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BANCO DE ESPAÑA
Eurosistema

CONTENTS

QUARTERLY REPORT ON THE SPANISH ECONOMY

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1 OVERVIEW

The global economic recovery has continued over recent months. However, the improvement in global activity and trade has lost some steam in the final stretch of the year. Contributing to this have been freshly emerging COVID-19 outbreaks in some regions and the intensification of two phenomena which have become increasingly manifest as the year has unfolded and are largely a consequence of the opening up of economies after the pandemic: the tensions in global supply chains; and the rise in the prices of a broad set of goods used in production processes and which, in some cases, are also part of the consumer basket.

Global productive capacity has encountered difficulties meeting the rise in demand following the phase of greater pandemic-imposed restrictions. The pick-up in demand has given rise to shortages of specific commodities and intermediate goods used in productive processes. A further outcome is the inadequacy of existing international shipping capacity to smoothly cater for the recovery in trade flows. In many cases, this has seen a lengthening of the time needed to meet goods orders.

Moreover, these supply and demand imbalances have given rise to notable inflationary pressures globally. Price increases have been particularly significant in the case of many commodities, particularly certain energy ones. As a result of the rise in prices, households in countries that are importers of these products have seen their purchasing power fall and costs in certain productive processes have climbed notably, thereby tempering the intensity of the recovery.

Output is performing unevenly across geographical areas. A measure of the widely differing degree of recovery in the various economies is given by the gap between the current and pre-crisis level of output. In the United States, this gap already has a positive sign: GDP in 2021 Q3 was 1.4 pp up on the related level in 2019 Q4. But in the euro area, GDP is still slightly below its pre-crisis level. The emerging economies have, on the whole, recouped their pre-pandemic levels. The cumulative growth since late 2019 is considerably lower than it would have been had pre-crisis trend growth held unchanged. Largely, this is because the economic effects of the virus currently remain relatively high in this group of countries (and greater, in any event, than in the advanced economies, owing to lower vaccination roll-out). More recently, moreover, the speed of the recovery is being curbed in some economies by the tightening in monetary policy induced by the increase in inflation.

In many countries' labour markets, signs of some structural changes appear to be emerging. The recovery is prompting the emergence of signs of labour

Table 1
MAIN SPANISH MACROECONOMIC AGGREGATES (a)

		2020				2021			
	2021	Q1	Q2	Q3	Q4	Q1	Q2	Q2	Q4
National Accounts									
Quarter-on-quarter rate of change, unless otherwise indicated									
Gross domestic product	4.5	-5.4	-17.7	16.8	0.2	-0.6	1.1	2.0	1.6
Contribution of domestic demand (b)	4.1	-4.3	-15.2	15.4	-0.1	-0.6	2.1	0.2	1.2
Contribution of net external demand (b)	0.3	-1.1	-2.4	1.4	0.3	0.0	-1.0	1.8	0.3
Year-on-year rate of change									
Employment: hours worked	7.4	-4.6	-25.3	-6.3	-6.1	-2.7	29.5	3.3	4.1
Price indicators									
Harmonised index of consumer prices (HICP)	3.0	0.7	-0.6	-0.6	-0.8	0.5	2.3	3.4	5.6
Harmonised index of consumer prices excluding energy and food	0.5	1.2	0.9	0.1	-0.1	0.1	-0.2	0.7	1.5

SOURCES: INE and Banco de España.

a Information available to 1 December 2021. The shaded figures are Banco de España projections in the baseline scenario.
b Contribution to the quarter-on-quarter rate of change of GDP, in percentage points.

shortages in some productive activities. This might partly reflect changes in the relative demand for different skill sets, determined, for example, by the increased weight of goods, to the detriment of services, in consumer baskets, or by the greater weight of online as opposed to face-to-face sales. Moreover, labour availability is being influenced by the reductions in the labour force experienced in some countries during the pandemic. That is the case, in particular, of the United States, where this trend has subsequently been reversed only partially.

Consumer price inflation rates have risen notably. The main determinant here is the increase in energy prices. Moreover, the negative base effects stemming from the notable slowdown in energy prices and in the prices of other goods and services at the onset of the pandemic are also playing a significant role. Core inflation rates have also risen somewhat, but much more modestly so.

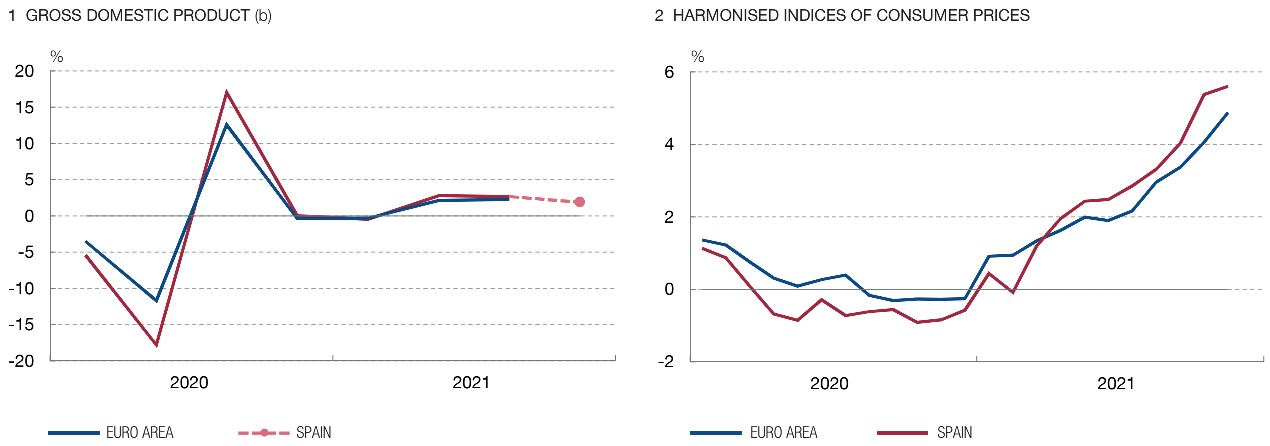
In the euro area, too, supply bottlenecks and the rise in consumer basket prices are adversely affecting economic activity in the final stretch of the year. The latest Eurosystem projections are for GDP to regain greater momentum as from mid-2022, as these obstacles to growth progressively fade.[1] Over the coming year, euro area output is expected to grow by 4.2%, before slowing to 2.9% and 1.6% in 2023 and 2024, respectively. As regards consumer prices, inflationary pressures are proving more acute and persistent than was expected some months back. However, the current projections adhere to the conclusion that the rise in inflation is highly likely to be transitory, meaning that the average growth rate of the HICP would, in the

1 https://www.ecb.europa.eu/pub/projections/html/index.en.html.

Chart 1

THE RECOVERY CONTINUED IN Q4, ALTHOUGH THE PACE OF GDP HAS EASED OWING TO THE PERSISTENCE OF BOTTLENECKS AND HIGHER INFLATION (a)

The pick-up in activity has continued in the autumn, with employment performing favourably. However, the disruption to global production chains and the rise in inflation have tempered the pace of growth. In particular, the increase in the HICP has stepped up, driven by the energy component, although core inflation has also risen.



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.
b The Q3 data are Banco de España projections.

medium term, descend from its current high (4.9% in November, on provisional data) to more moderate levels. Specifically, the estimate for average inflation in 2024 is 1.8%.

In Spain, headway in the vaccination roll-out has enabled the course of the epidemic to trend favourably for most of the autumn. This led to the virtual disappearance of the pandemic restrictions, with an almost full re-opening of services activities. Yet more recently there has been a fresh rise in the incidence of the virus, requiring the incipient reintroduction of some containment measures.

On the latest Banco de España projections,[2] the recovery in the Spanish economy will continue over the next three years. In the final stretch of 2021, the buoyancy of economic activity is expected to ease owing to the squeeze on household and business income induced by higher costs and prices and by the persistence of bottlenecks in some productive processes. It is estimated that the influence of these factors will moderate over the course of the coming year. Thus, as these obstacles are gradually lifted, improved private agent confidence and labour market conditions, the extension of the period of favourable financial conditions and the roll-out of the projects linked to the *Next Generation EU* (NGEU) programme will

2 See Box 1.

boost spending. In 2021, output is, on the latest estimates, expected to grow by 4.5%. In 2022, GDP will accelerate to 5.4%, enabling the pre-crisis level to be resumed towards the start of 2023.

After remaining high in the opening months of 2022, inflation is expected to slow sharply thereafter. Pointing along these lines are the futures markets, which foretell a marked slowdown in energy product prices in the opening months of 2022. The ultimate materialisation of this trajectory, along with the stripping out of the existing positive base effects, would lead to a notable decline in HICP growth rates. In the medium term, consumer price developments will be overshadowed by the core component (i.e. the aggregate excluding energy goods and food). This indicator will post relatively modest growth, once the effects of the bottlenecks wane and a degree of labour market slack takes hold.

The baseline scenario for economic activity in these projections is subject to some downside risks. Firstly, uncertainties include the possibility of a further worsening of the epidemiological situation, of which there are some signs in late 2021. The consequences of the recent emergence of the omicron strain are, at present, enormously uncertain. At the same time, the slow pace of vaccination roll-out in some areas of the world may be conducive to new variants of the virus arising, with characteristics entailing more adverse consequences for public health worldwide.

Also, the persistence of inflationary pressures might be greater than assumed under the baseline scenario. Some possible factors that may ultimately lead to a higher and/or more persistent path of inflation than that considered under this scenario include a prolongation of the period of global supply disruptions and of high energy and other inputs prices, and a greater degree of pass-through of the cost increases to final prices and wage costs. Were there to be material deviations by medium-term inflation expectations above the monetary policy objective, financial conditions might ultimately be affected, with potentially adverse effects on the vulnerability of the most indebted agents and on the availability and cost of new financing flows.

There are, however, some factors that might prompt upward growth bias. The pace of the recovery might quicken were households and firms to decide to earmark a higher-than-anticipated portion of the saving built up during the pandemic to consumer and investment spending. This would also be the case if tourist flows were to converge more quickly than expected under the baseline scenario towards their pre-crisis levels.

A final factor of uncertainty concerns the rate of absorption of the NGEU resources, and the economic impact of the projects and reforms undertaken. The investment projects to be developed under this programme may play a very

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

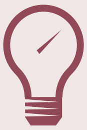
	MAIN RECENT DEVELOPMENTS	SHORT-TERM OUTLOOK	SOURCES OF UNCERTAINTY
ACTIVITY	The global economic recovery slowed down in Q3, held back by persistent global supply chain bottlenecks and inflationary pressures	The pace of growth in global activity may remain steady in 2021 Q4, with the growth outlook in the advanced and emerging economies converging somewhat towards levels slightly lower than anticipated a few months ago	— The course of the pandemic and vaccination programmes — Persistence of the current global value chain bottlenecks — Duration of the current bout of energy price rises and the surge in inflation, and possible indirect and second-round effects — Possible increase in volatility on international financial markets in the event of changes to the economic, public health and monetary policy outlook in the main world economies — Social and geopolitical tension in certain regions
PRICES	Inflation rates have continued to rise globally, driven by the surge in energy prices and persistent supply-side problems	Given that most of the determinants of the recent rise in inflation are predominantly temporary in nature, price increases are expected to ease off over the course of 2022	
OTHER	The central banks of the advanced economies have begun to adjust their monetary policy stance, while many emerging economies have seen substantial hikes in official interest rates	International financial markets are highly influenced by the course of the pandemic and by investors' shifting expectations of monetary policy changes in the main economies	

SOURCE: Banco de España.

important role in transforming the Spanish economy. Yet to maximise their impact on growth and employment will require an appropriate selection of projects and effective application, which must moreover be accompanied by the design and implementation of a wide range of structural reforms.

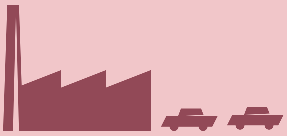
BOX 1

The pace of growth of the Spanish economy is expected to slow in Q4; the GDP growth forecast is revised down for 2021 and 2022 and revised up for 2023



BOX 2

The impact on economic activity of the current surge in energy prices, whose duration is still very uncertain, could be quite persistent and uneven across countries

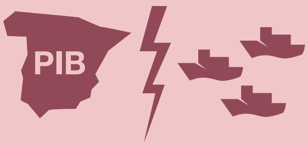


BOX 3

The increase in producer prices in the euro area is essentially explained by demand shocks, although the relative weight of supply shocks has risen recently and is expected to be especially significant in the manufacturing sectors most affected by bottlenecks

BOX 4

Spanish SMEs' perception of their capacity to access financing has continued to improve, although those applying for bank loans reported a slight increase in loan applications rejected and a tightening of some of the applicable terms and conditions



BOX 5

Global supply chain disruptions could result in a significant slowdown in the Spanish GDP growth rate over the final stretch of 2021 and in 2022

BOX 6

Places for some of the vocational training qualifications that offer better job opportunities appear to be in relatively short supply, as the cut-off marks required for admission are very high

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

This box describes the most notable features of the latest update to the Banco de España's macroeconomic projections for the Spanish economy. Compared with the previous projections published on 21 September,[1] the current projections incorporate the new information that has become available since then, including the revised Quarterly National Accounts (QNA) estimates up to 2021 Q2, the preliminary estimates for Q3 and the changes in the technical assumptions underlying the performance of the different variables (see Table A.1).[2]

Since the spring, the headway made in the vaccination process has helped to contain the spread of the virus and, above all, to reduce the number of more severe cases. This has allowed a gradual easing of pandemic containment measures and a progressive return to normal activity, particularly in sectors requiring more social interaction. Thus, after growing by 1.1% between April and June, GDP gained momentum in Q3, growing by 2% quarter-on-quarter, according to the National Statistics Institute's (INE) preliminary estimates. This increase is less marked than anticipated in the baseline scenario of the September projections (2.7%). Coupled with the downward revisions to growth in previous quarters,[3] this has led to a more unfavourable starting point for the current projection exercise than anticipated in September.

The pick-up in activity and employment has continued throughout Q4, drawing on the information available. The continued buoyancy of the job market has enabled effective social security registrations (i.e. social security registrations excluding furloughed workers) to return to pre-pandemic levels in November, in seasonally adjusted terms. This development confirms a key feature of recent economic events, namely that employment is recovering faster and more robustly than GDP.

In any event, available indicators suggest that the pace of economic growth has moderated somewhat in Q4 compared with the previous months. From the productive sector standpoint, the weakness is somewhat more marked in the case of manufacturing, as borne out, for example, by the sectoral PMI, which has continued to reflect a gradual loss of momentum in the output of these sectors since August, albeit still at levels consistent with growth in the sector's value added. The results of the most recent round of the Banco de España Business Activity Survey (EBAE) tend to confirm that turnover and employment at industrial firms have fared somewhat less favourably compared to other sectors.[4]

There are various factors behind this slight moderation in the buoyancy of activity. First, the increase in demand for certain products since the onset of the pandemic has led to a global shortage of supplies of some intermediate goods whose production is relatively inelastic in the short term (e.g. microchips). This shortage, which has mainly affected industrial sectors and is, therefore, consistent with their relatively lower strength, has led to a significant increase in order delivery times and, in some cases, such as in the automotive sector, the need to slow down production. Second, there has been a rise in the price of certain products, such as energy products and some of those experiencing supply shortages owing to the aforementioned supply problems. This is dampening real income growth for firms and households. A third factor has emerged in recent weeks: COVID-19 contagion figures have been on the rise, first in other European countries and then in Spain. This has led to the reintroduction of certain pandemic containment measures. These epidemiological developments probably explain why the recovery of some high-frequency indicators related to tourism, such as air traffic, has slowed down over Q4.

Drawing on the information available, it is estimated that GDP growth in 2021 Q4 could have amounted to 1.6% quarter-on-quarter, leading to average annual growth of 4.5% in 2021. However, there is considerable uncertainty surrounding this estimation, as the quantitative data

1 See Macroeconomic projections for the Spanish economy (2021-2023).

2 The current projections also include information on the institutional sectors' non-financial accounts for 2021 Q2 and take into account the revised annual National Accounts series of previous years. Although this last revision was released by the INE on 16 September, it could not be incorporated in the previous projections, as no quarterly series consistent with these annual series were published at that time (which is the data frequency required to prepare the Banco de España projections).

3 The INE revised the previous quarter-on-quarter GDP growth estimate for 2021 Q2 from 2.8% down to 1.1% and also made smaller changes in the previous quarters.

4 See M. Izquierdo (2021), "Encuesta a las empresas españolas sobre la evolución de su actividad: noviembre de 2021", Notas Económicas, *Boletín Económico,* 4/2021, Banco de España.

available for this period are still limited. Additionally, the information on the execution of projects under the Next Generation EU (NGEU) programme is incomplete, making it difficult to accurately estimate their contribution to growth.

Looking beyond the current quarter, developments in activity in the short term (especially during the first half of 2022) will continue to be influenced by the factors that have constrained GDP growth over the most recent period. In particular, disruptions in global supply chains are proving more persistent than anticipated three months ago. An example is the significant increase between 2020 Q4 and 2021 Q4, according to the latest round of the EBAE, in the share of firms reporting supply difficulties (from 13% to 31% for the sample overall and from 14% to 51% in the case of industry). These disruptions will foreseeably ease throughout the second half of 2022. However, over the year as a whole, they are expected to have a noticeable impact on output growth, higher than in 2021.[5] Additionally, the information available points to inflationary pressures remaining at around current levels until spring, approximately. This factor will therefore continue to squeeze agents' income and, with it, their spending power. Finally, the recent surge in COVID-19 case numbers in Europe somewhat delays the prospect of a return to normal activity, particularly as regards international tourism flows.

These factors will be partially offset by other developments, such as the faster pace of execution of the projects financed under the NGEU programme and the maintenance of favourable financing conditions, which will continue to provide support for agents' spending. Underpinned by these factors, growth in activity will pick up from mid-2022 onwards, as global supply chain disruptions recede, price and cost rises begin to ease and uncertainties linked to epidemiological developments are dispelled. In addition, export market growth will help further boost sales of goods to the rest of the world.

As a result, activity is expected to remain remarkably buoyant between mid-2022 and early 2023, before moderating somewhat thereafter. In annual average terms, GDP growth would stand at 5.4%, 3.9% and 1.8%, respectively, in 2022, 2023 and 2024 (see Chart 1 and Table 1). Under the projected trajectory, economic output would return to pre-pandemic levels in late 2022 or early 2023 (see Chart 2).

Chart 1
REAL GDP. RATE OF CHANGE

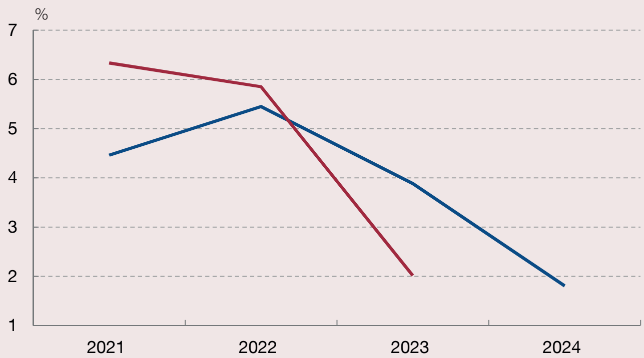
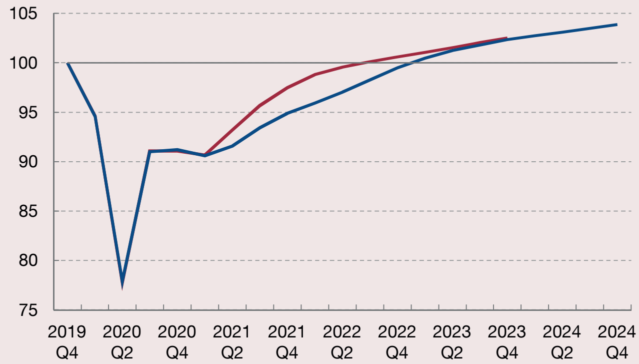


Chart 2
REAL GDP. LEVEL (2019 Q4 = 100)



DECEMBER 2021 SEPTEMBER 2021

SOURCES: Banco de España and INE.

5 Specifically, according to estimates, these disruptions could give rise to a reduction in the Spanish GDP growth rate of between 0.2 pp and 0.3 pp in 2021, and between 0.5 pp and 0.9 pp in 2022. See Box 5 of this Report, "The potential impact of global supply chain bottlenecks on the Spanish economy in coming quarters".

Compared with the September projections, these figures mean that GDP growth in 2021 and 2022 is revised down by 1.9 pp and 0.4 pp, respectively, while in 2023 it is revised up by 1.9 pp.[6] The changes in the first two years of the projection horizon are, above all, the result of the new QNA figures and, to a lesser degree, of the slight worsening of the short-term outlook, higher energy prices and supply bottlenecks, whereas the changes in the technical assumptions compared with those used in the September projections have approximately zero impact. The upward revision in 2023 is explained by the reversal of the effects of the supply disruptions and the different timing of the impact assumed for the execution of NGEU projects.

Developments since the summer of 2020 point to activity recovering more slowly in Spain than in the euro area, despite the pandemic-induced contraction in output also being sharper in our country. Specifically, in Q3 the gap compared with the pre-crisis GDP level was 6.6 pp in Spain and 0.3 pp in the euro area. The less favourable performance of activity compared with our peers' economies is partly due to the greater share of international tourism, a demand component that has been hit hard by the pandemic. However, domestic demand is also displaying less momentum in Spain.

Developments in the main macroeconomic aggregates

From the standpoint of the composition of aggregate demand, the projected recovery will rely mainly on the domestic component. The external sector will also contribute positively to GDP growth in 2021 and, above all, in 2022. However, it will make virtually no contribution to GDP growth in the subsequent two-year period.

Within private domestic demand, household consumption is expected to be highly buoyant over the projection horizon (see Table 2). In 2021 Q3, this demand component displayed a notable lack of momentum, the net result of two developments operating in opposite directions. On the one hand, supply chain disruptions hindered consumers' acquisition of some durables. However, on the other, the ongoing lifting of the restrictions imposed to combat the pandemic prompted a surge in spending on domestic tourism-related services. Over the projection horizon, the sustained recovery in the labour market and the maintenance of favourable financing conditions will continue to underpin household spending.

In the short term, however, certain factors that will tend to dampen private consumption will persist. These include, first, the rising incidence of the pandemic, that may affect the consumption of some services, insofar as it requires containment measures to be reintroduced, and may lead to greater precautionary saving. Second, high inflation may limit spending possibilities, particularly in the case of lower income households that earmark a greater proportion of their income to the consumption of energy goods, whose prices have risen the most. Lastly, global supply chain disruptions will continue to affect the availability of certain consumer goods.

Table 1
MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (a)

Annual rate of change

	GDP				HICP				HICP excluding energy and food				Unemployment rate (% of labour force) (b)			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
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
September 2021	6.3	5.9	2.0	—	2.1	1.7	1.3	—	0.3	1.0	1.4	—	15.1	14.3	13.3	—

SOURCES: Banco de España and INE.
NOTE: Latest QNA figure published: 2021 Q3.

a Projections cut-off date: 28 November 2021.
b Annual average.

6 The differences between the current and the September projections are calculated taking figures that include all their decimal places.

Over the course of 2022 household spending on consumer goods and services will gain greater momentum as the production bottlenecks affecting some goods – such as vehicles – that are preventing demand from being met in full fade away and, at the end of the year, due to the expected steep drop in the inflation rate.

As a result of all the above, the contribution of private consumption to GDP growth in the middle years of the projection horizon will increase significantly (see Chart 3). In any event, high uncertainty surrounds the degree of momentum of this aggregate, insofar as it is difficult to discern what proportion of the sizeable extraordinary savings households have amassed during the pandemic will be earmarked for their consumption decisions.

Among the components of gross capital formation, the momentum of residential investment will be boosted by the continued favourable performance of the labour market, which is bolstering households' future income expectations. In the nearer term, the growth of this aggregate may be limited by the signs of construction materials shortages. Also, the deployment of NGEU funds will give further momentum to residential investment, in light of the allocation to housing rehabilitation, under the Recovery, Transformation and Resilience Plan (RTRP), of a significant proportion of the grants received from the European Recovery and Resilience Facility.

Investment by non-financial corporations will be driven by a series of factors over the projection horizon. Against a background of gradually subsiding uncertainty, these include increased use of installed capacity (which in various economic sectors already exceeds pre-health crisis levels) as a result of the recovery in final demand.

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

Annual rate of change in volume terms and % of GDP

		December 2021 projections				September 2021 projections		
	2020	2021	2022	2023	2024	2021	2022	2023
GDP	-10.8	4.5	5.4	3.9	1.8	6.3	5.9	2.0
Private consumption	-12.0	4.3	5.1	5.2	2.2	9.6	4.3	1.3
Government consumption	3.3	3.0	-0.2	0.7	1.5	2.2	0.2	0.9
Gross fixed capital formation	-9.5	3.9	7.8	3.7	2.1	5.8	10.5	3.0
Exports of goods and services	-20.1	11.9	9.1	4.6	3.1	8.7	11.1	4.5
Imports of goods and services	-15.2	11.3	6.5	4.8	3.7	11.5	7.5	3.3
Domestic demand (contribution to growth)	-8.6	4.2	4.4	3.9	1.9	7.0	4.7	1.6
Net external demand (contribution to growth)	-2.2	0.3	1.0	0.0	-0.1	-0.7	1.2	0.4
Nominal GDP	-9.8	6.1	8.1	5.6	3.6	7.6	7.7	3.6
GDP deflator	1.1	1.6	2.5	1.7	1.7	1.2	1.8	1.6
HICP	-0.3	3.0	3.7	1.2	1.5	2.1	1.7	1.3
HICP excluding energy and food	0.5	0.5	1.8	1.4	1.6	0.3	1.0	1.4
Employment (hours)	-10.6	7.4	3.8	2.8	1.3	8.1	5.6	1.7
Unemployment rate (% of labour force). Annual average	15.5	15.0	14.2	12.9	12.4	15.1	14.3	13.3
Net lending (+)/net borrowing (-) of the nation (% of GDP)	1.2	1.2	2.9	2.7	2.1	0.1	3.1	3.4
General government net lending (+)/net borrowing (-) (% of GDP)	-11.0	-7.5	-4.8	-4.0	-3.4	-7.6	-4.3	-3.5
General government debt (% of GDP)	120.0	120.4	115.7	113.7	113.5	117.9	114.3	114.3

SOURCES: Banco de España and INE.
NOTE: Latest QNA figure published: 2021 Q3.

a Projections cut-off date: 28 November 2021.

Furthermore, business investment will be boosted by the momentum from the NGEU projects and by digitalisation needs, which have been heightened by the pandemic. In the short term, the momentum currently projected for this aggregate is somewhat smaller than three months ago. This is due to two reasons. First, the later implementation of the NGEU projects, which means that some of the momentum contributed by this factor to investment growth is pushed back to mid-2022. And second, this aggregate being held back in the short term by persisting supply chain disruptions and the adverse impact of higher production costs on profit margins.

With regard to trade with the rest of the world, in the short term the growth of exports of goods will tend to be checked by the supply problems facing some inputs, which are leading to delayed deliveries of orders for final goods, and by the signs of a slowdown in activity in our peers' economies. Exports will gain momentum throughout 2022 as these factors unwind. They will also be driven by a lower exchange rate than the 2021 average. The continuation of the recovery in tourism flows will be hampered in the short term by the recent resurgence of the pandemic in Europe, which has prompted the reintroduction of some restrictions on international travel.

The current projections still envisage a marked recovery in exports of travel services over the projection horizon, after it was estimated that in 2021 they would barely reach 35% of the 2019 level. In any event, in annual average terms, this aggregate will recover somewhat later than was expected in the September projections (see Chart 4).

Imports of goods and services will also follow an upward path in the three-year period from 2022 to 2024, in keeping with the recovery in final demand. As in the case of exports, growth of purchases of goods abroad will be constrained, in the short term, by the global supply problems. Consequently, in net terms, these difficulties will have a low impact on the contribution of foreign trade in goods to GDP growth.

In the labour market, the upward path of the number of hours worked and the employed will continue over the projection horizon. After reaching 7.4% in 2021, the growth rate of hours worked will gradually moderate over the subsequent three-year period to stand at 1.3% in 2024. In step with the recovery in employment, the unemployment rate will continue to fall over the projection horizon. It will be below the pre-pandemic level as of 2022 H2.

The general government budget balance will improve over the projection horizon. The reduction in the budget deficit as a percentage of GDP will owe to the temporary nature of some of the discretionary measures adopted to contend

Chart 3
GDP GROWTH AND CONTRIBUTIONS OF THE MAIN COMPONENTS

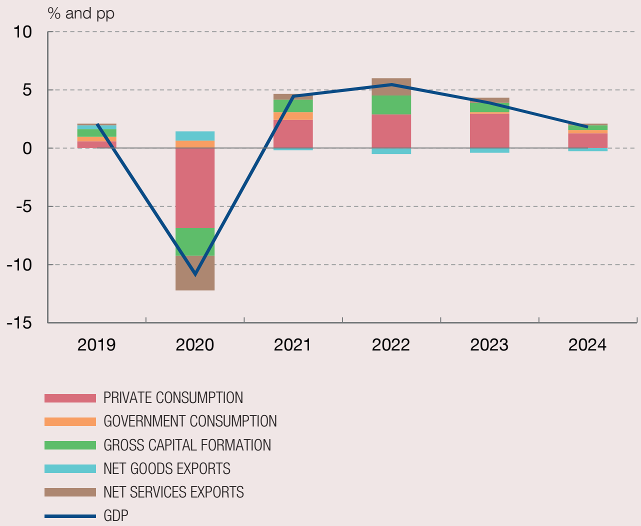
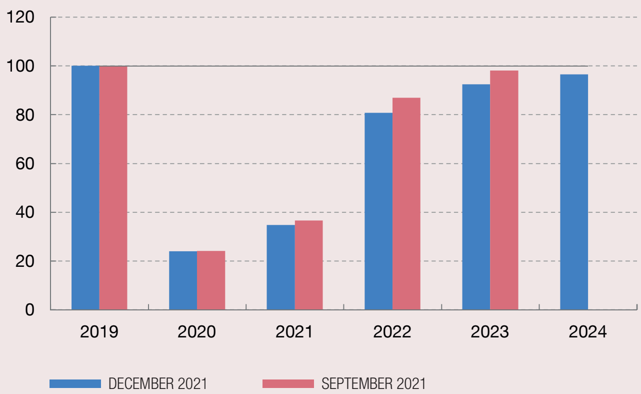


Chart 4
TOURISM EXPORTS (2019 = 100)



SOURCES: Banco de España and INE.

with the fallout from the pandemic and to the cyclical improvement. Nevertheless, the public finances shortfall is set to remain at very high levels at the end of the projection horizon. Based on the paths projected for the general government budget balance and for nominal GDP, the government debt-to-GDP ratio will fall moderately over the envisaged horizon, remaining at very high levels in 2024 (113.5% of GDP, around 6 pp below the 2020 level).

Prices and costs

As indicated above, one of the constraints on the growth of demand in the final stretch of the year has been the marked rise in inflation rates, which has proven to be much stronger than anticipated in the recent projections of the Banco de España and other institutions. Annual consumer price inflation, measured via the HICP, has risen from -0.6% in December 2020 to 5.5% in November 2021, its highest level since September 1992. This upsurge has mainly been attributable to the sharp rise in energy prices (and, especially, electricity prices) and, to a lesser degree, higher services prices.[7]

In any event, the factors that have had the most influence on inflation throughout 2021 are, in principle, predominantly transitory. The first of these factors, statistical in nature, is related to the sharp slowdown in the prices of some components of the consumption basket between the onset of the pandemic and the summer of 2020. This deceleration caused substantial base effects that have notably pushed up headline inflation since spring 2021 (see the blue bars in Chart 5).[8]

Second, the recovery in demand following the gradual easing of the restrictions imposed in response to the pandemic has prompted price levels in numerous HICP headings (especially in some services) to normalise

Chart 5
CONTRIBUTIONS TO HICP GROWTH. BASE AND CURRENT EFFECTS (a)

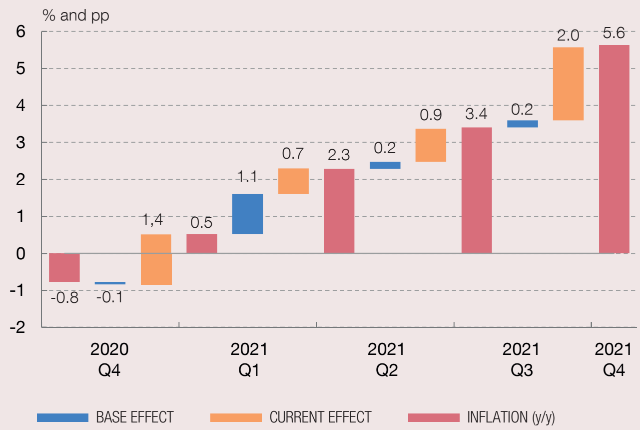
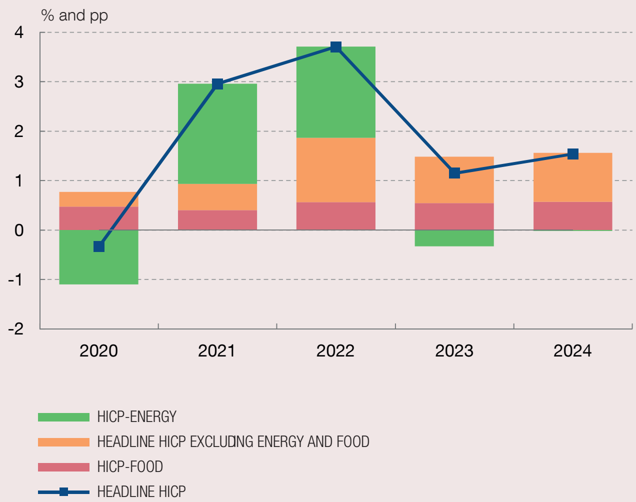


Chart 6
CONTRIBUTIONS TO HICP GROWTH BY COMPONENT



SOURCES: Banco de España and INE.

a The current effect is the difference between the change in the quarter-on-quarter rate in one quarter and the average quarter-on-quarter change in that quarter between 2014 and 2018. The base effect is the current effect of the previous year, changing the sign.

7 In any event, a more granular breakdown shows that the rise has been sharper among non-energy industrial goods. For a detailed analysis of recent inflation developments in Spain and in the euro area overall, see P. Hernández de Cos (2021), "Inflation: recent developments, outlook and monetary policy implications", XII Encuentro Sector Financiero Expansión-KPMG.

8 Base effect is the name given to the purely statistical effect that arises because the year-on-year rate of change in a given month is affected by the month-on-month changes, be they abnormally low or high, observed in the same month a year earlier. For a more detailed explanation of base effects, see "The recent rise in inflation in Spain and the short-term outlook", Box 3, «Quarterly report on the Spanish economy», *Economic Bulletin* 12/2016, Banco de España.

somewhat. A third factor that has played an important role in developments in headline inflation in Spain has been the increase in electricity prices, which in turn is mainly explained by the sharp surge in natural gas prices on the European markets.

Lastly, as indicated above, the gradual reopening of economies following the lifting of the initial stringent restrictions imposed in response to the pandemic has not led to an immediate normalisation of activity. On the contrary, the emergence of production bottlenecks, combined with the higher cost of global maritime transport,[9] has sharply driven up the prices of numerous commodities and intermediate goods. This increase in production costs has been most pronounced in the sectors that have faced greater supply difficulties.[10]

Firms have started to pass through these cost increases to the selling prices of their products. This could continue in the coming months, since the historical evidence suggests that production price increases are passed through to the HICP (albeit, in any event, only very partially) with a certain time lag.

Over the course of 2022, the factors that have fuelled the increase in inflation throughout 2021 are expected to be dispelled. First, the pandemic-related positive base effects will gradually ease in the coming months, disappearing completely as from spring 2022. Second, by mid-2022 the production chain disruption is expected to start to gradually ease; if confirmed, this will help correct the growth in intermediate production prices. Lastly, based on electricity prices on the futures markets, a considerable portion of the increase in wholesale electricity market prices should be expected to reverse from spring 2022.

In this setting, the year-on-year rate of change of headline HICP will peak between 2021 Q4 and 2022 Q1 and will then gradually fall back. Nevertheless, in terms of annual average rates, the HICP is expected to accelerate from 3% in 2021 to 3.7% in 2022 (see Chart 6). As a result of the disappearance of the temporary effects mentioned above, the annual rate will fall sharply in 2023 (to 1.2%). This will be followed by a minor increase, to 1.5%, in 2024, as a result of the performance of the non-energy components. Underlying inflation will peak several months later than headline inflation, and will then decline between late 2022 and early 2023 as the bottlenecks disappear. Over the last two years of the projection horizon, the gradual decrease in cyclical slack will give rise to a moderate but sustained increase in the underlying inflation rate, to reach an average of 1.6% in 2024.

Compared with the September projections exercise, the increase in the starting point, combined with the higher growth expected in energy prices, results in an upward revision of our inflation forecasts for 2021 and 2022. The inflation forecasts for 2023 remain virtually unchanged. The underlying inflation forecasts have also been revised up, albeit to a lesser extent.

Sources of uncertainty surrounding the baseline scenario

The macroeconomic outlook remains subject to a high level of uncertainty. First, the projections assume that the impact of the pandemic on economic activity will continue to fade in the coming quarters, before eventually disappearing. However, in view of the recent pick-up in the incidence of the virus (despite the major progress made in the vaccination campaign) and the emergence of the Omicron variant, other more adverse epidemiological scenarios – linked to a potential spread of more infectious and, in the worst case scenario, vaccine-resistant variants of the virus – that would require the reimposition of more stringent containment measures cannot be ruled out. In principle, the impact of these measures on activity will be more moderate than in the initial stages of the health crisis, in a setting in which economies' adaptation to the pandemic has improved with each successive wave.

A series of additional sources of uncertainty, already present in the previous projection exercises, also remain. These include the doubts surrounding the degree of persistence of the current increase in inflation and

9 The surge in global demand gave rise to increased demand for goods transport. At the same time, the pandemic containment measures created shipping disruptions. See Attinasi et al. (2021), "The semiconductor shortage and its implication for euro area trade, production and prices", Box 6, *Economic Bulletin,* Issue 4/2021, ECB.

10 See M. Izquierdo (2021), "Encuesta a las empresas españolas sobre la evolución de su actividad: noviembre de 2021", Notas Económicas, *Boletín Económico,* 4/2021, Banco de España.

production bottlenecks, the use that consumers may make of the savings accumulated since the start of the pandemic, the speed of the recovery in foreign tourism, the rate of execution of the NGEU programme (and the characteristics of the projects funded by it) and the possible scarring effects of the crisis on the business sector.

As indicated above, the baseline scenario assumes that the current uptick in energy and many intermediate goods prices will be transitory. But the longer this episode of higher prices and costs continues, the greater the likelihood that it will filter through more generally to final prices, and to wage demands, generating more persistent inflationary patterns. Thus, first, if geopolitical tensions were to intensify, gas prices could come under renewed pressure in Europe. Second, although the pass-through to final prices of the higher cost of some inputs has been limited so far, it could become more intense if the recent supply problems were to persist.

The pass-through of increases in inflation to wage demands is the starting point of what are generally known as second-round effects, whereby increases in wage costs and prices feed through to each other. The assumption under the baseline scenario that this pass-through will be limited is based on two factors. First, the multi-year nature of collective bargaining, which in practice means that changes in inflation and, in general, in economic conditions at a given point in time have a limited capacity to immediately affect the outcome of collective bargaining processes, since collective agreements are renegotiated on average every two or three years. And second, the low proportion of collective agreements that include indexation clauses, which link wage increases to inflation. In addition, in the short term, the degree of slack still in the economy will foreseeably be a further source of containment of wage increase demands, at least in the sectors that are lagging behind in terms of recovery.

So far, the assumption that there will be a limited pass-through of the increase in inflation to wages is being confirmed in practice, although the available information to November still essentially reflects the wage settlements agreed in months when inflation rates were lower.[11] The possibility that the current increases in prices and intermediate costs will prove to be more persistent and will give rise to a greater pass-through to labour costs cannot be ruled out.

The projections assume that households will use only part of their large stock of savings accumulated during the crisis to consume. This assumption is based on the fact that the bulk of these savings are concentrated among high income households (with a lower marginal propensity to consume) and that most of the expenditure that did not materialise during the pandemic (on services such as dining out and leisure) owing to the restrictions in place cannot be easily deferred. Nevertheless, despite these mitigating factors, the possibility that the savings accumulated during the crisis may be spent on consumer goods and services in a higher proportion than that considered in the baseline scenario cannot be ruled out.

It is also possible that, should a definitive solution to the health crisis emerge, tourist flows from the rest of the world may recover more rapidly. Or on the downside, that the pandemic could lead to more lasting changes in business travel that would stall the recovery, although this effect would be limited, given that tourism exports of this kind account for a low share of the total.

A further factor of uncertainty is associated with the multiplier effect on activity of the NGEU projects and with their distribution over time (which has a significant impact on the GDP growth profile).

Lastly, high uncertainty also remains as to the scale of the long-lasting scarring that COVID-19 may have left in terms of structural unemployment and destruction of the productive system. So far, the perceived effectiveness of the policies deployed to prevent these effects underpins the assumption made in these projections that, on aggregate, the scarring effect will be limited. Some signs of deterioration of firms' solvency have been detected, concentrated essentially in the sectors most affected by the pandemic, such as some deterioration of credit quality in some bank loan portfolios and an increase in the number of firms subject to insolvency proceedings. However, by contrast, the latest data reflect a moderation of these trends.

11 Specifically, to November, the average increase agreed for 2021 was 1.5%, 0.3 pp lower than that agreed for 2020. However, the latest collective agreements signed reflect an increase from 1.1% in 2020 to 1.5% in 2021.

ANNEX 1
Assumptions underlying the projections

The construction of projections is based on the fulfilment of 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 Spain's export markets and competitors' prices in domestic currencies, based on information up to 25 November, were taken from the Eurosystem staff macroeconomic projections for the euro area, December 2021. 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 10 working days prior to the cut-off date for each year's projections (in this case, 28 November). In the specific case of exchange rates, the spot market rate is used. For the other variables, the values observed in the futures markets for each point in time of the projection horizon are considered.

In comparison with the September projections, some notable changes to the assumptions used for the baseline scenario have been made. First, the projected evolution for export markets in 2021 and 2022 is now somewhat less favourable than had been anticipated three months ago, with growth rates revised downwards by around 1 pp in both years. In contrast, higher growth is now expected in 2023 (1.7 pp). These revisions in terms of annual averages reflect less positive developments in the most recent period than had been anticipated three months ago. Meanwhile, the outlook for the period running from mid-2022 to mid-2023 is somewhat more encouraging, and has barely changed in the second half of this past year.

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

Annual rate of change, unless otherwise indicated

		December 2021 projections				Difference between the current projections and those at September 2021 (b)		
	2020	2021	2022	2023	2024	2021	2022	2023
Spain's export markets (c)	-10.7	8.3	5.3	5.5	3.2	-0.9	-1.1	1.7
Oil price in dollars/barrel (level)	41.5	71.8	77.5	72.3	69.4	3.0	8.4	7.0
Monetary and financial conditions								
Dollar/euro exchange rate (level)	1.14	1.18	1.13	1.13	1.13	-0.01	-0.05	-0.05
Nominal effective exchange rate against non-euro area (d) (2000 = 100)	117.8	120.7	116.7	116.7	116.7	-0.8	-4.1	-4.1
Short-term interest rates (3-month EURIBOR) (e)	-0.4	-0.5	-0.5	-0.2	0.0	0.0	0.0	0.2
Long-term interest rates (10-year Spanish government bond yield) (e)	0.4	0.4	0.6	0.8	1.1	0.0	0.1	0.1

SOURCES: Banco de España and ECB.

a Cut-off date for assumptions: 25 November 2021 for Spain's export markets and 28 November 2021 for all other variables. Figures expressed as levels are annual averages; figures expressed as rates are calculated on the basis of the related annual averages.
b The differences are in rates for export markets, levels for oil prices and the dollar/euro exchange rate, percentages for the nominal effective exchange rate and percentage points for interest rates.
c The assumptions regarding the behaviour of Spain's export markets presented in the table are obtained from the *December 2021 ECB staff macroeconomic projections for the euro area.*
d A positive percentage change in the nominal effective exchange rate denotes an appreciation of the euro.
e For the projection period, the figures in the table are technical assumptions, prepared following the Eurosystem's methodology. These assumptions are based on futures market prices or on proxies thereof and should not be interpreted as a Eurosystem prediction as to the course of these variables.

Second, oil prices are now higher than anticipated in September. On average, after reaching $72 this year, the price of a barrel of crude oil is expected to stand at $77.5 in 2022 before falling to $72.3 in 2023 (representing upward revisions of 12% and 11%, respectively, with respect to the assumption used in September). In 2024, it is expected to stand at $69.4. Meanwhile, the euro exchange rate has depreciated in the last three months on the spot markets (by around 5% both against the dollar and in nominal effective terms).

The other changes to the external assumptions used in September are more modest and, consequently, have a smaller impact on the projections. In particular, the yields on 10-year bonds traded on sovereign debt markets prior to the cut-off date for these projections are similar to those in September for the projection horizon overall. Specifically, this variable is expected to stand, on average, at 0.4%, 0.6%, 0.8% and 1.1% in 2021, 2022, 2023 and 2024, respectively. Moreover, the slightly upward path projected by the financial markets for short-term interest rates is now somewhat steeper than three months ago. Specifically, the 3-month EURIBOR is expected to increase from -0.5% in 2021 to -0.2% in 2023, before rising to 0% in 2024.

Also, explicit assumptions on electricity prices have been used, since the scale of their recent increase has implications of some significance for the macroeconomic outlook. Specifically, the assumptions prepared have taken into consideration prices on the futures wholesale markets until end-2022. However, since information on such market prices for 2023 and 2024 is in short supply, a relatively neutral assumption has been used (as in September), based on month-on-month price increases equal to the average observed in pre-pandemic years.

On the fiscal policy front, the main new developments with respect to September come from the draft 2022 State Budget, currently before the Senate, and the 2022 draft budgetary plan, sent to Brussels in October.

In particular, the State Budget includes provision for a compensatory pension payment, to be calculated based on the positive difference between the average inflation for the twelve-month period running from December 2020 through November 2021 and the 0.9% increase approved at the start of the year. This payment would come on top of the 2022 increase under the new mechanism envisaged in the Law guaranteeing the purchasing power of pensions (currently before Parliament), which provides that pensions will increase annually in line with the average inflation rate for the twelve-month period ending in November of the preceding year. According to the inflation figures available up to November, the 2021 compensation will account for an additional amount of 1.6% and a spending increase of 0.2 pp of GDP, payable in 2022 but impacting on the National Accounts in 2021.

The projections for this year also include the latest available budget outturn information published by the National Audit Office. Worth noting in this regard is the notable increase in revenue (and, in particular, in tax take), leading to an upward revision of their estimated growth for the year.

Overall, the updated information on revenue and expenditure yields a slightly lower general government budget deficit in 2021 than was expected in September. In addition, the assumption regarding the impact of NGEU expenditure for REACT-EU on the budget balance for this year has changed. According to the latest information available, the impact will ultimately be zero.[12] This represents an improvement of 0.2 pp in the 2021 general government balance. Conversely, the downward revision to nominal GDP forecast for this year raises the budget deficit as a percentage of GDP by 0.1 pp.

The increases envisaged in the Stage Budget (2% to the public sector wage bill and 3% to minimum pensions[13]) have been included for 2022. On the revenue side, the changes have little relevance in quantitative terms. In any event, it is assumed that a large part of the exceptional rise in the revenue-to-GDP ratio recorded in 2021 will be reversed in 2022 and 2023.

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12 The information available in September suggested that the portion of NGEU corresponding to the REACT-EU programme would be accounted for in the same way as EU structural funds, which, while not affecting the long-term deficit, do have an impact in specific years, owing to the lag between the recognition of expenditure and revenue. This was the assumption made in September, in line with the Independent Authority for Fiscal Responsibility and the information from regional governments. However, the National Audit Office has recently announced that the criteria to be applied to REACT-EU will be the same as that for NGEU overall. The relevant revenue and expenditure will therefore be booked in such a way as to have no impact on the National Accounts deficit in any year, as per the Eurostat guidelines.

13 As opposed to the 2.5% general increase to pensions, based on average inflation up to November 2021, as noted above.

Meanwhile, in terms of the projects to be financed using NGEU funds, expenditure in 2021, 2022 and 2023 has been revised downwards somewhat and pushed back to 2024. Given the scarcity (at this point in time) of official figures on the implementation of such projects, information on the calls for applications arranged, as detailed on the Recovery, Transformation and Resilience Plan (RTRP) website, has been taken into account, together with certain assumptions made regarding the implementation schedule. Based on current assumptions, NGEU is expected to have a 1.6 pp impact on the estimated GDP growth rate for 2022 (0.3 pp in 2021).

For the other variables and years, the projections are based on the standard technical assumptions. Thus, items subject to greater discretionality (such as procurement) are expected to evolve in line with the growth potential of the Spanish economy. Government investment and the capital transfers paid are essentially determined by the assumptions made with respect to NGEU, while government revenue, pension expenditure, unemployment benefits and interest payments will be shaped by the usual determinants.[14]

In light of these assumptions and forecasts for the fiscal variables, and given the output gap estimated in a manner consistent with the other macroeconomic projections, the fiscal policy stance, measured as the change in the primary structural balance, net of European funds,[15] is expected to be expansionary in 2021 and 2022 (1.1 pp of GDP for the two years overall), before becoming contractionary in 2023 and, in particular, in 2024, as a result of lower NGEU-financed expenditure.

14 Specifically, it is assumed that government revenue will grow in line with tax bases, which mainly depend on the macroeconomic context. Nonetheless, a correction of the exceptional rise in the 2021 ratio of revenue-to-GDP has been included for 2022 and 2023. Expenditure on pensions in 2023 and 2024 is determined by demographic trends and the planned indexation of pensions to the CPI, unemployment benefits mainly depend on how unemployment behaves and interest payments reflect government debt levels and interest rates.

15 While the European NGEU funds do not affect the deficit in accounting terms, they do impact the fiscal policy stance, since they entail a rise in public expenditure, albeit not resulting from taxes collected from resident agents. Consequently, to correctly measure the fiscal policy stance, the change in the primary structural balance must be adjusted for this effect by subtracting the change in the net balance of funds from the European Union.

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 (cont'd)

Figure 1
SUMMARY OF THE MACROECONOMIC PROJECTIONS FOR THE SPANISH ECONOMY (2021-2024)

	2021	2022	2023	2024
GDP	4.5% ⬇ 1.9 pp	5.4% ⬇ 0.4 pp	3.9% ⬆ 1.9 pp	1.8%
Inflation	3% ⬆ 0.8 pp	3.7% ⬆ 1.9 pp	1.2% ⬇ 0.1 pp	1.5%

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

— Downward surprises in the economic growth figures for Q2 and Q3

— On the latest available indicators, in Q4 to date activity has been less buoyant

— Bottlenecks and higher energy prices persisting longer than expected

— Delays in the implementation of the NGEU projects

MAIN SOURCES OF UNCERTAINTY

— The course of the pandemic after its resurgence in recent weeks

— Persistence of the current global supply chain disruptions and potential spread beyond manufacturing

— Duration of the current episode of strong inflationary pressures, the possibility of second-round effects and direct/indirect impacts on activity

— Execution of the NGEU programme and the path of the recovery in household consumption and in international tourism flows

SOURCE: Banco de España.

Box 2

AN ANALYSIS OF THE GLOBAL ECONOMIC IMPACT OF THE RECENT INCREASE IN ENERGY COMMODITY PRICES

Irma Alonso and Marta Suárez-Varela

This early-release box was published on 14 December

Energy commodity prices have surged over the course of 2021. For instance, prices of natural gas have risen by 340%, coal by 80% and oil by 50% (see Chart 1). The sharp upturn in these prices appears partly attributable to demand-side factors, mainly stemming from the strong recovery in global economic activity since 2020 H2 thanks to the gradual easing of the pandemic containment measures and the vaccine roll-out.

However, various supply-side factors also appear to have contributed to the recent rise in energy commodity prices. Cases in point are the natural gas supply disruptions that have taken place in recent months (for technical and geopolitical reasons), lower coal production in China (both on environmental grounds and owing to pandemic containment measures), and the diminished supply-side capacity to respond to upturns in demand for oil and natural gas owing to the progressive reduction in investment in their extraction during recent years (see Chart 2).[1]

Looking ahead to the coming quarters, futures market prices for the main energy commodities show a clear downward trend (see Chart 1). This would essentially reflect prospects of some normalisation in their supply and demand conditions, which, in turn, would be consistent with the eminently temporary nature of many of the factors described above. In any event, those prospects are subject to enormous uncertainty, as borne out by the fact that these futures prices have been repeatedly revised upwards since the start of the year.

Against this background, this box illustrates how a bout of higher energy commodity prices can influence global economic activity and inflation, and how such impacts may be affected by the persistence of the shock. This is done using the NiGEM, a quarterly macroeconomic model that serves to simulate the impact of various shocks on the main world economies, paying due regard to the deep asymmetries and interdependencies between them.[2]

Charts 3 to 8 show the impact on GDP and consumer price inflation in the world's main economic regions that would result from a 10% increase in the price of oil, natural gas and coal when these shocks last for one year (shown as bars) or three years (shown as dots). Although these

Chart 1
COMMODITY AND FUTURES PRICES

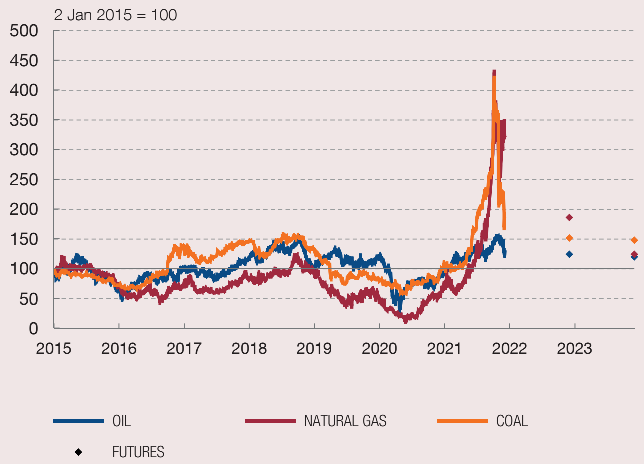
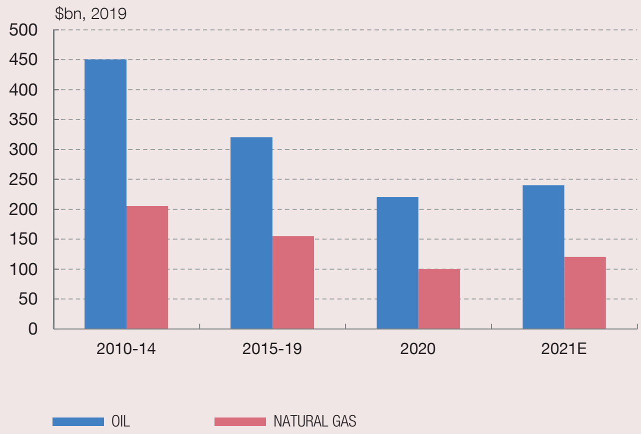


Chart 2
INVESTMENT IN EXTRACTION OF OIL AND NATURAL GAS



SOURCES: International Energy Agency and Thomson Reuters.

1 For further details on the relative contribution made by supply and demand-side factors in recent changes in euro area prices and industrial production, see I. Alonso, I. Kataryniuk and J. Martínez-Martín (2021), "The impact of supply and demand shocks on recent economic developments and prices", Box 3, "Quarterly Report on the Spanish Economy", *Economic Bulletin,* 4/2021, Banco de España.

2 The documentation for the model can be found at https://nimodel.niesr.ac.uk/.

Chart 3
IMPACT ON GDP OF AN INCREASE IN THE PRICE OF OIL:
1-YEAR SHOCK VS 3-YEAR SHOCK

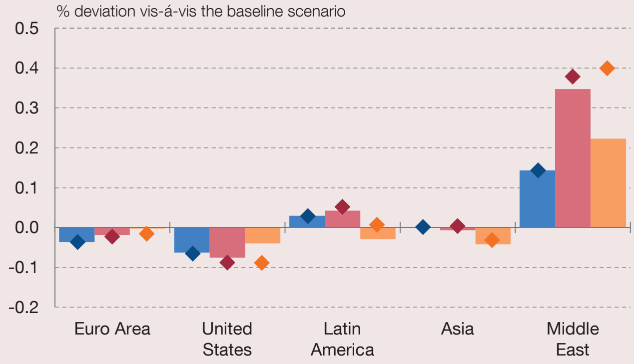


Chart 4
IMPACT ON INFLATION OF AN INCREASE IN THE PRICE OF OIL:
1-YEAR SHOCK VS 3-YEAR SHOCK

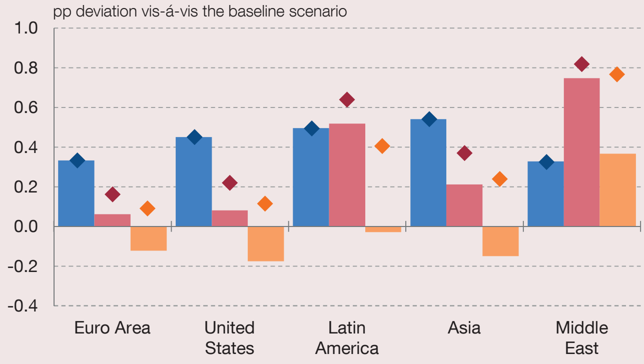


Chart 5
IMPACT ON GDP OF AN INCREASE IN THE PRICE OF NATURAL GAS:
1-YEAR SHOCK VS 3-YEAR SHOCK

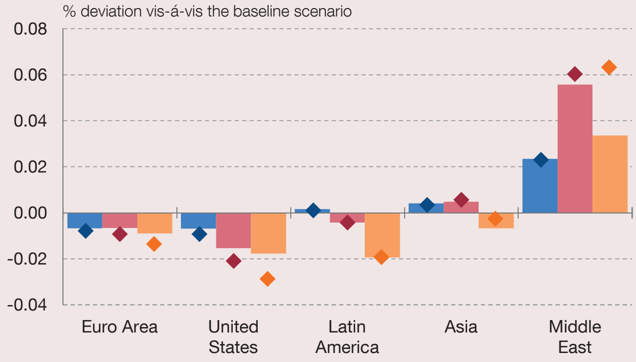


Chart 6
IMPACT ON INFLATION OF AN INCREASE IN THE PRICE OF NATURAL GAS:
1-YEAR SHOCK VS 3-YEAR SHOCK

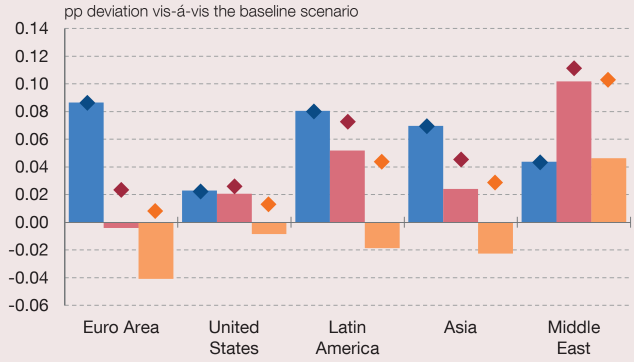


Chart 7
IMPACT ON GDP OF AN INCREASE IN THE PRICE OF COAL:
1-YEAR SHOCK VS 3-YEAR SHOCK

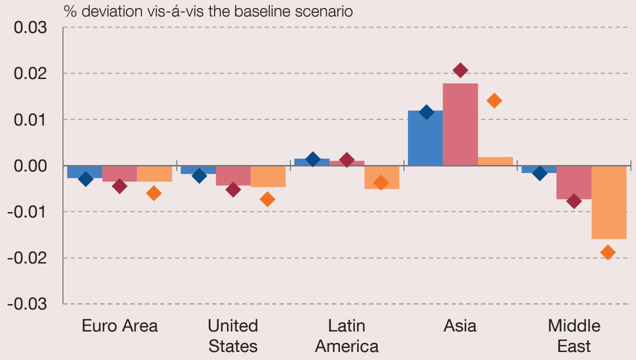
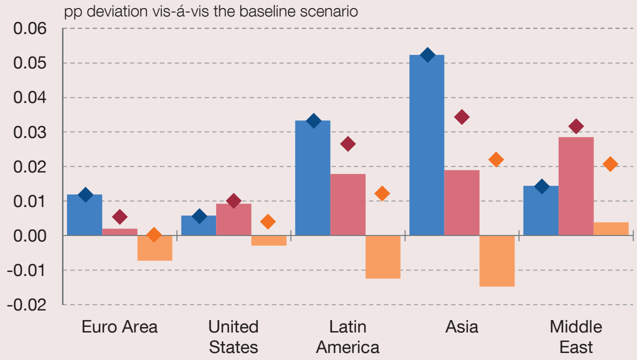


Chart 8
IMPACT ON INFLATION OF AN INCREASE IN THE PRICE OF COAL:
1-YEAR SHOCK VS 3-YEAR SHOCK



YEAR 1 YEAR 2 YEAR 3 3-YEAR SHOCK

SOURCES: Simulations using the NiGEM model under the assumption that monetary policy remains exogenous and that agents' expectations are rational.

results should be approached with due caution in quantitative terms,[3] from a qualitative standpoint three main conclusions may be drawn.

First of all, the impact of rising energy commodity prices on the GDP of the world's main economies varies considerably. Thus, given that these shocks entail a redistribution of income from the countries importing such commodities to those that are net exporters, regions such as the Middle East (in the case of oil and natural gas) or certain Asian countries (in the case of coal) may find themselves considerably better off, in terms of their overall level of activity, thanks to the rise in prices. Meanwhile, these shocks have a recessionary effect in the importing economies (such as the euro area), the more so in the case of an increase in oil prices, since this input accounts for a larger relative share of their energy mix than natural gas or coal.

Second, the impact of the shocks analysed on global inflation is clearly inflationary in the short term. Indeed, in line with the simulations conducted, the rise in oil, natural gas and coal prices is likely to be passed through to consumer goods prices thanks to the higher cost of doing business and the potential second-round effects on wages.[4]

The scale of this pass-through depends on a broad range of factors.[5] Thus, for example, a price shock affecting such commodities tends to be more inflationary over the projection horizon in economies that, as net exporters of such inputs, also experience an expansionary effect on activity.[6] Similarly, an increase in the price of a particular commodity tends to be more inflationary in economies in which this input accounts for a greater relative share of the energy mix. This factor would explain, for instance, why the inflationary impact of rising coal prices in the majority of the world's main economies (which depend little on this commodity for their energy) is far smaller than that of a comparable shock to the price of oil or gas.

Third, even where a rise in energy commodity prices is merely transitory (e.g. over one year), the impact on GDP and inflation is relatively long-lasting. Moreover, this impact tends to be more pronounced and enduring the longer the shock persists (e.g. over three years). This outcome can essentially be explained by the fact that, by distorting the cost of doing business for companies and the disposable income of households at the moment of impact, such shocks also condition the future consumption and investment of these agents, and their impact on overall economic activity may therefore be felt beyond the duration of the shock itself.

3 This is because, for example, the model captures the energy mix of the different countries assessed in stylised form only, the shocks are not calibrated to the magnitude of the energy commodity price upturns that have actually taken place in recent quarters, and monetary policy is considered exogenous in the simulations.

4 Such rises may also be passed through in other ways. For instance, a rise in the price of natural gas also exerts a degree of upward pressure on the price of electricity on Europe's wholesale markets, given their current marginal pricing model. Nonetheless, the extent to which this upward pressure on electricity prices is passed through to consumers is not the same for all economies, thanks in large part to the cross-border differences in retail pricing.

5 Alongside the factors mentioned in the text, the cross-border differences in how energy commodities are taxed also help explain why inflation in certain economies is more affected by the rising cost of such inputs than in other regions.

6 By way of example, while the inflationary effect in a year in which oil prices increase is similar in the Middle East (a net exporter of this input) and the euro area (a net importer), the rise in inflation is significantly higher in the Middle East over the following two years.

Box 3

THE IMPACT OF SUPPLY AND DEMAND SHOCKS ON RECENT ECONOMIC DEVELOPMENTS AND PRICES

Irma Alonso, Iván Kataryniuk and Jaime Martínez-Martín

This early-release box was published on 1 December

Throughout 2021 there has been a notable rise in global inflation. It has prompted a growing debate on its determinants, its persistence looking ahead and its implications for economic activity as a whole. Foremost among the drivers behind this inflation increase are various supply and demand shocks.

On one hand, once the phase in which the COVID-19 pandemic had peaked globally – in both health and economic terms – was behind us, the gradual easing of the virus-containment measures and the headway in the vaccination roll-out contributed to a very sharp recovery in demand as from the second half of 2020, which is estimated to have exerted upward pressure on both prices and output. Thus, for instance, the swift reactivation of global trade following the lockdowns in early 2020 in many of the major economies has led to shipping bottlenecks, resulting in significant increases in transport costs and in some commodities prices.

On the other, from the supply side, there has been some disruption in recent quarters to global supply chains.[1] These have particularly affected the cost and availability of specific intermediate goods, such as semiconductors,[2] which are pivotal to the production of a wide range of final end products. The immediate consequence of these problems has been a considerable lengthening of suppliers' delivery times (see Chart 1) and a rise in manufacturing and import prices. Such increases are also feeding through, albeit still only partially, to consumer prices (see Chart 2, for the euro area). Rising energy commodities prices, exerting notable upward pressure on the prices of some of the most energy-intensive sectors, have also contributed to these dynamics.

The aim of this box is to provide an initial quantitative assessment of the different relative roles these supply and demand factors have played in the recent path of euro area prices and industrial production. To this end, we estimate a Bayesian structural vector autoregression model (SVAR), which exploits monthly information available on the producer price index (PPI) for the manufacturing industry and on the industrial production index (IPI).[3] To identify the nature of the different types of shocks that influence the course of these variables during the period under analysis (from 1995 to September 2021),

Chart 1
MANUFACTURING PMI: SUPPLIERS' DELIVERY TIMES

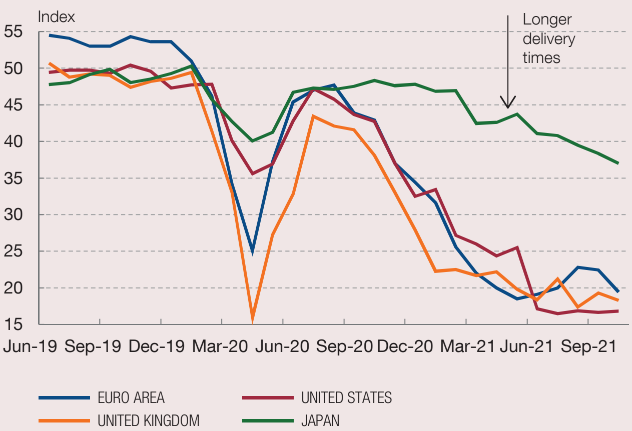
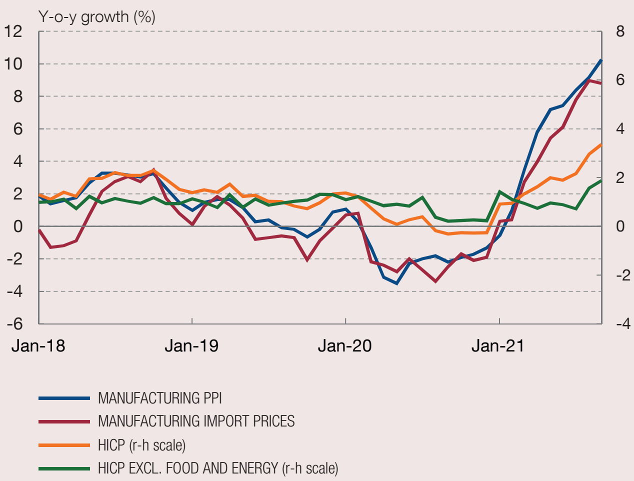


Chart 2
PRODUCER PRICES, IMPORT PRICES AND CONSUMER PRICES IN THE EURO AREA



SOURCES: IHS Markit and Eurostat.

1 See, for example, D. Rees and P. Rungcharoenkitkul (2021), "Bottlenecks: causes and macroeconomic implications", BIS Bulletin No. 48, BIS.

2 For a detailed analysis of bottlenecks at the sectoral level for Spain and the euro area, see I. Kataryniuk, A. del Río and C. Sánchez Carretero (2021), "Euro area manufacturing bottlenecks", Box 3, "Quarterly Report on the Spanish Economy", *Economic Bulletin,* 3/2021, Banco de España.

3 The SVAR model is estimated in log differences with three-month lags, according to estimated information criteria. For further details on a similar version of the model, see M. Dossche and J. Martínez-Martín (2018), "Understanding the slowdown in growth in 2018", *Economic Bulletin,* 8/2018, ECB.

Box 3

THE IMPACT OF SUPPLY AND DEMAND SHOCKS ON RECENT ECONOMIC DEVELOPMENTS AND PRICES (cont'd)

Chart 3
CONTRIBUTION OF SUPPLY AND DEMAND TO THE MANUFACTURING IPI IN THE EURO AREA (a)

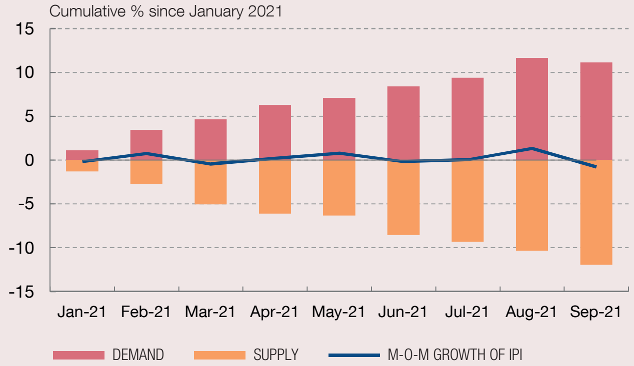


Chart 4
CONTRIBUTION OF SUPPLY AND DEMAND TO THE MANUFACTURING PPI IN THE EURO AREA (a)

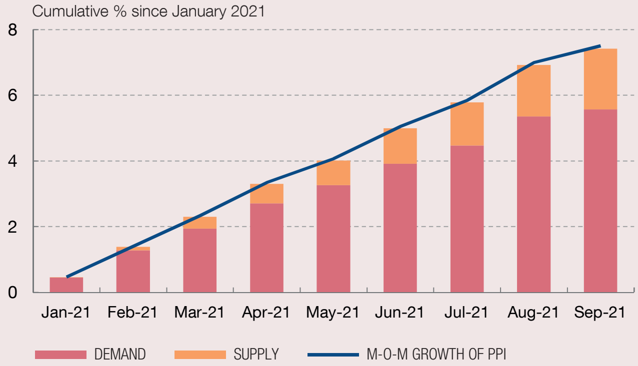


Chart 5
CONTRIBUTION OF SUPPLY AND DEMAND TO THE MANUFACTURING IPI IN THE EURO AREA, BY SECTOR (a) (b)

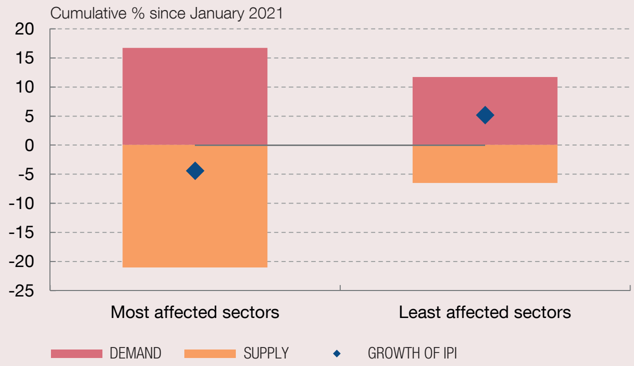


Chart 6
CONTRIBUTION OF SUPPLY AND DEMAND TO THE MANUFACTURING PPI IN THE EURO AREA, BY SECTOR (a) (b)

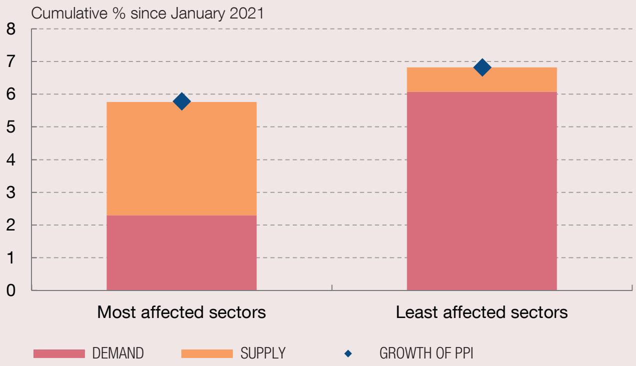


Chart 7
RESPONSE OF PRODUCER PRICES IN THE EURO AREA TO A POSITIVE DEMAND SHOCK (c)

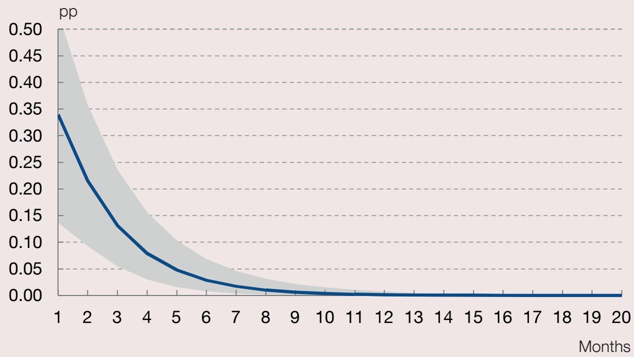
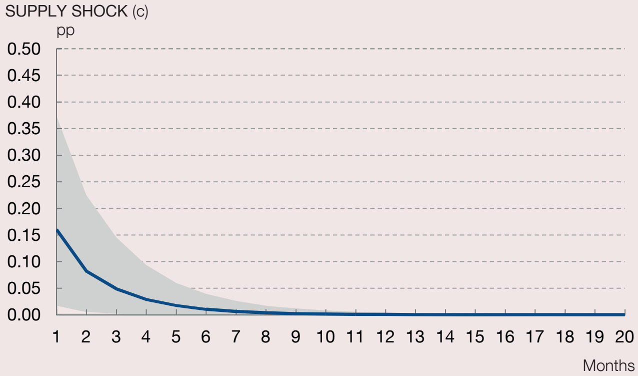


Chart 8
RESPONSE OF PRODUCER PRICES IN THE EURO AREA TO A NEGATIVE SUPPLY SHOCK (c)



95% CREDIBILITY INTERVAL   MEDIAN

SOURCES: Eurostat and Banco de España calculations.

a Banco de España estimates based on a monthly SVAR model in log differences of manufacturing IPI and PPI. IPI and PPI growth is depicted in these charts without constant.

b The most affected sectors are those where at least 50% of firms reported material and/or equipment shortages, according to the quarterly information from the October 2021 European Commission surveys.

c Banco de España estimates based on a monthly SVAR model in log differences of manufacturing IPI and PPI. The impulse response functions of two inflationary shocks (a positive demand shock and a negative supply shock) of 1 pp are depicted.

it is assumed that a demand shock leads output and prices to move in the same direction for at least three months, while a supply shock sees output and prices move in the opposite direction over the same period.

Charts 3 and 4 show the cumulative contribution of the different identified supply and demand shocks to the change in the IPI and in the PPI in the euro area as from early 2021.[4] As can be seen in these charts, the recent increase in producer prices in the euro area would seem to be essentially due to demand shocks. These shocks would be associated not only with the recovery in the economy during the period analysed, but also with the new needs that have arisen in the wake of the pandemic for all economic agents, e.g. in terms of digitalisation. The negative supply shocks identified in this analysis are also estimated to have contributed to gradually raising producer prices since early 2021 (and especially more recently), but, above all, they will have been central to preventing industrial production in the euro area from responding to the demand-side pressures observed.[5]

We obtain the foregoing estimates by analysing price and industrial production developments for the manufacturing industry as a whole. However, the size and relative weight of the supply and demand shocks that have recently influenced the behaviour of these variables may possibly have differed greatly across the different sectors in the industry. Indeed, in recent quarters the effects of the shortage of materials and/or equipment on these manufacturing activities have been very uneven. Hence, while in some – car assembly and the manufacture of electrical equipment – over 80% of firms indicate that material or equipment supply difficulties are constraining capacity, in others – such as food and clothing and apparel – this percentage is under 30%.

To quantitatively assess whether this cross-sector heterogeneity is reflected in a different relative weight of supply and demand shocks in recent euro area price and industrial production developments, we estimate the following model separately for two sectoral aggregates: those sectors in which at least 50% of firms indicate that the shortage of materials and/or equipment is a constraint on production in October 2021 (overall, these sectors account for 65% of the total gross value added (GVA) of manufacturing and the other sectors for the remaining 35%). As Charts 5 and 6 show, the impact of the supply shocks has been particularly significant in the most constrained sectors; the shocks account for over 50% of industrial production dynamics and 60% of the rise in producer prices, far higher percentages than those observed in the remaining sectors (36% and 10%, respectively). In particular, the supply shocks in the automobile sector – in which 87% of firms report materials and/or equipment shortages – account for around three-quarters of the change in its activity and producer prices.

Lastly, the analysis in this box also infers that the responses of producer prices in the euro area to the demand shocks persist, on the basis of past evidence, somewhat longer than those that arise as a result of supply shocks (see Charts 7 and 8). The final impact of these shocks on economic activity as a whole and on consumer prices will depend on the persistence of both the current shocks (over which there is considerable uncertainty) and of the reaction of producer prices to the shocks.

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4 The results of the model are robust to the treatment of the pandemic period and do not significantly change when, in line with Serena Ng (2021) ("Modelling macroeconomic variations after Covid-19", Working Papers, No. 29060, NBER), an exogenous control variable that takes into account COVID-19 infections is included.

5 A similar exercise for other advanced economies (United States, United Kingdom and Japan) would suggest supply and demand shocks with a relatively similar pattern to that of the shocks identified for the euro area. That would partly reflect the global nature of the pandemic-induced crisis and of the subsequent recovery.

Box 4

RECENT DEVELOPMENTS IN SPANISH SMEs' ACCESS TO EXTERNAL FINANCE ACCORDING TO THE EUROPEAN CENTRAL BANK'S SIX-MONTHLY SURVEY

Álvaro Menéndez

This early-release box was published on 7 December

On 24 November the European Central Bank (ECB) published the results of the latest round of the Survey on the Access to Finance of Enterprises (SAFE) in the euro area, covering the period from April to September 2021. The survey asks firms, essentially small and medium-sized enterprises (SMEs), about developments over the preceding six months in their economic and financial situation, their external financing needs and the terms and conditions on which such financing has, or has not, been obtained.

The results of this round show that more Spanish SMEs reported an increase in turnover between April and September 2021 than signalled the opposite. This had not occurred in the last three survey rounds and is consistent with the rebound in economic activity over the period analysed (see Chart 1). Despite these favourable turnover developments, higher labour and other costs meant that, in net terms, 16% of Spanish SMEs reported a deterioration in profits between April and September. This figure is higher than the percentage for the euro area as a whole (6%), but considerably lower than that recorded in Spain in the previous survey round (43%).

When asked about the main problem affecting their business, the difficulty in finding customers was the one reported by the highest percentage of Spanish SMEs (22%, see Chart 2), while in the euro area, this concern was placed second behind the availability of skilled labour.[1] In contrast, of those included in the question, access to finance was once again the concern cited by the lowest number of firms, both in Spain and in the euro area (8% and 7%, respectively, down slightly on the figures recorded six months earlier).

Meanwhile, the proportion of Spanish SMEs applying for bank loans between April and September 2021 declined by 6 percentage points (pp) as compared with the previous round of the survey, to 23% (see Chart 3). This is the lowest figure since the survey began in 2009 and very similar to that observed in the euro area. The steep downward trend shown by this indicator in the last two rounds of the survey foreseeably owes to Spanish firms' lower financing needs in recent months, following their large-scale borrowing in 2020 that was mainly attributable to the availability of State-guaranteed loans.

Chart 1
TURNOVER AND PROFIT (a)

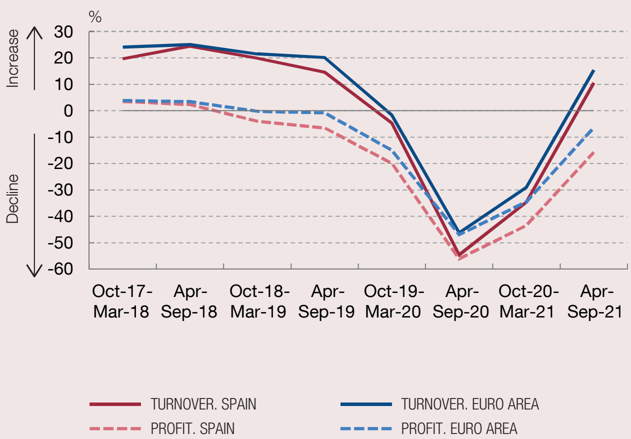
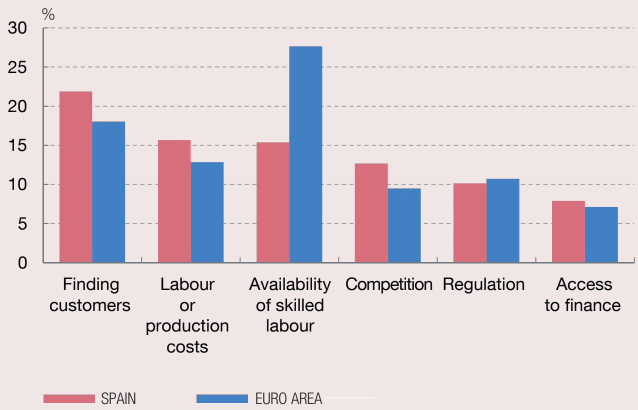


Chart 2
MAIN PROBLEMS AFFECTING BUSINESS. APRIL-SEPTEMBER 2021



SOURCE: ECB.

a Percentage of firms reporting an increase minus percentage reporting a decline.

1 In this connection, it should be highlighted that, in recent months, European Commission surveys have pointed to materials and/or equipment shortages as being a very significant constraint on Spanish and European manufacturing firms' capacity. For further details on the determinants and the effects of these bottlenecks, which are not analysed explicitly in the ECB's SAFE, see, for example, I. Kataryniuk, A. del Río and C. Sánchez Carretero (2021), "Euro area manufacturing bottlenecks", Box 3, "Quarterly report on the Spanish economy", *Economic Bulletin* 3/2021, Banco de España, and Box 5, "The potential impact of global supply chain bottlenecks on the Spanish economy in coming quarters", to this report.

SMEs' perception of their capacity to access bank financing continued to improve, doing so at a slightly higher rate than six months earlier (see Chart 4). This improvement came about despite the number of SMEs that perceived the general economic situation as an obstacle in terms of accessing new loans again exceeding those with the opposite view. However, in this round the difference between the two groups narrowed to just 4 pp, far less than the gap six months earlier (30.5 pp). All of the other factors considered had a favourable impact on access to finance. In particular, in contrast with the four previous rounds of the survey, the percentage of SMEs that thought the financial

Chart 3
SMEs THAT HAVE APPLIED FOR BANK LOANS

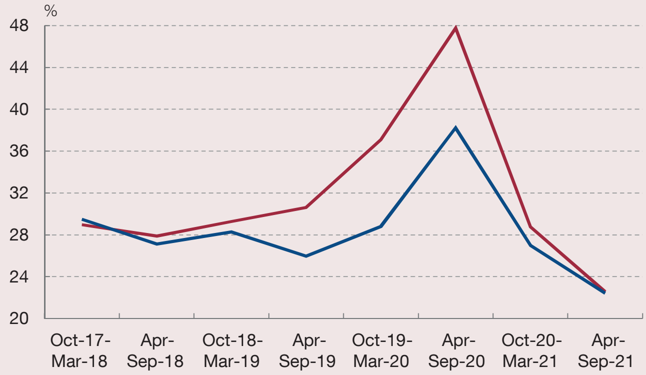
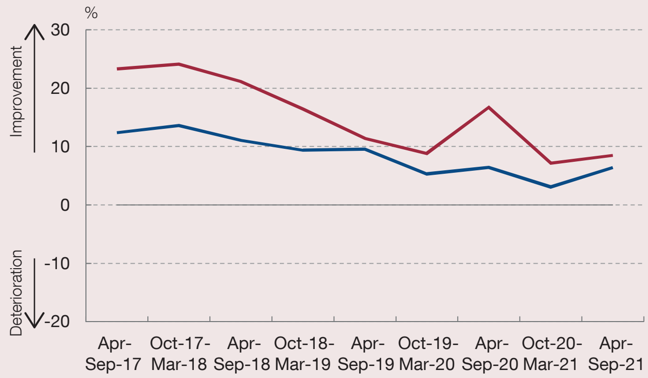


Chart 4
PERCEIVED AVAILABILITY OF BANK LOANS (a)



SPAIN
EURO AREA

Chart 5
SMEs HAVING DIFFICULTIES OBTAINING BANK LOANS (b)

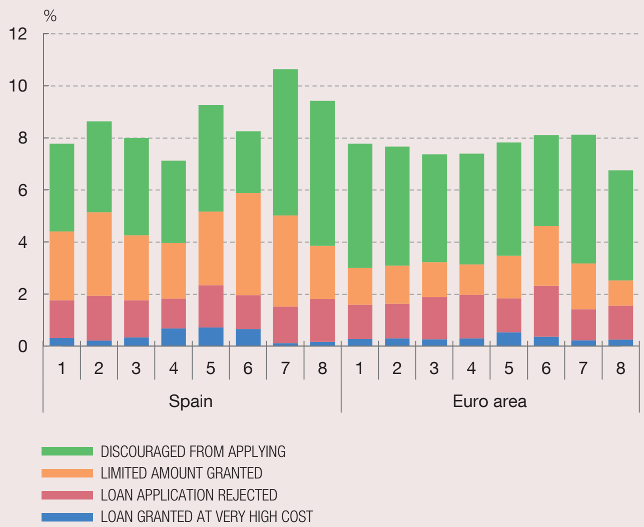
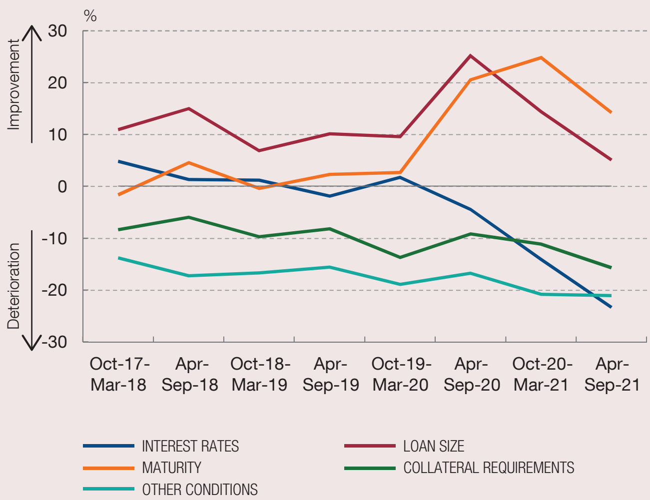


Chart 6
BANK LOAN CONDITIONS. SPAIN (c)



SOURCE: ECB.

a Percentage of firms reporting an improvement minus percentage of firms reporting a deterioration.
b This indicator reflects the proportion of firms in one of the following situations: those whose applications for funds were rejected; those which were granted funds but only a limited amount; those which were granted a loan but at a cost they considered very high; and those which did not apply for finance for fear of rejection (discouraged from applying). The numbers on the horizontal axis depict the rounds of the survey, with 1 corresponding to the period October 2017-March 2018 and 8 to the period April-September 2021.
c Percentage of firms reporting an improvement in conditions (lower interest rates, increase in amounts and maturities, and lower collateral and other requirements) minus percentage of firms reporting a deterioration in these conditions.

situation favoured their access to finance was higher (by 12 pp) than those who thought the opposite. Also, 10% of Spanish SMEs (in net terms) perceived greater willingness among banks to lend. This is 1 pp down on six months earlier and very similar to the euro area figure.

Despite the perception that access to bank finance has improved, 7% of SMEs' loan applications were rejected in the period from April to September 2021, up 2 pp on six months earlier and 1 pp higher than the rate recorded in the euro area as a whole.[2] By contrast, the overall financing obstacles indicator[3] improved slightly, with the proportion of Spanish SMEs encountering this type of obstacle declining by just over 1 pp to 9%, compared with 7% observed in the euro area (see Chart 5). Despite this decline, the percentage of SMEs discouraged from applying for financing (because they believed it would not be granted to them) held virtually unchanged at relatively high levels (just over 5%).

With regard to financing conditions, the net percentage of firms reporting an increase in interest rates continued to grow significantly, to 23%, 9 pp more than six months earlier (see Chart 6). In addition, SMEs perceived, again in net terms, a tightening of collateral requirements and of loan terms and conditions other than loan size and maturity. By contrast, the net proportion of companies indicating an increase both in the size and maturity of loans (5% and 14%, respectively) remained positive, although in both cases the percentages were substantially lower than in the previous round of the survey (14% and 25%, respectively).

Lastly, this round of the survey included an additional question on the problem of late payments by customers. In Spain, 7% of SMEs reported having had problems of this kind regularly in the period analysed, while 27% had only occasionally had such problems. Both percentages are lower than a year earlier (10% and 31%, respectively), and slightly lower than the figures for the euro area overall (10% and 28%, respectively).

In short, the latest round of the SAFE shows that, although turnover increased from April to September 2021 for most Spanish SMEs, their higher costs drove down their profits. In this setting, while their perception of access to external finance continued to improve, those that had applied for bank loans – less than a quarter of the total, the lowest figure since the survey was launched in 2009 – reported a slight increase in loan applications rejected and a tightening of the terms and conditions in respect of interest rates and collateral requirements, although other conditions – such as the size and maturity of loans – continued to evolve more favourably.

2 The reason for the apparent discrepancy between the changes in these two indicators – access to bank finance and the percentage of rejected applications – is mainly that the former encompasses the perception of all firms, whether or not they applied for financing, while the second is constructed solely on information provided by the companies that actually applied for loans (just 23% of all firms).

3 This indicator reflects one or more of the following situations: rejected loan applications; loan applications granted, but only in part; loan applications granted but at a cost deemed very high by the firms; and SMEs that did not apply for financing because they believed it would not be granted.

Box 5

THE POTENTIAL IMPACT OF GLOBAL SUPPLY CHAIN BOTTLENECKS ON THE SPANISH ECONOMY IN THE COMING QUARTERS

Alejandro Fernández Cerezo, José Manuel Montero and Elvira Prades

This early-release box was published on 3 December

In recent quarters global supply chains have been significantly disrupted, which has affected the strength of the recovery in activity in the main world economies.[1] In particular, these bottlenecks have affected various sectors of activity very unevenly and have had a particularly severe impact in those industries located in the upstream stages of the value chain, i.e. in those sectors supplying goods for use in other industries. Thus, for example, the major imbalances between supply and demand recorded recently in the semiconductor and integrated circuit industry[2] have had a very significant adverse impact on the motor vehicle industry, where many manufacturers have been forced to halt or cut their production plans. Likewise, the strains observed in various energy and commodity markets have also had a negative impact on numerous manufacturing sectors, such as those that make intensive use of natural gas – like the production of fertilisers and plastics – or magnesium –which is needed to produce aluminium alloys–.

The purpose of this box is to offer an initial quantitative assessment of the impact that these bottlenecks could have, should they persist, on Spanish economic activity in coming quarters. An analytical framework is considered for this purpose,[3] based on the World Input-Output Database (WIOD), which enables the consequences of different types of shocks on a very granular set of sectors to be explored, identifying both their direct and indirect effects — i.e. the spillover effects between sectors —, whether domestic or international. Given the economic interconnections existing at the global level, a precise assessment of the true exposure of domestic industries to diverse shocks requires that the way in which such shocks also affect the dynamics of activity in our main international trading partners be explicitly incorporated into the analysis.

To estimate the above-mentioned effects quantitatively, the first step is to identify the main sectors affected by global supply chain bottlenecks. The manufacturing industries considered to be under most strain are those that historically record a very low level of inventories of final goods and, at the same time, report relatively significant shortages of materials.[4] As seen in Chart 1, and in line with the foregoing, these industries include notably the production of motor vehicles, rubber and plastic products, paper products, electrical equipment, IT and electronics, and metal products.

The second step is to quantify the extent to which these bottlenecks are constraining activity in each of these sectors and to assess the persistence of these shocks.

The size of a shock is determined as follows. In the case of the automotive sector, the scale of the shock is defined as the difference between IHS Markit's average 2021 and 2022 global vehicle production forecasts from the first half of 2021 and from October 2021.[5] The result is a shock to the global industry of around -9% in the second half of 2021 and -7% in 2022. For the purposes of the analysis described in this box, this negative shock is distributed among the main advanced economies in line with their share of production.[6] In the case of other sectors, for which such detailed information on changes to projected production is not available, the size of shocks is calculated on the basis of the historical relationship between industrial output and the indicator of shortages of material

1 For further details on the drivers of this disruption and the impact that these bottlenecks have had on prices and activity in different sectors and economies, see, for example, "Euro area manufacturing bottlenecks", Box 3, "Quarterly report on the Spanish economy", *Economic Bulletin* 3/2021, Banco de España, "The impact of supply and demand shocks on recent economic developments and prices", Box 3, "Quarterly report on the Spanish economy", *Economic Bulletin* 4/2021 of the Banco de España, and D. Rees and P. Rungcharoenkitkul (2021), "Bottlenecks: causes and macroeconomic implications", *BIS Bulletin,* No 48.

2 The main factors explaining these imbalances are the sharp increase in the demand for electronic products during the pandemic, the energy crisis in China (the world's main supplier of silicon, a basic component of these products and whose production is energy intensive), and the limited spare capacity in the production of microchips.

3 For a description of this analytical framework, see "The heterogeneous economic impact of COVID-19 among euro area regions and countries", Analytical Articles, *Economic Bulletin* 2/2020, Banco de España and M. Izquierdo, E. Moral, E. Prades and J. Quintana (2021), "The propagation of worldwide sector-specific shocks", forthcoming.

4 Information obtained from the European Commission's Business and Consumer surveys. The latest data available for the indicator of shortages of material and/or equipment corresponds to 2021 Q4 and for the stock of final products to October 2021. In the case of stocks, their deviation from the 10th percentile of their historical distribution is considered, while the deviation from the 90th percentile is considered for the shortages of material and/or equipment.

5 For further details on these forecasts, see "Worsening run rate, but 2022 global light vehicle production outlook intact".

6 The projected output of the leading emerging economies has barely changed. These scenarios involve a drop in the output of the advanced economies (including Spain) of 16% in the second half of 2021 and of 13% in 2022.

and/or equipment in such industries. This relationship (estimated using panel data and accounting for a set of control variables) suggests that, on average, a 1 pp increase to the material and/or equipment shortage indicator leads to a fall in output of around 2.3 pp after 3-4 quarters. Thus, given currently measured shortages, this means a negative global shock to the activity of such sectors in the range of 5-6% of the output projected in the absence of shocks.

In terms of their duration, the shocks estimated above are expected to persist throughout the fourth quarter of 2021 and the first three quarters of the coming year. With this in mind, it is worth noting that, while there is considerable uncertainty as to how long these bottlenecks might last, the scenario considered in this box is relatively in line with the time frame in which Spanish firms expect the current supply problems to persist, according to the latest wave of the Banco de España Business Activity Survey (EBAE) (see Chart 2).[7]

Chart 1
MANUFACTURING SECTORS AFFECTED BY A SHORTAGE OF MATERIAL/EQUIPMENT AND LACK OF INVENTORIES (a)

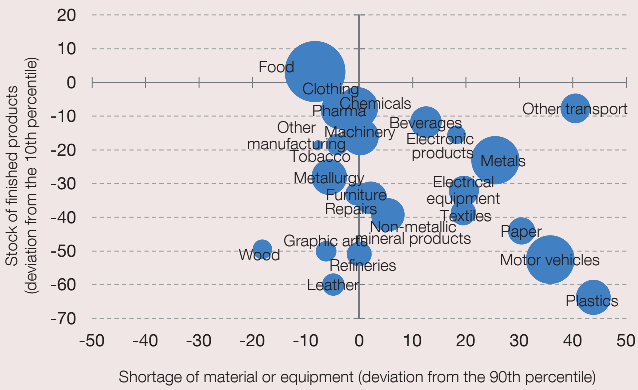


Chart 2
ESTIMATED DURATION OF SUPPLY DIFFICULTIES (b)

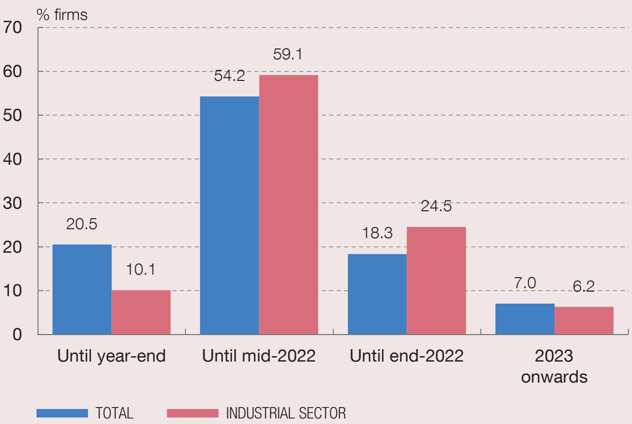


Chart 3
IMPACT OF BOTTLENECKS ON SPANISH GDP GROWTH

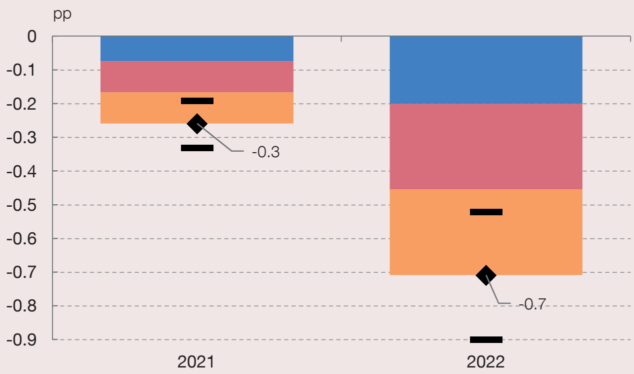
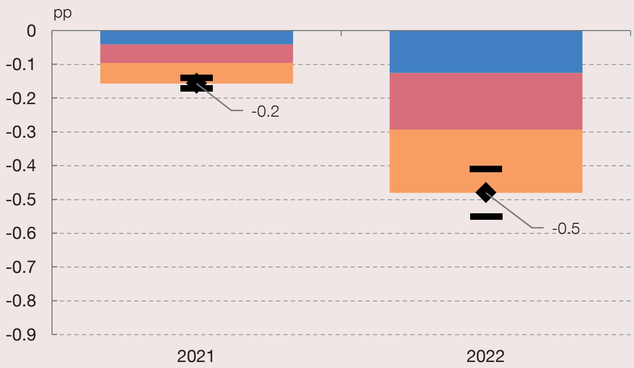


Chart 4
IMPACT OF BOTTLENECKS IN THE MOTOR VEHICLE INDUSTRY ON SPANISH GDP GROWTH



DIRECT EFFECTS DOMESTIC SPILLOVER EFFECTS INTERNATIONAL SPILLOVER EFFECTS

SOURCES: European Commission and Banco de España, based on WIOD data.

a For each sector, the size of the bubble reflects its percentage share of manufacturing value added.
b Banco de España Business Activity Survey: November 2021.

7 See "Banco de España Business Activity Survey: November 2021", Economic Notes, *Economic Bulletin,* Banco de España, forthcoming.

Box 5

THE POTENTIAL IMPACT OF GLOBAL SUPPLY CHAIN BOTTLENECKS ON THE SPANISH ECONOMY IN THE COMING QUARTERS (cont'd)

The third and final stage of this analysis calls for an estimate of how the projected contraction (over the period identified) in the activity of each of the sectors directly affected by the bottlenecks impacts the output of other sectors of the economy. In other words, the aim is to quantify all of the sector-specific spillover effects, at both domestic and international level, so as to be able to determine how such bottlenecks may ultimately impact the Spanish economy's overall level of activity in the coming quarters. To this end, the sectoral relationships inferred from the World Input-Output Database are taken into account.

As can be seen in Chart 3, it is estimated that global supply chain disruptions could result in a significant slowdown in the Spanish GDP growth rate over the final stretch of 2021 (of 0.2-0.3 pp) and in 2022 (of 0.5-0.9 pp), an adverse impact in which international spillover effects would play a pivotal role. At an industry level, Chart 4 shows that the adverse effect of such bottlenecks can for the most part be attributed to their negative impact on the automotive industry, as is to be expected given the sector's considerable size and importance for the country's economy.

Box 6

JOB OPPORTUNITIES AND SUPPLY AND DEMAND MISMATCHES FOR PLACES ON VOCATIONAL TRAINING COURSES

Iván Auciello, Aitor Lacuesta and Josep Lluís Segú

This early-release box was published on 10 December

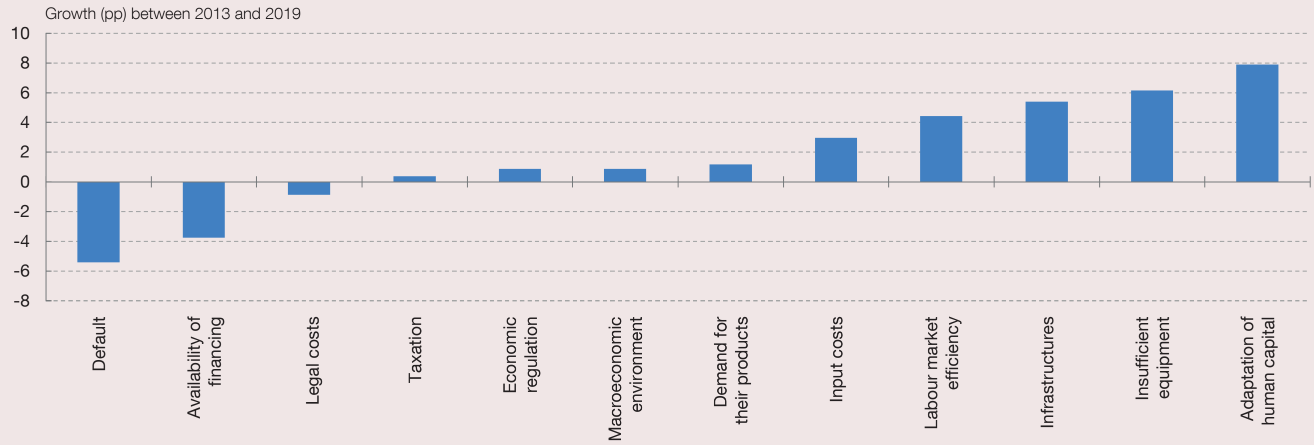
In recent years, Spanish firms have become increasingly concerned about the need to adapt workers' human capital to the requirements of constantly evolving jobs. According to the Business Environment Module of the Business Confidence Indicator, the percentage of Spanish firms considering this factor to be of medium or high importance for their activity increased by 8 percentage points (pp) between 2013 and 2019 (the largest increase for all the aspects analysed), to 28.5% of all the survey respondents (see Chart 1).

In a setting like the present one, in which the Spanish economy, along with many other European economies, is facing increasing digitalisation of economic activity, potentially far-reaching changes in its sectoral composition (not only as a result of the COVID-19 pandemic, but also, for example, of the transition to a more sustainable economy) and marked population ageing, it is particularly important for the human capital of Spain's workers and employers to be constantly increased and updated. Addressing this challenge requires ambitious economic policy action in highly diverse areas, notably including a comprehensive review of all areas of the Spanish education system and, in particular, university education and vocational training.[1]

In the area of vocational training, the focus of this box, the Organic Vocational Training Bill is currently before Parliament.[2] Broadly speaking, this draft legislation seeks to transform the vocational training system in Spain, by creating a single system of vocational training for students, the employed and the unemployed, to foster training opportunities throughout working lives, the accreditation of skills, and cooperation between training centres, universities and the workplace.

At the same time, the Recovery, Transformation and Resilience Plan presented by the Spanish government on 30 April to the European authorities within the framework of the Next Generation EU (NGEU) programme envisages investment of €254 million over the coming years to provide 200,000 additional vocational training places in

Chart 1
GREAT OR MEDIUM IMPORTANCE FOR DOING BUSINESS AND GROWING (% OF FIRMS)



SOURCE: INE.
NOTE: The data are from the Business Environment Module of the INE's Business Confidence Indicator. The chart depicts the changes in the sum of the percentage of firms that attach great or medium importance to these factors (the remainder attach little importance to them).

1 For further details on the importance of this challenge in terms of its bearing on the outlook for the Spanish economy in coming years and on the various economic policy measures that it may be advisable to adopt, see P. Hernández de Cos (2020), "The main post-pandemic challenges for the Spanish economy. Appearance before the Parliamentary Committee for the Economic and Social Reconstruction of Spain after COVID-19/Congress of Deputies – 23 June 2020", *Occasional Paper* No 2024, Banco de España.

2 See Proyecto de Ley Orgánica de Ordenación e Integración de la Formación Profesional (available in Spanish only).

Spain.[3] When deciding how these new places, and indeed existing ones, should be distributed between the current qualifications and, possibly, certain new qualifications that may be designed to better respond to the changing needs of firms, a highly detailed analysis of such present and future needs and of the contribution of all the groups involved is required.

With a view to contributing to this analysis, this box documents, first, the extent to which the different vocational training qualifications currently available offer their graduates different prospects in terms of labour market participation. Second, based on the cut-off mark for admission to each of these programmes, it explores whether there is any significant mismatch between the supply of and demand for places for any of the qualifications that offer better job opportunities.

The first four columns of Table 1 show, for each of the intermediate and higher vocational training course groups, different metrics that proxy the job prospects of their graduates. In particular, based on information provided by the Ministry of Education, the first column presents, for each qualification, the mean social security registration rate[4] in March 2019 of the cohort of students who graduated in 2014-2015.[5] The second column reports the same registration information, but as the average for the period 2015-2019.[6] The data in the third and fourth columns are taken from the Survey on the Transition from Education/Training to Labour Market Insertion conducted by the Spanish National Statistics Institute in 2019. The third column indicates the percentage of graduates in each qualification in 2013 and 2014 who were employed at the time of the survey (between September 2019 and January 2020),[7] while the fourth column shows the unemployment rate for each qualification, constructed as the ratio of graduates who report being unemployed to those who report being active in the labour market (employed or unemployed).

For purposes of clarity, each of the four indicators in Table 1 appears shaded when it outperforms the median. Thus, the intermediate vocational training qualifications that appear to offer their graduates better job opportunities are mechanical manufacturing, installation and maintenance, transport and vehicle maintenance, electricity and electronics, and health care. Among the higher vocational training course groups, the qualifications with the best job opportunity indicators in relative terms are mechanical manufacturing, installation and maintenance, IT and communications, transport and vehicle maintenance, electricity and electronics, chemistry, food industries, and commerce and marketing.

Subsequently, to analyse possible problems in the supply of and demand for places, and to relate them to the previous measures of job opportunities by course group, the information on the admission cut-off mark[8] for each vocational training qualification in the 2020-2021 academic year (fifth column in Table 1) was used. Intuitively, the supply of places for qualifications with the highest cut-off marks will be relatively lower compared with existing demand.[9]

In keeping with this criterion, Table 1 shows that the supply and demand mismatch is particularly severe in two intermediate vocational training course groups that offer better job prospects for their graduates: transport and vehicle maintenance, and health care. Indeed, these two

3 See Strategic Plan for Vocational Training (available in Spanish only), Project 20 of the Recovery, Transformation and Resilience Plan.

4 Registration means events that involve starting to pay social security contributions, excluding events associated with subsidies, unemployment benefits, discontinuation of activity benefits for the self-employed, special agreements with Social Security, periods of inactivity and other registration events not considered by Social Security as an employment spell.

5 Although data are available for a more recent cohort (2015-2016), these remain provisional and have relatively low coverage.

6 The first/second/third/fourth year of social security registration for the 2014-2015 cohort corresponds to the average registration rate on each day of March 2016/2017/2018/2019.

7 Employment includes non-remunerated work for a family company or business and paid traineeships or internships as part of a dual vocational training programme.

8 Information provided by Observatorio Educaedu and referring to all vocational training centres in the provinces of the Andalusia, Aragon, Canary Islands, Castile-La Mancha, Castile-Leon, Galicia, Murcia, Navarre and Valencia regions. The cut-off mark considered for admission to intermediate vocational training is via lower secondary education, whereas for higher vocational training it is via higher secondary education. In both cases these are the most common access routes.

9 An econometric analysis by qualification, training centre and province shows that the cut-off mark for a qualification tends to be lower in those provinces where that qualification is offered by a larger number of training centres (i.e. where supply is higher).

Box 6

JOB OPPORTUNITIES AND SUPPLY AND DEMAND MISMATCHES FOR PLACES ON VOCATIONAL TRAINING COURSES (cont'd)

Table 1
JOB OPPORTUNITIES AND CUT-OFF MARKS FOR INTERMEDIATE AND HIGHER VOCATIONAL TRAINING, BY TRAINING COURSE GROUP

	Intermediate vocational training				
	(a)	(b)	(c)	(d)	Cut-off mark (admission via lower secondary education)
Median	62.6	50.5	72.5	17.4	5.4
Training course group					
Mechanical manufacturing	76.8	65.6	83.7	11.1	5.2
Installation and maintenance	75.6	61.8	87.3	9.3	5.0
Transport and vehicle maintenance	75.4	61.0	83.8	9.7	5.4
Electricity and electronics	68.6	52.8	77.4	13.3	5.0
Wood, furniture and cork	67.6	54.2	74.0	19.3	5.0
Health care	66.1	56.4	78.8	11.8	6.1
Hair and beauty	64.2	51.3	70.9	19.5	5.6
Hospitality and tourism	64.1	54.5	70.8	19.5	5.0
Agriculture	62.8	47.0	77.4	13.5	5.0
Chemistry	62.6	48.9	67.9	21.9	5.7
Socio-cultural and community services	62.4	50.4	68.4	21.5	5.7
Food industries	61.5	50.5	71.4	17.4	5.0
IT and communications	60.2	39.5	73.6	14.6	6.0
Administration and management	59.8	43.6	68.9	22.3	5.0
Physical and sports activities	59.0	41.5	63.0	21.2	6.3
Shipping and fisheries	59.0	50.8	79.1	14.1	5.3
Commerce and marketing	57.0	43.7	63.1	24.9	5.5
Graphic arts	54.6	40.5	72.5	20.0	5.7
Image and sound	45.9	31.3	71.8	17.4	6.3

	Higher vocational training				
	(a)	(b)	(c)	(d)	Cut-off mark (admission via higher secondary education)
Median	64.7	54.2	78.8	12.7	5.6
Training course group					
Mechanical manufacturing	81.8	76.5	88.0	8.9	5.3
Installation and maintenance	80.5	74.9	89.4	7.4	5.0
IT and communications	76.6	66.4	83.5	10.0	5.8
Transport and vehicle maintenance	75.3	66.0	87.2	7.7	5.5
Electricity and electronics	74.0	64.4	86.1	8.0	5.0
Chemistry	73.3	65.4	79.9	12.7	6.5
Energy and water	70.7	59.2	81.3	10.4	5.6
Food industries	68.5	56.7	83.2	12.5	5.3
Administration and management	66.6	56.1	78.8	14.3	5.3
Hair and beauty	64.8	56.9	77.3	15.4	5.7
Commerce and marketing	64.7	54.2	84.0	10.0	5.7
Agriculture	63.5	52.4	77.0	14.0	5.0
Hospitality and tourism	62.4	53.4	76.4	14.7	5.0
Socio-cultural and community services	62.0	51.6	78.3	13.9	6.1
Graphic arts	61.6	52.8	73.9	19.9	5.8
Security and environment	61.5	50.1	78.8	14.9	5.5
Building and civil engineering	60.9	47.7	73.8	13.5	5.0
Shipping and fisheries	59.4	52.4	81.2	11.4	5.6
Physical and sports activities	59.2	49.9	75.2	10.9	6.5
Image and sound	57.5	44.0	74.6	18.9	5.7
Health care	56.1	48.2	74.7	13.5	7.1

SOURCES: Labour market integration of vocational training graduates (Ministerio de Educación y Formación Profesional and Tesorería General de la Seguridad Social), Survey on the Transition from Education/Training to Labour Market Insertion (INE) and Observatorio Educaedu.

a Mean social security registration rate in March 2019 for the cohort graduating in 2014-2015.
b Average of the mean social security registration rate in March 2015, 2016, 2017, 2018 and 2019 for the cohort graduating in 2014- 2015.
c Employment rate at the time of the survey, between September 2019 and January 2020, for the cohort graduating in 2013-2014.
d Unemployment rate at the time of the survey, between September 2019 and January 2020, for the cohort graduating in 2013-2014.

qualifications have a median lower secondary education cut-off mark of 5.4 or higher, which is the median cut-off mark for all qualifications. In the case of higher vocational training, there is also a relative scarcity of places in IT and communications, chemistry, energy and water, and commerce and marketing, four of the qualifications with better job opportunities.

In short, the box shows, first, that the job prospects that vocational training courses offer their graduates differ widely. It also shows that the cut-off mark for access to some of the qualifications with better job opportunities is particularly high. Insofar as a higher cut-off mark can be associated with a relatively short supply of public training places, given the level of student demand, it seems that the number of available places should be increased selectively in certain qualifications that are of particular interest to employers. This is especially relevant now considering that, under the framework of the NGEU programme, 200,000 new vocational training places are expected to be made available in Spain in the coming years.

The main factors shaping developments in the international financial markets in Q4, pulling in opposite directions, have been the emergence of the COVID-19 Omicron variant, the performance of corporate earnings and the adjustments in investors' expectations as regards the monetary policy decisions of the world's main central banks

Having posted gains up to late November, driven by better-than-expected corporate earnings, the main stock market indices have since seen sharp falls and increased volatility as a result of the worsening health situation (see Chart 2.1). Despite the decline observed in recent weeks, the S&P 500 index has risen by 9.3% in Q4 to date, outperforming the EURO STOXX 50, which has seen gains of 2.8%. This gap was, in part, attributable to the adverse impact on activity of the pandemic containment measures recently adopted in many European countries and to the lower relative share in the European index of the sectors that have performed better in this quarter, such as the technology sector.

Owing to investors' expectations of a gradual withdrawal of the monetary stimulus measures by the main central banks and the search for safe haven assets due to the worsening of the pandemic, the upward trend shown by the yield on long-term sovereign debt in advanced economies since August reversed as from November (see Chart 2.2). As a result, at the cut-off date for this report, the yield on US 10-year sovereign bonds was close to its end-Q3 levels, whereas that on the equivalent German Bund had fallen by around 17 basis points (bp). This difference in the behaviour of long-term interest rates in the euro area and the United States was in part driven by the different tone of monetary policy communication in the two areas. Along with other factors, it may have influenced the US dollar's recent appreciation against the euro.

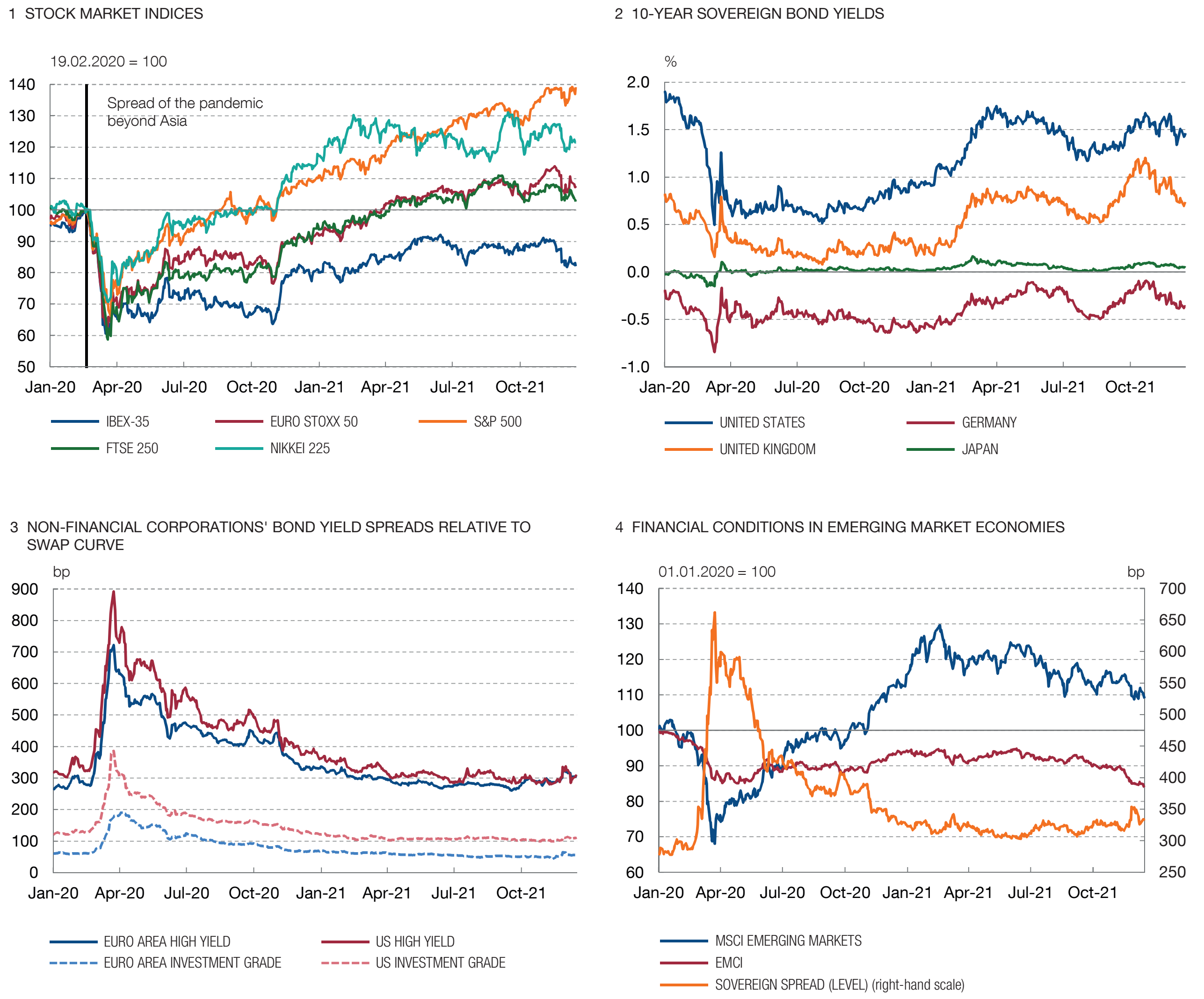
Sovereign debt yield spreads over Germany have widened in the euro area in Q4. In the case of 10-year bonds, the risk premium has seen sharper rises in Greece (56 bp) and Italy (22 bp) than in Spain (5 bp). Among the factors potentially behind such increases are the greater uncertainty surrounding the global economic outlook, prompted by the deterioration in the health situation, and investors' expectations that the net purchases conducted by the European Central Bank (ECB) under its pandemic emergency purchase programme (PEPP) could end sooner than was expected a few months ago.

Non-financial corporations' credit risk spreads have also increased in the latest period as a result of the greater risk aversion triggered by the spread of

Chart 2

THE RECENT DETERIORATION IN THE HEALTH SITUATION HAS TRIGGERED FALLS IN THE PRICES OF RISK-BEARING ASSETS AND INCREASED VOLATILITY IN THE FINANCIAL MARKETS

The main stock market indices posted gains up to end-November (driven by better-than-expected corporate earnings), which have partially reversed following the emergence of the COVID-19 Omicron variant. Long-term sovereign debt yields in the advanced economies continued to rise in October against a backdrop of a sharp increase in inflation. However, they have since declined, influenced by investors' expectations of a more gradual withdrawal of the monetary stimulus measures and by the search for safe haven assets due to the worsening of the pandemic. Emerging markets have also seen increased volatility in their financial variables in the quarter.



SOURCE: Refinitiv Datastream.

the Omicron variant (see Chart 2.3). The volume of corporate issuance by euro area firms in the high-yield segment in Q4 continues to be higher than in the same period of 2020. This stands in contrast to the developments observed in this segment in the United States and in the investment-grade segment in the euro area. However, it should be borne in mind that the volume of issuance in the high-yield segment in the euro area was relatively low in 2020.[3]

3 See D. Khametshin (2021), "High-yield bond markets during the COVID-19 crisis: the role of monetary policy", *Occasional Paper* No 2110, Banco de España.

As has occurred in other international financial markets, emerging countries have seen increased volatility in Q4 (see Chart 2.4). The pick-up in inflation in these economies, along with other idiosyncratic factors such as fiscal vulnerability and electoral cycles, has been reflected not only in a tightening of their monetary policy (which has been particularly sharp in Latin America) but also in a significant increase in long-term interest rates in local currency. Only emerging Asian countries have deviated from this general trend. In Turkey, the financial variables have deteriorated substantially in Q4, with the lira depreciating by 40%, sovereign spreads increasing by 60 bp, and long-term interest rates in local currency rising by 3.3 pp.

3.1 External environment of the euro area

The rate of recovery of the world economy moderated in Q3, as a result of the rise in the incidence of the pandemic in the United States, subdued private consumption, the persistence of production and distribution bottlenecks and inflationary pressures caused by these bottlenecks and rising energy prices

Global growth moderated in Q3, especially in the advanced economies. It was affected by the slowdown in the vaccination process and the rise in the incidence of the pandemic, which hit private consumption particularly hard (see Charts 3.1 and 3.2). Thus, quarter-on-quarter GDP growth was 0.5% in the United States, 1.3% in the United Kingdom, 2.2% in the euro area and -0.9% in Japan, with most of these rates being much lower than in Q2 (1.6%, 5.5%, 2.2% and 0.5%, respectively). In the main emerging market economies activity also slowed, except in the case of India. Specifically, output growth in China fell to 4.9% year-on-year in Q3 (due to the effect of the restrictions to contain the spread of the pandemic and the contraction in real estate activity), while GDP declined in countries such as Brazil, Mexico and South Africa. Reflecting these developments, world trade decreased by 1.1% quarter-on-quarter in Q3, having expanded by 0.9% in Q2.

The growth rate of global activity may remain unchanged in the last quarter of the year. PMI data to November show a smooth slowdown in manufacturing and a slight pick-up in services (see Chart 3.3), with some convergence between the growth outlook in the advanced and emerging market economies at somewhat lower levels than expected a few months ago. As regards the main world economies, the data available for Q4 point to a rise in the growth rate in the United States and some recovery in China, in a context of general weakness, while in Europe the sharp increase in the incidence of the pandemic in recent weeks and the restrictions introduced to curb it may weigh on activity.

The persistence of global supply chain bottlenecks continues to affect the path of recovery in activity and exert upward pressure on prices.[4] The rapid

4 For an analysis of the supply and demand side determinants of these bottlenecks and their impact on activity in the euro area and in the Spanish economy, see Box 3 "The impact of supply and demand shocks on recent economic developments and prices" and Box 5 "The potential impact of global supply chain bottlenecks on the Spanish economy in coming quarters" of this report.

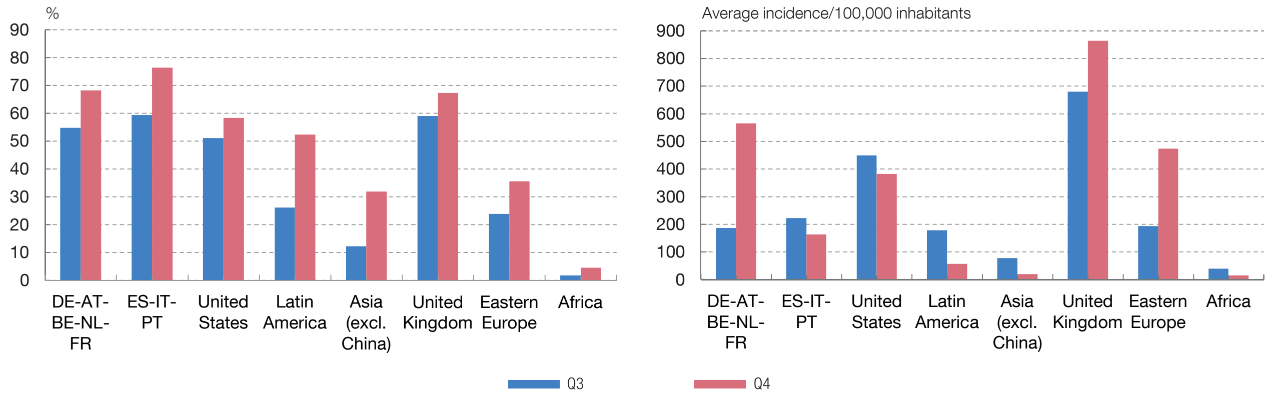
Chart 3

THE RECOVERY OF THE WORLD ECONOMY MODERATED IN Q3, AND GROWTH RATES COULD BE SIMILAR IN Q4

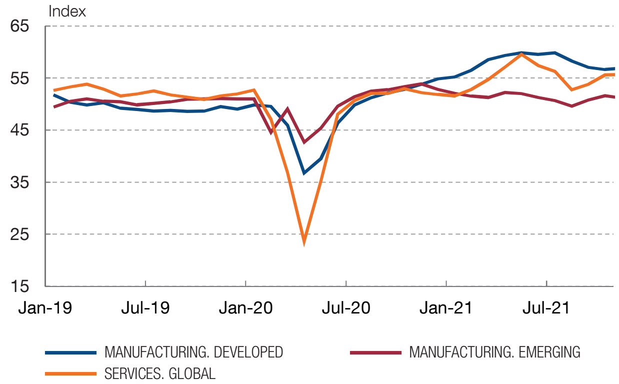
The rate of recovery of the world economy moderated in Q3, as a result of a range of factors: the rise in the incidence of the pandemic in some areas, which hit private consumption particularly hard; the persistence of goods production and distribution bottlenecks; and the inflationary pressures caused by these bottlenecks and rising energy prices. Spurred by the rise in inflation, central banks in the advanced economies have begun to tighten their monetary policy stance through the gradual withdrawal of some of the stimulus measures introduced in early 2020, while those in emerging market economies have continued normalising their official interest rates.

1 PERCENTAGE OF POPULATION FULLY VACCINATED (a)

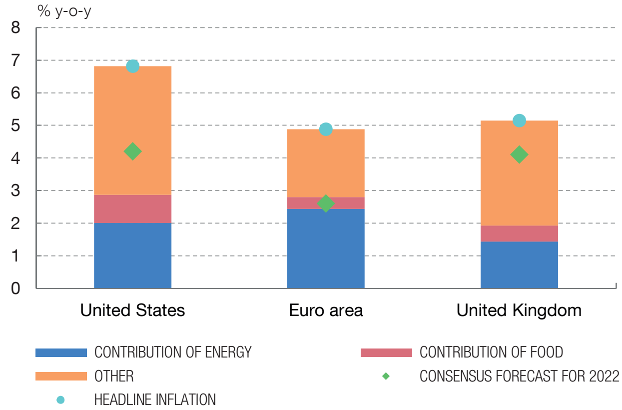
2 AVERAGE INCIDENCE RATE IN 14 DAYS PER 100,000 INHABITANTS (a)



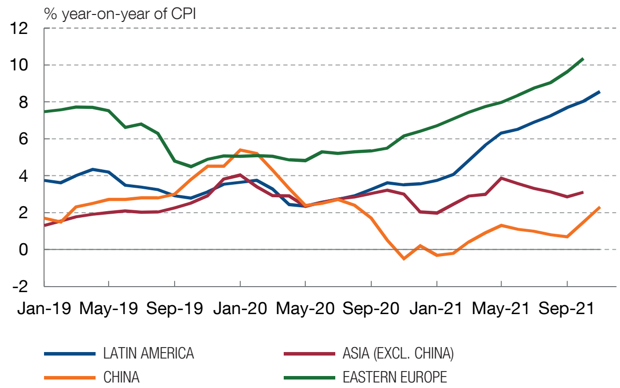
3 MANUFACTURING PMI IN ADVANCED AND EMERGING ECONOMIES AND GLOBAL SERVICES PMI



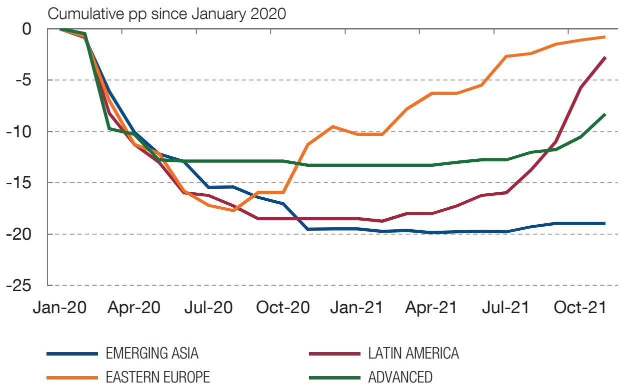
4 CONTRIBUTION OF ENERGY AND FOOD TO HEADLINE INFLATION: JANUARY TO NOVEMBER 2021



5 INFLATION IN EMERGING MARKET ECONOMIES



6 CHANGE IN OFFICIAL INTEREST RATES DURING THE PANDEMIC



SOURCES: Consensus Forecast, national statistics, IHS Markit, Johns Hopkins University - Coronavirus Resource Center, Our World in Data and Thomson Reuters.

a Q4 includes data obtained up to 13 December.

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recovery in demand after the deepest phase of the health crisis has not been accompanied by a proportional increase in supply, giving rise to delays in the supply of certain intermediate goods, production stoppages and input price increases. Also, in some economies (such as the United States and the United Kingdom), a fall in labour market participation and mismatches between labour supply and demand have also been observed, raising wage costs in those sectors hit hardest by the pandemic.

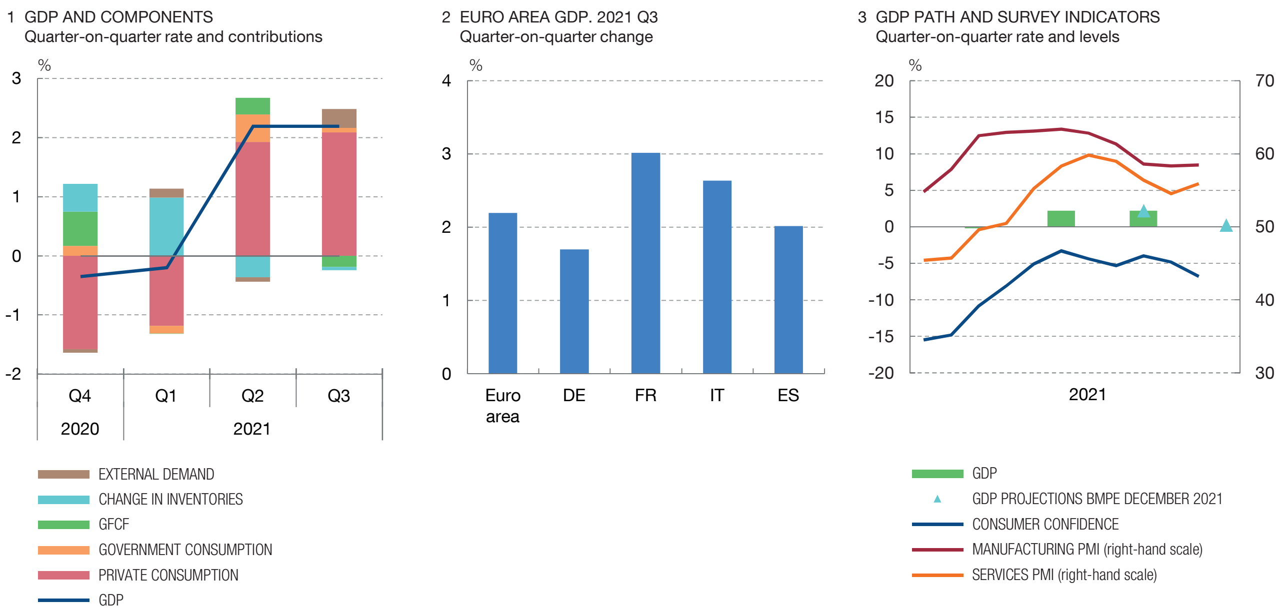
Inflation rates have continued to rise globally in recent months, driven by soaring energy prices and persistent supply problems (see Chart 3.4 and Box 2). Thus, in November, the annual growth rate of consumer prices stood at 6.9% in the United States, 4.9% in the euro area and 5.1% in the United Kingdom, levels not seen in these economies since 1990, 1991 and 2011, respectively. This surge in inflation has also been evident in numerous non-Asian emerging market economies (see Chart 3.5). Looking ahead, global inflation is expected to moderate gradually during 2022, as the effects of some of the factors that have driven it upwards in recent months, which have proved to be more persistent than expected, progressively fade.

In this setting of sharply increasing inflation, the central banks of some advanced economies have begun to adjust their monetary policy stance. In particular, the central banks of the United States, Canada and Australia have recently signalled a gradual reduction in their asset purchase programmes, while those of Norway, New Zealand and Iceland have already announced their first official interest rate rises. Likewise, the Bank of England raised the bank rate by 15 bp in mid-December, following an announcement at its previous meeting that a modest tightening of monetary conditions was necessary. In the case of the emerging market economies, there have been substantial increases in official interest rates in Latin America and eastern Europe, while in Asia they have remained unchanged (see Chart 3.6). Turkey has been the only exception to this general trend; its key policy rates have been reduced by 500 bp since September, despite clear signs of overheating in the Turkish economy.

Fiscal policies remain expansionary in the advanced economies, in contrast to the more contained stance in emerging countries. In the United States, a package of public investment was approved in November, involving spending of 1.7% of GDP over the next 10 years, and a fiscal programme focusing on social policies and combating climate change is under discussion. In the most vulnerable emerging market economies, by contrast, fiscal stimulus has continued to be reduced in recent quarters. Despite this, doubts over the capacity to carry out further adjustment have led to rises in long-term interest rates on public debt, especially in Latin America.

Chart 4
THE GROWTH RATE OF ACTIVITY STABILISED IN Q3, BUT MAY SLOW DOWN IN Q4

The growth rate of euro area economic activity in Q3 was similar to that of Q2. However, the last few months of 2021 have been marked by a build-up of certain risk factors (including unfavourable pandemic developments) that would tend to limit the short-term prospects for activity growth. Indeed, the latest qualitative indicators available suggest that GDP has been slowing in the last few months of the year.



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

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3.2 The euro area

Following two quarters of steady growth in the euro area, the last few months of 2021 have been marked by a build-up of certain risk factors (including unfavourable pandemic developments) that would tend to limit the short-term prospects for activity growth. The medium-term inflation outlook depends largely on whether the recent higher inflation levels are accommodated by the expectations formation and wage bargaining processes

Economic activity in the euro area continued to grow steadily in Q3, despite the intensification of global production and distribution chain bottlenecks. Euro area GDP grew by 2.2% quarter-on-quarter in this period, the same rate as in Q2, but somewhat less than expected. This growth was underpinned by a sharp rise in consumption and, to a lesser extent, external demand (see Charts 4.1 and 4.2). By contrast, investment and inventories declined, the latter on account of the global value chain disruption already referred to. Industrial activity was hit particularly hard by these bottlenecks, as shown by the fact that, according to the European Commission's indicator, order delivery times have reached all-time highs. In contrast, the services sector benefited from improved mobility in the quarter.

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

	2021		2022		2023		2024	
	GDP	HICP	GDP	HICP	GDP	HICP	GDP	HICP
ECB (December 2021)	5.1 (0.1)	2.6 (0.4)	4.2 (-0.4)	3.2 (1.5)	2.9 (0.8)	1.8 (0.3)	1.6 (...)	1.8 (...)
European Commission (November 2021)	5 (0.2)	2.4 (0.5)	4.3 (-0.2)	2.2 (0.8)	2.4 (…)	1.4 (…)	... (…)	... (…)
OECD (December 2021)	5.2 (-0.1)	2.4 (0.3)	4.3 (-0.3)	2.7 (0.8)	2.5 (…)	1.8 (…)	... (…)	... (…)
IMF (October 2021)	5 (0.4)	2.2 (…)	4.3 (0)	1.7 (…)	2 (…)	1.4 (…)	1.6 (…)	1.5 (…)
Consensus Forecast (December 2021)	5.1 (0)	2.5 (0.1)	4.2 (-0.1)	2.6 (0.3)	... (…)	... (…)	... (…)	... (…)
Survey of Professional Forecasters (October 2021)	5.1 (0.4)	2.3 (0.4)	4.5 (-0.1)	1.9 (0.4)	2.2 (0.1)	1.7 (0.1)	... (…)	... (…)

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

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

The available qualitative indicators – principally the European Commission's confidence surveys and PMIs – suggest that GDP has been slowing in the last few months of the year (see Chart 4.3). In Q4, the deterioration of the health situation in many euro area countries and the emergence of the Omicron variant of COVID-19 have led to a significant tightening of pandemic containment measures, which can be expected to have a negative impact on services activity and consumption.

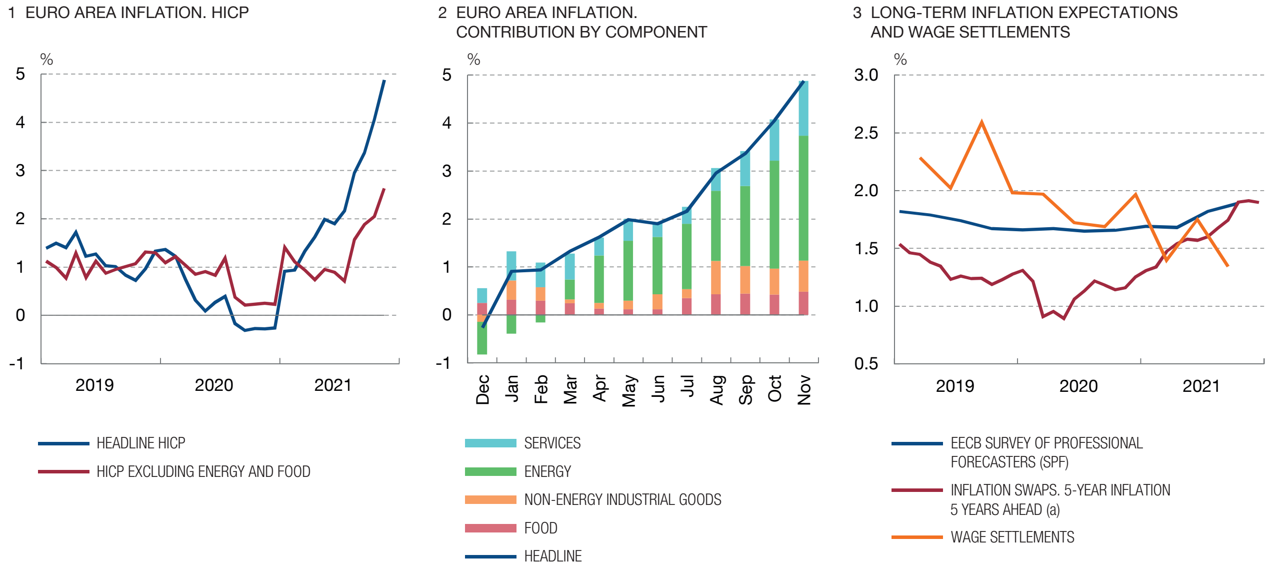
The December Eurosystem macroeconomic projections exercise (BMPE)[5] anticipates GDP growth of 5.1% in 2021, 4.2% in 2022, 2.9% in 2023 and 1.6% in 2024 (see Table 2). In comparison with the September exercise, these figures represent a slight upward revision (of 0.1 pp) in the growth forecast for 2021, but also a significant downward adjustment (of 0.4 pp) in the output growth projected for 2022, essentially as a result of worse epidemiological developments than anticipated in September and greater persistence of bottlenecks in industry. As regards 2023, however, the new projections anticipate 0.8 pp higher euro area GDP growth than was projected in September, which would enable the output gap to turn positive that year. These projections are broadly in line with those of other international organisations and private analysts, but are somewhat more optimistic for 2023. They are based on expectations of a more dynamic international environment, a rise in real disposable income and continuing fiscal and monetary policy support (ensuring highly favourable financial conditions for firms and households). It should be noted that the monetary authority considers that the risks to the baseline scenario of these

5 See Eurosystem staff macroeconomic projections for the euro area, December 2021.

Chart 5

EURO AREA INFLATION HAS RISEN SIGNIFICANTLY IN RECENT MONTHS

Headline inflation has risen strongly in recent months, driven mainly by the energy component and by persistent global production and supply chain bottlenecks which are affecting supply in a setting of robust recovery in demand. Despite the marked inflationary tensions in the short term, the degree of slack in the economy and the signals from inflation expectations suggest that medium and long-term underlying inflationary pressures will remain relatively moderate.



SOURCES: Bloomberg, Eurostat and ECB.

a Monthly average of daily data.

activity projections are essentially balanced. The downside risks are associated with epidemiological developments, the pace at which supply disruptions can be resolved and the future path of energy prices. On the upside, economic activity could be stronger than expected if consumers gain more confidence and accumulate lower than expected savings.

Inflation has risen very significantly in recent months. In November, the annual rate of change of headline inflation rose to 4.9%, while underlying inflation rose to 2.6% (see Charts 5.1 and 5.2). The increase in inflation from the low levels reached last year is in response to various idiosyncratic and, in principle, temporary factors: the end of the temporary VAT reduction in Germany in January, and the base effects deriving from the sharp falls in some prices in 2020. In recent months, however, two elements have played an increasingly important role in the course of inflation: the rise in energy commodity and electricity prices (see Box 2), and the intensification of global value chain disruptions (see Box 3). The degree of persistence of both factors will shape the pattern of prices in the coming months, but their medium-term impact on prices will also depend on the degree to which the expectations formation and wage bargaining processes respond to the current high levels of inflation.

Despite the marked inflationary tensions in the short term, significant underlying inflationary pressures are not expected, considering the still high level of slack in the economy and the signals from medium and long-term inflation expectations (see Chart 5.3). Thus, the December BMPE expects the annual average inflation rate to rise from 0.3% in 2020 to 2.6% in 2021 and to 3.2% in 2022, and to moderate subsequently to 1.8% in both 2023 and 2024. In turn, underlying inflation, which has been far less affected by the rise in energy prices in 2021, is expected to rise more gradually, to 1.4% in 2021 (from 0.7% in 2020) and 1.9% in 2022, falling slightly from then on to reach 1.8% at the end of the projection period. This underlying inflation pattern is compatible with a considerable acceleration in compensation per employee, which is expected to grow by 2.9% year-on-year in 2024 (compared with an average growth rate of 2.1% in the pre-crisis period). The inflation path projected by the ECB is somewhat higher than those published by other international organisations and private analysts, especially for 2022 (see Table 2), largely because it takes into account the most recent developments.

According to the latest European Commission forecasts, the conditions for deactivating the escape clause, which in 2020 temporarily suspended application of the Stability and Growth Pact rules, will be in place in 2023. In this setting, in October the European Commission relaunched the public debate on reform of the European Union's economic governance framework.[6, 7] This reform is shaped by two main issues. First, the heterogeneous but, in general, high public debt levels – well above 60% of GDP – expected in the wake of the health crisis in most EU Member States. Second, the extensive investment needs that will arise in the medium and long term from the European Union's strategic policy priorities in sustainability, energy transition and digitalisation.

At its latest monetary policy meeting, in December, the ECB's Governing Council made changes to its pandemic emergency purchase programme (PEPP) and its asset purchase programme (APP). The Governing Council decided to reduce the pace of net asset purchases under the PEPP compared with the previous quarter and confirmed that it will discontinue net asset purchases at the end of March 2022. It also decided to extend the reinvestment horizon for the principal payments from securities purchased under the PEPP until at least the end of 2024, and emphasised the flexibility these reinvestments afford across time, asset classes and jurisdictions. Further, it indicated that net purchases under the PEPP could be resumed, if necessary, to counter negative shocks related to the pandemic. In line with a step-by-step reduction in asset purchases and to ensure that the monetary policy stance remains consistent with the medium-term

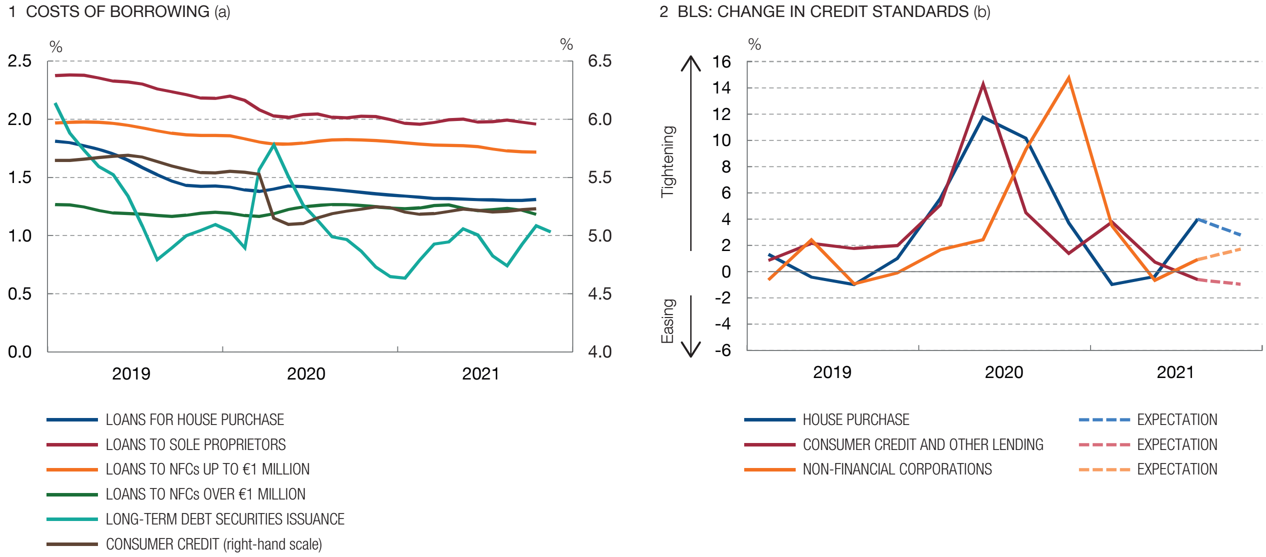
6 See European Commission (2021), "The EU economy after COVID-19: implications for economic governance", COM(2021) 662 final.

7 The public debate announced by the European Commission in February 2020 was suspended following the outbreak of COVID-19.

Chart 6

FINANCING COSTS IN THE EURO AREA AS A WHOLE REMAIN LOW AND THE SUPPLY OF CREDIT WAS STABLE IN MOST SEGMENTS IN 2021 Q3

Average interest rates on bank loans to households and firms have remained largely unchanged in recent months. According to the Bank Lending Survey (BLS), there was no appreciable change in credit standards in most segments in 2021 Q3. For Q4, banks expect the supply of credit to tighten somewhat, with the exception of consumer credit and other lending to households where they expect it to ease slightly.



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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inflation target, the Governing Council also decided to increase the pace of monthly net purchases under the APP to €40 billion in Q2 and €30 billion in Q3, and to maintain net asset purchases under the APP at a monthly pace of €20 billion from October 2022. There was a contained market reaction to the announcement of these decisions, save for some increase in sovereign risk premia (particularly in the case of Italy), which could be linked to the decisions relating to the two asset purchase programmes.

Financing conditions for euro area households and firms remain highly favourable. Average interest rates on new loans granted by credit institutions to the private sector remain at historically low levels, with no significant change in recent months (see Chart 6.1). In addition, according to the Bank Lending Survey, there was no appreciable change in credit standards in Q3, save for some tightening in the case of loans to households for house purchase. In Q4, banks expect the supply of credit to tighten somewhat, with the exception of the supply of consumer credit and other lending to households, which is expected to ease slightly (see Chart 6.2).

In terms of volume, the rate of growth of financing obtained by firms has increased in recent months, while the rate of growth of financing obtained by households has slackened somewhat. This is explained, essentially, by the acceleration in bank loans to firms – which grew by around 1% in quarter-on-quarter terms in October – and by the lower rate of growth of loans to households for house purchase.

Financing conditions have remained comfortable in recent months

On average in Q4, the IBEX-35 has underperformed the euro area-wide index. Thus far in Q4 the IBEX-35 has declined 5.9%, in contrast with the gain of 2.8% posted by the EURO STOXX 50. This weaker relative performance of the Spanish index would essentially reflect somewhat less favourable near and medium-term earnings growth expectations in the quarter for firms listed on the Spanish market than for other euro area firms. Despite the 10-year Spanish government bond yield declining slightly in the quarter to date (by 12 bp), the yield spread over the equivalent German Bund has widened by 5 bp (to 71 bp), a smaller increase than observed for Portugal, Greece and Italy.

In recent months, the average cost of bank lending extended to households and non-financial corporations has held at historically low levels, and credit standards appear to have remained largely unchanged. In recent months, average interest rates have declined slightly in new bank lending in the form of consumer credit and to sole proprietors, and have barely changed in all other segments (see Chart 7.1). According to the Bank Lending Survey (BLS), credit standards for lending to firms held stable in Q3, but tightened slightly for lending to households. Looking ahead to Q4, banks expect no significant changes to the supply of credit in any segment (see Chart 7.2).

The Spanish economy remained on a gradual recovery path in Q3, although the intensity of the recovery was conditioned by the fall-off in private consumption

Spanish GDP growth accelerated to 2% in Q3. This rate of GDP growth was short of that forecast in the Banco de España's September projection exercise,[8] just as it was in Q2. The GDP growth in Q3 essentially owed to net external demand's positive contribution to growth (1.8 pp), since domestic demand was significantly dampened by the fall-off in private consumption and residential investment (see Chart 8.1). The factors apparently behind the weakness of household consumption include the upturn in inflation in recent months and the global supply chain disruptions that have affected the availability of some durable goods, particularly vehicles.

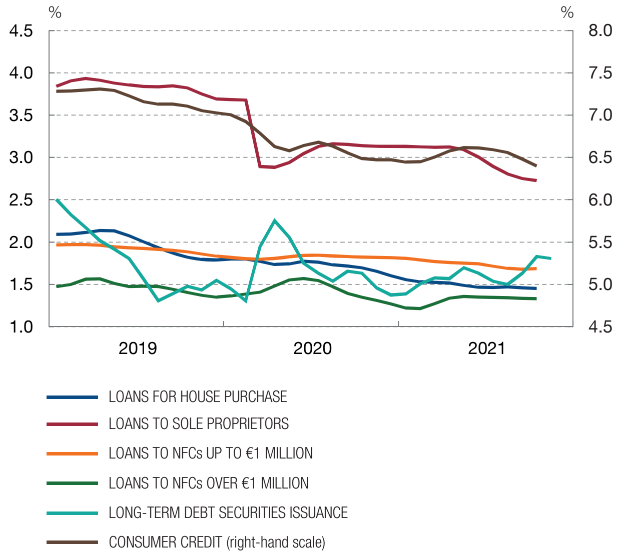
8 See Box 1, "Macroeconomic projections for the Spanish economy (2021-2023)", *Economic Bulletin* 3/2021, Banco de España.

Chart 7

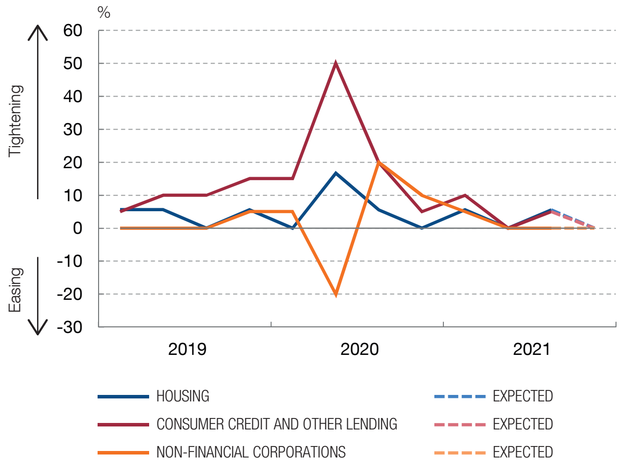
FINANCING CONDITIONS REMAIN LOOSE FOR HOUSEHOLDS AND FIRMS

In recent months, interest rates on new bank loans have held at historically low levels. According to the BLS, credit standards for lending to firms have remained stable in 2021 Q3, while tightening slightly for lending to households. If banks' expectations prove accurate, the supply of credit will remain stable across all segments in Q4.

1 COST OF BORROWING (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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In Q3, Spanish GDP stood 6.6% below its end-2019 level, a significantly larger gap than that observed for the euro area as a whole (0.3%). The Spanish economy contracted more sharply than the main euro area economies in 2020 H1, and has also recovered less robustly since then (see Chart 8.2). Indeed, in the last three quarters Spain's GDP growth rate has been lower than that for the euro area as a whole. Prominent among the demand components behind this worse relative performance are private consumption and, in particular, tourism exports, which have recovered more gradually in the Spanish economy.

Spain's economic growth is expected to slow in Q4, against a backdrop of persistent global supply chain bottlenecks and high inflation rates, and with the pandemic having taken a turn for the worse

The Banco de España's projections, published in Box 1 of this report,[9] envisage Spanish GDP growth of 1.6% in Q4. The slowdown anticipated in Spanish

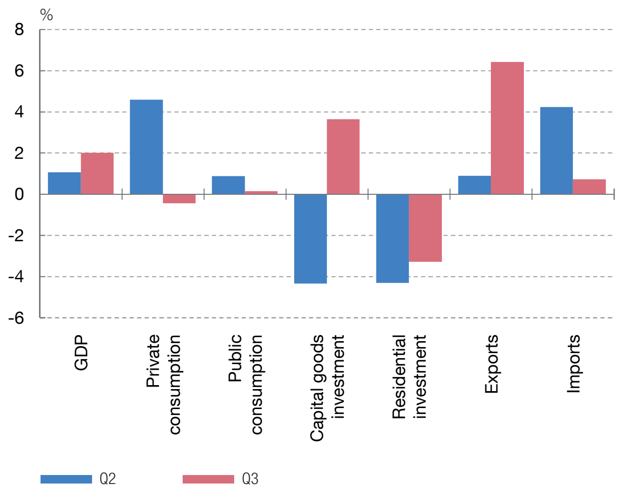
9 See Box 1, "Macroeconomic projections for the Spanish economy (2021-2024): the Banco de España's contribution to the Eurosystem's December 2021 joint forecasting exercise", *Economic Bulletin* 4/2021, Banco de España.

Chart 8

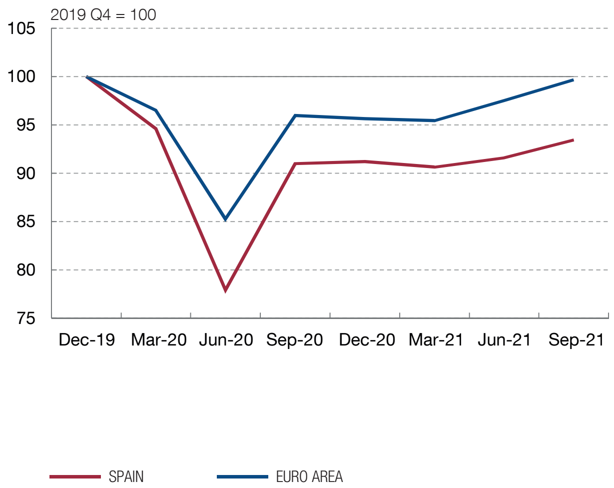
THE PACE OF SPANISH ECONOMIC GROWTH QUICKENED IN Q3, ALBEIT LESS INTENSELY THAN EXPECTED

Spanish GDP grew 2% in Q3, essentially underpinned by the foreign sector's positive contribution, since domestic demand was hampered by the fall-off in private consumption and residential investment. Spanish GDP remains 6.6% below end-2019 levels, a significantly larger gap than observed for the euro area as a whole (0.3%).

1 CHANGE IN GDP AND ITS COMPONENTS IN 2021 Q2 AND Q3. Q-O-Q RATES



2 GDP IN SPAIN AND THE EURO AREA



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SOURCES: Eurostat and INE.

economic growth in October-December is consistent with the signals from indicators. These include consumer and business confidence indicators, which have dipped slightly (see Chart 9.1), and mobility and fuel sale indicators, which show no sign of significant improvements in Q4 (see Charts 9.2 and 9.3). In addition, the worsening epidemiological situation and the reintroduction of restrictions to contain the spread of the virus, both in Spain and, above all, in some of its main trading partners (see Chart 9.4), will foreseeably have an adverse impact on the dynamism of activity in the final stretch of this year and in early 2022. Lastly, the most recent wave of the Banco de España Business Activity Survey (EBAE, by its Spanish abbreviation), based on data compiled up to the third week of November, indicates a slight reduction in expectations for business turnover growth in Q4 as compared with three months earlier.[10]

Employment has remained highly buoyant in Q4

Total social security registrations in October and November outperformed the historical norms for these months, seeing the figure for November stand 1% higher than that for February 2020. In addition, the number of furloughed workers

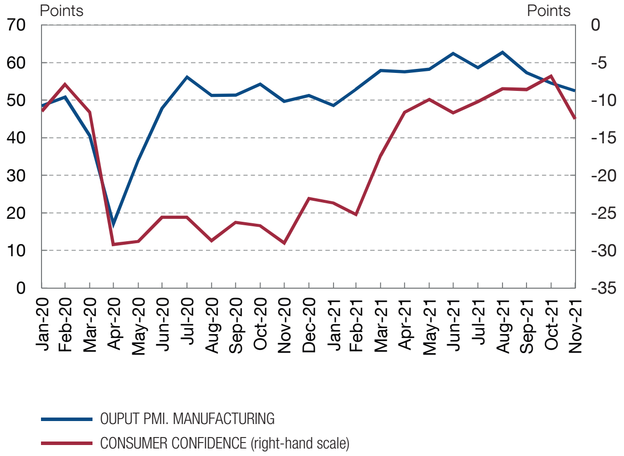
10 See "Encuesta a las empresas españolas sobre la evolución de su actividad: noviembre de 2021", Notas Económicas, *Boletín Económico,* 4/2021, Banco de España.

Chart 9

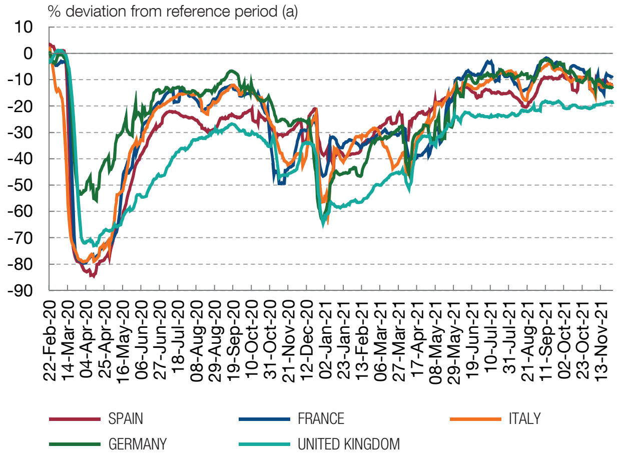
GDP GROWTH IS EXPECTED TO MODERATE IN Q4

The slowdown expected in Spanish economic growth in October-December is consistent with signals from indicators, including those for consumer and business confidence, mobility and fuel sales. In addition, the turn for the worse taken by the pandemic in recent weeks and the reintroduction of restrictions to contain the spread of the virus will foreseeably have an adverse impact on the dynamism of activity in the final stretch of this year and in early 2022.

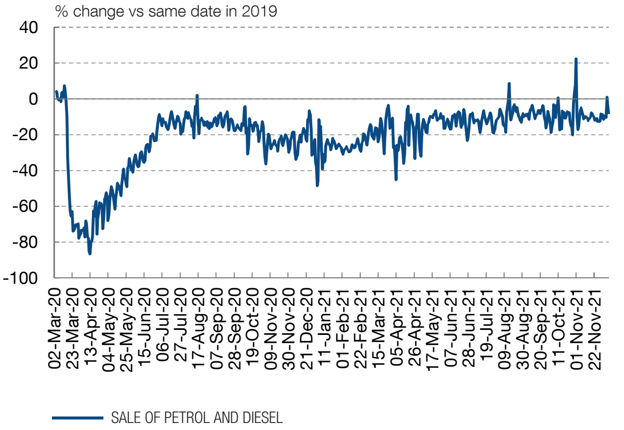
1 CONFIDENCE INDICATORS



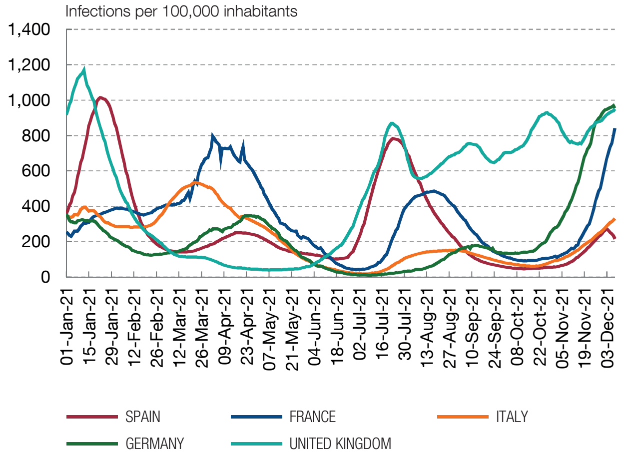
2 LOCAL MOBILITY INDICATORS. RETAIL AND RECREATION OUTLETS, TRANSIT STATIONS AND WORKPLACES



3 SALE OF PETROL AND DIESEL (4-DAY MOVING TOTAL)



4 14-DAY CUMULATIVE INCIDENCE



SOURCES: European Commission, IHS Markit, Google, Dirección de Estudios de Repsol and Our World in Data.

a Percentage deviation from mobility observed in a pre-pandemic reference period (3 January to 6 February 2020). 7-day moving averages are depicted.

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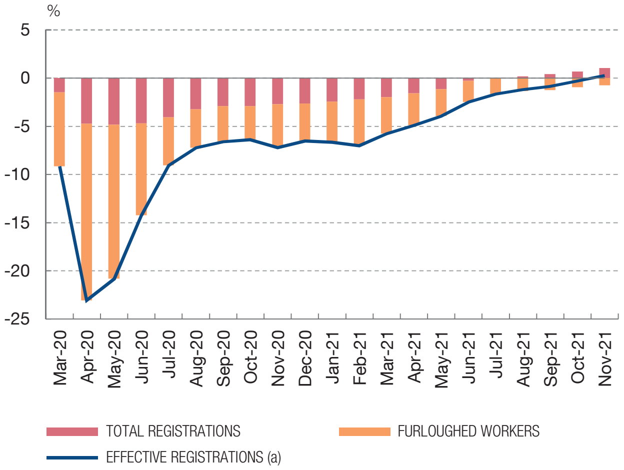
declined further during the period to just over 125,000 at end-November, down 800,000 on February 2021 (the peak for the year). As a result of these developments, and in the absence of information on the average level of furloughed workers in November, it is estimated that effective social security registrations in the month stood 0.3% up on pre-crisis levels, compared with an average negative gap of 1.2% observed in Q3 (see Chart 10.1). In keeping with these employment developments,

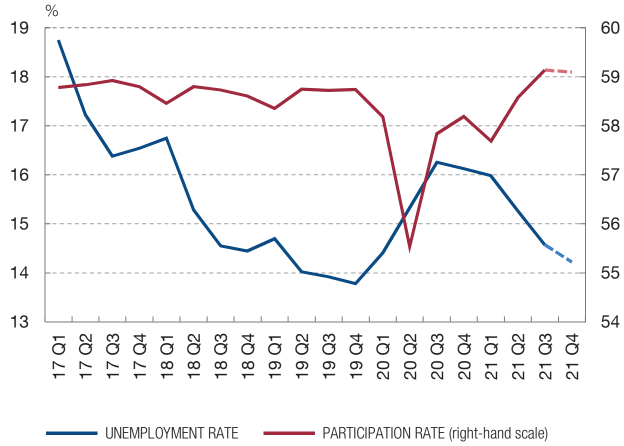
Chart 10
EMPLOYMENT IMPROVED FURTHER, WITH RISING REGISTRATIONS AND A DECLINING NUMBER OF FURLOUGHED WORKERS

Total registrations improved further in the first two months of Q4, to stand 1% above the level observed in February 2020, while the number of furloughed workers declined to 125,632. This allowed effective registration to stand 0.3% up on its pre-crisis level. In keeping with these favourable employment developments, the unemployment rate is expected to decline in Q4, against the backdrop of a sustained recovery in the labour market participation rate.

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



2 UNEMPLOYMENT RATE AND PARTICIPATION RATE



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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in Q4 the number of total hours worked is expected to rise and the unemployment rate to decline (to 14.3%), against the backdrop of a sustained recovery in the labour force participation rate (see Chart 10.2).

Amid a highly uncertain economic and health environment, GDP growth in Q4 would largely rely on growth in consumption and investment

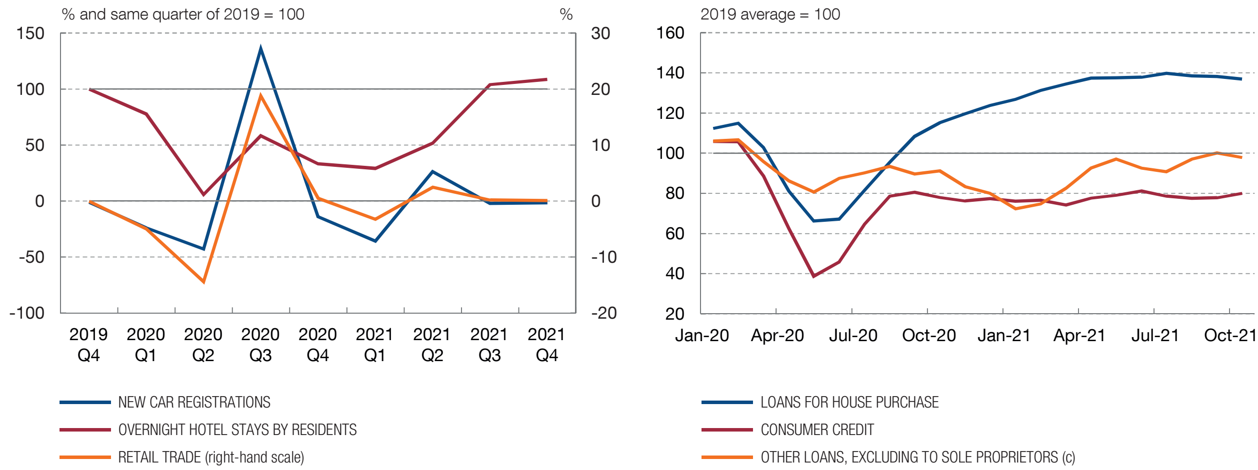
The deterioration of the health situation in recent weeks and the reintroduction of some pandemic containment measures could hamper private consumption in the final stretch of the year. Nonetheless, this demand component is expected to grow slightly in Q4 as a whole. This higher spending, which would be consistent with the sustained labour market improvement observed in recent months, would essentially materialise in certain services items, whereas the consumption of goods would be less buoyant, as indicated by the retail trade index and new car registrations (see Chart 11.1). In any event, said increase in spending would be compatible with somewhat weak developments in consumer lending (despite the cost of borrowing holding at historically low levels in this segment), given that households have built up a significant stock of savings since the onset of

Chart 11
HOUSEHOLD CONSUMPTION APPEARS TO HAVE RISEN SLIGHTLY IN Q4

This growth would be consistent with the sustained improvement in the labour market and would be underpinned in particular by increased spending on certain services items, while new car registrations and retail sales appear to remain somewhat weak. In keeping with the weak spending on certain durable goods and the considerable stock of savings built up by households since the onset of the pandemic, consumption growth in Q4 would be compatible with the fact that consumer credit remains lacklustre.

1 HOTEL OVERNIGHT STAYS BY RESIDENTS, RETAIL TRADE INDEX AND NEW CAR REGISTRATIONS (a)

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



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

a The chart depicts the quarter-on-quarter change in new car registrations and retail trade. For overnight hotel stays by residents, percentage ratio of overnight stays observed for the quarter analysed to those observed for the same quarter 2019. For 2021 Q4, the calculation takes into account the information available at the cut-off date of this report (November for new car registrations and October for retail trade and overnight stays by residents).
b Bank financing series include financing granted by credit institutions and by specialised lending institutions.
c Includes renegotiations of previous loans.

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the pandemic and have reduced their level of spending on certain durable goods whose purchase typically requires external financing (see Chart 11.2).

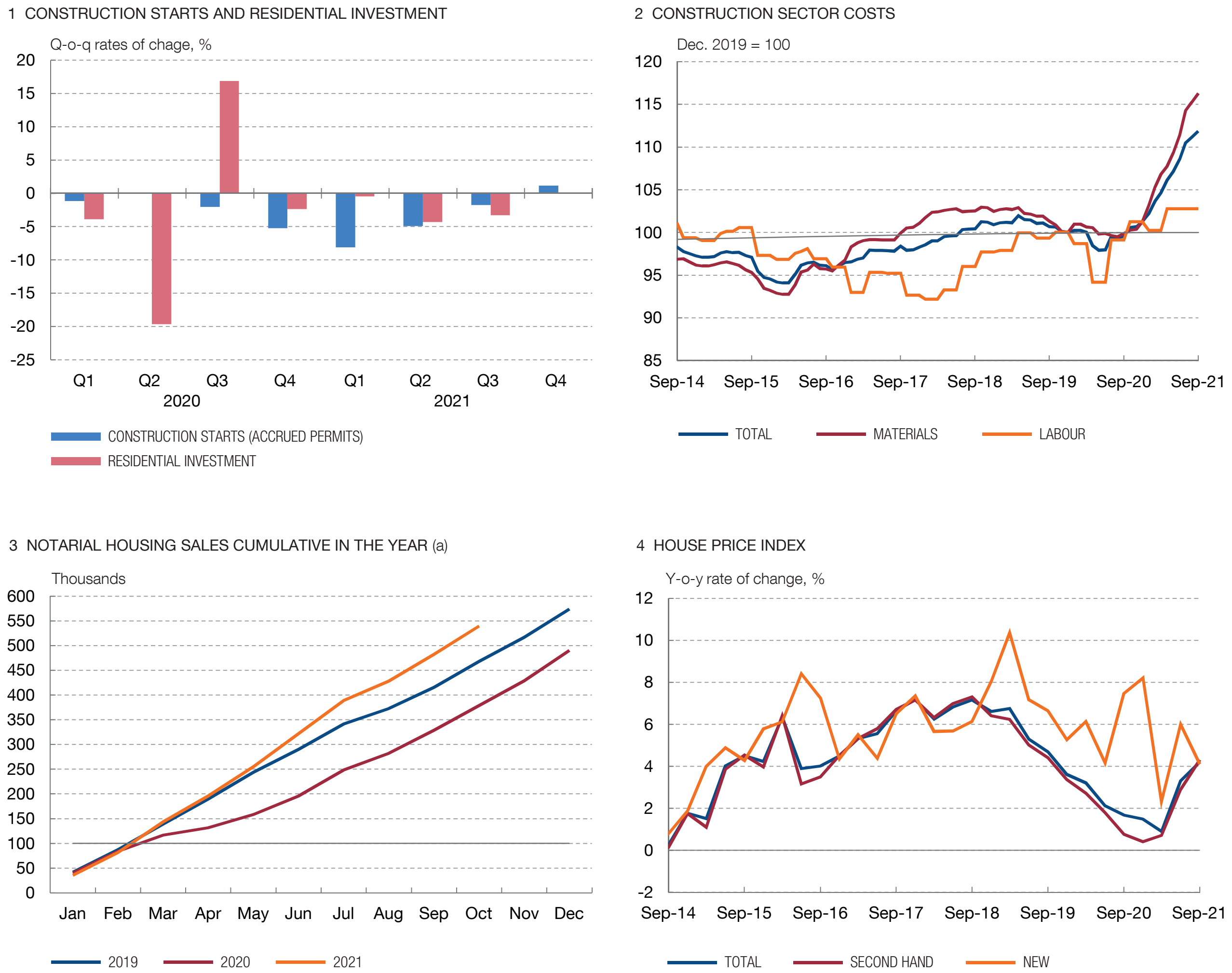
The recent buoyancy in construction starts suggests that residential investment may rise in 2021 Q4, having contracted since end-2020 (see Chart 12.1). However, the difficulties faced by the construction sector in recent months in terms of the availability of certain intermediate goods – also evident in a perceptible increase in costs (see Chart 12.2) – and labour supply shortages could hamper the recovery in residential investment over the coming quarters, particularly if they persist for an extended period of time. In any event, house purchases have shown considerable strength in recent months (see Chart 12.3), in step with a very dynamic performance from new lending for house purchase, which is clearly up on pre-pandemic levels (see Chart 11.2), and accelerating house prices in Q3 (see Chart 12.4).

The pace of growth in business investment appears to have picked up in Q4. Both the industrial confidence and the foreign order book indicators, which up to November had exceeded the levels reached in Q3 (see Chart 13.1) point in this

Chart 12

FOLLOWING THE DECLINES RECORDED SINCE END-2020, RESIDENTIAL INVESTMENT IS EXPECTED TO RISE IN Q4

The recent buoyancy in construction starts suggests that residential investment may rise in Q4. However, the strength of this recovery over a longer time horizon will depend on the persistence of the bottlenecks that have conditioned the sector's activity during recent months and driven up its costs. In any event, house purchases have shown considerable strength in recent months, which appears to have accelerated house prices in Q3.



SOURCES: Banco de España, Centro de Información Estadística del Notariado, INE and Ministerio de Transportes, Movilidad y Agenda Urbana.

a The latest data available for purchases in 2021 are for October.

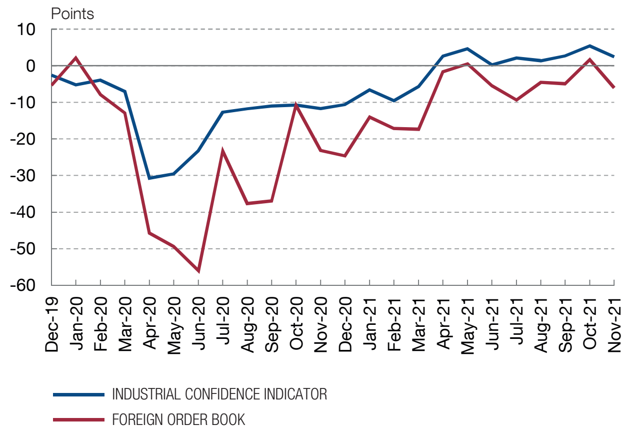
direction. However, the persistence of supply-side problems continues to prompt delays in delivery times in the manufacturing sector (see Chart 13.2) and increases in the percentage of firms which consider that input shortages are constraining their activity (see Chart 13.3). Looking forward, this could have a bearing on the buoyancy of business investment.[11] Also, in recent months, the flow of new bank loans to firms

11 For an analysis of the implications of these supply problems on the buoyancy of Spanish economic activity in the coming months, see Box 5 "The potential impact of global supply chain bottlenecks on the Spanish economy in coming quarters", *Economic Bulletin,* 4/2021, Banco de España.

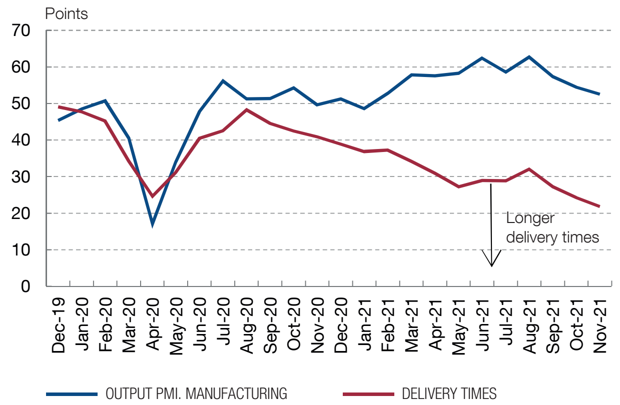
Chart 13
BUSINESS INVESTMENT MAY SHOW SLIGHTLY MORE BUOYANCY IN Q4 THAN IN Q3

The information available regarding the industrial confidence and the foreign order book indicators suggests that the pace of growth of investment in capital goods and intangibles might pick up in Q4. However, the persistence of problems on the supply side continues to prompt delays in delivery times in the manufacturing sector and increases in the percentage of firms which consider that input shortages are limiting their activity. Also, the flow of new bank loans to firms has remained relatively weak, while gross issuances of debt securities by firms have risen in recent months.

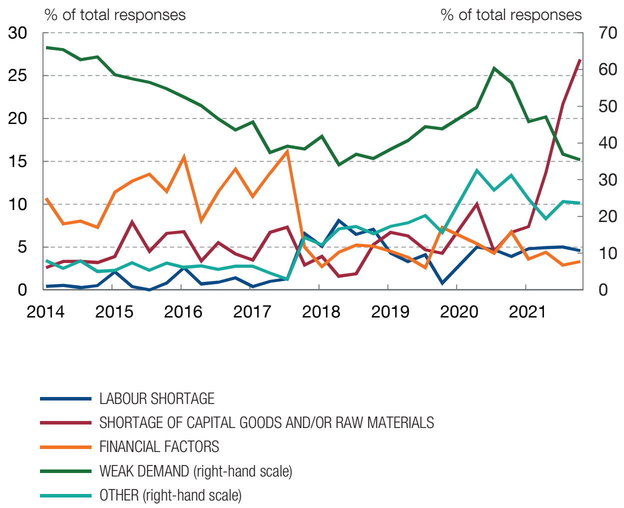
1 CONFIDENCE INDICATORS



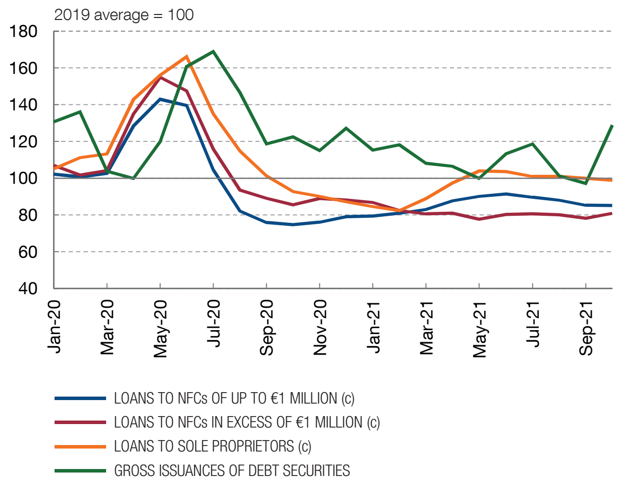
2 PURCHASING MANAGERS' INDICES



3 FACTORS LIMITING INDUSTRIAL ACTIVITY (a)



4 NEW LENDING TO PRODUCTIVE ACTIVITIES (b)
Seasonally adjusted 3-month cumulative flows



SOURCES: Banco de España, European Commission, IHS Markit and Ministerio de Industria, Comercio y Turismo.

a The percentages of the responses stating the indicated factors, together with the response "none" (not shown in the chart), sum to 100%.
b Bank financing series include financing granted by credit institutions and by specialised lending institutions.
c Includes renegotiations of previous loans.

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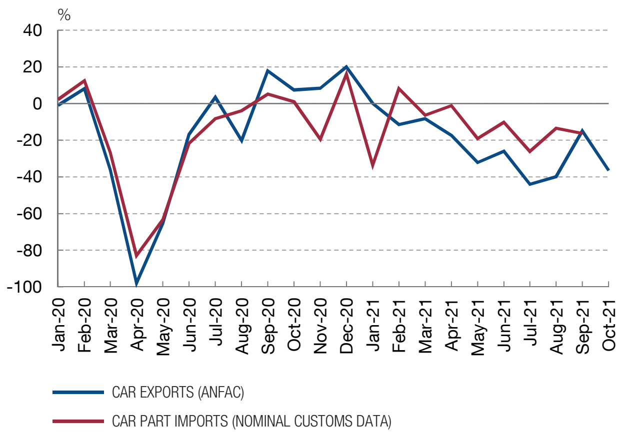
has remained relatively weak – largely owing to demand factors[12] – while gross issuances of debt securities by firms have risen (see Chart 13.4).

12 For further details on recent developments in access by Spanish SMEs to bank finance, see Box 4 "Recent developments in Spanish SMEs' access to external finance according to the European Central Bank's six-monthly survey", *Economic Bulletin,* 4/2021, Banco de España.

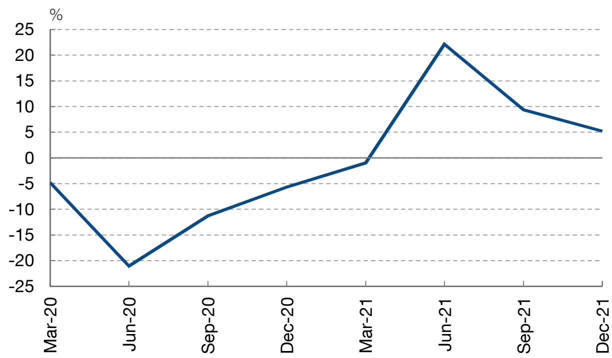
Chart 14
FOREIGN TRADE WILL CONTINUE TO RECOVER, ALBEIT LESS BUOYANTLY

The persistence of certain global supply chain disruptions and the weakening of economic activity as a whole in some of Spain's main trading partners point to a slowdown in the year-on-year growth rate of Spanish exports and imports of goods in Q4. Tourism exports continue to recover in the quarter as a whole. However, in the final stretch of the year this recovery may be hampered by the the worsening of the health situation observed in recent weeks in Spain and in the main tourism source markets for Spain.

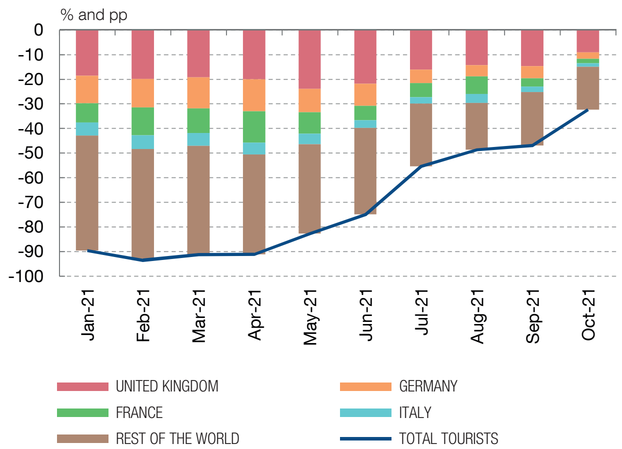
1 CAR EXPORTS (UNITS)
Rates of change vs the same dates in 2019



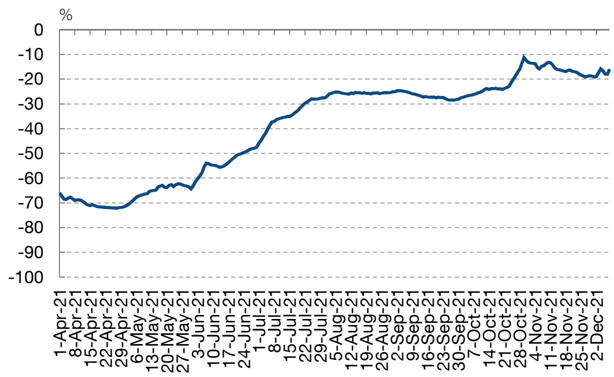
2 SPANISH EXPORT MARKETS
Y-o-y rates of change



3 INTERNATIONAL TOURIST ARRIVALS
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 dates in 2019; 7-day moving average



SOURCES: Anfac, Departamento de Aduanas, ECB, INE and Eurocontrol.

In Q4 the external sector is expected to contribute more modestly to GDP growth than in Q3

The persistence of certain global supply chain disruptions and the weakening of economic activity as a whole in some of Spain's main trading partners point to a slowdown in the year-on-year growth rate of Spanish goods exports and imports in Q4. The impact of bottlenecks on international trade flows is particularly evident in the automotive sector, where both Spanish car exports and imports of certain components necessary for car manufacturing have continued to decline notably in recent months (see Chart 14.1). Since late summer, Spanish export market growth forecasts for 2021 as a whole and for 2022 have been revised downwards by around 1 pp for each year (see Chart 14.2).

In the quarter as a whole, tourism exports are expected to continue to recover. However, in the final stretch of the year this recovery may be hampered by the worsening of the health situation observed in recent weeks in Spain and in the main tourism source markets for Spain. Indeed, certain indicators of the performance of tourism flows, only available up to October, show that at the start of Q4 the pace of recovery of international tourism in Spain accelerated (see Chart 14.3), thanks to the German and French markets and the improvement in the British market recorded last month. However, according to the most recent changes in air passenger transport, these relatively favourable dynamics have substantially slowed in recent weeks, coinciding with the increase in the number of infections in Europe and Spain and the implementation of fresh pandemic containment measures in many of these economies (see Chart 14.4).

The general government deficit continued to decline in 2021 Q3, in year-on-year terms, and might end the year below the reference value of 8.4% of GDP set by the Government

In the first nine months of the year, the general government deficit, excluding local government, stood at 4.2% of GDP, 2.7 pp down on the same period in 2020 (see Chart 15.1). This change was prompted by the notable growth of government revenue in recent months, reaching well above the pre-pandemic levels (see Chart 15.2). Meanwhile, public spending (which also exceeds pre-crisis levels) has accelerated in recent months, driven by the increase in capital transfers to the private sector owing to, among other factors, the measures approved in March 2021 to support business solvency.

Although incomplete, the information available on the effective degree of implementation of the NGEU programme suggests that the volume of funds that will be used this year may be substantially lower than that initially announced by the Government. To October, of the €26.6 billion of credit to be financed with the European funds of the NGEU programme included in the State Budget for 2021, only €9.2 billion of expenses, including those relating both to the Recovery and Resilience Facility and to the REACT-EU programme, had been recognised. The bulk of this amount relates to transfers to other general government sectors which will ultimately implement the expenditure.[13]

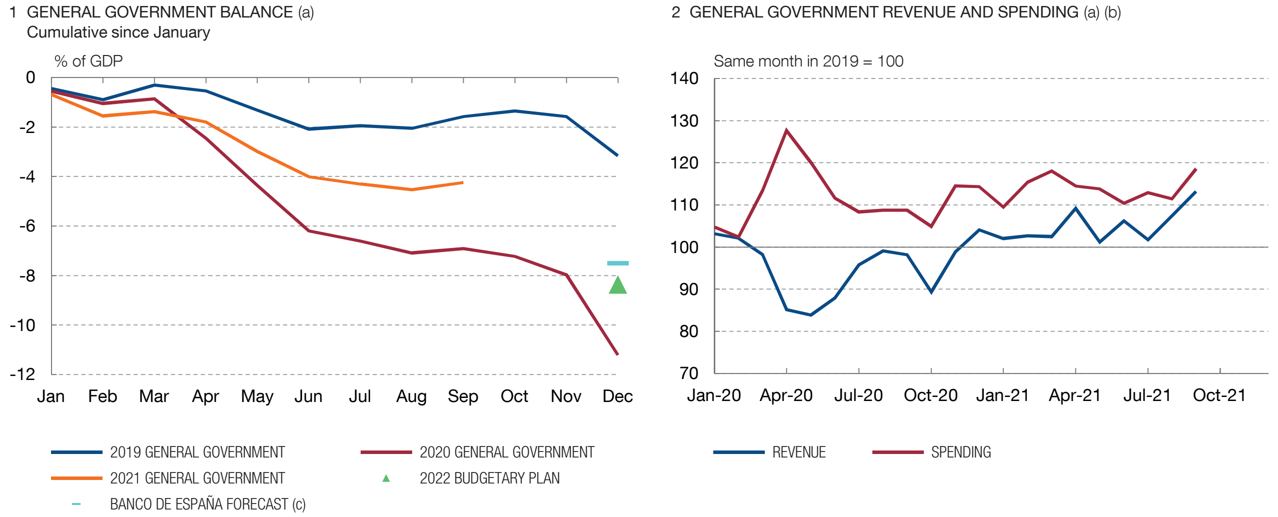
The 2022 State and Social Security Budget is currently under debate in the Senate, following its initial approval by Parliament. According to the draft budget

13 An alternative source of information is the website of the Spanish Recovery, Transformation and Resilience Plan, which includes the calls for funding proposals prior to expenditure outturn. As at early December, a total of €10,236 million was offered on the website, of which €5,662 million related to calls closing in 2021.

Chart 15

IN RECENT MONTHS, THE GENERAL GOVERNMENT DEFICIT HAS CONTINUED TO DECLINE AS COMPARED WITH THE SAME PERIOD IN 2020

In the first nine months of 2021 the general government deficit, excluding local government, stood at 4.2% of GDP, down 2.7 pp on the same period a year earlier, benefitting from notably buoyant government receipts in recent months, although government spending also appears to have accelerated recently.



SOURCES: Banco de España, IGAE and the 2022 draft budgetary plan (October 2021).

a The monthly data refer to the general government aggregate excluding local government, since the IGAE does not publish monthly information for general government as a whole.

b Excluding transfers within general government and adjusted for the temporary impact of several toll motorway concessions having been returned to the public sector in January 2020 and September 2021, and the reclassification of Sareb as part of general government in December 2020.

c December macroeconomic projections for the Spanish economy.

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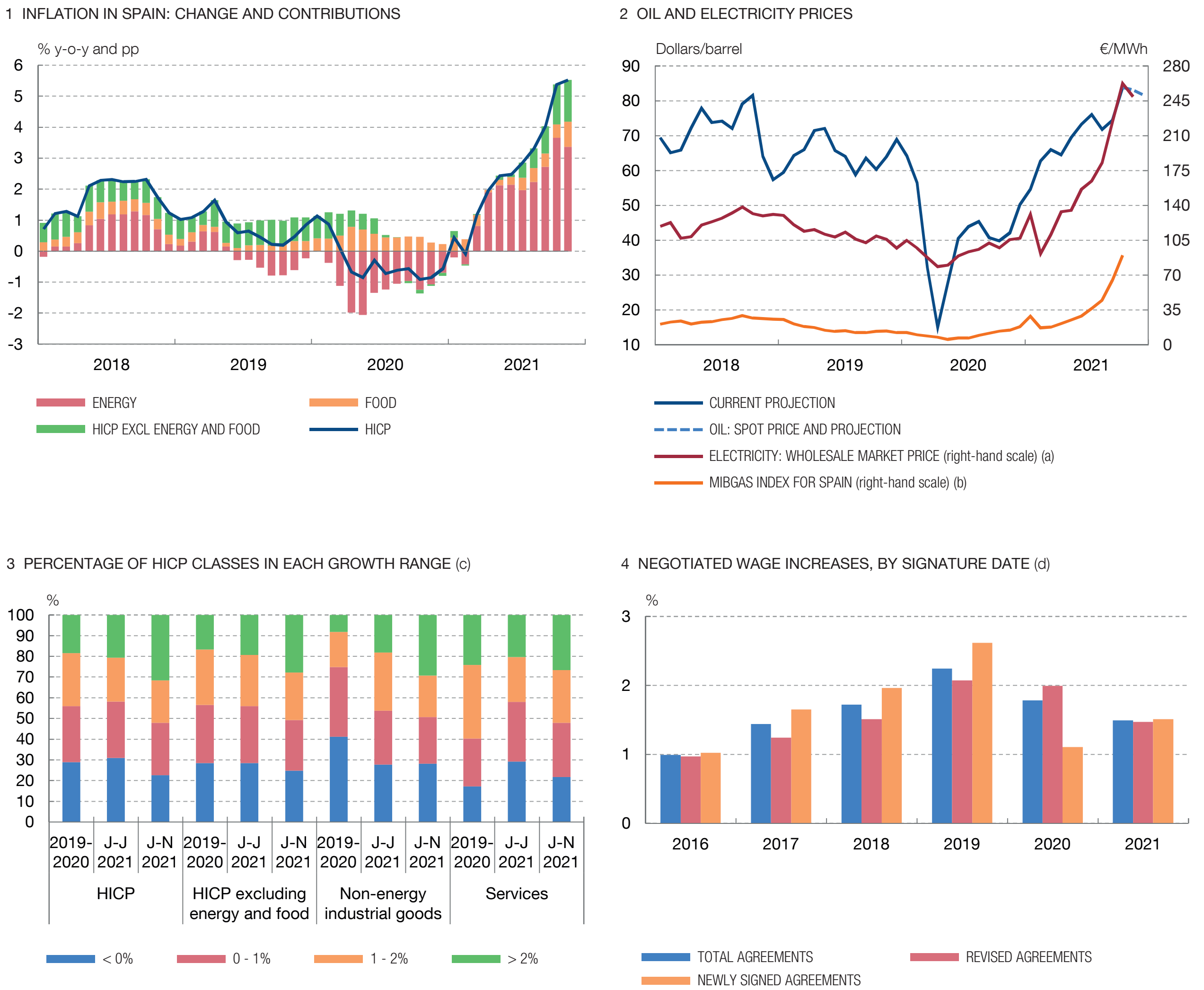
and the budgetary plan sent to Brussels, the overall general government deficit is expected to decrease from the 8.4% of GDP projected by the Government for 2021 to 5% of GDP in 2022. This positive performance would mainly be due to the improvement in the economic situation and the reduction in expenses related to the health crisis. The draft State budget includes loans amounting to €26.4 billion to be financed with NGEU funds in 2022, an amount similar to that included in the 2021 budget (€26.6 billion).

Headline inflation has risen sharply in recent months, mainly driven by the acceleration in the energy component of prices, but also by the (more moderate) increase in the core component

In November, the year-on-year growth rate of the Harmonised Index of Consumer Prices (HICP) rose to 5.5%, thus continuing the upward path maintained by headline inflation since late 2020 (see Chart 16.1). As in prior months, the rise in prices is mainly explained by the pick-up in energy prices (see Chart 16.2). Thus, the energy component contributed 3.4 pp to the inflation rate

Chart 16
THE INFLATIONARY TREND CONTINUES

Headline inflation has continued to rise in Spain during recent months (somewhat more sharply than in the euro area as a whole), driven by the energy component, but also by a moderate increase in core inflation. However, the inflationary upturn remains concentrated among a relatively small proportion of goods and services. Given that most determinants behind the recent rise in inflation appear to be predominantly temporary, and barring any additional shocks, the inflation rate can be expected to gradually decline over the course of 2022. However, the risks associated with this inflation outlook are clearly on the upside and additional inflationary pressure through indirect and second-round effects cannot be ruled out.



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

a Regulated rate for small consumers, which includes producer prices, network charges and energy policy charges and charges.
b 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.
c Average percentages for 2019-2020, January-June 2021 and July-November 2021.
d Data for 2021 up to November.

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observed in November, of which 1.4 pp related to higher electricity prices. This, in turn, reflects the increases in the prices of natural gas and, to a lesser extent, of CO2 emission allowances on international markets in recent months. Specifically, these factors would explain approximately 80% and 10%, respectively, of the increase in electricity prices in the year to date.[14] The different measures approved by the Spanish Government in mid-September (including most notably the reduction in tax burdens on the electricity system until January 2022 and the reinforcement of the social rebate for vulnerable consumers until April 2022) appear to have partially limited the impact of the high prices in the wholesale electricity market on the rates paid by consumers.

Core inflation, i.e. HICP excluding energy and food, has also increased in recent months, primarily because of the pick-up in services prices. In particular, core inflation stood at 1.6% year-on-year in November, a substantially higher rate than that observed, on average, both in H1 (0%) and in Q3 (0.7%). This rise in core inflation is largely attributable to the pick-up in the prices of some tourism and leisure-related services, following the sharp decline recorded in 2020. For instance, accommodation services prices recorded a year-on-year fall of 12.7% on average in H1, but rose by 6.8% in Q3 and by 14.5% in November.

The higher rate of growth recently observed in the prices of certain non-energy industrial goods also appears to have contributed to the rise in core inflation. In some cases, this price acceleration is mainly a reflection of the substantial impact of the increase in energy prices on the production costs of these goods. In others, however, it is due to the marked increase in the price of certain non-energy intermediate products (essential for producing these goods) and of shipping prices, resulting from the bottlenecks observed in global supply chains in recent months. In any event, the percentage of non-energy industrial goods with inflation rates above 2% has increased very significantly this year, from 6% in January to 34% in November (see Chart 16.3). Notwithstanding, it should be noted that for headline HICP overall, the proportion of items with inflation rates that are negative or below 1% remains relatively high (around 40%).

The recent surge in energy prices is an eminently global phenomenon;[15] accordingly, headline inflation has also quickened sharply in most European economies. For example, according to Eurostat's flash estimate, inflation in the euro area as a whole is estimated to have reached 4.9% in November, its highest level since the start of monetary union. Spain's positive inflation differential vis-à-vis the euro area in recent months mainly stems from the relatively more pronounced increase in energy prices in the country.[16] Conversely, the inflation gap with the euro area remains clearly negative for other goods and services (-0.5 pp in October).

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14 For further details, see M. Pacce, I. Sánchez and M. Suárez-Varela (2021), Recent developments in Spanish retail electricity prices: the role played by the cost of CO2 emission allowances and higher gas prices, Occasional Paper No 2120, Banco de España.

15 For a description of the main determinants of the recent surge in energy commodity prices and an analysis of its global economic impact, see Box 2 "An analysis of the global economic impact of the recent increase in energy commodity prices", *Economic Bulletin* 4/2021, Banco de España.

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

Given that most of the factors determining the recent rise in inflation appear to be predominantly temporary in nature, and barring any additional shocks, the inflation rate can be expected to gradually decelerate over the course of 2022. The prices of many energy commodities traded in international futures markets seem to point in this direction. According to the forecasts of the majority of analysts, the supply and demand mismatches observed globally in recent months, particularly in manufacturing, may become more protracted than anticipated some months ago, although they should gradually be corrected over the coming quarters.

That said, the risks associated with this inflation outlook are on the upside.[17] First, the rise in energy prices observed in recent quarters and the supply chain bottlenecks have systematically been more pronounced and persistent that initially expected. Looking ahead, a hypothetical escalation in geopolitical tensions could renew pressures on gas prices in Europe. Also, the simultaneous deployment of NGEU projects in different countries could lead to protracted demand-side pressures on certain products. Second, additional inflationary pressures through indirect and second-round effects cannot be ruled out. Indeed, in Spain, on data to November, newly signed collective bargaining agreements (which are the first to reflect any changes in the economic situation) have already begun to show an acceleration, albeit very moderate, of the negotiated wage increase for 2021 (up to 1.5%; see Chart 16.4). In any event, the intensity of these upside risks is mitigated by continued expectations of moderate price increases in the medium term, drawing on information both from surveys of professional forecasters and financial market prices.

Cut-off date: 15.12.2021.
Publication date: 17.12.2021.

17 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", Quarterly Report on the Spanish Economy, *Economic Bulletin* 4/2021, Banco de España.

Chronology of Analytical Articles published in this Economic Bulletin.

ECONOMIC AND FINANCIAL PERFORMANCE OF SPANISH FIRMS IN 2020 AND 2021 ACCORDING TO THE CENTRAL BALANCE SHEET DATA OFFICE

Álvaro Menéndez and Maristela Mulino

Published on 2 December 2021

This article describes the economic and financial performance of Spanish non-financial corporations in 2020, a year marked by the impact of COVID-19. According to the information available in the Central Balance Sheet Data Office integrated database, the crisis severely affected activity, causing a sharp decline in turnover and profitability, albeit with very uneven effects across sectors. There was also a deterioration of many firms' financial position, caused by both rising debt and, to a larger extent, falling revenue. Firms were able to meet the greater liquidity needs without any widespread strains. In fact, easier access to external financing allowed firms, on average, to increase their liquidity buffers as a precautionary measure. More recent developments are also analysed on the basis of Central Balance Sheet Data Office Quarterly Survey (CBQ) data for the first three quarters of 2021. This period has seen a gradual improvement in firms' economic and financial position that has partially reversed last year's deterioration, in line with the economic recovery. The article includes two boxes. The first analyses the impact of the COVID-19 crisis on average supplier payment and customer collection periods. The second analyses recent developments in activity drawing on other statistical sources with a more extensive or representative coverage of the corporate sector than the CBQ.

BIGTECHS AND FINANCIAL SERVICES: SOME CHALLENGES, BENEFITS AND REGULATORY RESPONSES

Sergio Gorjón

Published on 8 November 2021

The pandemic has speeded up the digital transformation of Spanish society. Cloud computing, data analytics and remote interactions have become even more essential, forming the basis for a new industrial and commercial reality in which large technology companies (BigTechs) are at an advantage. Against this background, financial services are increasingly attracting the attention of these market players; they allow them to diversify their income and offer them channels to boost their main activity. BigTechs are gradually gaining ground in the financial arena, becoming more prominent in the most profitable segments and strengthening their position as the providers of essential services for banks. In response to this challenge, financial authorities are building a new regulatory and supervisory framework for financial platforms. Although still in its early stages, the specific character of this framework is beginning to become clear. In combination with other cross-sectoral frameworks (e.g. for competition), it will discipline the behaviour of these agents in the financial sector. This article analyses the current situation of BigTechs in the financial industry, as well as the most important legislative initiatives taking shape in the European Union in this area.

REPORT ON THE LATIN AMERICAN ECONOMY. SECOND HALF OF 2021. OUTLOOK, VULNERABILITIES AND POLICY SPACE

International Economics and Euro Area Department

Published on 27 October 2021

The economic recovery in Latin America appears to have firmed in the second half of the year, having come to a halt in practically all the countries in Q2 owing to the unfavourable course of the pandemic. This has led in recent months to an across-the-board upward revision in growth forecasts in the region for 2021. Against this background, the region's banking systems remain healthy, although some indicators, such as non-performing loans, are beginning to be impacted by the persistence of the crisis. There has also been a notable slowdown in lending, linked partly to the generalised withdrawal of support programmes. The path of the recovery, which is uneven from country to country, will be determined by the pandemic being overcome. It is expected that the recovery will continue to be underpinned by the strength of external demand and commodities prices, by the widespread support of economic policies (albeit gradually with less intensity) and by the favourable financing conditions in the region which, though they have recently tightened, remain accommodative in historical terms. One key conditioning factor will be inflation, which has risen notably across the region as a whole, and, specifically, how transitory this development proves. Given the high uncertainty surrounding the economic outlook, the Report presents alternative scenarios referring to a series of epidemiological, economic and financial variables. The indicators of macro-financial vulnerability in the region remain contained in the external and banking sectors but high in respect of public finances, against a backdrop of notable uncertainty over the future course of economic policies.

OCTOBER 2021 BANK LENDING SURVEY IN SPAIN

Álvaro Menéndez Pujadas and Maristela Mulino

Published on 26 October 2021

According to the Bank Lending Survey, during 2021 Q3 credit standards held stable or tightened slightly, depending on the segment, in both Spain and the euro area. Terms and conditions on new loans appear to have eased slightly in Spain in the two household lending segments, whereas in the euro area they seem to have tightened in loans for house purchase, with no significant changes in the other categories. Loan applications are reported to have increased moderately in the two areas, across almost all segments, in keeping with the recovery in economic activity. Banks in both areas consider that non-standard monetary policy measures were generally conducive to some expansion in the supply of credit and to an increase in the volume of new lending.

AN EMPIRICAL ANALYSIS OF THE DETERMINANTS THAT CAN BOOST NEXT GENERATION EU'S EFFECTIVENESS

Silvia Albrizio and José Federico Geli

Published on 14 October 2021

The use of Next Generation EU can become one of the main determinants of Spanish economic developments in the coming years. This article analyses the economic impact of the European Regional Development Fund over the last 20 years, on account of the similarity between its goals and those of Next Generation EU and the available information. The findings suggest that those structural reforms that reduce barriers to competition in the product market and some labour market rigidities can scale up the European funds' expansionary effect (fiscal multiplier) in the medium and long term.

THE ROLE OF CRYPTOASSETS AS LEGAL TENDER: THE EXAMPLE OF EL SALVADOR

Sergio Gorjón

Published on 7 October 2021

On 7 September 2021, El Salvador became the first jurisdiction to adopt bitcoin as legal tender. This initiative has raised as much enthusiasm as it has scepticism and potentially opens the door for other countries to follow suit. The initiative is underpinned by a law passed by the Legislative Assembly, with the more functional aspects left to a series of technical standards drawn up by the Central Bank of El Salvador. To facilitate its operational roll-out, the Government has opted to provide

Salvadorans with a digital wallet and has also launched an ambitious educational programme aimed at the population as a whole. International organisations consider that this proposal poses significant risks to the overall economy, potentially compromising the Salvadoran monetary system and the integrity of its financial sector, and undermining the State's revenue-raising capacity. Many questions remain over the final outcome, which will largely depend on the country's ability to overcome not only the difficulties evidenced in the initiative's launch, but also other pre-existing structural shortcomings.

INFLATION IN THE UNITED STATES: RECENT DEVELOPMENTS AND OUTLOOK

Fructuoso Borrallo, Alejandro Buesa and Susana Párraga

Published on 30 September 2021

Global inflation rates have increased since early 2021, especially in the United States, where there has been an upward surprise in recent months. Part of the US inflation increase is due to a statistical phenomenon stemming from the comparison of current and previous-year prices, which were marked by an across-the-board decline in activity. Further, the economic recovery has prompted a rise in prices in the sectors most affected by the pandemic, it has accentuated certain supply and logistics disruptions, and it has been accompanied by an increase in the price of the energy component. While these factors are considered to be transitory, three upside risks to prices may be identified: first, wage pressures arising from the labour supply and demand mismatch; second, a greater-than-expected inflationary effect of the fiscal stimulus introduced in response to the pandemic; and third, a possible de-anchoring of medium-term inflation expectations. In any event, these transitory effects are expected to feed through relatively moderately to euro area inflation.

CORPORATE BOND ISSUANCE DURING THE COVID-19 PANDEMIC: A COMPARISON WITH THE GLOBAL FINANCIAL CRISIS

Roberto Pascual González

Published on 28 September 2021

In the early stages of the global financial crisis and the COVID-19 crisis, bond issuance by non-financial and non-bank financial corporations in the developed economies hit record levels. However, the underlying reasons for this are different: during the global financial crisis, bond issuances were made to replace bank loans, whereas during the COVID-19 pandemic they have been made to address a liquidity problem caused by the restrictive measures adopted to combat the virus. There are also significant differences between the issuances made during the two crises; notably the considerable decline in financing costs on account of lower market interest rates, which may partly explain the longer average duration of bonds, and the greater use of funds to refinance existing liabilities. The issuance of high-yield bonds has also risen and the sectoral breakdown of the issuers has changed.

RESULTS OF NON-FINANCIAL CORPORATIONS TO 2021 Q2

Álvaro Menéndez Pujadas and Maristela Mulino

Published on 23 September 2021

The information for the sample of firms reporting to the Central Balance Sheet Data Office Quarterly Survey (CBQ) evidences that in 2021 H1 firms' activity clearly recovered, partly reversing the sharp contraction in 2020. Thus, between January and June 2021, ordinary profit posted significant increases, although without recovering its pre-pandemic levels. Employment also rebounded, driven by the rise in permanent hires and a smaller decline in temporary employment. Against this background, average profitability levels rose significantly, albeit remaining below the values recorded before the pandemic. The financial position indicators showed an increase in firms' indebtedness across the sample in 2021 H1, leading to slightly higher average debt ratios, while the debt burden ratio resumed a downward path, assisted by the decline in the cost of outstanding debt and the increase in ordinary profit. Average liquidity ratios declined in most firms and sectors, following the sharp rise in the previous year. This article includes a box which analyses recent developments in trade finance granted and received by firms, concluding that the median for the average supplier payment and customer collection periods held steady in 2021 H1, slightly below pre-pandemic levels, after the increase observed in mid-2020. This may indicate that firms now have a more comfortable liquidity position, in a setting in which economic activity is gradually picking up.

Chronology of Economic Notes published in this Economic Bulletin.

EUROPEAN SEMESTER 2021 AND RECOVERY, TRANSFORMATION AND RESILIENCE PLAN

Daniel Alonso and María de los Llanos Matea

Published on 12 November 2021

The Recovery and Resilience Facility (RRF), the centrepiece of the Next Generation EU (NGEU) instrument, has become the European Union (EU) economic policy coordination priority. This has made it necessary to temporarily simplify the European Semester. To gain access to the RRF, the Member States (MSs) have to set out the investments and reforms to which the funds will be assigned in their national recovery and resilience plans (RRPs) and which must be aimed fundamentally at responding to climate change-related challenges, digitalisation, the strengthening of human capital and public sector efficiency. The assessment of these plans by the European Commission (EC) will be central to the EU annual economic policy coordination cycle within the European Semester, which retains the habitual Excessive Deficit and Macroeconomic Imbalance procedures.

MEASURES TO SUPPORT CREDIT AND THE FINANCIAL SECTOR IN BANKING SYSTEMS CONSIDERED MATERIAL FOR SPAIN

Alejandro Buesa, Elena Vidal, José Luis Puente and Alberto Flores

Published on 21 October 2021

Since March 2020, the world’s major economies have approved financial and regulatory measures to limit the impact of the health crisis on both the overall economy and their respective financial systems. This paper summarises the measures implemented by countries outside the European Union and the euro area that are considered material for the Spanish banking system (the United Kingdom, the United States, Mexico, Brazil, Turkey, Chile, Peru and Colombia). It focuses particularly on the measures that remain in force, both those attempting to support the most vulnerable sectors affected by the pandemic (moratoria on loans to households, firms and other entities) and those intended to encourage lending and to support the financial system. The former set of measures has already expired in the vast majority of the countries considered, although some temporary easing of the solvency and liquidity requirements applicable under normal conditions remains in effect. Nonetheless, these measures will foreseeably come to an end in the near future (e.g. the reduced countercyclical buffer requirements and the deferred implementation of accounting and prudential standards).

TURKEY: MACRO-FINANCIAL SITUATION

Paula Sánchez Pastor

Published on 22 September 2021

In 2021, the Turkish economy continued to be highly influenced by the course of the COVID-19 pandemic. Turkey has been more dynamic than other emerging economies since the start of the pandemic, but faces a number of macro-financial challenges as a result of imbalances that have become more acute during the crisis. These include, notably, high and persistent inflation, sizeable external financing needs (non-financial corporations have high levels of foreign currency-denominated debt), low international foreign currency reserves and growing bank deposit dollarisation. The banking sector remains relatively sound and its NPL ratio has declined, although some of its other indicators, such as profitability and solvency ratios, have slightly worsened.

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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
DGF	Deposit Guarantee Fund
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	Banco de España quarterly macroeconomic model
NAFTA	North American Free Trade Agreement
NCBs	National central banks
NFCs	Non-financial corporations
NGEU	New Generation EU fund
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-tem 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.