Box 1

MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE

This box describes the key features of the most recent update to the Banco de España's macroeconomic projections for the Spanish economy. Under the assumptions of the exercise, Spanish GDP is projected to grow by 4.6%, 1.3%, 2.7% and 2.1% in 2022, 2023, 2024 and 2025, respectively (see Table 1).[1] Headline inflation is projected to decelerate from an average of 8.4% in 2022 to 4.9% in 2023, 3.6% in 2024 and 1.8% in 2025, and underlying inflation from 3.8% this year to 3.4% next year, 2.2% in 2024 and 1.8% in 2025. The cut-off date for the projections is 30 November 2022.

Activity

The growth rate of activity eased substantially in 2022 Q3. According to the flash estimates published by the National Statistics Institute (INE), GDP rose by 0.2% quarter-on-quarter in this period, well below the 1.5% growth observed in Q2 but in line with the 0.1% forecast by the Banco de España in its October projections.[2] This slowdown in activity resulted primarily from the confluence of a range of interrelated adverse factors of an essentially global nature that had a negative impact on economic agents' decisions both in Spain and in most other European countries. These factors included not least the energy crisis (and the uncertainty about possible interruptions in supply for some economies), the high and persistent rates of inflation, the resulting monetary policy tightening by the world's main central banks and the widespread downturn in confidence. Moreover, the slowdown in the pace of Spanish output growth during Q3 was also attributable to the smaller boost from the sectors most affected by the health crisis, which had seen a strong improvement in Q2 on account of the lifting of virtually all the pandemic containment measures.

In a setting in which the above factors have continued to considerably constrain activity, Spanish household and business confidence seems to have been further eroded in the final stretch of the year, judging by the adverse developments in some qualitative indicators, while financial conditions have continued to tighten. However, on social security registrations data, employment growth in Q4 has been similar to in Q3, with permanent hires accounting for a growing share of the total. These labour market developments appear to be underpinning private consumption, which, while still markedly weak (owing to the notable erosion of household purchasing power, among other factors), seems to have remained moderately buoyant in the last few months of the year. Along these same lines, according to the results of the latest edition of the Banco de España Business Activity Survey (EBAE), business turnover levels have held somewhat stable in Q4, albeit with marked cross-sector heterogeneity.[3]

Table 1
Macroeconomic projections for the Spanish economy (a)

Annual rate of change (%)

	GDP				HICP				HICP excluding energy and food				Unemployment rate (% of labour force) (b)			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
December 2022	4.6	1.3	2.7	2.1	8.4	4.9	3.6	1.8	3.8	3.4	2.2	1.8	12.8	12.9	12.2	12.0
October 2022	4.5	1.4	2.9	—	8.7	5.6	1.9	—	3.9	3.5	2.1	—	12.8	12.9	12.4	—

SOURCES: Banco de España and INE.
NOTE: Latest QNA figure published: 2022 Q3.

a Projections cut-off date: 30 November 2022.
b Annual average.

1 Compared with the projections published on 5 October, the current projections incorporate the new information that has become available since then. This includes, in particular, the flash Quarterly National Accounts (QNA) estimate for Q3 and the changes in the technical assumptions underlying developments in the different key variables in the exercise (see Table 2). The projection horizon in this exercise includes 2025 for the first time.

2 See "Macroeconomic projections for the Spanish economy (2022-2024)", Box 1, "Quarterly report on the Spanish economy", *Economic Bulletin* 3/2022, Banco de España.

3 See M. Izquierdo (2022), "Encuesta a las empresas españolas sobre la evolución de su actividad: cuarto trimestre de 2022", Notas Económicas, *Boletín Económico* 4/2022, Banco de España.

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

Overall, subject to all the caveats arising from the fact that the information available is still incomplete, quarter-on-quarter GDP growth in Q4 is estimated at 0.1%. As in Q3, the contribution of domestic demand to this growth appears to have been positive and higher, in absolute terms, than the negative contribution of the net external balance.

In 2023 Q1 the dynamics of Spanish economic activity are expected to remain considerably weak, insofar as the outlook for the start of next year is one of continuing high inflationary pressures, a further tightening of financial conditions, persistent relatively low confidence levels and lacklustre global economic activity, especially in Europe. Conversely, the measures rolled out by the authorities to tackle the energy crisis and the spike in inflation are expected to provide some support for activity in the early months of next year.

These projections include three key assumptions for 2023 Q1 which are also relevant to the behaviour of activity and prices over the rest of the projection horizon.

First, looking to the coming months, it is assumed that commodity prices – about which much uncertainty persists – will perform in line with futures market prices. In particular, in the case of gas, Iberian Gas Market (MIBGAS) futures prices are assumed to be the most likely scenario for the future developments in gas prices.[4] In this respect, it is worth noting that gas prices for 2023 on the futures markets are currently just over a third lower than those envisaged in the last projection exercise, published in October.[5] Meanwhile, the assumptions about the oil price in dollar, again obtained drawing on the futures markets, result in a downward trajectory over the projection horizon, albeit at somewhat higher levels than those envisaged in early October.[6]

Second, in a particularly uncertain economic and geopolitical environment, it is assumed that over the coming months Spanish households will make relatively limited use of the large savings accumulated during the health crisis (mainly by higher income households), which will not provide a significant boost to aggregate spending levels.[7]

Third, certain assumptions have been made regarding the duration of the government measures rolled out in 2022 to counter the effects of the energy crisis on households and firms and, in particular, to compensate these agents for the spike in prices. With inflationary pressures expected to remain relatively high in 2023, and in the absence of an official decision in this respect, this projection exercise considers in its baseline scenario that several of the measures due to expire, in principle, on 31 December 2022 will be extended throughout 2023.

The measures currently in force can be classified into four categories according to their official duration and the assumptions made about their possible extension (Figure 1 shows those that have a direct impact on the HICP and specifies the differences between the assumptions made in this respect in the current exercise and in the October projections):

(a) *Measures approved until 31 December 2022, which, it is assumed, will be extended for one year until 31 December 2023:* the tax rate reductions in the electricity bill (from 21% to 5% in the case of VAT and from 5.1% to 0.5% in the case of the excise duty on electricity), a reduction in the VAT rate on natural gas from 21% to 5%, the suspension of the tax on electricity generation, a butane gas price freeze, the State subsidy for public transport season tickets, a

4 Specifically, gas prices on futures markets are taken up to the one-year term. Thereafter, prices are considered not very representative, owing to limited market liquidity, and therefore it has been decided to keep the price of this commodity constant at the futures price for December 2023 until the end of the projection horizon. The electricity price trajectory, meanwhile, is obtained from a formula that approximates the technical efficiency of electricity generation from gas with currently existing technology. Also, the cost of CO2 emission allowances is included. Finally, the calculation of the electricity price trajectory takes into account the mechanism to cap the price of gas until May 2023.

5 As in the rest of Europe, the price of gas in the Iberian market has declined considerably – and exhibited high volatility – since the cut-off date for the previous projections. For instance, in November the price of gas was 60% below that expected in the October projection exercise. This has been driven by the reduction in gas consumption, stemming in part from the mild temperatures observed in the first half of the quarter, which has mitigated the concerns in Europe about whether gas supplies will suffice to meet demand. For more details on these potential supply problems, see I. Alonso, L. López, D. Santabárbara and M. Suárez-Varela (2022), "The EU economies' natural gas inventories in 2022 and 2023 under two hypothetical scenarios", Box 2, "Quarterly report on the Spanish economy", *Economic Bulletin* 4/2022, Banco de España.

6 Oil prices have not been significantly affected by the entry into force on 5 December of two measures concerning the seaborne trade of Russian oil: the price cap at $60 per barrel agreed by the G7 and the ban on EU imports of Russian oil.

7 See C. Martínez-Carrascal (2022), "Impact on recent and expected consumption patterns of the savings accumulated by households during the pandemic", Box 5, "Quarterly report on the Spanish economy", Economic Bulletin 4/2022, Banco de España.

Box 1

MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

temporary 15% increase in non-contributory pensions and a 2% cap on rent increases. Hereafter, the public measures in category (a) are referred to as "extended measures".

(b) *Measures initially approved until 31 December 2022 which have already been officially extended for a further year, until 31 December 2023, or whose extension is envisaged in the State Budget currently before Parliament:* the introduction of a 15% cap on the increase in the cost of gas in the regulated rate for small natural gas consumers and free suburban rail passes.

(c) *Measure approved until 31 May 2023 which, in principle, cannot be extended:* a mechanism to cap the price of gas used to generate electricity.

(d) *Measures initially approved until 31 December 2022, which the baseline scenario assumes will not be extended:* an extraordinary and temporary discount on the retail price of fuel and other spending measures to compensate for inflation whose extension is not assumed given the lack of detailed information.[8]

Therefore, the baseline scenario assumes that the duration of the measures in categories (b), (c) and (d) coincides with that officially approved. Conversely, it is assumed that, in the case of the "extended measures", the duration is different to the officially approved term and that they would remain in force for the whole of 2023. Extending these support measures for households and firms will contribute in the coming year to sustaining activity and containing inflationary pressures, albeit at the expense of having the opposite effect in 2024 and, naturally, of slightly deteriorating public finances.

Beyond 2023 Q1, activity will regain increasing momentum from spring onwards, fuelled by a combination of factors. These include the gradual easing of energy market tensions and inflationary pressures (which will bring with it a progressive recovery in domestic agents' real incomes and confidence and stronger external demand), the ongoing

Figure 1
Assumptions regarding the duration of the measures directly affecting inflation taken by the authorities to mitigate the increase in energy prices

	Measures	October projections	December projections
1	— Reduced tax rates on electricity bills: VAT to 5% and excise duty on electricity to 0.5% — VAT on natural gas reduced to 5% — Suspension of the tax on electricity generation — Price changes in rental agreements capped at 2% — Butane gas price freeze — Reduced price of public transport season tickets (a)	In force until 31/12/2022	In force until 31/12/2023
2	— Cap on the increase in the cost of gas in the regulated rate for small natural gas consumers (maximum of 15%) — Free rail season tickets	In force until 31/12/2022	In force until 31/12/2023
3	— Cap on the price of gas used to generate electricity	In force until 31/05/2023	In force until 31/05/2023
4	— Extraordinary discount on fuel retail prices	In force until 31/12/2022	In force until 31/12/2022

SOURCE: Banco de España.

a It is assumed that only the portion financed by the central government is extended.

8 These are the aid to firms in the most affected sectors, the €200 grant for lower-income households, the complementary grant for students and the additional transport subsidies from regional governments.

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

roll-out of Next Generation EU (NGEU) funds[9] and the gradual resolution of the global supply chain disruptions.

In annual average terms, GDP will grow by 4.6% in 2022 (see Table 1 and Chart 1). This notable output growth is mainly the result of developments up to 2022 Q2, since, as mentioned above, activity has shown considerable weakness in 2022 H2. Such sluggishness, which will extend into the start of next year, will result in GDP growth for 2023 as a whole moderating significantly, to 1.3%, although it will gradually improve as the year progresses. In turn, this gradual increase in output growth will lead it to stand at 2.7% in 2024, in annual average terms. Thereafter, once the main economic consequences of the war in Ukraine have been overcome, the pace of GDP growth will soften, approaching that of potential output, thus bringing the average growth rate for 2025 to 2.1%. Under the projected trajectory, Spanish GDP will return to pre-pandemic levels in late 2023 or early 2024 (see Chart 2).

As compared with those published in October, the current projections revise up GDP growth for 2022 by 0.1 pp (see Table 3). This revision is the result of activity in the second half of the year performing somewhat more favourably than projected in October.[10] Meanwhile, growth for 2023 is now 0.1 pp lower than anticipated at the time. This is the net result of various factors operating in opposite directions. On the one hand, GDP growth in 2022 H2 has been stronger than projected in October, and this has a certain positive carry-over effect on annual output growth in 2023. Moreover, the new assumptions about the measures to alleviate the effects of inflation (i.e. those already announced and those projected to be extended) add 0.4 pp to GDP growth for next year. On the other hand, the changes in the other assumptions underlying the projections, which point particularly to a notable worsening in external markets, lead, in net terms, to a slight downward revision of GDP growth for next year. Average output growth in 2024 is also revised down by 0.2 pp. This revision owes mainly to the assumption about the "extended measures", whose withdrawal in early 2024 would have a small negative impact on activity in that year.[11]

Prices and costs

The pace of consumer price growth, as measured by the HICP, has moderated significantly in recent months. Thus,

Chart 1
GDP growth and contributions of main components

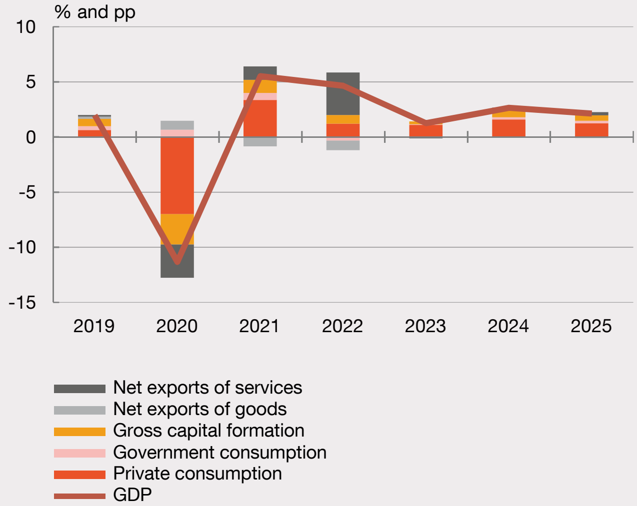
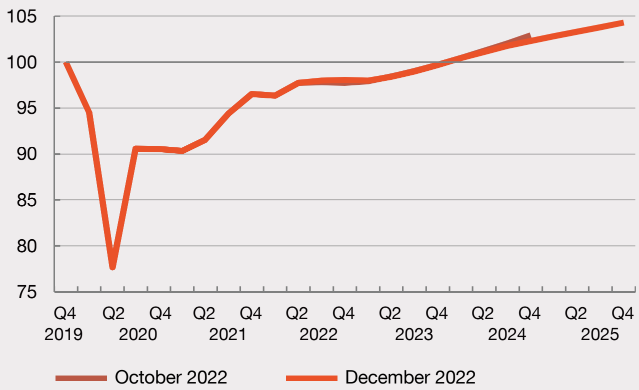


Chart 2
Real GDP. 2019 Q4 = 100



SOURCES: INE and Banco de España.

9 The information available suggests that the implementation of projects associated with the NGEU's Recovery and Resilience Facility (RRF) is proceeding as anticipated in the October projections. See the Annex for more details.

10 In particular, as noted above, the flash QNA estimate for Q3 reflects somewhat higher output growth than was estimated in the October projection exercise.

11 Strictly speaking, these effects owe not only to the measures whose extension has been assumed but is not official (category (a) in Figure 1) but also to those whose extension is already official (category (b) in Figure 1).

Box 1

MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

after reaching 10.7% in July, headline inflation gradually declined to 6.7% in November. This lower year-on-year growth mainly reflects the recent fall in energy prices, which has affected both electricity and heating and vehicle fuels. Underlying inflation has also slowed in recent months (from 4.9% in August to 4% in November), although this was mainly due to temporary factors.[12] By contrast, food prices have continued to accelerate in the most recent period, albeit at a slower pace than at the beginning of the year.

Headline HICP is expected to gradually ease from its current levels over the projection horizon. In particular, it is projected to fall from 8.4% in 2022 to 4.9% in 2023, 3.6% in 2024 and 1.8% in 2025 (see Chart 3). The reduction in consumer price growth rates is expected to be initially determined by the energy component, whose further slowdown would primarily be due to two factors. The first of these would be the emergence of negative base effects in the short term, as the year-on-year price growth is calculated relative to 2022 levels, which were very high due to the intensification of the energy crisis at that time. The second would be the expected decline in energy commodity prices, as indicated by their prices on the futures markets, which will translate into further reductions in the prices of fuel and, given the retail market pricing system, of electricity.

It will take somewhat longer for the pace of the food price increases to moderate and for underlying inflation to resume a downward trajectory, given that the recent increase in costs has not yet been fully passed through to the prices of all consumer goods and services (see Chart 4). In any event, the completion of this pass-through

Table 2
International environment and monetary and financial conditions (a)

Annual rate of change (%), unless otherwise indicated

		December 2022 projections				Difference between the current projections and the October 2022 projections (b)		
	2021	2022	2023	2024	2025	2022	2023	2024
Spain's export markets (c)	9.9	7.7	2.1	3.0	3.1	1.4	-0.4	-0.1
Oil price in dollars/barrel (level)	71.1	104.6	86.4	79.7	76.0	1.7	6.9	5.5
Monetary and financial conditions								
Dollar/euro exchange rate (level)	1.18	1.05	1.03	1.03	1.03	0.01	0.05	0.05
Nominal effective exchange rate against non-euro area countries (d) (2000 = 100)	120.7	111.9	111.2	111.2	111.2	0.6	3.9	3.9
Short-term interest rates (3-month EURIBOR. Level) (e)	-0.5	0.3	2.9	2.7	2.5	0.0	0.0	-0.2
Long-term interest rates (10-year Spanish government bond yield. Level) (e)	0.3	2.2	2.9	3.1	3.2	0.0	-0.5	-0.5

SOURCES: ECB and Banco de España.

a Cut-off date for assumptions: 28 November 2022 for Spain's export markets and 24 November 2022 for all other variables. Figures expressed as levels are annual averages; the figures expressed as rates are calculated on the basis of the related annual averages.
b The differences are in rates for export markets, in levels for oil prices, the dollar/euro exchange rate and the nominal effective exchange rate and in percentage points for interest rates.
c The assumptions regarding the behaviour of Spain's export markets presented in the table are obtained from the *December 2022 Eurosystem staff marcoeconomic projections for the euro area*.
d A positive percentage change in the nominal effective exchange rate denotes an appreciation of the euro.
e For the projection period, the figures in the table are technical assumptions, prepared following the Eurosystem's methodology. These assumptions are based on futures market prices or on proxies thereof and should not be interpreted as a Eurosystem prediction as to the course of these variables.

12 Specifically, the administrative measures to make public transport cheaper and impose a cap on rent increases have reduced the rate of growth of services prices, with an impact of around 0.3 pp on the underlying inflation rate between July and November.

Box 1

MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

and, in the case of food commodities, the materialisation of the downward price trajectories anticipated by the futures markets will result in the prices of the non-energy components also contributing to a retreat in inflation over the projection horizon. In particular, in annual average terms, underlying inflation is expected to ease from 3.8% this year to 3.4% in 2023, 2.2% in 2024 and 1.8% in 2025. The factors contributing to this decline include the progressive fading of the global supply chain disruptions and the gradual impact of the normalisation and subsequent tightening of monetary policy.

In any event, these projections rest on two very important assumptions. First, it is assumed that, while still incomplete, a substantial portion of the feed-through of past cost increases to final selling prices has already taken place. Second, in line with the evidence available to date, it is assumed that no significant second-round effects – via either profit margins or wages – emerge over the projection horizon that might trigger feedback loops from the current inflationary pressures.

The recent moderation in price growth has been more intense than envisaged in the October projections. As a result, the current projections have a more favourable starting point than the last projection exercise. This new starting point, together with the assumption regarding the "extended measures",[13] reduces the average inflation rate

Table 3
Projections for the main macroeconomic aggregates of the Spanish economy (a)

Annual rate of change in volume terms (%) and % of GDP

		December 2022 projections				October 2022 projections		
	2021	2022	2023	2024	2025	2022	2023	2024
GDP	5.5	4.6	1.3	2.7	2.1	4.5	1.4	2.9
Private consumption	6.0	2.1	1.9	2.8	2.1	1.6	1.3	3.2
Government consumption	2.9	-1.6	0.3	0.9	1.2	-1.5	0.0	0.9
Gross fixed capital formation	0.9	5.2	1.6	3.0	2.3	4.7	1.7	2.6
Exports of goods and services	14.4	18.0	3.8	3.0	3.1	17.5	4.0	3.1
Imports of goods and services	13.9	9.7	4.3	2.5	2.9	8.2	3.1	2.4
Domestic demand (contribution to growth)	5.2	1.6	1.4	2.4	1.9	1.1	0.9	2.5
Net external demand (contribution to growth)	0.3	3.0	-0.1	0.3	0.2	3.4	0.5	0.4
Nominal GDP	7.9	8.5	5.8	5.9	4.4	8.1	5.9	5.6
GDP deflator	2.3	3.6	4.5	3.2	2.2	3.5	4.5	2.6
HICP	3.0	8.4	4.9	3.6	1.8	8.7	5.6	1.9
HICP excluding energy and food	0.6	3.8	3.4	2.2	1.8	3.9	3.5	2.1
Employment (hours)	7.2	4.1	0.5	1.6	1.1	4.0	0.8	2.5
Unemployment rate (% of labour force). Annual average	14.8	12.8	12.9	12.2	12.0	12.8	12.9	12.4
Net lending (+)/net borrowing (-) of the nation (% of GDP)	1.9	2.4	2.1	2.4	2.3	2.6	2.7	3.4
General government net lending (+)/net borrowing (-) (% of GDP)	-6.9	-4.2	-4.1	-3.7	-4.5	-4.3	-4.0	-4.3
General government debt (% of GDP)	118.3	113.1	110.6	108.8	109.8	113.3	110.7	109.9

SOURCES: Banco de España and INE.
NOTE: Latest QNA figure published: 2022 Q3.

a Projections cut-off date: 30 November 2022.

13 Along with the effects of the measures whose extension is already official (category (b) in Figure 1).

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

projected for 2023 by 1.2 pp compared with the October projections (see Table 1). However, this downward revision is partially mitigated by the impact of the new information that has become available, which entails an effect in the opposite direction of 0.5 pp, as a result of a set of factors that include food prices surprising on the upside and the anticipated steepening of the energy price curve, partially offset by the recent negative surprises in some components. Meanwhile, the projected inflation rate for 2024 is revised up from that envisaged in the October projection exercise, chiefly due to the assumption that the measures deployed by the authorities to combat the effects of the energy crisis and the increase in prices will expire at end-2023. In the case of underlying inflation, the revisions (which are very minor: 0.1 pp for each of the three years in the period 2022-2024) primarily owe to the changes in the assumptions regarding the duration of the public transport subsidy.

Risks

In the short term, the risks to the growth projections are mainly tilted to the downside, while for the inflation projections upside risks predominate. However, towards the end of the projection horizon the risks are broadly balanced.

The main sources of uncertainty are linked to the course of the war in Ukraine and, in particular, to the materialisation of energy market developments that differ significantly from those envisaged in the baseline scenario of these projections. In the gas market, which is subject to a particularly high level of uncertainty, potential disruptions – whether favourable or adverse – over the coming quarters could have a considerable impact on both gas and electricity prices, and, potentially, also on the volume of gas available in relation to demand. In particular, an adverse disruption of this nature might considerably dampen economic growth and hamper the correction of the current high rates of inflation, leading to a further tightening of monetary policy at the global level.[14]

Other elements of risk notably include the uncertainty regarding the buoyancy of global economic activity in the near term, a time horizon in which some of the main global economies, such as the United States and the euro area as a whole, could fall into recession, while others, such as China,

Chart 3
Contributions to HICP growth by component

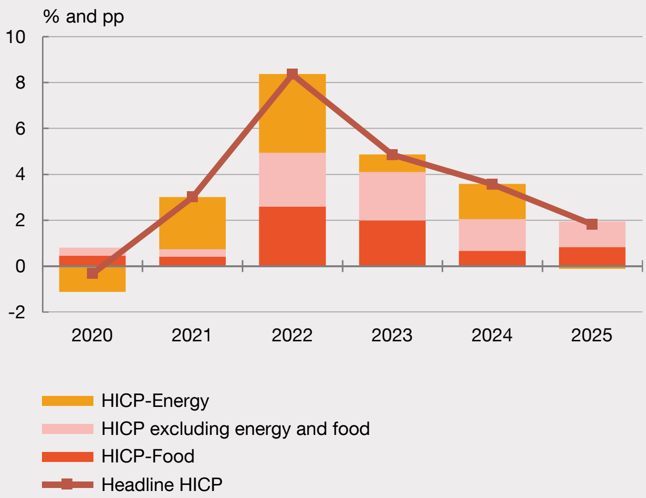
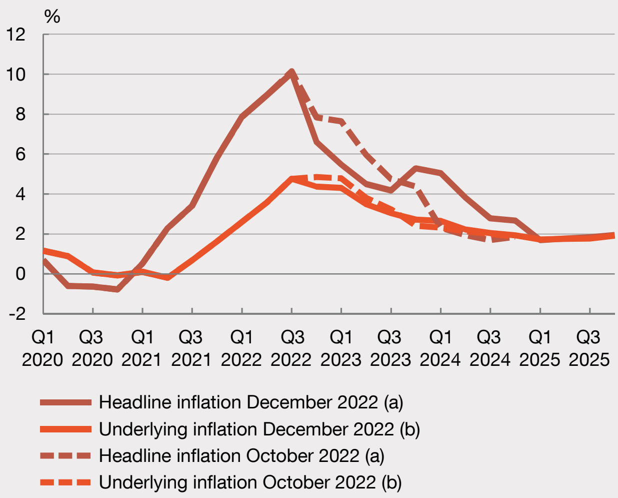


Chart 4
Headline and underlying inflation



SOURCES: Banco de España and INE.

a Measured by the HICP.
b Measured by the HICP excluding energy and food.

14 For an analysis of the sensitivity of GDP and of inflation in Spain to changes in the gas price path, see "Macroeconomic projections for the Spanish economy (2022-2024)", Box 1, "Quarterly Report on the Spanish Economy", *Economic Bulletin* 3/2022, Banco de España.

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MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

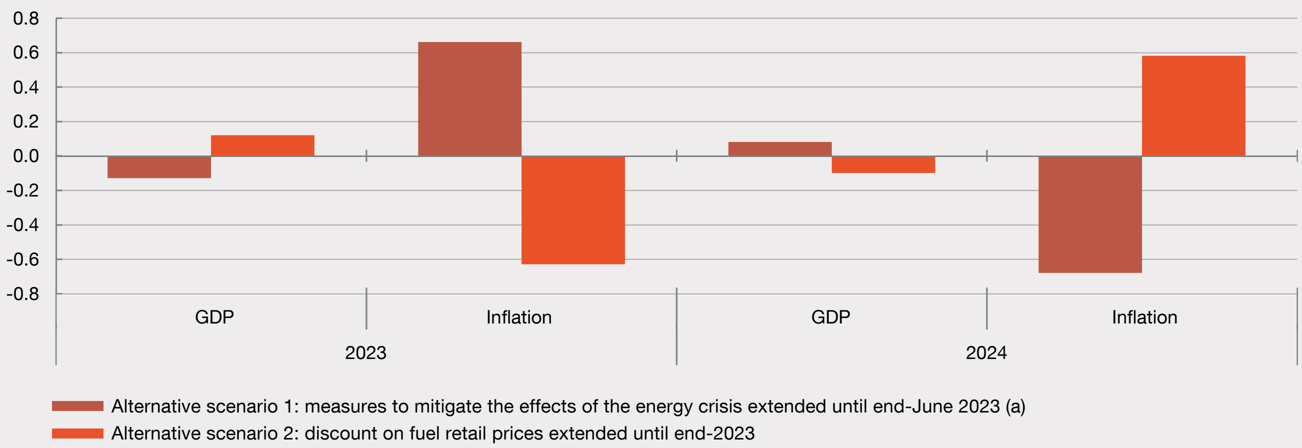
face significant macro-financial imbalances. In a situation as complex as the present one, it is also very difficult to pinpoint how severely the global process of monetary policy tightening – which has taken place with unusual speed and synchronicity over the last few quarters – could affect the main macroeconomic aggregates, the stability of the financial system overall, and the financial situation and spending capacity of households and firms – especially those with floating-rate debt, which are the majority in Spain.

At a more domestic level, the projections are also subject to additional risk factors. In particular, there is considerable uncertainty surrounding (i) possible future developments in the Spanish labour market, as employment, which tends to respond with a certain a lag to aggregate economic developments, may well continue to surprise on the upside or begin to show starker signs of weakness than envisaged in the baseline scenario, (ii) how the household saving rate will perform over the projection horizon – which depends, among many other factors, on developments in aggregate levels of uncertainty and household confidence –, and (iii) the pace at which the investment projects under the NGEU programme filter through to the economy, along with their capacity to boost the country's potential growth.

There is also a high level of uncertainty over the possible extension to 2023 of some of the public policy measures that were deployed in recent quarters (and remain in force in the final stretch of 2022) to compensate various groups for the increase in prices, particularly energy prices. This uncertainty relates both to the "extended measures", i.e. those for which the baseline scenario assumes an extension to 2023 will be approved (category (a) in the above classification) and to the measures presently in force which, it is assumed, will not be extended (category (d)).

Given this uncertainty, this projection exercise includes a sensitivity analysis for the possibility that the "extended measures" are indeed extended beyond 31 December 2022 but only to 30 June 2023 (alternative scenario 1), and that the current fuel price subsidies are extended to 31 December 2023 (alternative scenario 2) (see Chart 5). According to these simulations, if the support measures considered were extended only to 30 June 2023 rather than until the end of next year, average inflation in 2023 would be 0.7 pp higher than under the baseline scenario, while GDP growth would be 0.1 pp lower. Meanwhile, a hypothetical extension of the fuel price discount to end-2023 would reduce average inflation for that year by 0.6 pp as compared with the baseline scenario, but would increase it by the same amount in 2024. Conversely, it would increase GDP growth by 0.1 pp in 2023 and reduce it by 0.1 pp in 2024.

Chart 5
Differences vs the baseline scenario in 2023 and 2024 due to the fiscal policy measures. GDP growth and inflation



SOURCE: Banco de España.

a The measures considered are the reduced tax rates on electricity bills (VAT from 10% to 5% and the excise duty on electricity from 5.1% to 0.5%), the reduced rate of VAT on natural gas (from 21% to 5%), the suspension of the tax on electricity generation, the butane gas price freeze, the State-level reduction on the price of public transport season tickets and the 2% cap on changes in rent prices.

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

ANNEX
Assumptions underlying the projections

The technical assumptions include considerably lower wholesale gas and electricity prices and slightly higher oil prices than in the October projections. Projected interest rates are now somewhat lower than those expected in October and the euro exchange rate is slightly higher. The growth rate of export markets has been revised downwards in 2023 and, to a lesser extent, in 2024, as a result of the deterioration in the global economic outlook (see Table 2).

In the fiscal policy arena, there have been numerous legislative developments since the last projections. First, Royal Decree-Law 18/2022 of 18 October 2022 contains several measures that, overall, raise government expenditure for 2022 by 0.3 pp of GDP.[15] The new projections also incorporate the Draft State and Social Security Budget for 2023 (Draft Budget for 2023), with net increases in expenditure and receipts, which are more quantitatively significant on the spending side.[16] Leaving the Draft Budget for 2023 to one side, a recently approved parliamentary amendment resulted in the projected annual tax revenue from the temporary tax on energy utilities being re-estimated at around €1 billion in 2023 and 2024 (half the amount estimated in the October projections). Lastly, the latest projections take into account the new temporary wealth tax, which is currently before the Spanish parliament and seeks to raise €1.5 billion in 2023 and 2024. Given the temporary nature of the latter two taxes, their positive impact on tax revenues in the next two years disappears in 2025.

There is also a high level of uncertainty over the possible extension to 2023 of some of the public policy measures rolled out in recent quarters to compensate various groups for the increase in prices – particularly energy prices – and that remain in force in the final stretch of 2022.

In the absence of an official decision in this respect, and amid expectations for inflationary pressures to remain relatively high at least in 2023, the baseline scenario of this projection exercise assumes that certain measures entailing a budgetary cost that officially expire (on the information available at the cut-off date for this report) on 31 December 2022 will be extended to 31 December 2023. These measures include lower energy taxes, higher temporary spending on non-contributory pension benefits and the State subsidy for public transport season tickets.[17] Overall, this would have an estimated budgetary cost of approximately 0.5 pp of GDP. In any event, as detailed in the Risks section of the main text, this projection exercise includes, as a sensitivity analysis, the possibility of these measures indeed being extended beyond 31 December 2022, but only up to 30 June 2023 (see Chart 5).

In addition, given the low probability of them being extended under their current conditions, the baseline scenario does not include a hypothetical extension of the other spending measures, which include the fuel price subsidies currently in force, scheduled to expire on 31 December of this year. Similarly, the sensitivity analysis in the main text considers the possibility of these specific subsidies being extended to 31 December 2023.

All of the legislative changes considered would result in higher budget deficits in 2022, 2023 and 2024 than in the October projections. The largest revision would be in 2023, given the assumption about the extension of the measures in force in 2022.

However, the worsening of the general government balance stemming from the legislative changes is expected to be offset by the recent (more-favourable-than-projected) budget execution developments and by the assumption, introduced in the new projection exercise, that the positive gap between actual tax revenues and those based on their historical relationship with macroeconomic variables will correct more gradually than expected in October.

The fiscal projections are based on the usual technical assumptions, which include pensions being indexed to the CPI, interest payments moving in line with the market

15 These measures include an additional 1.5% rise in public sector wages in 2022, the assumption by the central government of the cost of the caps on the increase in the regulated rate for small natural gas consumers and of the greater flexibility in energy supply agreements, and the higher social rebate on heating.

16 Defence spending is expected to gradually increase over several years to a final amount of €2 billion in 2024 and then hold at that level thereafter. In addition, the projections include the extension until end-2023 of the discount on suburban rail transport managed by the central government (initially scheduled to expire on 31 December 2022) and the preliminary agreement reached in parliament for a 15% increase in 2023 in non-contributory pension benefits (the same as in 2022). On the revenue side, the changes included in the Draft Budget for 2023 have a relatively small net impact, as the measures raising tax receipts (such as the increase in the maximum social security contribution base and the temporary cap on corporate income tax relief for subsidiaries' losses) are offset by others that lower them (such as the personal income tax cuts for low incomes).

17 In other words, the measures with a budgetary cost in category (a) of the above-mentioned classification.

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2025): THE BANCO DE ESPAÑA'S CONTRIBUTION TO THE EUROSYSTEM'S DECEMBER 2022 JOINT FORECASTING EXERCISE (cont'd)

interest rate and government debt trajectories, and the "no-policy-change" growth in the discretionary items.

The latest available information on the pace of execution of the Recovery, Transformation and Resilience Plan (RTRP) does not differ significantly from the amounts envisaged in October. Accordingly, the estimated spending trajectory is very similar to that projected then. Specifically, general government spending charged to the programmes supported by the Plan will rise significantly in 2022 and continue growing, albeit to a lesser degree, in the following two years. After peaking in 2024, the annual outlay will start to fall in 2025.

Overall, once the impact of the European funds is taken into account, the fiscal policy stance, measured by the change in the structural balance, will be expansionary in the period 2022-2025.[18] The phasing-out of the public support measures implemented in response to the pandemic and the fall-out from the war in Ukraine, together with the discretionary increases in revenues, will tend to have a contractionary impact on the economy. However, this would be more than offset by the expansionary effect of the RTRP-related spending, pension benefits increasing in line with the CPI and an expected minor reversal in the upside surprises in tax revenues in the period 2020-2022.

Figure 2
Summary of the macroeconomic projections for the Spanish economy (2022-2025)

	2022	2023	2024	2025
GDP	4.6% ⬆ 0.1 pp	1.3% ⬇ 0.1 pp	2.7% ⬇ 0.2 pp	2.1%
Inflation	8.4% ⬇ 0.3 pp	4.9% ⬇ 0.7 pp	3.6% ⬆ 1.7 pp	1.8%

MAIN REASONS FOR THE REVISION
(with respect to the October projections)

- GDP growth in 2022 is revised upwards slightly due to stronger-than-expected growth in the second half of the year
- By contrast, the growth projected for 2023 is revised downwards slightly due to the deterioration in the external environment and despite the effect of opposite sign stemming from the extension to 2023 of some of the measures in force in 2022 to mitigate the impact of the energy crisis. The withdrawal of these measures in early 2024 has a small negative impact on activity, resulting in a slight downward revision to average output growth in that year
- Inflation is revised downwards in 2022, due to the recent downside surprises in the data, and in 2023, on account of the new assumption about the extension to 2023 of some of the measures, the withdrawal of which in 2024 results in an upward revision to inflation in that year

MAIN SOURCES OF UNCERTAINTY

- Geopolitical tensions and energy market developments
- Time frame of the measures adopted to contain the impact on inflation of rising energy costs
- The macroeconomic impact of the global process of monetary policy tightening
- The potential impact of uncertainty and confidence on agents' consumption and saving decisions
- How activity fares in Spain's main trading partners, which may entail significant disruptions in the short term
- The possibility, amid more persistent inflation, of second-round effects on inflation

SOURCE: Banco de España.

18 The RTRP funds do not affect the Spanish budget deficit, as they allow for a higher level of spending without the corresponding funds needing to be sourced from resident agents. As a result, they entail an expansionary impulse that does not result in a change in the structural balance.