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CONTENTS

QUARTERLY REPORT ON THE SPANISH ECONOMY

1 OVERVIEW

The Russian invasion of Ukraine amounts to a very severe economic shock, of highly uncertain duration and intensity. In the first few weeks of 2022, before the outbreak of the war, the global economic recovery from the pandemic was expected to continue, against a background of vaccination progress and supportive economic policy. In fact, fiscal policy and, in particular, monetary policy had been beginning to show the first signs of normalisation, after the surge in inflation rates resulting from the recovery in demand during 2021, the emergence of global supply chain bottlenecks and the rise in the prices of numerous commodities, including energy ones.

The war is having an adverse impact on economic activity and pushing up prices, through various channels. These worldwide impacts are hitting Europe harder than other regions, owing to Europe's greater links with the countries at war.

The most important channel runs through the commodity markets. Russia and, to a lesser extent, Ukraine account for a very large share of world production of oil and gas, and of certain metals and agricultural commodities. In particular, Russia supplies approximately a third of the gas consumed in the euro area and a fifth of the oil, these proportions being considerably lower in the case of Spain. The prices of many of these commodities, which had already increased as a result of heightened geopolitical tensions before the war, climbed considerably higher when the war started. Moreover, a hypothetical decrease or cut in the supply of Russian gas to Europe would probably hit economic activity in the continent very hard, given the difficulty of substituting these inputs in the short term.

The war is drastically reducing trade between Europe and Russia, but may also affect world trade if it leads to a slowdown in global growth. The West's coordinated sanctions against Russia place restrictions on the financial and non-energy trade flows with that economy. The direct impact of these restrictions, along with the indirect effects associated with the fall in economic activity in Russia owing to the war, have led to a sharp decline in Russia's foreign trade. From the standpoint of the European economies, these developments reduce the growth of their export markets, a decline that could be more pronounced if, as seems likely, the war also leads global economic growth to slow somewhat.

The war has also significantly reduced agents' confidence. The extraordinary uncertainty surrounding the current economic and geopolitical situation will tend to have an adverse impact on the spending decisions of households and firms. In the financial markets, the outbreak of war triggered a flight to safety, an increase in

Table 1
MAIN SPANISH MACROECONOMIC AGGREGATES (a)

	2021	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1
National Accounts									
Quarter-on-quarter rate of change, unless otherwise indicated									
Gross domestic product	5.1	-17.7	16.8	0.2	-0.5	1.1	2.6	2.2	0.9
Contribution of domestic demand (b)	4.7	-15.2	15.4	-0.1	-0.7	2.5	0.8	1.2	0.8
Contribution of net external demand (b)	0.5	-2.4	1.4	0.3	0.2	-1.4	1.8	1.0	0.1
Year-on-year rate of change									
Employment: hours worked	7.0	-25.3	-6.3	-6.1	-2.7	29.7	3.3	2.7	4.9
Price indicators									
Harmonised index of consumer prices	3.0	-0.6	-0.6	-0.8	0.5	2.3	3.4	5.8	7.9
Harmonised index of consumer prices excluding energy and food	0.6	0.9	0.1	-0.1	0.1	-0.2	0.7	1.6	2.5

SOURCES: INE and Banco de España.

a Information available to 31 March 2022. The shaded figures are Banco de España projections.
b Contribution to the quarter-on-quarter rate of change of GDP, in percentage points.

volatility and a deterioration in financing conditions. Although this initial market reaction has been partially reversed in recent weeks, in such an uncertain environment these developments may lead to a rise in the cost of credit.

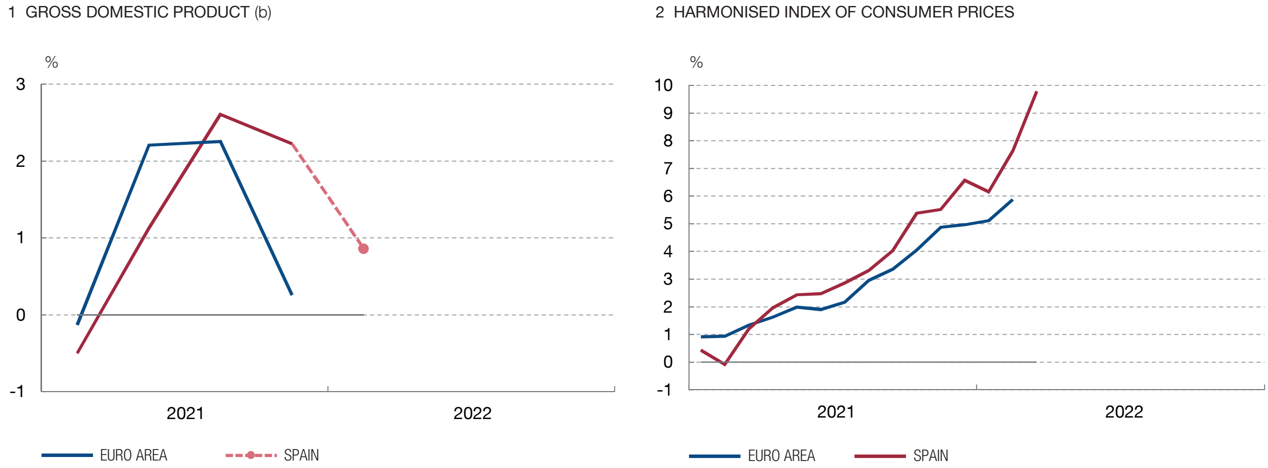
The precise magnitude of the effect of the war on activity and inflation is highly uncertain. The main source of uncertainty is the course of the armed conflict itself. Against this background, the ECB's March macroeconomic projections for the euro area – the cut-off date for which was a few days after the war broke out – involve a fall in GDP growth in 2022 (to 3.7%) and a sharp increase in the average headline and underlying inflation rates for this year (with upward revisions of 1.9 pp and 0.7 pp, respectively, to 5.1% and 2.6%). The ECB considered two additional scenarios in which GDP growth falls this year to 2.5% and 2.3%, respectively, while headline inflation rises to 5.9% and 7.1%. For its part, the OECD estimated in March that the war would have a negative impact of 1.4 pp on euro area GDP growth in 2022 and that it would raise the rate of inflation by 2 pp.

In Spain's case, the war is also having a significant impact on activity and prices. The Spanish economy is less directly exposed to some of the above-mentioned transmission channels than other European economies. Specifically, its dependence on Russia for the supply of gas is relatively low. It also has relatively little non-energy trade with Russia. Yet this has not prevented a worsening of the cost increases, especially in the case of energy inputs, to which our economy is particularly sensitive. Moreover, these increases, which seem to have started to be passed through, with some intensity, to the final prices of other goods and services

Chart 1

ACTIVITY HAS DETERIORATED AT THE END OF THE QUARTER AS A RESULT OF THE INVASION OF UKRAINE, AGAINST A BACKDROP OF SUSTAINED INFLATION GROWTH (a)

Activity continued to recover in the first half of the quarter, at a pace that was tempered by the surge in inflation and the continuation of pandemic-related restrictions. But the invasion of Ukraine changed these dynamics by giving rise to a highly significant increase in uncertainty and a notable rise in energy and non-energy commodity prices.



SOURCES: Eurostat, INE and Banco de España.

a Quarter-on-quarter rates of change based on the seasonally adjusted series in the case of GDP, and year-on-year rates of change in the case of the consumer price index.
a The Q1 data are Banco de España projections.

(thus reducing households' purchasing power), have also led to industrial stoppages in some sectors, such as transportation, compounding supply chain disruptions as a result.

The Banco de España's latest macroeconomic projections, presented in Box 1, envisage an average GDP growth rate of 4.5% this year. This downward revision of 0.9 pp from the December projections would actually be even more marked were it not for the 2021 H2 activity data (released since the publication of the December projections) being better than projected, which has raised the GDP growth rate for 2022 by 0.8 pp. The new projections foresee activity maintaining a high degree of momentum in the following two years, such that the Spanish economy will grow by 2.9% in 2023 and 2.5% in 2024. Under this scenario, it will return to its pre-pandemic level of activity in 2023 Q3.

Inflation will stand at 7.5% on average in 2022. Energy futures markets anticipate prices moderating somewhat from July this year. A crucial assumption underlying the projections is the small magnitude of the second-round effects, i.e. limited feedback effects between inflationary pressures and wages. Under this assumption, inflation will fall to 2% in 2023 and 1.6% in 2024.

Figure 1
RECENT GLOBAL ECONOMIC DEVELOPMENTS, OUTLOOK AND MAIN SOURCES OF UNCERTAINTY

	MAIN RECENT DEVELOPMENTS	SHORT-TERM OUTLOOK	SOURCES OF UNCERTAINTY
ACTIVITY	Global economic growth slowed in 2021 Q4, weighed down by new COVID-19 variants and persisting bottlenecks in global value chains	Set against buoyant activity in the first half of Q1, the outbreak of the armed conflict in Ukraine and the economic sanctions imposed on Russia will foreseeably have a severe impact on the growth outlook for the coming quarters	— Duration and intensity of the armed conflict in Ukraine, and the persistence of the possible geopolitical fallout — Energy prices and the possible indirect and second-round effects on inflation — Global production and supply chain bottlenecks — Global financing conditions and financial stability amid the normalisation of monetary policy around the world — The nature and magnitude of the fiscal response to contend with the war's adverse consequences — The pandemic
PRICES	Prior to Russia's invasion of Ukraine, inflation rates continued to rise worldwide, driven, above all, by persisting bottlenecks in global value chains and rising energy prices	The war in Ukraine has constituted a considerable shock to commodity prices. While these developments could contribute to the current inflationary spike lasting longer, it will remain temporary	
OTHER	In response to the current setting of high inflation, central banks in developed economies have continued to normalise their monetary policy stances	The course of the armed conflict and changes in investors' expectations about monetary policy in the main global economies will have a significant bearing on international financial market developments	

SOURCE: Banco de España.

Amid such volatility, the risks are predominantly tilted to the downside in the case of economic activity and to the upside in that of inflation. On this occasion, a particularly high degree of uncertainty surrounds the projections under the baseline scenario. In this regard, Box 1 presents, by way of illustration, several hypothetical exercises that highlight the considerable sensitivity of the projections envisaged under the baseline scenario to different assumptions relating to future developments in energy prices, trade with Russia, second-round price-wage effects and the path of household consumption and saving. As with the baseline scenario, the scale of the impacts estimated in these counterfactual exercises – which are not independent of each other, so that their impacts cannot simply be added together – should be interpreted with great caution given the enormous degree of uncertainty.

The economic policy response will also affect the scale of the war's economic impact. In recent weeks, many European governments have unveiled measures to alleviate the effects of higher energy prices on the most vulnerable consumers and the hardest-hit productive sectors. As public finances emerged from the pandemic significantly weakened, the design of these measures has had to strike a fine balance between their effectiveness and their budgetary cost. The set of measures adopted in Spain on 29 March will mobilise around €6 billion in the form of direct assistance and tax cuts, and a further €10 billion via an Official Credit Institute (ICO) guarantee facility. Future price and activity developments both in Europe and in Spain will partly depend on the ability of these measures (and of others that could be deployed in coming weeks) to attain their goals.

BOX 1

Russia's invasion of Ukraine has constituted a considerable shock to the Spanish economy's growth outlook, which is revised downwards for 2022 and 2023. Meanwhile, commodity market strains and the possible worsening of bottlenecks lead to a significant upward revision of the inflation rates forecast in the short term

BOX 2

The war in Ukraine will mainly impact the European economy through three channels: the commodities channel, the trade channel and the confidence channel

BOX 3

The greater slack in the euro area labour market (compared with the United States) and the lower inflation expectations limited pressures on wages in the euro area in 2021

BOX 4

Since late 2021, the cumulative increase in interest rates in the euro area is mainly explained by changes in monetary policy in the United States and the euro area

BOX 5

Net inflows of foreign immigrants in Spain have fallen significantly since the onset of the pandemic, resulting in a reduction in labour supply, particularly in those sectors with a greater share of foreign workers, such as hospitality, agriculture and construction

BOX 6

Collective bargaining developments in early 2022 show a moderate upturn in wage settlements and a greater prevalence of indexation clauses, although, above all they reflect agreements reached in 2021 when inflation was lower

Box 1

MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2024)

This box describes the key features of the most recent update to the Banco de España's macroeconomic projections for the Spanish economy. Compared with the previous projections, published on 17 December 2021,[1] the current projections incorporate the new information that has become available since then. This includes the revised Quarterly National Accounts (QNA) estimates up to 2021 Q3, new data available for 2021 Q4 (in particular, the QNA and the non-financial accounts of the institutional sectors for this period) and also the changes in the technical assumptions underlying the paths of the different variables (see Table A.1). Naturally, the Russian invasion of Ukraine means that these projections are surrounded by a particularly high degree of uncertainty. To illustrate some of these sources of uncertainty, this text includes a set of analyses of the sensitivity of the results of the baseline scenario to various changes in some of the key assumptions of the exercise.

In fact, apart from an enormous humanitarian crisis, the war has unleashed a very severe economic shock that has significantly impacted the growth outlook not only in Spain, but worldwide. Before the war, the world economy was on a path of gradual recovery, although its pace varied across geographical areas and sectors of activity. The Spanish economy's performance in the second half of 2021 was better than had been foreseen in December, although activity remained 3.8 pp below its pre-health crisis level.[2]

As regards 2022, the December projections envisaged that the Omicron variant would have a negative impact on GDP growth in Q1. However, according to the incomplete information available, the impact was milder than anticipated and also less pronounced than in previous waves of the pandemic: despite the elevated infection figures, high vaccination rates enabled the number of severe cases to be contained. These epidemiological developments have permitted a further gradual easing of containment measures, culminating with the introduction, at the end of March, of a new pandemic vigilance and control strategy, which dispenses with quarantine in asymptomatic and mild cases for most of the population.

The period prior to the start of the war was also characterised, in comparison with the December projections, by further surprises on the inflation front in addition to those already experienced in the second half of 2021. In early 2022, the ongoing acceleration of consumer price inflation (together with the persistence of the bottlenecks in the supply of certain inputs) was thus, increasingly, a constraint on the performance of the economy. In particular, the high global inflation was also reflected in expectations of a certain tightening of monetary policy and, in consequence, a moderate tightening of private sector financing conditions.

As a net result of these developments, the information available for the first half of the quarter pointed to a continuation of the recovery, albeit with some signs of a certain loss of momentum. Specifically, the behaviour of Social Security registrations in January was in line with the usual pattern for that month, but the rate of increase in February was somewhat lower than usual. At a longer time horizon, the economic recovery was expected to progress further during the following quarters, owing to improved epidemiological developments, the gradual disappearance of the supply chain disruptions, the persistence of relatively favourable financial conditions and the progressive deployment of Next Generation EU (NGEU) funds.

The Russian attack on Ukraine has profoundly changed this outlook. Spain's bilateral trade flows with the two countries at war are in fact modest, and the impact of the armed conflict on the Spanish economy through this direct channel will therefore be limited (see Chart 1). Specifically, in 2019 Spanish goods exports to Russia and Ukraine represented only 1.6% and 0.3%, respectively, of total Spanish goods exports, and the figures for imports were 1.1% and 0.5%.

However, this does not mean that these events will not have, foreseeably, significant economic implications. The impact will materialise through various channels, the most important of which is probably related to Russia's and Ukraine's sizeable share of global production and exports of energy, food and metal commodities. The proportion of these imports in Spain is relatively low,[3] but the war is affecting the cost of these goods on global markets regardless of their origin. Indeed, one of the factors

1 See Macroeconomic projections for the Spanish economy (2021-2024): the Banco de España's contribution to the Eurosystem's December 2021 joint forecasting exercise.

2 According to the latest QNA data published by the INE, GDP grew by 2.2% in 2021 Q4, exceeding the 1.6% growth projected by the Banco de España in December. Also, the INE has revised upwards quarter-on-quarter GDP growth in 2021 Q3, with respect to the October flash estimate, from 2% to 2.6%. The revisions to the data for the first half of 2021 were more modest.

3 In the specific case of energy goods imported from Russia, in 2019 it was 6%, considerably lower than in Germany (17%) and Italy (22%).

explaining the surge in prices observed on oil and gas markets between early 2021 and the outbreak of the war was precisely the growing geopolitical tensions in that part of Europe (see Chart 2). Amid high volatility, the armed conflict has accentuated the increase in the price of both these energy commodities, with significant repercussions for the cost of the household consumption basket and firms' production costs. In addition to their higher price, the war has also raised the question of whether the supply of these goods might potentially be disrupted. Besides the energy markets, the war is also affecting worldwide the cost, and even the supply, of some key food commodities (such as wheat) and of several metals (e.g. palladium, copper and nickel) that are essential to car and electronics manufacturing. As a result, the supply chain difficulties that already existed before the war could be compounded.

A second channel, which is also extremely important, runs through the uncertainty surrounding the duration and the course of the armed conflict and, therefore, its impact on private agents' income (see Chart 3). Amid uncertainty, households and firms tend to postpone their decisions to purchase consumer and investment goods, with the consequent negative impact on economic activity.

Third, as mentioned above, while Spain's direct trade relations with Russia and Ukraine are modest, other European countries, particularly eastern ones, are more exposed. In addition, the consequences of the conflict for the commodity markets and the heightened uncertainty will also be felt in other economies. Consequently, the war will have a significant impact on global activity (which will be particularly pronounced in Europe) and, through this channel, on the demand for Spanish exports and on GDP growth in Spain. For example, between December and March Consensus Forecasts survey respondents have revised downwards the projections for euro area GDP growth by 1 pp. A few weeks ago, the OECD also estimated that the war would subtract 1.4 pp from euro area GDP growth this year.

For the time being there is limited evidence available on the impacts that the war could already be having on the different economic aggregates in Spain through the above-mentioned channels. In March, the year-on-year rate of change of the harmonised index of consumer prices (HICP) recorded a further significant increase (of 2.2 pp to 9.8%) according to the early indicator.[4] The heightened inflationary pressures are in part a direct reflection of the war's impact, through the higher energy price channel. However, they are also the lagged result of the price acceleration in the preceding months and of other factors that bear an indirect relationship to the armed conflict, such as the shortage of some products caused by the haulage strike.

Chart 1
EXPOSURE OF FOREIGN TRADE IN GOODS TO RUSSIA AND UKRAINE
Percentage of foreign trade in 2019

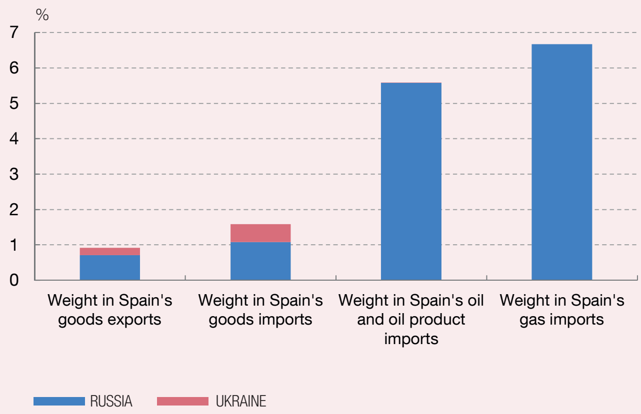
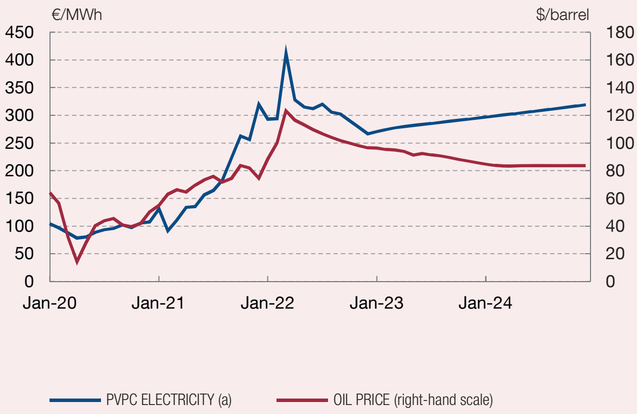


Chart 2
ENERGY PRICES



SOURCES: Aduanas, INE, Reuters and OMIP.

a Regulated rate for small consumers of electricity.

4 This is the highest rate since the HICP time series began in 1997. In terms of the CPI, an indicator for which longer time series are available, it is the highest value since May 1985.

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2024) (cont'd)

Turning to the impact on economic activity, the steep monthly decline in the consumer confidence indicator in March (the biggest in the time series, which dates from July 1986) suggests that higher uncertainty has started to affect household spending decisions. The fall in the similar indicator measuring retail trade confidence points in the same direction. Furthermore, respondents to the latest edition of the Banco de España Business Activity Survey (EBAE) expected their turnover to be slightly lower in 2022 Q1 than in 2021 Q4. They also anticipated a delayed easing of the bottlenecks affecting their production. Business owners submitted their survey responses between 23 February and 10 March; therefore, the deterioration in their expectations reflects the first effects of the war.[5] Lastly, social security registration data for March show that registrations have again lost some momentum, after already doing so in February.

Against this backdrop, the Q1 GDP growth estimate is subject to a high degree of uncertainty. In addition to the scant available evidence on the war's effects on economic output, there is the further difficulty of measuring the impact of some firms being forced to suspend activity owing to the lack of certain inputs used in their production processes due to the haulage strike. Moreover, there is not enough real-time information on the implementation of NGEU projects to accurately estimate their contribution to growth. The estimated quarter-on-quarter rate of change of GDP incorporated into these projections is 0.9%, versus 2.2% in 2021 Q4. For the reasons set out above, this figure is subject to a high degree of uncertainty.

In the coming quarters, Russia's act of aggression against Ukraine is expected to adversely affect economic activity through the continued high levels of commodity prices, the impact of the uncertainty associated with the unfolding of the war on the spending decisions of Spanish agents and the slower expansion of world markets, along with the persistence of supply chain disruptions.[6] These adverse effects will be partly offset by factors such as the

Chart 3
CHANGES IN CONFIDENCE IN SEVERAL CRISES ACCORDING TO "DENSI", SINCE THE DAY THEY STARTED (a)

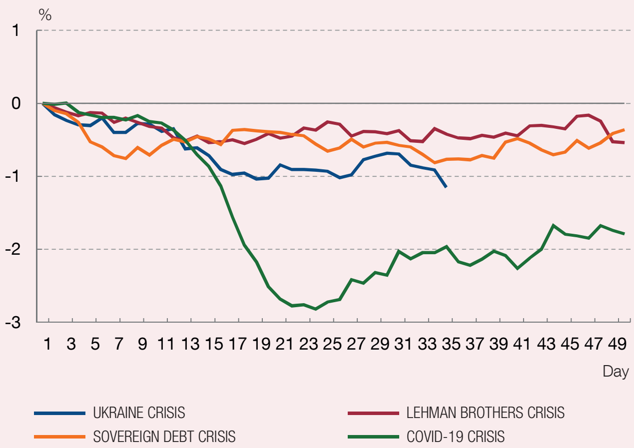
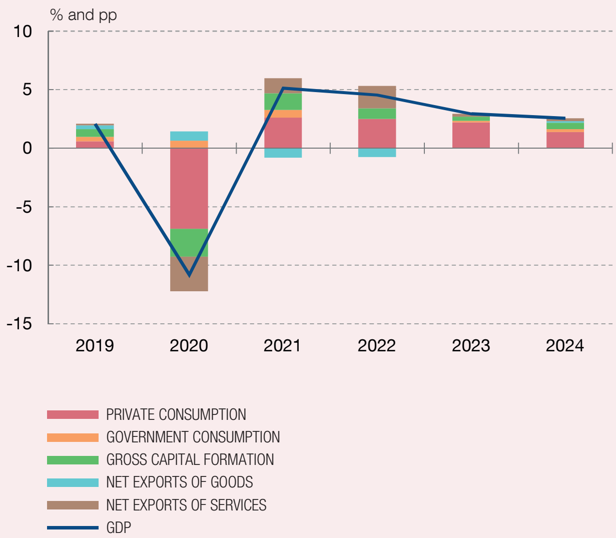


Chart 4
GDP GROWTH AND CONTRIBUTIONS OF MAIN COMPONENTS



SOURCES: Chart 3 is based on information from the main Spanish newspapers (ABC, El País, El Mundo, La Vanguardia, Cinco Días, Expansión, El Economista). Chart 4 uses information published by INE.

a The DENSI (Daily Economic News Sentiment Indicator) measures changes in economic sentiment in Spain on the basis of news published in the main Spanish economic newspapers (ABC, El País, El Mundo, La Vanguardia, Cinco Días, Expansión and El Economista). The chart shows the daily changes in this indicator in different crises from the first day onwards. This starting date is 29 September 2008 in the Lehman Brothers crisis, 9 May 2012 in the sovereign debt crisis, 29 February 2020 in the COVID-19 crisis and 21 February 2022 in the Ukraine crisis.

5 See M. Izquierdo (2022), "Encuesta a las empresas españolas sobre la evolución de su actividad: septiembre de 2022", Notas Económicas, *Boletín Económico,* 1/2022, Banco de España.

6 These assumptions take into account the adverse scenario of the March 2022 macroeconomic projections produced by ECB staff for the euro area.

support provided under the measures included in the National Plan to respond to the economic and social consequences of the war in Ukraine,[7] the execution of the projects financed under the NGEU programme, the maintenance of even more favourable financing conditions (albeit somewhat tighter than in preceding quarters) and the gradual improvement in the epidemiological situation.

The strongest macroeconomic impact of the war is expected in 2022 Q2 and, if there is no further escalation of the conflict, economic activity will gradually gain momentum in the second half of the year.[8] In annual average terms, GDP growth of around 4.5% is estimated in 2022 (see Chart 4 and Table 1). This increase is largely explained by the fact that the relatively fast pace of GDP growth in 2021 H2, from a purely accounting standpoint, boosts economic growth in 2022 in annual average terms. As an illustration of this effect, even if GDP did not post any quarter-on-quarter growth in 2022, the annual average rate would be 3.1%. In the two subsequent years, GDP would rise by 2.9% and 2.5%, respectively, in a setting of ongoing recovery following the health crisis. The projected path would delay a return to pre-pandemic levels of output until 2023 Q3 (see Chart 5). At end-2024, GDP would stand close to the level projected in December 2021, falling short by only 0.3 pp, under the assumption that the current crisis will not cause lasting damage to the productive system.[9]

Turning to consumer prices, the consequences of the war on Ukraine have, as already mentioned, exacerbated the strong inflationary pressures previously observed. Given the current oil and gas price trajectories in the futures markets, energy inflation is expected to peak in the second quarter of the year and to gradually slow thereafter. However, the persistence of the supply chain disruptions and the pass-through of past cost increases, which has recently intensified, will result in the food component and underlying inflation (and with them the headline indicator) rising somewhat more in the second and third quarters of the year. A crucial assumption underlying the projections is the moderate response of wage growth to inflation, which prevents the activation of feedback loops between wage increases and end prices and the resulting exacerbation of the inflationary process, with negative effects on external competitiveness and on economic activity and employment. As a result, headline inflation would accelerate to 7.5% in 2022 in annual average terms, but would then drop sharply to 2% and 1.6% in 2023 and 2024, respectively.

Table 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (a)

Annual rate of change

	GDP				Harmonised index of consumer prices (HICP)				HICP excluding energy and food				Unemployment rate (% of labour force) (b)			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
April 2022	5.1	4.5	2.9	2.5	3.0	7.5	2.0	1.6	0.6	2.8	1.8	1.7	14.8	13.5	13.2	12.8
December 2021	4.5	5.4	3.9	1.8	3.0	3.7	1.2	1.5	0.5	1.8	1.4	1.6	15.0	14.2	12.9	12.4

SOURCES: Banco de España and INE.
NOTE: Latest QNA figure published: 2021 Q4.

a Projections cut-off date: 31 March 2022.
b Annual average.

7 See Royal Decree-Law 6/2022 of 29 March 2022.

8 In particular, quarter-on-quarter GDP growth rates would move on an upward trajectory (0.1%, 0.4% and 0.7%, respectively, in the second, third and last quarters of 2022).

9 However, one of the likely consequences of the war is a degree of reversal of the increasing complexity of global value chains observed in recent decades, promoted by firms to reduce their costs. Should this reversal materialise, it could result in some efficiency losses and, consequently, in a reduction of the economy's potential output, which would tend to occur beyond the end of the projection horizon.

Box 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2024) (cont'd)

As mentioned, at the end of March, the Government approved a National Plan to respond to the economic and social consequences of the war in Ukraine. The Plan includes measures to counter the effects of rising inflationary pressures resulting from the war, specifically measures reducing the cost of different energy sources and setting limits on residential rental price increases.[10] According to the estimates made, these measures will lower average inflation in 2022 by between 0.5 pp and 0.8 pp.

In addition, the Spanish and Portuguese governments have sent a proposal to the European Commission that caps, within the Iberian electricity market, gas prices for gas-fired power plants at €30/MWh.[11] This measure could considerably lower wholesale electricity prices and, as a result, have a significant impact on the prices paid by consumers. However, given that how this measure will ultimately materialise is unknown, no impact whatsoever associated therewith has been incorporated into the projections.

Set against those published in December, the current projections revise GDP growth significantly downwards in 2022 and 2023, by 0.9 pp and 1 pp, respectively. These revisions are mainly driven by the negative consequences of the war. In particular, the higher commodity price levels (along with the stronger pass-through of price hikes in energy and other inputs to other goods), the weaker momentum of global activity (partly due to the production bottlenecks) and the rising uncertainty would drive down the GDP growth rate in 2022 by 0.7 pp, 0.5 pp and 0.6 pp, respectively, compared with the December projections (see Chart 6).[12] The sources of downward revision are partly offset by two positive factors, the most significant of which are the consequences of incorporating QNA information that was not yet available when the December projections were prepared. Specifically, the stronger-than-projected GDP growth in 2021 H2 results in an upward revision of 0.8 pp in the GDP growth rate for this

Chart 5
REAL GDP. LEVEL (2019 Q4 = 100)

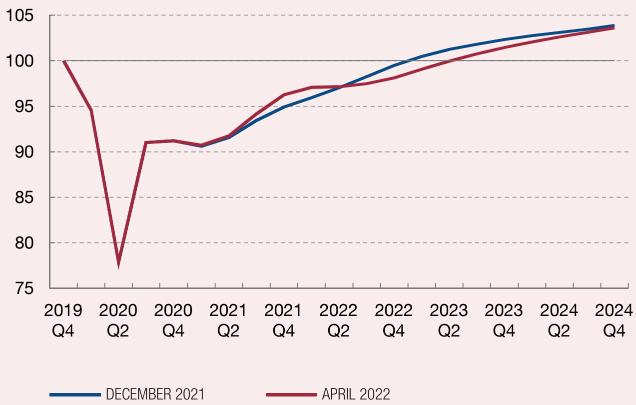
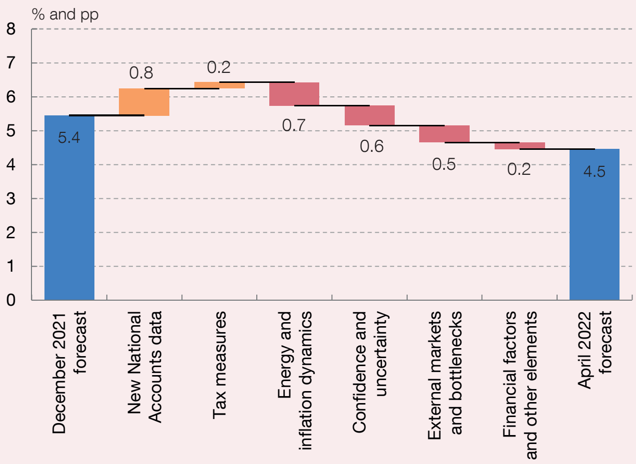


Chart 6
CHANGES IN THE 2022 GDP FORECAST



SOURCES: Banco de España and INE.

10 In greater detail, the approved measures with a direct impact on inflation include (i) an extraordinary and temporary discount of 20 euro cents per litre on the retail price of fuel (in force from 1 April to 30 June 2022), (ii) a 36% reduction in the electricity system charges affecting electricity bills, until 31 December 2022, (iii) the extension, until 30 June 2022, of the suspension of the tax levied on energy production and of the reduced VAT rates applied to electricity bills (up to 10%) and of the special tax on electricity (up to 0.5%), (iv) the extension, in the reviews of the natural gas regulated rate on 1 April 2022 and 1 July 2022, of the 15% cap on the increase in the cost of gas included in this rate and, (v) the extraordinary cap (2%), from 1 April 2022 to 30 June 2022, on the annual increase applied to residential rental contracts.

11 The proposal consists of a dual-auction system. The first auction would function as it has done up to now, such that the bids and prices offered in the interconnection with France would not be affected and the European market would not be distorted. The second auction would be conducted internally within the Iberian market. Here, the maximum price at which fossil fuel power plants could bid would be capped at a gas price of €30/MWh until December 2022.

12 In addition, compared with the December projections, the most recent developments relating to the first two factors would lead to a drop of 0.7 pp and 0.3 pp, respectively, in the average GDP growth rate in 2023.

year. Second, the measures approved at the end of March to soften the impact of the sharp rise in energy prices on the hardest-hit households and firms are expected to have a positive impact of 0.2 pp on average GDP growth in 2022.

Developments in the main macroeconomic aggregates

The war will entail adverse consequences for all components of aggregate demand. Within private domestic demand, private consumption will lose momentum in the near term due to increased uncertainty, renewed supply chain disruptions and, above all, loss of purchasing power as a result of rising inflation. The purchasing power of lower-income households, for whom energy accounts for a larger share of total spending, will suffer in particular. Further, these households tend to have comparatively lower saving rates, and a smaller proportion of them was able to build up extraordinary savings during the pandemic. This gives them less scope to cushion the effect of rising energy bills without reducing their consumption of other goods and services.

Over the course of the year, the gradual abatement of these constraints on household spending will allow private consumption to strengthen, driven by the sustained labour market recovery and by relatively accommodating financial conditions, albeit somewhat less favourable than anticipated some months ago. In annual average terms, consumption growth would stand at 4.5%, 3.9% and 2.4%, respectively, in 2022, 2023 and 2024 (see Table 2). In any event, there is considerable uncertainty as to the near-term dynamism of this aggregate, since anticipating saving rate developments in the current context of significant uncertainty and high inflation is no easy task. On the one hand, if households perceive that the upturn in prices will be relatively limited, they will tend to respond to the rising cost of their basket of goods and services by temporarily reducing saving rather than consumption (measured in real terms). However, on the other hand, the heightened uncertainty will tend to incentivise greater precautionary saving and discourage recourse to the extraordinary savings built up during the pandemic, having an adverse impact on consumption. The last section of this box assesses the macroeconomic effects of households adopting a less cautious attitude to spending decisions.

The growth in residential investment is likely to be curbed in the short term by rising costs and the reduced availability of certain construction materials, issues that the war has accentuated, and the relative shortage of labour for certain occupations (in turn somewhat related to sluggish migratory flows).[13] Over the projection horizon, the dynamism of this aggregate will be increasingly driven by the expected favourable labour market developments (strengthening households' future income expectations), relatively benign financing conditions and the deployment of NGEU funds, given that the Recovery, Transformation and Resilience Plan (RTRP) allocates a significant proportion of the grants received under the European Recovery and Resilience Facility to housing rehabilitation.

Investment by non-financial corporations will suffer in the near term due to increased uncertainty stemming from the war, higher production costs adversely affecting profit margins and the persistence of supply chain disruptions. The impact of rising energy prices may be particularly pronounced in the most energy-intensive sectors (such as metallurgy, steel, transport, chemicals and mining and quarrying). In any event, assuming that the energy cost increase will prove temporary, Banco de España estimates suggest that the proportion of firms struggling to cover those rising costs will grow modestly. However, that growth will be somewhat more marked precisely in the most electricity-intensive sectors and those reliant on certain other inputs whose prices have risen more sharply. Once the worst of the armed conflict is in the past, investment is expected to return to positive growth rates, in step with the gradual recovery in confidence, the lessening of inflationary pressures, the easing of bottlenecks, the increased plant capacity utilisation (already exceeding pre-health crisis levels in various manufacturing sectors), the stimulus provided by projects under the NGEU programme and the need, heightened by the pandemic, for further digitalisation.

As regards trade with the rest of the world, the growth in goods exports will tend to moderate in the coming months owing to slower growth in overseas markets and intensifying supply chain disruptions, which are translating into delayed order deliveries. Subsequently, the easing of the current difficulties will allow global trade to gain

13 High electricity costs have prompted sporadic production stoppages in the steel and cement industries, whose hypothetical persistence could lead to supply shortages in construction materials. For a discussion of the recent effects of the reduction in net migratory flows on the labour market, see Box 5 "Migratory flows in Spain during the COVID-19 crisis and their impact on labour supply" in this Quarterly Report.

momentum, which will be reflected in stronger growth in sales of goods to the rest of the world. Meanwhile, uncertainties linked to the war may also affect flows of tourist arrivals in the near term. However, the improving epidemiological situation should allow the recovery path observed in recent quarters to continue, providing for a return to pre-pandemic levels in early 2024. The pace of growth in imports of goods and services will suffer in the coming months, reflecting the adverse impact of the war on activity and supply chain disruptions. Subsequently, purchases by the rest of the world are expected to remain on a rising path, in step with growth in final demand.

The upward trajectory of hours worked and employment will extend across the projection horizon, albeit with less robust growth in 2022-2023 than projected in December. In line with the recovery in employment, the unemployment rate will continue to decline, reaching 12.8% in 2024.[14]

The war represents an additional source of pressure on public finances. The end-2021 budget balance was more favourable than anticipated in the December projections. The budget deficit as a proportion of GDP has been revised upwards over the projection horizon due to the deteriorating outlook for activity, the measures adopted in the short term to mitigate the impact of the war, and to certain spending items being updated to reflect a higher path of inflation (see Annex 1). Consequently, in the absence of corrective measures, the general government deficit will remain very elevated

Table 2
PROJECTIONS FOR THE MAIN MACROECONOMIC AGGREGATES OF THE SPANISH ECONOMY (a)

Annual rate of change in volume terms and % of GDP

		April 2022 projections			December 2021 projections		
	2021	2022	2023	2024	2022	2023	2024
GDP	5.1	4.5	2.9	2.5	5.4	3.9	1.8
Private consumption	4.6	4.5	3.9	2.4	5.1	5.2	2.2
Government consumption	3.1	-0.3	0.8	1.2	-0.2	0.7	1.5
Gross fixed capital formation	4.3	4.5	2.1	2.5	7.8	3.7	2.1
Exports of goods and services	14.7	12.0	3.8	3.7	9.1	4.6	3.1
Imports of goods and services	13.9	9.0	3.3	2.9	6.5	4.8	3.7
National demand (contribution to growth)	4.6	3.3	2.7	2.1	4.4	3.9	1.9
Net external demand (contribution to growth)	0.5	1.2	0.2	0.4	1.0	0.0	-0.1
Nominal GDP	7.4	9.1	4.8	4.3	8.1	5.6	3.6
GDP deflator	2.2	4.4	1.9	1.7	2.5	1.7	1.7
Harmonised index of consumer prices (HICP)	3.0	7.5	2.0	1.6	3.7	1.2	1.5
HICP excluding energy and food	0.6	2.8	1.8	1.7	1.8	1.4	1.6
Employment (hours)	7.0	1.9	2.0	1.6	3.8	2.8	1.3
Unemployment rate (% of labour force). Annual average	14.8	13.5	13.2	12.8	14.2	12.9	12.4
Net lending (+)/net borrowing (-) of the nation (% of GDP)	1.9	2.7	3.3	3.2	2.9	2.7	2.1
General government net lending (+)/net borrowing (-) (% of GDP)	-6.9	-5.0	-5.2	-4.7	-4.8	-4.0	-3.4
General government debt (% of GDP)	118.4	112.6	112.8	113.5	115.7	113.7	113.5

SOURCES: Banco de España and INE.
NOTE: Latest QNA figure published: 2021 Q4.

a Projections cut-off date: 31 March 2022.

14 The weaker employment growth now forecast as compared with the December projection exercise is consistent with the downward revision of the unemployment rate forecast for 2022. This owes to the projections having a more benign starting point following the publication of data for 2021 Q4, in turn explained by lacklustre labour force developments in that period.

in 2024 (4.7% of GDP), more than 1 pp higher than that forecast last December. Based on the paths projected for the general government budget balance and for nominal GDP, the government debt-to-GDP ratio will decline moderately to 113.5% of GDP in 2024 (6.5 pp below the all-time high reached in 2020 and 18 pp above the end-2019 level).

Prices and costs

The aggression against Ukraine has exacerbated the inflationary pressures that had built up over the course 2021. In February 2022, consumer prices increased year-on-year by 7.6%, up from -0.6% in December 2020, with recurrent surprises on the upside from the summer of 2021. There are three main reasons for this sharp pick-up in inflation. The first is the recovery in activity. The steep fall in demand in 2020 caused a significant slowdown in the prices of many products. The subsequent normalisation of these prices led to significant base effects from spring 2021 (see the red bars in Chart 7). Second, disruptions in global production chains, coupled with higher shipping costs worldwide and increased demand for certain goods (in particular electronics), have led to a rise in the prices of numerous commodities and inputs, which has partially fed through to final goods prices. A third key factor behind recent inflation developments has been the increase in energy prices, particularly electricity, which in turn is mainly explained by the surge in natural gas prices on European markets.

For the time being, firms appear to have only passed through a limited part of their cost increases to selling prices, as suggested by the latest round of the EBAE for 2022 Q1.[15] At the same time, wage growth remains moderate.

The protracted and increasingly rapid rise in energy and non-energy commodity prices would have seen a more persistent inflationary episode included in the projections even had the war not broken out. However, the war has led to an additional increase in commodity prices, against a background of heightened volatility, which has been reflected in a sharp pick-up in inflation, with HICP rising to 9.8% in March. According to the futures market, oil and gas prices will remain much higher in the first half of the year than they were three months ago.

Accordingly, these projections assume a somewhat more marked pass-through of intermediate cost increases to final prices. However, this pass-through remains moderate, in line with EBAE data. In the same vein, the projections maintain the assumption that the pass-through of the pick-up in inflation to wage growth is low. On data available to February, collective bargaining agreements reveal a slight acceleration in wage settlements for 2022, although they still mostly reflect the outcome of negotiations conducted in a lower inflation environment.[16] Specifically, the wage increase for 2022 negotiated in collective bargaining agreements up to February was 2.3%. Looking ahead, the assumption of a limited pass-through of the upturn in inflation to wage growth is based on three arguments: (i) medium-term inflation expectations remaining at around 2%; (ii) the multi-year nature of collective bargaining (meaning that inflation in a specific year is estimated to have the capacity to influence wage increases in only around one-third of agreements); and (iii) the limited presence of indexation clauses. However, the latter are becoming increasingly prevalent. This, coupled with the possibility that, in a context of high inflation rates, wage demands will incorporate expectations of higher inflation, raises the risk of price-wage feedback loops known as second-round effects. The persistence of the inflationary episode also increases the likelihood of firms passing through the cost of inputs to final prices to a greater extent than has been the case so far.

With these ingredients, inflation would remain very high until 2022 Q3 but would start to decline thereafter, when the factors that have fuelled the recent pick-up begin to correct. In particular, energy commodity prices on the futures markets follow a downward path, such that by early 2023 the gradual decline in oil and gas prices, according to these markets, would bring them to levels only slightly higher than at the beginning of 2022. Thus, the energy component will foreseeably slow from 46.2% in 2022 Q1 to 9.1% in 2023 Q1 (and fall to negative rates from the second half of the year). Over 2022, inflation is projected to average 7.5% (see Chart 8). In 2023, the annual rate would fall to around 2% and the contribution of the energy component to price increases would turn negative. From end-2023, HICP growth would be on a slightly upward trend, largely reflecting developments in non-energy components, and would

15 Specifically, although 81.6% of all respondent firms reported an increase in input costs, only 41.2% of them raised their selling prices. See M. Izquierdo (2022), "Encuesta a las empresas españolas sobre la evolución de su actividad: primer trimestre de 2022", Notas Económicas, *Boletín Económico* 1/2022, Banco de España.

16 See Box 6 "An initial analysis of the impact of inflation on collective bargaining in 2022" of this Report.

average 1.6% in 2024. Underlying inflation would peak a few months after the headline index. Specifically, this indicator would not start to decline until end-2022, once the upward pressures on firms' costs associated with energy prices and bottlenecks are corrected, rebounding, on average, to 2.8% over the year as a whole. Subsequently, the gradual reduction in the degree of cyclical slack would give rise to a sustained, albeit moderate, increase in the prices of services and non-energy industrial goods, with underlying inflation standing, on average, at 1.8% in 2023 and 1.7% in 2024.

Compared with the December projections, the upward revision of inflation projections for 2022 is substantial due mainly to their higher starting point as a result of recent surprises, particularly in the energy component. Specifically, this year the energy component is revised up 22.7 pp. However, current projections also include the expectation that non-energy industrial goods prices will be subject to stronger inflationary pressures in the coming months, owing to higher and more persistent cost increases. The inflation rate for 2023 is also revised up, albeit to a much lesser extent. Underlying inflation is revised in the same direction, but on a far lower scale.

Sources of uncertainty surrounding the baseline scenario

Overall, given that the foregoing scenario assumes that the persistence of the effects of the Ukraine crisis will be limited, the risks to the baseline scenario of the projections are tilted to the downside in the case of activity and to the upside in that of inflation. The reason for this lies primarily in the developments surrounding the aggression against Ukraine. Indeed, the complexities of the war's repercussions and the uncertainty surrounding how it will unfold make it difficult to prepare macroeconomic projections. One way of illustrating these difficulties is to conduct various sensitivity analyses, which make it possible to evaluate the implications of different risks materialising.

Specifically, four potential sources of risk are considered: three adverse supply-side risks (which would lower output growth but push up inflation) and one favourable risk, which would entail a positive demand-side shock (boosting activity, albeit with higher consumer price increases). The three adverse risks are (i) a more marked and lasting increase in commodity prices, (ii) a complete suspension of bilateral trade flows between Russia and the European Union (EU), and (iii) the hypothetical emergence of second-round effects of the hike in energy prices. The fourth risk is an increase in household demand, associated with a swifter reduction in the surplus saving built up during the pandemic.

The analytical tools available at the Banco de España have been used to assess the impact of these four risks (as deviations from the baseline scenario) on key variables

Chart 7
BASE EFFECTS AND MECHANICAL IMPLICATIONS ON THE INFLATION RATE

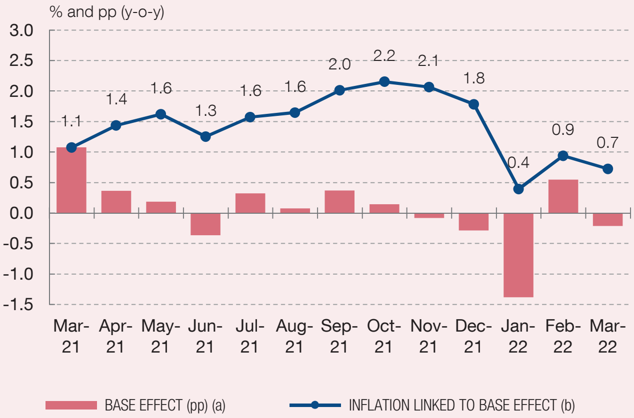
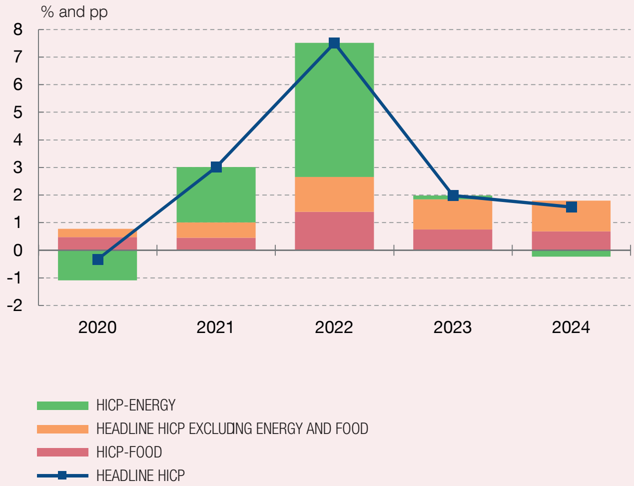


Chart 8
CONTRIBUTIONS TO HICP GROWTH BY COMPONENT



SOURCES: Banco de España and INE.

a Calculated as the deviation of the month-on-month rates in t-12 from the period averages (Jan 2012-Feb 2020), changing the sign.
b Mechanical inflation obtained by accumulating the base effects over the following months.

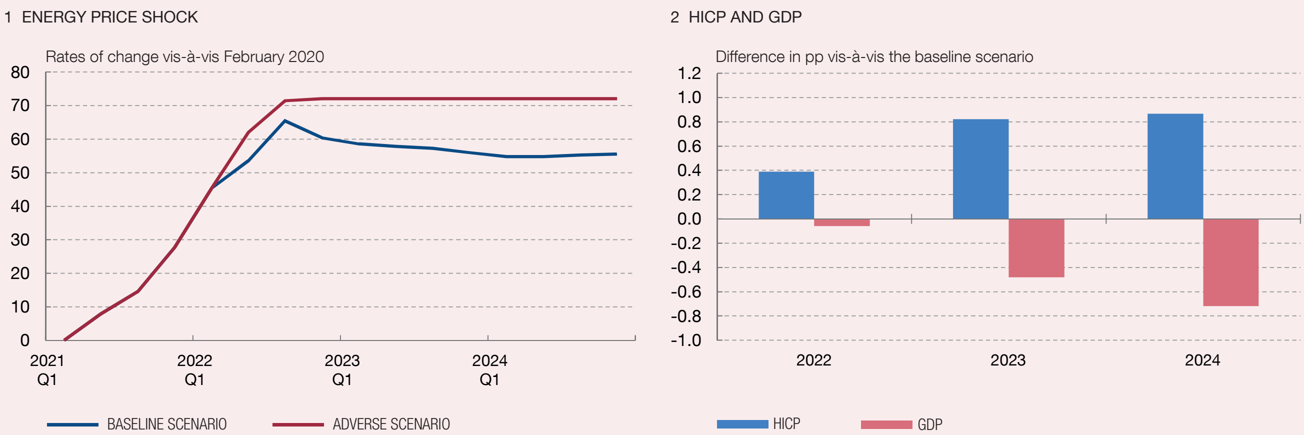
of the projections, such as GDP, inflation and employment. All the exercises have been conducted using the Quarterly Macroeconometric Model of the Banco de España (MTBE, by its Spanish abbreviation),[17] except for the exercise considering supplies from Russia being cut, for which a multi-country sectoral model is used.[18]

The first sensitivity exercise assumes that the increases in energy commodity prices become more significant and persistent. Specifically, in the short term, energy prices are assumed to stand at their highest level since the war broke out (observed in mid-March 2022) and to remain at that level throughout the entire projection horizon. Under this assumption, GDP would fall by 0.7 pp in cumulative terms to 2024, while inflation would be 0.4 pp higher in 2022 and 2023 (see Chart 9).

The second exercise envisages Russia-EU trade flows being suspended owing to a hypothetical escalation of the war. This would disrupt the supply of energy products and, as a result, require resorting to alternative suppliers in order to meet demand. EU countries have a limited capacity to replace such energy inputs from Russia. Doing so would be costly in the short term and have potentially severe effects on GDP and inflation, including in Spain, despite its lesser reliance on such imports. Specifically, depending on the degree to which the Russian energy imports could be replaced, suspending Russia-EU trade could lead to Spanish GDP being between 0.6 pp and 1.3 pp lower than in the absence of such a cut-off of supply, and consumer prices being between 1 pp and 1.5 pp higher (see Chart 10). In any event, such effects would be significantly smaller than in other European economies that are more reliant on Russian gas.[19]

The third exercise illustrates the extent to which the medium-term effects of higher energy prices on the Spanish economy depend on how much this increase passes through to other prices and wages. The projections presented in this box consider a partial and delayed response from wages to rising energy prices, while that of other prices (represented by underlying inflation) is expected to be very limited. The MTBE makes it possible to simulate the impact on activity and employment of a greater reaction in other domestic prices and private wages, in line with the direct effect of the energy price increase on the general price level. The cumulative adverse impact on activity and employment (in terms of difference from the current projections) could be

Chart 9
WHAT IF HIGH ENERGY PRICES PROVED MORE PERSISTENT?



SOURCES: INE and Banco de España.

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17 See A. Arencibia Pareja, S. Hurtado, M. de Luis López and E. Ortega (2017), "New Version of the Quarterly Model of Banco de España (MTBE)", *Occasional Paper* No 1709, Banco de Espana.

18 See D. Baqaee and E. Fahri (2022), "Networks, Barriers, and Trade", NBER *Working Paper* No 26108.

19 See J. Quintana (2022), "Consecuencias económicas del cierre comercial entre Rusia y la Unión Europea", *Artículos Analíticos*, Banco de España (forthcoming).

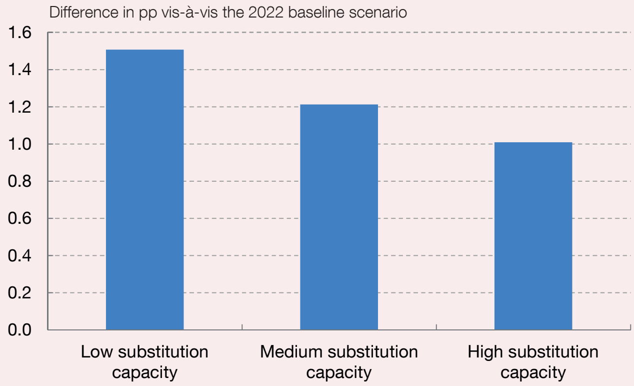
approximately 1.5 pp in 2024 (see Chart 11).[20] These adverse consequences are associated with the resulting loss of external competitiveness, reducing exports and private productive investment.

The fourth sensitivity exercise considers the possibility of households making greater use of the extraordinary savings built up during the pandemic, which at end-2021 were estimated at around €85 billion. Specifically, this alternative scenario assumes that two-thirds of these savings (double that considered under the baseline scenario) are used. The resulting increase in consumption would push up GDP and employment levels by 0.4 pp in 2022 and by a further 0.2 pp between 2023 and 2024 (see Chart 12).

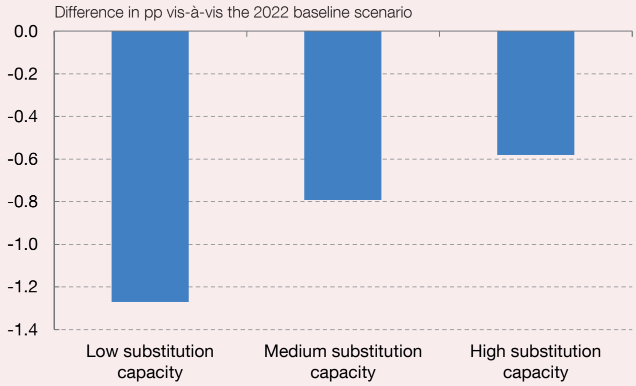
The risks considered are not mutually exclusive, such that two or more of them may materialise simultaneously (and with a severity that differs from that considered). In any

Chart 10
WHAT IF TRADE WITH RUSSIA WERE SUSPENDED?

1 HICP



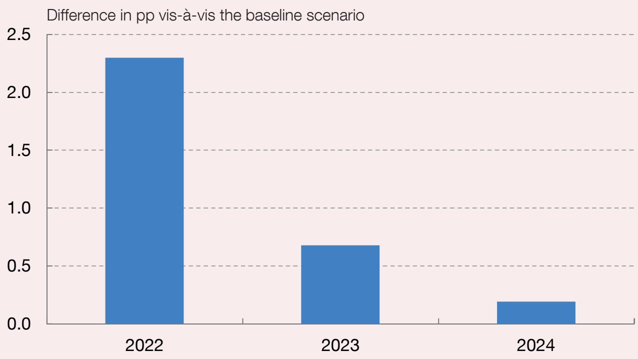
2 GDP



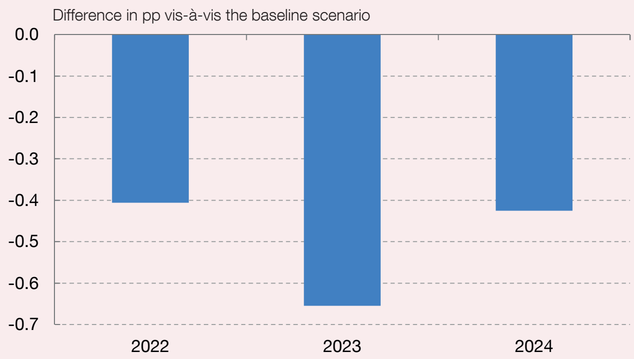
SOURCES: INE and Banco de España.

Chart 11
WHAT IF SIGNIFICANT SECOND-ROUND EFFECTS WERE TO ARISE?

1 HICP



2 GDP



SOURCES: INE and Banco de España.

20 Note that the wage response to avoid the erosion of purchasing power does not prevent a reduction in households' real disposable income, given that the fall in employment is extended and inflation increases further.

event, should this occur, the complexity of the interrelatedness between output, employment and inflation means that the overall impact of the shocks would not be the mere sum of their individual effects. Lastly, as indicated, the current setting is marked by the predominance of downside risks to activity and of upside risks to inflation. For this reason, the possibility that a worsening of the war's macroeconomic consequences may potentially result in temporary drops in activity cannot, in principle, be ruled out.

ANNEX 1
Assumptions underlying the projections

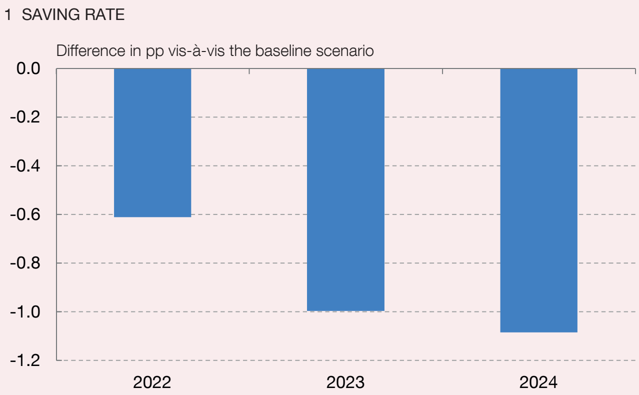
The construction of projections is based on certain assumptions about the trajectory of a set of variables relating to the Spanish economy's external markets for goods and services, prices in the financial and commodity markets and fiscal policy. The assumptions regarding export markets and competitors' prices in domestic currency have been taken from the ECB's March 2022 macroeconomic projections for the euro area. Given that the economic outlook has worsened since that exercise was completed, it was decided to take as reference the adverse scenario set out in such projections, which envisages, in particular, a significant downward revision to the euro area's projected 2022 GDP growth with respect to December (1.7 pp in 2022, as shown in Table A.1), in line with the global demand forecasts published by other organisations.

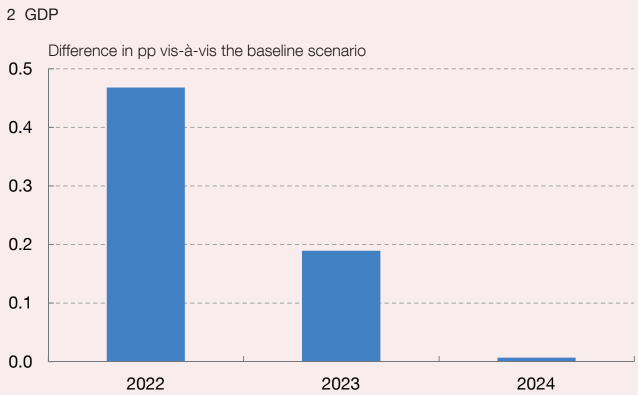
The assumptions regarding the paths of interest rates, exchange rates and oil and other commodity prices are based on the prices observed in the respective markets in the ten working days prior to the cut-off date for each projection exercise (in this case, 31 March). In the specific case of exchange rates, the spot market rate is used. For the other variables, futures market values for each point in time of the projection horizon are considered.

As far as oil prices are concerned, the surge seen in 2022 so far is expected to be partially reversed once the year has passed the halfway mark. In annual average terms, following a rise of 47.4% in 2022, to $104.8 per barrel, the price of crude is expected to fall thereafter to $91.4 per barrel in 2023 and to $83.6 per barrel in 2024. For electricity prices, the assumptions are based on wholesale futures market prices for the next twelve months, to March 2023. However, since there is scant information on those market prices beyond that horizon, a relatively neutral assumption has been used (as in September and December), based on month-on-month price increases equal to the average observed in the run up to the pandemic. As can be seen in Table A.1, the current assumptions entail a slight upward revision to the electricity price growth path.

Interest rate futures have been revised substantially upwards since the last projection exercise. The three-month EURIBOR is expected to rise progressively over the projection horizon, to 1.2% in 2024, 1.7 pp above the 2021 rate and 1.2 pp above December's projection for that period. The assumptions regarding 10-year sovereign bond yields have also tightened since the outbreak of war in Ukraine. On average, the 10-year sovereign bond yield is expected to stand at 1.4% in

Chart 12
WHAT IF HOUSEHOLD CONSUMPTION WERE MORE BUOYANT?





SOURCES: INE and Banco de España.

2022, 0.7 pp higher than anticipated in December, and is expected to rise to 1.7% in 2023 and to 1.9% in 2024. For its part, the exchange rate is expected to be somewhat lower than in the December projection. Specifically, the nominal effective exchange rate of the euro over the projection horizon is expected to fall 1.2% with respect to the average rate observed in 2021. Against the dollar, the depreciation of the euro exchange rate is somewhat higher (2.1%).

Changes in agents' confidence and rising uncertainty are captured by two indicators. The first of these, the DENSI (Daily Economic News Sentiment Indicator) developed by the Banco de España, seeks to measure changes in economic sentiment in Spain (see Chart 3 of this box), while the second, the EPU (Economic Policy Uncertainty) index, captures uncertainty over the direction of economic policy. In both cases, news published in the press is used as the base data. Looking ahead, the future course of such indicators is projected based on the developments observed during other crises, and both are therefore expected to improve gradually once the worst phase of the war is over.

The impact of the war on disruptions to productive processes is estimated using an analytical framework based on global input-output tables. This approach makes it possible to examine the consequences of shocks to global trade flows, such as those observed as a result of the war, for a very granular set of sectors, identifying both their direct and indirect impacts (i.e. cross-sector spillover effects), be they domestic or international. This is necessary since, in a context in which global economies are closely intertwined, any assessment of the impact on Spanish industries of the shock triggered by the war calls for specific reference to the way in which such shocks affect the activity dynamics in Spain's main trading partners, whose Russian imports account in some cases for a sizeable share of the total.

In the fiscal policy sphere, the main new features compared with December are the better than expected public finances

Table A.1
INTERNATIONAL ENVIRONMENT AND MONETARY AND FINANCIAL CONDITIONS (a)

Annual rates of change unless otherwise indicated

		April 2022 projections			Difference between the current projections and the December 2021 projections (b)		
	2021	2022	2023	2024	2022	2023	2024
Euro area GDP growth (c)	5.4	2.5	2.7	2.1	-1.7	-0.2	0.5
Regulated rate component of energy in €/MWh (level) (d)	180.5	309.7	283.9	307.7	8.4	-0.3	9.1
Oil price in $/barrel (level)	71.1	104.8	91.4	83.6	27.3	19.1	14.3
Monetary and financial conditions							
$/€ exchange rate (level)	1.18	1.11	1.10	1.10	-0.02	-0.03	-0.03
Nominal effective exchange rate against non-euro area (e) (2000 = 100)	120.7	115.3	115.0	115.0	-1.4	-1.7	-1.7
Short-term interest rates (3-month EURIBOR) (f)	-0.5	-0.2	0.9	1.2	0.2	1.1	1.2
Long-term interest rate (10-year government bond yield) (f)	0.3	1.4	1.7	1.9	0.7	0.9	0.8

SOURCES: Banco de España and ECB.

a Cut-off date for assumptions: 31 March 2022. The figures expressed as levels are annual averages. The figures expressed as rates are calculated based on the relevant annual averages.
b The differences are expressed as rates for euro area GDP, as levels for electricity and oil prices and the $/€ exchange rate, as percentages for the effective nominal exchange rate and as percentage points for interest rates.
c Obtained from the ECB staff macroeconomic projections for the euro area, March 2022.
d Regulated rate for small electricity consumers.
e A positive percentage change in the nominal effective exchange rate denotes an appreciation of the euro.
f 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 approximations thereto, and should not be interpreted as a Eurosystem prediction as to how these variables will trend.

position at end-2021 and the package of measures approved by the Government on 29 March to address the consequences of the war in Ukraine.[21] The more positive performance of public finances in 2021 was underpinned by the lower COVID-19 related expenditure and the more positive revenue outturn in the last few months of the year. Thus, the €7 billion envisaged in Royal Decree-Law 5/2021 of 12 March 2021 to finance direct assistance to firms in 2021 was ultimately not fully taken up.[22] Moreover, the strong tax revenue momentum (including social security contributions) drove up the revenue-to-GDP ratio, which stood 1.6 pp higher than in 2020 and 3.7 pp higher than in 2019. It is assumed that much of this exceptional increase will be reversed in 2022–2024.

The new package approved includes various measures to soften the impact of the higher energy costs on consumers and firms, help the sectors hardest hit by this increase and the most vulnerable households, and allocate the necessary resources for taking in refugees, with a total cost for general government, according to Government estimates, of €6 billion.[23] These are short-term measures, effective from April to June 2022, and so only affect the general government deficit forecast for the current year. But they could be

Figure 1
SUMMARY OF THE MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2022-2024)

	2022	2023	2024
GDP	4.5% ⬇ 0.9 pp	2.9% ⬇ 1.0 pp	2.5% ⬆ 0.7 pp
Inflation	7.5% ⬆ 3.8 pp	2.0% ⬆ 0.8 pp	1.6% = 0.0 pp

MAIN REASONS FOR THE REVISION
(compared with the December projections)

- Upward surprise in the economic growth data for 2021
- Adverse impact of the armed conflict in Ukraine through three main channels:
  — Commodities channel: surge in energy prices; higher and possibly more persistent inflation rates
  — Trade channel: sanctions against Russia; worsening of certain bottlenecks; deterioration in global growth outlook
  — Confidence channel: increase in uncertainty, which weighs on the consumption and investment decisions of households and firms

MAIN SOURCES OF UNCERTAINTY

— Duration and intensity of the armed conflict in Ukraine
— Developments in energy prices and global value chain bottlenecks
— Intensity of the indirect and second-round effects on inflation
— Household consumption developments and recourse to the stock of savings built up by households in recent years
— Developments in financial conditions in a context of monetary policy normalisation globally
— Implementation and macroeconomic impact of European funds
— Course of the pandemic

SOURCE: Banco de España.

21 See Royal Decree-Law 6/2022 (Spanish version only).
22 The €3 billion earmarked for debt restructuring also remained untouched, although these funds are available to firms until June 2023.
23 Plus €10 billion to guarantee loans granted to firms.

extended if the tension on the energy markets persists, and this would pose a risk to these projections.

The assumption regarding the expenditure financed out of the NGEU funds has been revised down slightly, as the take-up rate in 2021 was somewhat lower than initially expected. For 2022, this expenditure is projected to increase considerably, based on the Government's announcements and the information on calls for applications on the RTRP's website. A further increase is expected in 2023. This expenditure primarily affects public investment and aid granted for investment in other sectors, and also, albeit to a lesser extent, public consumption and social welfare benefits. The estimated positive impact on the 2022 GDP growth rate is 1.4 pp, slightly lower than that forecast in December.

Also, for the current year, the measures approved in the budgets of the various tiers of general government are included, such as the increases in public sector wages and pensions and other social welfare benefits. For the other years and all the other variables, the projections are based on the usual technical assumptions. Accordingly, the items subject to greater discretionality (such as procurement and transfers in kind) are expected to evolve in accordance with prices and with the potential growth of the Spanish economy. Public revenue is projected to grow in line with its tax bases, which mainly depend on the macroeconomic setting, although the forecast also includes, as indicated above, a correction in the exceptional increase in the revenue-to-GDP ratio in 2021. Pension expenditure in 2023 and 2024 is determined by demographic trends and by the indexation of pensions to the CPI,[24] while unemployment benefits essentially depend on unemployment numbers and interest payments reflect moves in government debt and interest rates.

In view of these assumptions and projections relating to the fiscal variables, and given the output gap estimated consistently with the other macroeconomic projections, the fiscal policy stance, measured by the change in the primary structural balance net of the European funds,[25] will be expansionary in 2022 and 2023 (increasing by 1.6 pp and 1.1 pp of GDP, respectively), and will then turn contractionary in 2024 (decreasing by 0.7 pp), as a consequence of the decline in NGEU-financed expenditure.

24 Specifically, under Law 21/2021 of 28 December 2021, pensions are updated every year in accordance with the average year-on-year rates of the 12 months to November of the previous year.

25 The NGEU funds to be received entail a lower structural deficit, but not a more contractionary fiscal policy stance, as they do not stem from taxes collected from resident agents. In consequence, to correctly measure the fiscal policy stance, the change in the primary structural balance must be corrected for this effect, by subtracting the change in the net balance of funds received from the European Union.

Box 2

POSSIBLE CHANNELS THROUGH WHICH THE WAR IN UKRAINE MAY IMPACT THE EURO AREA ECONOMY

Irma Alonso, Florens Odendahl, Paula Sánchez and Francesca Viani

Apart from unleashing a severe humanitarian crisis, the Russian invasion of Ukraine in late February has severely disrupted the economic recovery path in Europe. In particular, in the coming quarters the conflict may affect the future of the euro area economy through three main channels: the (energy and non-energy) commodities channel, the trade channel, and the confidence channel, associated with the heightened economic uncertainty that generally accompanies geopolitical instability.[1]

The commodities markets have borne the most immediate economic impact of the war, as both Russia and Ukraine (albeit to a lesser extent) are among the world's main producers and exporters of several of these inputs, some of which are essential for global supply chains. Specifically, the Russian extractive (natural gas and oil), refined oil products and basic metals industries are among the ten most systemic sectors worldwide (see Chart 1). Moreover, Russia is the euro area's main supplier of natural gas and oil: in 2019, 36% of all the natural gas consumed in the euro area came from Russia, and 22% of all the oil consumed (see Chart 2).

The Russian invasion of Ukraine has triggered sharp surges in prices and volatility on these commodities markets. Specifically between 23 February (the day before the start of the conflict) and 31 March (the cut-off date for this report), oil and natural gas prices on the European market rose by 11% and 42%, respectively (see Chart 3).[2] This has sharply reduced the international purchasing power of the euro area economies and could have a highly adverse impact on their economic momentum. Specifically, simulations made using the NiGEM[3] model show that a 10% increase in oil prices over one year would reduce euro area GDP by approximately 0.06% in the year in which the shock occurs. The impact on economic activity would still be considerable 12 months later, when euro area GDP would still be 0.04% below the level it would have reached had the shock not occurred (see Chart 4).[4] A shock of the same scale to gas prices would also affect euro area GDP, albeit to a lesser extent because oil accounts for a larger share of the euro area's energy mix than gas does. Economic activity in the euro area would also be significantly impacted if, in addition to these price effects, there were to be cuts in commodity supplies from Russia, i.e. not only price but also quantity effects.[5]

Aside from the impact of the conflict through the commodities markets, disruptions to trade flows of other goods and services are also likely. In particular, a sharp fall in Russia's external demand can be expected, as a consequence of the direct impact of the conflict on the Russian economy (for example, through heightened uncertainty and worsening financial conditions at the domestic level) and the broad range of sanctions imposed by many countries on Russia. Although it is still too soon to quantify the possible impact of these sanctions on bilateral trade, historical evidence suggests that broad-based sanctions can have a significant impact on trade.[6] Moreover, the complexity of global supply chains could amplify some of these effects, even though Russia's direct trade links with the euro area are quite limited.[7] In any event, the simulations made using the NiGEM model suggest that a drop of 10% in Russia's purchases

1 Such uncertainty also tends to trigger higher global risk aversion among investors. Indeed, over the last few weeks, financial market volatility has risen and financing conditions have tightened and this could also influence the economic outlook for the euro area.

2 This box focuses on energy commodities, in view of their importance, although prices of other non-energy commodities, such as nickel, aluminium and wheat, have also risen very sharply. The higher increase in the price of natural gas is due to the greater difficulty finding alternative suppliers, because of the low penetration of liquefied natural gas (LNG), compared with oil, which is much easier to substitute in the international markets.

3 The NiGEM model allows us to simulate the impact of various shocks on the main global economies taking into account the existing interdependencies between economies (see https://nimodel.niesr.ac.uk/).

4 These results are consistent with the evidence available in the literature. See, for example, L. J. Álvarez, S. Hurtado, I. Sánchez and C. Thomas (2011), "The impact of oil price changes on Spanish and euro area consumer price inflation", *Economic Modelling,* Vol. 28, pp. 422-431. Also, for a detailed analysis of the effects on prices, see Box 2, "An analysis of the global economic impact of the recent increase in energy commodity prices", "Quarterly report on the Spanish economy", *Economic Bulletin* 4/2021, Banco de España.

5 In this setting, the European Commission has formally announced its intention to reduce its energy dependence on Russia, under the REPowerEU plan (see https://ec.europa.eu/commission/presscorner/detail/es/ip_22_1511).

6 For example, between 2006 and 2012 the sanctions on Iran included a ban on access to central bank reserves, an oil embargo and disconnecting the country's banks from the Swift system. This led to an estimated drop of 55% in trade between Iran and the countries applying the sanctions, according to the methodology used by R. Campos, J. Timini and E. Vidal (2021), "Structural gravity and trade agreements: Does the measurement of domestic trade matter?", *Economics Letters,* Vol. 208.

7 Of all euro area exports to and imports from non-euro area countries in 2019, Russia accounted for 3% of goods exports and 5% of goods imports.

worldwide would reduce euro area GDP by around 0.1%, although this impact would be quite uneven across countries (see Chart 5).

The war in Ukraine could also influence the economic outlook for the euro area through a third channel: confidence. Against a backdrop of high uncertainty, households and firms find it more difficult to foresee future income developments. This can affect their consumption and investment decisions, and in consequence GDP growth. In this respect, a tentative analytical exercise, exploiting the historical relationship between uncertainty levels – proxied by uncertainty indicators on the future course of economic policy[8] – and economic activity,

Chart 1
TEN MOST SYSTEMIC SECTORS IN GLOBAL SUPPLY CHAINS (a)

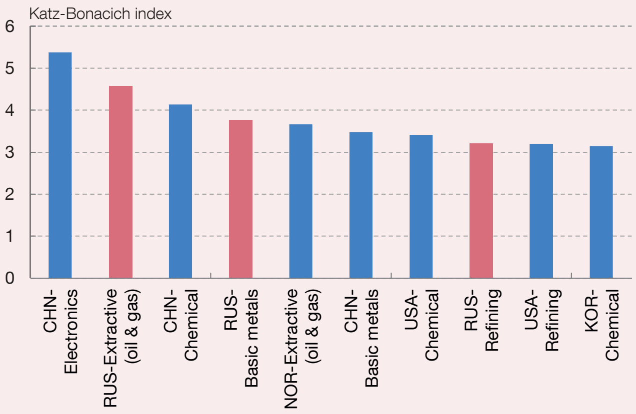


Chart 2
SOURCE OF NATURAL GAS AND OIL CONSUMED IN EURO AREA

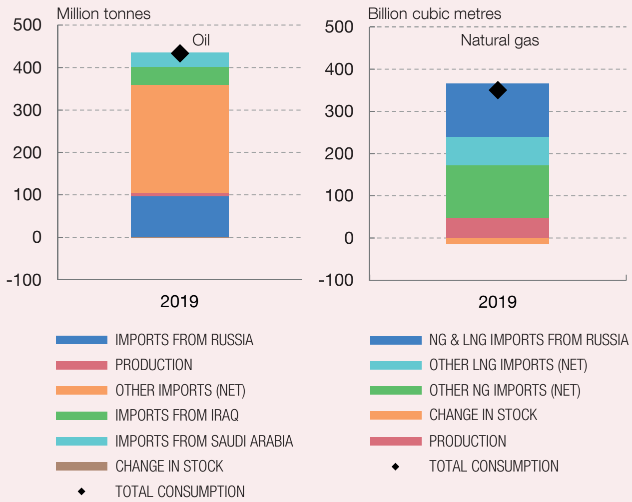


Chart 3
OIL AND NATURAL GAS PRICES IN EUROPE

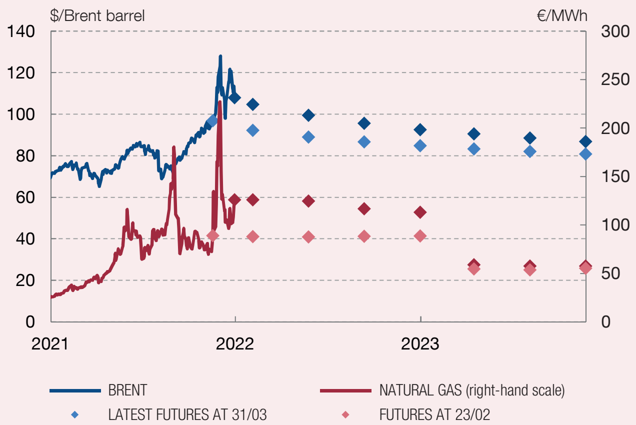
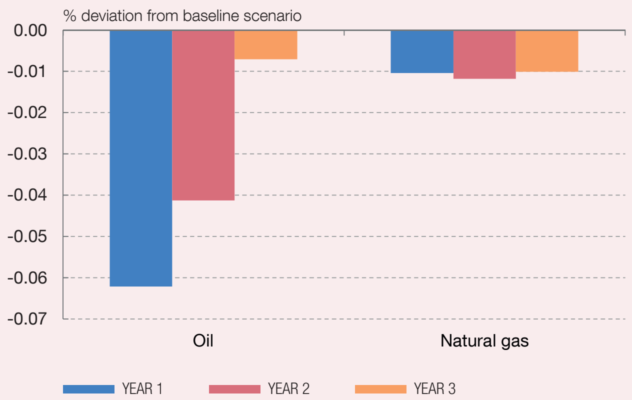


Chart 4
EURO AREA: ECONOMIC IMPACT ON GDP OF A 10% INCREASE IN EACH COMMODITY PRICE OVER ONE YEAR (b)



SOURCES: Eurostat, OECD (TiVA), Thomson Reuters and simulations using the NiGEM model.

a The Katz-Bonacich index is a network centrality measure which, in this case, measures the importance of an industry as a supplier in glogal supply chains. For more details, see, for example, F. Bloch, M. Jackson and P. Tebaldi (2016), Centrality Measures in Networks.
b Simulations using the NiGEM model under the assumption that monetary policy remains exogenous and that agents' expectations are rational.

8 See https://www.policyuncertainty.com/.

suggests that an increase in the uncertainty indicator equivalent to the 90th percentile of its historical distribution[9] would be associated with a fall of around 0.30% in euro area GDP (see Chart 6).

To conclude, this box describes the three main channels through which the war in Ukraine could affect economic growth in the euro area in the coming quarters and presents some preliminary estimates which suggest that the conflict could have a notably adverse impact on economic activity. Nevertheless, precisely quantifying these effects is subject to extraordinary uncertainty, first because the models used may possibly not fully capture the economic effects of the conflict, and second because we do not know how long and how intense the war will prove to be.

Chart 5
IMPACT ON GDP OF A 10% DROP IN RUSSIAN IMPORTS (a)

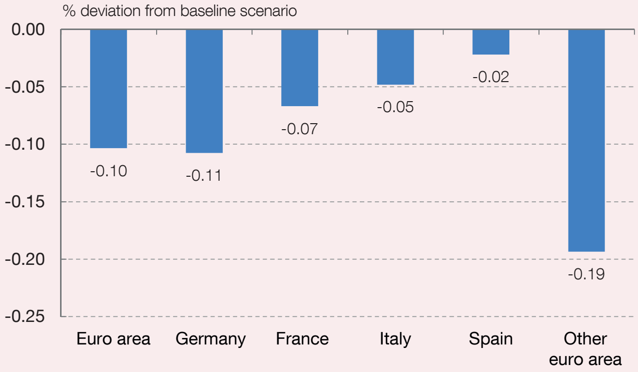


Chart 6
CUMULATIVE EFFECTS ON REAL GDP OF HYPOTHETICAL SCENARIOS OF INCREASED UNCERTAINTY IN THE EURO AREA (b)

SOURCES: Eurostat, OECD (TiVA), Thomson Reuters and simulations using the NiGEM model.

a Simulations using the NiGEM model on the assumption that agents' expectations are rational.
b A VAR model is estimated including the following variables: an uncertainty indicator, GDP growth, sovereign spreads, euro area inflation and a geopolitical risk index. Specifically, uncertainty is proxied by uncertainty indicators on the future course of economic policy (see https://www.policyuncertainty.com/).

9 This increase in uncertainty is equivalent to the increase in the indicator observed following the Brexit referendum in 2016 and half the increase associated with the collapse of Lehman Brothers in 2008.

Box 3

RECENT WAGE DEVELOPMENTS IN THE EURO AREA AND THE UNITED STATES: MAIN DETERMINANTS AND DIFFERENCES

Ángel Luis Gómez, Paula Nieto, Susana Párraga and Carmen Sánchez Carretero

This early-release box was published on 31 March

At the end of 2021, the degree of slack in the US labour market was lower than in the euro area. Thus, while the job vacancies-to-unemployment ratio reached an all-time high in the United States in the final stretch of the year, far outstripping pre-pandemic levels, in the euro area this ratio remained relatively close to the values observed in 2019 (see Chart 1). Also, the gap between the unemployment rate at end-2021 and its trend level was negative in the United States, but positive in the euro area.[1]

There are a number of reasons that may help explain the further tightening of the US labour market. First, the initial impact of the COVID-19 pandemic on economic activity in the United States was lower than in the euro area, and the subsequent recovery, swifter and stronger.[2] At end-2021, GDP in the United States exceeded its pre-pandemic level by 3.2%, whereas in the euro area it was only 0.2% above the level observed before the health crisis (see Chart 2). Second, the labour force participation rate in the United States declined more sharply at the onset of the pandemic and has since recovered at a slower pace than in the euro area. Thus, while the participation rate in the United States in 2021 Q4 was 0.7 percentage points (pp) lower than that recorded before the pandemic, in the euro area it was 0.7 pp higher.[3]

This box analyses the extent to which the varying degrees of slack in the labour markets of the United States and the euro area may have influenced wage dynamics in these two regions. In this respect, it should be noted that compensation per employee in the United States rose by 5.9% in 2021, well above the average (2.7%) for the period 2000-2019. Other indicators, such as the labour cost index, also posted growth rates in the United States above the usual average (see Chart 3).[4] In the euro area, compensation per employee grew by 4.3% in 2021, compared with an average of 2.1% in the period 2000-2019, while the labour cost index rose by 1.3%, below the average annual growth rate of the last two decades.[5]

Wage dynamics are analysed using a quarterly econometric model based on a Phillips curve specification relating wage increases to the degree of slack in the labour market, inflation expectations and labour productivity.[6] Drawing on this model, it is estimated that greater slack in the euro area labour market contributed significantly to restraining wage growth in 2021, unlike in the United States (see Chart 4). In addition, the results of the model suggest that productivity gains and higher inflation expectations also contributed appreciably to explaining the higher wage growth observed in the United States in 2021.[7]

Looking forward, estimated historical relationships can be used to quantify expected wage growth in the medium term based on projected developments in its determinants. In this connection, taking into account the latest projections of the European Central Bank,[8] a more

1 In the euro area, a broader unemployment rate, which includes workers in job retention schemes, is considered.

2 See M. Diakonova and A. del Río (2021), "Some determinants of the growth differential between the euro area and the United States since the onset of the pandemic", Box 2 of the "Quarterly report on the Spanish economy", *Economic Bulletin* 2/2021, Banco de España.

3 For further details about the factors behind these developments, see F. Borrallo, A. Buesa and S. Párraga (2021), Inflation in the United States: recent developments and outlook, Analytical Articles, *Economic Bulletin* 4/2021, Banco de España

4 The highly uneven impact of the COVID-19 crisis on employment, depending on the sector of activity and workers' wage level, gave rise to major composition effects which distorted developments in compensation per employee in 2020 and 2021. It would therefore be advisable to complement the analysis of wage dynamics with indicators such as the employment cost index in the case of the United States.

5 These indicators are, to a certain extent, affected by the distortions associated with the job retention schemes deployed in the euro area in response to the pandemic. In any event, wage settlements in the euro area notably rose by 1.5% in 2021, below the 2.1% observed in the average for the period 2000-2019 (see Chart 3).

6 For a detailed description of these models for the euro area, see C. Nickel, E. Bobeica, G. Koester, E. Lis and M. Porqueddu (2019). "Understanding low wage growth in the euro area and European countries", Occasional Paper Series, No 232, ECB. The estimation period is 2000-2019 for the euro area and 1978-2019 for the United States. The results of the estimation for the euro area are based on aggregate data that are in line with those obtained using panel techniques with individual member country data (see Box 2 of the above-mentioned paper).

7 The unexplained component of growth in compensation per employee was large in 2020-2021 in both regions owing to the strong volatility of this variable during the pandemic, which was mainly associated with statistical distortions in the euro area and important composition effects in the United States.

8 See (2022) ECB staff macroeconomic projections for the euro area.

Box 3

RECENT WAGE DEVELOPMENTS IN THE EURO AREA AND THE UNITED STATES: MAIN DETERMINANTS AND DIFFERENCES (cont'd)

Chart 1
LABOUR MARKET SLACK (a)

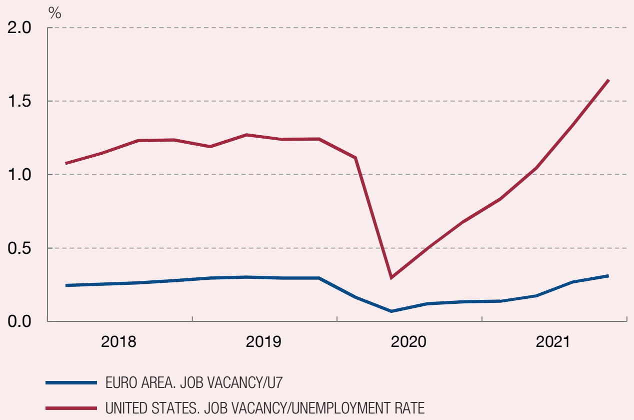


Chart 2
GDP AND PARTICIPATION RATE
Change 2021 Q4 - 2019 Q4 (b)

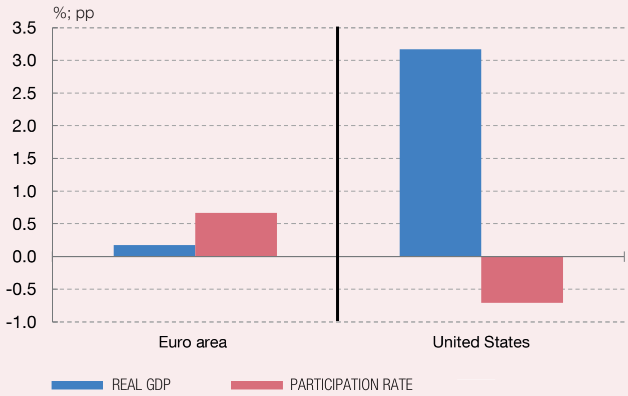


Chart 3
WAGES AND INFLATION
Annual growth rate

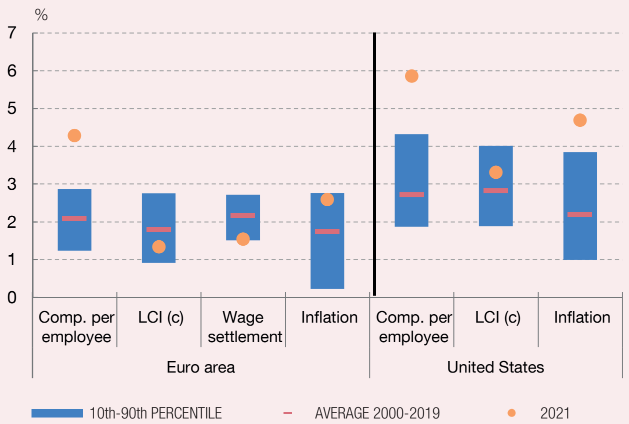
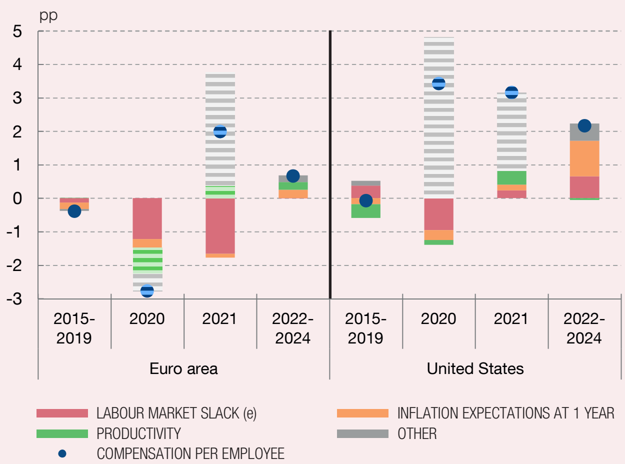


Chart 4
WAGE EQUATION (d)
Annual growth rate and contributions
(Deviations from the period average)



SOURCES: Own calculations based on ECB, Eurostat, Bureau of Labor Statistics, Congressional Budget Office, Survey of Consumers University of Michigan, OECD and national social security statistics.

a U7 is the unemployment rate resulting from summing up the number of workers in job retention schemes and the number of unemployed workers, as a percentage of the labour force. A ratio of job vacancy to U7 with value over 1 (less than 1) denotes a tight (slack) labour market.
b Euro area participation rate data refer to 2021 Q3.
c LCI refers to the employment cost per hour index. The euro area LCI is affected by statistical distortions (as is compensation per employee), but in the United States it is not affected by the distortions owing to the so-called composition effect. A comparable series with wage settlements is not available for the United States.
d An equation relating wage increases (compensation per employee) to lags thereto, the slack in the labour market, inflation expectations and labour productivity is estimated. The striped areas relate to distorted variables in the reference periods.
e Labour slack is approximated as the unemployment rate minus the structural component of the unemployment rate, both expressed as a percentage of the labour force. In the case of the euro area, U7 is used.

moderate wage growth in the euro area than in United States is estimated for the period 2022-2024, mainly owing to a less tight labour market and a lower inflation expectations forecast for Europe (see Chart 4). Nonetheless, in the present setting of high uncertainty, these estimates are particularly tentative.

In short, the evidence presented in this box suggests that the greater slack in the euro area labour market and the lower inflation expectations in this region contributed significantly to greater wage restraint in the euro area vis-à-vis the United States in 2021, a trend that might continue over the coming years.

Box 4

DRIVERS OF RECENT DEVELOPMENTS IN EURO AREA LONG-TERM INTEREST RATES

Alberto Fuertes and Jaime Martínez-Martín

This early-release box was published on 28 March

Since late 2021, both euro area and US long-term interest rates have increased sharply (see Chart 1). In the euro area, the 10-year OIS rate[1] rose by 95.5 basis points (bp) between 15 December, the day before the ECB's December monetary policy meeting, and 24 March. This increase is similar to that observed over the same period in the 10-year US Treasury yield (87.9 bp). Moreover, these changes occurred in a setting in which the euro area is in a comparatively less advanced cyclical position than the US economy and is experiencing more moderate inflationary pressures.

This box analyses the drivers of the recent developments in euro area long-term interest rates, distinguishing between internal and external drivers. The external drivers are primarily related to the US economy, which can influence European interest rates through various channels. For example, changes in US risk-free asset yields can affect their euro area equivalents through arbitrage mechanisms. In this respect, in recent decades there has been a high correlation between long-term risk-free yields on both sides of the Atlantic.

Analysis of the drivers of developments in long-term interest rates is generally based on daily comovements in the prices of different financial assets that contain a wealth of information as these prices react in real time to a multitude of macro-financial and geopolitical changes. Specifically, in this box a structural vector autoregression (SVAR) model is used for two economies – the euro area and the United States – to identify five shocks that underlie the developments in euro area long-term interest rates. In particular, a distinction is drawn between macroeconomic and monetary policy shocks – distinguishing between those originating in the euro area and in the United States, in both cases – and global risk shocks.[2]

Chart 2 shows the contribution of these five types of shocks to the cumulative change in euro area 10-year interest rates from 15 December 2021 to 24 March 2022. During this period, two distinct phases can be identified. In the first phase, before Russia's invasion of Ukraine, both macroeconomic and monetary policy developments in the euro area appear to have contributed to the rise in the 10-year OIS rate, with these factors accounting for more than half of the increase during this phase. These results are consistent with the better macroeconomic outlook for the euro area during this sub-period, as the impact of the Omicron variant of COVID-19 on activity was proving more moderate than initially expected. Moreover, the estimated influence of the ECB's monetary policy on the long-term OIS rate seems to be in line with the upward revision of analysts' expectations for euro area policy interest rates made during this period. In any event, beyond these internal factors, somewhat less than half of the increase in the 10-year OIS rate in the euro area during this first phase would owe to external factors linked particularly to changes in the macroeconomic conditions and monetary policy stance of the United States.

In the second sub-period, which began after the Russian invasion of Ukraine on 24 February, the 10-year OIS rate tumbled initially but regained its upward trend shortly afterwards. At first this phase was driven both by the increase in global risk and the deterioration in the euro area macroeconomic outlook. These factors were both conducive to an initial decline in euro area long-term risk-free yields, although they subsequently reversed, making their cumulative contribution during this second sub-period practically zero. Nevertheless, the US macroeconomic outlook continued to improve, contributing substantially to the increase in the OIS rate. The monetary policy expectations of the ECB and the Federal Reserve

1 In the euro area, the Overnight Index Swap (OIS) rate is the fixed leg of an interest rate swap contract where the floating leg is the 1-day €STR interest rate. Accordingly, the OIS rate reflects the expected path of the €STR throughout the duration of the contract (although it is not a perfect indicator of this path as it also includes term premia). The OIS rate is considered the benchmark rate for euro area risk-free interest rates.

2 The SVAR model is estimated in log differences, using daily data on the following five variables for the period between August 2005 and March 2022: euro area 10-year OIS interest rates, their spread over US 10-year Treasury yields, the bilateral nominal exchange rate between the euro and the dollar, and the EURO STOXX and S&P500 stock market indices. To identify the five types of shocks considered in the analysis, sign restrictions on the impact of these shocks on the above-mentioned variables are used. Specifically, it is assumed that a positive shock on the domestic macroeconomic outlook will simultaneously drive up long-term rates and the stock market index in its region of origin and appreciate its exchange rate. A contractionary domestic monetary policy shock is associated with the same effects on long-term rates and the exchange rate, but with a decline in the domestic stock market index. Lastly, an increase in global risk is associated with a fall in long-term interest rates and stock markets in both jurisdictions, and with appreciation of the dollar (insofar as it traditionally acts as a global safe-haven currency) against the euro. For more details on a similar version of this model, see L. Brandt, A. Saint-Guilhem, M. Schröder and I. Van Robays (2021), "What drives euro area financial market developments? The role of US spillovers and global risk", *Working Papers,* No 2560, European Central Bank.

also appear to have pushed in the same direction, albeit to a lesser extent than during the first phase. In any event, the high asset price volatility in international financial markets in recent weeks has made it more difficult to accurately identify the nature of the shocks. These results should therefore be interpreted with due caution.

In short, the results of this box suggest that, since the start of the Russian invasion of Ukraine, the US macroeconomic outlook and the monetary policy expectations of the ECB and, to a lesser extent, of the Federal Reserve, have been the main drivers of the increase observed in euro area long-term interest rates. Considering a longer time frame (from late 2021), a substantial part of the cumulative increase in the euro area 10-year OIS rate appears to be explained by the changes in macroeconomic conditions and monetary policy in the United States. These appear to have led to a greater tightening of financial conditions in the euro area during this period than would have arisen from domestic euro area macroeconomic and monetary policy developments alone.

Chart 1
EURO AREA AND US 10-YEAR INTEREST RATES

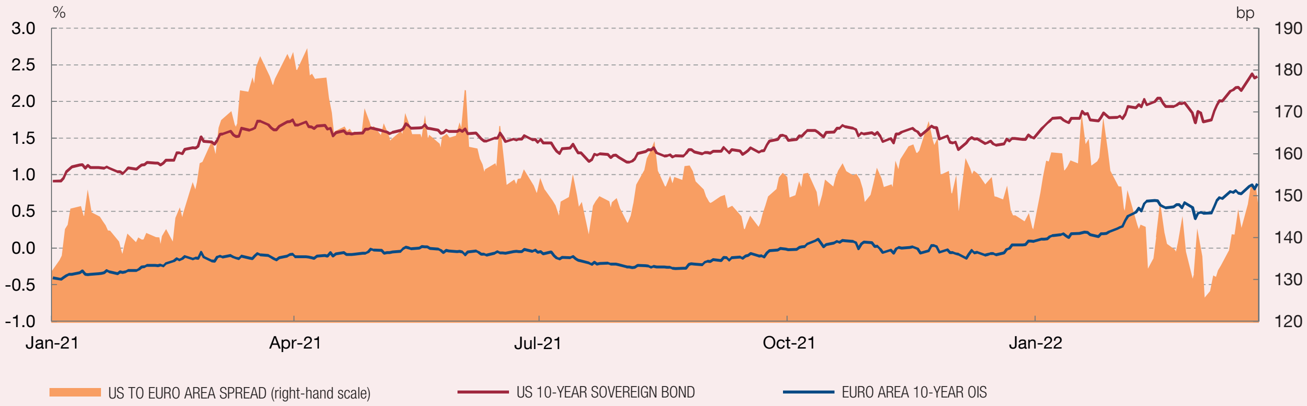
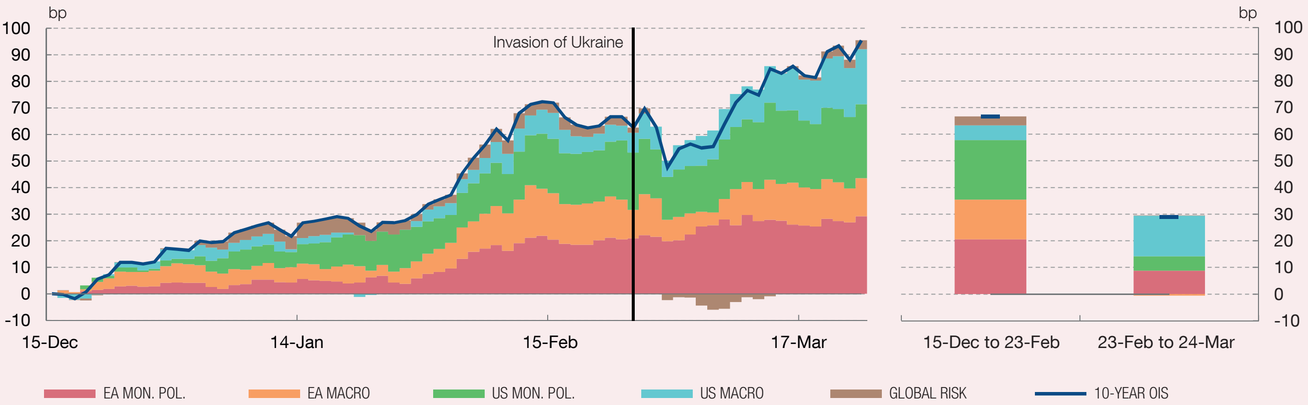


Chart 2
BREAKDOWN OF THE DRIVERS OF DEVELOPMENTS IN THE EURO AREA 10-YEAR OIS RATE. CUMULATIVE CHANGE SINCE 15 DECEMBER 2021 (a)



SOURCES: Refinitiv Datastream, ECB Survey of Monetary Analysts and Banco de España. Data updated as at 24 March 2022.

a SVAR two-country model including the euro area 10-year OIS rate, euro area and US equity prices, the bilateral nominal $/€ exchange rate and the spread between the euro area 10-year OIS rate and US Treasury yields. Identification using sign restrictions on the impact, based on Brandt et al. (2021), estimated on daily data from 2005 to 2022.

Box 5

MIGRATORY FLOWS IN SPAIN DURING THE COVID-19 CRISIS AND THEIR IMPACT ON LABOUR SUPPLY

Pilar Cuadrado and José Manuel Montero

This early-release box was published on 22 March

The COVID-19 crisis has had an unprecedented impact on migratory flows worldwide. The restrictions on international travel associated with combating the pandemic, fear of the virus itself and a context of high uncertainty have prompted a very significant decline in migratory movements. For instance, permanent migrations[1] to Organisation for Economic Co-operation and Development (OECD) countries fell by more than 30% in 2020, standing at their lowest level since 2003.

In the case of the Spanish economy, in 2020 the migration balance of foreign nationals declined by 48%, with net inflows falling to 232,000 individuals from 446,000 in 2019 (see Chart 1).[2] This reduction was mostly driven by the marked decrease in immigrant inflows (37.7%), down from 666,000 in 2019 to 415,000 in 2020. Meanwhile, outflows of foreign nationals declined by close to 17%, from 220,000 in 2019 to 183,000 in 2020.

On the latest information available, outflows rebounded sharply in 2021 H1 compared with 2020 H1 (83%), while inflows remained in decline (-22.6%). Thus, the migration balance in 2021 H1 was virtually zero, barely amounting to some 8,400 people.

In addition to the very significant adjustment in net immigrant inflows in Spain since the onset of the pandemic, there has also been something of a compositional change in terms of the geographical origin of the immigrants. In particular, in recent half-year periods, inflows of foreign nationals from Europe have gained considerably in prominence, rising from 27% of the total in 2019 to 31% in 2020 and 42% in 2021 H1. Also noteworthy is the performance of inflows from Central and South America, which accounted for 47% of the total in 2019 and 44.5% in 2020, but declined to 26% in 2021 H1 (see Chart 2).

The migratory dynamics described here can affect the economy's aggregate performance through multiple channels. One of the most significant is the impact of migratory flows on labour supply. In this respect, the labour force in Spain shrank by 1.3% in 2020, but grew by 2.1% in 2021 to stand slightly above pre-pandemic levels. However, this performance masks highly uneven developments between domestic and foreign labour supply. Thus, in 2021 H2 the domestic labour supply had recovered to a level consistent with its pre-crisis trend, whereas the foreign labour force remained well below that trend (see Chart 3).

This impact of migration flows on labour supply could have a very uneven effect across the various sectors of activity in the Spanish economy. For instance, since in Spain the share of foreign workers is higher in accommodation and food service activities, agriculture and construction (see Chart 4), these could be the sectors experiencing, to a greater extent, a certain shortfall in the availability of workers as a result of the decline in migratory flows. Indeed, this might be inferred from the information from the Banco de España Business Activity Survey (EBAE),[3] which points to a positive relationship between the labour shortages reported by employers at end-2021 and the share of foreign workers in each sector before the pandemic (see Chart 5). In fact, it is precisely in the accommodation and food service activities, agriculture and construction sectors where firms are reporting a greater perceived shortage of workers as a constraint on their current activity.

Looking ahead, it is difficult to foresee to what extent the changes in migration flow patterns since the onset of the pandemic will persist over time and will continue to affect labour supply in Spain. However, over a long time horizon, a certain recovery in immigration flows is to be expected as mobility restrictions ease and the pent-up demand for migration that could not be met during the pandemic materialises.[4]

However, from a sectoral standpoint it is worth noting that, besides migration flows, other factors will also play a major role in explaining the labour shortages that some sectors may face in the future. Particularly, these tensions

1 Permanent migrations are those where the migrant intends to settle permanently in the destination country. They therefore exclude instances such as movements to take up seasonal employment. See *International Migration Outlook 2021,* OECD (2021).

2 This box focuses on the migratory flows of foreign nationals, given their greater relevance as a factor conditioning recent labour force developments in Spain, as analysed here.

3 See M. Izquierdo (2021), "Encuesta a las empresas españolas sobre la evolución de su actividad: noviembre de 2021", Economic Notes, *Economic Bulletin* 4/2021, Banco de España.

4 See K. Bodnár and D. O'Brien (2022), "The role of migration in weak labour force developments during the COVID-19 pandemic", *Economic Bulletin* 1/2022, ECB.

Box 5

MIGRATORY FLOWS IN SPAIN DURING THE COVID-19 CRISIS AND THEIR IMPACT ON LABOUR SUPPLY (cont'd)

Chart 1
MIGRATORY FLOWS OF FOREIGN NATIONALS IN SPAIN

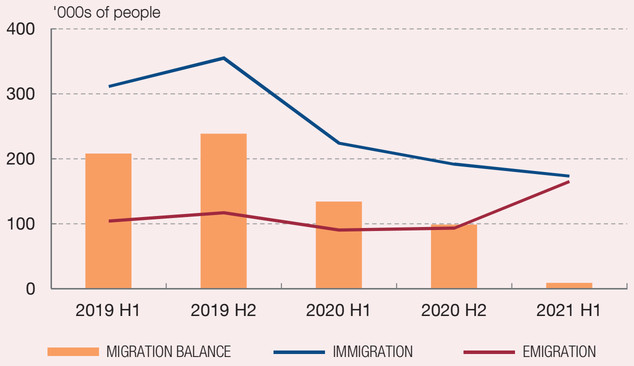


Chart 2
DISTRIBUTION OF FOREIGN IMMIGRATION FLOWS BY REGION OF ORIGIN

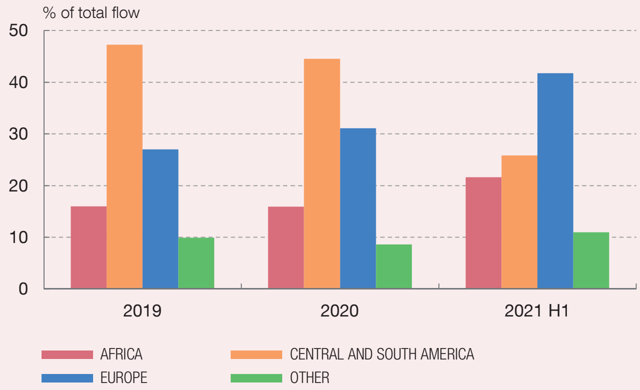


Chart 3
LABOUR FORCE (a)

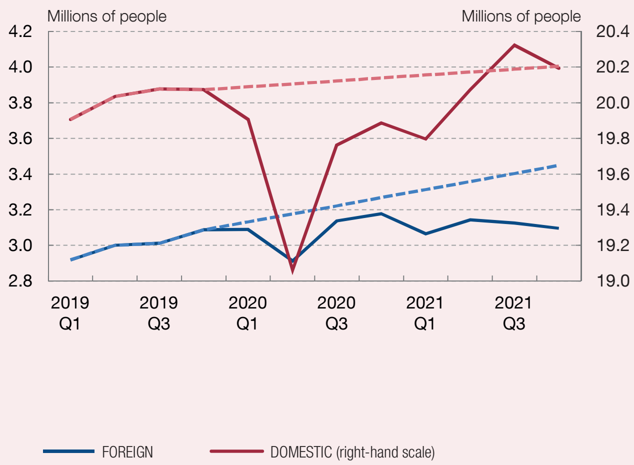


Chart 4
PERCENTAGE OF FOREIGN EMPLOYMENT BY SECTOR

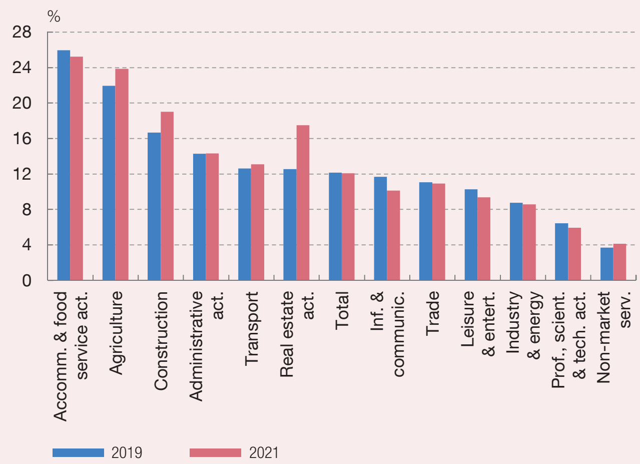


Chart 5
LABOUR SHORTAGE AND FOREIGN EMPLOYMENT (b)

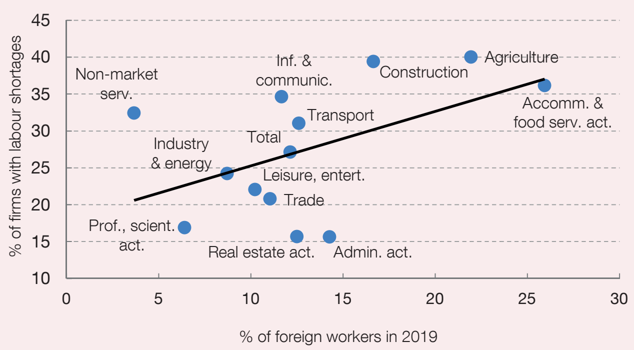
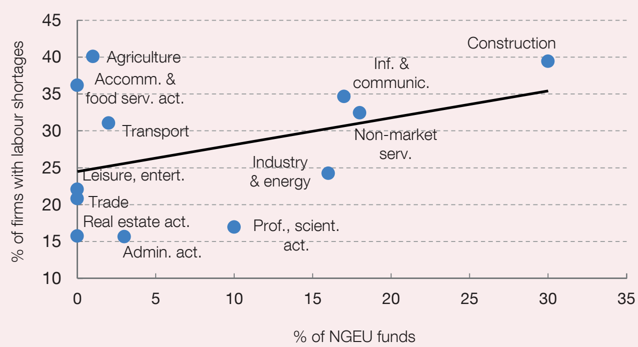


Chart 6
LABOUR SHORTAGE AND ALLOCATION OF NGEU FUNDS (c)



SOURCE: Migration statistics and Labour Force Survey of the INE, the Banco de España Business Activity Survey, the Recovery, Transformation and Resilience Plan and Banco de España.

a The dotted lines are extrapolations of the pre-pandemic trends of the different aggregates (from 2018 Q1 to 2019 Q4).
b Labour shortages reported by firms in 2021 Q4 and average foreign employment in 2019 by sector.
c Labour shortages reported by firms in 2021 Q4 and percentage of NGEU funds by sector.

could be higher in those sectors whose relative demand is boosted to a greater extent by the roll-out of the investment projects linked to the Next Generation EU (NGEU) programme. Indeed, there is a positive association between perceived labour shortages according to the EBAE and the share of NGEU funds allocated to each sector, drawing on the information available in the Recovery, Transformation and Resilience Plan (RTRP).[5] Moreover, since the priority areas identified under the NGEU programme are very similar across countries, the tightening of some segments of the labour market could be aggravated by the European context.[6]

5 See A. Fernández-Cerezo, E. Moral-Benito and J. Quintana (2022), "A production network model for the Spanish economy: an application to the impact of NGEU funds", *Working Papers,* Banco de España (forthcoming).

6 The percentage of European firms reporting that labour shortages have been a constraint on their activity is at record highs according to the European Commission's business and consumer surveys. See also P. Ramskogler (2022), "Feeling the Heat? – Assessing Labor Shortages in the Euro area", *SUERF Policy Brief* No 266.

Box 6

AN INITIAL ANALYSIS OF THE IMPACT OF INFLATION ON COLLECTIVE BARGAINING IN 2022

Mario Izquierdo and Isabel Soler

This early-release box was published on 1 April

How wages respond to the recent acceleration in inflation is a key factor when assessing how long its current upturn may persist. Thus, should the wage response be significant, this upturn will foreseeably extend over a longer time horizon, as the possibilities of the higher energy prices – the main factor behind the current inflationary episode – feeding through to other prices and costs in the economy will increase.

Against this backdrop, the available information[1] on collective bargaining in Spain in early 2022 shows a moderate uptick in negotiated wage increases. However, these remain well below inflation. Specifically, on the information on the collective agreements registered to February 2022, the wage settlement for this year is 2.3%, above the 1.5% negotiated for 2021, but in line with the 2019 settlement when inflation was much lower (see Chart 1).

However, this negotiated wage increase (which affects 4.4 million employees, or around 40% of the typical year-end figure (see Chart 2)) reflects the wage settlements in collective agreements spanning more than one year signed in prior years. Specifically, to February, new collective agreements signed in 2022 were still very thin on the ground and covered somewhat fewer than 15,000 employees.

To more accurately assess collective bargaining developments in Spain over recent months, this box uses Ministry of Labour and Social Economy microdata that provide individual information on registered collective agreements, by point in time when they were signed.[2] Based on this information, the vast majority of employees covered by collective agreements with economic effects in 2022 signed their collective agreement in 2021 (see Chart 3). This also somewhat reflects the collective bargaining standstill in 2020 during the early months of the pandemic.

A detailed analysis of the collective agreements signed in 2021, by quarter in which they were signed, reveals that the acceleration in inflation in 2021 had somewhat of an impact on negotiated wage increases. Specifically, the percentage of collective agreements that stipulated wage increases of less than 2% fell from 98% in 2021 Q1 (when the inflation rate was 0.5%) to 57% in Q4 (when inflation stood at 5.8%).

As regards the collective agreements effective in 2023 that span more than one year,[3] the analysis of the incomplete information available suggests that the average wage increase negotiated for 2023 will, for the time being, remain relatively contained, at 1.9% for nearly 1.5 million employees.[4] As with the agreements in force for 2022, most of these agreements were entered into in 2021, and the wage increases negotiated have risen slightly over time (e.g. 2% increase in those signed in 2021 Q4, compared with 1.8% in those signed in Q3) (see Chart 4).

One aspect meriting particular attention is the indexation mechanisms in negotiated wage increases for 2022 and 2023. In this regard, the percentage of agreements signed for 2022 with such clauses rose considerably in the first two months of this year, accounting for nearly 30% of the employees with a registered agreement, having fallen below 20% in recent years (see Chart 5). Moreover, the agreements already entered into for 2023 show the prevalence of indexation clauses increasing further, to nearly 50% of employees with an agreement effective for that year. Although this is lower than before the 2008 financial crisis (around 70%) and affects a small number of employees, its upward trend in recent months poses a growing risk of second-round effects on inflation.[5] Specifically, as this type of clause means wages are automatically adjusted for past inflation, its greater prevalence increases the risk of a potential wage increase-price spiral, which could have very harmful effects on activity and employment over a medium-term horizon.

1 Drawing on the *Estadística de Convenios Colectivos de Trabajo* (Collective Agreement Statistics) published by the Ministry of Labour and Social Economy.

2 While these microdata provide incomplete information, as they only include 85% of the employees covered by collective agreements in the official aggregate statistics, their high degree of coverage means that they can be considered representative of the overall dynamics.

3 Drawing on the individual information about the agreements released on https://expinterweb.mitramiss.gob.es/regcon/, which allows information to be obtained on the provisions for the subsequent years of such collective agreements. The statistics published by the Ministry and the available microdata file contain information on negotiated wage increases for the current year.

4 The wage increase is already known for around 90% of agreements effective in 2023. For the remaining 10%, the wage increase negotiated depends on as yet unknown variables. In most cases, this reference is related to inflation at end-2022.

5 It is, however, worth highlighting that a significant proportion (around one-half) of these clauses contain a multi-year component. That is to say, they index wages to inflation over a period of more than one year, mitigating the risks of temporary inflationary spikes directly passing through to wages.

Chart 1
NEGOTIATED WAGE INCREASE, BY YEAR OF ECONOMIC EFFECTS AND WHEN THE COLLECTIVE AGREEMENT WAS SIGNED (a)

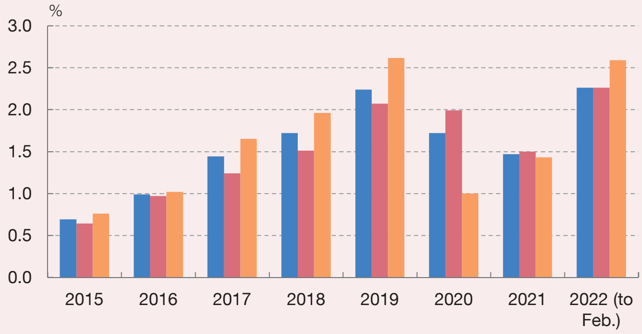


Chart 2
EMPLOYEES COVERED, BY YEAR OF ECONOMIC EFFECTS AND WHEN THE COLLECTIVE AGREEMENT WAS SIGNED (a)

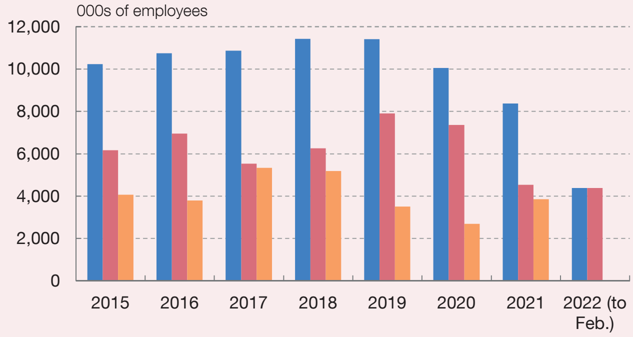


Chart 3
EMPLOYEES COVERED, BY BRACKET OF NEGOTIATED WAGE INCREASE FOR 2022 AND QUARTER WHEN THE COLLECTIVE AGREEMENT WAS SIGNED (b)

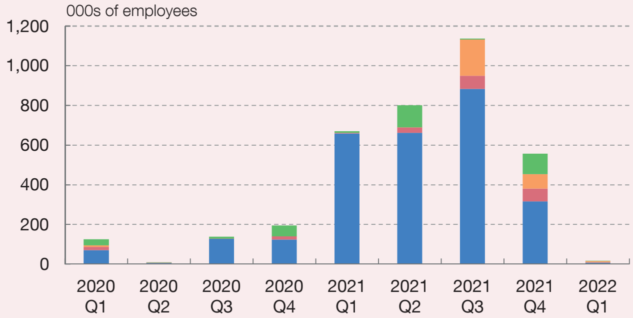


Chart 4
EMPLOYEES COVERED, BY BRACKET OF NEGOTIATED WAGE INCREASE FOR 2023 AND QUARTER WHEN THE COLLECTIVE AGREEMENT WAS SIGNED (c)

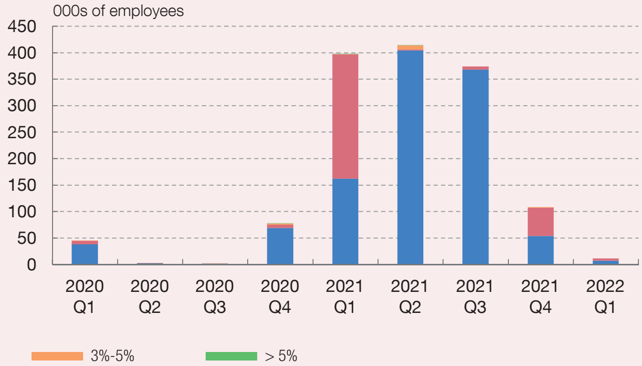


Chart 5
PREVALENCE OF INDEXATION CLAUSES (d)

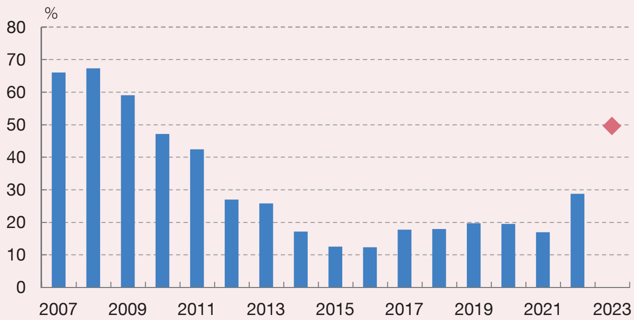
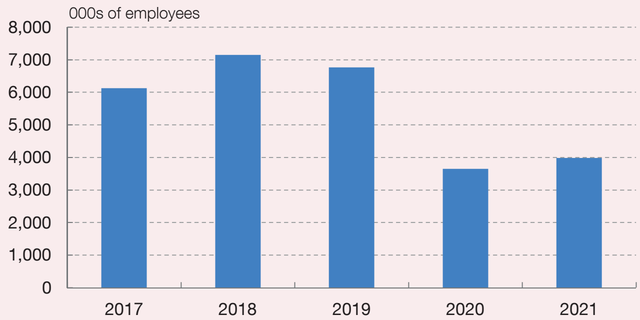


Chart 6
EMPLOYEES WITH A COLLECTIVE AGREEMENT SIGNED IN EACH YEAR THAT IS EFFECTIVE IN THE FOLLOWING YEAR (b)



SOURCE: Ministerio de Trabajo y Economía Social.

a Revised collective agreements are those signed in years before their economic effects begin. New collective agreements are those signed in the same year their economic effects begin or those whose economic effects are retrospective.
b Calculated drawing on the microdata file provided by the Sub-Directorate General of Statistics of the Ministry of Labour and Social Economy.
c Information obtained from the individual records compiled at https://expinterweb.mitramiss.gob.es/regcon/index.htm.
d Information referring to 2023 is incomplete and only available for the collective agreements effective in that year and already registered. It only covers just over 1.6 million employees.

Lastly, it should be pointed out that in both 2020 and 2021 the number of employees with a signed agreement in force for the following year was much lower than usual (see Chart 6). In this regard, there currently seems to be a relatively sizeable volume of latent collective bargaining yet to be agreed. Progress in this respect over the coming months will be key to calibrating the degree to which the current pick-up in inflation will pass through to wages in the medium term.

International financial market conditions deteriorated in 2022 Q1, with asset price falls and a rise in volatility, essentially as a consequence of the Russian invasion of Ukraine and the less accommodative stance of monetary policies

Long-term yields on higher-rated sovereign bonds have increased significantly in 2022, basically as a consequence of expectations of monetary policy tightening in the advanced economies, against a background of high inflation globally (see Chart 2.1 and Box 4). At the cut-off date for this report, US and German 10-year sovereign bond yields stood at 2.3% and 0.6%, respectively, 83 and 73 basis points (bp) above their end-2021 levels. This somewhat larger increase in long-term rates in the United States, along with the lower risk appetite of investors, in a context of high uncertainty stemming from the increase in geopolitical tensions in eastern Europe, appears to have contributed to the appreciation of the US dollar against the euro. These developments have also been accompanied by an increase in the implied volatility of sovereign debt prices, which rose sharply after the outbreak of the war in Ukraine and have subsequently moderated (see Chart 2.2).

In the euro area, sovereign debt yield spreads over the German benchmark and corporate risk premia rose in the quarter, driven by a faster than expected withdrawal of the monetary stimulus measures. The 10-year sovereign yield spread has risen more sharply in the case of Greece (with an increase of 62 bp), while in Italy (13 bp), Spain (12 bp) and Portugal (6 bp) the increases have been moderate. At the cut-off date for this report, these spreads stand above their pre-pandemic levels (see Chart 2.3). Corporate credit risk premia have also increased in recent months, especially since the invasion of Ukraine and in the high-yield segment, and they also stand above their pre-pandemic levels (see Chart 2.4).

The main stock market indices of the developed economies declined during the quarter, while their volatility increased sharply as from the outbreak of the war in Ukraine (see Chart 2.5). Having in many cases reached all-time highs in January, the main stock market indices fell back, initially as a consequence of the increase in long-term interest rates and subsequently as a result of the Russian invasion of Ukraine. The declines were more pronounced in the European markets, reflecting the greater exposure of European companies to the effects of the war in Ukraine. More recently, share prices have recovered somewhat and their volatility has moderated.

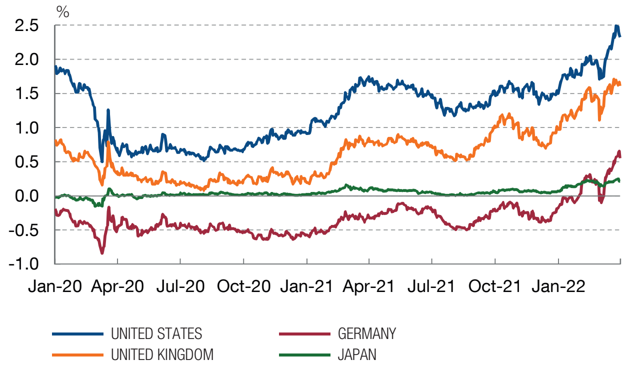
Financial conditions in emerging markets have deteriorated abruptly following the outbreak of the war in Ukraine. Stock prices have slumped, local currencies

Chart 2

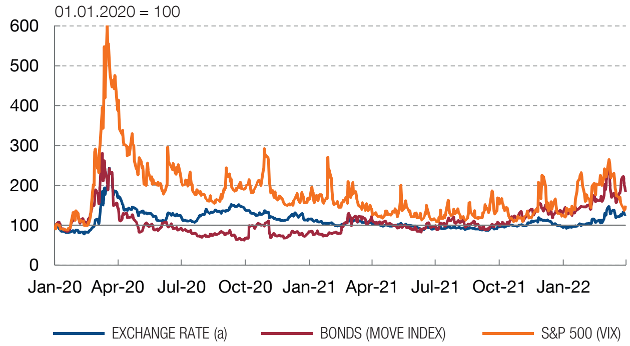
IN RECENT MONTHS CONDITIONS HAVE DETERIORATED IN INTERNATIONAL FINANCIAL MARKETS

Long-term yields on higher-rated sovereign debt have increased significantly since end-2021 as a consequence of expectations that monetary policy tightening will be greater than previously anticipated. In this context, and given the increase in geopolitical tensions, there was an increase in implied volatilities, which has subsequently been reversed. In the euro area, there were increases in sovereign and corporate risk premia, which have in recent weeks been contained. The main stock market indices of the developed economies suffered significant falls over the quarter, which have recently been partially corrected. Financial conditions in emerging markets deteriorated abruptly following the outbreak of the war in Ukraine, with an increase in sovereign risk premia, a slump in stock market indices and currency depreciation.

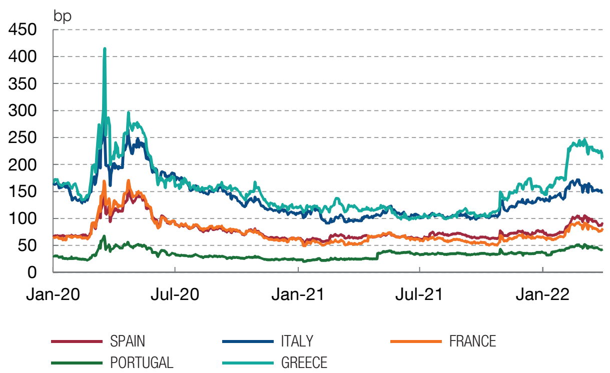
1 TEN-YEAR SOVEREIGN BOND YIELDS



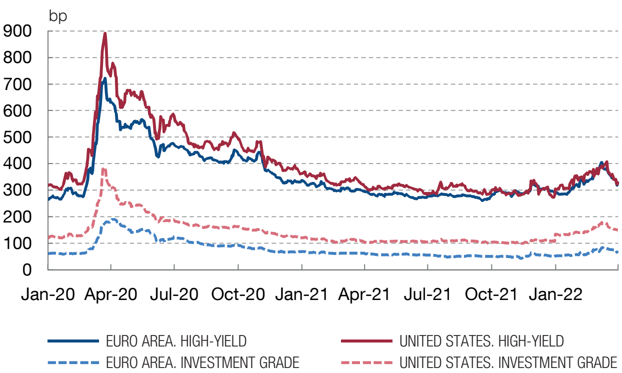
2 IMPLIED VOLATILITIES



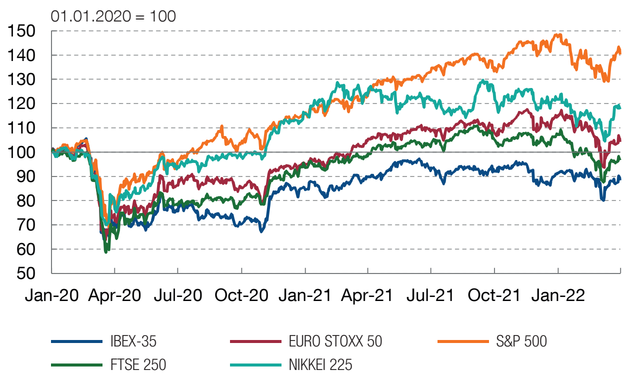
3 INTEREST RATE SPREADS ON 10-YEAR PUBLIC DEBT VIS-À-VIS GERMANY



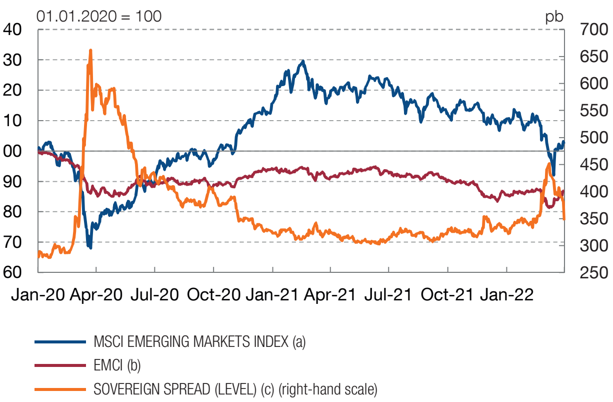
4 NON-FINANCIAL CORPORATIONS' BOND YIELD SPREADS RELATIVE TO SWAP CURVE



5 STOCK MARKET INDICES



6 FINANCIAL CONDITIONS IN EMERGING MARKET ECONOMIES



SOURCE: Refinitiv Datastream. Data updated to 31 March 2022.

a Stock exchange index compiled by Morgan Stanley for an aggregate of emerging market economies.
b Index of exchange rates against the US dollar compiled by JP Morgan for an aggregate of emerging economy currencies. An increase (decrease) denotes an appreciation (depreciation) of the currencies against the dollar.
c Spread of a set of emerging economy sovereign bonds that comply with certain requirements as regards liquidity and issue size vis-à-vis the US equivalent, compiled by JP Morgan.

have depreciated and sovereign spreads have widened in emerging markets (see Chart 2.6). There are differences, however, across countries. Thus, while the currencies of the eastern European countries, excluding Russia, depreciated by 7% on average between 25 February and 7 March, Latin American currencies barely fell 0.2%. This may reflect the status of Latin American countries as net exporters of commodities (whose prices rose significantly over the quarter), their lower degree of integration in global value chains and the absence of direct geostrategic risks.

3.1 External environment of the euro area

The pace of global economic growth moderated in 2021 Q4, weighed down by the increase in COVID-19 case numbers following the appearance of new variants and the persistence of the global value chain bottlenecks. Inflation rates continued to increase worldwide, driven above all by higher energy and food prices. The outbreak of the war in Ukraine and the economic sanctions that many countries have imposed on Russia will foreseeably have a severe impact on the growth and inflation outlook for the coming quarters

The rate of recovery of economic activity worldwide continued to moderate in 2021 Q4, weighed down by the worsening of the pandemic following the emergence of the Omicron variant and the persistence of the global value chain bottlenecks (see Charts 3.1 and 3.2). In any event, economic performance was uneven. While quarter-on-quarter GDP growth rose in the United States and Japan in Q4 (by 1.7% and 1.1%, respectively, compared with 0.5% and -0.7% in Q3), in the euro area it was just 0.3% (compared with 2.2% in Q3). The main emerging market economies continued to post positive GDP growth rates, which were especially high in Asia. In Latin America, GDP growth moderated somewhat, except in Brazil which managed to overcome two quarters of negative growth. Lastly, in China, the economy continued to slow, with growth falling to 4% year-on-year from 4.9% in the previous quarter, as a consequence of the deceleration in the real estate sector and the strict healthcare measures introduced to contain the pandemic. Yet against this backdrop of more moderate economic activity, world trade expanded by 2.5% in the last quarter of the year, compared with a decline of 0.9% in Q3.

In early 2022, the relatively positive course of the pandemic and certain signs of easing in the supply bottlenecks pointed to a continuation of the ongoing economic recovery. The decline in infections from the start of the year and confirmation that the Omicron variant was less severe enabled pandemic containment measures to be eased in most regions of the world. In addition, the improvement in delivery time indicators (see Chart 3.2) and the decline in transport costs pointed to a gradual easing of the disruptions caused by the bottlenecks. Thus, until late February, various activity indicators, such as the PMI, showed signs of continued economic recovery (see Chart 3.2).

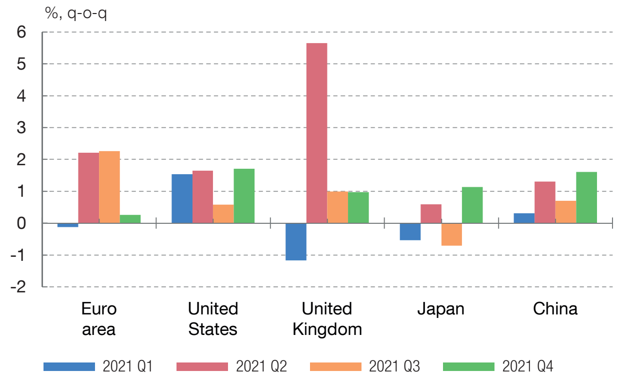
The outbreak of the war in Ukraine and the international community's response, with harsh economic sanctions against Russia, significantly affect growth prospects for the short and medium term, through various channels (see

Chart 3

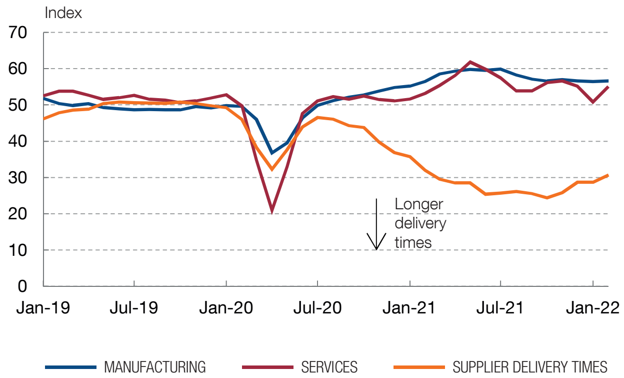
GLOBAL GROWTH MODERATED IN Q4 AND INFLATION CONTINUED TO RISE, REACHING HISTORICAL HIGHS. THE INVASION OF UKRAINE SEVERELY AFFECTS THE MACROECONOMIC OUTLOOK

Inflation has continued to surprise on the upside, driven by rising energy commodity and food prices and by the persistence of the supply bottlenecks. Global growth moderated in Q4, weighed down by these factors and by the emergence of the Omicron variant. The war in Ukraine, to which the international community has responded with harsh economic sanctions against Russia, has driven up uncertainty, intensified the escalation in energy and other commodity prices and tightened financial conditions worldwide. This is having a significant impact on the growth and inflation outlook for the coming quarters.

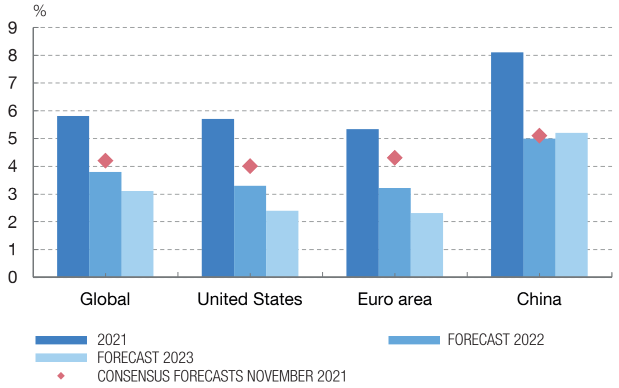
1 QUARTERLY GDP GROWTH IN 2021



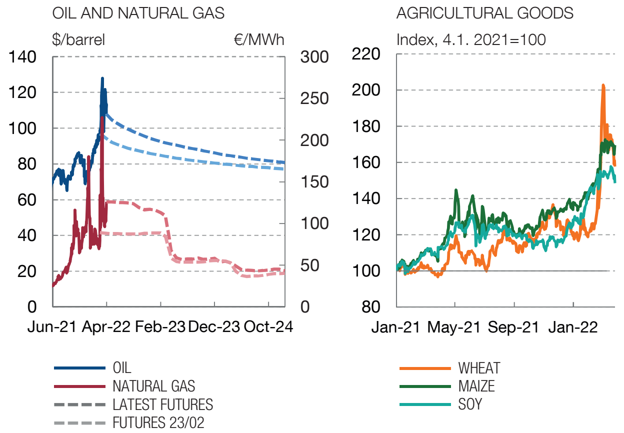
2 PMI: DEVELOPED ECONOMIES



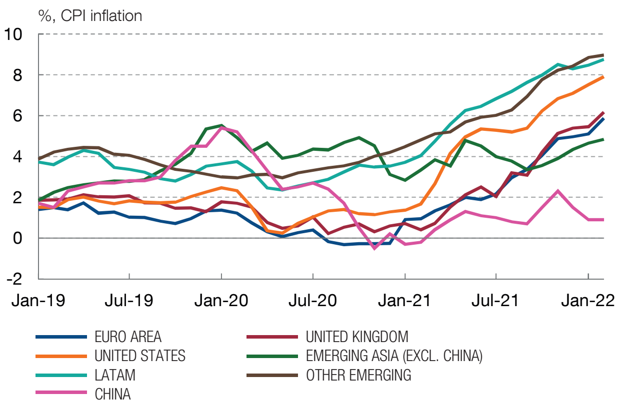
3 GDP GROWTH FORECASTS (2021-2023)
Consensus Forecasts March 2022



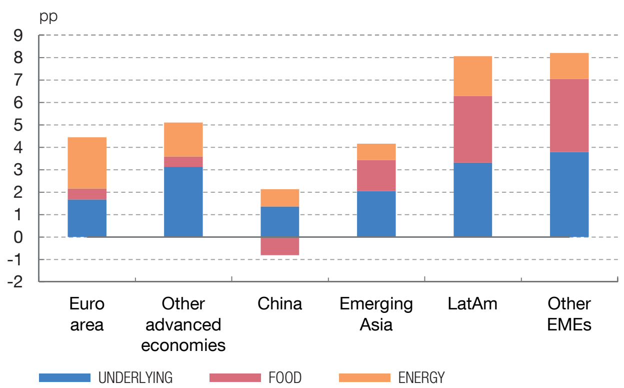
4 COMMODITY PRICES



5 YEAR-ON-YEAR INFLATION (a)



6 INFLATION AND COMPONENTS (a)
Contribution to average inflation, August 2021 to January 2022



SOURCES: Consensus Forecasts, national statistics, IHS Markit, central banks, Bloomberg and Thomson Reuters.

a Other EMEs includes eastern European economies (Poland, Hungary and Russia). LatAm is the average of five Latin American countries (Brazil, Colombia, Chile, Peru and Mexico).

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Chart 3.3 and Box 2). First, the surge in uncertainty adversely affects economic agents' confidence and tends to tighten financing conditions. Second, economic activity could also be hit through the trade channel, with a fall-off in world trade and a possible worsening of the supply bottlenecks, given the key position of Ukraine and, especially, Russia as suppliers of commodities to various economic sectors and geographical areas. Lastly, the sharp escalation in energy commodity prices and in the prices of some agricultural products in the wake of the invasion poses a shock to the terms of trade. This will have an uneven impact across countries, as it will be negative for those that import raw materials but positive for exporting countries, especially for some emerging market economies – such as those in Latin America – which do not have a high level of participation in global value chains. In this respect, the size of the shock is significant: at the cut-off date for this report, oil and gas prices had risen, since the start of the war, by 11% and 41%, respectively, and the price of wheat by 14%. Gas and oil futures have risen sharply and are factoring in continued high prices throughout 2022 (see Chart 3.4).

In the coming months, the war will drive inflation – which was already surprising on the upside in the previous quarters – up to historically high levels worldwide (see Chart 3.5). In the United States inflation rose to 7.9% in February, its highest point since 1982, while in the euro area it reached an all-time high of 5.8%. Inflation also rose among the emerging market economies, especially in eastern Europe, although it moderated in China (to 0.9%). Of note in this global inflationary picture are the contribution of energy prices, particularly in the advanced economies, and food prices, especially in Latin America and eastern Europe (see Chart 3.6). Underlying inflation has also risen in recent months, with very sharp increases in some countries, such as the United States or the United Kingdom which have a smaller output gap and a lower degree of labour market slack. Inflation expectations have also risen since the outbreak of the conflict, especially on a short-term horizon.

In view of this high inflation setting, the advanced economies' central banks have begun to tighten their monetary policy stance. The Bank of England raised its base rate at its February meeting and then again at its March meeting, by 25 bp both times, so that it now stands at 0.75%. The Federal Reserve also raised the federal funds target rate at its March meeting by 25 bp to 0.25%-0.50% and expects to make further rate hikes in the year. Meanwhile, the emerging market economies – with the exception of those in Asia – remained in the restrictive monetary policy phase that began in 2021.

In the fiscal sphere, the surge in energy and food prices will foreseeably exert significant pressure on some income and expense items to counter its adverse effects on the most vulnerable sectors. Thus, in Europe, a wide range of measures has been adopted since late 2021 aiming to offset the increase in electricity prices. These measures include rebates on taxes and charges levied on electricity, grants for the most vulnerable households and temporary levies on extraordinary profits obtained by zero-emission electric power plants that have benefited from higher gas prices. Pressure will also be exerted on budgetary items such as defence spending and refugee programmes. In the United States, a plan to reduce the cost of certain essential products, such as energy, is also being discussed. These measures need to take into account the limited fiscal space available as a consequence of the high levels of government debt reached during the pandemic.

3.2 The euro area

Since the start of the war in Ukraine, the increase in commodity prices (particularly energy prices), the deterioration in global confidence and the notable tightening of financial conditions have had a very significant impact on the euro area growth and inflation outlooks, which are also facing considerable uncertainty

Economic activity in the euro area slowed in 2021 Q4, weighed down by the introduction of fresh health restrictions in response to the worsening of the pandemic, the persistence of bottlenecks in global value chains and the increase in energy prices. GDP growth of 0.3% quarter-on-quarter, which was slightly higher than expected although well below the 2.3% figure for Q3, was mainly due to improvements in investment and inventory restocking (see Charts 4.1 and 4.2), while both private consumption and external demand declined. By economic sector, the scant growth observed in Q4 was concentrated in the primary sector. By contrast, during this period there was no growth in value added in either the services sector or industry. The former was affected by the rise in COVID-19 case numbers, which entailed a noticeable decline in mobility, while disruptions in global production and distribution chains continued to affect the buoyancy of industrial activity.

The latest available information from opinion-based surveys points to a worsening in the short-term outlook for activity in the wake of the Russian invasion of Ukraine. Specifically, the improvement seen in the manufacturing PMI in the early months of the year was cut short in March, while order delivery times lengthened significantly, suggesting a resurgence of global supply chain bottlenecks. In the same vein, both the services sector PMI and the European Commission's confidence surveys point to a sharp decline since the outbreak of the war in Ukraine (see Chart 4.3).

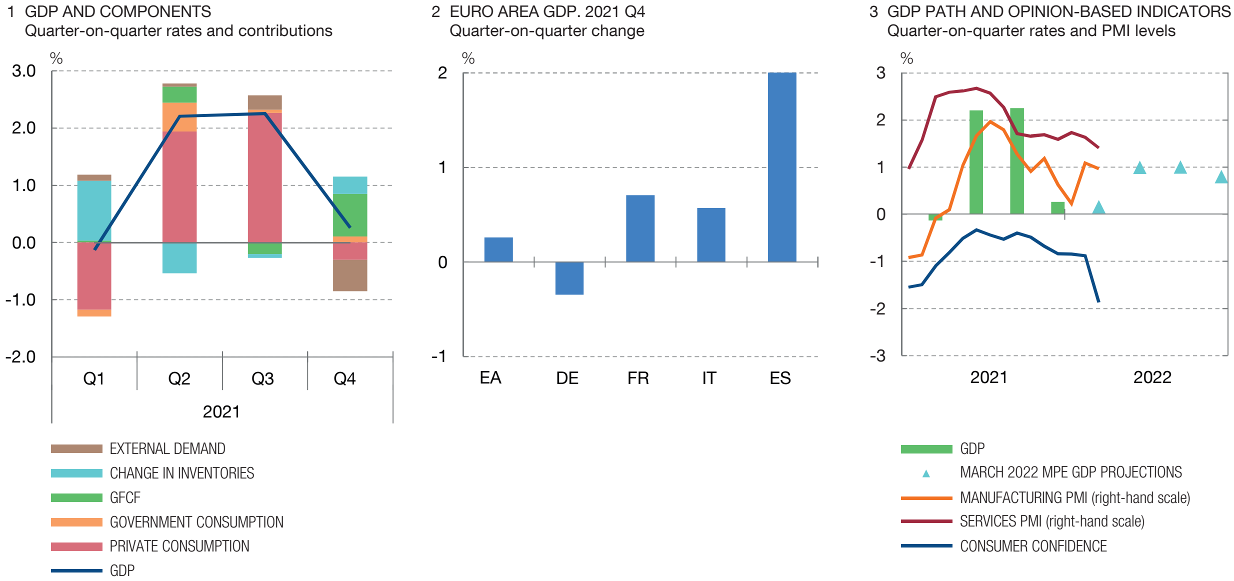
In this particularly uncertain environment, in its March macroeconomic projections (MPE)[1] the ECB revised down the growth forecasts for the euro area. The baseline scenario of these projections assumes that the impact of the conflict on agents' confidence will be limited in time and that global production and

1 See *ECB staff macroeconomic projections for the euro area*, March 2022.

Chart 4

ECONOMIC ACTIVITY SLOWED IN LATE 2021 AND THE OUTLOOK WORSENED AFTER THE RUSSIAN INVASION OF UKRAINE

In Q4, economic activity in the euro area grew at a much slower pace than in previous quarters. The invasion of Ukraine that began in late February has significantly affected energy and other commodity prices, financial conditions and agents' confidence, and its adverse impact on economic activity has become apparent at the end of Q1. In all likelihood these effects will continue over time, although their scale and duration are subject to considerable uncertainty.



SOURCES: Eurostat, Markit Economics, ECB and national central banks.

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distribution chains will not be significantly affected. In the medium term, the improvement in the epidemiological situation and in industry bottlenecks will continue to support the recovery in activity and the convergence of growth towards its historical average, despite the less expansionary fiscal and monetary policy stance. Specifically, projected GDP growth under this scenario is 3.7% in 2022, 2.8% in 2023 and 1.6% in 2024, a downward revision of 0.5 pp in 2022 and 0.1 pp in 2023 compared with the December exercise (see Table 2). The March projection exercise also presents two alternative scenarios envisaging more adverse developments in the war in Ukraine and its economic implications. In particular, the MPE's most adverse scenario assumes, among other developments, more serious disruptions in global value chains, a further worsening of financing conditions and cuts in oil and natural gas supplies, which could give rise to additional increases in energy costs and energy consumer prices and some deanchoring of inflation expectations. Under this scenario, GDP growth will stand at 2.3% in 2022 and 2023 and at 1.9% in 2024.

Inflation has continued to surprise on the upside in recent months, reaching an all-time high since the creation of the Economic and Monetary Union. In February, the annual rate of change of headline inflation rose to 5.9%, while underlying inflation also rose, albeit more modestly, to 2.7% (see Charts 5.1 and 5.2). This

Table 2
EURO AREA GDP AND HICP GROWTH FORECASTS (a)

	2022		2023		2024	
	GDP	HICP	GDP	HICP	GDP	HICP
ECB (March 2022, baseline scenario)	3.7 (-0.5)	5.1 (1.9)	2.8 (-0.1)	2.1 (0.3)	1.6 (0)	1.9 (0.1)
ECB (March 2022, adverse scenario)	2.5 (-1.7)	5.9 (2.7)	2.7 (-0.2)	2.0 (0.2)	2.1 (0.5)	1.6 (-0.2)
ECB (March 2022, severe scenario)	2.3 (-1.9)	7.1 (3.9)	2.3 (-0.6)	2.7 (0.9)	1.9 (0.3)	1.9 (0.1)
European Commission (February 2022)	4 (-0.3)	3.5 (1.3)	2.7 (0.3)	1.7 (0.3)		
OECD (December 2021)	4.3 (-0.3)	2.7 (0.8)	2.5 (…)	1.8 (…)		
IMF (January 2022)	3.9 (-0.4)	3 (1.3)	2.5 (0.5)	1.7 (0.3)		
Consensus Forecast (March 2022)	3.2 (-0.7)	5.7 (1.8)	2.3 (-0.2)	2.1 (0.4)		
Survey of Professional Forecasters (March 2022)	4.2 (-0.3)	3.0 (1.1)	2.7 (0.4)	1.8 (0.1)	1.7 (...)	1.9 (...)

SOURCES: ECB, European Commission, Consensus Forecast, IMF and OECD.

a In brackets is the change with respect to the previous forecast, which was December 2021 for the ECB, November 2021 for the European Commission, September 2021 for the OECD, October 2021 for the IMF, February 2022 for Consensus Forecast and October 2021 for the Survey of Professional Forecasters.

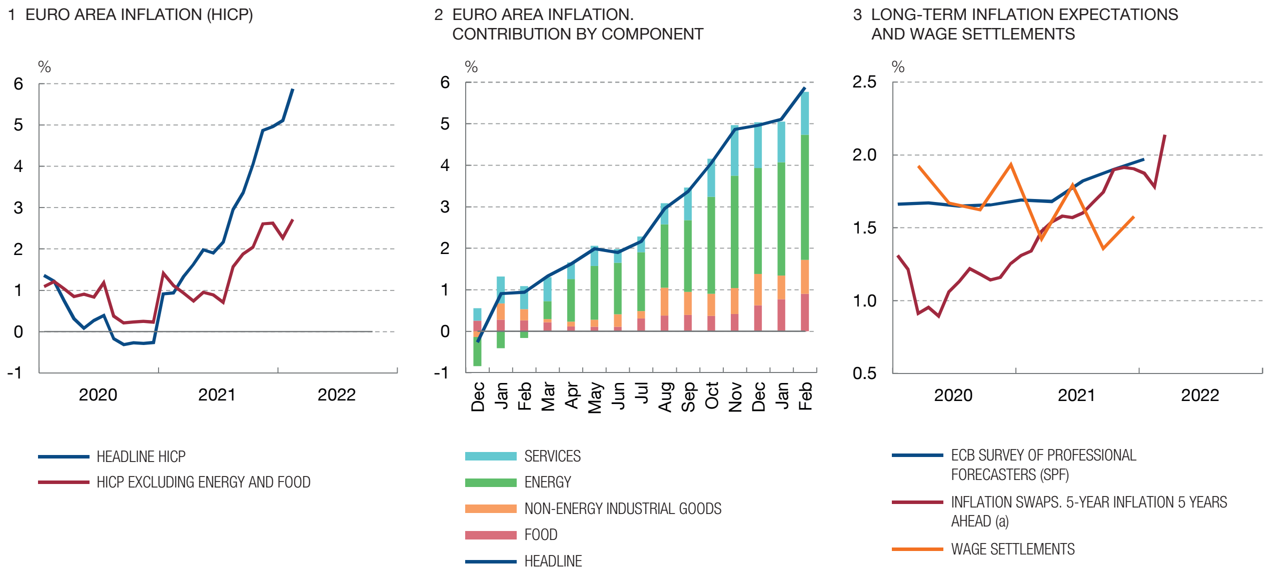
mostly reflected higher energy and food prices, which have risen due to higher production and transport costs and adverse weather conditions. Persistent bottlenecks in global value chains have also contributed to heightening inflationary pressures. Moreover, inflation expectations, particularly in the short term, have also risen following the outbreak of the war. Going forward, this increase, coupled with the severity and persistence of the current inflationary episode, could drive up the risk of second-round effects on wages, which have however continued to evolve relatively moderately in recent months (see Chart 5.3 and Box 3).

In this setting, the ECB has substantially revised up its outlook for inflation for the coming quarters. The March MPE's baseline scenario expects the annual average inflation rate to rise to 5.1% in 2022 (up from 2.6% in 2021) and to subsequently ease to 2.1% in 2023 and 1.9% in 2024. These figures are 1.9 pp, 0.3 pp and 0.1 pp, respectively, above the forecasts published by the Eurosystem in December (see Table 2). Underlying inflation is expected to remain relatively high in 2022 (at an average annual rate of 2.6%, 0.7 pp more than projected in December) as a result of the indirect effects of higher energy prices, the impact of bottlenecks and higher inflation in the services most affected by pandemic-associated restrictions. The exercise projects a gradual easing of these pressures on underlying inflation, with the average annual rate falling to 1.8% in 2023 and standing at 1.9% in 2024. Under the March MPE's most adverse scenario, headline inflation will rise to 7.1% in 2022 and to 2.7% in 2023, before falling to 1.9% at the end of the projection horizon.

The new macroeconomic and geopolitical environment that has emerged following the outbreak of war in Ukraine and the ensuing heightened uncertainty call for a careful calibration of the fiscal policy stance. For 2022

Chart 5
INFLATIONARY PRESSURES IN THE EURO AREA HAVE INTENSIFIED IN RECENT MONTHS

Headline inflation has continued to rise, driven above all by the energy component. In the present setting, the outlook as to the intensity and duration of inflationary pressures on prices is particularly uncertain. The surge in inflation expectations following the invasion of Ukraine and the sheer scale and persistence of the current inflationary episode could signal a risk of second-round effects on wages.



SOURCES: Bloomberg, Eurostat and ECB.

a Monthly average of daily data.

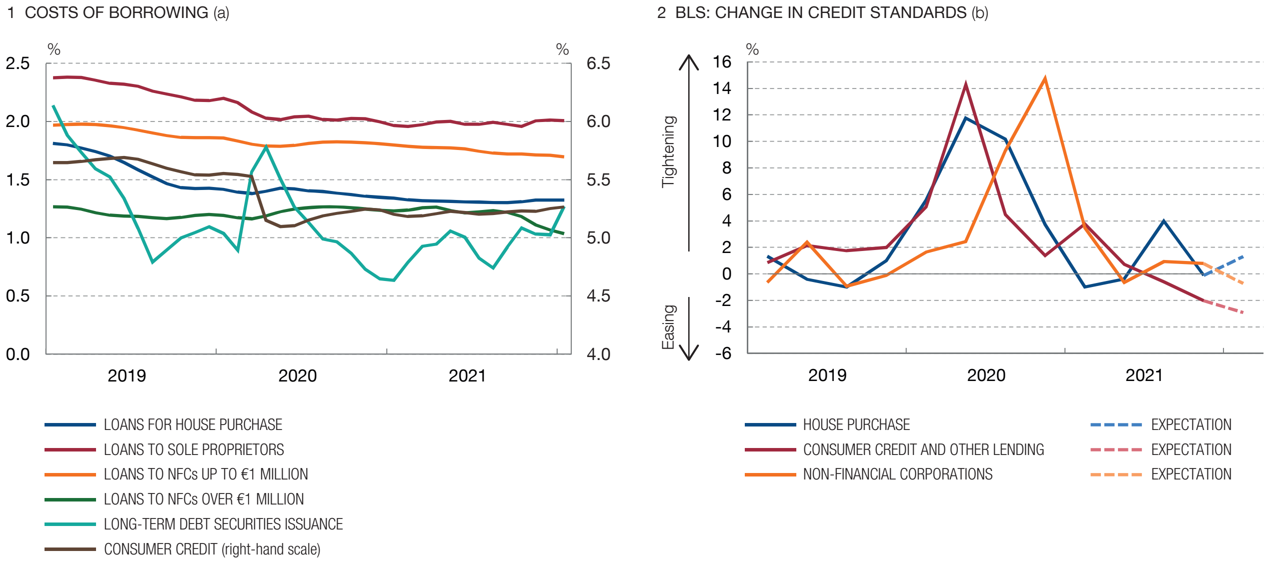
many euro area countries have adopted measures to compensate firms and households for higher energy prices, with an impact on public finances of more than 0.4 pp of GDP in France, Italy or the Netherlands, for example. The costs associated with receiving Ukrainian refugees will also need to be covered. Ahead of 2023, pending a decision on the extension of the clause suspending the Stability and Growth Pact rules, the European Commission is advocating a neutral fiscal policy stance for the euro area overall, but differentiated by country depending on their respective economic situations. Other notable developments include the potentially highly significant fiscal impact of the initiatives recently put forward by the European Commission, with the aim of mitigating the effects of the high energy prices and reducing energy dependence on Russia,[2] and the announcements by some countries (e.g. Germany) of their intention to increase their defence spending in the future.

At its last monetary policy meeting in March, the Governing Council of the ECB revised down its net purchases under its asset purchase programme (APP) for the coming months and changed its guidance on the likely future

2 European Commission (2022), "REPowerEU: Joint European Action for more affordable, secure and sustainable energy", Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions.

Chart 6
EURO AREA FIRMS' AND HOUSEHOLDS' AVERAGE FINANCING COSTS REMAIN LOW AND THE SUPPLY OF CREDIT APPEARS TO HAVE HELD STEADY IN MOST SEGMENTS IN 2021 Q4

Average interest rates on bank loans to households and firms have not changed significantly in recent months. By contrast, the average cost of long-term debt securities issuance has increased. According to the Bank Lending Survey (BLS), credit standards remained broadly unchanged in most segments in 2021 Q4. For 2022 Q1, banks expect the supply of credit to expand somewhat, with the exception of loans to households for house purchase, where they expect a slight contraction.



SOURCES: Refinitiv Datastream and ECB.

a Bank lending rates are NDERs (narrowly defined effective rates), i.e. they exclude related charges, such as repayment insurance premiums and fees. They are also trend-cycle interest rates, i.e. they are adjusted for seasonal and irregular components (small changes in the series with no recognisable pattern in terms of periodicity or trend).

b Indicator = percentage of banks that have tightened their standards considerably × 1 + percentage of banks that have tightened their standards somewhat × 1/2 – percentage of banks that have eased their credit standards somewhat × 1/2 – percentage of banks that have eased their credit standards considerably × 1.

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course of interest rates. The Governing Council set monthly net purchases under the APP at €40 billion in April, €30 billion in May and €20 billion in June. It also indicated that the calibration of net purchases for Q3 will be data-dependent. If the incoming data support the expectation that the medium-term inflation outlook will not weaken even after the end of net asset purchases, such purchases will conclude in Q3. Otherwise, the schedule for net asset purchases could be revised in terms of both size and duration. The Governing Council also stated that any adjustments to the key ECB interest rates will take place some time after the end of its net purchases and will be gradual. Finally, the Governing Council highlighted that, in a context of heightened uncertainty, it will take whatever action is needed to fulfil the ECB's mandate to pursue price stability and to safeguard financial stability. In this regard, the Governing Council has decided to extend the Eurosystem repo facility for non-euro area central banks until 15 January 2023. After these decisions were announced, euro area long-term risk-free interest rates and sovereign risk premia rose, possibly because markets were expecting a slower decline in net asset purchases than was finally agreed. These developments continued the trend that began in late 2021 towards less accommodative financial conditions in the euro area. This trend has also been driven to a large extent by external factors, mainly associated with changes in macroeconomic conditions and in monetary policy in the United States (see Box 4).

Financing conditions for euro area households and firms remain highly favourable. On data to January, average interest rates on new loans granted by credit institutions to the private sector remained at historically low levels. By contrast, the average cost of long-term debt securities issued has risen in recent months as a result of higher risk-free interest rates and credit risk premia (see Chart 6.1). In addition, according to the Bank Lending Survey, credit standards remained unchanged in 2021 Q4, save in consumer credit and other lending to households, where they continued to ease. For 2022 Q1, banks expect the supply of credit to expand somewhat, except in the case of loans to households for house purchase, for which they expect a modest contraction (see Chart 6.2). In terms of volume, lending to firms and households has increased slightly in recent months. This is explained, essentially, by the greater momentum of both bank loans to firms – which grew by around 2% in quarter-on-quarter terms in January – and loans to households for house purchase.

Financial conditions in the Spanish economy tightened over the first quarter of the year, owing essentially to the Russian invasion of Ukraine and expectations of monetary policy tightening, against a background of high inflation globally

Stock prices in Spain have fallen in recent months, while government debt issuance costs have risen. Although the IBEX-35 dropped in 2022 Q1 (-3.1%), it did so more moderately than its euro area counterpart, the EURO STOXX 50 (-9.2%). The Spanish index's better relative performance may owe, at least in part, to its listed firms having less direct exposure to the economic consequences of the war in Ukraine than firms listed on the European index. Turning to the sovereign debt market, the Spanish 10-year government bond yield rose by 85 bp during 2022 Q1, with the spread over the German Bund widening by 12 bp, similar to the increase recorded by Italy and Portugal, but far less than Greece.

The cost of long-term corporate debt issuance rose markedly during the first three months of 2022, although the average cost of bank lending held close to all-time lows in February (See Chart 7.1). In any event, the recent increase in interbank market interest rates suggests that bank lending rates may also rise in the coming months. In particular, in 2022 Q1 the 3-month EURIBOR increased by 9 bp and the 12-month EURIBOR by 27 bp. According to the Bank Lending Survey (BLS), credit standards tightened moderately in 2021 Q4, except in the lending to large firms segment, where they remained unchanged. Looking ahead to 2022 Q1, banks expect the supply of credit to remain stable across all segments (see Chart 7.2).

Economic activity in Spain continued its recovery in 2021 Q4, albeit at a slower pace than in the previous quarter

Spain's GDP growth rate stood at 2.2% in 2021 Q4, down 0.4 pp on the previous quarter. In any event, this GDP growth was slightly stronger than that envisaged in the Banco de España's December projection exercise.[3] The epidemiological situation, marked by a steep upturn in infections due to the spread of the COVID-19 Omicron variant, shaped activity in the closing months of 2021, albeit less so than in

3 See Box 1, "Macroeconomic projections for the Spanish economy (2021-2024): the Banco de España's contribution to the Eurosystem's December 2021 joint forecasting exercise", *Economic Bulletin* 4/2021, Banco de España.

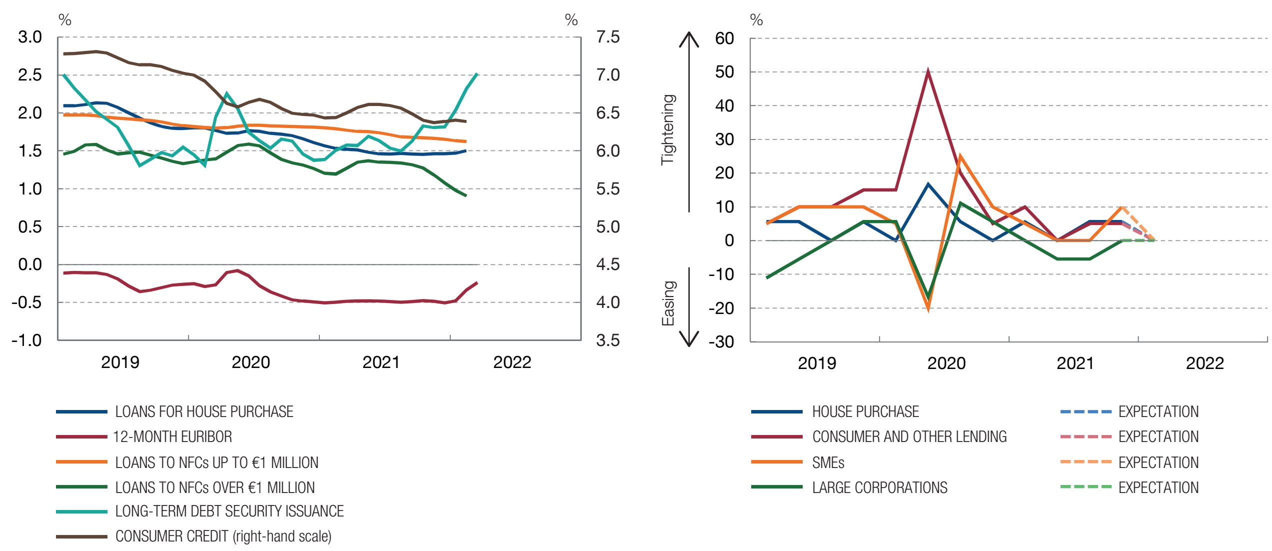
Chart 7

FINANCING CONDITIONS IN THE SPANISH ECONOMY TIGHTENED SLIGHTLY IN THE FIRST QUARTER

The average cost of bank lending to firms and households appears to have held close to all-time lows through to February (latest data available). However, this trend may reverse in the months ahead given the recent upturn in interbank market interest rates. In addition, according to the BLS, credit standards tightened moderately in 2021 Q4 practically across the board.

1 COST OF FINANCING (a)

2 BLS: CHANGE IN CREDIT STANDARDS (b)



SOURCES: Banco de España and Refinitiv Datastream.

a Bank lending rates are NDERs (narrowly defined effective rates), i.e. they exclude related charges, such as repayment insurance premiums and fees. They are also trend-cycle interest rates, i.e. they are adjusted for seasonal and irregular components (small changes in the series with no recognisable pattern in terms of periodicity or trend).

b Indicator = percentage of banks that have tightened credit standards considerably × 1 + percentage of banks that have tightened credit standards somewhat × 1/2 – percentage of banks that have eased credit standards somewhat × 1/2 – percentage of banks that have eased credit standards considerably × 1.

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previous waves of the pandemic. Thus, there were positive contributions to the GDP growth in 2021 Q4 both from net external demand (albeit to a lesser extent than in the previous quarter) and domestic demand. The latter was fuelled by private consumption and investment in capital goods, both of which showed greater buoyancy than in Q3 (see Chart 8.1).

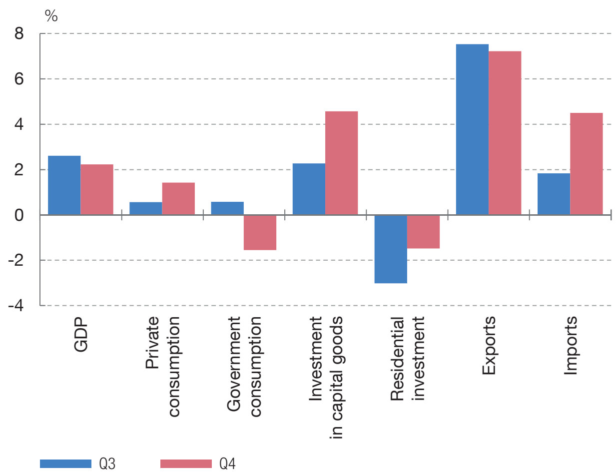
As a result of these developments, Spanish GDP stood 3.8 pp short of its pre-pandemic level, while the euro area overall had recovered that mark by end-2021 (see Chart 8.2). This difference reflects a sharper contraction in activity during 2020 H1 in Spain than in the main euro area economies, and a less robust subsequent recovery. In turn, these developments are explained, at least in part, by the Spanish economy's greater relative specialisation in the sectors hardest hit by the pandemic. However, it is worth noting that the Spanish economy showed greater buoyancy in 2021 Q4 than the euro area as a whole, owing above all to a stronger performance in investment in capital goods and investment in intangible capital.

Chart 8

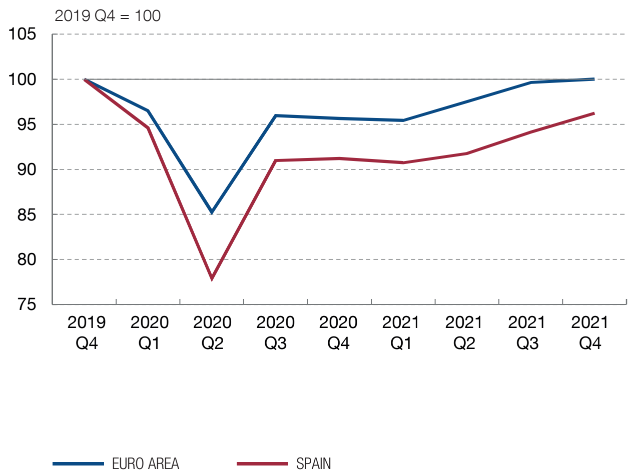
IN Q4 THE SPANISH ECONOMY GREW FASTER THAN EXPECTED, ALBEIT LESS STRONGLY THAN IN Q3

The Spanish economy's GDP grew 2.2% in Q4, underpinned by the positive contribution of both the external sector and domestic demand. Spanish GDP is still 3.8 pp below its end-2019 level, a significantly wider gap than for the euro area as a whole, which has already recovered its pre-pandemic level. However, this difference with respect to the pre-COVID-19 level appears to have narrowed much more sharply in Spain in 2021 Q4.

1 CHANGE IN GDP AND ITS COMPONENTS IN 2021 Q3 AND Q4. QUARTER-ON-QUARTER RATES



2 GDP. SPAIN AND THE EURO AREA



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SOURCES: Eurostat and INE.

The growth rate of the Spanish economy is expected to ease in 2022 Q1, owing essentially to the economic fallout from the war in Ukraine

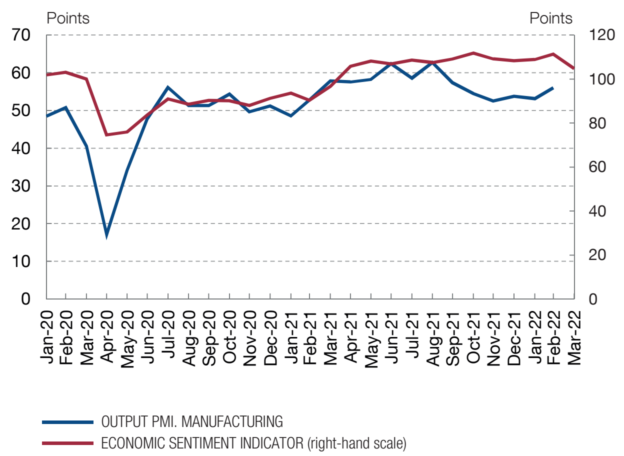
The Banco de España's projections, published in Box 1 of this report,[4] envisage GDP growth of 0.9% in Q1. Confidence indicators followed a gradual recovery path during January and February (see Chart 9.1), in step with the improving epidemiological situation (see Chart 9.2). However, these indicators deteriorated sharply in the wake of the Russian invasion of Ukraine on 24 February, reflecting the possible adverse economic consequences of the war (see Charts 9.1 and 9.3). In particular, both the armed conflict itself and the sanctions imposed on Russia by numerous international governments and institutions have triggered a surge in commodity prices and in uncertainty levels, which appear to have had a very significant bearing on the consumption and investment decisions of firms and households in the final stretch of the quarter. Indeed, the most recent wave of the Banco de España Business Activity Survey (EBAE, by its Spanish acronym), based on data compiled between 23 February and 10 March, indicates somewhat worse growth expectations for business

4 See "Macroeconomic projections for the Spanish economy (2022-2024)".

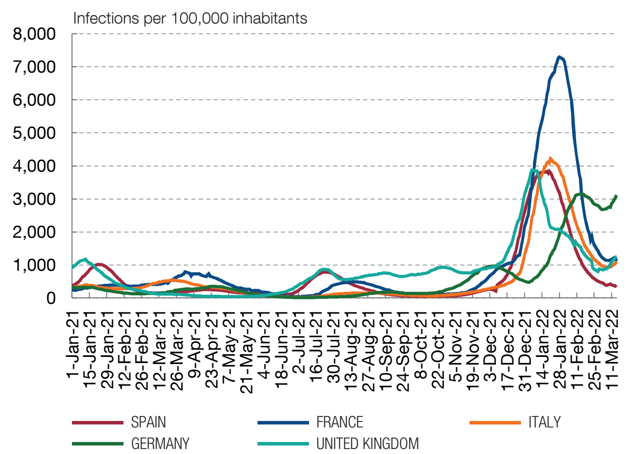
Chart 9
THE PACE OF GDP GROWTH IS EXPECTED TO EASE IN THE FIRST QUARTER

In January and much of February, confidence indicators followed a gradual recovery path in step with the improving epidemiological situation and some easing of global supply chain bottlenecks. However, confidence indicators deteriorated very sharply following the invasion of Ukraine by Russia, which would reflect the economic consequences of the war and will foreseeably have an adverse impact on the buoyancy of activity in the final stages of the first quarter.

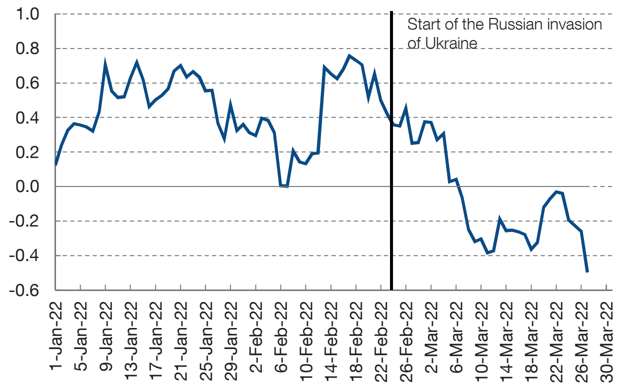
1 CONFIDENCE INDICATORS (a)



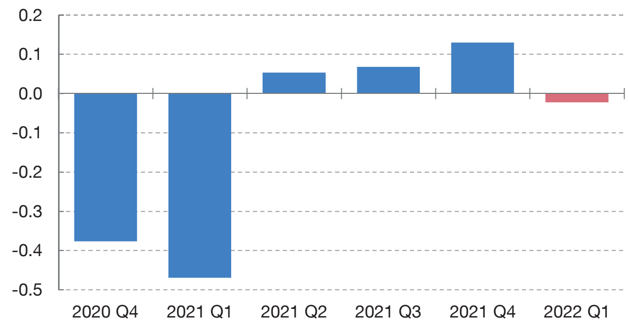
2 14-DAY CUMULATIVE INCIDENCE



3 CONFIDENCE INDICATOR (DENSI) (b)



4 QUARTERLY CHANGE IN TURNOVER (c)



SOURCES: European Commission, IHS Markit, Our World in Data and Banco de España.

a Latest observation: February for the output PMI and March for the economic sentiment indicator.
b See Aguilar et al. (2020), "Can news help measure economic sentiment? An application in Covid-19 times", *Working Paper* No 2027, Banco de España. 7-day moving averages. Positive figures indicate a confidence level above the historical average (1997-2019), while negative figures indicate a confidence level below the historical average.
c Index constructed allocating the following values to the quantitative answers of firms: Significant increase = 2; Slight increase = 1; Stability = 0; Slight decrease = –1; Significant decrease = –2.

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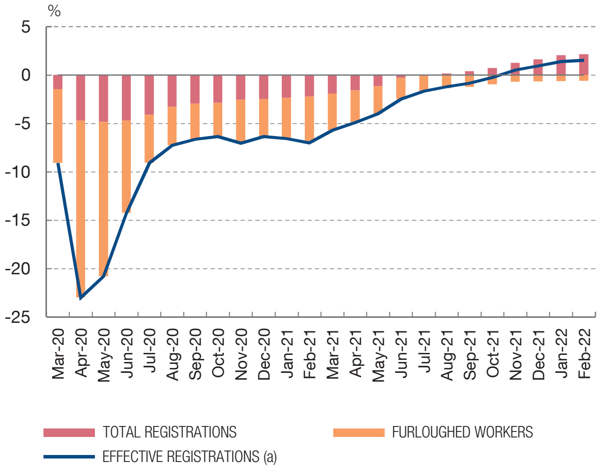
turnover than in 2021 Q4 (see Chart 9.4).[5] Further, during the final weeks of the quarter an unofficial strike in the transport sector caused supply chain disruptions in Spain. Overall, these developments would have curbed the pace of Spanish GDP growth somewhat in 2022 Q1.

5 For more details, see "Encuesta a las empresas españolas sobre la evolución de su actividad: March 2022", Notas Económicas, *Boletín Económico,* 1/2022, Banco de España. (Forthcoming)

Chart 10
EMPLOYMENT CONTINUES TO IMPROVE, ALBEIT AT A SLOWER PACE

Total registrations in the first two months of Q1 lost momentum, despite standing 2.3% above the level observed in February 2020. Meanwhile, the number of furloughed workers continued to decline, albeit at a slower pace than in previous quarters, falling to 118,900. Overall, effective registrations stood 1.7% above their pre-crisis level. These developments in employment, coupled with the relative stability of the labour force participation rate, would lead to a slight decrease in the unemployment rate in Q1 overall.

1 CHANGE IN TOTAL AND EFFECTIVE REGISTRATIONS VS FEBRUARY 2020 (AVERAGE MONTHLY AND SEASONALLY ADJUSTED DATA)



2 TUNEMPLOYMENT RATE AND LABOUR FORCE

SOURCES: Ministerio de Inclusión, Seguridad Social y Migraciones, Spanish Labour Force Survey (INE) and Banco de España.

a Effective registrations are calculated as total registrations less the number of workers on furlough.

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Employment lost momentum slightly over the quarter

In February and, on the forecast available, March, employment growth stood slightly below the level consistent with the historical performance of social security registrations in those months. In addition, although the number of furloughed workers declined again in January and February, the reduction was notably slower than in the preceding months. Specifically, in February the number of furloughed workers stood at 118,900, only slightly down on December 2021 (129,200). In any event, effective social security registrations in February were 1.7% higher than prior to the onset of the pandemic, a wider positive gap than recorded in December 2021 (0.9%; see Chart 10.1). Meanwhile, employment developments in the quarter overall would see the unemployment rate decline again, albeit more moderately than at end-2021, against the backdrop of a slight pick-up in labour-market participation following a drop in the previous quarter (see Chart 10.2).

Amid high uncertainty, GDP growth in Q1 appears to have been underpinned by the growth in consumption and, to a lesser extent, in investment

After rallying slightly in January and February, consumption seems to have slowed following the invasion of Ukraine. Against the backdrop of the improving

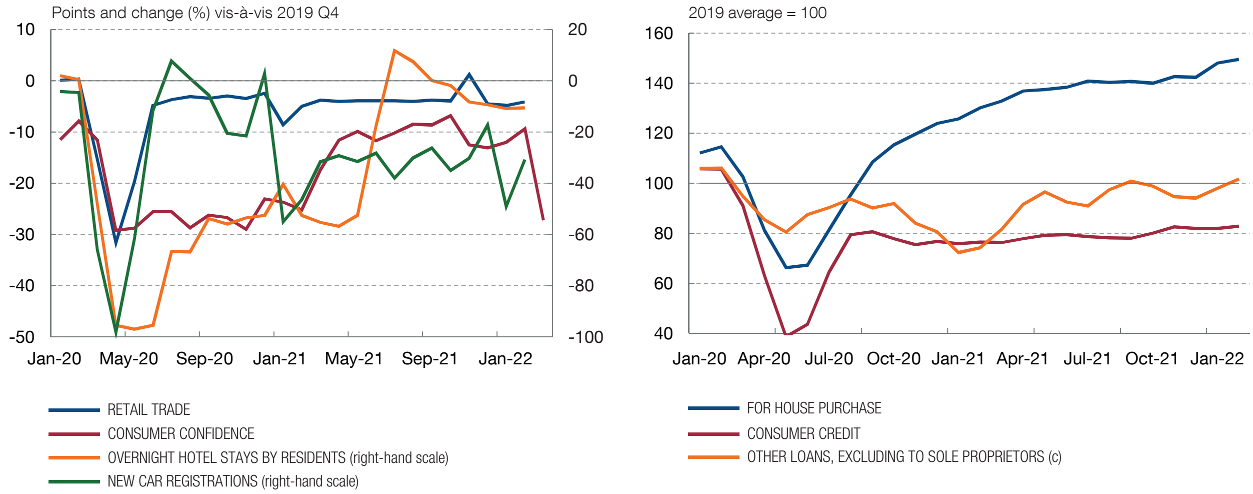
Chart 11

HOUSEHOLD CONSUMPTION RESUMED A RECOVERY PATH FROM JANUARY, BUT THE WAR IN UKRAINE LIKELY HINDERED THE RECOVERY IN THE FINAL STAGES OF THE QUARTER

Having been constrained around the turn of the year by the upturn in COVID-19 infections, household consumption seems to have embarked on a recovery path, consistent with the labour market improvement taking root, which would have fostered an increase in private consumption in the quarter as a whole. That growth, apparently underpinned by increased expenditure on certain services items and by retail sales, may have been affected by the outbreak of the war in Ukraine in the final stretch of the quarter. New consumer lending remains lacklustre, in line with sluggish expenditure on some durable goods and with the significant savings built up by families since the onset of the pandemic.

1 HOUSEHOLD CONSUMPTION-RELATED INDICATORS (a)

2 NEW LENDING TO HOUSEHOLDS (b)
Seasonally adjusted 3-month cumulative flows



SOURCES: European Commission, IHS Markit, INE and Banco de España.

a Seasonally adjusted series. The chart shows the percentage change against 2019 Q4, except for the consumer confidence indicator, for which the series level is shown. For 2022 Q1, the calculation takes into account the data for January and February (the most recent available at the cut-off date for this report), except for the consumer confidence indicator, for which data are available to March.
b The bank financing series include financing granted by credit institutions and specialised lending institutions.
c Includes renegotiations of previous loans.

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epidemiological situation and some easing of global bottlenecks, retail sales, private vehicle registrations and overnight hotel stays recovered in February (see Chart 11.1). However, while the information available remains limited, the Russian invasion of Ukraine can be expected to weigh on household consumption decisions. Among other adverse effects, the conflict has steepened the upturn in inflation, which will reduce households' purchasing power, and increased uncertainty, which will hamper their ability to anticipate their future real income. Indeed, this is corroborated by the slump in consumer confidence in March (see Chart 11.1). In this setting, consumer credit proved somewhat sluggish (see Chart 11.2), in line with households retaining the significant savings built up since the outbreak of the pandemic.

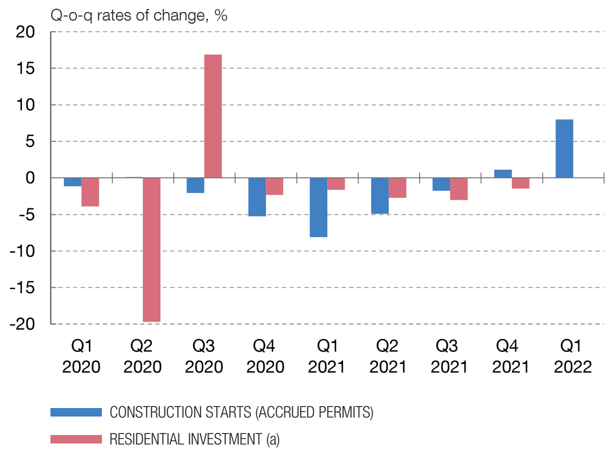
On the construction starts indicator, buoyancy in residential investment appears to have been relatively high in 2022 Q1 (see Chart 12.1). Nevertheless, the pace of growth in this sector's activity seems to have been constrained by several factors of some significance. These mainly include the shortage of labour (related to

Chart 12

HAVING BEEN SLUGGISH IN 2021 Q4, RESIDENTIAL INVESTMENT APPEARS TO HAVE BEEN MORE BUOYANT IN 2022 Q1

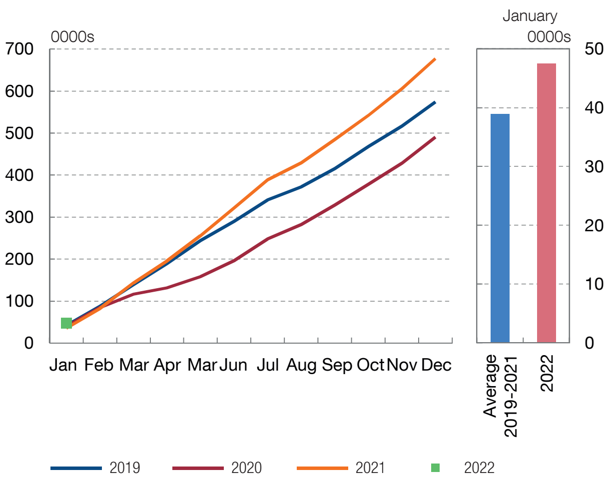
The pace of construction starts points to a slight recovery in residential investment in 2022 Q1, following the sluggishness of previous quarters. However, the buoyancy of this demand component over the coming quarters will be shaped by the supply problems concerning some materials that have impacted the sector over 2021, and which have been reflected in a continuous rise in costs. These developments will be compounded by the economic repercussions of the war in Ukraine. For their part, house purchases and loans for such transactions have tended to stabilise in recent months well above their pre-pandemic levels. Average house prices continued to accelerate in 2021 Q4.

1 CONSTRUCTION STARTS AND RESIDENTIAL INVESTMENT

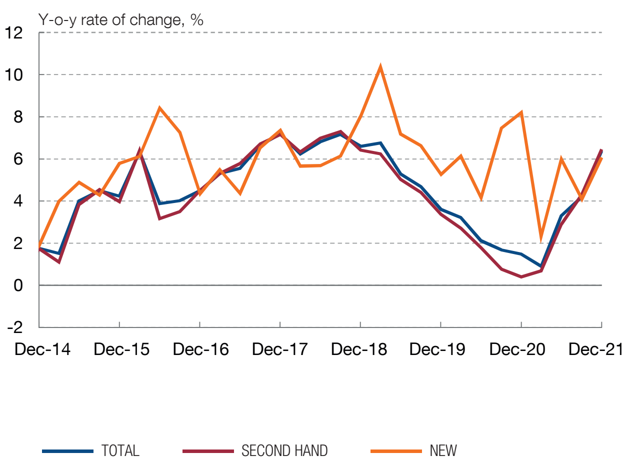


2 LABOUR SHORTAGE AND SUPPLY DIFFICULTIES IN CONSTRUCTION (b)

3 NOTARIAL HOUSING SALES CUMULATIVE IN THE YEAR (c)



4 HOUSE PRICE INDEX



SOURCES: Banco de España, Encuesta del Banco de España sobre la Actividad Empresarial (EBAE), Centro de Información Estadística del Notariado, INE and Ministerio de Transportes, Movilidad y Agenda Urbana.

a Series adjusted for seasonal and calendar effects.
b Percentage of firms reporting each factor as having an adverse or very adverse impact on their production.
c The latest sales figure available is for January 2022.

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the sluggishness of migration flows and the roll-out of the Next Generation EU (NGEU) projects)[6] and certain supply-side difficulties, which had already been observed since the final stretch of 2021 and may be compounded by the conflict in

6 See Box 5, "Migratory flows in Spain during the COVID-19 crisis and their impact on labour supply", Quarterly report on the Spanish economy, *Economic Bulletin* 1/2022, Banco de España.

Ukraine (see Chart 12.2). Added to this is the fall-out from the haulage strike in the latter stages of Q1. For their part, house sales in 2021 H2 exceeded pre-pandemic levels, and this dynamic continued in January 2022 (see Chart 12.3). Average house prices accelerated in 2021 Q4, increasing at a year-on-year rate of 6.4% (see Chart 12.4).

The pace of growth in business investment may have slowed down in Q1 as a whole. Developments in the indicators for this demand component were positive in January and February, but pointed to a slight moderation in the growth rate, having been highly buoyant in 2021 Q4. Specifically, on the qualitative information available to February, industrial confidence performed favourably, as did production expectations and external demand (see Chart 13.1). Despite this, new bank loans to non-financial corporations, particularly those for larger amounts, have accelerated in recent months (see Chart 13.2), although financing raised through debt securities has slowed. In any event, the heightened uncertainty on account of the war in Ukraine has likely already begun to have an adverse impact on business investment decisions. This in a setting in which firms also expect their production costs to rise (see Chart 13.3)[7] and perceive a worsening of supply problems as a factor limiting production (see Chart 13.4).

Foreign trade is expected to have slowed down in Q1, with a more moderate contribution to GDP growth

The worsening global bottlenecks as a result of the war in Ukraine point to a slowdown in the pace of growth of Spanish imports and exports in Q1 as a whole. In January and February, the foreign trade indicators were compatible with a moderate expansion of Spanish trade with the rest of the world insofar as the bottlenecks in global value chains eased (see Chart 14.1). However, while Spain's direct trade exposure to Russia and Ukraine is low,[8] the conflict is expected to have an adverse effect on Spanish exports via global supply chains and the impact on some of its European trade partners that are more exposed to these two countries. In this respect, following the invasion of Ukraine, the ECB has revised its 2022 growth forecasts down for the euro area as a whole, which is Spain's main export market (see Chart 14.2).[9]

Tourism exports appear to have resumed their recovery path over the course of Q1, but future developments will be shaped by the possible repercussions

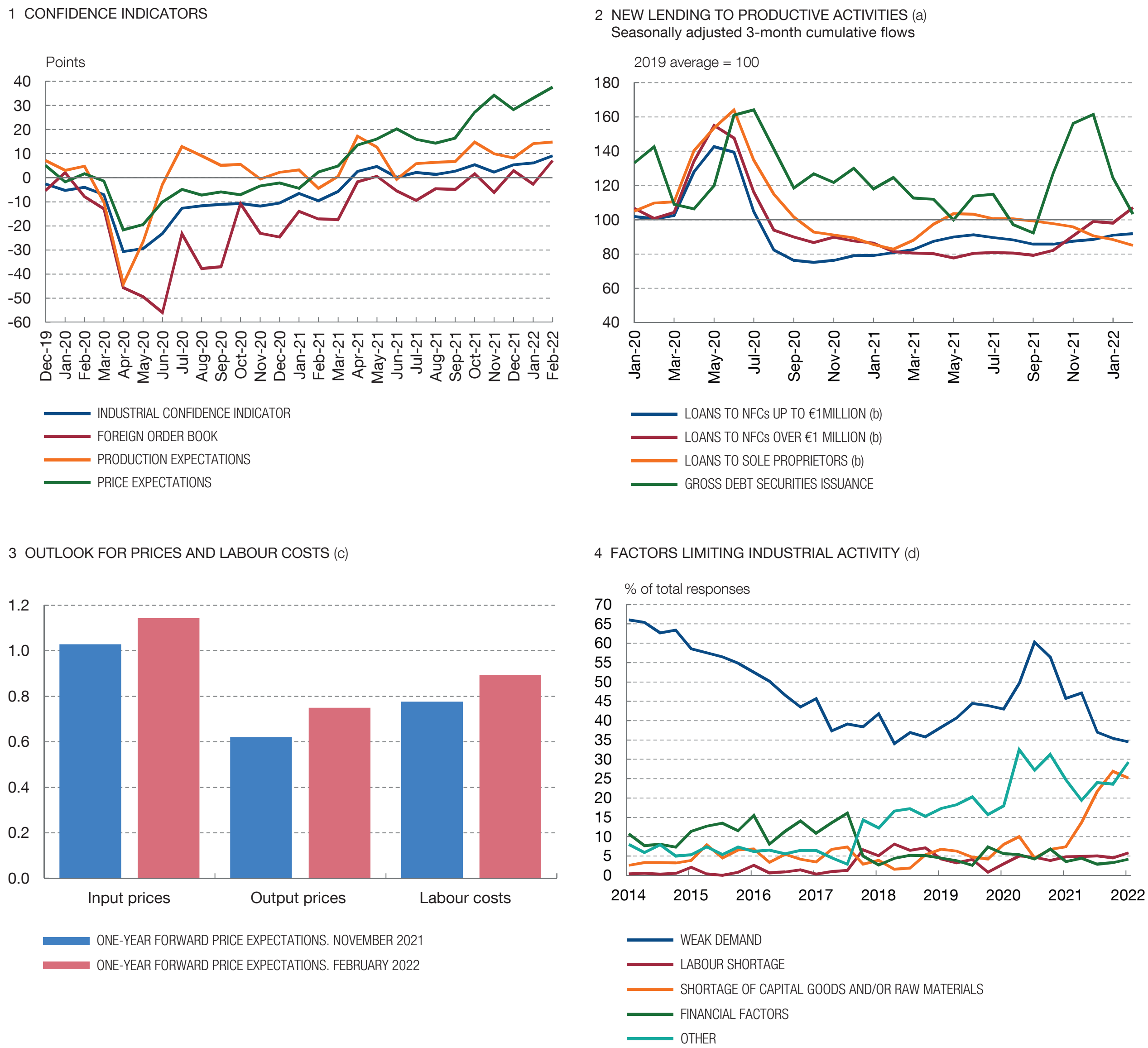
7 For more details, see "Encuesta a las empresas españolas sobre la evolución de su actividad: marzo de 2022", Notas Económicas, *Boletín Económico* 1/2022, Banco de España. (Forthcoming)

8 Goods exports to the two countries accounted for some 0.2% of GDP in 2019, while imports represented around 0.3%. However, Russia's share in energy imports is relatively high (around 6% of the total). Services exports accounted for 0.1% of GDP and mostly comprised tourism receipts (76%).

9 See *ECB staff macroeconomic projections for the euro area,* European Central Bank, March 2022.

Chart 13
BUSINESS INVESTMENT COULD PERFORM SOMEWHAT LESS DYNAMICALLY IN Q1 THAN IN THE PREVIOUS QUARTER

The qualitative information available to February shows industrial confidence and production expectations performing favourably. Also pointing in this direction is new lending to non-financial corporations, the buoyancy in which was mainly explained by loans for larger amounts. However, the war in Ukraine may aggravate the persistence of supply problems and could increase inflationary pressure, hindering growth in business investment.



SOURCES: IHS Markit, Banco de España, Encuesta del Banco de España sobre la Actividad Empresarial (EBAE), Ministerio de Industria, Comercio y Turismo and European Commission.

a The bank financing series include financing granted by credit institutions and specialised lending institutions.
b Includes renegotiations of previous loans.
c Index constructed allocating the following values to the quantitative answers of firms: Significant increase = 2; Slight increase = 1; Stability = 0; Slight decrease = –1; Significant decrease = –2.
d The percentages of the responses stating the indicated factors, together with the response “none” (not shown in the chart), sum to 100%.

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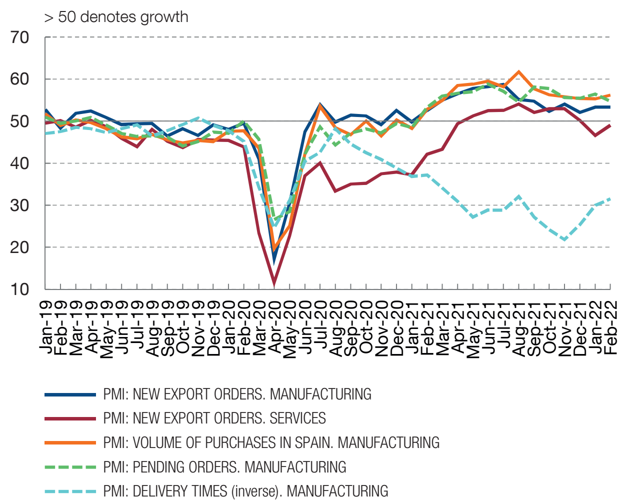
Chart 14

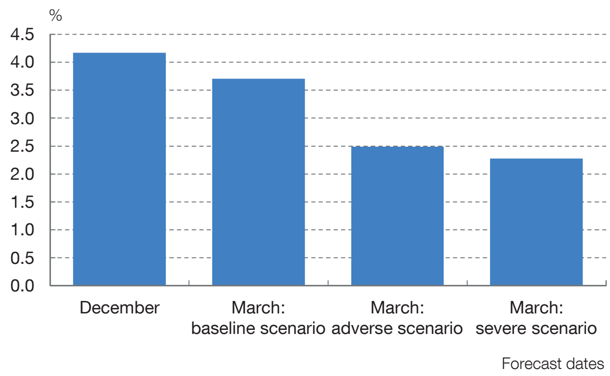
FOREIGN TRADE IS EXPECTED TO SLOW DOWN IN Q1 AS A RESULT OF THE TENSIONS ARISING FROM THE WAR IN UKRAINE

The invasion of Ukraine and the sanctions against Russia have sharply driven up commodity prices and altered global supply chains, weakening the economic recovery worldwide and, particularly, in European economies, Spain's main export markets. However, available foreign tourism indicators have resumed their gradual recovery since February, as the travel restrictions reintroduced in late 2021 to curb the spread of Omicron cases were lifted. However, higher transport prices and lower perceived security by travellers in the face of the new war scenario could negatively affect tourism exports.

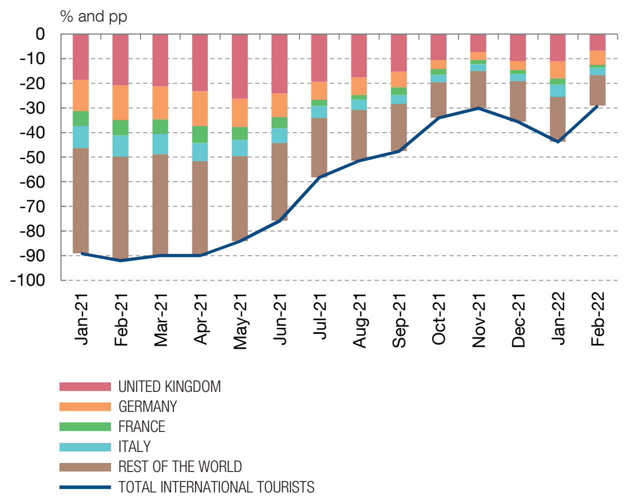
1 PURCHASING MANAGERS' INDICES



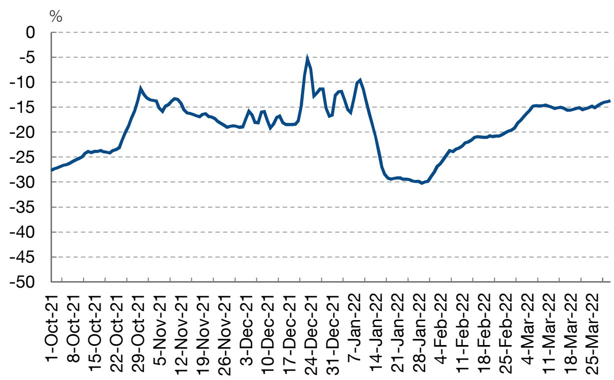
2 EURO AREA GDP GROWTH FORECAST FOR 2022
Annual rates



3 INTERNATIONAL TOURIST ARRIVALS BY AIR
Rates of change vs the same dates in 2019 and contribution by country



4 CHANGES IN AIR TRAFFIC IN SPANISH AIRPORTS
Rates of change vs the same week in 2019; 7-day moving average

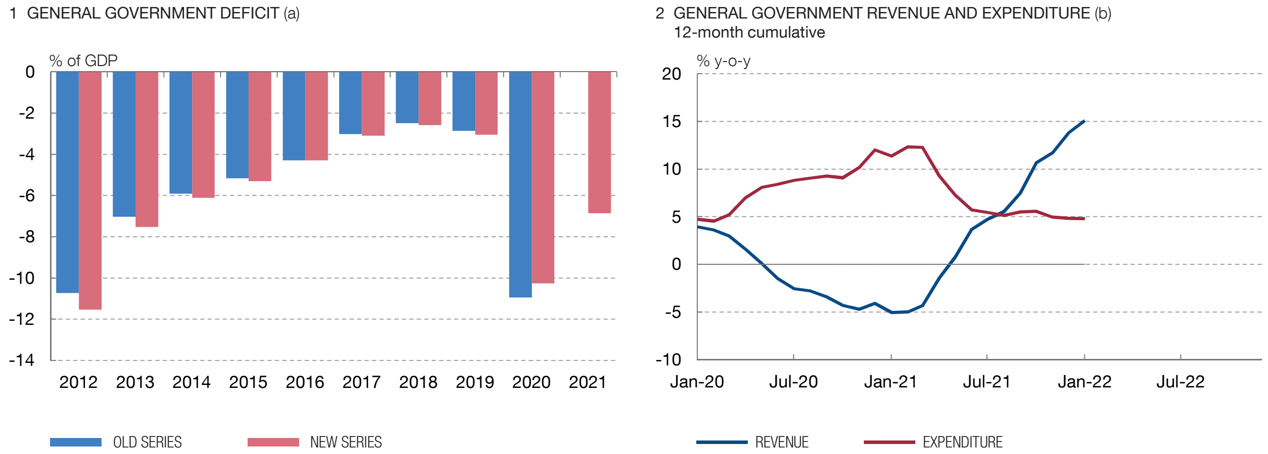


SOURCES: IHS Markit, ECB, Aena and Eurocontrol.

of the conflict in Ukraine. The indicators of tourism flows saw a significant recovery in February, in line with the favourable developments in the epidemiological situation. Specifically, in February, overnight hotel stays by foreigners and passenger arrivals on international flights recovered, reaching 82% and 71%, respectively, of their pre-pandemic level (see Chart 14.3). Meanwhile, developments in the indicator of air passenger transport at Spanish airports appear consistent with the recovery

Chart 15
THE GENERAL GOVERNMENT DEFICIT DECLINED IN 2021

The general government deficit stood at 6.9% of GDP at end-2021, 3.4 pp below the revised 2020 figure. Expenditure slowed notably, mainly as a result of the lower spend on extraordinary Government support measures linked to the COVID-19 crisis. Meanwhile, revenue posted strong momentum, standing above pre-pandemic levels.



SOURCES: Banco de España and IGAE.

a The IGAE has decided to change the criterion adopted in December 2020 and to reclassify Sareb, since its creation in 2012, to the general government sector. This entails a review of the general government debt and deficit series since that date.
b Relating to the general government aggregate, excluding local government and transfers between tiers of government.

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path continuing even into March, after the war broke out (see Chart 14.4). The direct impact of the conflict on tourism flows is limited, as the Russian market accounts for a very small part of Spanish tourism exports (1.6% in 2019). However, looking ahead, the recovery in Spanish tourism may be dampened by increased transport costs and rising inflation eroding household purchasing power in the main source countries.

The sharp deterioration in public finances in 2020 was partially corrected in 2021, with significant growth in government revenue

The general government deficit stood at 6.9% of GDP in 2021, 3.4 pp below the 2020 figure,[10] an improvement associated with both the strong growth in revenue and the slowdown in expenditure (see Chart 15.1). Public revenue rose by 14% year-on-year in 2021 overall, gathering pace towards the end of the year and posting strong momentum also in early 2022. In turn, the slowdown in total public expenditure throughout the year, with year-on-year growth down from 12% in 2020

10 The IGAE has decided to change the criterion adopted in December 2020 and to reclassify Sareb, since its creation in 2012, to the general government sector. This entails a review of the general government debt and deficit series since that date, which has resulted in higher deficits in the early years and a lower deficit in 2020 (10.3% of GDP, compared with the 11.0% notified previously).

to 4.8% in 2021, is explained by the fall in pandemic-related expenditure (see Chart 15.2). For its part, general government debt amounted to 118.4% of GDP at December 2021, down 1.6 pp on 12 months earlier, as a consequence of the strong growth in nominal GDP which more than offset the increase in debt caused by the general government deficit.

The limited information available suggests that the expenditure financed with grants under the NGEU programme in 2021 was much lower than initially forecast by the Government.[11] Specifically, according to the information published by the Spanish National Audit Office (IGAE), the budgetary items recording the take-up of European funds point to actual expenditure being well below the amount initially budgeted (€26.6 billion), although the lack of detailed information makes it difficult to monitor the actual degree of take-up of NGEU funds in 2021. Looking ahead, the volume of expenditure financed out of the NGEU programme can be expected to accelerate significantly in the coming quarters. At 29 March 2022 the calls for applications for funding on the programme's website already amounted to €24 billion. This figure – up €7.8 billion on December – should continue to rise, as the Government has announced a plan of calls for applications for the first half of 2022 amounting to €24.6 billion. Moreover, as part of the structural reforms envisaged in the Recovery, Transformation and Resilience Plan (RTRP), in late 2021 the Government approved a public pension reform[12] which includes, among other measures, the indexation of pensions to the CPI, the repeal of the sustainability factor and a new intergenerational equity mechanism.[13] Overall, these measures will entail an increase in public expenditure, which will have to be covered by new measures on the revenue and/or the expenditure side to guarantee the sustainability of public finances in the medium and long term.

To mitigate the economic and social consequences of the war in Ukraine, on 29 March the Council of Ministers approved the Emergency Response Plan.[14] The Government estimates that the direct cost to the public purse of the measures approved will be €6 billion overall in 2022.[15] The main measures with a direct budgetary impact notably include a State rebate of €0.15 per litre of fuel for drivers (in principle from 1 April to 30 June), an extension to 30 June of the existing energy tax rebates, compensatory measures and direct aid to the transport sector and

11 The programme includes both the Recovery and Resilience Facility (RRF) and REACT-EU.

12 Law 21/2021 of 28 December 2021.

13 This will entail an increase in social security contributions of around 0.2 pp of GDP per year between 2023 and 2032, to fund the increase in expenditure as from 2033. The Law envisages that if this increased revenue is insufficient to finance the expenditure increase arising from the repeal of the sustainability factor, alternative measures still to be defined will be implemented.

14 See RDL 6/2022 (Spanish version only).

15 Not including a contingent liability of €10 billion linked to the new ICO guarantee facility approved as part of the package of measures to meet corporate sector liquidity needs stemming from the temporary surge in energy and fuel costs.

electricity-intensive industries (amounting to €1.4 billion), and the refugee reception programme (with a budget of €1.2 billion).

Prices have continued to accelerate in the early months of the year, mainly driven by the energy component, but also by the increase in underlying inflation

In March, the year-on-year rate of the leading indicator of the Harmonised Index of Consumer Prices (HICP) rose very sharply, to 9.8%, an all-time high in the series.[16] The information available on the breakdown of this growth rate is mainly qualitative. According to the Spanish National Statistics Institute (INE), the increase of 2.2 pp in March compared with February is quite widespread across components, although electricity, heating and vehicle fuel, and food and non-alcoholic beverages stand out. This rise in inflation is mainly attributable to energy prices on the international markets, and possibly to the effects on fresh food prices of the recent haulage strike in Spain. In the absence of data on the underlying inflation indicator of the HICP, the indicator based on the CPI (excluding energy and unprocessed food components from the headline index) rose by 3.4% year-on-year, 0.1 pp more than in February.

The February HICP breakdown recorded very sharp increases in the most volatile components. The contribution of energy to the February inflation rate (7.6%) amounted to 4.8 pp, of which 2.7 pp corresponded to higher electricity prices (see Chart 16.1). Yet the impact of the high wholesale electricity market prices on consumers was partially mitigated by the extension (to end-June 2022) of the lower tax charges and the strengthened social rebate approved by the Government in 2021. Food prices have also accelerated significantly in recent months, contributing 1.4 pp to the February headline inflation rate.

Underlying inflation, i.e. HICP excluding energy and food, has also increased in recent months, primarily because of the pick-up in non-energy industrial goods prices. Specifically, year-on-year underlying inflation stood at 2.7% in February, compared with an average of 1.6% in the previous quarter. This increase was largely attributable to the accelerating price of certain non-energy industrial goods affected by global bottlenecks, such as vehicles, replacement parts and accessories, and furniture and fittings. Also noteworthy is the rise in clothing and footwear prices in January, due, at least in part, to a methodological change made that month.[17] Elsewhere, the recent increase in the growth rate of services prices

16 The HICP was first published in 1997. In CPI terms, the March inflation rate is the highest figure recorded since May 1985.

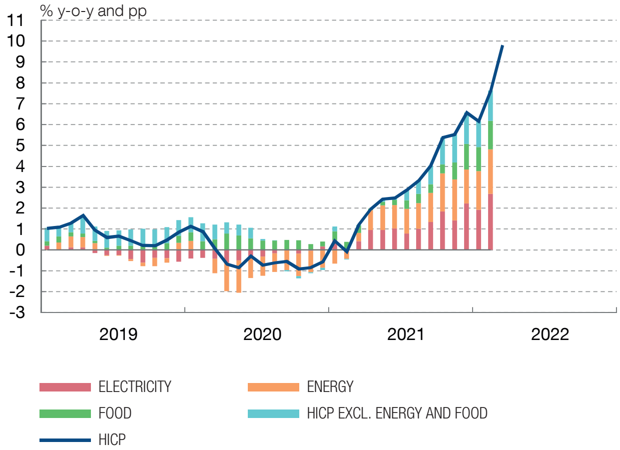
17 In January 2022, the INE published the CPI with the new 2021 base. Notable among the methodological improvements made, due to its impact, is the change in the treatment of clothing prices (see https://www.ine.es/prensa/ipc_base_2021.pdf (Spanish version only)).

Chart 16

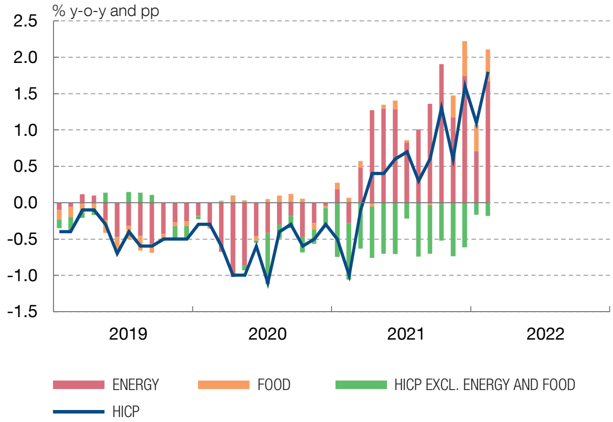
INFLATION HAS SOARED IN RECENT MONTHS

Headline inflation has risen sharply in Spain in recent months, somewhat more markedly than in the euro area as a whole, driven by the energy component of prices, but also by the higher underlying inflation and the food price rally. In particular, energy commodity prices have risen abruptly with the outbreak of the war in Ukraine, which has been a major shock that will lead to a more persistent pick-up in inflation than initially estimated. While inflation may be expected to decline from 2022 Q4, risks surrounding future inflation developments are on the upside and additional inflationary pressures via indirect and second-round effects cannot be ruled out.

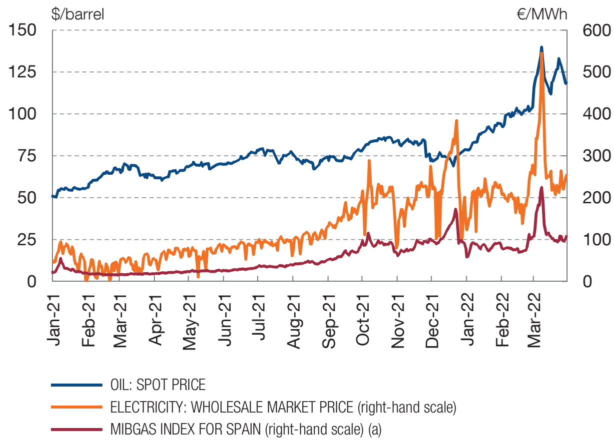
1 INFLATION IN SPAIN: CHANGE AND CONTRIBUTIONS



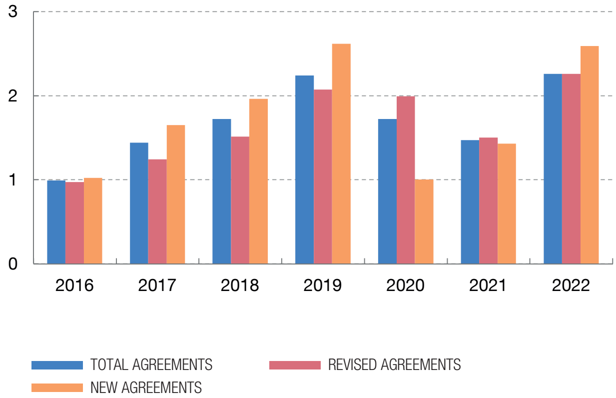
2 CONTRIBUTIONS TO THE INFLATION DIFFERENTIAL BETWEEN SPAIN AND THE EURO AREA



3 ENERGY COMMODITY PRICES



4 NEGOTIATED WAGE INCREASES, BY SIGNATURE DATE (b)



SOURCES: Banco de España, Eurostat, INE, Reuters, Mercado Ibérico del Gas (MIBGAS), OMIE and Ministerio de Trabajo y Economía Social.

a The MIBGAS index is the weighted average price of all the gas trades executed for the same day in all of Spain's trading sessions.
b Data for 2022, up to February.

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can essentially be explained by the acceleration in restaurant and catering prices, suggesting a degree of pass-through of higher energy and food costs.

The recent surge in energy prices is a global phenomenon; accordingly, headline inflation has also quickened in most European economies. Thus, inflation in the euro area as a whole hit 5.9% in February, marking an all-time high since the start of monetary union. In any event, Spain's positive inflation differential vis-à-vis the euro area over this past year stems from a more marked rise in energy[18] and, to a lesser degree, food prices. Meanwhile, the opening months of the year saw the prices of certain non-energy industrial goods affected by global supply chain bottlenecks and of the services hardest hit by the pandemic rise more sharply in Spain than in the euro area. As a result, the negative underlying inflation gap has tended to close (see Chart 16.2).

The war in Ukraine has triggered a sizeable energy commodity price shock. Given Russia's importance on the energy commodity markets, the prices of these inputs have been subject to considerable volatility since the conflict broke out. In particular, oil and natural gas prices rose by 36% and 178%, respectively, between 23 February and 8 March,[19] though such surges were partially corrected in the weeks that followed (see Chart 16.3). Moreover, the prices of other non-energy commodities (such as nickel, aluminium, maize and wheat) also soared in the closing weeks of Q1.

While uncertainty remains very high, the recent shocks are undoubtedly playing a role in ensuring inflation persists longer than initially estimated. Yet prices on the commodity futures markets continue to point to falls in the coming months. Thus, in the absence of fresh shocks, inflation rates are expected to start declining from their current high levels in the last quarter of this year. Moreover, the measures approved by the Government on 29 March,[20] including a rebate on the retail price of fuel, a reduction in energy system-related charges in electricity bills, an extension to the cut in electricity bill-related taxes and a cap on the increase to the regulated rate for small natural gas consumers, are all expected to mitigate, at least in part, the escalation of energy prices.

In any event, the outlook for inflation is subject to upside risks.[21] Given the uncertainty over the intensity and duration of the war, more negative shocks to energy commodity markets, further exacerbating the escalation in prices, cannot be ruled out. Moreover, if the conflict persists over time, rising energy costs may be passed through to a greater extent to consumer prices and, in turn, to wages, in a context in which workers are losing purchasing power. This risk, associated with second-round effects that could potentially trigger inflationary wage-price spirals, is possibly the greatest risk over a longer time span. In this regard, based on data to February, collective bargaining agreements in Spain have seen a moderate rise of 2.3% in the 2022 wage settlement, compared with the 1.5% negotiated for 2021 (see Chart 16.4). Nonetheless, there are some signs of higher inflation impacting the collective bargaining agreements signed most recently, and of a more widespread

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18 In Spain, the contribution of energy prices has been higher, owing to the greater weight of these goods in the country's consumption basket and the repercussions on retail electricity prices of changes in wholesale prices, which are more pronounced than the euro area average.

19 Increases in the price of Brent oil in $/barrel and the MIBGAS natural gas index.

20 See RDL 6/2022.

21 See Box 1 of this Report, "Macroeconomic projections for the Spanish economy (2021-2024)".

use of indexation mechanisms.[22] Either way, based on surveys of professional forecasters and financial market prices, the fact that medium-term inflation expectations remain anchored should mitigate these upside risks, at least partially.

Cut-off date: 31.3.2022.
Publication date: 5.4.2022.

22 See Box 6, “An initial analysis of the impact of inflation on collective bargaining in 2022”, *Economic Bulletin* 1/2022, Banco de España. (Forthcoming)

Chronology of Analytical Articles published in this Economic Bulletin.

RESULTS OF NON-FINANCIAL CORPORATIONS TO 2021 Q4. PRELIMINARY YEAR-END DATA

Álvaro Menéndez and Maristela Mulino

Published on 25 March 2022

Data from the Central Balance Sheet Data Office Quarterly Survey (CBQ) show that corporate earnings and activity increased significantly in 2021. However, the recovery was dampened in Q4 at the firms most exposed to rising energy costs. Against this background, average profitability levels rose significantly compared with 2020, albeit remaining below pre-pandemic values. The overall debt of the sample firms grew in 2021, leading to a slight increase in the average debt-to-assets ratio. Conversely, the average ratio of debt to ordinary earnings, which proxies repayment capacity, fell, helped by the recovery in corporate earnings. The average interest coverage ratio also decreased. This was due to both the lower cost of outstanding debt and higher ordinary earnings. Following the sharp rise in the previous year, liquidity ratios declined at most firms and sectors, against a less uncertain backdrop. The article includes a box analysing recent developments in the degree of financial vulnerability of CBQ firms. It shows that, after the severe downturn in 2020, there was a clear improvement in 2021. However, they remained more financially vulnerable than in 2019.

RECENT DEVELOPMENTS IN LENDING TO NON-FINANCIAL CORPORATIONS: SUPPLY AND DEMAND FACTORS

Roi Barreira, Sergio Mayordomo, Irene Roibás and Manuel Ruiz-García

Published on 15 March 2022

Since summer 2020, resident banks’ lending to non-financial corporations has been sluggish. In the wake of the impact of the health crisis, this has been against a backdrop of weak demand, a relatively steady supply of bank lending and an increase in financing obtained through issuance of debt securities. An analysis drawing on the granular information both of firms and banks confirms that this loss of momentum in bank lending is explained essentially by demand factors. In particular, there are signs that some firms have been using part of the liquidity buffers they built up in 2020, and that large corporations have replaced part of their bank lending with issuance of debt securities. The analysis also suggests that supply factors linked to the amount of capital available to banks are not an important factor in explaining the weakness of lending to non-financial corporations during the period considered.

JANUARY 2022 BANK LENDING SURVEY IN SPAIN

Álvaro Menéndez Pujadas and Maristela Mulino

Published on 1 February 2022

According to the Bank Lending Survey, during 2021 Q4 credit standards tightened slightly in Spain, while remaining virtually unchanged in most segments in the euro area. The terms and conditions applied to new loans did not change significantly in either of the two areas, the sole exception being those applied in Spain to the loans to households for house purchase segment, which eased slightly. Loan applications increased moderately in both Spain and the euro area, across almost all segments, in keeping with the recovery in economic activity.

THE CHALLENGE OF MEASURING DIGITAL PLATFORM WORK

Marina Gómez García and Laura Hospido

Published on 31 January 2022

The article presents an overview of digital platform work in Spain and analyses the challenge of quantifying this work in view of the lack of reliable and comprehensive data available. Digital platforms are technological infrastructures that act as intermediaries, facilitating interaction between two or more persons, for the provision of services through IT applications in exchange for payment. Although it is estimated that platform work accounts for less than 5% of the global workforce, this share is expected to increase.

In 2018, according to the COLLEEM survey, platform work was the main job of 2.6% of the Spanish population over 16. Including occasional platform work, the figure rose to 18.5%, the highest percentage among the 16 European countries included in the survey. Nevertheless, in practice it is difficult to obtain precise figures, since to date official statistics are not designed to include the gig economy.

The article compares the demographic characteristics of platform workers in Spain, according to the COLLEEM survey, and those of self-employed workers and employees according to two Spanish surveys of individuals and households, namely the 2018 Labour Force Survey (Encuesta de Población Activa) and the 2017 Survey of Household Finances (Encuesta Financiera de las Familias). The comparison shows that digital platform workers make up a specific group that is not directly comparable with either employees or the self-employed.

To conclude, a number of ways to obtain a better measure of digital platform work are considered. One option would be to include direct questions on these work arrangements in employment survey questionnaires. Another would be to develop integrated datasets, combining the information from administrative records, which include digital platform activities, with surveys of the workers included in those records. In any event, in order for these administrative records and surveys to reflect platform work accurately, labour legislation needs to clearly define the relationship between those providing the services and the platforms.

THE EU-MERCOSUR TRADE AGREEMENT AND ITS IMPACT ON CO_2 EMISSIONS

Rodolfo Campos, Marta Suárez-Varela and Jacopo Timini
Published on 20 January 2022

In 2019 the European Union (EU) and the Latin American countries that make up the Common Market of the South (Mercosur) reached a political agreement to sign, ratify and implement a trade agreement between the two blocs. This agreement is expected to bring trade and welfare benefits on both sides of the Atlantic. The impact estimated for the EU will be similar to that of other recent agreements, such as that entered into with Japan. However, the EU-Mercosur "agreement in principle" has raised concerns owing to its potential impact on the environment and climate, even though it includes strict provisions in these areas and entails very few changes to the tariff and non-tariff measures adopted for agricultural imports from Mercosur. This article focuses on a specific aspect of the EU-Mercosur agreement's potential environmental impact, namely, the change envisaged in global CO_2 emissions. Despite the uncertainty associated with such estimations, when using a standard general equilibrium model, the increase in CO_2 emissions deriving from this agreement is found to be limited. Moreover, in certain plausible scenarios, application of the very stringent environmental standards provided for in the agreement in principle could even lower emissions in Mercosur countries.

RECENT DEVELOPMENTS IN FINANCING AND BANK LENDING TO THE NON-FINANCIAL PRIVATE SECTOR. 3RD QUARTER OF 2021

Pana Alves, José Cebrián and Eduardo Pérez Asenjo
Published on 21 December 2021

In recent months, financing conditions for non-financial corporations and households have remained very favourable, while demand for credit has lost momentum. In this setting, the flow of new financing raised by these two institutional sectors and their outstanding debt have slowed down. Indeed, the volume of loans granted by deposit institutions to the resident private sector has declined slightly between June and September 2021, with no significant changes in credit quality over the quarter. The sectors of activity most affected by the health crisis have not shown any notable changes in 2021 Q3 in terms of volume and credit quality, although they continue to post the highest cumulative growth in bank debt, non-performing loans and Stage 2 loans since the start of the pandemic. The rise in the volume of credit since the onset of the health crisis has helped to sustain banks' interest income, but has failed to offset the negative price effects of the widespread decline in interest rates.

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ACRONYMS AND ABBREVIATIONS

AIReF	Independent Authority for Fiscal Responsibility
AMCESFI	Spanish macroprudential authority
APP	Asset Purchase Programme
BCBS	Basel Committee on Banking Supervision
BE	Banco de España
BIS	Bank for International Settlements
BLS	Bank Lending Survey
BOP	Balance of Payments
CBA	CBSO Annual Survey
CBI	Integrated CBSO Annual Survey
CBQ	CBSO Quarterly Survey
CBSO	Central Balance Sheet Data Office
CCR	Central Credit Register
CDSs	Credit default swaps
CNE	Spanish National Accounts
CNMV	National Securities Market Commission
COVID-19	Coronavirus disease 2019
CPI	Consumer Price Index
CSPP	Corporate sector purchase programme
DGS	Deposit Guarantee Scheme
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
ECOFIN	Council of the European Communities (Economic and Financial Affairs)
EDP	Excessive Deficit Procedure
EFB	European Fiscal Board
EFF	Spanish Survey of Household Finances
EFSF	European Financial Stability Facility
EMU	Economic and Monetary Union
EONIA	Euro overnight index average
EPA	Official Spanish Labour Force Survey
ESA 2010	European System of National and Regional Accounts
ESCB	European System of Central Banks
ESFS	European System of Financial Supervisors
ESM	European Stability Mechanism
ESRB	European Systemic Risk Board
EU	European Union
EURIBOR	Euro interbank offered rate
EUROSTAT	Statistical Office of the European Communities
FASE	Financial Accounts of the Spanish Economy
FDI	Foreign direct investment
FOMC	Federal Open Market Committee
FSB	Financial Stability Board
GDI	Gross disposable income
GDP	Gross domestic product
GFCF	Gross fixed capital formation
GNP	Gross national product
GOP	Gross operating profit
GVA	Gross value added
HICP	Harmonised Index of Consumer Prices
IASB	International Accounting Standards Board
ICO	Official Credit Institute
IFRSs	International Financial Reporting Standards
IIP	International Investment Position
IMF	International Monetary Fund
INE	National Statistics Institute
LTROs	Longer-term refinancing operations
MFIs	Monetary financial institutions
MREL	Minimum requirement for own funds and eligible liabilities
MROs	Main refinancing operations
MTBDE	Quarterly Macroeconometric Model of the Banco de España
NAFTA	North American Free Trade Agreement
NCBs	National central banks
NFCs	Non-financial corporations
NGEU	Next Generation EU
NPISHs	Non-profit institutions serving households
OECD	Organisation for Economic Co-operation and Development
ONP	Ordinary net profit
OPEC	Organisation of Petroleum Exporting Countries
PEPP	Pandemic Emergency Purchase Programme
PER	Price/earnings ratio
PMI	Purchasing Managers' Index
PPP	Purchasing power parity
QNA	Quarterly National Accounts
SDRs	Special Drawing Rights
SEPA	Single Euro Payments Area
SGP	Stability and Growth Pact
SMEs	Small and medium-sized enterprises
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
TFP	Total factor productivity
TLTROs	Targeted longer-term refinancing operations
ULCs	Unit labour costs
VAT	Value Added Tax
WTO	World Trade Organization

COUNTRIES AND CURRENCIES

In accordance with the protocol order, the EU Member States are listed using the alphabetical order of the country names in the national languages.

BE	Belgium	EUR (euro)
BG	Bulgaria	BGN (Bulgarian lev)
CZ	Czech Republic	CZK (Czech koruna)
DK	Denmark	DKK (Danish krone)
DE	Germany	EUR (euro)
EE	Estonia	EUR (euro)
IE	Ireland	EUR (euro)
GR	Greece	EUR (euro)
ES	Spain	EUR (euro)
FR	France	EUR (euro)
IT	Italy	EUR (euro)
HR	Croatia	HRK (Croatian kuna)
CY	Cyprus	EUR (euro)
LV	Latvia	EUR (euro)
LT	Lithuania	EUR (euro)
LU	Luxembourg	EUR (euro)
HU	Hungary	HUF (Hungarian forint)
MT	Malta	EUR (euro)
NL	Netherlands	EUR (euro)
AT	Austria	EUR (euro)
PL	Poland	PLN (Polish zloty)
PT	Portugal	EUR (euro)
RO	Romania	RON (New Romanian leu)
SI	Slovenia	EUR (euro)
SK	Slovakia	EUR (euro)
FI	Finland	EUR (euro)
SE	Sweden	SEK (Swedish krona)
UK	United Kingdom	GBP (Pound sterling)
JP	Japan	JPY (Japanese yen)
US	United States	USD (US dollar)

CONVENTIONS USED

M1	Notes and coins held by the public + sight deposits.
M2	M1 + deposits redeemable at notice of up to three months + deposits with an agreed maturity of up to two years.
M3	M2 + repos + shares in money market funds and money market instruments + debt securities issued with an agreed maturity of up to two years.
Q1, Q4	Calendar quarters.
H1, H2	Calendar half-years.
bn	Billions (10^9).
m	Millions.
bp	Basis points.
pp	Percentage points.
...	Not available.
—	Nil, non-existence of the event considered or insignificance of changes when expressed as rates of growth.
0.0	Less than half the final digit shown in the series.