YEARS OF THE BABY BOOMERS: CHALLENGES AND OPPORTUNITIES

Baby boomers: who they are and how they are facing retirement

Reforming the pension system: in search of sustainability

How have other pension systems ensured their sustainability?

How to manage our cognitive biases to boost private pension savings

What does the retirement of the baby boomers mean for economic growth?

Consumption and saving patterns after retirement

CaixaBank Research

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK
June 2023

The *Monthly Report* is a publication developed jointly by CaixaBank Research and BPI Research (UEEF)

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Date this issue was closed:
2 June 2023

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Forecasts in an unstable economy

The last few years have provided a dose of humility for economic prediction exercises. The string of shocks – varying widely in nature – has caused distortions in key variables such as growth and inflation, while the economic scenarios have had to be calibrated with hypotheses related to the evolution of the pandemic and the effects of the war on commodity prices, all of which has increased the degree of uncertainty in the forecasts. In a short space of time, economists have had to brush up on their knowledge of energy markets, take a crash course on the economic effects of epidemic diseases and put geopolitical risk back on the radar, all while trying to understand the nature and consequences of the mismatches between global supply and demand. Along the way, the intensity and duration of the inflationary episode which originated in early 2021 and the resilience of the business cycle to all kinds of disturbances were underestimated; so too, therefore, was the flexibility of households and businesses to overcome the successive obstacles emerging on the horizon. This ability of modern economies to adapt, as well as the tailwinds provided by extraordinarily expansive monetary and fiscal policies, explains the better-than-expected economic performance we have seen in recent months.

These signals are still present as we approach the end of the first half of the year, as the international economy is moving along at an acceptable cruising speed, albeit with divergences between countries and economic sectors. While headline inflation readings continue to improve and doubts remain regarding price behaviour in the medium term as the signs regarding a possible reduction in core inflation measures are inconclusive (especially in the food and services components) and this sheds little light on how the current cycle of interest rate hikes will end. The good news is that behind this pattern in the main economic variables lies a correction of many of the imbalances between global supply and demand, which demonstrates that economic policy transmission channels continue to operate and that the bottlenecks that were distorting production have cleared. That said, there is a feeling that this adjustment is still incomplete.

In this context, with the first episode of financial instability apparently stifled, there is an upward revision in the growth forecasts for this year, reflecting the fall in commodity prices since the summer, the better-than-expected economic activity data over the winter, the strength of the labour market and the improvement in agents' expectations. In our case, we have raised our economic activity forecasts for 2023 for the euro area (0.9% vs. 0.5%), Spain (2% vs. 1.3%) and the US (1.2% vs. 0.9%), although in all cases we have slightly lowered our forecasts for 2024 due to the delayed effect of the cumulative rise in interest rates.

Specifically, once the energy outlook has cleared, the main risks to the baseline projections are the behaviour of core inflation and the course of monetary policy, as well as the extent to which a tightening of the latter could trigger new episodes of financial turbulence like those we experienced in March. All in all, with fiscal policy converging towards neutrality, the key will lie in how central banks manage their dual mandate (financial stability versus price stability). That said, the main negative surprise of recent months has been the difficulties that the manufacturing sector is experiencing in breaking free from its recent sluggishness, which is affecting global trade and is clearly apparent in the economic data of countries such as Germany, where growth has been negative for three of the last four quarters. Moreover, this weakness has come at a time when industrial policy is in the midst of adapting to the new geostrategic challenges, a trend led by the US with the approval of the IRA (Inflation Reduction Act), which marks a turning point for the framework for transatlantic economic relations. In short, despite the encouraging signs of recent months, the international economy will continue to operate in an unstable equilibrium within the forecast horizon.

José Ramón Díez
June 2023

Chronology

MAY 2023

3 The Fed raises rates 25 bps, to the 5.00%-5.25% range.
4 The ECB raises rates 25 bp and places the depot rate at 3.25% and the refi rate at 3.75%.
5 The WHO declares the global COVID-19 health emergency over.

MARCH 2023

16 The ECB raises rates by 50 bps and places the depo rate at 3.00% and the refi rate at 3.50%.
18 Russia and Ukraine extend the deal allowing the export of grain and related foodstuffs and fertilisers via the Black Sea.
22 The Fed raises rates by 25 bps, placing them in the 4.75%-5.00% range.

JANUARY 2023

1 Croatia joins the euro area and the Schengen Area.
8 China reopens its borders to foreign travellers after three years.

APRIL 2023

2 OPEC+ announces an additional production cut of 1.15 million barrels per day (bpd), bringing the total reduction to 3.66 bpd.
9 Kazuo Ueda becomes the new governor of the Bank of Japan.
19 The United Nations estimates that in 2023 India will overtake China to become the country with the biggest population in the world.

FEBRUARY 2023

1 The Fed raises rates by 25 bps up to the 4.50%-4.75% range.
2 The ECB raises rates by 50 bps, placing the depo rate at 2.50% and the refi rate at 3.00%.
6 A magnitude 7.8 earthquake strikes Türkiye and Syria, with the highest death toll since 2010 and the fifth highest this century.

DECEMBER 2022

14 The Fed raises official interest rates by 50 bps.
15 The ECB raises official interest rates by 50 bps and announces that it will reduce reinvestments under the APP.

Agenda

JUNE 2023

2 Spain: registration with Social Security and registered unemployment (May).
9 Spain: DBRS rating.
Portugal: international trade (April).
12 Portugal: service sector turnover (April).
13-14 Federal Open Market Committee meeting.
15 Governing Council of the European Central Bank meeting.
16 Spain: quarterly labour cost survey (Q1).
23 Spain: quarterly national accounts (Q1).
Spain: loans, deposits and NPL ratio (Q1 and April).
Spain: balance of payments and NIIP (Q1).
Portugal: GDP breakdown (Q1).
29 Spain: CPI flash estimate (June).
Portugal: NPL ratio (Q1).
Euro area: economic sentiment index (June).
29-30 European Council meeting.
30 Spain: household savings rate (Q1).
Spain: state budget execution (May).
Portugal: CPI flash estimate (June).

JULIO 2023

3 Portugal: industrial production (May).
4 Spain: registration with Social Security and registered unemployment (June).
11 Spain: financial accounts (Q1).
14 Spain: Moody's rating.
18 China: GDP (Q2).
20 Portugal: balance of payments (May).
21 Portugal: DBRS rating.
24 Spain: loans, deposits and NPL ratio (May).
25 Portugal: bank loan survey (Q2).
25-26 Federal Open Market Committee meeting.
27 Spain: labour force survey (Q2).
Governing Council of the European Central Bank meeting.
US: GDP (Q2).
28 Spain: GDP flash estimate (Q2).
Spain: CPI flash estimate (July).
Portugal: turnover in retail (June).
Euro area: economic sentiment index (July).
31 Spain: state budget execution (June).
Portugal: GDP flash estimate (Q2).
Euro area: GDP (Q2).

The strength of exports

The Spanish economy has been performing better than expected in recent months. To date, not only has it managed to avoid the dreaded recession, but it has also maintained a significant growth rate in both economic activity and employment. This leads us to improve our scenario. The GDP growth forecast for this year now stands at 2.0%, 0.7 percentage points above the previous scenario. In part, this improvement is due to the easing of energy prices, which has occurred earlier than expected. The measures adopted, both in Spain and in most developed countries, have helped to cushion the impact of the energy crisis. In Spain, moreover, the foreign sector has performed much better than expected.

Domestic demand has been declining for two quarters now. Between Q4 2022 and Q1 2023 it registered a cumulative decline of more than 1.5% in real terms. But this has been more than offset by the buoyancy of goods and services exports, which grew by 10.2% year-on-year in Q1. The good performance of the foreign sector is also reflected in the current account, which last year remained in surplus despite the sharp rise in the cost of energy imports: it fell by just 0.4 percentage points compared to 2021, to 0.6% of GDP. This is one of the smallest declines among all developed countries. In Germany, France and Italy, for example, the current account balance fell by around 4 pps – a remarkable difference.

If we analyse the evolution of purchases from abroad in a little more detail, we see that the cost of energy imports rose substantially. The deficit in the energy balance increased from 27,842 million euros in 2021 to 56,551 million in 2022. However, in terms of GDP, the figure for 2022 (4.3%) did not exceed that of 2012 (4.5%). This is partly due to a milder-than-usual winter, and also due to the efforts made to cut energy consumption. If we take a broader perspective, we see a marked improvement in the energy production mix thanks to an increase in the role of renewables. In particular, whereas in 2007 just 20% of electricity production came from renewables, in 2022 this figure stood at 43%, and so far this year it is above 50%. Investing in renewable energies is not just essential for tackling climate change. It also makes the economy much more resilient to external shocks.

When we look at the evolution of exports, three elements stand out. Firstly, the improvement has been widespread across both goods and services. In particular, two-thirds of the categories of goods show double-digit growth rates in the period January-March. Among services, the boom in tourism stands out, as revenues grew by 38.8% year-on-year in Q1 and are now well above pre-pandemic levels, while transportation and services to companies also registered strong export growth (+19.2% and 18.6%, respectively, in Q4 2022). Among goods, the automotive sector stands out (+32% in Q1). Secondly, the strong growth rate is also widespread by destination, and is especially intense in the case of the main markets: exports of goods to the euro area (accounting for 56% of the total) grew by 14.3%, especially those destined for Germany and France (+18.9% and +15.2%, respectively). Thirdly, this pattern is not widespread across developed countries. Germany, France and Italy, for example, are experiencing less buoyant growth in their exports of goods: 7.8%, 9.5% and 9.8%, respectively, compared to the 14.6% registered by Spain.

Although Spain's exports have been surprisingly strong in the current context, this good performance stretches back a long time. It began during the financial and sovereign debt crisis of a decade ago, when many Spanish companies were forced to look abroad for business opportunities in the face of weak domestic demand. Supported by the recovery of the Spanish economy's competitiveness, the number of companies that export on a regular basis has not stopped growing, increasing from 35,000 in 2010 to 57,000 last year. The relative weight of exports of goods and services has increased too, climbing more than 15 pps to 41.6% of GDP.

Over the coming months, the growth of Spanish exports could lose some steam. The slowdown anticipated in the major developed countries, which is where the bulk of Spain's exports go to, will be difficult to get around. In any case, this should not cause us to lose sight of the excellent trajectory of recent years, which once again has been key to dampening the impact of a challenging context.

Oriol Aspachs

Average for the last month in the period, unless otherwise specified

Financial markets

	Average 2000-2007	Average 2008-2019	2020	2021	2022	2023	2024
INTEREST RATES							
Dollar							
Fed funds (upper limit)	3.43	0.81	0.25	0.25	4.50	5.00	3.50
3-month Libor	3.62	1.01	0.23	0.21	4.74	5.00	3.50
12-month Libor	3.86	1.48	0.34	0.52	5.47	4.50	3.10
2-year government bonds	3.70	1.04	0.13	0.62	4.41	3.50	2.60
10-year government bonds	4.70	2.57	0.93	1.45	3.62	3.20	3.00
Euro							
ECB depo	2.05	0.20	–0.50	–0.50	1.77	3.75	3.00
ECB refi	3.05	0.75	0.00	0.00	2.27	4.25	3.50
€STR	–	–0.54	–0.56	–0.58	1.57	3.66	2.98
1-month Euribor	3.18	0.50	–0.56	–0.60	1.72	3.62	2.83
3-month Euribor	3.24	0.65	–0.54	–0.58	2.06	3.57	2.69
6-month Euribor	3.29	0.78	–0.52	–0.55	2.56	3.72	2.74
12-month Euribor	3.40	0.96	–0.50	–0.50	3.02	3.86	2.80
Germany							
2-year government bonds	3.41	0.35	–0.73	–0.69	2.37	3.30	2.50
10-year government bonds	4.31	1.54	–0.57	–0.31	2.13	2.80	2.60
Spain							
3-year government bonds	3.62	1.69	–0.57	–0.45	2.66	3.15	2.82
5-year government bonds	3.91	2.19	–0.41	–0.25	2.73	3.23	2.99
10-year government bonds	4.42	3.17	0.05	0.42	3.18	3.90	3.60
Risk premium	11	164	62	73	105	110	100
Portugal							
3-year government bonds	3.68	3.33	–0.61	–0.64	2.45	3.35	3.07
5-year government bonds	3.96	3.94	–0.45	–0.35	2.53	3.40	3.20
10-year government bonds	4.49	4.68	0.02	0.34	3.10	3.85	3.60
Risk premium	19	314	60	65	97	105	100
EXCHANGE RATES							
EUR/USD (dollars per euro)	1.13	1.26	1.22	1.13	1.06	1.12	1.15
EUR/GBP (pounds per euro)	0.66	0.84	0.90	0.85	0.87	0.86	0.85
OIL PRICE							
Brent ($/barrel)	42.3	80.1	50.2	74.8	81.3	93.0	80.0
Brent (euros/barrel)	36.4	62.5	41.3	66.2	76.8	85.0	69.8

Forecasts

Change in the average for the year versus the prior year average (%), unless otherwise indicated

International economy

	Average 2000-2007	Average 2008-2019	2020	2021	2022	2023	2024
GDP GROWTH							
Global	4.5	3.3	–2.8	6.3	3.4	2.8	3.0
Developed countries	*2.7*	*1.4*	*–4.2*	*5.4*	*2.7*	*1.2*	*1.2*
United States	2.7	1.7	–2.8	5.9	2.1	1.2	0.8
Euro area	2.2	0.8	–6.3	5.3	3.5	0.9	1.3
Germany	1.6	1.2	–4.1	2.6	1.9	0.2	1.1
France	2.2	1.0	–7.9	6.8	2.6	0.7	1.0
Italy	1.5	–0.3	–9.0	7.0	3.8	1.1	1.0
Portugal	1.5	0.5	–8.3	5.5	6.7	2.5	1.5
Spain	3.7	0.6	–11.3	5.5	5.5	2.0	1.8
Japan	1.4	0.4	–4.3	2.3	1.1	1.3	1.1
United Kingdom	2.6	1.3	–11.0	7.6	4.1	0.4	0.6
Emerging and developing countries	*6.5*	*4.9*	*–1.8*	*6.9*	*4.0*	*4.0*	*4.3*
China	10.6	8.0	2.2	8.4	3.0	5.7	4.9
India	7.2	6.8	–6.7	9.0	7.3	6.0	6.7
Brazil	3.6	1.6	–3.3	5.0	2.9	0.9	1.8
Mexico	2.4	1.9	–8.0	4.7	3.1	1.4	1.9
Russia	7.2	1.3	–2.7	5.6	–2.1	–0.5	1.3
Türkiye	5.5	4.5	1.9	11.4	5.6	2.4	3.2
Poland	4.2	3.7	–2.0	6.9	4.9	0.7	2.7
INFLATION							
Global	4.1	3.7	3.2	4.7	8.7	6.6	4.8
Developed countries	*2.1*	*1.6*	*0.7*	*3.1*	*7.3*	*4.6*	*2.4*
United States	2.8	1.8	1.3	4.7	8.0	4.2	2.2
Euro area	2.2	1.4	0.3	2.6	8.4	5.6	2.6
Germany	1.7	1.4	0.4	3.2	8.6	6.0	2.9
France	1.9	1.3	0.5	2.1	5.9	5.0	2.4
Italy	2.4	1.4	–0.1	1.9	8.7	6.3	2.5
Portugal	3.1	1.1	0.0	1.3	7.8	5.0	2.8
Spain	3.2	1.3	–0.3	3.1	8.4	3.9	2.8
Japan	–0.3	0.4	0.0	–0.2	2.5	2.5	1.5
United Kingdom	1.6	2.3	0.9	2.6	9.0	6.3	2.7
Emerging countries	*6.7*	*5.6*	*5.2*	*5.9*	*9.8*	*8.1*	*6.4*
China	1.7	2.6	2.5	0.9	2.0	1.5	2.1
India	4.5	7.3	6.6	5.1	6.7	5.3	5.0
Brazil	7.3	5.7	3.2	8.3	9.3	5.3	4.5
Mexico	5.2	4.2	3.4	5.7	7.9	6.5	4.6
Russia	14.2	7.9	3.4	6.7	13.8	6.7	5.2
Türkiye	22.6	9.6	12.3	19.6	72.3	46.4	34.9
Poland	3.5	1.9	3.7	5.2	14.3	12.8	6.9

Forecasts

Change in the average for the year versus the prior year average (%), unless otherwise indicated

Spanish economy

	Average 2000-2007	Average 2008-2019	2020	2021	2022	2023	2024
Macroeconomic aggregates							
Household consumption	3.6	0.0	–12.4	6.0	4.5	0.6	2.0
Government consumption	5.0	1.1	3.5	2.9	–0.7	0.7	0.4
Gross fixed capital formation	5.6	–1.4	–9.7	0.9	4.6	0.8	2.9
Capital goods	4.9	0.1	–13.3	6.3	4.0	0.6	5.0
Construction	5.7	–2.9	–10.2	–3.7	4.7	0.7	1.7
Domestic demand (vs. GDP Δ)	4.6	–0.2	–6.4	4.5	3.2	0.6	1.8
Exports of goods and services	4.7	2.9	–19.9	14.4	14.4	5.1	1.6
Imports of goods and services	7.0	0.2	–14.9	13.9	7.9	2.2	1.9
Gross domestic product	**3.7**	**0.6**	**–11.3**	**5.5**	**5.5**	**2.0**	**1.8**
Other variables							
Employment	3.2	–0.4	–6.8	6.6	3.8	1.8	1.5
Unemployment rate (% of labour force)	10.5	19.5	15.5	14.8	12.9	12.6	12.2
Consumer price index	3.2	1.3	–0.3	3.1	8.4	3.9	2.8
Unit labour costs	3.0	0.6	7.7	0.3	0.4	2.6	2.6
Current account balance (% GDP)	–5.9	–0.3	0.6	1.0	0.6	0.8	1.0
External funding capacity/needs (% GDP)	–5.2	0.1	1.1	1.9	1.5	1.5	2.0
Fiscal balance (% GDP)[1]	0.3	–6.5	–10.3	–6.9	–4.8	–4.2	–3.4

Note: *1. Excludes losses for assistance provided to financial institutions.*

Forecasts

Portuguese economy

	Average 2000-2007	Average 2008-2019	2020	2021	2022	2023	2024
Macroeconomic aggregates							
Household consumption	1.7	0.5	–7.0	4.7	5.7	0.4	0.9
Government consumption	2.3	–0.3	0.4	4.6	2.4	1.0	1.0
Gross fixed capital formation	–0.4	–0.7	–2.2	8.7	2.7	5.0	8.2
Capital goods	3.2	2.6	–5.4	13.9	5.3	–	–
Construction	–1.5	–2.6	1.0	5.5	0.8	–	–
Domestic demand (vs. GDP Δ)	1.3	0.1	–5.3	5.7	4.8	1.3	2.3
Exports of goods and services	5.3	4.0	–18.8	13.4	16.7	4.3	6.1
Imports of goods and services	3.6	2.7	–11.8	13.2	11.0	4.6	6.4
Gross domestic product	**1.5**	**0.5**	**–8.3**	**5.5**	**6.7**	**2.5**	**1.5**
Other variables							
Employment	0.4	–0.5	–1.9	2.7	2.0	0.3	0.3
Unemployment rate (% of labour force)	6.1	11.4	7.0	6.6	6.0	7.1	6.9
Consumer price index	3.1	1.1	0.0	1.3	7.8	5.0	2.8
Current account balance (% GDP)	–9.2	–2.9	–1.2	–0.8	–1.4	–0.4	–0.2
External funding capacity/needs (% GDP)	–7.7	–1.6	0.1	1.0	–0.4	1.3	1.5
Fiscal balance (% GDP)	–4.6	–5.1	–5.8	–2.9	–0.4	–0.3	–0.1

Forecasts

The US debt ceiling and the landing of the economy determine investor sentiment

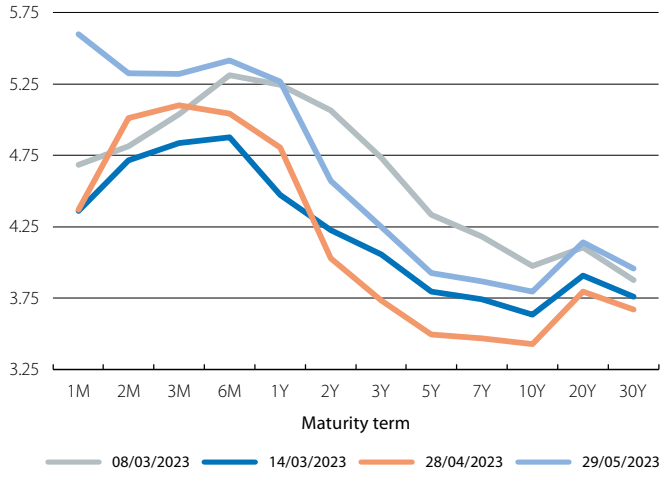
Financial markets on the trilemma of political tensions, a resilient cycle and a persistent inflation. Following the instability involving the US regional banking system and Credit Suisse in March, and as investors gradually digested these changes in the environment in April (a process that was not without its incidents), in May investors' attention shifted to other sources of uncertainty. Firstly, the negotiations around raising the US debt ceiling, which were unresolved up until the beginning of June, determined the investor mood in May, especially as the deadline approached. News about the progress of the negotiations either spurred on or stifled risk appetite in the markets and raised the yield on US Treasury bills in the shorter term, driving it up to a 20-year high of around 6%. Secondly, as concerns about financial instability receded, the health of the business cycle and the evolution of inflation regained prominence in the major developed economies.

Expectations for interest rate hikes in the coming months pick up slightly, easing towards the end of the month. After May kicked off with the Fed and the ECB raising benchmark interest rates by 25 as expected, as the month progressed and the doubts about financial stability faded, market expectations regarding interest rate levels in the coming months rose. For the Fed, after investors initially anticipated that May would bring the final rate hike of the current cycle, the strength of the labour market and the resilience of private consumption have now raised the possibility of additional 25-bp hikes in June or July. Nevertheless, a pause in the rate-hiking cycle at the June meeting remains the most likely scenario. In the euro area, with inflation figures still high (despite the stronger signs of moderation in May), coupled with statements by most members of the ECB's Governing Council – including its president Christine Lagarde – stressing that the institution still has some way to go in this cycle, investors continue to expect that the reference rate will reach 3.75%.

Public debt yields end the month down despite a month of gains fuelled by the mentioned uncertainties. The tensions over the debt ceiling, as well as Fitch's revision of its US rating watch (despite maintaining its AAA rating, the agency revised the outlook from «stable» to «negative») and the release of the economic data for April, caused a gradual and widespread rebound in sovereign debt yields in the short-term sections of the yield curves during the first few weeks of May, exacerbating their inversion. However, after progress was made in the political negotiations in the closing days of the month, these rallies were reversed both in the US and, even more sharply, in the euro area. Here, the slowdown in inflation in May, coupled with the continued signs of weakness in the industrial sector according to the business surveys, led 2-year benchmark rates to end the month almost flat. In the United Kingdom, in contrast, the worrying core inflation data drove 2-year debt yields to climb above 4.5%.

US sovereign yield curve by date

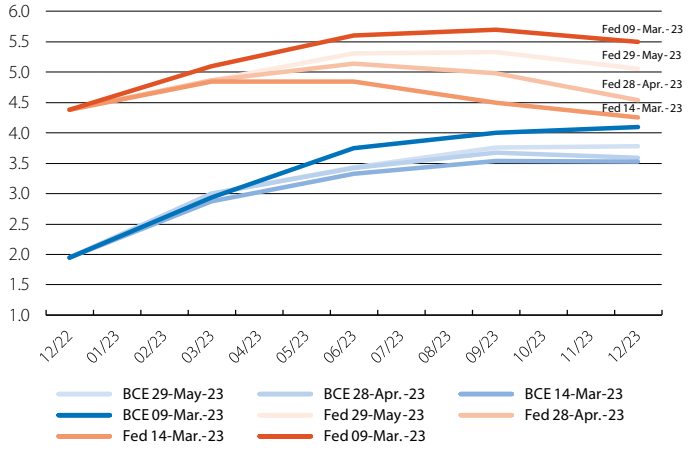
Yield (%)



Source: *CaixaBank Research, based on data from Bloomberg.*

Expectations for Fed and ECB benchmark interest rates

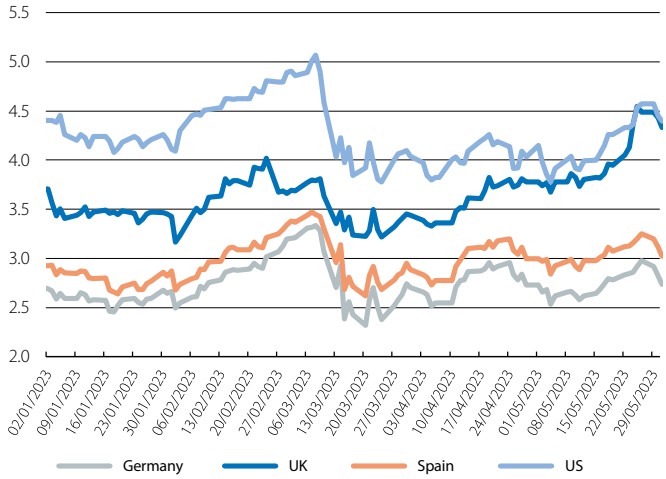
(%)



Source: *CaixaBank Research, based on data from Bloomberg.*

Interest rates on 2-year sovereign debt

(%)



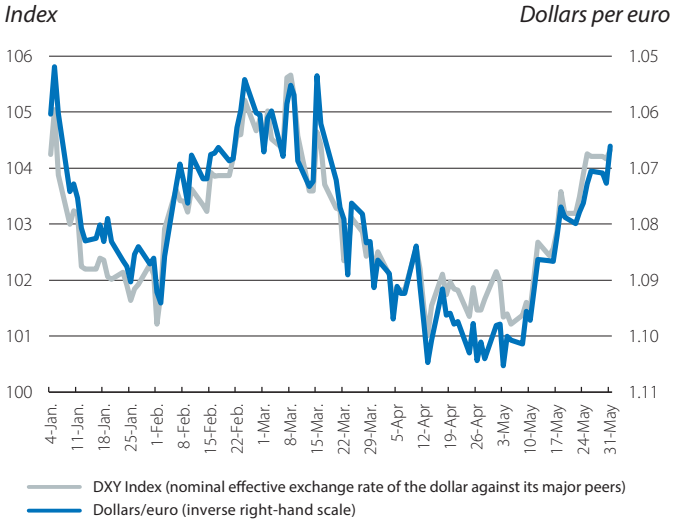
Source: *CaixaBank Research, based on data from Bloomberg.*

The US dollar appreciates on the back of higher interest rates expectations. In May, the depreciation experienced by the dollar since the beginning of March was reversed. This depreciation had initially been triggered by the financial instability in the US regional banks, which had lowered expectations for benchmark interest rates much more sharply for the Fed than for the ECB, thereby favouring the euro. However, the role of the dollar as a safe-haven currency amid the uncertainty surrounding the debt ceiling, as well as the gradual rise in expectations for rate hikes in the US, favoured the appreciation of the US currency relative to its major peers. Thus, after exceeding the level of 1.10 per euro, the dollar appreciated by 3%, to below 1.07 per euro. The dollar also appreciated against the yen (2.2%), although it depreciated against the pound sterling (1%) as the inflation data in the United Kingdom could pressure the Bank of England to implement further rate hikes.

Weakness in European and Chinese stock markets due to the impact of a weaker-than-expected reopening of China. May was the month with the weakest stock market performance so far this year in Europe, both in the Euro Stoxx 50 (–3.2%) and on the main national trading floors, with Portugal's PSI-20 performing particularly poorly (–7.8%). This pattern is explained both by the poorer performance of banking stocks and by the declines in the luxury sector (which affect the Italian and French indices in particular), weighed down by a reopening of the Chinese economy which has fallen short of expectations. This has also weighed on Hong Kong's Hang Seng index, which was down more than 8% in the month and fell to its lowest level this year. In the US, the tech sector performed particularly well (Nasdaq +7.5% in the month) compared to the rest (S&P flat with +0.2%). Also of note was the performance of US regional banking stocks: although the KBW index fell 6% in the month, the rapid deterioration observed in March and April appears to have ended, with several banks showing a stabilisation in their deposits in their earnings presentations.

Commodity prices ease. Energy prices registered their biggest declines of the year in May, with a cumulative decrease of almost 25% in the past five months. In the oil market, the Brent barrel ended the month below 73 dollars, dragged down by China's slower economic recovery and despite the intention of some OPEC countries to maintain their current production cuts. On the other hand, in Europe tensions relating to the gas market continued to ease. In addition to the continuous flow of liquefied natural gas supplies from the US and Qatar, energy generation from renewables registered a record high and there was a slowdown in the demand for gas across the continent, having reduced by almost 20% in the first four months of the year compared to the previous year. These factors, combined with the mild temperatures, favoured the acceleration of the filling of gas reserves (which are already back at almost 70% of capacity) as well as a drop in gas prices down to the levels of two years ago (around €25/MWh in the case of the TTF).

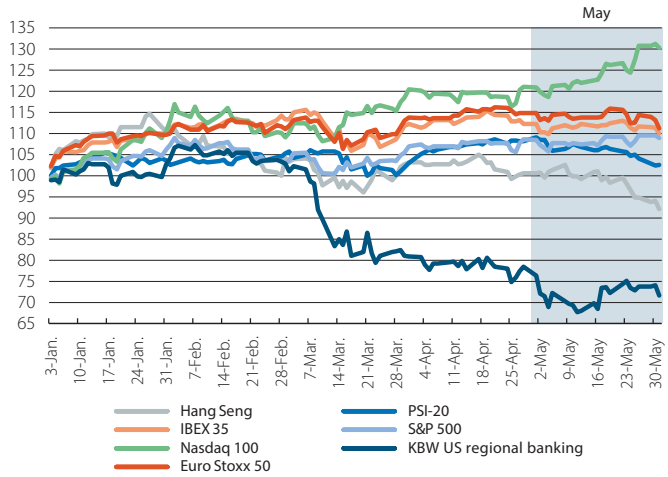
Evolution of the dollar exchange rate



Source: *CaixaBank Research, based on data from Refinitiv.*

Stock market performance for the year to date

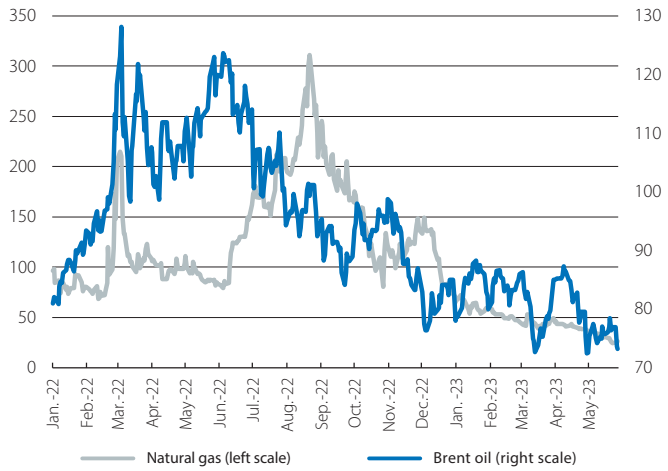
Index (100 = 30 December 2022)



Source: *CaixaBank Research, based on data from Eikon Refinitiv.*

Oil and gas prices

(€/MWh) *$/barrel)*



Note: *The natural gas price corresponds to the Dutch TTF benchmark.*
Source: *CaixaBank Research, based on data from Eikon Refinitiv.*

Is monetary policy managing to cool economic activity? A first assessment

In its battle against inflation, monetary policy has tightened considerably, as is clearly visible in official interest rates and those faced by businesses, households and governments. But these interest rates are not an end in themselves; rather, the ultimate goal is to cool economic activity and thus curb inflation. With this in mind, we have analysed the state of monetary policy transmission through one of its main channels: credit conditions.

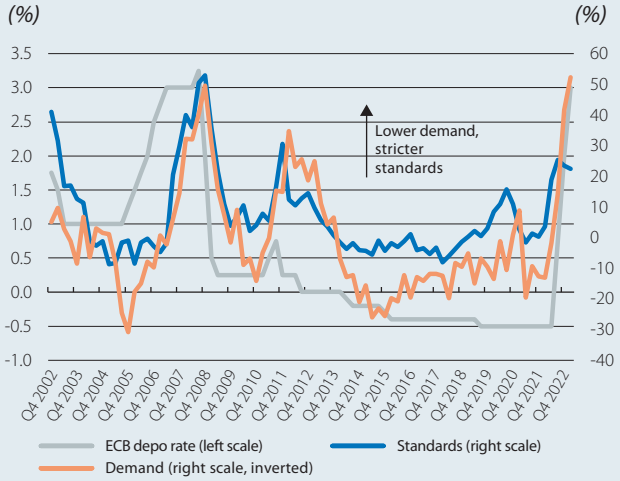
The Fed and ECB rate hikes (+500 bps and +375 bps, respectively) have resulted in a tightening of credit standards and weaker demand for credit. This is reflected in the latest banking sector surveys conducted by the Fed and the ECB (in particular, the BLS in Europe and the SLOOS in the US).[1] Not only do they capture this accumulated tension up to Q1 2023, but in the case of the euro area survey it also suggests that the peak may have already been reached and that we could see a slowdown in the pace of the tightening process in Q2 2023 (this would be consistent with expectations that the Fed and ECB's official rates have already reached their peak or are close to doing so).[2]

In this context of higher rates, stricter lending standards and lower demand, we would expect to observe less buoyancy in credit volumes. Therefore, it is useful to analyse the pattern of so-called «credit impulse», which we define as the change in the balance of outstanding credit minus its change in the same period of the previous year (as a percentage of nominal GDP).[3] This measure has a close correlation with GDP growth and allows us to assess credit dynamics in terms of their importance for economic activity.[4] In recent months, credit impulse has deteriorated. Most notably, it has done so to a degree that is commensurate with the tightening observed in credit standards and demand, which also suggests that the transmission of the monetary tightening strategy pursued by the Fed and the ECB has been successful.

In Europe, if the reduced tension in credit standards and lower demand predicted by the surveys end up being

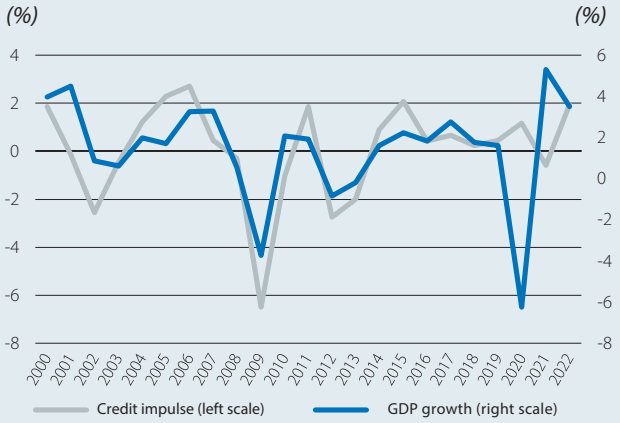
1. Bank Lending Survey (BLS) and Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS).
2. Specifically, in Europe, the BLS captures the state of credit standards and the demand for credit in the current quarter and expectations for the next one. Abnormally, in Q1 2023 the actual situation ended up being more severe than had been anticipated in Q4 2022. However, this occurred in a context of turbulence surrounding Silicon Valley Bank. Generally speaking, BLS expectations are a very good predictor of future patterns.
3. See W.L. Barcelona *et al.* (2022). «What Happens in China Does Not Stay in China». Fed International Finance Discussion Papers.
4. Intuitively, the outstanding balance of credit is especially associated with past economic activity, while new lending issued in a given quarter is associated with the economic activity of that quarter. Thus, the growth of this new credit is associated with GDP growth.

Euro area: credit standards and demand



Note: *The percentages refer to the net difference between the number of banks that have tightened standards/seen an increase in demand and those that have relaxed standards/seen a drop in demand.*
Source: *CaixaBank Research, based on data from the ECB's Bank Lending Survey.*

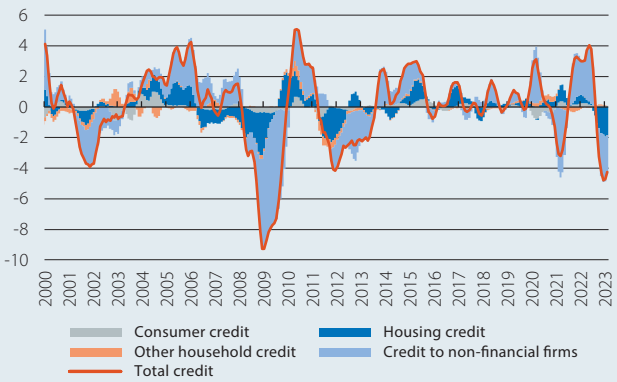
Euro area: credit impulse and GDP



Note: *Credit impulse is calculated as the change in the balance of outstanding credit minus its change in the previous year (as a percentage of nominal GDP).*
Source: *CaixaBank Research, based on data from the ECB and Eurostat.*

Euro area: credit impulse

Year-on-year change (%)



Note: *Credit impulse is calculated as the change in the balance of outstanding credit minus its change in the previous year (as a percentage of nominal GDP). The changes used are three-month cumulative changes and the credit impulse plotted on the chart is smoothed out using a moving average.*
Source: *CaixaBank Research, based on data from the ECB.*

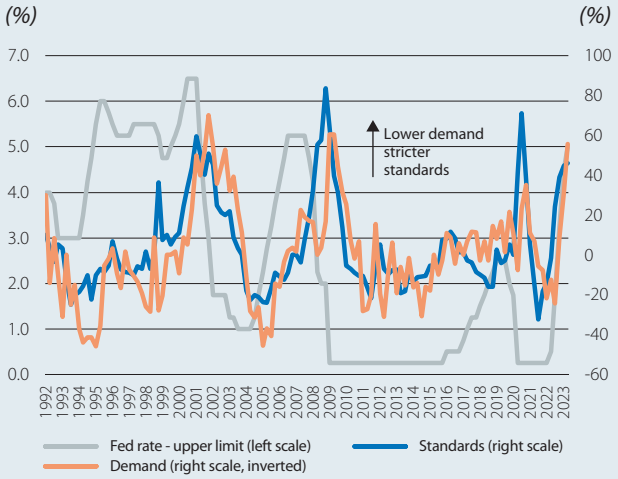
confirmed, then credit impulse will remain negative over the coming months, albeit slightly less so than in Q1 (specifically, the BLS expectations for Q2 predict an improvement in credit impulse of between 0.5 and 1.0 pps). In the case of the US, meanwhile, the SLOOS suggests that in the next quarter these credit conditions could tighten further still, which could reduce credit impulse by at least 0.2 pps.

If the transmission of monetary policy to credit impulse is proving effective, both in the US and in the euro area, then the question that remains is to what extent and with what time lag will this channel cool economic activity. The time lags are uncertain and variable, as prominent ECB and Fed members continue to stress,[5] but the close correlation between credit impulse and GDP growth offers us clues about the possible impact. To assess the magnitude of the potential cooling, we used a statistical model that predicts GDP growth based on its latest level and the contemporary credit impulse. The model is simple, but it is useful for explaining the correlation between the two measures and it suggests that credit plays an important role in determining GDP growth.[6] According to this exercise, the drop in credit impulse already observed, and assuming zero impulse in the coming quarters, would be associated with a reduction in GDP growth of 0.7 pps in both the euro area and the US.[7] If the impulse over the coming quarters evolves in line with the latest surveys for Q2, then according to this exercise GDP growth for 2023 as a whole would be 1.5 pps less in the euro area and 2.1 pps less in the US.[8]

Finally, beyond this simple exercise, a tightening of credit conditions could be affected by vulnerabilities in certain sectors. In this regard, one of the concerns is focused on the US and the high exposure of its regional banks to the commercial real estate sector, given the setbacks this sector has suffered so far this year and the fact that, in an environment of high rates, the outlook remains challenging. As an illustration, of all the credit issued by small banks in the US, 47% goes to this sector, whereas in the case of the big banks this figure drops to 16%. On the other hand, of the total credit granted to the commercial real estate sector, 67% is held by small banks, which are precisely the ones which suffered the most during the financial turbulence of March.

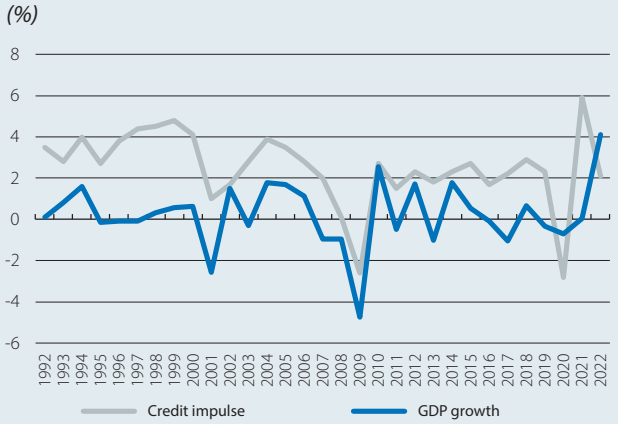
5. See the speech by the Federal Reserve Governor Philip N. Jefferson of 18 May 2023, *The U.S. Economic Outlook and Considerations for Monetary Policy*.
6. The R-squares for the US and the euro area are 0.85 and 0.64, respectively, all variables are significant at 1%, and the estimated ratios for credit impulse are similar in magnitude to those corresponding to the time lag of GDP growth.
7. In both cases, compared to a scenario where credit impulse was exactly 0 in 2023 (i.e. a scenario where the growth in the volume of the outstanding balance of credit was equal to that of 2022).
8. In the US, we would see a tightening of credit conditions consistent with what was expected in the latest SLOOS, while in the euro area we assume that the maximum tightening has already occurred.

US: credit standards and demand



Note: *The percentages refer to the net difference between the number of banks that have tightened standards/seen an increase in demand and those that have relaxed standards/seen a drop in demand.*
Source: *CaixaBank Research, based on data from the Fed's Senior Loan Officer Opinion Survey.*

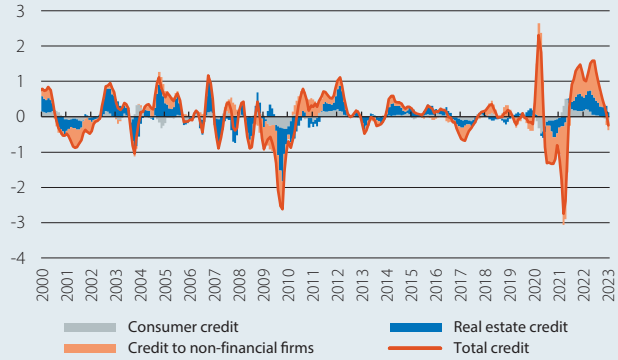
US: credit impulse and GDP



Note: *Credit impulse is calculated as the change in the balance of outstanding credit minus its change in the previous year (as a percentage of nominal GDP).*
Source: *CaixaBank Research, based on data from the Federal Reserve and the BEA.*

US: credit impulse

Year-on-year change (%)



Note: *Credit impulse is calculated as the change in the balance of outstanding credit minus its change in the previous year (as a percentage of nominal GDP). The changes used are three-month cumulative changes and the credit impulse plotted on the chart is smoothed out using a moving average.*
Source: *CaixaBank Research, based on data from the Fed.*

Interest rates (%)

	31-May	30-April	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Euro area					
ECB Refi	3.75	3.50	25	125.0	375.0
3-month Euribor	3.46	3.27	20	133.1	379.8
1-year Euribor	3.94	3.88	6	64.8	352.2
1-year government bonds (Germany)	3.17	3.09	8	57.0	311.0
2-year government bonds (Germany)	2.72	2.69	3	–4.5	216.3
10-year government bonds (Germany)	2.28	2.31	–3	–28.9	109.5
10-year government bonds (Spain)	3.33	3.36	–3	–33.1	102.8
10-year government bonds (Portugal)	3.02	3.13	–11	–56.3	68.6
US					
Fed funds (upper limit)	5.25	5.00	25	75.0	425.0
3-month Libor	5.50	5.30	19	72.9	387.0
12-month Libor	5.73	5.37	36	24.8	295.5
1-year government bonds	5.17	4.74	43	48.6	307.8
2-year government bonds	4.40	4.01	40	–2.3	176.1
10-year government bonds	3.64	3.42	22	–23.2	73.7

Spreads corporate bonds (bps)

	31-May	30-April	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Itraxx Corporate	82	83	–2	–8.8	–7.0
Itraxx Financials Senior	93	98	–5	–6.3	–5.7
Itraxx Subordinated Financials	173	187	–14	1.4	–15.9

Exchange rates

	31-May	30-April	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
EUR/USD (dollars per euro)	1.069	1.102	–3.0	–0.1	0.4
EUR/JPY (yen per euro)	148.950	150.070	–0.7	6.1	7.5
EUR/GBP (pounds per euro)	0.859	0.877	–2.0	–3.0	0.7
USD/JPY (yen per dollar)	139.340	136.300	2.2	6.3	7.1

Commodities

	31-May	30-April	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	541.5	547.5	–1.1	–2.4	–13.8
Brent ($/barrel)	72.7	79.5	–8.6	–15.4	–37.5
Gold ($/ounce)	1,962.7	1,990.0	–1.4	7.6	6.3

Equity

	31-May	30-April	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	4,179.8	4,169.5	0.2	8.9	1.9
Eurostoxx 50 (euro area)	4,218.0	4,359.3	–3.2	11.2	12.2
Ibex 35 (Spain)	9,050.2	9,241.0	–2.1	10.0	3.5
PSI 20 (Portugal)	5,729.4	6,212.3	–7.8	0.1	–8.1
Nikkei 225 (Japan)	30,887.9	28,856.4	7.0	18.4	12.5
MSCI Emerging	958.5	977.1	–1.9	0.2	–10.2

Clearer skies in the international economy, albeit with risks of storms

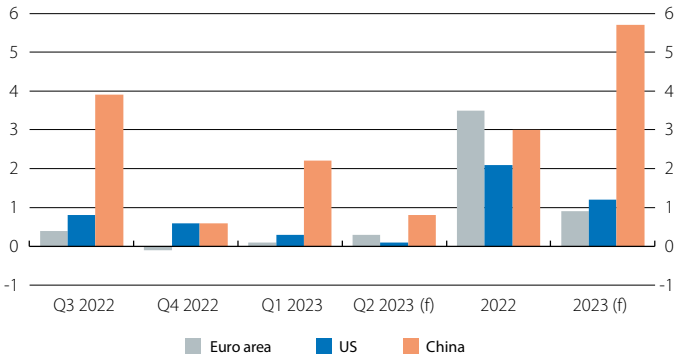
After a few months in which the winds have been less unfavourable than expected, the growth forecasts for this year are looking somewhat brighter. With the horizon loaded with risks, the clouds of the war in Ukraine led us to expect a scenario of stagflation at the beginning of the year, with a slowdown in the world economy from 3.1% in 2022 to 2.7% in 2023. Such a scenario was consistent with a Chinese economy weighed down by the restrictions, an energy crisis in Europe without precedent in recent times, gas prices far above their historical levels, a process of rapid monetary tightening in most of the major economies (necessary to contain the inflation crisis) and an environment of high geopolitical tensions. Although many of these underlying factors have not changed, China's reopening, the improvement in the energy outlook and a less weak Q1 than expected lead us to revise our macroeconomic scenario for 2023, with global growth now expected to be 2.8% as a result of upward revisions in the major economies. Specifically, we revised our forecast for GDP growth in the euro area to 0.9% (vs. 0.5% previously), in the US to 1.2% (vs. 0.9% previously) and in China to 5.7% (vs. 5.2% previously).

Inflation offers mixed signs of cooling. As set out in the Focus «New economic scenario: a change of outlook for international economies and markets?» in this same report, the balance between the downward drag of energy prices and the inertia of core component prices has led us to revise our inflation forecasts for the major international economies slightly upwards. After all, despite the moderation observed in recent months, the latest data still show significant underlying tensions. In particular, core inflation is still above 5% in both the US and the euro area, and the indicator of negotiated wage rates for the euro area (an indicator published by the ECB) continues to show an acceleration relative to prior quarters, with a year-on-year increase of 4.3% in Q1 2023 (vs. 3.1% in Q4 2022 and a historical average of around 2%). The strength of the labour market will thus continue to provide a floor for the rate at which inflation can decline. In the US, the unemployment rate has stood at around 3.5% in recent months, a level not sustained since 1969. Finally, even though tensions in food prices have begun to moderate, prices remain well above their pre-war levels, and there continues to be a state of drought in many major producing regions.

Mists and crosswinds in European economic activity. In the euro area, the situation is rather varied. On the one hand, the downward revision of Germany's growth for Q1 2023 from 0.0% to –0.3% (vs. –0.5% in Q4 2022) shows that the largest economy in the European bloc is in a technical recession, after registering two consecutive quarters of quarter-on-quarter declines in GDP. Spain, France and Italy remain the stars of the show, with positive growth in Q1 and an acceleration in the

Global: GDP growth in the euro area, the US and China

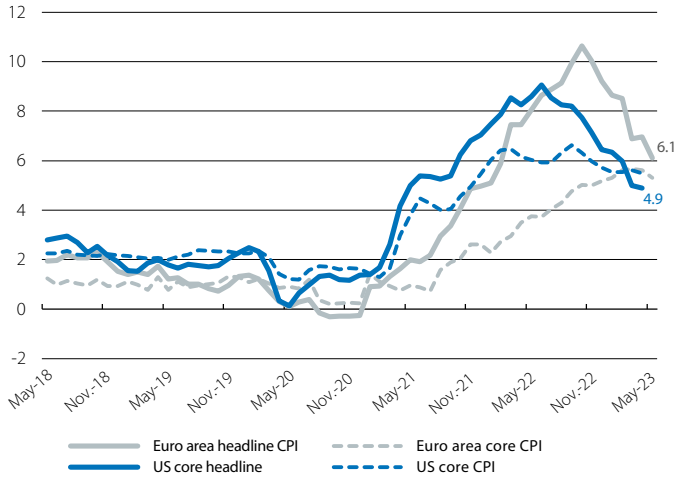
Quarter-on-quarter change (%) *Year-on-year change (%)*



Notes: *On the left-hand side of the chart we show the quarter-on-quarter growth for the last three quarters and the forecast for the next quarter (Q2 2023). On the right, we show the year-on-year growth rates recorded in 2022 and the forecasts for 2023.*
Source: *CaixaBank Research, based on data from Eurostat, the Bureau of Economic Analysis and the National Statistics Office of China.*

US and euro area: CPI

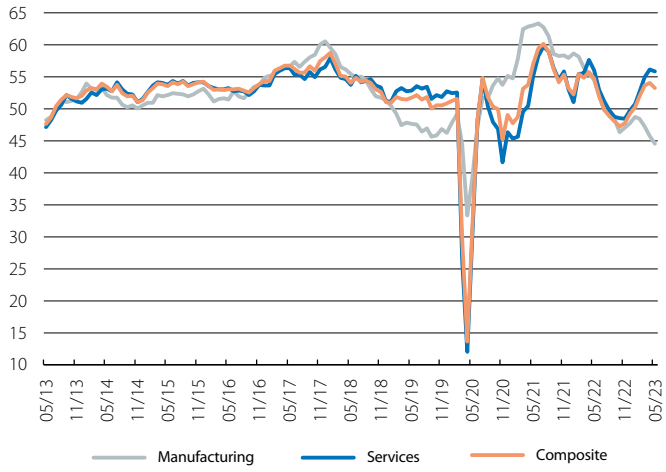
Year-on-year change (%)



Source: *CaixaBank Research, based on data from Eurostat and the Bureau of Labor Statistics.*

Euro area: PMI

Index



Source: *CaixaBank Research, based on data from S&P Global, via Refinitiv.*

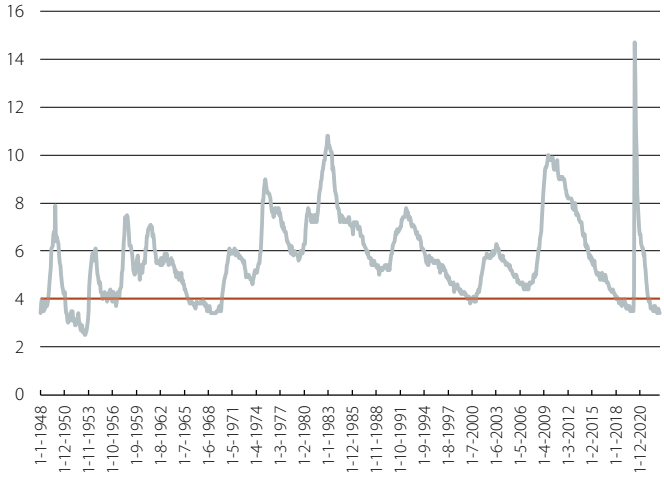
growth rate versus the previous quarter. There are also significant differences between sectors. Services remain the driver of the recent recovery, still spurred on by a post-pandemic boom which is beginning to show timid signs of moderation, while industry is showing persistent signs of weakness. This duality is well reflected in the business confidence data: the services PMIs are above 55 points for the third consecutive month, while those of industry have registered 11 months below 50 points and 4 consecutive months of declines. The German Ifo index also disappointed this month, falling by more than expected (to 91.7 points) and with 22 months in contractionary territory (below 100 points). In this context, economic activity is expected to remain luggish in the coming months.

With the impasse in the US Congress seemingly resolved, watch out for side effects. In the US, although the market turbulence has dissipated for now, the risk of storms remains ever-present due to the side effects of the impasse regarding the debt ceiling, as well as due to the tightening of financial conditions. Since January, the US Treasury has been forced to take exceptional measures to ensure the normal functioning of the federal government (a historically rare event, although in the last 13 years these episodes have been repeated over 10 times). With these measures on the verge of expiring, an agreement was reached in the negotiations between Democrats and Republicans to raise the debt ceiling, alleviating fears of a partial government shutdown (to ensure the repayment of the debt) or a default which, although highly unlikely, would have led to a cascade of events in the financial markets and would have had potentially severe global consequences. However, following the increase in the debt ceiling under an agreement that should last two years, the heightened risk perceived by investors is still palpable in the financial markets (see the Financial Markets section) and the spending cuts negotiated between Republicans and Democrats are expected to deduct as much as 0.2 pps from US growth this year.

In China, the boost provided by the reopening process has run out of steam. The economic activity data for April has fallen short of expectations. Although both industrial production (5.6%) and retail sales (18.4%) have advanced at a considerable rate in year-on-year terms, this growth is distorted by the base effects related to the closure of the Chinese economy a year ago. Looking at the breakdown by component, the strength of the services sector and the advance of public investment have stood out in recent months, in contrast with the weakness of the manufacturing sector and residential investment. In the manufacturing sector, of particular note is the year-on-year decline in the industrial production of electronic products, including semiconductors. Taking into account the export restrictions announced over the last few months by the world's major producers of these components, such as the US and Japan, this factor is expected to continue to undermine the outlook for industry in the short term, while also acting as a strong headwind for the long-term growth outlook.

US: unemployment rate

(%)



Source: *CaixaBank Research, based on data from the Bureau of Labor Statistics.*

US: debt ceiling

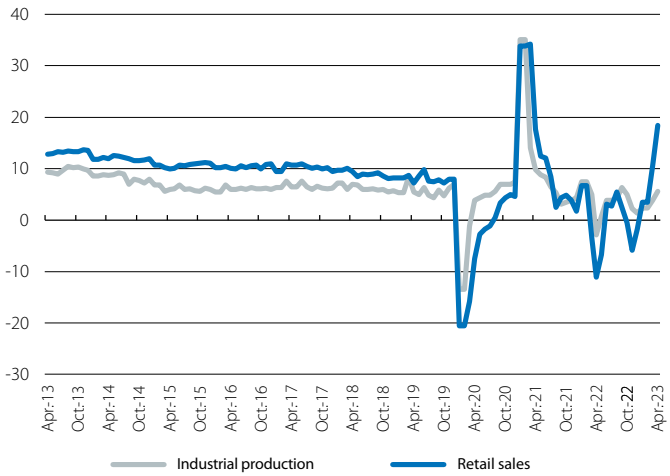
Episodes of near-default in the last 10 years

	Debt ceiling in force	White House	House of Representatives	Senate	Approximate time to shutdown
May. 23	31.4b USD				1 week
Dec. 21	28.4b USD				1 day
Jul. 19	22b USD				1 month
Feb. 18	20.5b USD				1 month
Sep. 17	19.8b USD				2 weeks
Nov. 15	18.1b USD				1 day
Feb. 14	17.2b USD				1 month
Oct. 13	16.7b USD				1 day
Feb. 13	16.4b USD				2 weeks

Note: *The table shows the debt ceiling that was in force on each occasion (before its suspension), the party that was in office and the party that controlled both houses of Congress (blue: Democrats, red: Republicans), as well as the estimated time remaining until the date that the funds available to meet the US federal government's financial obligations would run out (which would lead to a default, or a shutdown of parts of the government).*
Source: *CaixaBank Research, based on data from Politico.com.*

China: economic activity

Year-on-year change (%)



Source: *CaixaBank Research, based on data from the National Statistics Office of China.*

New economic scenario: a change of outlook for international economies and markets?

The international economy in the year to date has been marked by three major dynamics. Firstly, energy price tensions have eased, with prices stabilising at much lower levels than had been feared a few months ago, although they are still above pre-pandemic levels.[1] Secondly, the economic indicators have shown resilience on the activity side, while sending mixed signals on the inflation side, with sharp declines in headline inflation but significant persistence in the more inertial components. For these reasons, and as the third key dynamic of the year, the major central banks have been driven to further tighten their monetary policy. In addition to rate hikes, financial conditions in 2023 have also been strained following the collapse of Silicon Valley Bank (SVB) in the US and its reverberations in the global financial markets.[2] Taken together, all these developments have led us to re-evaluate the outlook for the international economy and financial markets.[3]

Easing of energy prices

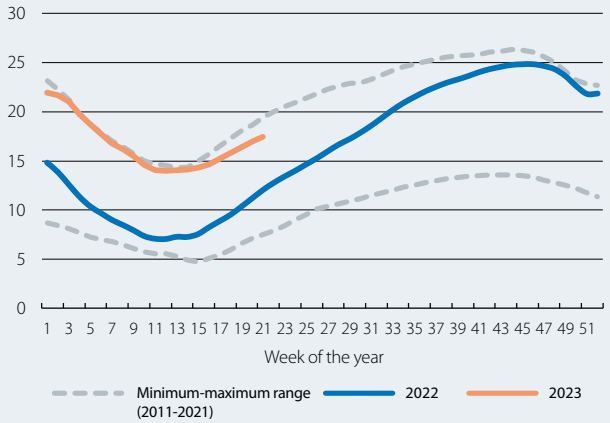
2023 began with energy prices that were much less stressed than had been initially feared, and this scenario has been confirmed over the course of the spring. In the gas market, Europe managed to get through the winter without major incidents, thanks to high levels of reserves and effective policies to contain demand and price volatility, all accompanied by a more temperate winter than usual. Thus, in May in the futures markets, the TTF gas price was trading at around €50/MWh on average for 2023 and 2024 as a whole. These levels, which are well below those anticipated at the start of the year (of over 100 euros),[4] will provide some relief for economic activity over the coming quarters.

The oil market, meanwhile, has experienced a more volatile few months, with the Brent barrel fluctuating between 70 dollars (when the market was dominated by fears of global cooling) and almost 90 dollars (when signs of a rapid revival of the Chinese economy coincided with further cuts in OPEC production). This volatility, coupled with the prospect of a second half of the year in which China's rebound could have a greater effect on commodity prices, leads us to forecast a Brent barrel price of around 85 dollars (80 euros) for 2023.

1. Gas prices are also now below their pre-Ukraine war levels (having been on the rise since Q3 2021).
2. See the Focus «Financial stability considerations amid monetary tightening» in the MR05/2023.
3. Our new macroeconomic scenario can be viewed in the forecast tables of this very *Monthly Report*.
4. Prices based on the 60-day moving average, which is the benchmark metric used for our gas price projections. In part, the lower prices also reflect the prospect of a cooling in global economic activity.

*Euro area: gas storage **

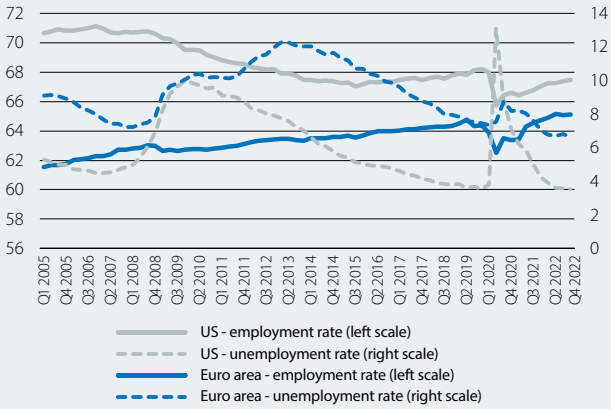
(% of consumption)



Note: ** Average for Germany, France, Italy and Spain.*
Source: *CaixaBank Research, based on data from AGSI.*

US and euro area: labour market

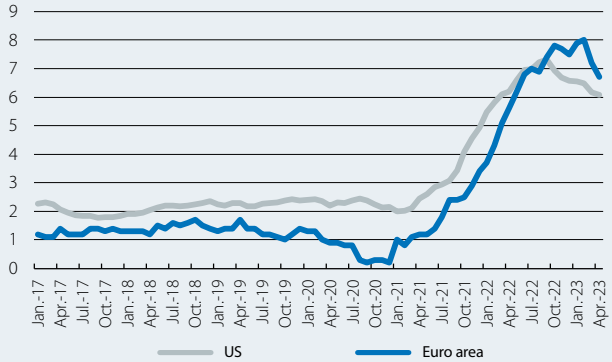
(% of population between 15 and 74 years old) *(% of labour force between 15 and 74 years old)*



Source: *CaixaBank Research, based on data from the OECD.*

*CPI: 15% trimmed mean **

Year-on-year change (%)



Note: ** The trimmed-mean inflation rate is calculated based on the mean basket of goods, but where the components with the most pronounced price movements are excluded (trimmed). In this case, the 15% of components with the sharpest movements (16% for the US series) are excluded.*
Source: *CaixaBank Research, based on data from the ECB and the Federal Reserve Bank of Cleveland.*

Resilience of global activity

Not only did the economic activity indicators improve steadily over the winter and spring (e.g. the global PMI rose from a low of 48 points in November, indicating economic contraction, to above 54 points in April, well within expansionary territory), but the GDP figures for Q1 in the major economies also proved better than expected: while the forecasts were for growth of 0.1%, 2.0% and –0.2% quarter-on-quarter in the US, China and the euro area, respectively, the actual figures were 0.3%, 2.2% and 0.1%.[5] This suggests that economic activity has been less weak than expected and, almost mechanically, it leads us to raise our GDP forecasts for 2023.

However, this does not mean that the global economy is out of the woods. In reality, our new forecasts paint a picture of rather modest quarterly growth, especially in the US and for the euro area as a whole. The fact is that higher interest rates are exerting a burden on the economy that will become increasingly visible. In fact, the cooling is already visible in the sector breakdown: the strength of the PMI mentioned above is driven mainly by the services sector, while various indicators point to a contraction of industrial activity in the world's major economies in recent months.

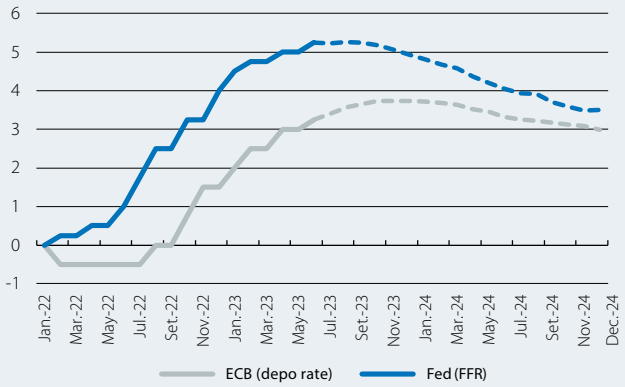
However, the loss of momentum of economic activity will be cushioned by the strength of the labour markets, which continue to show unemployment rates at close to all-time lows in both the US and the euro area, as well as significant growth in labour activity rates.

Greater inertia in underlying inflation

Headline inflation has fallen steadily since the peaks reached in 2022, and it has done so mainly thanks to energy prices, both due to their base effect and because of lower energy costs.[6] This energy effect will indirectly filter through to the rest of the price basket over the coming months, intensifying the decline in inflation. In fact, the emergence of disinflationary signals is becoming increasingly apparent in the middle stages of the price formation chain, where supply bottlenecks have normalised, producer prices are decelerating in all sectors (including food) and the surveys reflect a moderation in businesses' pricing intentions. Moreover, the US rent index, which is a key component accounting for 40% of the core inflation basket, has registered two consecutive months of moderation and will help to bring down inflation going forward.

Official interest rates and market expectations

(%)



Source: *CaixaBank Research, based on data from the Fed, the ECB and Bloomberg.*

However, so far this year, underlying price pressures have shown more resistance than initially anticipated.[7] While this leads us to moderately raise our inflation forecasts for 2023 as a whole (more than offsetting the downward effect of the new energy forecasts), we continue to expect a gradual slowdown in prices over the coming quarters, supported by the indirect effects mentioned above, the cooling of demand and the containment of the feedback loops between wages, margins and prices.

Interest rates, higher for longer

Given these dynamics in the energy crisis, economic activity and inflation, the central banks of the major advanced economies have been driven to continue to raise rates (with the fed funds rate at between 5.00%-5.25% in the US and the depo rate at 3.25% in Europe). On the other hand, with interest rates at clearly restrictive levels, and conscious that the macroeconomic impact of rate hikes operates with a time lag and with clear indications that the monetary policy transmission mechanisms are working,[8] the central banks have recently adopted a more cautious approach. While the Fed has not ruled out further rate hikes, and further moderate rises are still being considered by the ECB, the general strategy is now to keep rates in restrictive territory for a long time (as opposed to raising them even further) and to monitor the economic activity and inflation data before deciding on the next steps.

5. Although better than expected, the euro area figure has been overshadowed by a downward revision in Germany (–0.3%, after an initial estimate of 0.0%). However, the euro area figure is also weighed down by a contraction of 2.7% in Ireland (a country which has recently been generating unusually volatile data). With these two notable exceptions, in the majority of euro area countries GDP was higher than expected in Q1.
6. In the euro area, the energy component has gone from adding around 5 pps to headline inflation in the autumn (when inflation peaked at 10.6%) to just 0.2 pps in April (when headline inflation stood at 7.0%).

7. For example, core inflation began 2023 at 5.6% in the US and at 5.3% in Europe in January, while in April it remained at 5.5% in the US and at 5.6% in the euro area.
8. A viewpoint reinforced by the SVB episode. Also see the Focus «Is monetary policy managing to cool economic activity? A first assessment» in this very *Monthly Report*.

Thus, focusing on Europe, we take up the ECB's message of the need for rates to be kept «higher for longer» and our new forecasts contemplate that interest rates will reach a slightly higher peak in the coming months (depo rate at 3.75%) and that they will remain there for a little longer (the first rate cut would not occur before mid-2024).

The environment remains challenging

Behind these changes in the economic environment, a constellation of risks persists which still leave the global economy in a fragile environment. In addition to the geopolitical factors, most notably the war in Ukraine, the collapse of SVB has highlighted the fact that, in a context of sharp interest rate rises (particularly following a long period of low rates), there is a risk of a sharp tightening of financial conditions, which in turn can trigger a sudden cooling of the economy. In the same vein, the state of some real estate markets is also cause for concern, having experienced significant price increases in recent years and with signs of overvaluation and high household indebtedness, as we recently analysed.[9] In addition, if the underlying price pressures persist, the central banks may be forced to tighten monetary policy even further, accentuating the aforementioned risks.

Forecasts for international economies and markets

Annual change (%), unless otherwise stated	2022	2023	2024
Global GDP	3.4	2.8 (2.7)	3.0 (3.4)
US GDP	2.1	1.2 (0.9)	0.8 (1.4)
US inflation	8.0	4.2 (4.1)	2.2 (2.7)
Fed funds rate *(year end)*	4.50	5.00	3.75
Euro area GDP	3.5	0.9 (0.5)	1.3 (1.6)
Euro area inflation	8.4	5.5 (5.3)	2.6 (2.7)
ECB depo rate *(year end)*	2.00	3.75 (3.50)	3.00 (2.50)
12-month Euribor *(average)*	1.1	3.8 (3.4)	3.3 (2.6)
EUR/USD exchange rate *(year end)*	1.06	1.12 (1.10)	1.15
Chinese GDP	3.0	5.7 (5.2)	4.9 (5.1)
Brent oil *(€ per barrel, average)*	94	80	76
Natural gas (TTF) *(€ per MWh, average)*	132	51 (113)	55 (93)

Note: *In brackets, previous forecast (only where different).*
Source: *CaixaBank Research.*

9. See the Focus «Advanced economy housing markets in a scenario of tighter monetary policy (part I)» in the MR04/2023.

Year-on-year (%) change, unless otherwise specified

UNITED STATES

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Activity									
Real GDP	5.9	2.1	1.8	1.9	0.9	1.6	–	–	–
Retail sales (excluding cars and petrol)	15.8	9.3	8.8	9.4	7.5	5.9	5.0	4.3	...
Consumer confidence *(value)*	112.7	104.5	103.4	102.2	104.2	105.5	104.0	103.7	102.3
Industrial production	4.4	3.4	3.8	3.5	1.8	1.3	0.1	0.2	...
Manufacturing activity index (ISM) *(value)*	60.7	53.5	55.0	52.2	49.1	48.3	46.3	47.1	...
Housing starts *(thousands)*	1,606	1,551	1,636	1,446	1,405	1,375	1,371	1,401	...
Case-Shiller home price index *(value)*	267	306	313	310	303	302	302.1	...	...
Unemployment rate *(% lab. force)*	5.4	3.6	3.6	3.6	3.6	3.5	3.5	3.4	...
Employment-population ratio *(% pop. > 16 years)*	58.4	60.0	59.9	60.0	60.0	60.1	60.4	60.4	...
Trade balance [1] *(% GDP)*	–3.6	–3.7	–4.0	–3.9	–3.7	–3.6	–6.6	...	...
Prices									
Headline inflation	4.7	8.0	8.6	8.3	7.1	6.7	5.0	4.9	...
Core inflation	3.6	6.2	6.0	6.3	6.0	5.7	5.6	5.5	...

JAPAN

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Activity									
Real GDP	2.2	1.0	1.8	1.6	0.4	1.3	–	–	–
Consumer confidence *(value)*	36.3	32.2	32.4	31.0	30.4	30.7	33.9	35.4	36.0
Industrial production	5.6	0.1	–3.6	4.0	0.6	–1.8	–0.6	0.4	...
Business activity index (Tankan) *(value)*	13.8	9.5	9.0	8.0	7.0	1.0	–	–	–
Unemployment rate *(% lab. force)*	2.8	2.6	2.6	2.6	2.5	2.5	2.8	2.6	...
Trade balance [1] *(% GDP)*	–0.3	–3.7	–1.9	–3.0	–3.8	–4.0	–7.7	–15.0	...
Prices									
Headline inflation	–0.2	2.5	2.4	2.9	3.9	4.1	3.3	3.5	...
Core inflation	–0.5	1.1	0.8	1.5	2.8	3.0	3.7	4.1	...

CHINA

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Activity									
Real GDP	8.4	3.0	4.8	0.4	3.9	4.5	–	–	–
Retail sales	12.4	–0.8	1.6	–4.9	3.5	5.9	10.6	18.4	...
Industrial production	9.3	3.4	6.3	0.6	4.8	2.9	3.9	5.6	...
PMI manufacturing *(value)*	50.5	49.1	49.9	49.1	49.5	51.5	51.9	49.2	48.8
Foreign sector									
Trade balance [1,2]	681	889	728	824	908	933	979.6	969.2	...
Exports	30.0	7.1	15.7	12.9	10.0	0.4	14.8	8.5	...
Imports	30.0	1.1	10.6	1.2	0.6	–7.3	–1.4	–7.9	...
Prices									
Headline inflation	0.9	2.0	1.1	2.2	2.7	1.3	0.7	0.1	...
Official interest rate [3]	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Renminbi per dollar	6.5	6.7	6.3	6.6	6.9	6.9	6.9	6.9	7.1

Notes: *1. Cumulative figure over last 12 months. 2. Billion dollars. 3. End of period.*

Source: *CaixaBank Research, based on data from the Department of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Standard & Poor's, ISM, National Bureau of Statistics of Japan, Bank of Japan, National Bureau of Statistics of China and Refinitiv.*

EURO AREA

Activity and employment indicators

Values, unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Retail sales *(year-on-year change)*	5.4	...	1.1	–0.5	–2.6	–2.6	–3.7	...	...
Industrial production *(year-on-year change)*	9.9	...	2.0	3.4	2.0	0.4	–1.5	...	...
Consumer confidence	–7.5	...	–22.7	–26.9	–26.9	–26.9	–19.1	–17.5	–17.4
Economic sentiment	110.7	...	103.9	96.5	96.5	96.5	98.9	99.0	96.5
Manufacturing PMI	60.2	...	54.1	49.3	49.3	49.3	47.3	45.8	44.6
Services PMI	53.6	...	55.6	49.9	49.9	49.9	55.0	56.2	55.9
Labour market									
Employment (people) *(year-on-year change)*	1.4	...	2.7	1.8	1.5	1.6	–	–	–
Unemployment rate *(% labour force)*	7.7	6.7	6.7	6.7	6.7	6.6	6.6	6.5	...
Germany *(% labour force)*	3.6	3.1	3.0	3.1	3.1	3.0	2.9	2.9	...
France *(% labour force)*	7.9	7.3	7.5	7.2	7.2	7.0	7.0	7.0	...
Italy *(% labour force)*	9.5	8.1	8.1	8.0	7.9	8.0	7.9	7.8	...
Real GDP *(year-on-year change)*	5.6	3.5	4.4	2.5	1.8	1.3	–	–	–
Germany *(year-on-year change)*	2.8	1.9	1.7	1.4	0.8	–0.5	–	–	–
France *(year-on-year change)*	6.8	2.5	4.0	1.1	0.6	0.9	–	–	–
Italy *(year-on-year change)*	7.3	3.9	5.0	2.5	1.5	1.9	–	–	–

Prices

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
General	2.6	8.4	8.0	9.3	10.0	8.0	6.9	7.0	6.1
Core	1.5	3.9	3.7	4.4	5.1	5.5	5.7	5.6	5.3

Foreign sector

Cumulative balance over the last 12 months as % of GDP of the last 4 quarters, unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Current balance	2.5	–1.2	0.6	–0.8	–1.2	–0.5	–0.5	...	...
Germany	7.8	4.2	6.0	4.7	4.2	4.5	4.5	...	...
France	0.4	–2.2	–0.4	–1.4	–2.2	–1.9	–1.9	...	...
Italy	3.1	–1.2	0.6	–1.1	–1.2	–0.8	–0.8	...	...
Nominal effective exchange rate[1] *(value)*	94.3	90.8	90.2	88.9	91.7	93.1	93.3	94.6	...

Credit and deposits of non-financial sectors

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Private sector financing									
Credit to non-financial firms[2]	3.5	6.7	6.1	8.4	7.8	5.7	4.6	...	...
Credit to households[2,3]	3.8	4.4	4.6	4.4	4.0	3.2	2.5	...	...
Interest rate on loans to non-financial firms[4] *(%)*	1.2	1.8	1.4	1.8	2.9	3.8	...	...	...
Interest rate on loans to households for house purchases[5] *(%)*	1.3	2.0	1.5	2.1	2.9	3.7	...	...	...
Deposits									
On demand deposits	12.6	6.3	7.8	6.4	1.8	–3.4	–6.1	...	...
Other short-term deposits	–0.8	4.5	0.9	5.3	12.0	17.6	21.1	...	...
Marketable instruments	11.6	3.7	2.2	4.1	7.6	19.5	21.9	...	...
Interest rate on deposits up to 1 year from households *(%)*	0.2	0.5	0.2	0.4	1.1	1.8	...	...	...

Notes: *1. Weighted by flow of foreign trade. Higher figures indicate the currency has appreciated. 2. Data adjusted for sales and securitization. 3. Including NPISH. 4. Loans of more than one million euros with a floating rate and an initial rate fixation period of up to one year. 5. Loans with a floating rate and an initial rate fixation period of up to one year.*

Source: *CaixaBank Research, based on data from the Eurostat, European Central Bank, European Commission, national statistics institutes and Markit.*

Upward revision of Spain's growth for 2023

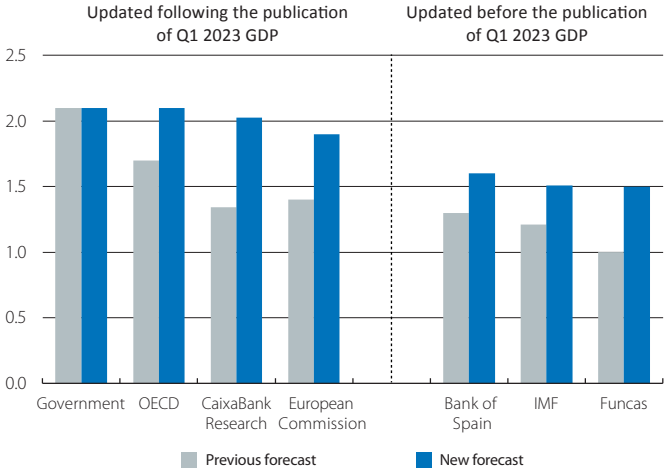
The forecast for GDP growth in 2023 is revised upwards to 2.0% (+0.7 pps). The encouraging Q1 2023 growth data published last month (0.5% quarter-on-quarter) alleviated fears of a recession in the short term, while the data published in the last few months have, in general, been better than expected. The improved economic outlook also supports the rapid moderation in energy prices witnessed in recent months. However, while 2% growth in a challenging context is certainly an encouraging development, it is important to note that much of this growth comes from the good performance of the foreign sector. Domestic demand, on the other hand, is weak, affected by the impact of the high inflation and rising interest rates (see the Focus «New economic scenario: the outlook improves for Spain» in this same report, for more information on the change in the macroeconomic forecasts).

The indicators available for the Q2 2023 show a mixed pattern. On a positive note, the PMI for the services sector stood at 56.7 points in May, well above the level at which positive growth rates are usually observed (50 points), albeit below the level of the previous two months. The consumption-related indicators offer mixed signals. On the one hand, the retail trade index in real terms grew by 0.9% month-on-month in April and, if we exclude service stations from the tally, growth amounted to 4.1% month-on-month. In contrast, according to the CaixaBank consumer indicator, Spanish bank card activity slowed in April compared to the previous months and grew by 4.1% year-on-year (9.9% in March). This weakness has continued in the latest available data up until the first half of May. In turn, the industrial sector has continued to show weakness. In May, the PMI for the manufacturing sector fell 0.6 points and stood at 48.4 points, within contractionary territory (below 50 points). Overall, the scoreboard of indicators suggests that the economy is continuing to grow, but at a more moderate pace than in the previous quarter.

The Spanish labour market continues to perform well and Social Security affiliation marks a new high in May, with 20.8 million registered workers. However, there is a slight moderation in the rate of job creation. Specifically, the number of registered workers rose by 200,411 people in May, slightly below the average for the month of May (214,000 on average in the period 2014-2019), and the year-on-year rate of growth moderated by 0.1 percentage points, to 2.9%. Correcting for seasonality, employment increased in the month by 47,883 registered workers, after growing by more than 100,000 in the previous two months. Unemployment, meanwhile, fell by 49,260 people to 2,739,110 people, which represents a smaller decline than usual in the month of May (–105,000 on average in the period 2014-2019).

Spain: GDP forecast comparison

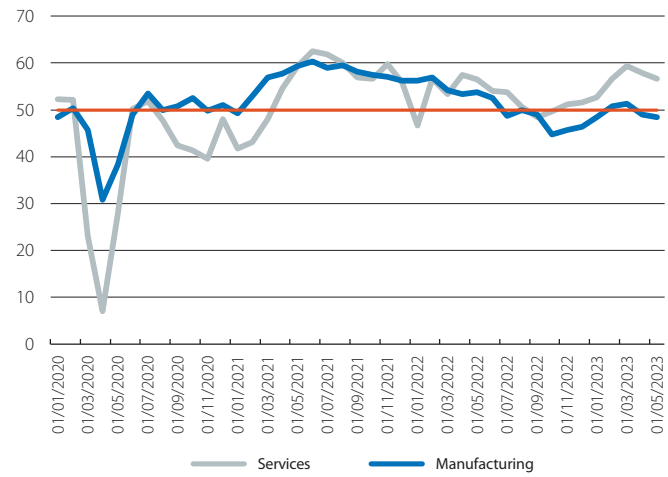
Annual change in 2023 (%)



Source: *CaixaBank Research, based on data from the government, the European Commission, the OECD, the Bank of Spain, the IMF and Funcas.*

Spain: PMI

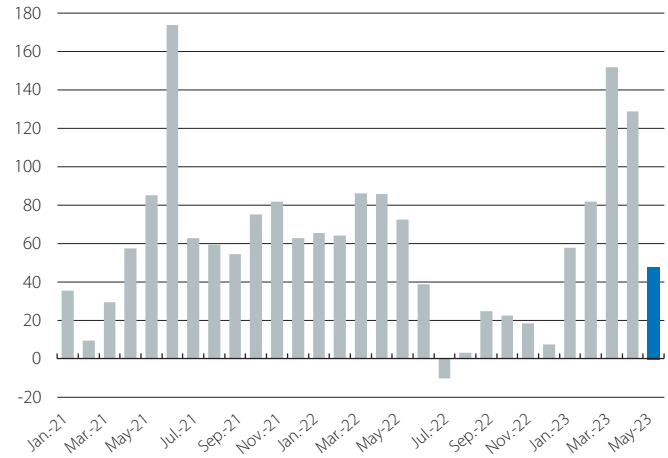
Level



Source: *CaixaBank Research, based on data from IHS Markit.*

*Spain: workers registered with S.S. **

Month-on-month change (in thousands)



Note: ** Seasonally-adjusted data.*
Source: *CaixaBank Research, based on data from the Ministry of Inclusion, Social Security and Migration.*

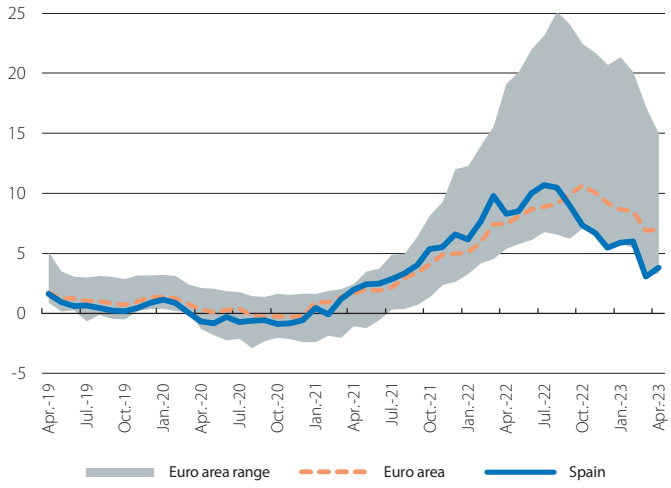
Inflation moderates more than expected in May. Headline inflation fell sharply in May and stood at 3.2% year-on-year (4.1% in April), according to the CPI flash indicator published by the National Statistics Institute. The slowdown in prices was not dominated by base effects, as was the case in the previous two months, meaning that the signal that this moderation conveys is clear and, in this case, positive. In the absence of the breakdown, the National Statistics Institute pointed out that the containment of inflation was mainly due to an appreciable fall in fuel prices, as well as lower food inflation. Core inflation (which excludes energy and unprocessed food) also fell significantly, standing at 6.1% (6.6% in April). This was due to contained growth in the core CPI in month-on-month terms, which reaffirms the signs of an easing of price tensions.

Housing prices rose significantly in Q1. Home prices based on valuations grew by 2.2% quarter-on-quarter in Q1 2023, compared to 0.5% in Q4 2022, although in year-on-year terms it continued to slow down (3.1% year-on-year compared to 3.3% in the previous quarter). In the same vein, the home price index based on repeat sales and produced by the College of Registrars also registered a significant increase in Q1 2023 (1.3% quarter-on-quarter, 5.4% year-on-year). The demand for housing, meanwhile, is showing signs of cooling. In March, the number of sales fell by 5.7% year-on-year. However, it is necessary to clarify that this moderation is based on a very high starting point. Despite the year-on-year decline, sales are still 30.4% above the level of March 2019 (pre-pandemic). Despite the rebound seen in Q1 2023, we expect to see a slowdown in home prices over the coming quarters, in a context of moderation in demand in the face of rising interest rates.

Intense correction of the trade deficit in Q1 2023. The deficit of the trade balance of goods stood at 6,578 million euros in Q1, 2.3 times less than a year ago (–15,416 million) and slightly below the average for the first quarters between 2014 and 2019 (–6,760 million). This result was the result of both the lower energy deficit and the notable improvement in the balance of non-energy goods. Thus, the energy deficit in Q1 fell to 8,218 million, compared to a deficit of 11,052 million in the same period of 2022, thanks to a lower volume of imports (–9.7%) in a context of lower prices (–1.1%). The balance of non-energy goods, meanwhile, registered a surplus of 1,639 million euros, marking the best Q1 figure since 2014 (deficit of 4,364 million in the same period of 2022), thanks to the greater buoyancy of exports (15.1% vs. 7.3% in the case of imports).

Spain and the euro area: headline CPI

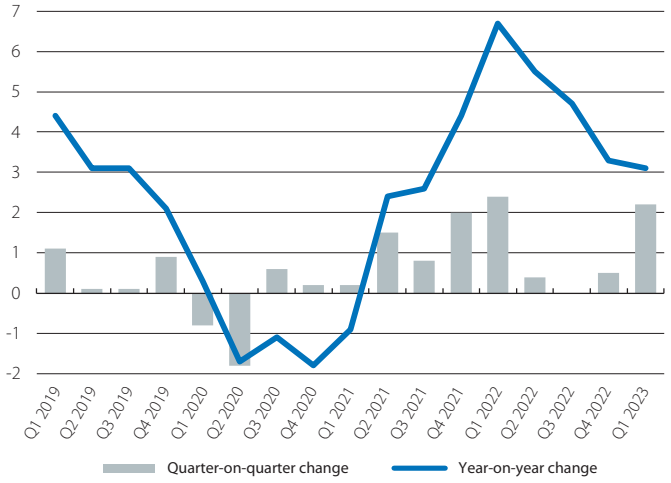
Year-on-year change (%)



Source: *CaixaBank Research, based on data from the National Statistics Institute and from Eurostat for the HICP.*

Spain: home prices (appraisal values)

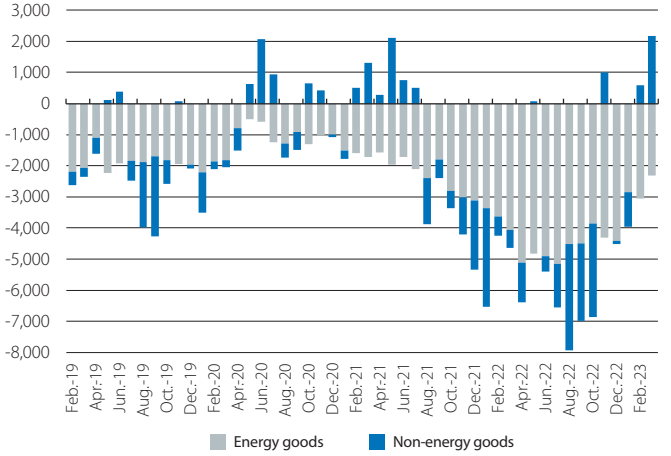
Change (%)



Source: *CaixaBank Research, based on data from the Ministry of Transport, Mobility and Urban Agenda.*

*Spain: trade balance of goods **

Monthly data (EUR millions)



Note: ** Based on the Standard International Trade Classification (SITC) for goods.*
Source: *CaixaBank Research, based on data from the Customs department.*

New economic scenario: the outlook improves for Spain

It has been almost four months since our last update to the macroeconomic scenario. During these months, the Spanish economy has shown a more resilient tone than expected. Furthermore, the normalisation of gas prices, although incomplete, has been confirmed and the peak in reference interest rates is now in sight. Faced with all these changes, we have updated our macro forecast scenario.

A better-than-expected starting point

Despite the current economic environment being fraught with challenges, the performance of the Spanish economy has been sustained by three key elements: a strong labour market, the marked correction in gas prices and a highly buoyant foreign sector.

Employment, far from slowing down, has stepped on the gas in the early stages of 2023. According to the LFS, employment grew by 1.2% quarter-on-quarter in Q1 2023 in seasonally adjusted terms, which is well above the 0.2% registered in the previous quarter. Looking at the Social Security affiliation data, this positive trend appears to be continuing in Q2 2023. The strong performance of the labour market is giving households greater solvency to cope with the inflationary pressures. It is also supporting the demand outlook for businesses and is creating an effective barrier to the rise of inequality, a crucial factor amid the current cost of living crisis.

At the same time, economic activity has benefited from the fall in the price of natural gas. Following fears that the energy crisis would intensify over the winter, in the end they were alleviated by a more temperate winter than usual, as well as by a marked reduction in consumption and high levels of gas reserves. Whereas the Mibgas benchmark gas price registered an average of around €100/MWh in 2022, during Q1 2023 the average price has stood at around €50/MWh, and so far in Q2 it has fallen to €35/MWh, thus approaching the €20/MWh average for the period 2017-2019.

As for the foreign sector, it has been highly buoyant, driven largely by tourism. To illustrate this, despite international tourist arrivals in Q1 2023 still lying 3.5% below the same quarter of 2019, their expenditure in real terms was 12.1% higher. While tourism has been the primary driver of foreign demand, it has not been the only one. The trade balance of non-energy goods registered a surplus of 1,639 million euros in the quarter, thanks to the increase in exports (15.1% year-on-year) exceeding that of imports (7.3%). This balance is the best Q1 record since 2014, and it stands in contrast with the deficit of 4,364 million registered in Q1 2022. Also, not all the improvement in the balance is attributable to price effects. In terms of volume, exports grew by 3.6% year-on-year compared to a fall in imports of 2.2%. In addition, the pattern of exports of non-tourism services has been highly favourable. The trade balance of non-tourism services reached a surplus of 10,460 million euros, well above the balance of Q1 2022, when it stood at 5,892 million euros. This improvement has been driven by a combination of strong export growth (18% year-on-year) and a fall in imports (–6%).

In short, all these factors have led to GDP exceeding expectations during Q1, alleviating fears of a recession in the short term.[1]

Key assumptions of the scenario: inflation and interest rates

However, the outlook is not without its obstacles. High inflation and interest rates are leaving their mark on the economy. Fortunately, those shocks that triggered the inflation rally are beginning to fade. As we mentioned earlier, energy prices have experienced a significant decline and are now close to their historical average levels. In addition, the famous bottlenecks, a legacy of the process of economies reopening in the late stages of the pandemic, are also beginning to dissipate and this is alleviating pressures in the early stages of the price formation chain.

The recent correction in energy prices has given way to a substantial moderation in headline inflation. With data up to April, it has already dropped to 4.1%, compared to the 8.4% average registered in 2022, and this is despite food prices still rising by 12.4%.[2] Core inflation, which excludes food and energy, is slightly higher than the headline inflation rate, at 4.6%. This is due to the delayed effects of the transmission of the cost increases that businesses have been facing since last year (contagion effect).

For 2023, we project that headline inflation will be 3.9% on average. This forecast incorporates the substantial fall in energy prices, but also the greater persistence of core inflation and that of food. However, we expect that these pressures will gradually ease and that by 2024 inflation will be below 3% in annual average terms.

These projections are based on the assumption that there will not be significant second-round effects. While wages are gradually incorporating the impact of inflation,

1. See the Brief Note for further information on the reported GDP figure.
2. The May inflation flash indicator shows a continuation of the trend of slowing inflation, standing at 3.2%. However, we will have to await the definitive announcement to find out the breakdown by component.

there are incipient signs that wage growth could stabilise at around 4%-4.5% this year. Wage growth of this magnitude should not pose an upward risk for inflation. In this regard, the recent wage agreement reached between the various social agents should be viewed positively, because it helps to reduce uncertainty and limit the occurrence of second-round effects.

With regards to interest rates, the ECB remains concerned about the lack of obvious signs of moderation in core inflation in the euro area and it has signalled its intention to raise interest rates a little further. But it is also true that the cumulative increase of almost 4 pps (from –0.50% to +3.25%) is very substantial and that its effects are already beginning to be felt, for example, in the demand for credit. Therefore, we expect the ECB to raise the depo rate to a peak of 3.75% (which is in line with market expectations) and to keep it there until mid-2024. This reflects a more gradual path towards monetary policy normalisation than we were previously expecting. Nevertheless, based on its recent communications, we believe that the ECB will opt to keep rates higher for longer in order to ensure that inflation falls to 2% in the medium term.

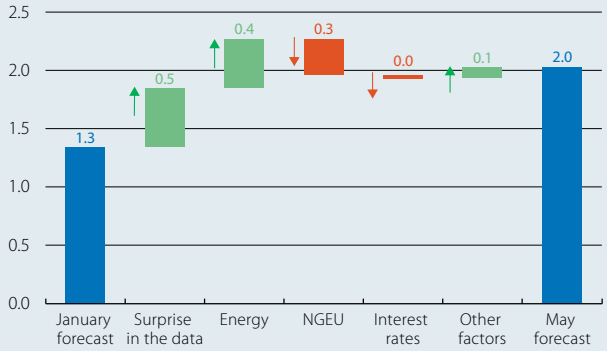
However, the high inflation and interest rates are leaving clear traces in their wake. Private consumption has been declining for two consecutive quarters, while higher frequency indicators, such as our internal indicator based on card spending, are showing no signs of any clear improvement in the immediate future. In 2022, rising prices led to a sharp increase in spending. Private consumption in nominal terms grew by over 10%, compared to a more moderate growth of 3.6% in gross disposable income. Consequently, the savings rate decreased from 13.7% in 2021 to 7.2% in 2022. Given that the savings rate is approaching its historical average (6.7% between 2014 and 2019), consumption in 2023 could be more closely linked to the growth of disposable income. However, while we expect disposable income to grow at a higher rate – specifically at around 4.5%, thanks to the rebound in wage growth and the expected good performance of employment – we also project that inflation will remain high, at 3.9%. This will limit the growth of consumption in real terms. Similarly, investment is also reflecting the effects of the higher cost of credit and has been showing signs of weakness since the spring of 2022. While the European funds will continue to provide support, we expect investment will continue to experience only moderate growth during the remainder of 2023.

Outlook

All in all, 2023 looks set to continue to be a year full of challenges. This is a year in which the economy will continue to endure high inflation and the impact of the interest rate hikes, but it will also be able to enjoy some support factors. In particular, it will receive a boost from the almost complete fading of the energy shock, the good performance of the foreign sector thanks to the margin for recovery which the sectors hardest hit by the pandemic still have, and the contribution from the European funds. After incorporating all the information, we expect GDP to grow by 2.0% in 2023 as a whole, representing a 0.7-pp upward revision compared to our previous forecast. As the chart shows, this revision is largely explained by the improvement of the economic data in the latter part of 2022 and by the fall in energy prices that has been reflected in a good performance of the economy in Q1 2023. The assumption regarding the execution of European funds has limited the scale of the revision, as the forecasts now incorporate a somewhat more conservative degree of execution. Nevertheless, the effect of the NGEU funds will remain very significant, contributing 0.7 pps to annual GDP growth. As for the higher-for-longer interest rates, we expect this factor will still have only a moderate impact in 2023, becoming more pronounced in 2024.

Oriol Carreras

Spain: breakdown of the revision of the 2023 GDP growth forecast
(pps)



Source: *CaixaBank Research.*

The 2023-2026 Stability Programme: reduction of Spain's budget deficit through economic growth

Economic growth, key to the deficit reduction

The 2023-2026 Stability Programme presented by the government proposes a gradual reduction of the budget deficit, driven by the recovery of the Spanish economy, bringing it down from 4.8% of GDP in 2022 to 3.9% in 2023 and to 2.5% by 2026.[1] In contrast, AIReF estimates that by 2026 the public deficit will be 3.0% of GDP, mainly due to a less optimistic revenue forecast.[2]

The macro table on which the Stability Plan is based is similar to that of the consensus of analysts and has been reviewed by AIReF. The forecasts reflect cumulative GDP growth of 8.2% between 2023 and 2026, with investment playing a key role in 2024 due to the NGEU programme.[3] This assumes that inflation will fall to 2% in 2025 and that the labour market will remain buoyant, with an unemployment rate below 10.0% in 2026 and an average year-on-year growth of the population in employment of 2.1% in 2023-2026 (creation of 1.1 million full-time equivalent jobs by 2026).

If we analyse the expected evolution of the public accounts in some detail, on the revenues side the Programme takes into account the measures approved in the 2023 budget (the increase in the income tax rate for capital incomes, the tax on banks and the energy sector, the solidarity tax on large fortunes in 2023-2024, etc.), as well as the increase in social security contributions foreseen in the pension reform. Thus, revenues as a percentage of GDP are expected to increase to 43.4% of GDP in 2023 (43.0% in 2022) and this will continue to increase over the coming years, driven by growth in direct taxes and social security contributions above nominal GDP. In the case of direct taxes, this reflects the buoyancy of collections due to the anticipated strength of the labour market as well as the assumption that there will be a consolidation of post-pandemic structural factors, such as the materialisation of the submerged economy following the labour reform, a reduced level of tax fraud and the rise in e-commerce. As for social security contributions, the forecasts capture the buoyancy of the labour market and the increase in contributions under the pension reform. Thus, fiscal pressure is expected to increase in the coming years, despite the fact that the Programme does not contemplate any rise in tax rates.

1. This is based on a scenario that contemplates the impact of the measures approved to date.
2. In 2026, AIReF's forecast for revenues as a percentage of GDP is 0.6 pps lower than in the Stability Programme. In contrast, its forecast for public expenditure as a percentage of GDP is very similar.
3. Investment is expected to grow by 5.0% year-on-year in 2024 (0.9% in 2023).

Spain: macro scenario per the Stability Programme

	2022	2023	2024	2025	2026
Real GDP (% growth)	5.5	2.1	2.4	1.8	1.7
Nominal GDP (% growth)	10	6.1	5.9	3.9	3.6
Unemployment rate (% annual average)	12.9	12.2	10.9	10.3	9.8
Remuneration per employee (% growth)	2	4.7	3.3	2.4	1.7
Private consumption deflator (%)	6.8	3.9	3.2	2	1.9
3-month Euribor	0.3	3.3	3	2.5	–
Natural gas price (€/MWh)	100	59	50	50	50
Yield on 10-year Spanish bond	2.2	3.5	3.6	3.8	–

Source: *2023-2026 Stability Programme, Spanish government.*

Spain: government 2023-2026 Stability Programme

Key elements	% of GDP 2022	% of GDP 2023	% of GDP 2024	% of GDP 2026
Government revenues	**43.0**	**43.4**	**43.3**	**43.8**
Indirect taxes (VAT, etc.)	12.1	11.9	12.0	11.8
Direct taxes	12.4	13.2	13.5	14.3
Capital taxes	0.4	0.4	0.3	0.3
Social security contributions	13.6	13.9	14.0	14.0
Other revenues *	4.6	4.0	3.5	3.4
Government expenditure	**47.8**	**47.3**	**46.3**	**46.3**
Wage earners' remuneration	11.6	11.3	11.2	11.2
Social benefits (not in kind)	17.2	17.7	17.6	17.7
Gross capital formation	2.8	2.7	2.6	2.4
Interest expense	2.4	2.4	2.6	2.9
Subsidies	2.0	1.8	1.3	1.4
Government balance	**–4.8**	**–3.9**	**–3.0**	**–2.5**
Primary balance	**–2.4**	**–1.5**	**–0.4**	**0.4**
Cyclical balance	**–1.0**	**–0.5**	**–0.1**	**0.1**
Structural balance	**–3.6**	**–3.4**	**–2.9**	**–2.5**

Note: ** Includes revenues from property income and transfers of European funds excluding NGEU.*
Source: *2023-2026 Stability Programme, Spanish government.*

Public expenditure would gradually decline as a percentage of GDP due to the large increase in nominal GDP and a certain containment of non-pension and interest expenditure. Thus, primary public expenditure (i.e. excluding interest payments) would go from 45.4% of GDP in 2022 to 43.4% in 2026. Of particular note is the reduction (as a percentage of GDP) of wage earners' remuneration, which would fall from 11.6% in 2022 to 11.2% in 2026, as well as that of subsidies, from 2.0% in

2022 (very high due to the 20-cent-per-litre fuel discount, now withdrawn in 2023) to 1.4% in 2026. In contrast, pension expenditure, which is linked to inflation by law, is expected to grow faster than nominal GDP in 2023 and at a similar rate to GDP in 2024-2026.

As for interest charges – a key variable for debt sustainability – the Stability Programme projects that it will increase moderately, bringing it to 2.9% of GDP in 2026 (2.4% in 2022), since nominal GDP growth and the long average maturity of Spanish debt will limit the increase. That said, this figure is very similar to the 2012 level of 3.0%. These figures are based on the assumption that the yield on the Spanish 10-year bond will stand at 3.5% to 4.0% between 2023 and 2025, reflecting the rise in interest rates currently taking place. However, according to a sensitivity exercise performed within the Programme itself, with an additional 120-bp rate rise relative to the baseline scenario, the interest bill would reach 3.6% of GDP in 2026 and the budget deficit would stand at 3.6% of GDP[4] (as opposed to 2.5% in the baseline scenario).

On the other hand, public debt would gradually reduce as a percentage of GDP, but would remain high. This would go from 113.2% of GDP in 2022 to 106.8% in 2026. The bulk of this reduction is driven by nominal GDP growth.[5]

Finally, the structural deficit would follow a gradual decline. Specifically, it would go from 3.6% of GDP in 2022 to 2.5% in 2026, which is still a high figure. This decrease would be the result of the more prominent role in the economy of tax revenues and social security contributions, as well as the withdrawal beginning in 2024 of the spending measures introduced following the outbreak of the war in Ukraine.

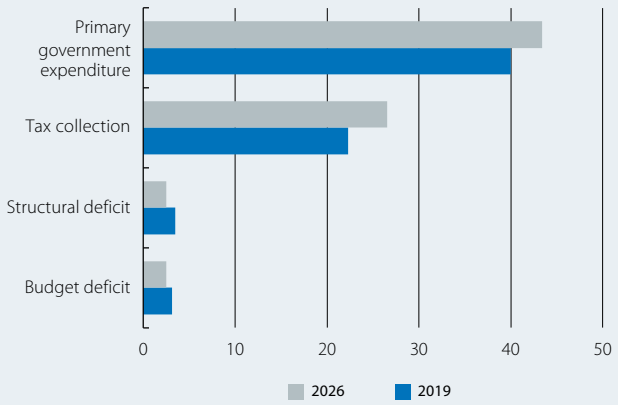
The public accounts of the future: a comparison of 2026 with the pre-pandemic world

One particularly revealing exercise is to compare the state of the public accounts in 2026, as projected by the government in its Stability Programme, with that of the pre-COVID world. Two key results stand out from this comparison.

(i) In 2026, the relative weight of the public sector in the economy will be considerably higher than in 2019; in particular, primary public expenditure (excluding interest payments) will be 3.4 pp higher as a percentage of GDP, which represents a 40.6% increase in expenditure between 2019 and 2026 (exceeding the 28.9% growth of nominal GDP). This suggests that public expenditure will experience a structural leap due to factors such as the indexation of pensions to inflation and the sustained increase in health expenditure.[6]

Spain: comparison of the public accounts in 2026 and 2019

(% of GDP)



Source: *CaixaBank Research, based on data from the 2023-2026 and 2021-2024 Stability Programmes.*

(ii) The government projects that the increase in tax revenues, following the significant growth of collections in 2021-2022, will be consolidated and will even continue without the need for new tax measures. Specifically, according to the Stability Programme, tax revenues will be 5.2 pps higher in 2026 as a percentage of GDP than they were in 2019, representing a 47.9% increase in tax revenues (exceeding the 28.9% growth of nominal GDP). In short, the Stability Programme anticipates that the strength of the economy over the coming years will facilitate the reduction of the budget deficit. However, a deficit of 2.5% of GDP clearly cannot be the end point and further deficit reduction will be necessary in order to recover fiscal policy's margin to react. There is no doubt that, one day, we will need to use it again.

Javier Garcia-Arenas

4. The budget deficit would increase mechanically as a result of higher interest payments and also because this increase in rates would have a negative impact on GDP growth, which in turn would lead to lower tax revenues and an increase in benefits to cushion the shock.
5. In cumulative terms, the Programme considers nominal GDP growth of 20.9% between 2023 and 2026.

6. It appears that social benefits, which predominantly comprise pension expenditure, have increased permanently and will be 1.9 pps higher as a percentage of GDP in 2026 than prior to the pandemic.

Activity and employment indicators

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Industry									
Industrial production index	8.8	2.8	4.3	4.6	0.9	1.6	4.5	...	...
Indicator of confidence in industry *(value)*	0.6	–0.9	0.4	–5.2	–5.4	–4.3	–3.2	–1.5	–5.2
Manufacturing PMI *(value)*	57.0	51.0	53.2	49.2	45.6	50.1	51.3	49.0	48.4
Construction									
Building permits *(cumulative over 12 months)*	4.7	15.4	18.8	8.8	2.6	–1.9	–3.4	...	...
House sales *(cumulative over 12 months)*	9.6	29.0	33.6	23.0	17.3	10.1	7.4	...	...
House prices	3.7	7.4	8.0	7.6	5.5	...	–	–	–
Services									
Foreign tourists *(cumulative over 12 months)*	64.7	129.8	312.5	208.8	129.8	...	...	...	...
Services PMI *(value)*	55.0	52.5	55.9	51.0	50.8	56.3	59.4	57.9	56.7
Consumption									
Retail sales	5.1	0.9	1.1	0.2	1.9	6.6	9.9	5.5	...
Car registrations	158.0	–3.0	–10.3	3.1	2.6	45.5	66.1	8.2	8.3
Consumer confidence index *(value)*	–12.9	–26.5	–27.0	–32.6	–28.1	–23.1	–24.5	–20.7	–21.2
Labour market									
Employment [1]	3.0	3.1	4.0	2.6	1.4	1.8	–	–	–
Unemployment rate (% labour force)	14.8	12.9	12.5	12.7	12.9	...	–	–	–
Registered as employed with Social Security [2]	2.5	3.9	4.8	3.5	2.7	...	2.7	3.0	2.9
GDP	**5.5**	**5.5**	**7.7**	**4.8**	**2.9**	**3.8**	–	–	–

Prices

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
General	3.1	8.4	9.1	10.1	6.6	5.1	3.3	4.1	3.2
Core	0.8	5.1	4.9	6.2	6.5	7.6	7.5	6.6	6.1

Foreign sector

Cumulative balance over the last 12 months in billions of euros, unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	21.2	22.9	22.2	23.3	22.9	20.5	20.5	...	...
Imports *(year-on-year change, cumulative over 12 months)*	24.8	33.4	35.2	38.1	33.4	24.0	24.0	...	...
Current balance	**11.5**	**7.8**	**7.8**	**6.1**	**7.8**	**22.9**	**22.9**	**...**	**...**
Goods and services	17.9	18.7	14.7	14.4	18.7	35.2	35.2	...	...
Primary and secondary income	–6.4	–10.9	–7.0	–8.3	–10.9	–12.4	–12.4	...	...
Net lending (+) / borrowing (–) capacity	**22.4**	**19.7**	**19.5**	**18.0**	**19.7**	**36.2**	**36.2**	**...**	**...**

Credit and deposits in non-financial sectors [3]

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Deposits									
Household and company deposits	6.1	4.9	5.4	5.3	3.8	1.7	0.7	...	...
Sight and savings	10.3	7.9	9.2	8.2	5.0	0.3	–1.7	–2.6	...
Term and notice	–24.4	–19.7	–25.4	–19.2	–7.3	7.7	17.9	27.7	...
General government deposits	15.5	9.6	15.6	6.6	–3.2	7.4	9.6	8.4	...
TOTAL	**6.7**	**5.2**	**6.0**	**5.4**	**3.2**	**2.1**	**1.3**	**...**	**...**
Outstanding balance of credit									
Private sector	0.3	0.7	0.8	1.3	0.5	–0.9	–1.0	–1.9	...
Non-financial firms	1.1	0.9	0.7	2.4	0.9	–1.0	–0.7	–2.2	...
Households - housing	0.2	1.0	1.4	1.1	0.2	–1.2	–1.7	–2.1	...
Households - other purposes	–1.2	–0.6	–0.5	–0.9	–0.1	–0.1	–0.1	–0.4	...
General government	15.3	0.2	1.9	–3.5	–1.1	–0.2	–0.4	–4.5	...
TOTAL	**1.1**	**0.7**	**0.9**	**1.0**	**0.4**	**–0.9**	**–1.0**	**–2.1**	**...**
NPL ratio (%)[4]	**4.3**	**3.5**	**4.1**	**3.8**	**3.7**	**3.5**	**3.5**	**...**	**...**

Notes: *1. Estimate based on the Active Population Survey. 2. Average monthly figures. 3. Aggregate figures for the Spanish banking sector and residents in Spain. 4. Period-end figure.*

Source: *CaixaBank Research, based on data from the Ministry of Economy, the Ministry of Public Works, the Ministry of Employment and Social Security, the National Statistics Institute, the State Employment Service, Markit, the European Commission, the Department of Customs and Special Taxes and the Bank of Spain.*

Portugal: upward revision of the 2023 GDP forecast following a strong Q1

Strong GDP growth in Q1 supported by exports. It has been confirmed that GDP grew by 1.6% quarter-on-quarter, thanks to the significant contribution from foreign demand (+2.5 pps). Exports were highly buoyant, with goods climbing by 4.8% versus the previous quarter and services by 10.8%. Offsetting these improvements, domestic demand subtracted 0.9 pps from quarterly GDP growth, driven by weak investment and a reduction in inventories. Private consumption, meanwhile, followed a somewhat more encouraging pattern than in the previous quarter and grew 0.4% quarter-on-quarter.

The indicators available for Q2 – still scarce – show a positive trend, albeit with a slowdown. Most notably, they reveal a cooling in the economic climate, reflecting a more cautious assessment in virtually all sectors, accompanied by an improvement in consumer sentiment thanks to the improved outlook for prices and the labour market. Thus, we anticipate that quarter-on-quarter growth will be much more modest over the coming quarters, mainly due to the impact of the higher interest rates. The good results for Q1 and the expectation of a moderation over the coming quarters lead us to revise our GDP growth forecast for 2023, from 1% to 2.5%.

Sharp decline in inflation in May. The National Statistics Institute's flash indicator shows a sharp slowdown in inflation to 4.0% (5.7% in April). The data also reveal that the monthly price reductions occurred not only in the headline CPI (–0.66%), but also in all the main components: core CPI (–0.31%), energy (–1.77%) and unprocessed foods (–2.85%). Following this result, we revise down our average annual inflation forecast for 2023 to 5.0%.

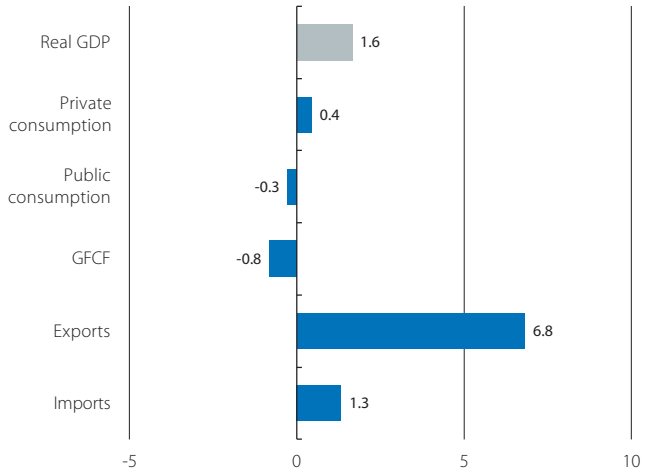
Paradox in the labour market? Recent statistics show a simultaneous increase in employment and unemployment, which is explained by the rapid growth of the labour force. In Q1, although the number of people in employment increased by 0.4% quarter-on-quarter, this rate was insufficient to offset the rapid growth of the labour force, of 1.1% quarter-on-quarter, and this led to a notable increase in the number of unemployed (11%).

Tourism extends the good performance of Q1 into April. The figures referring to April reinforce our conviction that this will be a record year for the Portuguese tourism sector in its main metrics: visitors, overnight stays and revenues. In fact, compared to the pre-pandemic situation, in April the number of visitors increased by 17.5%, while that of overnight stays rose by 14.3%. There has been a particularly sharp rise in the number of tourists visiting from the US. They account for 54% of the growth in the total number of tourists in these first four months of the year, which amounts to more than 1 million.

The current account balance returns to a surplus in Q1 2023, registering a positive balance of 380 million euros, something not seen since 2018 (except for in 2021, a year marked by the pandemic). This improvement reflects the strength of tourism and the correction of the energy deficit.

Portugal: real GDP

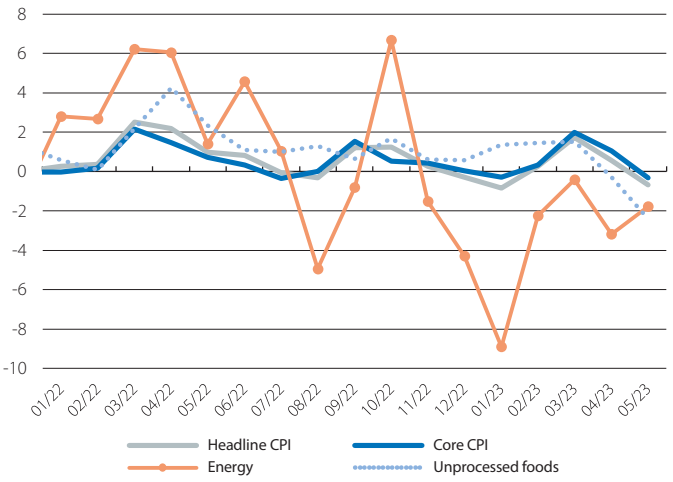
Quarter-on-quarter change in Q1 2023 (%)



Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal.*

Portugal: CPI

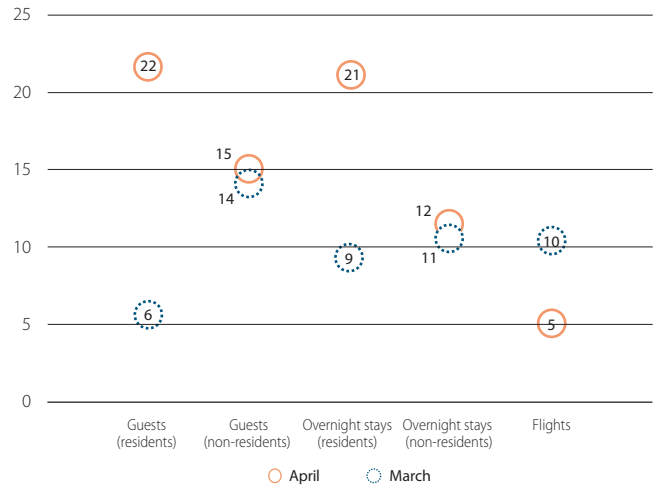
Monthly change (%)



Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal.*

Portugal: tourism

Changes versus the same month of 2019 (%)



Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal.*

Activity and employment indicators

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Coincident economic activity index	3.4	5.7	6.5	5.1	4.3	4.6	4.8	5.0	...
Industry									
Industrial production index	4.5	0.4	2.0	1.8	–0.3	0.6	–4.4	...	...
Confidence indicator in industry *(value)*	–5.3	–3.4	–2.5	–4.8	–6.3	–5.0	–3.6	–3.7	–5.5
Construction									
Building permits - new housing (number of homes)	13.5	6.0	3.2	–3.2	13.2	–34.4	12.4	...	...
House sales	20.5	1.3	4.5	–2.8	–16.0	...	–	–	–
House prices *(euro / m² - valuation)*	8.6	13.8	14.2	15.8	13.6	12.9	11.4	10.0	...
Services									
Foreign tourists *(cumulative over 12 months)*	51.5	158.6	298.1	244.4	158.6	116.9	116.9	89.0	...
Confidence indicator in services *(value)*	0.1	15.1	19.5	16.9	9.9	11.1	13.3	15.9	12.7
Consumption									
Retail sales	4.9	4.8	3.1	3.3	0.0	1.6	0.6	2.4	...
Coincident indicator for private consumption	4.9	4.1	4.9	2.8	2.2	3.0	3.4	3.8	...
Consumer confidence index *(value)*	–17.2	–29.7	–30.5	–31.8	–37.0	–35.1	–33.4	–31.7	–29.8
Labour market									
Employment	2.8	2.0	1.9	1.1	0.5	0.5	0.6	0.7	...
Unemployment rate (*% labour force*)	6.6	6.0	5.7	5.8	6.5	7.2	7.0	6.8	...
GDP	**5.5**	**6.7**	**7.4**	**4.8**	**3.2**	**2.5**	**–**	**–**	**–**

Prices

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
General	1.3	7.8	8.0	9.1	9.9	8.0	7.4	5.7	4.0
Core	0.8	5.6	5.5	6.5	7.2	7.1	7.0	6.6	5.5

Foreign sector

Cumulative balance over the last 12 months in billions of euros, unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	18.3	23.0	18.9	22.7	23.0	21.5	21.5	...	...
Imports *(year-on-year change, cumulative over 12 months)*	22.0	31.4	31.5	35.2	31.4	24.4	24.4	...	...
Current balance	**–1.6**	**–3.2**	**–4.4**	**–4.2**	**–3.2**	**–1.1**	**–1.1**	**...**	**...**
Goods and services	–5.5	–4.9	–6.4	–5.3	–4.9	–2.9	–2.9	...	...
Primary and secondary income	3.9	1.7	2.0	1.1	1.7	1.8	1.8	...	...
Net lending (+) / borrowing (–) capacity	**2.1**	**–1.1**	**–1.0**	**–1.9**	**–1.1**	**1.5**	**1.5**	**...**	**...**

Credit and deposits in non-financial sectors

Year-on-year change (%), unless otherwise specified

	2021	2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	03/23	04/23	05/23
Deposits [1]									
Household and company deposits	9.3	6.4	8.2	7.8	6.4	0.5	0.5	–0.8	...
Sight and savings	16.3	7.3	12.9	11.2	7.3	–3.1	–3.1	–5.0	...
Term and notice	1.2	5.2	2.3	3.3	5.2	5.4	5.4	5.1	...
General government deposits	–4.1	12.4	8.5	–0.1	12.4	11.1	11.1	21.3	...
TOTAL	**9.0**	**6.5**	**8.2**	**7.5**	**6.5**	**0.8**	**0.8**	**–0.2**	**...**
Outstanding balance of credit [1]									
Private sector	2.9	1.8	3.0	2.3	1.8	0.0	0.0	–0.6	...
Non-financial firms	2.2	–0.4	1.2	0.1	–0.4	–2.1	–2.1	–2.9	...
Households - housing	3.3	3.2	4.2	3.8	3.2	1.6	1.6	1.1	...
Households - other purposes	3.0	2.9	3.4	3.3	2.9	0.0	0.0	–0.2	...
General government	3.8	–2.7	–1.3	–1.5	–2.7	–2.0	–2.0	–2.0	...
TOTAL	**2.9**	**1.6**	**2.8**	**2.2**	**1.6**	**–0.1**	**–0.1**	**–0.6**	**...**
NPL ratio *(%)* [2]	**3.7**	**3.0**	**3.4**	**3.2**	**3.0**	**...**	**–**	**–**	**–**

Notes: *1. Residents in Portugal. The credit variables exclude securitisations. 2. Period-end figure.*
Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal, Bank of Portugal and Refinitiv.*

Baby boomers: who they are and how they are facing retirement

The first cohort of baby boomers turns 65 in 2023 and in the coming years this entire generation will retire en masse. In this article, we will assess the state in which the baby boom generation is approaching retirement in Spain, both from a financial perspective and in terms of their emotional state and their health.

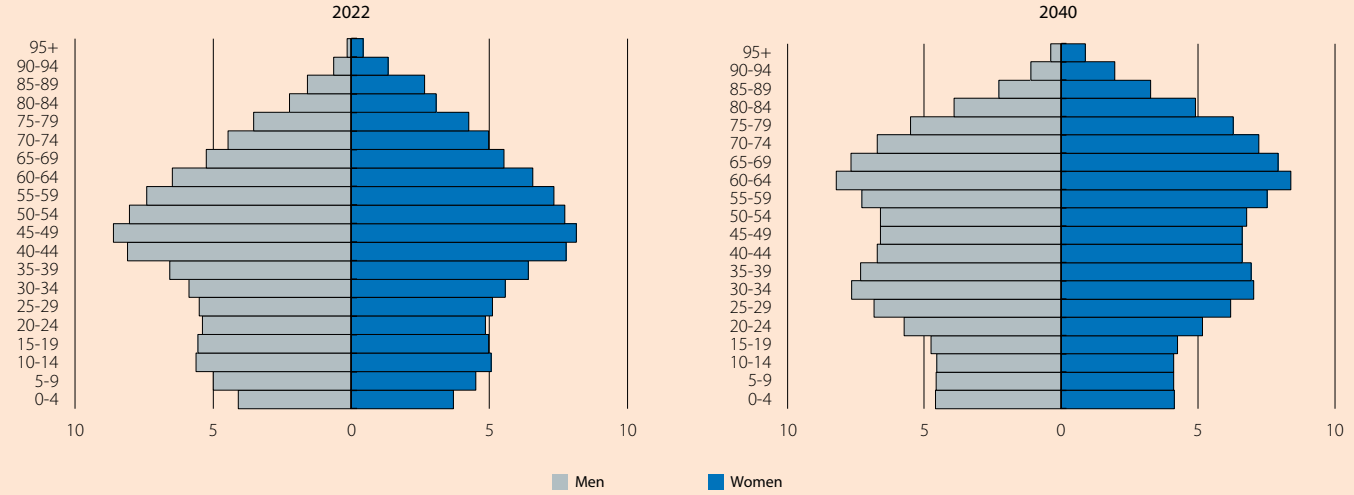
The baby boom generation was born in Spain between 1958 and 1975, a period that corresponds to the birth rate boom; a phenomenon which occurred later in Spain than in the US (1946-1964).[1] These years also correspond to a period of social, economic and political changes, with the turning point in the Franco regime marked by the end of autarchy and the announcement of the Economic Stabilisation Plan in 1959, as well as the oil crisis, high inflation and Franco's death in 1975. This generation began their professional careers during the early years of democracy and developed them during a period of modernisation and rapid growth in the Spanish economy, albeit one also marked by severe economic crises (1993, 2009).[2] The population pyramid projected by the National Statistics Institute shows how this generation, the most numerous group in Spain's population, will turn 65 years of age between 2023 and 2040 (see first chart). This generation will also experience the longest retirement, since those retiring at 65 will be able to look ahead to the longest life expectancy of any generation to date, amounting to 23 years in 2021 for women and 19 for men. In addition, by 2040 this life expectancy is set to rise further still, reaching 25.5 years for women and 21.6 years for men,[3] far exceeding that of the year 2000 (20.5 and 16.6, respectively, for women and men).

Thus, this generation will need resources to tie them over during what will be an increasingly long phase of their lives. In this article, we analyse the financial situation of the baby boomers as they approach retirement and compare it with other generations, as well as the situation of past generations when they were the same age.[4]

In particular, the gross income of households where the head of the family is between 46 and 64 years of age (predominantly baby boomer households) amounted to 39,500 euros on average in 2019 (latest available data). This exceeds the income level for all other age groups, as one would expect for the generation that has been working the longest. However, this value represents a loss of –19.3% in real terms compared to the income of households whose head of the family was between 46 and 64 years of age back in 2001. The rest of the population groups that are of working age also experienced reductions in their income in real terms between 2001 and 2019 (–25.6% for young people aged 18 to 29 and –5.1% for those aged 30 to 45). The only population group to have experienced improvements over this period was that of households with a head of the family aged over 65, almost all of whom are already retired, as their income improved on average by 37.0% in real terms (in 2019, they earned 36,800 euros).

Spain: population distribution by age group, 2022 and 2040

(% of the total)



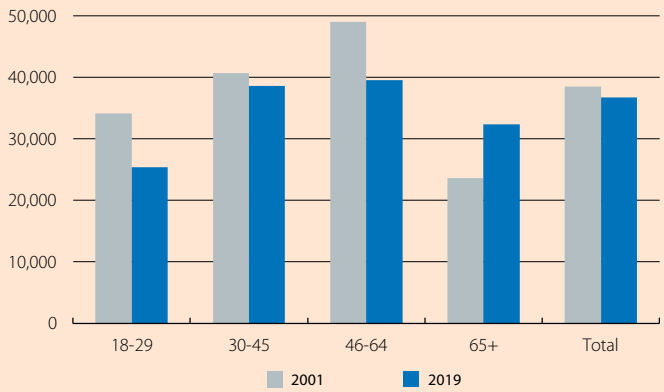
Source: *CaixaBank Research, based on data from the National Statistics Institute.*

1. See M. Delaunay (2019). «Le Fabuleux Destin des Baby-Boomers». Éditions PLON.
2. See G. Tortella and C.E. Núñez (2014). «El desarrollo de la España contemporánea». Alianza Editorial (content available in Spanish).
3. National Statistics Institute, *2021 Ageing Report*. EU.
4. Analysis performed at the household level, based on data from the Bank of Spain's Survey of Household Finances. Generations are classified according to the age group of the head of the household in order to facilitate comparisons between the years 2002 and 2020.

All in all, baby boomers are approaching retirement with a good level of accumulated financial resources. A household where the head of the family is between 46 and 64 years of age in 2020 had a median net worth of 129,000 euros,[5] which is above the 119,500 euros in real terms which the generation aged 46 to 64 years in 2002 had. However, it is the households over 65 years of age that have seen the biggest improvement in their wealth between 2002 and 2020: the median net worth of households over the age of 65 amounted to 191,000 euros in 2020, far higher than that of retirees 20 years ago (+129%). On the other hand, today's youth have hardly been able to accumulate wealth at all, with a median net worth of 10,500 euros in 2020. This represents a decline of 24,700 euros compared to the situation of the generation of the same age back in 2002.

*Spain: average annual income in real terms by age group **

(Euros at 2020 prices)



Notes: ** The age groups of households are classified based on the age of the head of the family. The group aged 46 to 64 in 2020 corresponds mostly to baby boomers. Income corresponds to the year prior to the survey.*
Source: *CaixaBank Research, based on data from the Bank of Spain (Survey of Household Finances, 2002 and 2020).*

Differences in wealth between different generations at the same point in time are logical, as they are the result of the accumulation of wealth over the course of one's lifetime. However, the change experienced between 2002 and 2020 for groups of the same age at each time shows that things have got much better for older people but much worse for younger people. For the generation aged 46 to 64, the change has been positive. Firstly, the median net worth among these cohorts in 2020 is higher than among the same age group in 2002. Secondly, wealth inequality within the baby boom generation, measured using the ratio between the mean average net worth and the median, stood at 2.2 in 2020. This is similar to the degree of inequality that existed within this same generation in 2002 when they were younger (1.8) and also within the generation that was their age in 2002 (2.1).[6]

Spain: financial situation by age group, 2020

(% or EUR in 2020, as indicated)

	18-29	30-45	46-64	65+	Total	18-29	30-45	46-64	65+	Total
	Mean value (EUR in 2020)					*Medium value (EUR in 2020)*				
Annual income	25,456	38,634	39,557	32,386	36,783	23,937	33,155	30,802	22,347	28,490
Net worth	68,173	135,558	286,537	379,911	272,966	10,547	69,880	129,071	191,205	122,153
	Proportion of households					*Median value for households that own it*				
Assets										
Real assets	50.8%	76.9%	85.3%	91.4%	84.4%	91,438	150,000	170,248	182,377	165,083
Primary home under ownership	34.8%	60.8%	76.6%	83.7%	73.9%	90,030	140,000	130,000	126,813	130,000
Other real estate properties	14.9%	33.1%	45.6%	56.8%	45.3%	99,000	96,221	85,597	98,393	92,952
Financial assets	93.9%	96.1%	96.2%	97.8%	96.6%	2,000	8,787	14,953	16,678	13,011
Payment accounts	90.7%	94.7%	95.0%	97.4%	95.6%	1,580	5,000	6,000	10,000	6,958
Equities	5.1%	8.5%	11.8%	16.6%	12.3%	4,000	4,000	5,000	10,000	6,000
Investment funds	2.2%	5.2%	8.3%	11.8%	8.5%	–	5,000	20,440	41,848	25,000
Pension plan	3.7%	22.1%	38.9%	19.8%	27.9%	–	3,672	11,000	22,853	10,000
Liabilities										
Some form of debt	54.8%	76.6%	67.3%	28.0%	57.1%	8,000	63,624	33,333	7,590	33,167
Mortgage debt	14.5%	44.0%	34.6%	5.4%	27.4%	88,000	80,000	55,000	27,995	63,933
Personal credit	25.5%	31.7%	32.3%	13.7%	26.2%	4,809	7,000	7,225	4,000	6,790
Credit card debt	15.2%	12.3%	8.5%	3.9%	8.2%	276	800	1,180	1,000	964

Notes: *The age groups of households are classified based on the age of the head of the family. The group aged 46 to 64 in 2020 corresponds mostly to baby boomers. Net worth corresponds to the sum of real estate and financial assets minus liabilities (debts). Income corresponds to the year prior to the survey.*
Source: *CaixaBank Research, based on data from the Bank of Spain (Survey of Household Finances, 2002 and 2020).*

5. The mean average is higher, at 286,500 euros, because it is influenced by higher values.
6. Wealth inequality within the same age group, as measured by the ratio between mean average net worth and median net worth, stood at around 2 for all age groups both in 2002 and in 2020, except for in the case of the generation aged 18 to 29, for whom the ratio went from 2.2 in 2002 to 6.9 in 2020. For all households as a whole, wealth inequality in 2020 stood at 2.2, below the OECD average of 2.6. See C. Balestra and R. Tonkin (2018). «Inequalities in household wealth across OECD countries: Evidence from the OECD Wealth Distribution Database».

Spain: financial situation by age group, 2002

(% or EUR in 2020, as indicated)

	18-29	30-45	46-64	65+	Total	18-29	30-45	46-64	65+	Total
	Mean value (EUR in 2020)					*Medium value (EUR in 2020)*				
Annual income	34,208	40,706	49,007	23,648	38,556	28,648	32,961	36,018	16,393	28,978
Net worth	79,066	137,089	248,913	172,534	181,765	35,202	76,555	119,499	83,464	121,133
	Proportion of households					*Median value for households that own it*				
Assets										
Real assets	66.8%	81.4%	89.9%	88.2%	85.3%	147,606	154,235	172,098	122,798	151,422
Primary home under ownership	61.5%	76.3%	84.5%	85.3%	80.7%	144,083	139,833	147,605	106,074	131,204
Other real estate properties	15.0%	23.9%	37.9%	27.2%	29.1%	77,492	81,582	112,710	67,510	87,106
Financial assets	96.6%	98.3%	98.1%	98.8%	98.3%	2,475	4,807	7,791	4,194	5,170
Payment accounts	96.6%	97.3%	97.8%	98.1%	97.6%	1,547	2,117	2,624	2,603	2,456
Equities	6.0%	9.7%	13.8%	8.2%	10.4%	2,456	4,093	9,003	12,814	7,735
Investment funds	5.8%	6.3%	8.9%	5.2%	6.9%	0	16,400	40,946	40,131	38,825
Pension plan	10.5%	29.6%	34.0%	3.9%	22.7%	3,343	4,982	13,188	13,552	8,203
Liabilities										
Some form of debt	58.6%	63.3%	44.9%	11.2%	42.5%	56,078	37,466	19,397	8,187	30,281
Mortgage debt	40.4%	40.2%	12.7%	2.7%	20.6%	65,492	45,377	35,426	22,104	43,620
Personal credit	22.9%	24.5%	24.2%	6.2%	19.3%	5,434	7,378	8,187	4,100	7,346

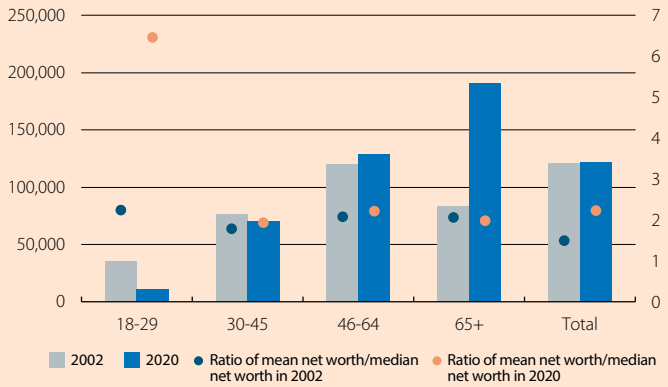
Notes: *The age groups of households are classified based on the age of the head of the family. The group aged 46 to 64 in 2020 corresponds mostly to baby boomers. Net worth corresponds to the sum of real estate and financial assets minus liabilities (debts). Income corresponds to the year prior to the survey.*
Source: *CaixaBank Research, based on data from the Bank of Spain (Survey of Household Finances, 2002 and 2020).*

Most baby boomers have their wealth concentrated in home-ownership. In 2020, 77% of households with a head of the family aged 46 to 64 owned their primary home, with an average value of 130,000 euros. Nearly one in two also had other real estate properties, with an average value of 85,600 euros. On aggregate, real assets accounted for 80% of their total gross wealth, while financial assets accounted for the remaining 20%. Among the latter, a significant proportion of these households had pension plans (39% in 2020, +6 pps compared to 2002), with an average value of 11,000 euros. Investment funds represent another important investment channel for 8.3% of households with a head of the family aged 46 to 64, with an average value of 20,400 euros. Investments in equities account for a smaller portion of households' financial wealth, as the median value of such assets stands at 5,000 euros for the 11.8% of households with a head of the family aged 46 to 64 who hold investments in this asset class. The weight of financial assets relative to total assets is slightly higher for baby boomers (+5 pps) than it is for households of the same age in 2002. This phenomenon is apparent across all age groups, albeit to a greater extent among those aged 65 and over (+14 pps). Finally, in terms of liabilities, 34.6% of baby boomers still have mortgage debt (with a median debt value of 55,000 euros), logically below the percentage of those between 30 and 44 years of age (44%) and well above the 5.4% of those aged over 65.

But money is not everything in life and the baby boom generation appears to be approaching retirement with a high level of satisfaction with their lives and personal relationships, which they rate as high or very high (see third table). Moreover, their overall health and mental health is better than among previous generations when they were their same age. In fact, it seems that the levels of happiness and vitality remain very high among Spaniards as they get older. According to a study on active ageing,[7] one in two Spaniards over the age of 60 is considered a

Spain: median net worth

(Euros at 2020 prices) *Ratio*



Notes: *The age groups of households are classified based on the age of the head of the family. The group aged 46 to 64 in 2020 corresponds mostly to baby boomers. Households' net worth corresponds to the sum of their real and financial assets minus their liabilities (debts).*
Source: *CaixaBank Research, based on data from the Bank of Spain (Survey of Household Finances, 2002 and 2020).*

7. See «LLYC Bendita edad. Envejecimiento activo» (2023), study performed by LLYC and Sondea (IO Investigación) for CaixaBank (content available in Spanish).

Spain: level of satisfaction with life, with personal relationships and health by age group
Index

	Satisfaction with their life (0-10)		Satisfaction with personal relationships (0-10)		Health index (0-10)		Mental health (0-12)	
	2013	2018	2013	2018	2003	2017	2006	2017
16-29	7.3	7.7	8.1	8.5	8.7	9.1	1.2	1.0
30-44	7.0	7.6	7.8	8.3	8.4	8.7	1.4	1.2
45-65	6.7	7.2	7.7	8.2	6.1	6.7	1.6	1.4
65+	6.6	6.9	7.8	8.2	3.7	4.6	2.1	2.0

Notes: *The level of satisfaction ranges from 0 (not satisfied whatsoever) to 10 (fully satisfied), while the health index ranges from 0 (very bad) to 10 (very good), so higher values indicate a better situation. The mental health index ranges from 0 (better health) to 12 (worse health), so lower values in the index indicate a better situation.*
Source: *CaixaBank Research, based on data from the National Statistics Institute (Survey of Living Conditions [2013, 2018] and National Health Survey [2006, 2017]).*

very or quite active person. In addition, more than 75% believe that, compared to when they were young, they eat more healthily, experience less stress and spend more time with their families.

In conclusion, the most numerous generation in Spanish society is reaching retirement with a good financial and emotional situation, surpassing that of other generations of the same age in the past as they are about to embark on a new period enjoying life as pensioners. In the next articles, we analyse the challenges that the retirement of the baby boomers could pose for the pension system in the coming decades.

Josep Mestres Domènech

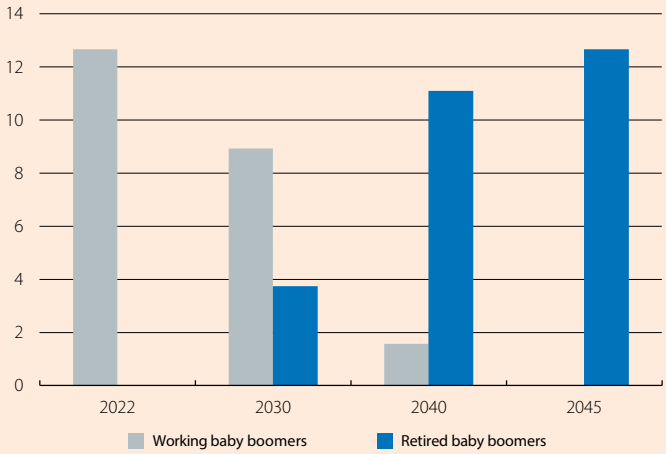
Reforming the pension system: in search of sustainability

Spain is entering an historic moment: the first batches of baby boomers are beginning to retire in 2023 and will continue to do so over the next 17 years.[1] Considering that in the coming decades the population over the age of 66 will gain prominence while that of the working-age population will diminish, it is of vital importance to evaluate the sustainability challenge facing our public pension system following the latest reform – a task which has been addressed by various agencies and which we analyse in this article.

According to the demographic projections produced by the National Statistics Institute, between 2023 and 2050 the working-age population in Spain will decrease by more than 800,000 people,[2] while the population over 65 will increase by more than 6 million. Thus, by 2030, almost 4 million baby boomers will already be enjoying their thoroughly deserved retirement, and this figure will exceed 11 million by 2040. Given that the Spanish public pension system is a redistribution system in which today's contributors pay the pensions of today's retirees in exchange for receiving a pension in the future based on their present contributions, it is worth asking how the increase in the relative weight of the senior population will affect the system's sustainability and what measures are being taken to balance it out. Wide-ranging estimates have been made regarding the impact of the pension reform on the long-term Social Security deficit, after the second part of the reform was approved in March. In this article, we will focus on the analyses carried out by the Independent Authority of Fiscal Responsibility (AIReF),[3] the European Commission in its *2021 Ageing Report* (AR21) and the Ministry of Inclusion, Social Security and Migration (MISSM).

Spain: baby boomers

(Millions of people)



Source: *CaixaBank Research, based on the National Statistics Institute's demographic databases.*

In 2022, the Social Security deficit stood at 0.5% of GDP,[4] with expenditure on contributory pensions amounting to 12.0% of GDP.[5] The AIReF estimates that contributory pension spending will increase by 2.8 pps between 2022 and 2050, bringing it to 14.8% of GDP, due to the high cost of the indexation of pensions to inflation (+2.7 pps), the repeal of the sustainability factor (+0.8 pps)[6] and the inertia of demography, the labour market, etc. (+0.4 pps). On the other hand, these factors will be partially offset by expenditure savings (–1.2 pps), which will come mainly (–0.8 pps) from people taking later retirement because of the new monetary incentives. The AR21 gives very similar estimates of the impact of indexing pensions to inflation and repealing the sustainability factor, but it estimates that the inertia of demographics, the labour market, etc. will add 0.7 pps (rather than 0.4 pps) to expenditure in terms of GDP.

The second part of the government reform has introduced measures focused on boosting revenues, the bulk of which comes from the gradual increase in social security contributions. The burden of this increase in contributions will fall mainly on those with high incomes, while the highest pensions will not grow at the same rate.[7] According to the AIReF, revenues will increase by 1.3 pps of GDP by 2050, which is less than the 2.8-pp increase in expenditure. Of these 1.3 pps, 0.8 points are expected to come from the aforementioned increase in social security contributions and 0.5 points from the new social security contribution scheme for self-employed workers.

The MISMM, meanwhile, has a more optimistic projection: contributory pension spending is expected to increase by around 1.5 pps of GDP to approximately 13.5% of GDP by 2050, some 1.3 pps less than according to the AIReF projections.[8] In particular, the indexation of pensions to inflation and the improvement of minimum pensions, the repeal of the sustainability factor and the inertias are expected to increase expenditure by almost 3 pps of GDP, but delayed retirements will also enable savings of 1.5 pps of GDP. On the revenue side, they project an improvement of 1.5 pps in terms of GDP by 2050.[9] This increase in revenues is very similar to the increase in expenditure, so the deficit would not increase.

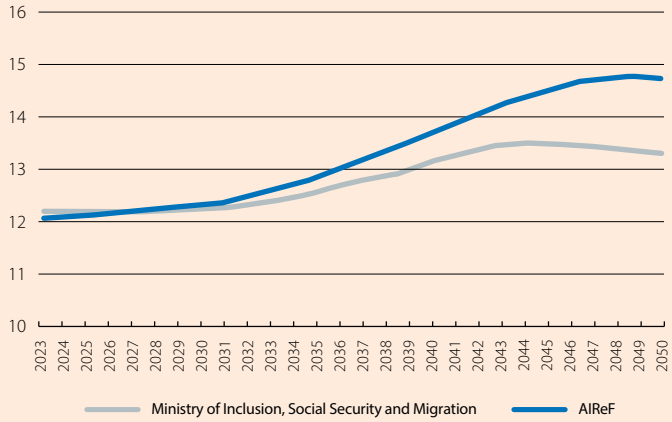
One of the two main factors that explains the differences between these various projections is the underlying macroeconomic scenario: that of the MISSM is more optimistic, with an average annual real GDP growth of 1.9% in the period 2023-2050. This is 0.6 pps higher than

1. It should be recalled that baby boomers are defined as the cohorts born between 1958 and 1975.
2. Refers to the population between 16 and 64 years of age. This is a much smaller drop than according to the latest demographic projections by the AIReF, which places the reduction at over 3 million. The main reason for the difference is that the National Statistics Institute projects net annual migration flows of more than 300,000 people over the period 2023-2050, while the AIReF anticipates a lower figure of 229,000.
3. See AIReF. «Opinión sobre la sostenibilidad de las administraciones públicas a largo plazo: la incidencia de la demografía», Opinion 1/23 (content available in Spanish).
4. The same figure that is expected in 2023 according to the General Government Budget.
5. 13.5% of GDP if we include the so-called passive-class pensions (for civil servants) and non-contributory pensions (for disability, widowhood, etc.).
6. This mechanism automatically linked the increase in pensions to life expectancy, which ensured the balance of the Social Security accounts in the long term. However, it entailed a cut in the initial pension ranging from 2% for a person aged 60 today to 10% for a person aged 25 today.
7. According to the AIReF, the bulk of the increase in social security contribution will fall on those with earnings of over 54,000 euros (65% of the cost of the reform), mainly due to the increase in the maximum contribution bases.
8. See slide 18 of the report entitled Informe sobre la modernización del sistema de pensiones by the Ministry of Inclusion, Social Security and Migration (MISMM) of March 2023 (content available in Spanish).
9. 1.1 pps due to the increase in social security contributions and 0.4 pps due to the new scheme for self-employed workers.

that of the AIReF and 0.4 pps higher than in the case of the AR21, as it incorporates a long-lasting and substantial impact on potential growth of the reforms and investments under the NGEU Recovery Plan. This higher economic growth is fed[10] by an average labour productivity growth in 2023-2050 of 1.5% (0.4 pps more than the AIReF and 0.1 pp more than in the AR21), net annual migration flows of 308,000 people in 2023-2050 (compared to 229,000 according to the AIReF and 182,000 in the AR21), a reduction in the unemployment rate to 5.5% in 2050 (compared to 7% in the AIReF and 7% in the AR21)[11] and a participation rate of the population aged between 20 and 64 of 84% in 2050 (82% in the AR21).[12] These differences in the macroeconomic and demographic assumptions have a substantial impact on the anticipated expenditure as a percentage of GDP. Specifically, the macroeconomic scenario according to the MISMM is relatively similar to an alternative, more optimistic scenario presented by the AIReF in which it considers average GDP growth of 1.6% in 2023-2050, an unemployment rate converging towards 5.0% by 2050 and net annual migration flows of 271,000 people. In this alternative AIReF scenario, pension spending in 2050 would be 1.3 points lower than in its baseline scenario; that is, spending would grow by just 1.5 pps, an increase very similar to that of revenues (+1.3 pps).

*Spain: projections for expenditure on contributory pensions **

(% of GDP)



Notes: ** These expenditures already take into account savings from delayed retirement incentives. They exclude expenditure on so-called passive-class pensions for civil servants, which would amount to approximately 1 additional percentage point of GDP over the period, as well as expenditure on non-contributory pensions, which would amount to an additional 0.2-0.3 points.*
Source: *CaixaBank Research, based on the charts by the Toledo Pact Commission and the AIReF.*

The second factor to consider is the impact of the monetary incentives for delaying retirement:[13] according to the AIReF, these incentives will give rise to savings in pension spending of 0.8% of GDP in 2050, because 30% of workers will delay retirement by three years or until they turn 68.[14] In contrast, the MISMM estimates that these incentives will result in spending savings of 1.5% of GDP in 2050, which would mean that 55% of workers would delay retirement by three years or retire at age 68.

Due to the high degree of uncertainty surrounding how the country's macroeconomic situation will evolve over the next 30 years, the reform establishes that the AIReF will review its impact every three years beginning in 2025. Moreover, it establishes that measures will have to be taken (by default, additional increases in the so-called Intergenerational Equity Mechanism, an extra social security contribution which from 2029 will be 1.2% on all wages) if the total expenditure on public pensions on average in the period 2022-2050[15] exceeds a certain threshold, which in its assessment of the reform the AIReF has preliminarily placed at 14.3% of GDP. Initially, the AIReF forecasts that the spending limit will be exceeded, which would result in additional measures as early as 2025, when it estimates that pension spending in 2022-2050 in its baseline scenario would amount to 15.1% of GDP and in its optimistic scenario, 14.5% of GDP. The Bank of Spain, for its part, also considers it highly likely that further measures will be needed as early as 2025.[16] In contrast, the government is more optimistic and projects in its 2023-2026 Stability Programme published at the end of April an average total pension expenditure of 14.0% of GDP in 2022-2050, which would render the introduction of new measures unnecessary.

Spain: macroeconomic assumptions underlying the pension spending projections

	MISSM	AIReF	Ageing Report 2021
Real GDP growth 2023-2050	1.9%	1.3%	1.5%
Productivity growth per hour worked 2023-2050	1.5%	1.1%	1.4%
Employment growth (hours) 2023-2050	0.4%	0.2%	0.1%
Net migration flows 2023-2050	308,000	229,000	182,000
Participation rate 2050 *	84.0%	68.4%	82.0%
Unemployment rate 2050 **	5.5%	7.0%	7.0%

Notes: ** The participation rate according to AIReF is not comparable with that of the Ministry of Inclusion, Social Security and Migration (MISSM) or the AR21, given that it corresponds to people between 15 and 74 years of age, whereas those of the MISSM and the AR21 are for people aged 20 to 64. ** The unemployment rate per the AIReF corresponds to people aged between 15 and 74, that of the AR21 between 20 and 64, while in the case of the MISSM the age range is not specified.*
Source: *CaixaBank Research, based on estimates from the MISSM, AIReF, the* 2021 Ageing Report *and Fedea.*

In short, while there are no magic solutions to bolster the sustainability of our pension system, there is considerable scope for action and the task will be easier if a favourable economic scenario materialises. For this to be the case, it will be key to boost productivity through reforms linked to the NGEU programme and to illuminate a greener and more digital economy that allows a buoyant and sustained level of potential growth to be achieved.

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10. The assumptions regarding migration flows, the unemployment rate and the participation rate according to the MISSM have been set out in A. De la Fuente. «Los efectos presupuestarios de la reforma de pensiones de 2021-23: iii) impacto total y cláusula de salvaguarda del MEI» Estudios sobre la Economía Española, 23/13, Fedea (content available in Spanish).
11. In reality, these figures are not entirely comparable: the unemployment rate per AIReF corresponds to people aged between 15 and 74, that of the AR21 between 20 and 64 years, while in the case of the MISSM the age range is not specified, although presumably it is for the age range between 20 and 64 as well.
12. The participation rate is the labour force (employed and unemployed) over the total population. The AIReF estimate is not comparable, as it gives the participation rate for the population between 15 and 74 years of age.
13. A 4% pension increase for every extra year worked above retirement age or, as an alternative to the 4% increase, a fixed lump-sum upon retirement (e.g. maximum pension and over 44.5 years paying social security contributions: 12,060 euros for each extra year). Both formulas can be combined.
14. 68 is the new minimum age to allow forced retirement under a collective labour agreement. Currently, only 5.4% of Spanish workers take late retirement.
15. Including both passive-class and non-contributory pensions, both financed by the General Government Budget.
16. See its *2022 Annual Report* published in May 2023.

How have other pension systems ensured their sustainability?

Reforming the pension system in order to make it more sustainable is a major challenge throughout Europe, particularly in a context marked by the retirement of the baby boom generation. Although we have tools as economists to assess whether a particular reform can help improve the system's sustainability, the path ahead is shrouded in uncertainty.[1] In this article, we explore some of the pension reforms implemented in other countries which, according to the economic literature and various international organisations, have best managed to navigate this uncertainty.

Let's start by reflecting on how a pension system's sustainability can be evaluated. A public pension system is sustainable, according to the IMF's definition,[2] if under current policies, demographic projections and a conservative macroeconomic scenario it allows pension spending in the coming decades to be funded without exerting stress on the public finances or, therefore, deteriorating macroeconomic stability. In other words, it is about balancing the revenues that fund the benefits and expenditure in the medium term. These two channels – revenues and expenditure – must go hand in hand.

Focusing first on the expenditure channel, there are four major levers which can be used to keep pension spending contained. According to the variables they affect, we can classify them as: a demographic lever (linked to the ratio of the population above retirement age to the population aged over 16); another relating to the coverage rate (the ratio between the number of pensioners and the population above retirement age); a third related to the health of the labour market as reflected in the employment rate (the number of people in employment over the population over 16 years of age), and a final lever related to the relative amount of pensions (usually measured using the replacement rate: the ratio between the average pension and the average salary).[3] All of these levers interact and create synergies, so it is key to gauge the impact of influencing each of them separately versus together.

The first two levers related to demographics and the system's coverage are complementary. Although there are multiple ways of influencing them, in view of the ambitions and constraints of a modern welfare state (among the former, the aspiration to assist all dependent persons; and among the latter, the difficulty involved in encouraging a higher birth rate and the delayed effect of achieving it), the way to do it more quickly and with greater certainty is by altering the retirement age. Raising it helps to even out the balance between workers and pensioners. Moreover, this measure improves intergenerational equity in societies like those in the West, where life expectancy has increased and the birth rate has fallen considerably.

Some of the countries in our vicinity have established mechanisms to link the retirement age to life expectancy automatically. Specifically, 7 of the 38 OECD countries have done so, all of them European (see first table).[4] In four of them (Denmark, Estonia, Greece and Italy) the increase is transmitted in full – i.e. for each year life expectancy increases, the retirement age is increased by the same amount – while in the other three (Finland, the Netherlands and Portugal) it is diminished – for every year life expectancy increases, the retirement age is increase by eight months. The way in which the rule works is similar in all seven countries: every

Retirement age is linked to life expectancy in seven OECD countries

	Increase in the retirement age in proportion to the increase in life expectancy	Need for parliamentary approval to raise the retirement age	Rule based on life expectancy at the age of:	Years between revisions of the retirement age	Period between the establishment of the new retirement age and its entry into force	Minimum increase in each revision of the retirement age	Maximum increase in each revision of the retirement age	The retirement age decreases if life expectancy falls
Denmark	1	•	60	5	15 years	6 months	1 year	
Estonia	1		65	1	2 years	1 month	3 months	•
Finland	2/3		65	1	3 years	1 month	2 months	•
Greece	1		65	3	Max. 1 year	No	No	•
Italy	1		65	2	2 years	1 month	3 months	
Netherlands	2/3		65	1	5 years	3 months	3 months	
Portugal	2/3 *		65	1	2 years	1 month	No	•

Note: ** For a person with over 40 years of social security contributions, the ordinary retirement age only increases by half as much as life expectancy does.*
Source: *CaixaBank Research, based on the* Pensions at a Glance 2021 *report by the OECD.*

1. See the article «Reforming the pension system: in search of sustainability» in this same *Monthly Report*.
2. See «Technical Notes and Manuals», IMF Engagement on Pension Issues in Surveillance and Program Work, Fiscal Affairs Department and Strategy, Policy, and Review Department, TNM/2022/004.
3. See, among others, the *2021 Ageing Report* by the European Commission, or the *Pensions at a Glance 2021* report by the OECD. In this article, we follow the breakdown according to the following article: M.A. Martín and R. Ramos (2023), *El Gasto en pensiones en España en comparativa europea*, Bank of Spain Economic Bulletin, 2023/T1, 09 (content available in Spanish).
4. See *Pensions at a Glance 2021*, by the OECD.

Revaluation of pensions in Europe based on automatic rules linked to changes in the labour market or demographics

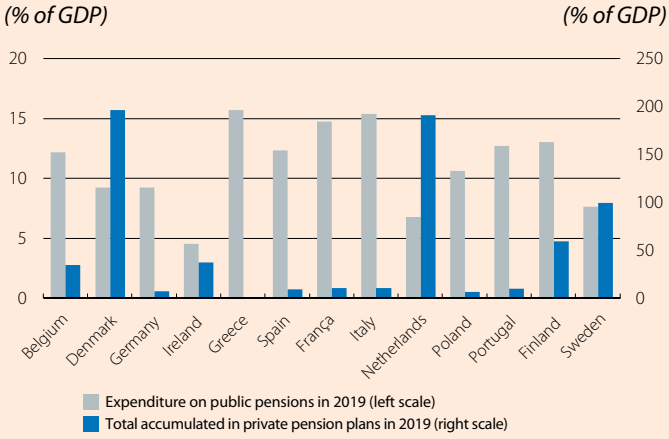
Country	The underlying variable of the rule	Relative weight of the underlying variable for the revaluation of pensions (%)
Estonia	Social security contribution revenues	80% (+20% inflation)
Greece	Nominal GDP	The lower of two options: inflation, or 50% inflation + 50% nominal GDP growth
Lithuania	Volume of total wages	100%
Portugal	Real GDP	It has to be between inflation −0.75% and inflation +20% of real GDP growth
Germany	Ratio between contributors and pensioners	Partial (it also depends on wage growth and changes in social security contribution rates)
Sweden	(1+average growth of nominal wages)/1.016	100% in the absence of financial imbalances in the notional accounts of the pension system *

Note: ** Notional accounts are a redistribution system whereby pensions are calculated based on accumulated social security contributions, the returns generated and life expectancy.*
Source: *CaixaBank Research, based on the* Pensions at a Glance 2021 *report by the OECD.*

certain period of time, the retirement age is reviewed based on changes in life expectancy at 65 years of age. On the other hand, since the increase in life expectancy in a given country is not the same for all socio-economic groups, the homogeneous increase in the retirement age has, by default, a redistributive impact. Attempts have been made in the Danish pension system to try and mitigate this problem, such as by offering an economic supplement to the public pension for pensioners who are less well off (whether as a result of having worked fewer years or having received lower wages); given that the Danish public pension system seeks to guarantee a minimum level of income for all pensioners, this supplement serves to compensate those who, as is statistically proven, also tend to have a lower life expectancy.[5]

Continuing with spending policies, the levers relating to the amount of pensions and the labour market are also complementary. The sustainability of the pension system depends largely on the relationship between public pensions and the level of wages in the economy, although it also depends on certain labour policies, such as those aimed at boosting employment and productivity. Thus, sustainability is reinforced when pensions do not grow above wages, and it improves as the economy creates more jobs (in turn, the more productive those jobs are, the better). To achieve this, as many as six EU countries automatically link the revaluation of pensions to macroeconomic variables related to the evolution of the labour market or demographic variables (see second table). Specifically, in Estonia, pension increases partly depend on revenues from social security contributions increasing; in Greece, they are partly dependent on nominal GDP growth; in Lithuania, they are entirely dependent on the growth of the volume of total wages; and in Portugal, partly on real GDP growth. Germany, meanwhile, fixes the initial pension and the revaluations according to a points system which takes into account wage growth, changes in the social security contribution rate and the evolution of the ratio between pensioners and contributors. Sweden, for its part, adjusts pensions each year on the basis of average nominal wage growth, provided that this exceeds 1.6% (if it is lower, pensions are decreased), although it will make an adjustment if there are imbalances in the system's actuarial balance sheet. In addition, in Finland and Portugal, the amount of the initial pension is automatically linked to the evolution of the mortality and life expectancy data, respectively.

Europe: expenditure on public pensions and total accumulated in private pension funds



Note: *Pension fund data for Denmark corresponds to 2018 (latest available).*
Source: *CaixaBank research, based on data from the* 2021 Ageing Report *for public pensions and from the World Bank for private pension plans.*

Another lever used in many countries to mitigate pressures on public pension systems is to supplement them with private systems, whether company or personal pension plans.[6] Specifically, as we see in the chart, economies such as Denmark and the Netherlands have a lower level of expenditure on public pensions as a percentage of GDP compared to the countries of southern Europe, but on the other hand much higher contributions are made to private pension schemes as a percentage of GDP. In these countries, given that it is practically mandatory to have a private pension fund by law, between 93% and 100% of working-age individuals have this form of savings. Also, public pensions in the Netherlands and in Scandinavian economies are generally lower

5. See D. Weber, E. Loichinger «Live longer, retire later? Developments of healthy life expectancies and working life expectancies between age 50-59 and age 60-69 in Europe», Eur J Ageing 19, 75-93 (2022); J.-A. Álvarez, M. Kallestrup-Lamb and S. Kjærgaard (2021) «Linking retirement age to life expectancy does not lessen the demographic implications of unequal lifespans», Insurance: Mathematics and Economics, 99, pages 363-375.
6. For further details on the private savings component, see the article «How to manage our cognitive biases to boost private pension savings» in this same *Monthly Report*.

relative to wages than in southern European countries. However, with the savings achieved in public spending in this regard, these countries are also able to offer extensive safety nets in old age, as well as greater pension supplements for those with fewer resources. Overall, these systems have proven effective in reducing public spending, as well as inequality and poverty in old age.[7]

As for the public revenues funding pension systems, it is essential to keep in mind that similar increases in revenues can be achieved in different ways, which in turn will have differing impacts on the economy. Funding pensions through social security contributions is quite common in European countries, and it is the main feature of contributory pension systems. There is, however, a debate regarding to what extent pensions could be funded through taxes. In particular, the European Commission has recommended to some countries, such as Germany, that if they offer new non-contributory pension benefits, these should not be funded through higher social security contributions.[8] In this regard, a group of economists at the central bank (Bundesbank) have documented that a policy replacing part of the pension system funding that comes from social security contributions with taxes on consumption would have largely positive macroeconomic effects.[9] Although there are various models in the EU for funding pension systems, the Commission's suggestion is usually applied: all European countries have safety nets for old age, usually funded with taxes, and many also have basic and minimum pension components that are often funded with taxes. There are also one or two examples, such as Denmark, where the public pension system is funded entirely by taxes and not by social security contributions.[10]

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7. S.R. Martínez and M. Soto (2021). «Pension Reforms in Europe: how far have we come and gone», IMF Departmental Papers, 2021(016), A001. Torben M. Andersen *et al.* «Pension reform and wealth inequality: evidence from Denmark». Centre for Economic Policy Research, 2022.
8. Council recommendation on the 2014 National Reform Programme of Germany and delivering a Council opinion on the country's 2014 Stability Programme. COM(2014) 406 final.
9. Exchanging taxes on work for taxes on consumption partially shifts the tax burden from domestic producers to foreign producers, which would reduce the costs of domestic production, generating positive domestic macroeconomic effects. This policy would also increase the costs of domestic consumption and partially defer the tax burden on households until retirement, and it would lead to greater savings. That said, during the transition period from one system to the other, the situation of retirees and households nearing retirement deteriorates. See K. Ruppert, M. Schön and N. Stähler (2021), «Consumption Taxation to Finance Pension Payments», Deutsche Bundesbank Discussion Paper nº 47/2021.
10. See European Commission, «The 2021 ageing report – Economic & budgetary projections for the EU Member States (2019-2070)», Publications Office, 2021. S.R. Martínez and M. Soto (2021) and «Pension Reforms in Europe: how far have we come and gone», IMF Departmental Papers, 2021(016), A001.

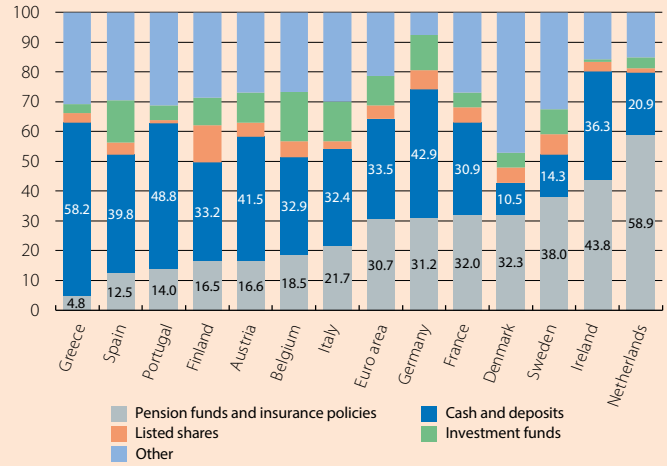
How to manage our cognitive biases to boost private pension savings

The public pension system, a fundamental pillar of the welfare state, presents a set of significant challenges both in Spain and in Europe in a context characterised by the retirement of the baby boom generation. In fact, almost 60% of adult European citizens admit to being concerned about whether they will have enough money in retirement.[1] However, there has not been a significant increase in savings rates in recent years: the savings rate in the euro area in the period 2010-2019 was 12.5% (7.4% in Spain), below the 13.3% of 2000-2009 (9.1% in Spain). Germany is an exception to this trend, as not only is it the euro area economy with the highest savings rate but it has also seen an increase in this rate (17.5% in 2010-2019 versus 16.8% in 2000-2009).

Moreover, the composition of European households' financial savings reflects a conservative profile in most countries, with a clear preference for deposits, which represent between 20% and 40% of total financial assets. In contrast, the proportion of total financial assets made up of savings in private pension funds and retirement insurance policies is rather uneven from country to country and is determined by the replacement rate of public pensions.[2] It is observed that the higher the replacement rate for public pensions, the lower the percentage of workers with private pension plans: in Denmark and the Netherlands, public replacement rates are among the lowest in the EU, yet between 93% and 100% of working-age individuals have a private pension fund. This is because it is practically mandatory to have this type of savings instrument and, as a result, they contribute around 60% of the total pension which people receive in retirement. On the other hand, in Spain, which has one of the highest public pension replacement rates in Europe (around 74%), it is observed that the percentage of the working-age population with pension plans has barely changed since 2005 and is below 30%.[3]

Distribution of households' financial assets

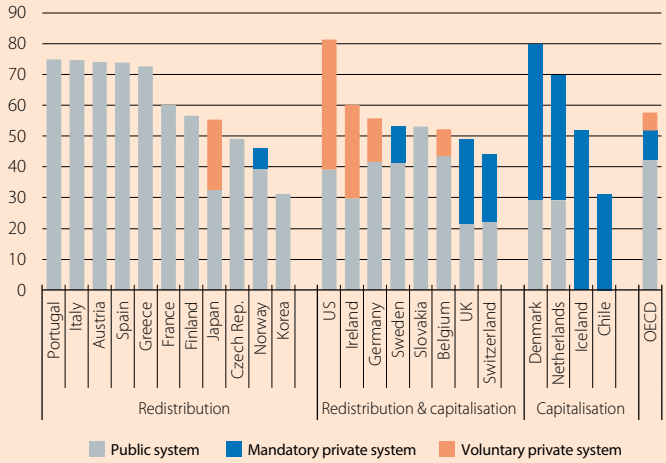
(% of total assets) Q4 2022



Source: *CaixaBank Research, based on data from the ECB.*

Gross replacement rate for public and private pensions *

Pension to be received as a percentage of the final salary received



Note: ** The replacement rate is calculated using the average pension and salary. Gross refers to before taxes.*

Source: *CaixaBank Research, based on data from the Pensions at a Glance 2021 report, OECD.*

What behavioural economics teaches us about how we save

Often, people who can afford to save, even though they are concerned about their financial situation in retirement, fail to allocate a substantial amount of their income to long-term savings products such as pension plans or insurance policies. How can human beings have such contradictory or even irrational behaviour? Precisely because we are human.

Over millions of years our brain evolved into the organ it is today, accounting for just 2.0% of the average weight of a human but 25% of the body's daily energy consumption. Given the challenge involved in finding food for our ancestors, their brains could not remain in a state of concentration all the time, so having a «lazy» brain was a matter of survival. This explains why our brain has two thought mechanisms: the automatic mechanism, installed in the limbic system (impulsive, unconscious...) and the reflective mechanism, located in the prefrontal cortex (planner, controller...).

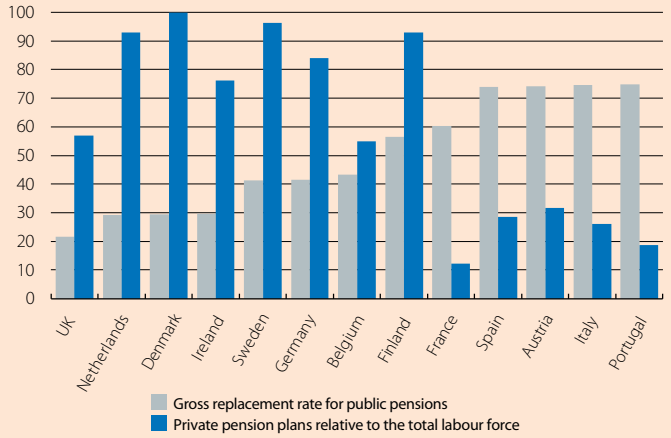
1. According to the European Insurance and Occupational Pensions Authority (EIOPA).
2. The replacement rate shows how much a person's pension received in retirement (whether public or a combination of public and private) represents relative to their final salary.
3. On the other hand, Spaniards tend to start saving late, which limits the savings that can be accumulated for retirement. In Spain, 25% of households where the head of the family is between 35 and 44 years of age have a savings plan or insurance policy, and this percentage rises to almost 39% for those between 45 and 64 years of age (Survey of Household Finances 2020, Bank of Spain).

The automatic mechanism generates a series of biases within us (whether cognitive or emotional) which make it difficult for us to make «rational» decisions. Behavioural economics incorporates this idea that agents do not make their decisions in an entirely rational way (as has traditionally been assumed in economic theory), but rather their decisions are driven by emotions and different types of biases.

Certain biases are decisive when it comes to planning our savings. These include our lack of self-control (too many temptations in the present which prevent us from saving); our aversion to loss (if an investment incurs losses in a particular year, that affects us more than the gains which that same investment had accumulated over the years); the creation of mental accounts (we organise our money into different categories of expenditure or income, which are not interchangeable), and the status quo and inertia (our preference to remain in the current situation). These biases lead to the erection of three major barriers which prevent us from «activating» our rational brain to think about retirement: we struggle to imagine a time when we will be old and to identify with our future self; we value our present needs much more than our future ones, and we suffer a certain short-sightedness when assessing what our needs will be as we age.

Gross replacement rate for public pensions and population with private pensions *

(%)



Source: *CaixaBank Research, based on data from the* Pensions at a Glance 2021 *report, OECD.*

However, these behaviours that are inherent in our human condition can be modified, or adapted, as demonstrated by the findings of behavioural economics which confirm that individuals' decisions are highly conditioned by the way in which the available options are presented to them. It is therefore a question of «taking advantage» of the cognitive biases we have as human beings in order to give individuals a nudge so that their final decision is the right one, while at the same time respecting their freedom of choice, as the available alternatives are neither removed nor blocked.[4] Behavioural economics therefore presents methods that can be used by government institutions to guide citizens' decisions.[5]

The United Kingdom, a nearby example of how the application of behavioural theories works

The UK pension system had been mixed since the mid-20th century: it had a public redistribution system and a private pension system. However, the demographic trends and projections were raising warning signs regarding the sustainability of the public pension system. In addition, the private system could not compensate for the situation, since the level of contributions and savings had been gradually declining.

For this reason, in 2008 a new pension law was approved which included the adoption of so-called automatic enrolment. Under this mechanism, employers must automatically enrol their staff in a private pension plan[6] (so-called company or employment pension plans, which supplement the public pension) provided they meet certain requirements,[7] although the employee has one month to withdraw from the system. In addition, every three years companies must automatically re-register those workers who had chosen to withdraw. The system was activated in 2012 and gradually implemented across all British companies over the next six years.

The figures confirm the initiative's success: whereas in 2013 only 32% of British private-sector workers had a company pension scheme, by 2019 this figure had risen to 75%. As a result, the total replacement rate for pensions reached 49% in 2021, compared to 22% counting public pensions only. In addition, the volume of assets in private pension plans has more than doubled, amounting to over 120% of GDP in 2021, compared to 73% prior to automatic enrolment.

4. Nudge techniques involve positive reinforcement actions and indirect suggestions to influence behaviour and decision-making. These tools were analysed by the economics Nobel Laureate Richard Thaler and Cass Sunstein in their book «Nudge: Improving Decisions About Health, Wealth, and Happiness» published in 2008.
5. In 2014, Cass Sustein published his essay «Nudging: A Very Short Guide», which proposed 10 techniques for application in public policy programmes to help individuals make the best decisions.
6. Contributions to these private pension funds are calculated based on the pensionable salary. Since 2019, 3% corresponds to the employer, 4% to the worker and 1% to the state. On the other hand, only 9% of workers exercised their right to withdraw from the system.
7. Employees must be at least 22 years old, earn more than 10,000 pounds a year (a figure that is reviewed annually), work ordinarily in the United Kingdom and not already be a participant in another employment plan.

The titanic challenge of harnessing our biases

The United Kingdom is just one example demonstrating that behavioural economics techniques work. Other success stories can be found in the US with its Save More Tomorrow (SmarT) programme, which managed to boost pension savings for some 15 million people;[8] in Brazil, which got 80% of public-sector workers to have a supplementary pension fund through automatic enrolment, or in the Netherlands, which raised awareness among workers at the individual level of the status of their public pension by sending them what became known as the «orange envelope».[9] These cases can serve as inspiration when designing public policies to promote private savings for retirement, although there are no magic formulas and they must be adapted to the idiosyncrasies of each particular culture, because what works in one place may not necessarily work in another.

Ensuring that private company pension plans become widespread is an important first step, but achieving a significant increase in the level of savings depends on the tax incentives offered for doing so – in most countries, contributions made to pension plans can be deducted from one's taxable income, up to a certain limit, and the taxation on this portion of income and its returns is deferred until it is collected in retirement. It also depends on the profile of the affected savers[10] and, as we have seen, on people's cognitive biases. In Spain, where from 2022 the combined tax-deductible contribution limit for workers and employers in company pension schemes is raised to 10,000 euros,[11] the available estimates suggest that every euro saved in company plans has historically increased the level of gross private savings by around 66 cents (i.e. a portion is offset by the reduction of other forms of savings, but on balance there is a substantial increase in total savings).[12] An alternative way to boost aggregate savings would be for the state to supplement contributions to individual pension plans. This policy has been followed, for example, in the so-called «Riester plans» in Germany or in the case of Lifetime ISAs in the United Kingdom.[13] The evidence suggests that supplements to contributions increase the ownership of retirement savings vehicles, but that the majority of taxpayers fail to make any contributions despite the incentive.[14] Once again, we come face-to-face with human irrationality, dear Sancho: as human beings we struggle to see the tax benefits of saving for retirement, unless someone explains them to us well.[15]

Rita Sánchez Soliva

8. See R.H. Thaler and S. Benartzi (2001), «Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving», The University of Chicago Press.
9. The Netherlands pioneered these practices and they also report on the status of employment pension schemes. In Spain, since 2015 the Social Security simulator has been available for calculating the public pension, but it is not yet a well-known tool and it gets limited use.
10. While among higher-income and older Spanish households it is observed that the tax deductions in pension plans (whether private or employment) generate, above all, a reallocation of their portfolios to pension funds from other savings instruments, in the case of other types of households it does seem to generate new savings. See J. Ayuso, J.F. Jimeno and E. Villanueva (2019), «The effects of the introduction of tax incentives on retirement saving», Series, nº 10, pages 211-249.
11. Not so in the case of individual pension plans, where the maximum tax-deductible amount is reduced from 8,000 to 1,500 euros.
12. See M. Gómez García and E. Villanueva López (2022), «El efecto de los planes de pensiones de empresa sobre el ahorro privado de los hogares», Bank of Spain Economic Bulletin [Articles], nº 2, 2022 (content available in Spanish).
13. A savings account into which the state pays a bonus of 25% of the contributions (up to a maximum of 1,000 pounds per year) on condition that it is used to purchase a first home or for retirement.
14. See P.H. De Cos (2021), «El sistema de pensiones en España: una actualización tras el impacto de la pandemia. Contribución del Banco de España a los trabajos de la Comisión de Seguimiento y Evaluación de los Acuerdos del Pacto de Toledo», Occasional Papers nº 2106, Bank of Spain (content available in Spanish).
15. See E. Duflo, W. Gale, J. Liebman, P. Orszag and E. Sáez (2006), «Saving Incentives for Low and Middle-Income Families: Evidence from a Field Experiment with H&R Block», Quarterly Journal of Economics 121.4.

What does the retirement of the baby boomers mean for economic growth?

As noted in other articles of this Dossier,[1] the retirement of a generation as numerous as the baby boomers will result in the relative growth of the elderly population in the coming decades. This, in turn, will lead to an increase in the dependency ratios: according to projections by the National Statistics Institute, the number of people over 65 years of age in Spain will surpass 50% of the working-age population (16-64 years of age) by the mid-2040s, representing 20 pps more than in 2022.

This pronounced ageing of the population will have significant ramifications not only for how our societies are structured, but also for our economies.

Firstly, unless there are significant changes in the employment rates among the older population, a decrease in the working-age population[2] will reduce the number of workers and, therefore, the total GDP of the economy. Also, some economists have documented that the productivity of the labour force, i.e. GDP per worker, could also be negatively affected by an ageing population.[3]

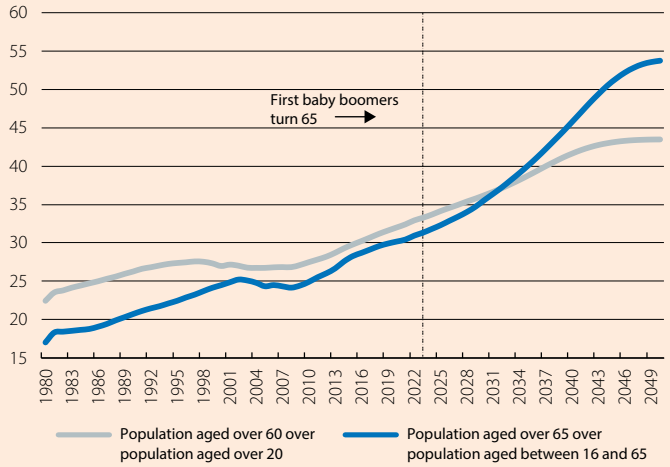
Secondly, population ageing has an impact on the behavioural patterns of economic agents: the consumption of longer-lived cohorts tends to be more skewed towards health spending at the expense of other items, while their investments tend to exhibit greater risk aversion.[4]

Another important channel for the impact of population ageing is through the public accounts. In particular, if a higher proportion of the population is elderly, there tends to be higher structural public spending (e.g. health, pensions and care).[5] If corrective measures are not introduced, the result would be a structural deterioration of the budget deficit and an increase in public debt.

It is important to clarify that the magnitude of these macroeconomic effects of population ageing will depend on other dynamic and idiosyncratic factors, such as consumption habits in each country, the productivity of the economy both on aggregate and by age group, the willingness of the population to delay retirement, as well as factors associated with the quality of public services and the characteristics of the Social Security system.

Spain: population ratios by age

(%)



Source: *CaixaBank Research, based on the National Statistics Institute's population projections.*

Population ageing means less growth, but how much are we talking about?

As we set out in the other articles of this Dossier, starting this year and for the next 17 we will witness the retirement of the baby boom generation, and the impact this will have on economic growth will not be small. As we estimated in a previous CaixaBank Research article,[6] when the population ages by 1%, as measured using the ratio of people aged 60 years or more over those aged 20 years or more, GDP per capita falls by 0.39%. In other words, the so-called «elasticity of economic growth with respect to population ageing» is –0.39. In the case of Portugal, the model results in an elasticity of –0.51. These results are similar to those of other countries, such as –0.55 in the case of the US.[7]

To estimate the cost of population ageing in Spain in the future, it must be borne in mind that in the next 20 years, according to the demographic projections of the National Statistics Institute, the population ratio of people aged 60 years or more over those aged 20 years or more will increase in Spain by 10 pps. Combining these demographic projections with our estimate for the elasticity of economic growth with respect to population ageing, we find that population ageing due to the retirement of the baby boomers will reduce GDP growth per capita by 0.5 pps per year over the next two decades, assuming all other factors remain constant.[8]

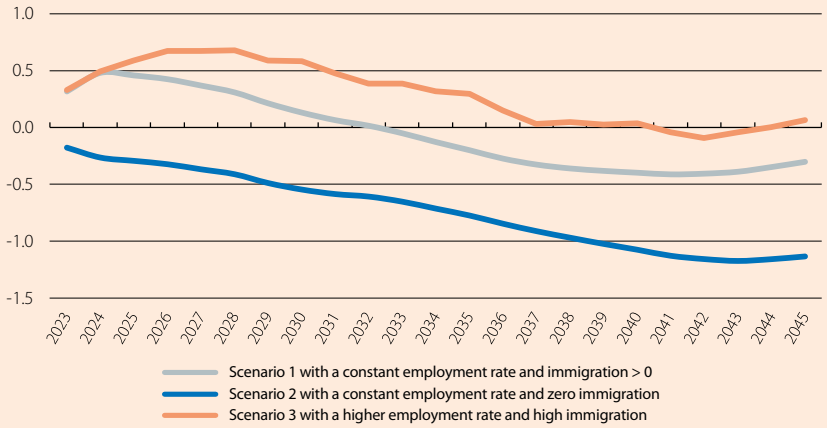
1. See in particular «Reforming the pension system: in search of sustainability» in this same Dossier.
2. Specifically, the latest projections of the National Statistics Institute indicate that the working-age population in Spain, counting the cohorts between 16 and 64 years of age, will decrease by more than one million people between 2023 and 2050.
3. See M. Poplawski-Ribeiro (2020), «Labour force ageing and productivity growth», Applied Economic Letters, vol. 27, nº 6, IMF.
4. The empirical evidence also suggests that population ageing results in a lower natural interest rate and thus alters the capacity of monetary policy to respond to economic developments. See K. Bodnár and C. Nerlich (2022), «The Macroeconomic and fiscal impact of population ageing», ECB.
5. The European Commission estimates that fiscal spending linked to population ageing will increase from 24% of GDP in 2019 to 27% of GDP by 2040. See «The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States (2019-2070)». European Commission (2021).
6. See E. Llorens and J. Mestres (2020), «El impacto del envejecimiento en el crecimiento económico de España: un enfoque regional», CaixaBank Research, Working Paper 01/20 (content available in Spanish).
7. See N. Maestas, K. Mullen and D. Powell (2016), «The effect of population aging on economic growth, the labor force and productivity». NBER Working Paper Series.
8. The 10-pp increase in this population ratio is equivalent to an increase of 30%.

Looking further ahead, the demographic projections suggest that the impact of the retirement of the millennial generation, or even generation Z, will be much smaller in scale given that those generations are substantially less numerous than the baby boom generation.

But... are we really in a world of *ceteris paribus*?

Predictions of a negative macroeconomic impact of population ageing, and of the retirement of the baby boomers in particular, are based on projections of a decline in the workforce, which in turn depends on three major factors: (i) the expected natural growth of the population (births minus deaths), (ii) net migration flows and (iii) the employment rate (ratio of people in employment over the working-age population).

Spain: contribution of the change in the labour force to GDP
(pps)



Notes: *Contribution of the change in the labour force to economic growth within the framework of the growth accounting, assuming that wage incomes represent the same percentage of GDP as they did in the period 2000-2018. Scenario 1 incorporates the population forecasts according to the National Statistics Institute and a constant employment rate. The alternative scenarios incorporate forecasts with no immigration (scenario 2) and with high immigration (scenario 3) according to the National Statistics Institute. The increase in the employment rate in scenario 3 consists of the baseline scenario from the* 2021 Ageing Report.
Source: *CaixaBank Research, based on data from the National Statistics Institute, the* 2021 Ageing Report *(European Commission) and The Conference Board.*

The demographic projections of the National Statistics Institute assume that, in line with what has been observed in recent years, the natural growth rate will remain in negative territory throughout the forecast horizon, at around –100,000 people per year on average up until the end of the 2040s, when it is expected to exceed –200,000 individuals. On the other hand, they predict positive net migration flows of around 450,000 people per year in the next decade and of 250,000 people per year between 2030 and 2040.

With these latest demographic projections of the National Statistics Institute,[9] and assuming that the employment rate remains constant in the coming decades at around today's 63%, we built a first scenario for the future population and labour force (scenario 1) using a simple long-term economic growth accounting model.[10] We find that the contribution of the labour force to GDP growth would turn negative from 2033 onwards. Indeed, it is precisely during the 2030s that we will see the biggest negative impact on the labour force resulting from the retirement of the baby boomers materialise.

In the second chart, we can see how changes in the assumptions could, as a whole, mitigate the projection of a negative contribution to growth of the labour factor. Such assumption changes could include greater net immigration flows, or they could be labour policies that manage to raise the employment rate through, for instance, a higher labour participation rate among older people and the vulnerable (by implementing measures which boost inclusion and reintegration into the labour force or reforms that seek to raise the effective retirement age). Thus, in scenario 2, which is the most adverse (without migration flows and keeping the employment rate constant), the contribution of the labour force to growth would become negative immediately. In contrast, the contribution would be only very slightly negative for some years in the 2040s in scenario 3, which includes high immigration (it uses alternative projections by the National Statistics Institute with around 60,000 more net migrants per year between 2023 and 2045 compared to scenario 1) and a higher employment rate (a gradual increase from 63% in 2023 to 70% in 2045, +7 pps versus scenario 1 and in line with the projections of the *2021 Ageing Report*). Thus, the average contribution of the labour force to GDP growth in the period 2027-2045 would be –0.15 pps in scenario 1, –0.83 pps in scenario 2, and +0.24 pps in scenario 3. This compares with an average contribution of the labour factor to GDP growth of +0.1 pps for the period 2027-2050 in the baseline forecast scenario recently used by the AIReF in its assessment of the pension reform.[11]

These estimates are subject to considerable uncertainty and should also be framed within the estimates for the potential growth of the Spanish economy, which depend on the expected growth of the labour force and of productivity. As an example, the AIReF estimates that potential GDP growth will be around 1.3% in the coming decades, below that expected by the Ministry of Inclusion, Social Security and Migration (1.9%) and similar to that projected by the European Commission (1.2%).

Another key element to keep in mind when analysing the macroeconomic impact of the retirement of the baby boomers will be how the labour factor interacts with the other factors of production and with technological changes. After all, technological advances could prove to be the decisive factor which more than offsets the negative impact of the reduced labour force by increasing the output generated by each available worker.

Antonio Montilla and Ricard Murillo Gili

9. The Ministry of Inclusion, Social Security and Migration takes these National Statistics Institute demographic projections as the basis for its latest analysis on pension spending discussed in the article «Reforming the pension system: in search of sustainability» in this same report.
10. See J. Mestres (2019), «El envejecimiento de la población española y su impacto macroeconómico», Spanish Economy Papers, nº 161, Funcas (content available in Spanish).
11. See «Opinión sobre la sostenibilidad de las administraciones públicas a largo plazo: la incidencia de la demografía», Opinion 1/23, AIReF (content available in Spanish).

Consumption and saving patterns after retirement

The life cycle theory of consumption,[1] developed, among others, by the economics Nobel laureates Franco Modigliani and Milton Friedman in the 1950s, lays out the basis of people's behaviour in terms of consumption and saving. The theory points out that a person's saving patterns vary over the course of their lifetime following an inverted U-shape. That is, those who save the least are the young and the elderly, and those who save the most are middle-aged people. The reason behind this pattern is the desire to maintain a relatively stable quality of life and level of consumption over time. To achieve this, people must save more at those ages when they earn the highest income and use those savings to improve their quality of life at those ages when their income flow is lower.

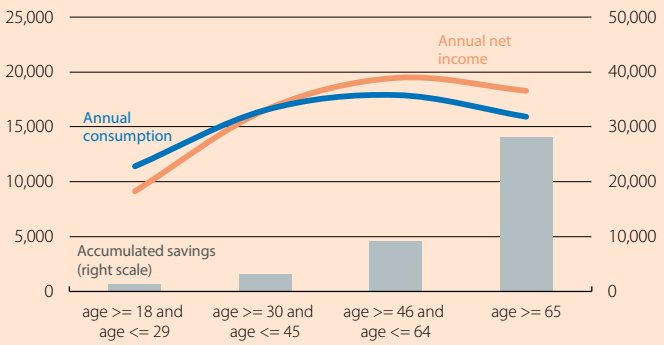
Do we observe this saving and consumption pattern during people's lifecycle in practice? Abundant empirical evidence shows that consumption after retirement reduces significantly, and this goes against the life cycle theory and has led to the so-called retirement-consumption puzzle.[2] This apparent puzzle can be explained by the fact that the savings people have accumulated are insufficient in order to maintain their level of consumption after retirement, as a result of multiple factors (uncertainty, financial constraints, cognitive biases, etc.). Part of the answer has also been found by analysing the breakdown in the type of consumption: it does not decrease across all expenditure categories, but rather it is concentrated in certain categories such as those related to work (e.g. transport) or leisure.[3] So the issue remains open.

In this article, we will use internal CaixaBank data, duly anonymised, to carry out an exploratory analysis on how consumption patterns change after retirement for the case of Spain. The use of these data allows us to identify individuals' income, consumption and savings with precision, as well as to identify the moment of retirement.

In a first exploration,[4] we can identify differences in saving and consumption patterns between different age groups (see first chart). Income volatility across the different age groups is higher than that of consumption, indicating that households seek to maintain a relatively stable level of consumption throughout their lifetimes. Only in the 18 to 29-year-old age group does consumption exceed annual net income; some possible explanations for this include that they have other sources of income (for example, help from parents in the case of the youngest cohorts) or that they borrow to finance their consumption. As for the older group, there is a reduction in their income compared to the group between 46 and 64 years of age, albeit a rather slight one. This moderate reduction can be achieved in part thanks to the current public pension system, with its relatively high replacement rates that allow people to maintain an average income level that is not too dissimilar from what they received before retirement. This limited contraction in income, together with the accumulated savings cushion, help to explain why the reduction in consumption among those aged 65 and over compared to those aged 46 to 64 is relatively small.

Spain: consumption and savings by age group

Median (euros)



Notes: *Includes all CaixaBank customers who in 2022 had at least one payroll, unemployment benefit or pension payment deposited into their account and made at least one purchase from it. Consumption is defined as any expense which materialises as a cash withdrawal, card payment, bizum transfer, direct debit charge or a transfer made to a company. Savings include deposits and other investments (stocks, pension plans, etc.). The income is net, after taxes and social security contributions. The data are aggregated at the contract level.*

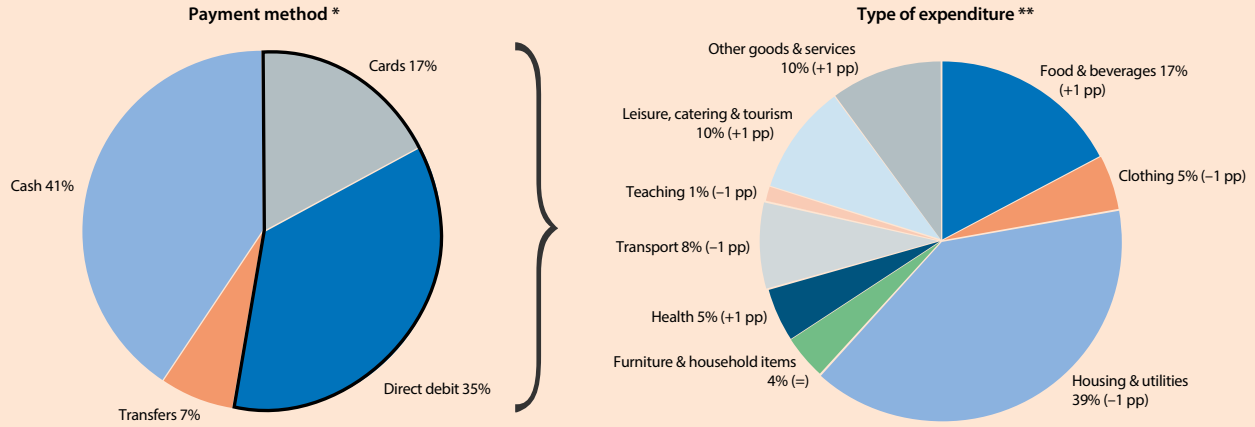
Source: *CaixaBank Research, based on internal CaixaBank data.*

1. This basic theoretical framework has served to cement the foundations of an extensive economic literature that has enriched the analysis regarding the behaviour of economic agents in decision-making. For example, an element of uncertainty was incorporated into the model with which agents may tend to save more as a precautionary measure, or other factors which limit or modify household decisions, such as taxes or restrictions on access to the financial system.
2. For further details, see J. Banks, R. Blundell and S. Tanner (1998). «Is there a retirement-savings puzzle?» American Economic Review, vol. 88, nº 4, 769-788.
3. See E. Aguila, O. Attanasio and C. Meghir (2011). «Changes in consumption at retirement: evidence from panel data». Review of Economics and Statistics, 93(3), 1094-1099.
4. The sample includes all CaixaBank customers who in 2022 had at least one payroll, unemployment benefit or pension payment deposited into their account and made at least one purchase from it, whether via cash withdrawal, card payment, bizum transfers, direct debit charges or transfers to companies. The income is net, after taxes and social security contributions. Savings include all financial assets held with the bank (deposits, stocks, pension plans, etc.). The data are aggregated at the contract level and therefore do not correspond to the household level. This differs from the data from the Survey of Household Finances (Bank of Spain), which correspond to the household level and where the income variable is at the gross level (before taxes and social security contributions). As for consumption, the levels are more similar to those of the Household Budget Survey (National Statistics Institute) at the individual level. However, there are some differences in the definition. For example, self-consumption, wages in kind, or rent allocated to property under ownership are not included, and the expenses are recorded when the payment is made rather than at the time of purchase.

In order to take a close look at changes in consumption after retirement, next we focused on a sample of customers who were between 60 and 68 years of age and who were previously employed and then retired between June 2014 and February 2018.[5] At the aggregate level, we continue to see a reduction in consumption in real terms in the post-retirement years. Specifically, after one year of retirement, consumption falls, on average, by 1.2% compared to the year before retirement. This trend continues in the following years, and in the fifth year of retirement consumption decreases, on average, by 6.4% compared to the year prior to retirement. In addition, it is observed that the distribution of consumption by type of expenditure also changes. In particular, compared to the year before retirement, expenditure on food, leisure, catering and tourism and health increase, while other items such as housing and utilities, transport and education reduce. Expenditure in the year after retirement is concentrated in housing and utilities (40%), followed by food (17%) and then leisure, catering and tourism (10%).[6]

Spain: consumption by payment method and type of expenditure after the first year of retirement

Distribution of the average annual consumption (%)



Notes: ** «Transfers» to companies, «direct debit» includes account payments; «cash» includes cash withdrawals from ATMs or bank branches. Bizum transfers are not included as use of this payment method was very residual in the period analysed. ** The type of expenditure is only available for card payments and direct debit charges. The figures in brackets indicate the change relative to the year prior to retirement.*
Source: *CaixaBank Research, based on internal data.*

In addition to the changes in consumption habits, it is observed that the variations in consumption after retirement depend on the available resources, in terms of both income and accumulated savings. To analyse this relationship, we segmented the sample into quartiles according to occupational income before retirement, and for each quartile the observations are once again divided into quartiles based on the level of accumulated savings. For individuals with incomes below the median (1st and 2nd quartiles), the level of consumption increases slightly in the first year after retirement (a median increase of +3% for the first income quartile and of +1% for the second quartile, see third chart).[7] However, it should be noted that the level of consumption is lower than in the case of individuals with higher incomes. For this latter group, the level of consumption reduces compared to the year prior to retirement (–3% for the third income quartile and –6% for the fourth quartile),[7] although it remains high.

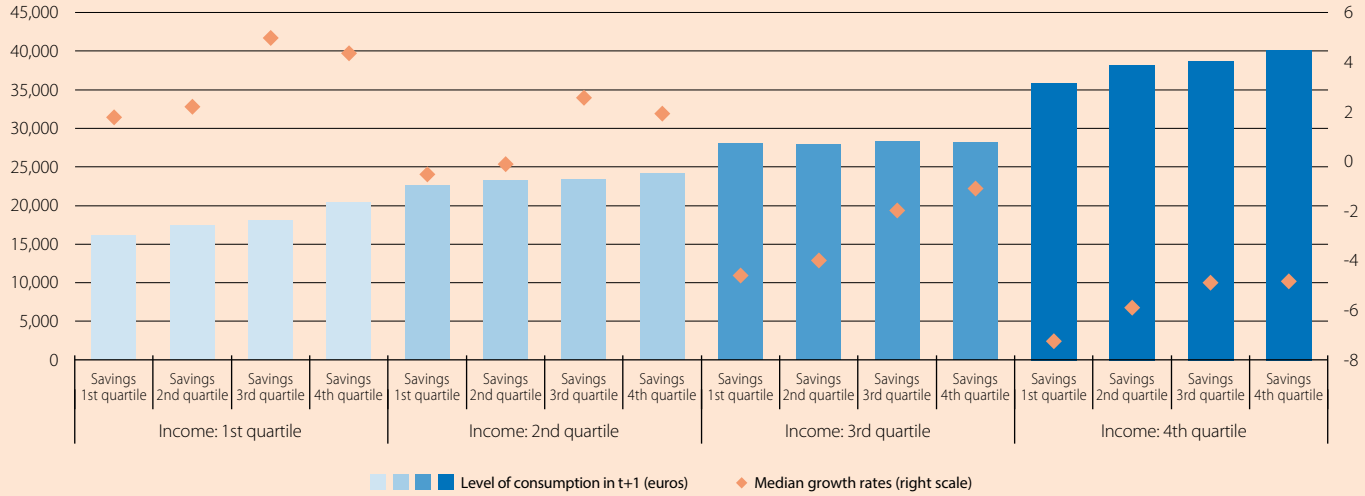
In addition, the savings accumulated over the course of one's lifetime play a decisive role in maintaining a relatively stable level of consumption after retiring. For those starting with low income levels before retirement, we observe (see third chart) that individuals with higher savings (third and fourth quartiles) increase their consumption to a greater degree after retiring. Among those with high incomes before retirement, the individuals with higher savings reduce their post-retirement consumption to a lesser degree. In other words, the savings cushion allows them to maintain a higher level of expenditure after retiring.[7]

In conclusion, these results add to the extensive literature documenting the existence of the retirement-consumption puzzle. The results show that consumption reduces after retirement: by 1.2% after one year of retirement, and by up to 6.4% five years after

5. The analysis focuses on customers aged 60 to 68 who received a payroll before retirement and who, at some point between June 2014 and February 2018, retired and went on to receive a public pension. We analyse the period prior to the COVID-19 pandemic to avoid the temporary shock that occurred in consumption. The data are deflated using the headline CPI to euros at 2013 prices. The year *t* is the year of retirement, so the expenditure in the year *t+1* corresponds to the annual expenditure in the year after retirement. The definitions of savings, income and consumption are the same as in footnote 4.
6. These results are similar to those of the Household Budget Survey (National Statistics Institute) for households in which the main breadwinner is over 65 years old.
7. The results have been validated using a linear regression in which individuals' consumption is explained by the variables of income, savings and other control variables. The estimated coefficients are statistically significant.

Spain: level of consumption after retirement by level of savings and pre-retirement income

Consumption t+1 (euros) *Median change after retirement (%)*



Notes: *The sample includes all CaixaBank customers aged 60 to 68 who retired between June 2014 and February 2018 and went from receiving a payroll to receiving a public pension. The expenditure in the year t+1 corresponds to the annual expenditure in the year after retirement (always prior to COVID-19) and includes cash withdrawal, card payments, bizum transfers, direct debit charges and transfers to companies. The data are deflated using the headline CPI to euros at 2013 prices. The results have been validated with a regression in which individuals' consumption is explained by the variables of income, savings and other control variables. The estimated coefficients are statistically significant.*

Source: *CaixaBank Research, based on internal CaixaBank data.*

leaving the world of work. In addition, our analysis highlights the important role that savings play in determining the degree to which consumption is reduced after retirement. For retirees with the same pre-retirement income level, having greater accumulated savings makes it possible to maintain a higher level of consumption, demonstrating the importance of planning for retirement in order to build up that savings cushion that will allow us to maintain the quality of life we desire in our golden years.

Mar Bisquert, Josep Mestres, José Antonio Sánchez and Ariadna Vidal

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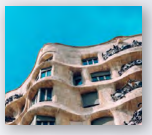

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Design and production: www.cegeglobal.com
Legal Deposit: B. 21063-1988 ISSN: 1134-1920

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