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MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

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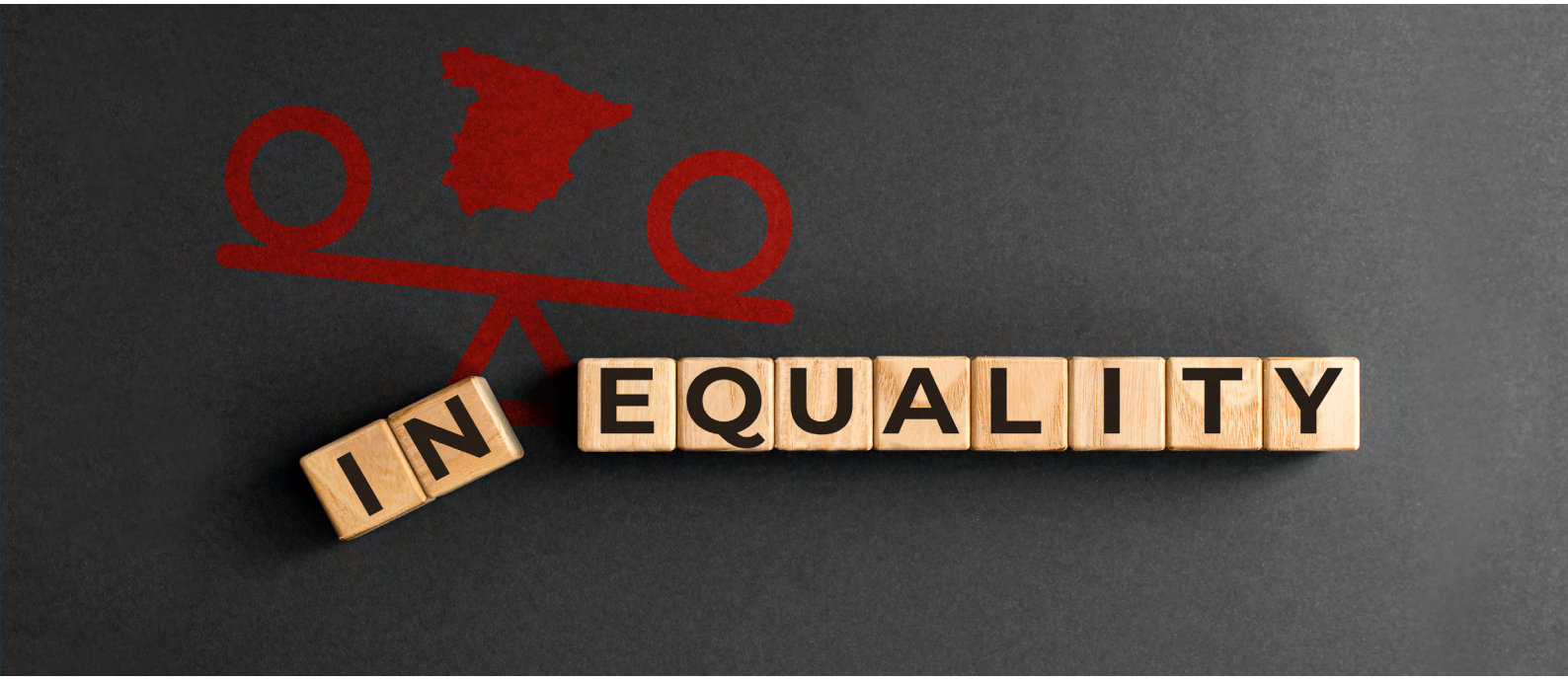

ECONOMIC & FINANCIAL ENVIRONMENT

DOSSIER: IN PURSUIT OF A LESS UNEQUAL RECOVERY

CaixaBank Research

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK
October 2021

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

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Looking for a less unequal recovery

We now have enough information to assess how inequality has evolved since economic activity began to recover. And the news is hopeful. In the past, we had to wait several years to obtain reliable data on trends in inequality. In all developed countries, this remains the case. Spain is the exception. The project developed by CaixaBank Research, in collaboration with a team of researchers from Barcelona School of Economics, has enabled Spain to become the first country to have real-time and highly-detailed information on changes in inequality. The key to this achievement has been the use of CaixaBank's internal data, in particular payroll and unemployment benefits or furlough scheme deposits. Using big data techniques, since millions of data are analysed each month, it has been possible to replicate the main inequality indicators both for Spain as a whole and for different regions and groups. Given the wide diversity of CaixaBank's customers, both geographically and among the different groups of the population, it has been found that the indicators generated are representative of the population as a whole.

The launch of this project at the beginning of the pandemic allowed us to determine that the crisis had a very pronounced impact on inequality in 2020. The main indicators rose suddenly, sharply and across the board, reaching unprecedented levels. We exposed the fact that there were several groups, such as young people and those born outside Spain, who were suffering much more than the population as a whole. We also noted that the impact was greater in some regions, especially those more dependent on tourism. Faced with this situation, the alarm bells started to ring. In previous crises, the rise in inequality had been very persistent and it had taken much longer than the economy as a whole to recover to more normal levels. Fortunately, this time is different. At least so far. Inequality is rapidly declining as a result of the improvement in economic activity and, above all, in the labour market, and we are already approaching pre-crisis levels.

Inequality in Spain has always been closely linked to the evolution of the labour market. Historically, a rise in unemployment or job creation has determined the inequality of the population's income – much more so than changes in the distribution of wage income. This should not come as any surprise. When a person loses their employment, the change in their income level is substantial. This aspect is particularly relevant in Spain, as the number of job people has historically fluctuated much more than in other developed countries.

In this crisis, however, the labour market has behaved very differently: much less employment has been destroyed than in previous crises, especially when considering the severity of the shock experienced in economic activity. For instance, between 2008 and 2013, employment fell by 16.3%, while GDP fell by 8.6%. Employment fell far more than GDP, and it then took employment much longer than GDP to recover to pre-crisis levels. This time, things are quite different. For starters, employment fell less than GDP: by 19.0% between Q4 2019 and Q2 2020, whilst GDP fell by 22.1%. Moreover, since the restrictions on activity and mobility have begun to be eased, the recovery of employment has been much more vigorous. Indeed, the number of workers registered with Social Security and not on furlough is now just 0.9% below the pre-crisis level, and in November it could exceed this milestone. In contrast, in Q3 2021 GDP is still 5.7% below the pre-crisis level according to our estimates, and it is not expected to reach pre-pandemic levels until the second half of next year.

Although the trends in inequality are encouraging, we cannot declare victory just yet. Over the coming months, we will have to keep a close eye on whether the observed trend is consolidated, especially in the most vulnerable segments of the population, and adjust the support schemes accordingly. Moreover, now that we have confirmed that the ERTE furlough schemes are a mechanism which helps to preserve employment in times of crisis, it is essential that this tool is made available to all workers and businesses, at all times. In the forthcoming labour-market reform, which will be key for further reducing inequality, this should be one of the centrepieces. It is within our reach to ensure that this is a less unequal recovery.

Oriol Aspachs
October 2021

Chronology

SEPTEMBER 2021

1 The crisis affecting Chinese real estate firm Evergrande intensifies.
17 Moody's upgrades Portugal's rating (from Baa3 to Baa2).
26 Elections in Germany, bringing an end to the 16-year Merkel era.

JULY 2021

6 Iran informed the International Atomic Energy Agency of its uranium enrichment activities, a decision quickly condemned by several countries.
15 The COVID-19 Delta variant rapidly spreads around the world.
23 The 2020 Tokyo Olympic Games are held without any crowds in the stands.
30 First sentence in Hong Kong under the controversial national security law.

MAY 2021

10 New crisis between Israel and Hamas with attacks in Israel and the Gaza Strip lasting two weeks. The ceasefire was established at the end of the month.
19 The EU opens its borders to fully-immunised tourists.
20 Global Health Summit organised by the G-20 and the EU in which support was pledged for greater production and distribution of vaccines to poor countries.

AUGUST 2021

1 The withdrawal from Afghanistan by the US and its European allies accelerates and the Taliban regain power.
9 The UN's Climate Change report talks of mankind's responsibility in relation to global warming and warns of changes that are irreversible for centuries.
17 The European Commission disbursed the first 9 billion euros of the NGEU funds to Spain.

JUNE 2021

11 G7 summit at which an agreement was reached on a global minimum tax on multinationals.
15 First issue linked to Next Generation EU, raising 20 billion euros.
Five-year truce agreed by the EU and the US in the trade dispute between Airbus and Boeing.
16 The European Commission endorses Spain's Recovery and Resilience Plan.

APRIL 2021

1 OPEC and its partners approve a gradual increase in oil production for May, June and July 2021.
27 The European Parliament gives its final approval for the agreement governing the new relationship between the EU and the United Kingdom, already in force since January.
30 Spain submits its Recovery Plan to the European Commission to gain access to NGEU funds.

Agenda

OCTOBER 2021

4 Spain: registration with Social Security and registered unemployment (September).
11 Spain: financial accounts (Q2).
Portugal: turnover in services (August).
14-15 European Council meeting.
22 Spain: loans, deposits and NPL ratio (August).
28 Spain: labour force survey (Q3).
Spain: CPI flash estimate (October).
Portugal: business and consumer confidence indicator (October).
Governing Council of the European Central Bank meeting.
Euro area: economic sentiment index (October).
US: GDP (Q3).
29 Spain: GDP flash estimate (Q3).
Portugal: GDP flash estimate (Q3).
Portugal: industrial production (September).
Portugal: preliminary tourism activity (September).
Euro area: GDP (Q3).

NOVEMBER 2021

2-3 Federal Open Market Committee meeting.
3 Spain: registration with Social Security and registered unemployment (October).
5 Spain: industrial production (September).
9 Portugal: international trade (September).
Portugal: turnover in industry (September).
10 Portugal: employment (Q3).
12 Portugal: Fitch rating.
15 Japan: GDP (Q3).
19 Portugal: coincident economic activity indicators (October).
25 Spain: loans, deposits and NPL ratio (September).
29 Spain: CPI flash estimate (November).
Spain: state budget execution (October).
Euro area: economic sentiment index (November).
30 Portugal: GDP breakdown (Q3).

Winds of stagflation?

The macroeconomic dynamics of a crisis as special as the current one are proving difficult to anticipate. Indeed, we are facing the biggest imbalance between supply and demand in recent decades. In a world of sophisticated value chains and just-in-time stock management, the global production of goods and services has been unable in recent months to respond either to the sharp increase in demand following the lifting of the lockdowns or to the changes in players' consumption patterns resulting from the COVID-19 pandemic. The bottlenecks caused by these mismatches, coupled with rising energy prices and the labour market disruptions caused by the pandemic, have led to an unexpected surge in prices, as reflected in the significant change in the inflation forecasts we have seen in recent months.

Whereas in April the consensus of analysts anticipated that inflation for this year would be 2.6% in the US and 1.6% in the euro area, the prediction has now risen to 4.3% and 2.2%, respectively. For the time being, almost half a year after the first unexpected price increases occurred, the view that this rebound is transient still prevails. Thus, it is expected to be diluted as soon as supply has adapted to players' new preferences and the imbalances in the energy and labour markets have been resolved. But the longer the price rally lasts, the harder it will be to reverse it. It should be borne in mind that economic players can withstand a temporary erosion of their margins or disposable income, but if inflation expectations are affected then the risk of second-round effects could be triggered. This is particularly the case with regard to the risk of unexpected slipping in such sensitive components as those related to energy prices.

In this respect, although the winter outlook is not very reassuring, as markets such as natural gas are experiencing a mismatch between supply and demand on a global scale, it is also true that production should be able to adjust to demand from next spring and this ought to trigger a significant price correction. In any case, beyond the short-term trends, what is beginning to become apparent is that the energy transition is going to entail significant adjustment costs (greenflation), which will need to be spread equally among the various players.

However, despite the noise of recent weeks, the medium-term inflation expectations (5Y/5Y) remain contained (1.7% for the euro area and 2.4% in the US), although a slight erosion of household confidence is beginning to be detected, which is being transmitted to consumption decisions. This is nothing alarming, given that the excess savings accumulated during the lockdowns remain very high (45 billion euros in Spain), representing an important buffer for dealing with possible reductions in disposable income such as the one we can expect to materialise over the coming months.

The recent deterioration of the growth/inflation mix is the result of the dynamics of an asymmetric recovery and will remain subject to a high level of uncertainty in the coming quarters. Nevertheless, we are still far from a scenario of stagflation like that of the 1970s, which is the major source of concern for a number of economists. This is because, firstly, the global economy is much more flexible than it was 50 years ago. Also, economic policy, especially in the monetary sphere, now has the tools (and the independence) to respond to such a risk. Above all, it seems difficult to jump from the risk of Japanisation to that of stagflation in just over 18 months, when the major trends that had brought us closer to a situation of secular stagnation are still very much present (population ageing, excess savings compared to investment, low productivity, etc.).

An altogether separate risk is that of episodes of financial instability potentially being triggered by the monetary normalisation process that is already underway (Norway, Brazil, Mexico, Colombia, Peru, Hungary, Russia, the Czech Republic and Turkey raised rates in September, and New Zealand in October). Evergrande's problems in China, beyond its idiosyncratic nature and the limited risk of contagion to the rest of the world, reflect the fact that financial stability will require at least as much attention from the central banks as inflation in the post-pandemic world.

José Ramón Díez Guijarro

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

Financial markets

	Average 2000-2007	Average 2008-2018	2019	2020	2021	2022	2023
INTEREST RATES							
Dollar							
Fed funds (upper limit)	3.43	0.68	1.75	0.25	0.25	0.25	0.75
3-month Libor	3.62	0.90	1.91	0.23	0.15	0.35	0.85
12-month Libor	3.86	1.40	1.97	0.34	0.30	0.65	1.45
2-year government bonds	3.70	0.96	1.63	0.13	0.25	0.50	1.35
10-year government bonds	4.70	2.61	1.86	0.93	1.75	2.00	2.40
Euro							
ECB depo	2.05	0.26	–0.50	–0.50	–0.50	–0.50	–0.50
ECB refi	3.05	0.82	0.00	0.00	0.00	0.00	0.00
Eonia	3.12	0.47	–0.46	–0.47	–0.48	–0.48	–0.48
1-month Euribor	3.18	0.58	–0.45	–0.56	–0.55	–0.51	–0.48
3-month Euribor	3.24	0.74	–0.40	–0.54	–0.53	–0.46	–0.40
6-month Euribor	3.29	0.88	–0.34	–0.52	–0.50	–0.41	–0.34
12-month Euribor	3.40	1.07	–0.26	–0.50	–0.46	–0.35	–0.27
Germany							
2-year government bonds	3.41	0.45	–0.63	–0.73	–0.70	–0.50	–0.45
10-year government bonds	4.30	1.69	–0.27	–0.57	–0.30	–0.10	0.20
Spain							
3-year government bonds	3.62	1.87	–0.36	–0.57	–0.35	–0.11	0.22
5-year government bonds	3.91	2.39	–0.09	–0.41	–0.20	0.06	0.42
10-year government bonds	4.42	3.40	0.44	0.05	0.30	0.50	0.85
Risk premium	11	171	71	62	60	60	65
Portugal							
3-year government bonds	3.68	3.66	–0.34	–0.61	–0.49	–0.14	0.26
5-year government bonds	3.96	4.30	–0.12	–0.45	–0.29	0.11	0.52
10-year government bonds	4.49	5.03	0.40	0.02	0.30	0.55	0.90
Risk premium	19	334	67	60	60	65	70
EXCHANGE RATES							
EUR/USD (dollars per euro)	1.13	1.28	1.11	1.22	1.17	1.19	1.21
EUR/GBP (pounds per euro)	0.66	0.84	0.85	0.90	0.86	0.84	0.83
OIL PRICE							
Brent ($/barrel)	42.3	81.5	65.2	50.2	70.0	65.0	63.0
Brent (euros/barrel)	36.4	62.9	58.6	41.3	59.8	54.6	52.1

Forecasts

Percentage change versus the same period of the previous year, unless otherwise indicated

International economy

	Average 2000-2007	Average 2008-2018	2019	2020	2021	2022	2023
GDP GROWTH							
Global	**4.5**	**3.4**	**2.8**	**–3.2**	**6.2**	**4.7**	**3.6**
Developed countries	***2.7***	***1.4***	***1.6***	***–4.6***	***5.6***	***4.3***	***2.0***
United States	2.7	1.6	2.3	–3.4	6.0	4.1	2.1
Euro area	2.2	0.8	1.5	–6.5	5.3	5.0	2.1
Germany	1.6	1.3	1.1	–4.9	3.2	4.7	1.3
France	2.2	0.9	1.8	–8.0	5.9	4.1	2.0
Italy	1.5	–0.4	0.3	–8.9	6.1	5.0	2.5
Portugal	1.5	0.3	2.5	–7.6	4.0	5.1	2.4
Spain	3.7	0.5	2.1	–10.8	5.0	6.2	3.3
Japan	1.4	0.5	0.0	–4.7	2.5	2.2	0.8
United Kingdom	2.9	1.1	1.4	–9.8	6.9	5.7	1.3
Emerging and developing countries	***6.5***	***5.1***	***3.7***	***–2.1***	***6.9***	***5.1***	***4.9***
China	10.6	8.2	6.0	2.3	8.3	5.6	5.4
India	7.2	6.9	4.8	–7.0	9.2	7.3	7.5
Brazil	3.6	1.7	1.4	–4.1	5.3	2.2	2.5
Mexico	2.4	2.1	–0.2	–8.3	6.2	3.0	2.3
Russia	7.2	1.1	1.3	–3.1	3.8	2.5	2.0
Turkey	5.4	4.9	0.9	1.6	8.3	3.3	3.9
Poland	4.2	3.5	4.8	–2.6	5.4	5.0	3.0
INFLATION							
Global	**4.1**	**3.7**	**3.5**	**3.2**	**4.1**	**3.4**	**3.0**
Developed countries	***2.1***	***1.6***	***1.4***	***0.7***	***3.3***	***2.2***	***1.6***
United States	2.8	1.8	1.8	1.2	4.2	2.4	1.8
Euro area	2.1	1.4	1.2	0.3	2.2	1.7	1.5
Germany	1.7	1.4	1.4	0.4	2.8	2.0	1.6
France	1.8	1.3	1.3	0.5	2.1	1.7	1.4
Italy	1.9	1.5	0.6	–0.1	1.7	1.6	1.4
Portugal	3.0	1.2	0.3	0.0	1.2	1.4	1.4
Spain	3.2	1.4	0.7	–0.3	2.4	1.7	1.3
Japan	–0.3	0.4	0.5	0.0	–0.2	0.7	0.7
United Kingdom	1.9	2.4	1.8	0.9	2.1	1.9	1.7
Emerging countries	***6.7***	***5.6***	***5.1***	***5.1***	***5.7***	***4.9***	***4.0***
China	1.7	2.6	2.9	2.5	0.9	1.3	1.4
India	4.5	7.7	3.7	6.6	5.0	5.5	4.5
Brazil	7.3	5.9	3.7	3.2	7.3	4.5	3.5
Mexico	5.2	4.2	3.6	3.4	5.4	3.9	3.5
Russia	14.2	8.2	4.5	4.9	6.3	4.4	4.1
Turkey	27.2	9.1	15.5	14.6	17.3	14.2	11.0
Poland	3.5	1.9	2.1	3.7	4.1	3.0	2.5

Forecasts

Percentage change versus the same period of the previous year, unless otherwise indicated

Spanish economy

	Average 2000-2007	Average 2008-2018	2019	2020	2021	2022	2023
Macroeconomic aggregates							
Household consumption	3.6	–0.1	0.9	–12.2	6.0	5.3	2.6
Government consumption	5.0	1.0	2.0	3.3	3.2	1.0	–0.5
Gross fixed capital formation	5.6	–1.9	4.5	–9.5	4.4	10.0	4.8
Capital goods	4.9	0.0	3.2	–12.9	13.4	8.0	3.6
Construction	5.7	–3.8	7.1	–9.6	–1.0	11.0	5.5
Domestic demand (vs. GDP Δ)	4.3	–0.4	1.6	–8.7	5.1	5.1	2.4
Exports of goods and services	4.7	2.9	2.5	–20.1	11.3	9.9	6.2
Imports of goods and services	7.0	0.1	1.2	–15.2	12.4	7.0	3.6
Gross domestic product	**3.7**	**0.5**	**2.1**	**–10.8**	**5.0**	**6.2**	**3.3**
Other variables							
Employment	3.2	–0.7	2.3	–7.5	5.5	3.8	2.6
Unemployment rate (% of labour force)	10.5	20.0	14.1	15.5	15.1	14.0	13.0
Consumer price index	3.2	1.4	0.7	–0.3	2.4	1.7	1.3
Unit labour costs	3.0	0.2	2.4	5.3	–0.5	0.2	2.0
Current account balance (% GDP)	–5.9	–0.5	2.1	0.7	1.5	1.6	1.7
External funding capacity/needs (% GDP)	–5.2	–0.1	2.6	1.1	1.7	1.8	1.9
Fiscal balance (% GDP)[1]	0.4	–6.3	–2.9	–11.0	–8.2	–5.6	–4.2

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

Forecasts

Portuguese economy

	Average 2000-2007	Average 2008-2018	2019	2020	2021	2022	2023
Macroeconomic aggregates							
Household consumption	1.7	0.3	2.6	–5.8	4.6	4.1	2.2
Government consumption	2.3	–0.5	0.7	0.4	4.6	0.5	0.2
Gross fixed capital formation	–0.3	–1.2	5.4	–1.8	5.4	7.3	7.9
Capital goods	6.2	2.7	4.3	–6.1	12.7	8.4	8.5
Construction	–1.9	–3.5	7.2	4.7	4.1	5.6	4.3
Domestic demand (vs. GDP Δ)	1.3	–0.2	2.8	–4.6	4.8	4.2	3.0
Exports of goods and services	5.2	4.0	4.0	–18.7	5.8	9.6	5.5
Imports of goods and services	3.6	2.5	4.7	–12.0	7.5	6.7	6.6
Gross domestic product	**1.5**	**0.3**	**2.5**	**–7.6**	**4.0**	**5.1**	**2.4**
Other variables							
Employment	0.4	–0.6	1.2	–1.9	2.0	1.2	0.6
Unemployment rate (% of labour force)	6.1	11.8	6.6	7.0	7.0	6.9	6.8
Consumer price index	3.0	1.2	0.3	0.0	1.2	1.4	1.4
Current account balance (% GDP)	–9.2	–3.2	0.4	–1.2	–0.7	–0.5	–0.4
External funding capacity/needs (% GDP)	–7.7	–1.9	1.2	0.1	1.2	1.8	1.9
Fiscal balance (% GDP)	–4.6	–5.5	0.1	–5.7	–4.8	–3.0	–1.5

Forecasts

The central banks draw the attention of the financial markets

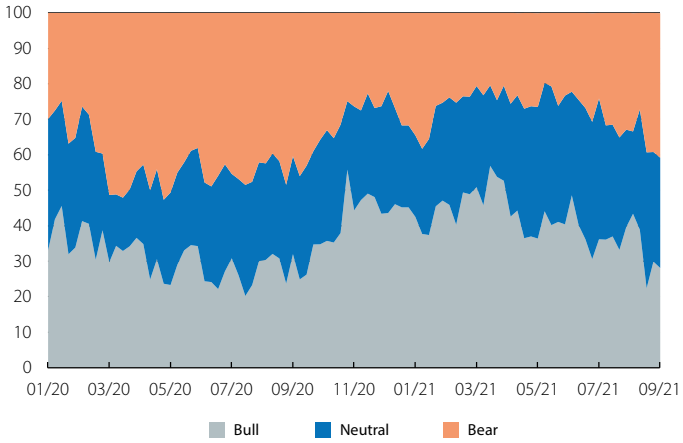
Investors focus on the withdrawal of the monetary stimulus, China and the gas market. The focus of the financial markets after the summer continues to be the economic recovery and the central banks' strategy for withdrawing the monetary stimulus deployed following the outbreak of the pandemic. On the one hand, the ECB decided to slow the pace of asset purchases under the PEPP, while the Fed announced that, if the data continue to follow the expected trend, it would initiate the tapering process this year and hinted at a possible rate hike next year. These messages led to an increase in sovereign yields, albeit a much more moderate one than earlier this year, as both Washington and Frankfurt have insisted on describing the current inflation rally as transitory. The gas market, with an unprecedented price rally, as well as doubts over the health of the real estate sector in China (mainly the property firm Evergrande) have been the other key development of the month, given their implications both for the financial markets and for the wider global economy.

The summer euphoria fades in the stock markets. In September, the major stock market indices registered widespread setbacks, both in advanced economies (falling from their recent historical highs) and in emerging economies (with more severe losses). The stock markets were weighed down, above all, by doubts surrounding the Chinese giant Evergrande. This conglomerate, with a strong presence in the real estate sector, has been in difficulties for months, which have recently been accentuated by the Chinese authorities' agenda to clean up the country's debt. In September, the firm's failure to pay various of its financial obligations triggered concerns of a possible contagion into China's financial sector and its wider economy. However, those fears were tempered at the end of the month thanks to the support from China's central bank in the form of liquidity injections into the financial markets.

Natural gas gains prominence in the commodities market. Storage of this fossil fuel in Europe are at very low levels for the period of the year (around 70% compared to 90% last year). This low accumulation of stocks has been caused, among other factors, by the reduced supply of gas received from Russia, the production stoppages in the US, the rise in demand for gas in Asian countries such as China, and the dynamics related to liquefied natural gas, which allows the gas to be transported long distances through maritime trade. The latter element makes it possible for countries with high electricity consumption, such as those in Asia, to obtain gas supplies which are produced at supply points that are usually unloaded in Europe. Thus, the price of gas has increased in the main global benchmark (the Dutch TTF, which is the one used in Europe, is +90% and +384% up so far this month and year,

US: market sentiment

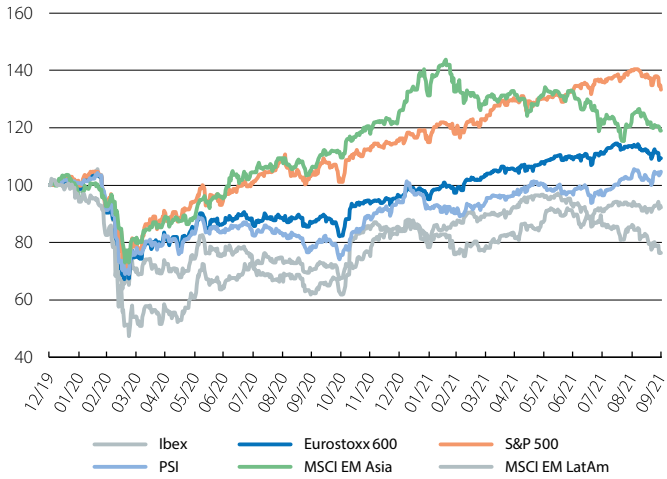
(%)



Note: *Percentage of investors responding to the American Association of Individual Investors survey regarding their sentiment: bull (optimistic), neutral, or bear (pessimistic).*
Source: *CaixaBank Research, based on data from Bloomberg.*

International stock markets

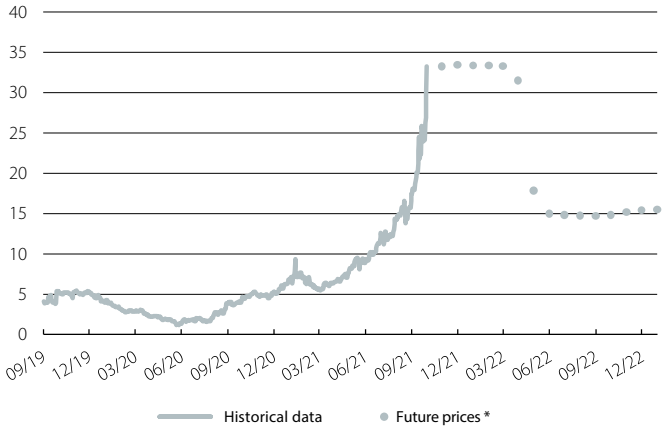
Index (100 = December 2019)



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

Gas price

Dollars per MMBtu



Notes: ** Future contracts listed in the financial markets on 30 September.*
We use the TTF benchmark, one of the main ones in Europe.
Source: *CaixaBank Research, based on data from Bloomberg.*

respectively) and market-traded futures suggest that the price rally still has some way to go. However, after winter gas prices should return to more normal levels. The price of a barrel of Brent, meanwhile, also surged due to the rising gas prices, climbing above 78 dollars.

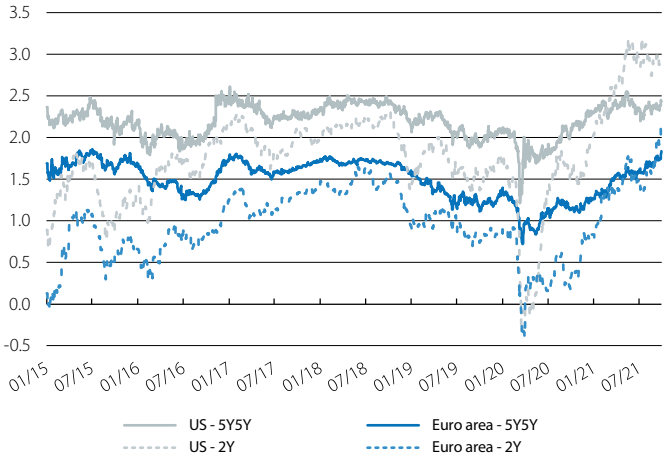
The ECB revises up its economic outlook and reduces the rate of the PEPP. Following September's meeting, the ECB announced that during Q4 it will reduce the pace of its asset purchases under the PEPP, which currently amount to some 80 billion euros per month. It justified this decision with the upward revision of the euro area's GDP and inflation forecasts, as well as based on the assumption that it will be able to maintain the accommodative financial environment with a reduced presence in the financial markets. However, the monetary institution offered no clues as to how the PEPP will be brought to an end or whether, as expected by the consensus of analysts, the APP will gain more importance during 2022. On the rise in inflation, Christine Lagarde reiterated that the factors behind it are transitory in nature (base effects, bottlenecks, and increase in the energy component, mostly) and expects them to fade in the first half of 2022. Therefore, the ECB does not consider it advisable to overreact to factors that ought not to have a significant effect on the medium-term inflation target.

The Fed will initiate tapering this year and signals a possible rate hike in 2022. The Fed, meanwhile, kept the official interest rate range unchanged in September at 0.00%-0.25%, as well as maintaining asset purchases at a monthly rate of 80 and 40 billion dollars in Treasuries and MBSs, respectively. However, Fed Chairman Powell confirmed that an agreement was reached among FOMC members to begin the tapering process in the short term and to complete it by mid-2022 (provided that the economic data evolve in line with expectations). Also, in the update of the rate forecasts, the so-called dot plot showed that the FOMC is split over the possibility of bringing the first rate hike forward to 2022 and that the median voter considers that there should be three additional hikes in 2023 and 2024.

Interest rates reflect the central banks' stimulus withdrawal. In both the euro area and the US, sovereign debt yields registered a sharp rise following the announcements by the Fed and the ECB and the economic data that give continuity to the economic recovery. Thus, the German *bund* and the 10-year US Treasury both increased by 18 bps. This is a small rebound compared to those experienced in Q1 of this year, when fears of runaway inflation in the major advanced economies led the yield on the 10-year Treasury to reach over 1.70%. The risk premia of the periphery, meanwhile, registered widespread declines, while the dollar strengthened against most currencies of both advanced and emerging economies, leading the euro to fluctuate below 1.16 dollars (a year-to-date low).

Inflation expectations based on inflation swaps

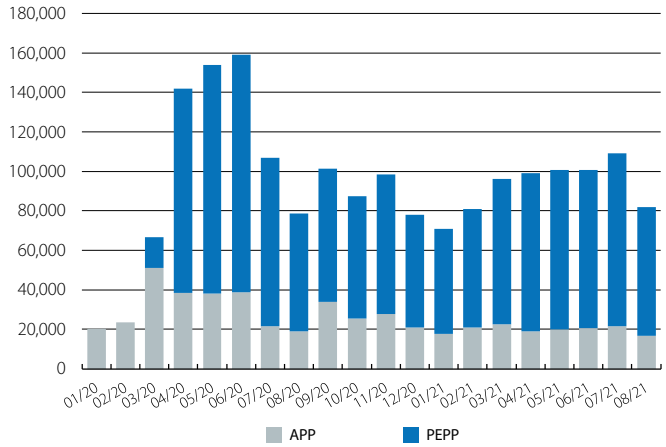
(%)



Note: *We show five-year five-year (5Y5Y) inflation swaps and average 2-year (2Y) inflation swaps.*
Source: *CaixaBank Research, based on data from Bloomberg.*

ECB: net asset purchases

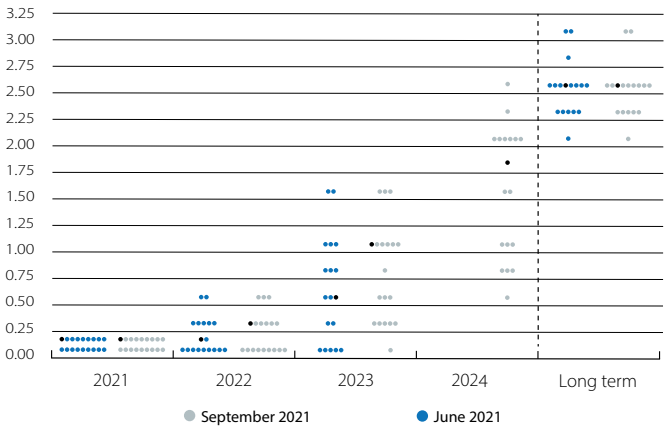
(EUR millions)



Note: *APP refers to the Asset Purchase Programme, in force since 2014, and PEPP to the Pandemic Emergency Purchase Programme, deployed following the outbreak of the pandemic.*
Source: *CaixaBank Research, based on data from the ECB.*

Federal Reserve: expected evolution of interest rates

(%)



Note: *Each point represents a voter on the Federal Reserve's Federal Open Market Committee. The median voter is indicated in black.*
Source: *CaixaBank Research, based on data from the Federal Reserve.*

On the normalisation of monetary policy

The COVID-19 crisis has been a shock on a global scale, but its economic impact has been quite uneven from country to country, reflecting differences in productive structures and public policy response. Given this asymmetry, it is no surprise that the recovery is also occurring at very different paces, exacerbated by the discriminatory access to the vaccines and the continuous new outbreaks of the virus.

Thus, as of the end of Q2 2021, only a handful of countries have managed to recover pre-pandemic levels of economic activity. Among advanced economies, we highlight the US, with its GDP already 0.9% above the level of Q4 2019. In the case of China, meanwhile, its ability to rapidly bring the health emergency under control allowed it to register positive growth even in 2020. Yet even in China, GDP has not yet managed to recover to the level it would have reached in the absence of the virus. In fact, viewed from this angle, referred to as output loss, no country shows a positive balance, as illustrated in the first chart.[1]

Monetary policy, at a turning point

As the vaccination campaign progresses, the economic recovery is leading to a shift in monetary policy. In developed countries, there is no longer talk of new stimulus, but rather of when to start the eventual withdrawal.[2] In the case of emerging countries, meanwhile, some have already raised their official interest rates.

Indeed, like the economic recovery itself, this normalisation process is taking place unevenly from country to country, due to various factors. Firstly, there are differences in the current state of the economic recovery and its future outlook in each country, as illustrated in the second chart. The needs for monetary stimulus appear to be less urgent in the US, for instance, where the economy is projected to reach its potential by the end of this year. In contrast, in the euro area the economic cycle is lagging behind (the output gap is expected to remain in negative territory until the end of 2022), so there is less pressure on the ECB to begin the withdrawal.

A second factor is the persistence of inflationary pressures during the reopening process, partly as a result of the factor mentioned above, but also because of the temporary imbalances between demand and supply (accentuated by savings accumulated during the pandemic and exposure to bottlenecks in global production chains). The US also stands out in this sphere, as the country's inflation has reached more than double its central bank's target rate.

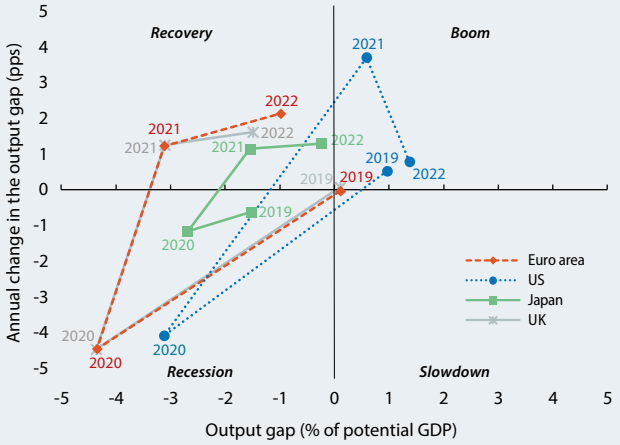
Finally, there are idiosyncratic imbalances, ranging from the risk of bubbles in certain sectors, such as real estate,[3]

Q2 2021 GDP: gap versus the pre-COVID level and output loss

(%)

Note: *Output loss corresponds to the difference in GDP level versus projections made by the OECD before the start of the pandemic (October 2019).*
Source: *CaixaBank Research, based on data from the OECD.*

Position in the business cycle and trajectory



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

1. Output loss corresponds to the difference between the observed level of GDP in Q2 2021 versus the level which was projected for that period at the end of 2019, taking OECD forecasts.
2. The strategy seeks to bring net asset purchases to an end, in the first instance, and subsequently to raise official rates.
3. Housing prices have risen significantly in most advanced countries. However, the risk associated with such a rebound does not affect all the central banks' reaction function to the same extent: it is more relevant in the Nordic countries, such as Norway or Sweden, as well as in Australia and New Zealand, where it was recently included in the central banks' mandate. In the euro area, it is expected to gain importance in the ECB's decision-making as a result of the strategic review.

to other macroeconomic imbalances which alter the external position. The latter factor mainly affects emerging economies, which have seen their currencies depreciate against the dollar in the year to date, as the financial markets incorporate expectations of reduced monetary stimulus in advanced countries. To minimise the risks associated with this adjustment (which could materialise as a negative external liquidity shock),[4] some central banks have already begun to raise official interest rates (such as those in Russia, Mexico, Brazil and Hungary, among others).

Our outlook for the advanced economies

With these elements, we can classify the central banks of developed countries into three groups.

In the first group, we have the countries that are furthest ahead in the business cycle and/or those which show clear signs of acceleration in the real estate market: New Zealand, Norway, Australia and Canada. Their central banks are expected to kick-start the monetary normalisation process this year; they have all reduced the rate of asset purchases already, and rate hikes are anticipated in New Zealand and Norway (the first hike was announced in September).

In the second group we have the US and the UK, countries which have seen a strong rebound in the economy in the first half of 2021, thanks to a rapid vaccination roll-out, and which have also recorded significant inflation rebounds, even if the driving factors are transitory in nature. In the US, we would expect these factors to lead to a less expansionary monetary policy. However, the implementation of the Fed's new strategic framework, focusing on an inclusive recovery towards full employment and anchoring inflation expectations, has paved the way for a very gradual withdrawal strategy. In any case, we believe that further progress in the labour market will allow the Fed to begin to reduce its net asset purchases in the coming months and to begin to raise interest rates in 2023. In the United Kingdom, the Bank of England will end net asset purchases this year, with official rates potentially being raised at the beginning of 2023 or even earlier (the markets anticipate the first rate hike in the first half of 2022).

Finally, in the third group we place the euro area and Japan, economies that are lagging behind in the recovery process. For the ECB, we expect net asset purchases to continue until at least 2023, with the first rate hike not expected until late 2024. In Japan, we expect both the yield curve control policy and official rates to remain unchanged for the foreseeable future.

In any case, regardless of which group a given economy is in, all of them will test the resilience of the global recovery and will be exposed to the risks that are inherent to the normalisation of monetary policy, in a context which remains highly uncertain and still tied to the evolution of the pandemic. Indeed, the package of measures put in place by the monetary authorities has been a key factor in preventing the health crisis from becoming a financial crisis up until now. Whether this remains the case will largely depend on the strategy that is adopted by the central banks in their transition towards the «new normal».

Antonio Montilla and Ricard Murillo Gili

4. See the Focus «Emerging economy outlook: an uneven recovery» in the MR05/2021.

Interest rates (%)

	30-September	31-August	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Euro area					
ECB Refi	0.00	0.00	0	0.0	0.0
3-month Euribor	–0.55	–0.55	0	0.0	–4.0
1-year Euribor	–0.49	–0.50	1	1.1	–3.9
1-year government bonds (Germany)	–0.67	–0.66	–1	3.8	–7.8
2-year government bonds (Germany)	–0.69	–0.71	2	1.1	2.0
10-year government bonds (Germany)	–0.20	–0.38	18	37.0	33.7
10-year government bonds (Spain)	0.46	0.34	12	41.2	23.8
10-year government bonds (Portugal)	0.36	0.21	14	32.5	13.5
US					
Fed funds (upper limit)	0.25	0.25	0	0.0	0.0
3-month Libor	0.13	0.12	1	–10.8	–10.3
12-month Libor	0.24	0.23	1	–10.5	–12.1
1-year government bonds	0.07	0.06	1	–3.6	–4.3
2-year government bonds	0.28	0.21	7	15.4	14.7
10-year government bonds	1.49	1.31	18	57.4	78.7

Spreads corporate bonds (bps)

	30-September	31-August	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Itraxx Corporate	50	45	5	2.2	–8.4
Itraxx Financials Senior	57	52	5	–2.4	–20.0
Itraxx Subordinated Financials	110	100	10	–1.1	–41.9

Exchange rates

	30-September	31-August	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
EUR/USD (dollars per euro)	1.158	1.181	–1.9	–5.2	–1.2
EUR/JPY (yen per euro)	128.880	129.920	–0.8	2.1	4.4
EUR/GBP (pounds per euro)	0.859	0.859	0.1	–3.9	–5.1
USD/JPY (yen per dollar)	111.290	110.020	1.2	7.8	5.7

Commodities

	30-September	31-August	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	553.7	559.6	–1.1	24.8	37.2
Brent ($/barrel)	78.5	73.0	7.6	51.6	99.9
Gold ($/ounce)	1,757.0	1,813.6	–3.1	–7.4	–7.5

Equity

	30-September	31-August	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	4,307.5	4,522.7	–4.8	14.7	28.6
Eurostoxx 50 (euro area)	4,048.1	4,196.4	–3.5	13.9	26.9
Ibex 35 (Spain)	8,796.3	8,846.6	–0.6	9.0	30.2
PSI 20 (Portugal)	5,460.8	5,417.1	0.8	11.5	33.6
Nikkei 225 (Japan)	29,452.7	28,089.5	4.9	7.3	27.9
MSCI Emerging	1,253.1	1,308.7	–4.2	–3.0	15.8

The vaccination campaign is advancing, although the global recovery is moving at a slower pace

The recovery temporarily loses momentum. The latest indicators show that there was a moderation in the speed of recovery in the first half of the year, whilst inflation stands well above central banks' targets in most cases. However, the economic revival is not compromised, as most economies continue to register high growth rates. The evolution of the pandemic remains one of the key determining factors for the economic outlook, so we must pay close attention to the progress of the vaccination campaigns. Developed economies are leading the way, although they are not all progressing at the same pace either: Europe is now the star student (with 62% of the population fully vaccinated), while the US has stagnated since the summer (55%). Among the major emerging economies, China is leading the process (more than 70% fully vaccinated), well ahead of Turkey (51%), Brazil (41%) or Russia (29%). The good news is that, unless new, more aggressive variants emerge, herd immunity is likely to be achieved globally in the summer of 2022, either through the vaccines or through people acquiring immunity after overcoming the disease.

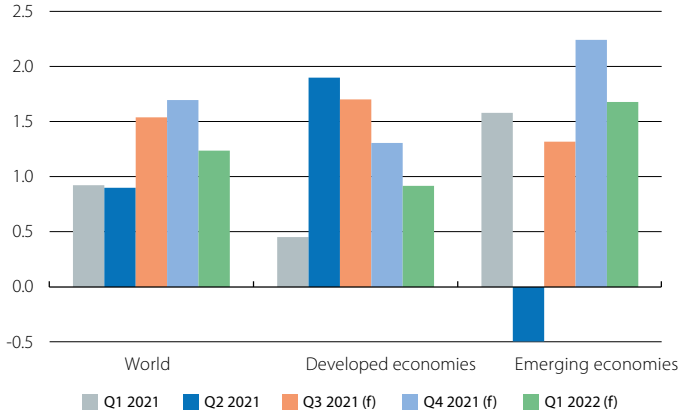
Distortions in global supply chains, the main short-term threat. The sharp rebound in consumption, especially in manufacturing, coupled with the Zero COVID policies adopted in China and other Asian economies (which are central to the large global manufacturing chains), is generating supply problems of such a magnitude that they have forced production to slow down, or even to stop altogether, in some industrial sectors (the automotive, computer and construction industries are among those hardest hit). This distortion is also driving up production costs. This is a dynamic still in its early stages and it could intensify in the future, which in turn could exacerbate one of the most significant risks right now, namely the inflationary stress that is already apparent in consumer prices in many economies.

US

The spread of the Delta variant and supply restrictions, key factors affecting the US outlook for the coming months. After exceeding pre-pandemic GDP levels back in Q2, the outlook for Q3 remains positive, albeit with slightly lower growth rates (around 1.4% quarter-on-quarter). On the one hand, private consumption will lose momentum once the impact of the stimulus cheques distributed in Q2 2021 has been diluted, the extra unemployment benefits come to an end and the easing of mobility restrictions slows in the face of the rise in cases of the Delta variant. On the other hand, businesses will have to deal with the aforementioned supply

Evolution of GDP

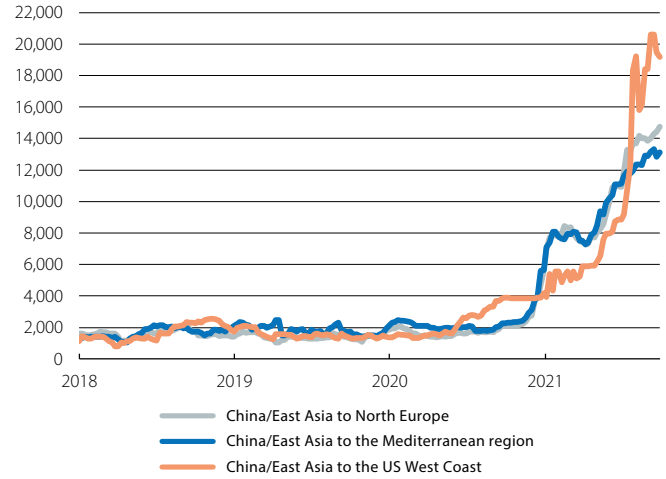
Quarter-on-quarter change (%)



Notes: *The aggregates are calculated including only the major developed and emerging economies. In all cases, the aggregates are calculated at market prices and not in terms of purchasing power parity. (f) forecasts.*
Source: *CaixaBank Research, based on internal data.*

Cost of shipping a container

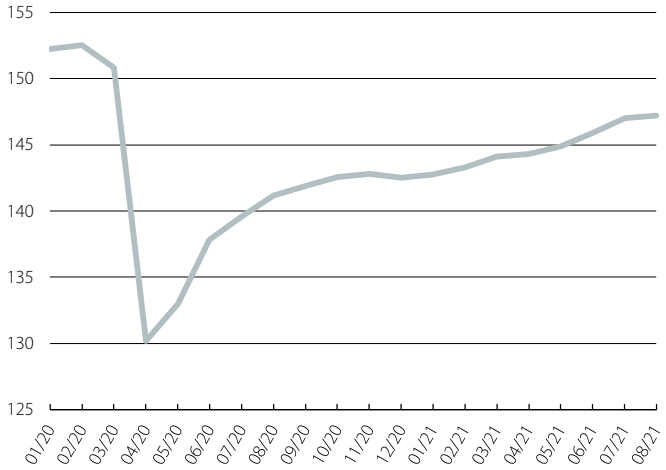
(Dollars for a 40-foot container)



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

US: total number of people in employment

(Millions)



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

shortages, as well as the difficulties in filling job vacancies. In fact, in this latter area, some 85% of US business owners report having difficulties filling their vacancies. This labour shortage, however, should dissipate as the extra unemployment benefits come to an end in September. In this context of high demand and supply disruptions, US inflation declined slightly in August, although it was still at historically high levels. In particular, the headline CPI advanced 5.3% year-on-year in August, slightly lower than the previous month (–0.1 pp) and in line with market expectations, while core inflation stood at 4.0%, 3 decimal points below the figure for July. Looking ahead, we project a gradual moderation in inflation as accumulated savings are absorbed and the supply-side distortions are alleviated. Nevertheless, we continue to see a substantial risk that inflation will remain at high levels.

Congress faces a busy autumn. By the time this *Monthly Report* is published, part of Biden's proposed measures, focused on improving the country's classic infrastructure and equipped with a budget of 550 billion dollars, should have been given the final approval (although the first vote on the matter had been delayed at the time of writing). Moreover, in the short term, Congress must approve some sort of debt ceiling agreement, since by mid-October the country's Treasury could run out of funds to service its payments (see the Focus «The US debt ceiling back in the spotlight» available on the website). Finally, the details of numerous measures proposed by the Biden administration under The American Jobs Plan (which deals with infrastructure) and The American Family Plan (with a social approach) need to be defined (see the Focus «Fiscal activism in the US: a lot of noise and little substance?» available on the website).

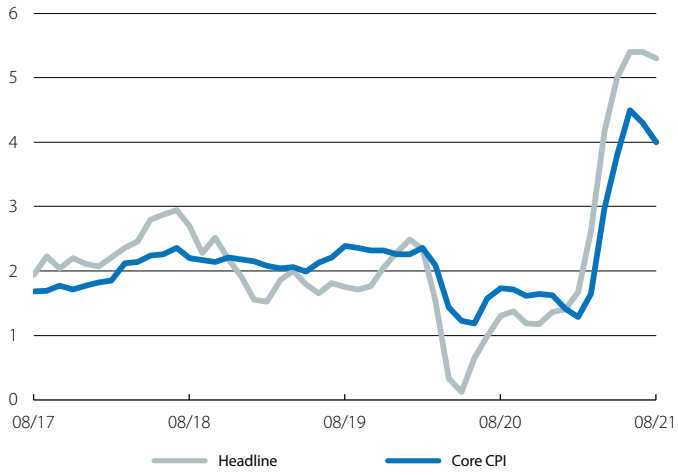
EURO AREA

Very encouraging progress in the vaccination campaign. The euro area has significantly accelerated the vaccination roll-out during the summer. For instance, in Portugal and Spain around 80% of the population has now received the full dose. This explains why the Delta variant is causing less damage than in other areas of the world in terms of economic activity. However, we must monitor the negative impact due to the problems in global supply chains, especially in countries where manufacturing plays a significant part in their economies, such as Germany (22%). In fact, according to Eurostat, the net percentage of euro area companies in the sector that acknowledged experiencing production constraints in Q3 2021 due to a lack of materials and machinery reached 40%, the highest ever figure in the series' history (35 years). At the same time, there appears to be a growing shortage of labour, another factor that could have a negative impact on supply.

Euro area growth will remain highly buoyant in Q3. These supply problems are affecting the main confidence indicators, which fell again in September in most cases.

US: CPI

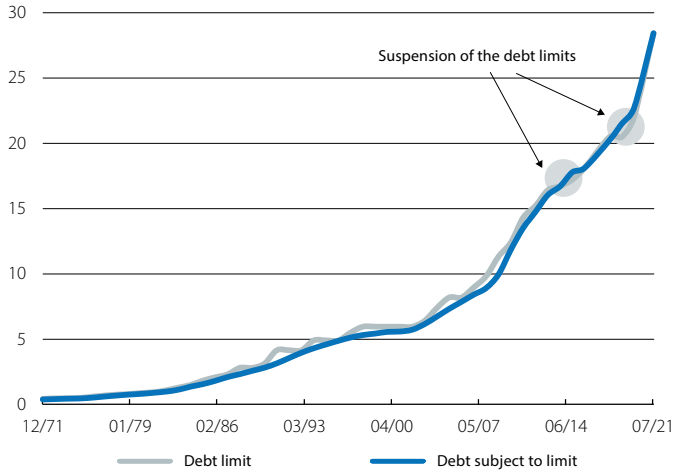
Year-on-year change (%)



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

US: debt ceiling

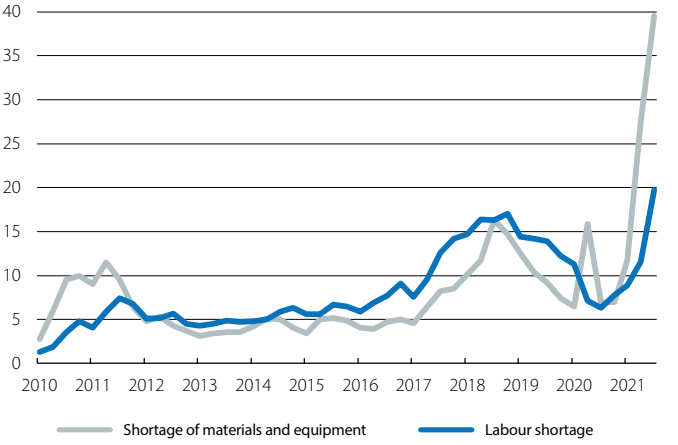
(USD trillions)



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

Euro area: factors limiting manufacturing production

(% of responses)



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

Nevertheless, they still all remain at fairly high levels and suggest that growth in Q3 will be higher than in Q2. It will not be until Q4 that growth will significantly decelerate, mainly due to global supply problems, although it will still be well above the long-term average trend. Also, the risks of a more abrupt slowdown caused by bottlenecks cannot yet be ruled out. In this context of buoyant demand and emerging supply problems, inflation has surged to over 3.0%, also pushed up by the sharp rise in electricity prices, which have been driven by the prices of gas and EU emission rights. These factors will persist over the coming months, so inflation will remain around those levels for the remainder of the year, although we expect it to decline to around 2.0% during the first half of 2022.

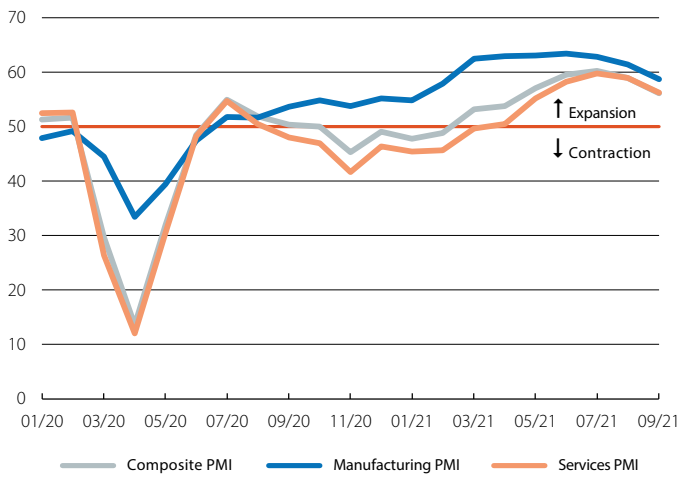
EMERGING ECONOMIES

China feels the consequences of its Zero COVID policies, and the Evergrande crisis increases the risks for the coming months. The country in which the pandemic originated and the first one that appeared to have it under control is implementing a «zero tolerance» policy with the Delta variant. These policies have exacerbated the distortions already apparent in global supply chains, and they will also restrict growth in Q3 2021. Another risk factor for the coming months is Evergrande's delicate financial situation: it is the country's second-largest property developer, with assets equivalent to 2.0% of China's GDP and liabilities exceeding 300 billion dollars spread across 128 banks and more than 121 non-banking institutions. Nevertheless, the risk of global financial contagion resulting from a potential default is estimated to be very limited, given that Chinese investors hold more than 80% of the firm's debt. Moreover, the Chinese authorities have already begun to act to reduce the financial stress and to secure the flow of credit (the central bank has injected some 17 billion dollars), and they will most likely work towards achieving an orderly restructuring. Although the risks to short-term growth have increased, growth of around 8% in 2021 is still feasible.

Uneven performance among other emerging economies in Q3. The latest data suggest that growth in most of the emerging Asia region will experience a marked slowdown in Q3, especially in countries of Southeast Asia, as they are lagging far behind in the vaccination process and are also highly dependent on international tourism, which is still at a low point. The exception in Asia will be India, which will see a major rebound in activity in Q3. Emerging Europe will also slow in Q3, after a very dynamic Q2, mainly due to the cooling of activity in industry, which is heavily affected by the global supply chain problems. On the other hand, much of Latin America will see its growth intensify in Q3 following a fairly satisfactory Q2.

Euro area: PMI

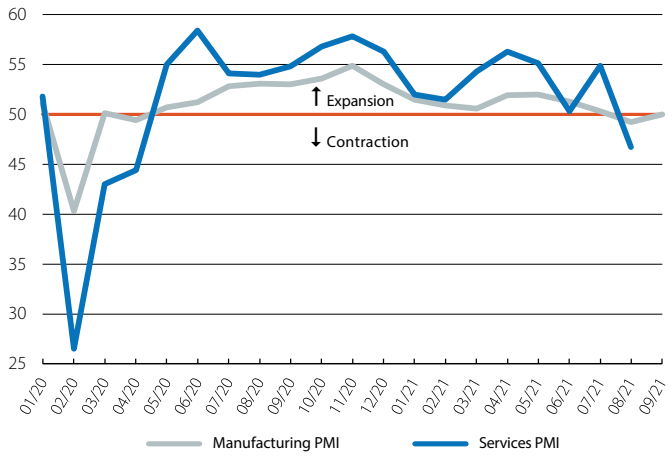
Level



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

China: PMI

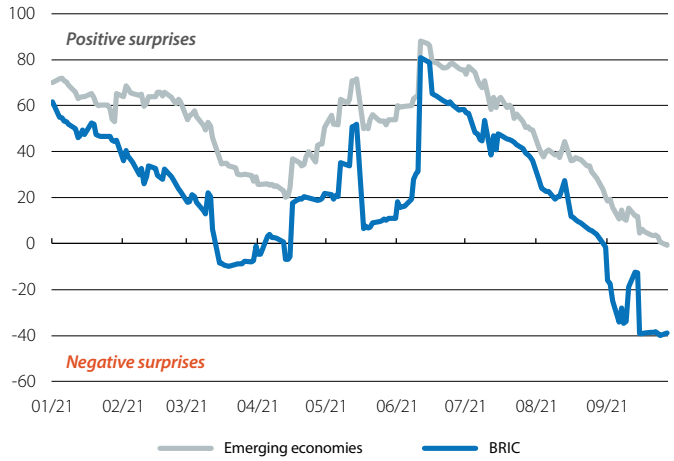
Level



Note: *The data for the services PMI correspond to the month of August.*
Source: *CaixaBank Research, based on data from Markit.*

Economic surprise index *

(%)



Note: ** Weighted balance of the typical deviations of forecast errors, measured as the difference between the figure published and the median of the Bloomberg consensus.*
Source: *CaixaBank Research, based on data from Refinitiv.*

The chip shortage is going nowhere fast

The shortage of semiconductors (or chips) and the associated bottlenecks constitute one of the most significant features of the post-pandemic economy. This shortage has affected many manufacturing sectors, and the car industry in particular, which in Europe plays a major role in the economy. It has also contributed to bottlenecks that are generating inflationary pressure and could hold back economic activity. But what lies behind this phenomenon? Are these chip bottlenecks a transient phenomenon attributable to the pandemic, or do they also reflect structural factors resulting from the sector's specific characteristics?

Macroeconomic factors

The post-pandemic economy is characterised by significant unmet demand, especially in private consumption, which is receiving an additional boost from the pent-up savings amassed during the lockdown. Also, the demand in this reopening phase is proving particularly high in the case of information and communication technology goods, driven by the rise in teleworking and remote learning (computers, tablets, etc.), and these goods require large quantities of chips. Moreover, a considerable portion of this demand has been directed towards the purchase of cars, which also need semiconductors. While some of this excess demand ought to correct itself over the coming quarters as consumption patterns normalise and pent-up savings fade, there are other more structural forces which could cause the chip shortage to persist.

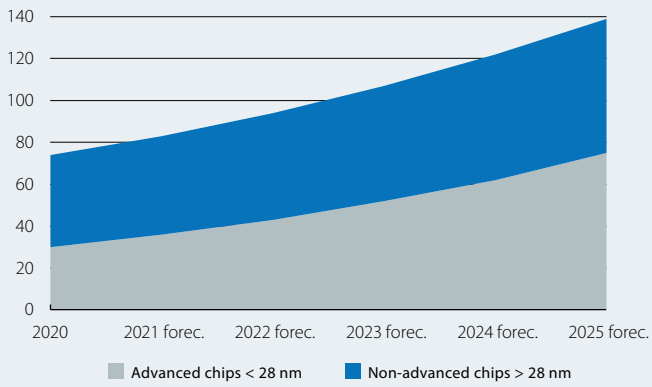
Firstly, there is the technological decoupling between China and the US, which is set to continue in the coming years and is disrupting chip supply chains. Secondly, the transition towards electric cars will also increase the demand for semiconductors, as they use more chips than internal combustion vehicles. Thirdly, and perhaps most importantly, there is the idiosyncratic structure of the semiconductor industry.

What makes the semiconductor industry special?

Semiconductor firms can be divided into three groups. There are Integrated Device Manufacturers (IDMs, such as Intel, Samsung or Texas Instruments), which handle both the design and the manufacturing; so-called fabless firms, which only design their chips and outsource the production (such as Nvidia, Qualcom or AMD), and pure play foundries (such as Taiwan Semiconductor), which only manufacture other companies' designs.

In this semiconductor value chain, the foundries are the critical point. This is firstly because the high fixed cost of manufacturing chips, especially the most advanced ones (less than 28 nm)[1], makes it very financially costly to have manufacturing units sitting idle (see first chart). Moreover, this high cost means that vast investments are required, posing a formidable barrier to entry. Thirdly, the complexity of wafer manufacturing requires a high degree of specialisation and also requires the customer – in this case the designer – to provide the manufacturer with a great deal of sensitive information if they want the product to meet their specifications. As a result, the economies of scale in the industry and the flows of sensitive information between customers and manufacturers tend to encourage concentration.

Expected evolution of the chip market: the dominance of advanced chips
(USD billions)



Source: *CaixaBank Research, based on data from Goldman Sachs.*

A concentrated market

A prime example of the key role of foundries in the sector is the fact that, over the past 20 years, the foundry market has grown at an annual rate of 10% (74 billion dollars in 2020), whilst the total semiconductor market has grown by 4% (239 billion dollars in 2020). The investment bank Goldman Sachs expects the demand for advanced nodes (under 28 nm) to cause the foundry market to grow at a rate of 15% per annum through to 2023, before returning to 10% in 2024-2025. In comparison to the previous cycle, the foundry industry is now more concentrated. Taiwan Semiconductor is the biggest pure play foundry. In 2020 it accounted for 59%

1. The complexity of chips is measured by how small they are, and the unit of measurement is a nanometre (nm), representing a billionth of a metre. The fewer nanometres a chip measures, the more advanced or sophisticated it is. The most advanced ones currently measure 3 nm, but those under 28 nm are already considered relatively advanced.

of the total wafer market, compared to 50% in 2010, and in the case of highly advanced chips (less than 10 nm, a 21.1-billion-dollar market) the concentration is even higher (Taiwan Semiconductor produces around 90% of the total) (see second chart). Trailing far behind, the second biggest wafer manufacturer is Samsung. On the other hand, the aforementioned technological decoupling of the US and China has severely affected the Chinese firm SMIC (Semiconductor Manufacturing International Company), since the recent US restrictions prevent it from using certain American technology.

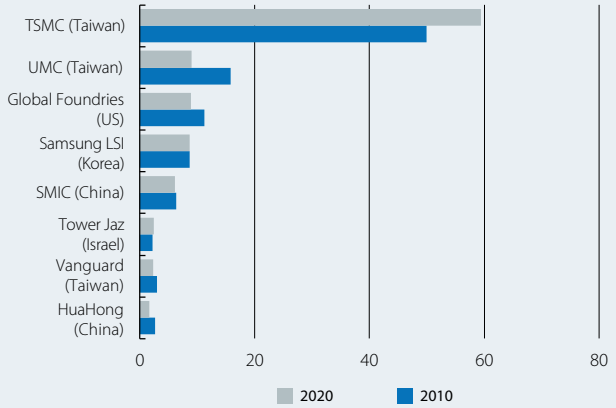
Europe, where are you going?

In this environment of structural chip shortages, the big tech giants, such as Faang (an acronym for the leading US technology companies),[2] are using their greater bargaining power to meet their high demand ahead of other industries, such as the automotive industry.

Europe is seeking to bolster its own semiconductor industry and to explore the possibility of developing European chip manufacturing. The problem is that the starting point is a long way behind the technological cutting edge, especially in the manufacture of wafers. This, coupled with the aforementioned investment requirements, means that significant long-term effort involving the major European economies is required. The European dilemma is whether to seek short-term solutions to alleviate the situation in the automotive sector or to compete directly with Taiwan. Without drastic policy changes, this looks like a chimera.

Jordi Singla

Chip foundries:* market share
(% of the total in dollars)



Note: ** Foundries and wafer manufacturers.*
Source: *CaixaBank Research, based on data from Goldman Sachs.*

2. Namely, Facebook, Amazon, Apple, Netflix and Alphabet.

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

UNITED STATES

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Activity									
Real GDP	2.3	–3.4	–2.9	–2.3	0.5	12.2	–	–	–
Retail sales (excluding cars and petrol)	4.0	2.1	5.4	4.7	11.9	26.1	13.1	14.3	...
Consumer confidence *(value)*	128.3	101.0	93.1	93.8	99.1	122.1	125.1	115.2	109.3
Industrial production	–0.8	–7.2	–6.7	–4.3	–1.6	14.6	6.6	5.9	...
Manufacturing activity index (ISM) *(value)*	51.2	52.5	55.0	59.0	61.4	60.8	59.5	59.9	61.1
Housing starts *(thousands)*	1,295	1,396	1,440	1,575	1,599	1,586	1,554	1,615	...
Case-Shiller home price index *(value)*	217	228	229	239	249	262	271	...	...
Unemployment rate *(% lab. force)*	3.7	8.1	8.8	6.8	6.2	5.9	5.4	5.2	...
Employment-population ratio *(% pop. > 16 years)*	60.8	56.8	56.1	57.4	57.6	58.0	58.4	58.5	...
Trade balance[1] *(% GDP)*	–2.7	–3.2	–2.9	–3.2	–3.6	–3.7	–3.7	...	...
Prices									
Headline inflation	1.8	1.2	1.2	1.2	1.9	4.8	5.4	5.3	...
Core inflation	2.2	1.7	1.7	1.6	1.4	3.7	4.3	4.0	...

JAPAN

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Activity									
Real GDP	0.0	–4.7	–5.5	–0.9	–1.3	7.6	–	–	–
Consumer confidence *(value)*	38.9	31.1	30.5	33.0	33.3	35.4	37.5	36.7	37.8
Industrial production	–2.7	–10.6	–12.7	–4.2	–1.5	19.9	13.3	7.6	...
Business activity index (Tankan) *(value)*	6.0	–19.8	–27.0	–10.0	5.0	14.0	–	18.0	–
Unemployment rate *(% lab. force)*	2.4	2.8	3.0	3.0	2.8	2.9	2.8	2.8	...
Trade balance[1] *(% GDP)*	–0.3	0.1	–0.3	0.1	0.3	–	0.9	0.8	...
Prices									
Headline inflation	0.5	0.0	0.0	–0.9	–0.5	–0.7	–0.3	–0.4	...
Core inflation	0.6	0.2	0.1	–0.4	0.0	–0.9	–0.6	–0.5	...

CHINA

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Activity									
Real GDP	6.0	2.3	4.9	6.5	18.3	7.9	–	–	–
Retail sales	8.1	–2.9	0.9	4.6	34.0	14.1	8.5	2.5	...
Industrial production	5.8	3.4	5.8	7.1	24.6	9.0	6.4	5.3	...
PMI manufacturing *(value)*	49.7	49.9	51.2	51.8	51.3	51.0	50.4	50.1	49.6
Foreign sector									
Trade balance[1,2]	421	527	444	525	623	611	604	606	...
Exports	0.5	3.6	8.4	16.6	48.9	30.7	19.3	25.6	...
Imports	–2.7	–0.7	3.7	5.6	29.0	43.4	28.1	33.1	...
Prices									
Headline inflation	2.9	2.5	2.3	0.1	0.0	1.1	1.0	0.8	...
Official interest rate[3]	4.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Renminbi per dollar	6.9	6.9	6.9	6.6	6.5	6.5	6.5	6.5	6.5

Notes: *1. Cumulative figure over last 12 months. 2. Billion dollars. 3. End of period.*
Source: *CaixaBank Research, based on data from the Department of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Standard & Poor's, ISM, National Bureau of Statistics of Japan, Bank of Japan, National Bureau of Statistics of China and Refinitiv.*

EURO AREA

Activity and employment indicators

Values, unless otherwise specified

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Retail sales *(year-on-year change)*	2.4	–0.9	2.5	1.6	2.5	12.3	3.1	...	...
Industrial production *(year-on-year change)*	–1.3	–8.6	–6.9	–1.4	3.5	23.3	7.7	...	...
Consumer confidence	–7.0	–14.3	–14.4	–15.6	–13.7	–5.5	–4.4	–5.3	–4.0
Economic sentiment	103.7	88.2	88.5	91.4	95.3	114.3	119.0	117.6	117.8
Manufacturing PMI	47.4	48.6	52.4	54.6	58.4	63.1	62.8	61.4	58.7
Services PMI	52.7	42.5	51.1	45.0	46.9	54.7	59.8	59.0	56.3
Labour market									
Employment (people) *(year-on-year change)*	1.2	–1.6	–2.1	–1.8	–1.9	...	–	...	–
Unemployment rate *(% labour force)*	7.6	7.9	8.5	8.2	8.1	8.0	7.6	7.5	...
Germany *(% labour force)*	3.2	3.9	4.1	4.1	3.9	3.7	3.6	3.6	...
France *(% labour force)*	8.4	8.0	8.9	8.0	8.0	8.2	8.0	8.0	...
Italy *(% labour force)*	10.0	9.3	10.0	9.8	10.1	9.8	9.3	9.3	...
Real GDP *(year-on-year change)*	1.4	–6.5	–4.0	–4.6	–1.3	13.6	–	...	–
Germany *(year-on-year change)*	1.1	–4.9	–3.7	–2.9	–3.1	9.4	–	...	–
France *(year-on-year change)*	1.8	–8.0	–3.6	–4.3	1.5	18.7	–	...	–
Italy *(year-on-year change)*	0.3	–8.9	–5.2	–6.5	–0.7	17.3	–	...	–

Prices

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
General	1.2	0.3	0.0	–0.3	1.1	1.8	2.2	3.0	3.4
Core	1.0	0.7	0.6	0.2	1.2	0.9	0.7	1.6	1.9

Foreign sector

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Current balance	**2.5**	**2.3**	**2.2**	**2.3**	**2.7**	**2.8**	**...**	**...**	**...**
Germany	7.4	7.0	6.8	7.0	7.1	7.3	...	...	...
France	–0.3	–1.9	–1.5	–1.9	–1.7	–1.6	...	...	...
Italy	3.2	3.5	3.4	3.5	3.5	3.9	...	...	...
Nominal effective exchange rate[1] *(value)*	**92.3**	**93.8**	**95.4**	**95.5**	**95.3**	**94.9**	**94.2**	**93.9**	**93.8**

Credit and deposits of non-financial sectors

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Private sector financing									
Credit to non-financial firms[2]	3.8	6.3	7.1	7.0	6.4	2.3	1.7	1.5	...
Credit to households[2,3]	3.4	3.2	3.1	3.2	3.1	3.9	4.2	4.2	...
Interest rate on loans to non-financial firms[4] *(%)*	1.2	1.2	1.3	1.3	1.1	1.2	1.3	1.2	...
Interest rate on loans to households for house purchases[5] *(%)*	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.3	...
Deposits									
On demand deposits	8.0	12.9	14.1	15.2	16.1	12.3	11.3	11.5	...
Other short-term deposits	0.3	0.6	1.0	1.4	1.0	–0.6	–1.8	–1.5	...
Marketable instruments	–1.9	9.6	10.2	17.5	12.6	9.9	7.9	9.9	...
Interest rate on deposits up to 1 year from households *(%)*	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	...

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

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

Expansionary signals in Spain in the third quarter

The favourable epidemiological developments have allowed the restrictions to be lifted, thus reducing the pandemic's impact on economic activity. The data show a growing dissociation between infections and hospitalisations and deaths, as the percentage of the immunised population, now at 76.8%, has grown. The cumulative incidence continues to decline and now stands at a contained 59 infections per 100,000 inhabitants, compared to 276 a month ago; the percentage of hospital occupancy due to COVID patients has dropped to 2% at the end of September compared to 6% the previous month, while the number of weekly deaths per million inhabitants has dropped to 2.5 from the 7.5 at the end of August.

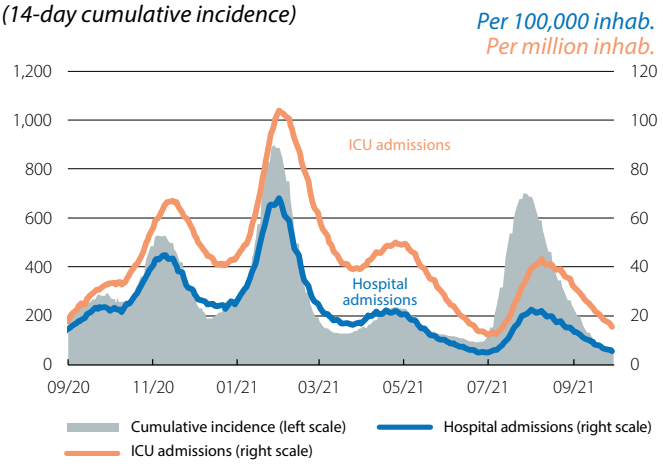
Notable downward revision of GDP growth in Q2 2021, from the initial estimate of 2.8% quarter-on-quarter to 1.1%. The revision is mainly due to lower growth in private consumption and investment, together with higher growth in imports than originally announced. As a result, the GDP gap compared to pre-pandemic levels has widened to 8.4% *versus* the prior 6.8%. As a result of this revision, and while the growth outlook for the coming quarters is no worse, we adjust our outlook for the coming years. For 2021 as a whole, we cut the GDP growth forecast to 5.0%, while for 2022 we revise it up by 2 decimal points to 6.2%, due to a delay in the materialisation of pent-up demand.

The economic activity indicators continue to show signs of expansion and that the recovery has been gaining momentum up to August. That said, in September there was a slight moderation in the rate of growth, which is normal following the strong rebound that occurred with the end of the state of emergency. On the one hand, the manufacturing and services PMIs, which measure business sentiment, stood at 58.1 and 56.9 in September, respectively, slightly below the highs of June, they have now registered six consecutive months in expansionary territory (above 50 points). The CaixaBank consumption indicator, meanwhile, climbed 12% in September compared to the same month of 2019, having marked a peak of maximum growth in August (13%). In any case, these are markedly higher rates than in Q2, when it stood only 3% above 2019 levels.

The labour market consolidates its recovery and approaches pre-pandemic levels. After five months on the rise, in September the number of people registered with Social Security, corrected for seasonality, exceeded the level of February 2020 (19.5 million). In addition, there was a reduction of 22,482 workers affected by ERTE furlough schemes, bringing the average for September to 248,797 people. Effective employment (seasonally adjusted registered workers excluding those on furlough) is only 160,000 people short of the pre-pandemic level, and in Q3 as a whole this measure registered a quarter-on-quarter growth of 3.3%, compared to 1.8% in Q2. This would support the prospects of an acceleration in GDP growth in the quarter just ended.

Spain: infections and hospitalised COVID patients

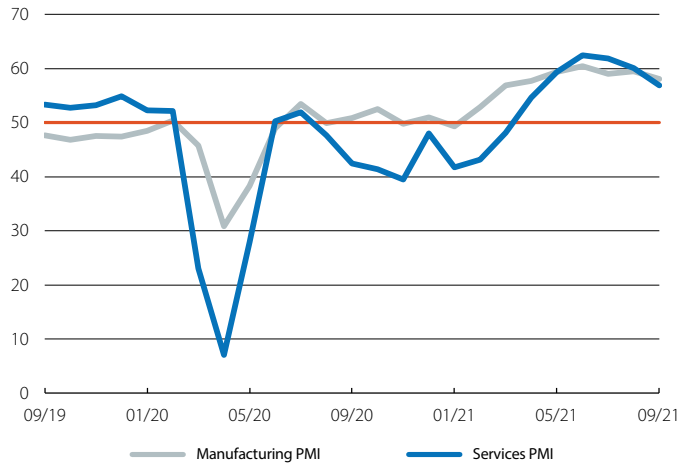
(14-day cumulative incidence)



Source: *CaixaBank Research, based on data from the Ministry of Health.*

Spain: economic activity indicators

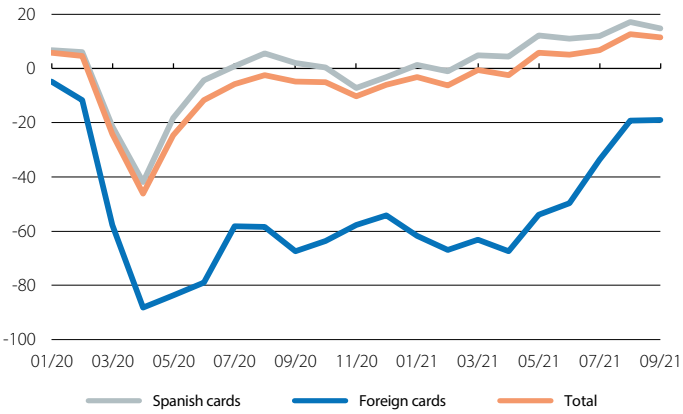
Level



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

Spain: CaixaBank consumption indicator *

Change compared to the same period of 2019 (%)



Notes: ** This indicator includes spending and withdrawals carried out using cards issued by CaixaBank as well as non-customer spending registered on CaixaBank POS terminals. In the case of foreign cards, cash withdrawals from CaixaBank ATMs are also included. The figure for September 2021 includes the average of the first four weeks.*

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

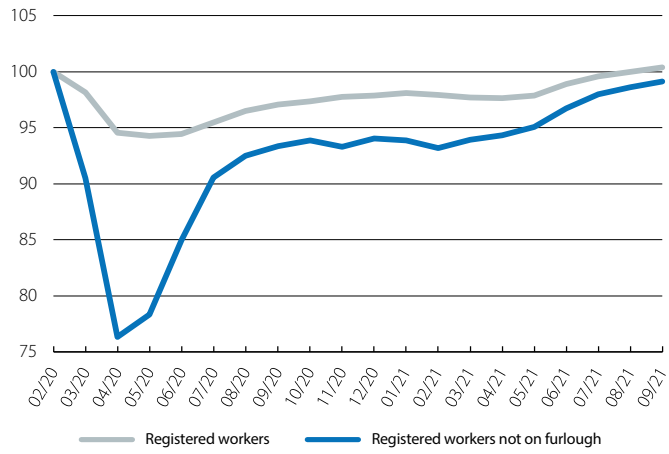
Inflation rises to 4% in September, the highest level since 2008. For the seventh consecutive month, inflation rose by 7 decimal points, driven mainly by the energy component and by electricity in particular. On the other hand, core inflation, which excludes unprocessed food and energy products, is also climbing, albeit at a more contained rate than headline inflation, due to the rising prices of services related to tourism and catering. It now stands at 1%, 3 decimal points higher than in August and its highest level in 15 months. Thus, the gap between the core and the headline rate, of 3 points, is at its widest since the series began back in August 1986. While inflation in the euro area also remains on the rise, the rally has been less intense than in Spain, so the inflation gap has widened in September to 6 decimal points. The upward pressure of electricity could persist over the coming months, given the prices marked by electricity futures up until Q1 2022. CaixaBank Research's forecast for average annual inflation in 2021 has been raised to 2.4%, with predominantly upside risks due to energy prices. However, for now the inflation rally is predominantly transitory, with no apparent second-round effects and with long-term inflation expectations remaining low.

The improvement in the trade balance allows the current account surplus to grow. In the first seven months of the year, the current account balance showed a surplus of 4,554 million euros, 15.8% more than in the same period of 2020, but still a far cry from the figures of 2019 (14,033 million euros). The improvement in the current account balance is explained by the correction of the trade deficit, which has reduced by 11.2% year-on-year to –6,995 million: we need to go back to 1987 to find a lower trade deficit in the period January-July. This was helped by the significant improvement in the non-energy component (a surplus of 5,202 million compared to 1,142 million in 2020), in contrast to the sharp rise in the energy deficit, deteriorating by 35.2% to –12,197 million. On the other hand, there was a deterioration both in the income balance, the deficit of which increased by 9.9% to 6,868 million, and in tourism, with a surplus that reduced by 13.2% to 5,539 million, the lowest figure for this period since the series began (in 1993).

The recovery of incomes facilitates the correction of the public deficit. In the first seven months of the year, the state registered a deficit of 4.2% of GDP, compared to 5.4% a year earlier, thanks to a 14.4% year-on-year increase in incomes, with a particularly significant increase in VAT collection (+16.5%). However, there was an acceleration in the rate of expenditure growth to 3.3% (+2.5% up to July), mainly due to the increase in transfers to other public administrations and the rebound in intermediate consumption driven by expenditure on vaccines. Although the COVID-19 crisis will continue to have a considerable impact on the public accounts in 2021 (through ERTE furlough schemes, which have been extended until February 2022, aid to businesses and health expenditure), the economic recovery will help to reduce the public deficit in 2021, potentially placing it at around 8.2% of GDP (10.1% in 2020 excluding Sareb).

Spain: average monthly number of workers registered with Social Security *

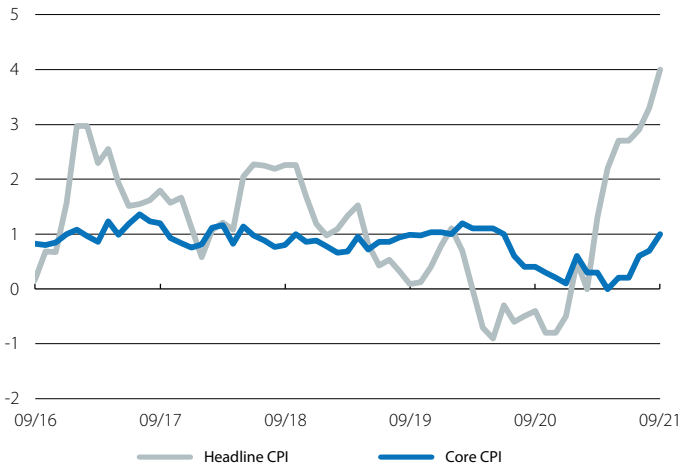
Index (100 = February 2020)



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

Spain: CPI growth

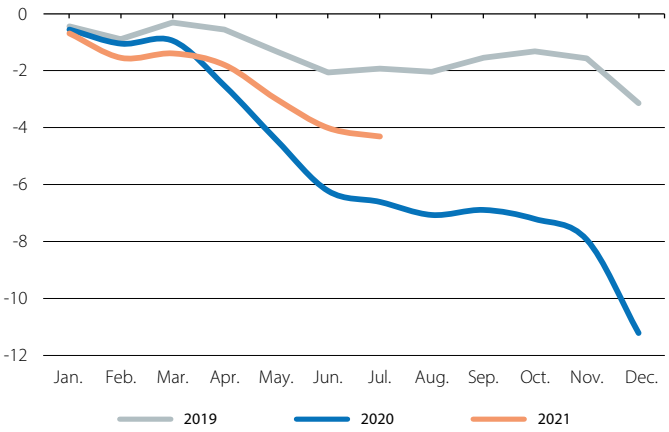
Year-on-year change (%)



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

Spain: general government funding capacity/needs *

(% of GDP)



Note: ** Consolidated balance excluding local corporations.*
Source: *CaixaBank Research, based on data from the General Comptroller of the State Administration (IGAE).*

The export sector in Spain: a value-added perspective

The transformation of the Spanish economy in the last decade has been particularly visible in the external sector. It went from losing competitiveness and running ever-increasing deficits between 1997 and 2007 (the current account deficit reached over 9% of GDP) to recovering competitiveness and maintaining a consistently positive foreign balance since 2012 (+1.8% on average over the period 2012-2020). To better understand how this transformation will help the economy after the pandemic, we analyse the trend in exports from a new perspective.

The value added of Spanish exports

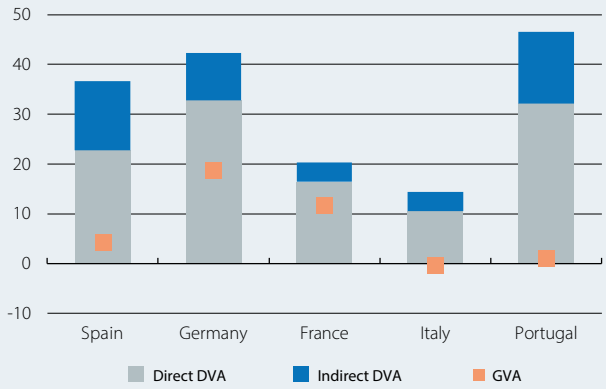
In an environment marked by fragmented production chains, increasing «servification»[1] and the digitalisation of the economy and international trade – where final goods increasingly include more services in their value chains, services themselves become more marketable and companies incorporate information and communication technologies more intensively into their production processes – it is important to understand the evolution of Spanish exports from a value added perspective. Domestic value added (DVA) in exports offers us a measure of the value that is added by Spanish workers and firms to the products and services which they export.[2] Between 2005 and 2015, Spain's DVA amassed a growth of 38%, a particularly noteworthy figure in the context of a double-dip recession in which the gross value added (GVA) of the economy as a whole rose by just 4% (see first chart).

In addition, we can split the DVA in exports between direct DVA, which is the value added generated in the final export sectors of each country, and indirect DVA, generated in other sectors that are considered intermediate in each value chain but which nevertheless add value to exports of «final» goods and services. With this distinction, we see that the growth in DVA in Spanish exports has an unusually high contribution from indirect DVA, which is responsible for 16 pps of the total growth of the DVA in exports, well above that observed in other European countries (5.5 pps in France and 9 pps in Germany).

1. See for instance WTO (2019), «World Trade Report 2019: The future of services trade» and S. Miroudot and C. Cadestin (2017), «Services in Global Value Chains: From inputs to value-creating activities», OECD Trade Policy Papers 197.
2. DVA in Spanish exports accounts for 77% of gross exports. The EU average is 68%, with a range varying between around 80% in Germany, France or Croatia and around 40% in countries such as Luxembourg or Malta. By sector, DVA represents a higher proportion of gross exports in services (79% on average in EU countries), while DVA in industry represents an average of 62% of exports.

Evolution of GVA and DVA in exports

(%, change in GVA and contributions to the change in DVA between 2005 and 2015)



Notes: *Direct domestic value added (DVA) measures the contribution which final exporters provide to the GVA. Indirect DVA measures the contribution of «intermediate exporters», i.e. companies and workers that are involved in the value chain but are not final exporters of a given product. In aggregate, indirect DVA provides a measure of the knock-on effect of exports.*
Source: *CaixaBank Research, based on data from the OECD.*

Internationalisation and value added: knock-on capacity and services

But how did these exports grow? By sector, the main exporters in terms of DVA are vehicle sale and repair services, chemical and non-metallic mineral products, transport equipment and sundry business services. If we distinguish between direct DVA (originating directly in the sector) and indirect DVA (originating in other sectors, but incorporated into the exports of the final export sector), we see that exports of the manufacturing sector stand out for their knock-on effect. In particular, in the agrifood and metallurgical industries, indirect DVA accounts for around 60% of the total export DVA, and in the petrochemical and transport goods sectors it exceeds 50%. In addition, between 2005 and 2015, the agrifood sector and information and communication services are among those that have seen their indirect effect increase the most, making a significant contribution to the growth of the relative importance of these exports to the Spanish economy. Also of note is the increase in direct DVA in information and communication services, as well as in commercial and other business services, reinforcing the importance of these sectors to Spain's exports (see second chart).

An analysis of the trade balance from a value-added perspective gives us a more accurate picture of how the foreign sector's performance has evolved over time. In particular, it enables us to unravel how each sector, whether directly or indirectly, provides value added and to what extent its foreign dimension is significant for the

national economy.[3] First of all, it is noteworthy that all of the sectors analysed provided a positive contribution to the dramatic improvement in the trade balance between 2005 and 2015, with the exception of the «other manufactured goods» category (explained entirely by the deterioration in the external deficit of the textile sector). Secondly, the significant improvement in commercial services and other business services is worth highlighting, marking the key role played by services throughout the value chain of the Spanish economy, with an aggregate contribution of 4 pps to the improvement in the trade balance over the period in question (see third chart). Among goods, the performance of certain heavy manufacturing sectors with a high knock-on capacity, such as capital equipment goods and metal products, is particularly relevant. As for the biggest contributions to the trade balance, tourism and logistics services remain top of the list, although their relative contribution has decreased, both as a result of a lower direct contribution and due to a lower knock-on effect.

Quo vadis, DVA?

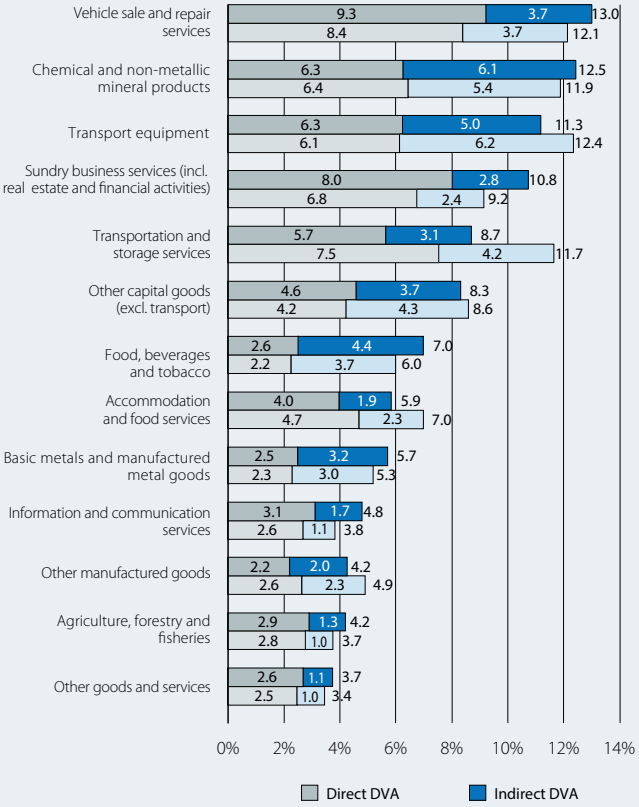
In the last decade, Spain's economy became more internationalised and achieved important transformations in its exporting sectors. Looking ahead to the future, the economy's competitiveness will depend on the ability to sustain productivity gains and to spread the value added which is generated in the most dynamic sectors across the rest of the economy. In addition to the usual ingredients of investment in education, training and digitalisation, it will also be important to continue to work towards greater integration between sectors. In this regard, it is important to highlight the growth in the role of services, given their capacity to generate value and as an amalgam of the entire production chain, as well as the successful implementation of the Strategic Projects for Economic Recovery and Transformation (known as PERTE)[4] as key tools for the success of this mission.

Luís Pinheiro de Matos

3. Specifically, the sectoral foreign balance in value added measures the difference between the DVA in exports and the external value added in imports for each sector, thus revealing trade relations that are not readily evident when looking at the relationship between exports and imports in gross terms. By aggregating this foreign balance in value added for all sectors of the economy, we obtain the trade balance in value added, which may differ from the «standard» measure of the trade balance which is calculated based on gross export and import flows.
4. The so-called PERTE projects are projects which are identified as having a high knock-on capacity for the economy and are defined in the decree law regulating European funds. Among their main characteristics, PERTE projects must have private funding, which can be coordinated with public funding, for instance through grants or consortia. The criteria that are valued in order for a project to be declared a PERTE include its innovative nature and the contribution of value added.

Spain: domestic value added (DVA) in exports (2005 vs. 2015)

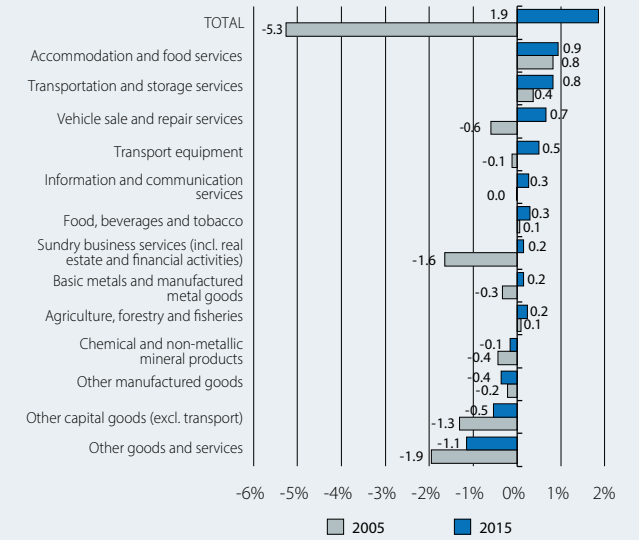
(% of the total domestic value added in exports)



Notes: *Direct domestic value added (DVA) measures the sector's (direct) contribution to the DVA of the sector's own exports. Indirect DVA measures the (indirect) contribution of other sectors to the DVA of the sector's exports. The DVAs corresponding to the year with the latest available data (2015) are shown in a darker colour, while the baseline year (2005) is shown in a lighter colour.*
Source: *CaixaBank Research, based on data from the OECD.*

Spain: trade balance in value added (sector contributions)

(% of the Spanish economy's GVA in 2005 and 2015)



Note: *The foreign balance in value added measures, for each sector, the difference between the domestic value added in final foreign demand and the external value added in final domestic demand.*
Source: *CaixaBank Research, based on data from the OECD.*

Activity and employment indicators

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Industry									
Industrial production index	0.7	–9.4	–5.2	–2.2	3.0	28.0	3.3	1.7	...
Indicator of confidence in industry *(value)*	–3.9	–14.0	–11.9	–11.0	–7.3	2.5	2.1	1.4	2.7
Manufacturing PMI *(value)*	49.1	47.5	51.4	51.1	53.0	59.2	59.0	59.5	58.1
Construction									
Building permits *(cumulative over 12 months)*	17.2	–12.8	–19.1	–19.9	–19.1	–1.8	13.4	...	...
House sales *(cumulative over 12 months)*	3.6	–12.5	–17.5	–17.2	–17.3	0.6	17.3	...	...
House prices	5.1	2.1	1.7	1.5	0.9	3.3	–	–	–
Services									
Foreign tourists *(cumulative over 12 months)*	1.4	–36.9	–50.9	–72.7	–85.5	–81.3	–68.2	–55.5	...
Services PMI *(value)*	53.9	40.3	47.3	43.0	44.3	58.8	61.9	60.1	56.9
Consumption									
Retail sales	2.3	–7.1	–3.5	–2.9	–0.4	20.4	–0.1	–0.9	...
Car registrations	–3.6	–29.2	–7.5	–13.2	12.7	661.0	–28.9	–28.9	–15.7
Consumer confidence index *(value)*	–6.3	–22.8	–26.9	–26.3	–22.1	–11.1	–10.2	–8.5	–8.6
Labour market									
Employment [1]	2.3	–2.9	–3.5	–3.1	–2.4	5.7	–	...	...
Unemployment rate (% labour force)	14.1	15.5	16.3	16.1	16.0	15.3	–	...	...
Registered as employed with Social Security [2]	2.6	–2.0	–3.0	–2.0	–1.4	3.9	4.3	3.6	3.5
GDP	**2.1**	**–10.8**	**–8.7**	**–8.8**	**–4.2**	**17.5**	**–**	**...**	**...**

Prices

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
General	0.7	–0.3	–0.5	–0.7	0.6	2.6	2.9	3.3	4.0
Core	0.9	0.7	0.5	0.2	0.4	0.1	0.6	0.7	...

Foreign sector

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	1.8	–10.0	–8.9	–10.0	–8.1	8.7	10.7	...	...
Imports *(year-on-year change, cumulative over 12 months)*	1.0	–14.7	–13.3	–14.7	–14.0	3.3	6.3	...	...
Current balance	**26.2**	**9.3**	**11.9**	**9.3**	**8.3**	**9.2**	**9.9**	**...**	**...**
Goods and services	36.5	16.5	19.2	16.5	16.0	16.8	17.8	...	...
Primary and secondary income	–10.3	–7.3	–7.3	–7.3	–7.6	–7.7	–7.9	...	...
Net lending (+) / borrowing (–) capacity	**30.4**	**13.7**	**16.3**	**13.7**	**12.7**	**15.5**	**16.8**	**...**	**...**

Credit and deposits in non-financial sectors [3]

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

	2019	2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	07/21	08/21	09/21
Deposits									
Household and company deposits	5.4	7.5	9.0	8.7	8.9	4.9	4.8	4.8	...
Sight and savings	10.7	12.3	13.8	13.7	14.1	9.2	9.0	8.9	...
Term and notice	–13.4	–16.5	–16.5	–17.1	–20.4	–23.5	–25.0	–26.3	...
General government deposits	8.8	1.0	5.2	11.8	11.2	16.3	11.6	13.6	...
TOTAL	**5.6**	**7.1**	**8.7**	**8.9**	**9.1**	**5.6**	**5.2**	**5.4**	**...**
Outstanding balance of credit									
Private sector	–1.5	1.2	2.0	2.4	2.3	–0.4	–0.5	–0.9	...
Non-financial firms	–3.4	4.9	7.1	7.9	7.8	–0.7	–1.4	–2.2	...
Households - housing	–1.3	–1.8	–1.8	–1.5	–1.0	0.0	0.5	0.5	...
Households - other purposes	3.2	0.8	0.3	–0.1	–1.8	–0.7	–0.8	–1.6	...
General government	–6.0	3.0	1.1	8.8	9.5	17.4	22.6	22.2	...
TOTAL	**–1.7**	**1.3**	**1.9**	**2.7**	**2.7**	**0.6**	**0.9**	**0.4**	**...**
NPL ratio (%)[4]	**4.8**	**4.5**	**4.7**	**4.5**	**4.5**	**4.5**	**4.4**	**...**	**...**

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

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

Portugal: record vaccination drives the recovery

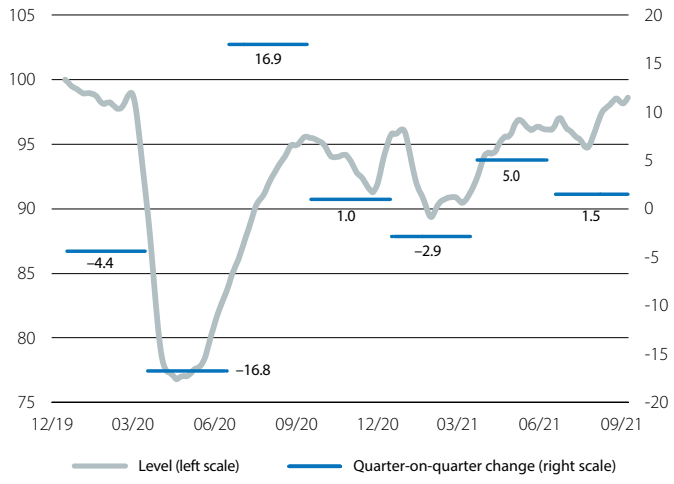
The recovery is progressing, but the GDP revision postpones the milestone of reaching pre-COVID levels. The National Statistics Institute has revised the data for Portuguese GDP, which indicate an 8.4% contraction in 2020, more accentuated than in the previous forecast (–7.6%). This revision is driven by the fact that the pandemic has had a greater impact than initially estimated on the accommodation and catering sector, as well as on transportation and storage. The revised data also suggest lower household consumption, lower investment and lower imports in 2020. Similarly, the economic recovery in Q2 2021 was less pronounced than initially anticipated (4.5% quarter-on-quarter, instead of 4.9%). With these revisions, our expectation is that GDP will not recover to pre-COVID levels until the end of 2022 (previously, by mid-2022). However, the outlook remains positive: the Bank of Portugal's daily economic indicator reveals a narrowing of the gap compared to the end of 2019 of around 2%, while the vaccination roll-out is virtually complete (84% of the population is fully vaccinated) and the plan for the lifting of restrictions has entered its final phase. At present, face masks are only mandatory in certain places (such as on public transport), the digital certificate is no longer required to enter restaurants or accommodation establishments, and all establishments can now open.

Household consumption grows, supported by the labour market and savings. Private consumption has made a notable recovery in Q2, reaching only 2.9% below the level of the end of 2019 (–9.5% in Q1) – a recovery sustained by the consumption of durable goods. This is in line with expectations, as the pandemic and the resulting mobility restrictions, as well as a context of greater uncertainty, led to a considerable increase in household savings. It therefore comes as no surprise that the easing of the lockdown and the recovery of employment levels (this August employment exceeded the level of August 2019 by 0.7%) are helping to generate greater confidence, which is reflected in the latest indicators. More specifically, consumer confidence increased in September for the second consecutive month bringing it close to the levels of the end of 2019, driven by a more positive outlook for the financial situation of both households and the country. At the same time, card payments continue to exceed pre-COVID values: in August, they registered a 5.7% increase over August 2019.

The real estate market remains strong. In Q2 there were 52,855 home sales, 24% more than in the same period of 2019, and prices accelerated relative to the first three months of the year, registering a year-on-year change of 6.6% (5.2% in Q1). In turn, more recent indicators such as bank valuations and price changes calculated by Confidencial Imobiliário suggest that in Q3 the rate of price growth will remain high, albeit somewhat more moderate than in Q2. The strength of

Portugal: daily economic indicator (DEI)

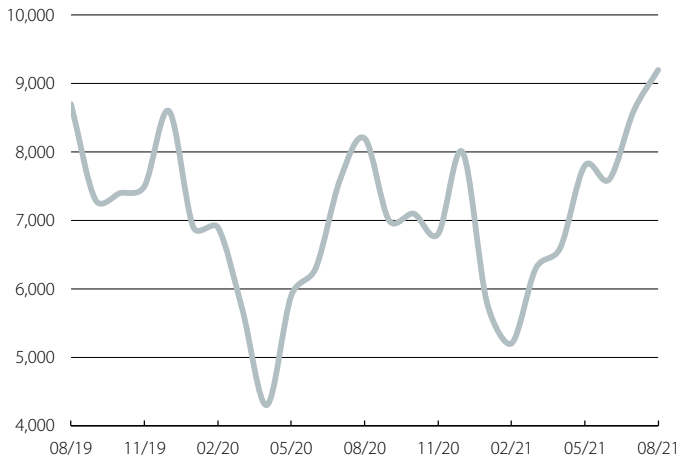
Index (100 = December 2019) *(%)*



Source: *CaixaBank Research, based on data from the Bank of Portugal.*

Portugal: electronic payments

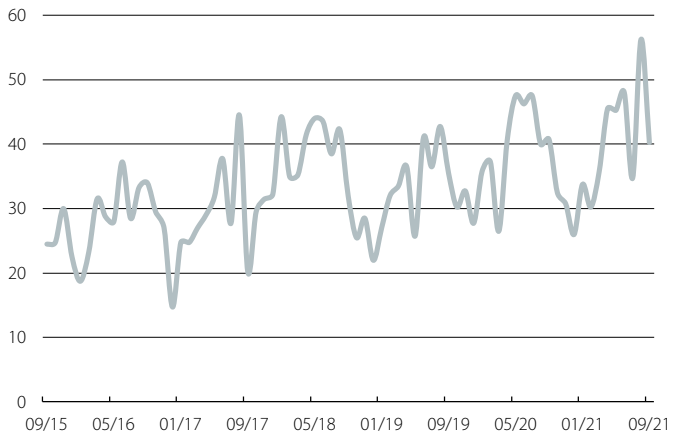
(EUR millions)



Source: *CaixaBank Research, based on data from SIBS Analytics.*

Portugal: housing searches on Google (popularity)

(Points)



Source: *CaixaBank Research, based on data from Google Trends.*

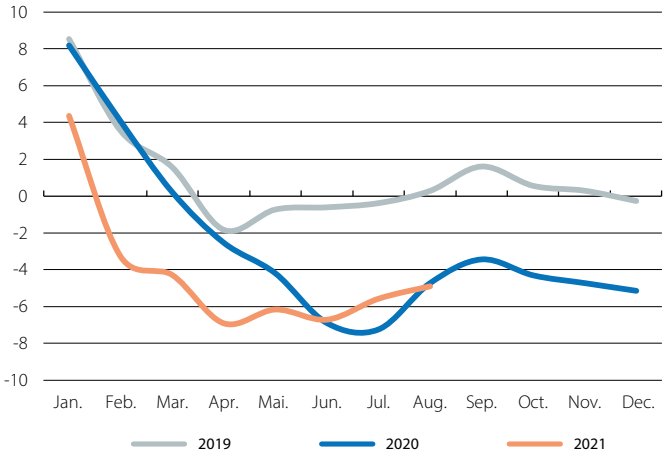
the market will be supported by the potential increase in demand from non-residents, given the imminent end of the Golden Visa programme in major urban centres (according to Google Trends, the popularity of housing searches in Portugal is increasing), together with the highly favourable financing conditions and the moderate increase in supply.

The tourism sector registers a record number of overnight stays by residents in August. According to National Statistics Institute data, in August Portugal reached the highest number of overnight stays by resident tourists since records began (4.2 million). This number reiterates what had already been observed in recent months: that resident tourism is the major driving force behind the recovery of national tourism activity. Compared to July, the total number of guests rose by 54.7%. The total number of overnight stays in July and August exceeds even the total number of overnight stays in all of Q3 2020. The cumulative number of guests from January to August is also higher than it was in 2020, albeit still 58% below the value for the same period of 2019. At the same time, the number of flights at domestic airports in September was 49% higher than in the same month of 2020 and only 8% lower than in August. This indicator usually evolves in parallel with non-resident tourism, hinting that September could still be strong in this field.

The public accounts remain infected by the pandemic. The unprecedented state intervention to protect households and businesses from the most devastating economic effects of the pandemic continues to be reflected in the public accounts, with general government debt reaching 274,585 million euros in July (+3.7% year-on-year). This is equivalent to 130.9% of GDP, but it is still a 4.3-pp reduction compared to the end of 2020. The deficit up to August, meanwhile, deteriorated to 4.9% of GDP (4.7% in the same period of 2020) as expenditure grew by more than income (+5.1% and 4.7%, respectively). The measures introduced to combat the COVID-19 crisis reached 2.9% of GDP in August (4,052 million euros). Those affecting current transfers (such as the simplified lay-off scheme) continue to have the biggest impact, accounting for more than 41% of the total of all COVID-related measures up to August.

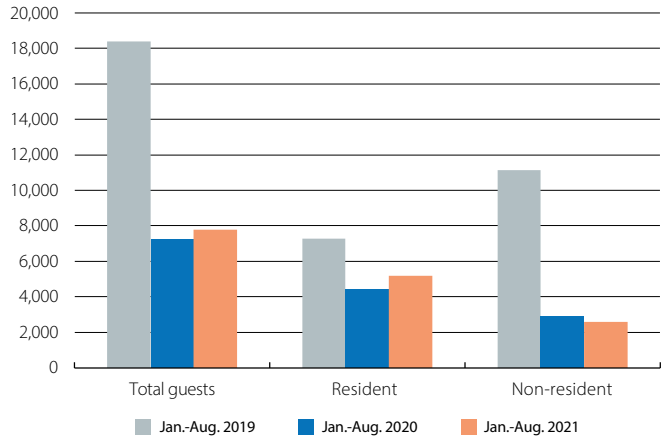
Moratoria coming to an end. In August, the total sum of loans under moratorium amounted to 36,339 million euros. Loans to individuals under moratorium represented 11.1% of the total stock of credit in this segment, rising to 28.5% in the case of loans to companies. By economic sectors, moratoria granted to the accommodation and catering sector represent the largest group. It should be recalled that the moratoria currently in force ended at the end of September, but a smooth transition to the resumption of regular payments is anticipated. Indeed, the state has set up a 1-billion-euro credit facility which will allow a portion of the credit currently under moratoria but not restructured to be guaranteed. The banks have also been in close contact with customers in order to anticipate any potential difficulties.

Portugal: general government balance *
(% of GDP)



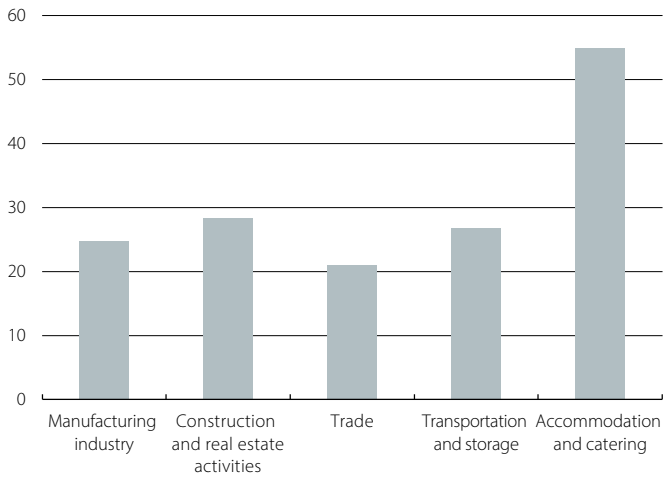
Note: ** Public accounting data.*
Source: *CaixaBank Research, based on data from the DGO.*

Portugal: number of guests versus pre-pandemic
(Thousands of guests, year-to-date total)



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

Portugal: loans under moratorium
(% of total loans in each segment)



Source: *CaixaBank Research, based on data from the Bank of Portugal.*

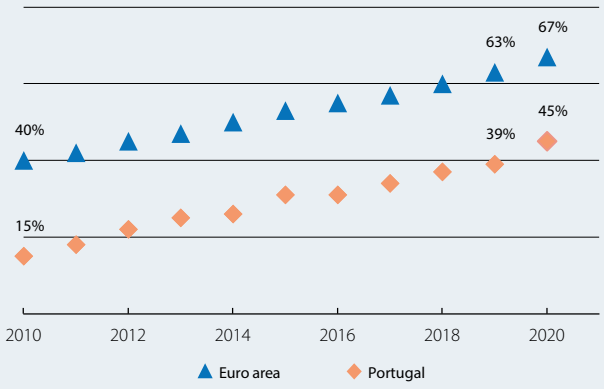
E-commerce in Portugal during the pandemic: a buffer for the fall in consumption?

There is a certain consensus that, during the COVID-19 crisis, we have witnessed an expansion of e-commerce and a portion of what households previously spent in physical shops has shifted online. In this article we will take a closer look at the case of Portugal,[1] posing the following questions: did online trade mitigate the fall in household consumption? Were (are) Portuguese businesses ready to do business in this way? Have consumers' habits changed? Can e-commerce continue to gain ground from traditional retail?

Going back to 2020, it is clear that the pandemic, the various lockdowns and mobility restrictions, the deterioration of the labour market and the uncertainty over households' future incomes led to a fall in household consumption (–5.8% compared to 2019, at constant prices). In fact, food purchases were the only component of consumption not to register a decline (in fact, they increased by 4.7%). More detailed data, from physical shops and transactions (surveys and *in situ* purchases), confirm the signals emanating from the national accounts. In particular, in Portugal's first lockdown (from 18 March to 3 May 2020), the number of credit or debit cards registering transactions fell by 11% year-on-year,[2] followed by a drop of –5% during the second lockdown (15 January to 17 March 2021). Moreover, focusing only on those cards which registered transactions, they also suffered a decline in the number of payments made.

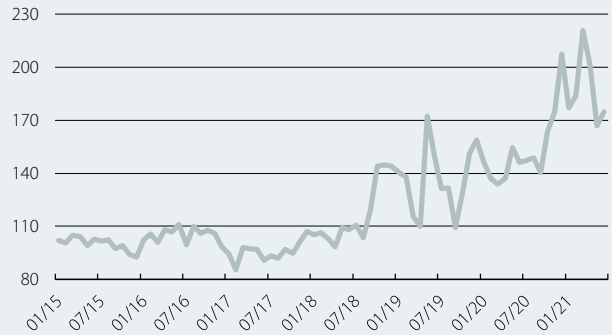
These figures attest to the reduction in face-to-face purchases (with the exception of the consumption of essential food products) and consumers' desire to maintain social distancing. This is also confirmed by data from Eurostat: in Portugal, the percentage of people aged between 16 and 74 who made online purchases of goods and services in the last 12 months rose to 45% in 2020 (39% in 2019), well above the growth trend of the past. According to information from SIBS (Portugal's main payment service provider),[3] the number of online transactions increased, as did their relative weight in the total volume of purchases made, especially during periods when a state of emergency was declared: for instance, in February 2021 the number of online purchases represented 19% of the total (10% in February 2020). Finally, the retail trade index published by Portugal's

Portugal: portion of people who made online purchases in the last 12 months
(%)



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

Portugal: volume of internet sales according to the IVNCR (non-food products)
Index (100 = 2015)



Note: *The IVNCR is the index of turnover, employment, wages and hours worked in the retail trade.*
Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal.*

National Statistics Institute[4] reflects a marked increase in remote sales (those made by mail order, internet or other means) for non-food products, with peaks in December 2020 and March 2021. All of this makes it patently clear that, on the demand side, there was a significant growth in online trade in goods and services. What about supply?

First of all, we must quantify the online presence of Portuguese businesses. According to Eurostat data, Portugal has a comparatively low number of businesses with a website through which products can be ordered or booked: 8% compared to 20% of businesses across the euro area. However, the infrastructure that will enable online sales to grow already exists and is expanding:

1. For the case of Spain, see the Dossier «Consumption during the pandemic: a cross section by generation» in the MR05/2021, also available at www.caixabankresearch.com
2. SIBS (March 2021). «365 days of pandemic – Report on the changes of Portuguese consumer habits». SIBS Analytics.
3. Bank of Portugal Economic Bulletin, May 2021.
4. IVNCR: index of turnover, employment, wages and hours worked in the retail trade. June 2021.

the number of Portuguese firms[5] with a website rose from 59% in 2019 to 62% in 2020.

On the other hand, according to an ACEPI study,[6] half of Portuguese businesses have a presence in online marketplaces (digital buyer and seller platforms such as Amazon, Dott or OLX). This may help us to understand the low figures discussed above: the Portuguese business world is mainly made up of small businesses, and if they use marketplaces they do not need large sums of capital or a major upfront investment to conduct e-commerce.

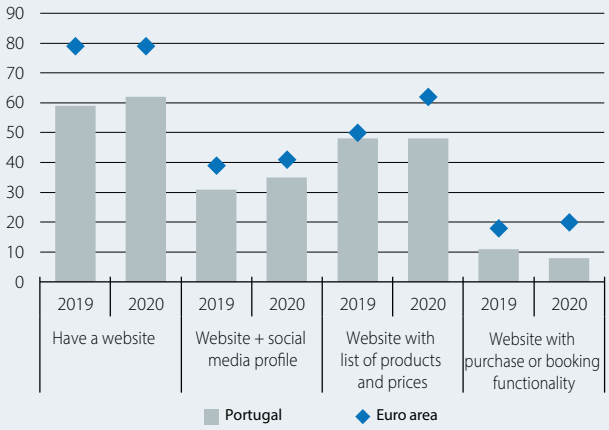
ACEPI estimates indicate a 21% increase in B2C e-commerce,[7] bringing the total to 7.4 billion euros in 2020 (3.6% of GDP).[8] However, the data do not allow us to specify what portion of this increase is derived from «traditional» consumption shifting online and what portion is «new» consumption generated by electronic means. In any case, the figures are significant and suggest that, in the absence of e-commerce, the collapse in aggregate household consumption during the pandemic would have been far more severe.

The benefits of e-commerce are well known. For businesses, it provides access to new markets and enables new business models to be developed. E-commerce boosts business productivity and exports gain greater importance as a source of income.[9] For consumers, they benefit from the ability to buy without having to leave their homes, in addition to the ease of comparing prices and having access to a range of differentiated products which they would not have in nearby shops. In this regard, it is important to note that the ability to compare prices and product characteristics helps to improve market efficiency. On the other hand, e-commerce also presents challenges. For businesses, these include stock logistics and management, marketing, access to high-quality telecommunications and adapting to new ways of interacting with customers. For consumers, they must be digitally literate and have greater knowledge about how to protect themselves in the online world. For states, the challenges lie in having suitable taxation frameworks and legislation to protect the economic players involved in online trades.

Following the boost to e-commerce provided by the pandemic, the lockdowns and teleworking (because of the ease of receiving orders at home), businesses and consumers can be expected to continue to make greater use this channel. Its growth will also be facilitated by

Portugal: online presence of Portuguese companies

(% of all companies)



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

generational substitution, as more consumers feel at home in the digital world. However, face-to-face trade will continue to play an important role. The potential of e-commerce is not the same in all sectors.[10] In addition, a purchase is a contract between two parties and, especially in high-cost transactions, human contact is important in order to convey confidence, both in the initial exchange and also in resolving potential post-sale problems. Similarly, personal interaction in the purchase process is intrinsically important for many people, at least for certain items. E-commerce has certainly come to stay and is set to continue to grow. As part of their omni-channel strategy, businesses cannot fail to be present in the online market. Faced with the challenge of balancing retail trade in physical shops with online retail, one attractive option is the so-called ROPO strategy (Research Online & Purchase Offline). In addition, in the interaction between online and offline retail, the role of physical shops can be two-fold. On the one hand, flagship or concept stores better represent a brand's product range and offer a distinctive shopping experience. On the other hand, the shop also functions as a logistics centre, where consumers can collect and return the items they have bought online, taking advantage of existing circuits.

Tiago Belejo Correia

5. Companies with more than 10 employees and excluding the financial sector.
6. ACEPI (2020 edition). «Economia Digital em Portugal». Associação Economia Digital/IDC.
7. Business to Consumer.
8. Current prices.
9. See T. Kinda (2019). «E-commerce as a Potential New Engine for Growth in Asia». IMF Working Paper.

10. For example, in 2020, only 10% of Portuguese people who bought online indicated that they had bought medicines. See source in note 6.

Activity and employment indicators

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

	2019	2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	07/21	08/21	09/21
Coincident economic activity index	1.1	–5.0	–4.8	–2.7	1.0	...	2.6	2.7	...
Industry									
Industrial production index	–2.2	–6.9	–2.1	–0.8	25.0	...	0.8	–9.0	...
Confidence indicator in industry *(value)*	–3.2	–15.8	–14.7	–13.6	–5.0	–1.5	0.4	–1.5	–3.3
Construction									
Building permits - new housing (number of homes)	15.4	0.7	12.8	43.9	–29.0	...	–10.4	...	...
House sales	1.7	–5.7	1.0	0.5	58.3	...	...	...	...
House prices *(euro / m² - valuation)*	10.4	8.3	6.0	6.2	8.5	...	8.3	8.2	...
Services									
Foreign tourists *(cumulative over 12 months)*	7.8	–76.2	–76.2	–86.7	–74.2	...	–66.8	–55.2	...
Confidence indicator in services *(value)*	12.9	–21.6	–19.5	–19.1	–9.9	5.5	2.6	6.9	7.2
Consumption									
Retail sales	4.4	–3.0	–1.9	–7.5	16.0	...	2.1	3.0	...
Coincident indicator for private consumption	2.2	–5.4	–4.7	–0.4	4.7	...	6.8	7.1	...
Consumer confidence index *(value)*	–8.0	–22.4	–26.2	–24.4	–17.3	–13.6	–14.1	–13.8	–12.9
Labour market									
Employment	1.2	–1.9	–1.2	–1.3	4.5	...	4.8	3.8	...
Unemployment rate (*% labour force*)	6.6	7.0	7.3	7.1	6.7	...	6.6	6.4	...
GDP	**2.7**	**–8.4**	**–6.8**	**–5.7**	**16.2**	**...**	**...**	**...**	**...**

Prices

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

	2019	2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	07/21	08/21	09/21
General	0.3	0.0	–0.2	0.4	0.8	1.5	1.5	1.5	1.5
Core	0.5	0.0	–0.1	0.5	0.2	0.9	0.8	0.9	0.9

Foreign sector

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

	2019	2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	07/21	08/21	09/21
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	3.6	–10.3	–10.3	–8.0	9.5	...	11.3	...	...
Imports *(year-on-year change, cumulative over 12 months)*	6.0	–14.8	–14.8	–15.7	1.5	...	5.3	...	...
Current balance	**0.9**	**–2.2**	**–2.2**	**–2.1**	**–1.5**	**...**	**–1.9**	**...**	**...**
Goods and services	1.7	–3.6	–3.6	–3.5	–3.8	...	–4.3	...	...
Primary and secondary income	–0.7	1.3	1.3	1.4	2.3	...	2.3	...	...
Net lending (+) / borrowing (–) capacity	**2.8**	**0.0**	**0.0**	**0.1**	**0.5**	**...**	**1.3**	**...**	**...**

Credit and deposits in non-financial sectors

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

	2019	2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	07/21	08/21	09/21
Deposits [1]									
Household and company deposits	14.8	18.8	10.1	10.6	8.7	...	8.4	9.2	...
Sight and savings	–2.9	1.4	18.8	18.5	15.3	...	15.2	16.5	...
Term and notice	5.6	–21.0	1.4	2.4	1.3	...	0.9	1.1	...
General government deposits	5.2	9.0	–21.0	–23.6	–15.0	...	–18.8	–12.2	...
TOTAL	**–0.1**	**4.6**	**9.0**	**9.4**	**7.8**	**...**	**7.4**	**8.4**	**...**
Outstanding balance of credit [1]									
Private sector	–3.7	10.5	4.6	5.1	4.4	...	4.4	4.2	...
Non-financial firms	–1.3	2.1	10.5	11.0	7.2	...	6.9	6.2	...
Households - housing	16.5	–1.2	2.1	2.6	1.0	...	1.2	1.4	...
Households - other purposes	–4.7	–4.2	–1.2	–1.0	9.4	...	9.6	9.3	...
General government	–0.3	4.2	–4.2	–5.1	4.5	...	3.6	3.3	...
TOTAL	**6.2**	**4.9**	**4.2**	**4.7**	**4.4**	**...**	**4.4**	**4.2**	**...**
NPL ratio *(%)* [2]	**6.2**	**4.9**	**4.9**	**4.6**	**4.3**	**...**	**...**	**...**	**...**

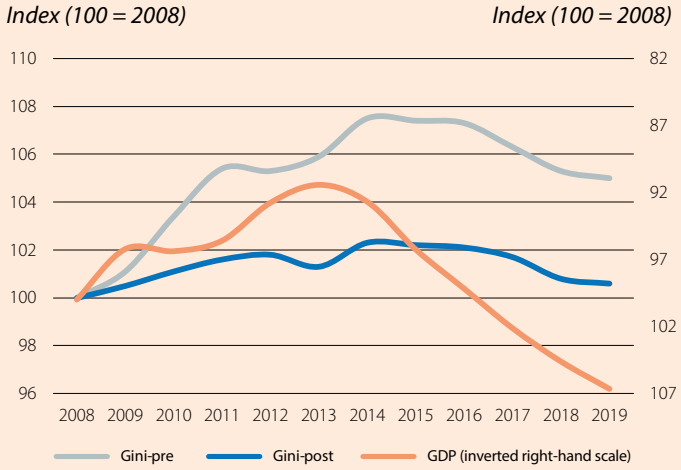
Notes: *1. Residents in Portugal. The credit variables exclude securitisations. 2. Period-end figure.*
Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal, Bank of Portugal and Datastream.*

Is the economic recovery reaching all pockets?

The recovery of economic activity is finally a tangible reality, clearly reflected in the main economic indicators. Having plummeted to more than 20% below the pre-pandemic level, by Q2 2021 GDP had recovered nearly two-thirds of the lost territory. But is the economic recovery reaching all pockets?

The past experience of the real estate and financial crisis does not invite optimism. Between 2008 and 2013, GDP fell by more than 8%, leading to a sharp rise in inequality. Even more worrying is the fact that the recovery which began in 2014 took a long time to reach all households. The inequality indicators declined very slowly during the post-crisis years. In fact, when the pandemic irrupted last year, the Gini index, the benchmark inequality indicator, was still higher than in 2008. This statement is valid both for the Gini index which measures income inequality before taking into account public sector transfers (Gini-pre) and for the version of the index which analyses changes in income inequality taking into account public transfers (Gini-post).

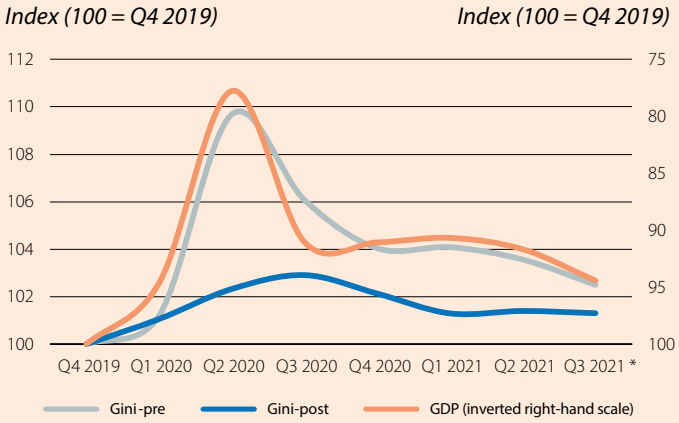
Evolution of the Gini index and GDP during the financial crisis



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

The economic crisis triggered by the pandemic has also led to a sharp rise in inequality. The Gini-pre index increased by more than 10 points between February and April last year.[1] Although a historic increase, it is worth noting that the rise in inequality relative to the fall in economic activity was substantially lower than that witnessed during the real estate and financial crisis. Specifically, in the crisis of 2008-2013, for every pp decline in GDP, the Gini-pre index increased by 0.9 pps. In the current crisis, in contrast, this sensitivity has been halved: for each point of GDP, the Gini-pre index has moved by 0.4 points. The increase in the Gini-post index relative to the fall in GDP has also been halved. But beyond the change in the sensitivity of the Gini indices to GDP, it is particularly noteworthy that the moment the economy began to recover, inequality has begun to decline immediately.

Evolution of the Gini index and GDP since the outbreak of the pandemic



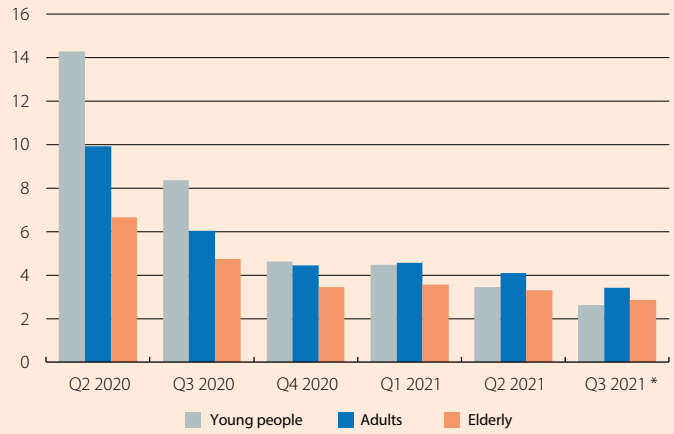
Note: ** GDP growth forecast for Q3 2021 of 3.0% quarter-on-quarter. Gini indices corresponding to July.*
Source: *CaixaBank Research.*

To explain what lies behind the shift in the behaviour of inequality in the current crisis, we must look to the labour market. Indeed, the evolution of employment accounts for around 90% of the change in the Gini index.[2] The nature of the present crisis, being so different from that of 2008-2013, is one determining factor. The previous recession was much longer and had a particular impact on specific sectors, such as real estate, thus forcing many people to reorient their career and making it difficult for them to rejoin the labour market. In contrast, the crisis generated by the pandemic is taking place at a much quicker rate, and the demands for sectoral relocation are lower. In addition, many people who have stopped working have received the support of an instrument that has enabled them to maintain their working relationship with the company where they worked, making it far easier for them to quickly return to employment with the arrival of the economic revival: namely, ERTE furlough schemes.

1. Gini index produced using information from more than 3 million payrolls deposited into CaixaBank accounts. For more information on how real-time inequality indicators are built using internal CaixaBank data, see the Dossier «The impact of the COVID-19 crisis on inequality in Spain» in the MR11/2020.
2. See O. Aspachs, R. Durante, A. Graziano, J. Mestres, J. Montalvo and M. Reynal «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, forthcoming, for a detailed explanation of how this has been estimated. In the previous crisis, changes in employment explained around 80% of the change in the Gini-pre index, according to OECD estimates.

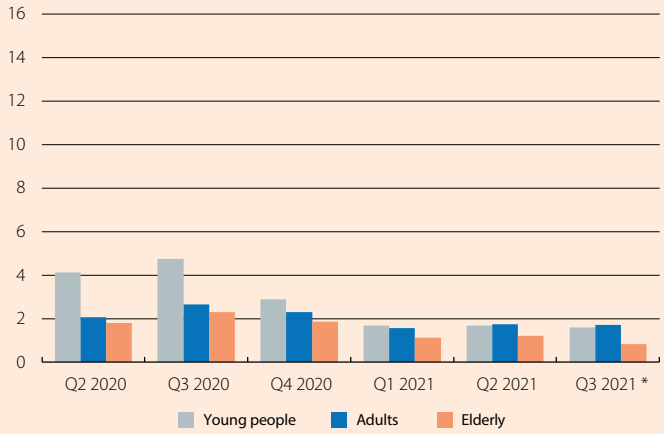
Evolution of the Gini-pre index by age group

Change versus *February 2020*



Evolution of the Gini-post index by age group

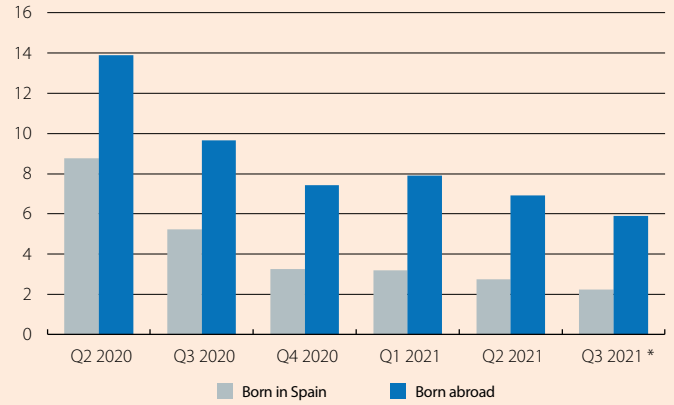
Change versus *February 2020*



Note: ** Average monthly change in the last three months to July.*
Source: *CaixaBank Research.*

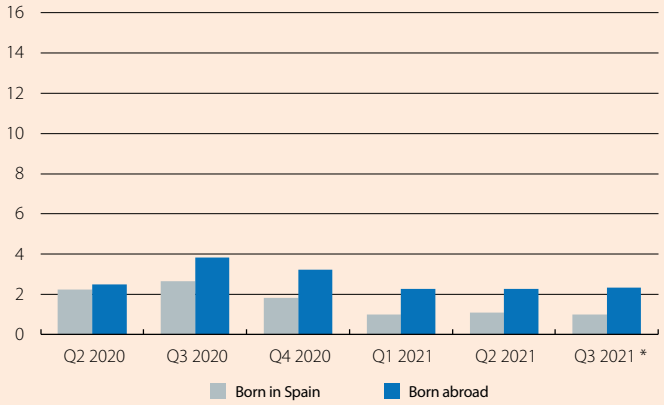
Evolution of the Gini-pre index according to country of birth

Change versus *February 2020*



Evolution of the Gini-post index according to country of birth

Change versus *February 2020*



Note: ** Average monthly change in the last three months to July.*
Source: *CaixaBank Research.*

Finally, it should also be noted that the improvement in the Gini indices is occurring across the various groups of the population. The Gini indices for young people and for people born outside Spain increased much more than for the rest of the population during the early stages of the pandemic. However, since we began to see a rebound in economic activity, the situation of these groups has improved substantially. In July, there were no longer such notable differences in the change in the Gini index by age group. As for immigrants, the Gini indices have also improved significantly, although they remain somewhat above those for Spaniards.

The latest inequality indicators invite optimism, both because of the trends apparent at the aggregate level and those among the various groups. But the rise in inequality compared to the pre-pandemic level remains significant. The increase in the Gini-post index in July of this year, of 1.3 points compared to the pre-pandemic level, is not far off that which occurred during the 2008-2013 recession, when it rose by 2.3 points. There is still a long way to go before we reach pre-pandemic levels. The coming quarters, in which we expect the recovery to be consolidated, will be key in determining whether history will be repeated and economic activity and inequality will once again follow separate paths, or whether, on the contrary, this time is different. You can follow it live on the portal www.inequality-tracker.caixabankresearch.com/en, where you will find near real-time information on the main inequality indicators.

The Dossier «In pursuit of a less unequal recovery» has been produced by:
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Factors behind the differences on inequality at the regional level

The economic crisis generated by the COVID-19 pandemic is deep, that much is well known, but its impact is also proving to be very different from region to region. This also makes the pressure on inequality highly varied. There are several factors that can explain the large regional differences, such as the strictness of the measures imposed in each area or the differing production structures. Below, we analyse in detail the role that these factors have played in the changes in inequality in each autonomous community region,[1] although we can tell you now that it varies. We also show the ability of the public sector to cushion the regional differences. As you will see, it has played a key role, and despite the varying intensity of the shock in each region, the final rise in inequality has been very similar across the board.

The pressure on wage inequality has been highly varied between autonomous community regions

In April 2020, at the height of the crisis, all autonomous community regions experienced a sudden and very pronounced increase in inequality, but the intensity of this increase varied from region to region. The Gini-pre index, which measures wage inequality without taking into account public sector transfers, increased by 7 to 11 points in most regions.[2] However, in some, such as the Balearic Islands and the Canary Islands, the increase was much greater, with changes in the Gini-pre index of 19 and 17 points, respectively. The impact decreased as activity resumed, and by July 2021 the increase compared to pre-pandemic levels was «only» 1 to 3 points in most regions. In the Balearic Islands and the Canary Islands, however, the figures remained notably higher.

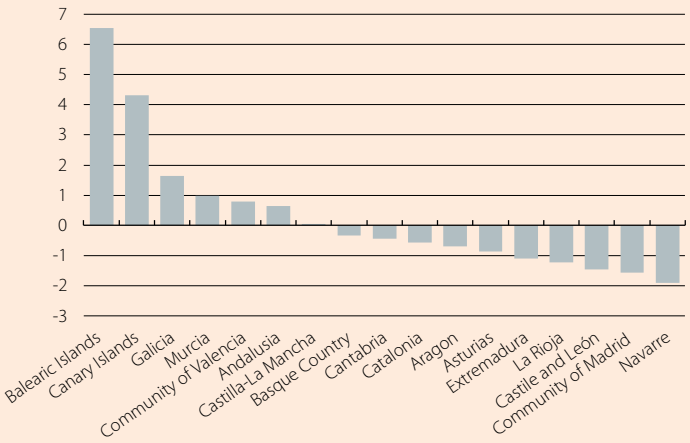
The sectoral composition explains much of the regional differences

The different evolution of wage inequality in each region is due, above all, to the differing production structures from region to region, since the measures imposed had a very different impact depending on the sector. In particular, the sectors hardest hit were retail and hospitality, as well as construction. Thus, the Gini-pre index increased much more in regions where these activities play a more important role in the economy. In contrast, the increase in inequality was lower in regions with a higher relative weight of economic sectors that were able to continue operating with some degree of normality, such as the public sector, the financial sector or utilities (water, electricity, etc.).

In the chart, we translate this reflection into concrete figures. As you can see, the production structure of the Balearic Islands or the Canary Islands – highly focused on tourism – has caused the Gini-pre index to rise by 6.5 and 4.3 points more, respectively, than in the case of Spain as a whole. At the opposite end of the spectrum, the Community of Navarre was favoured by its sectoral composition. The

Change in inequality with respect to Spain as a whole: impact of the sectoral composition of each region *

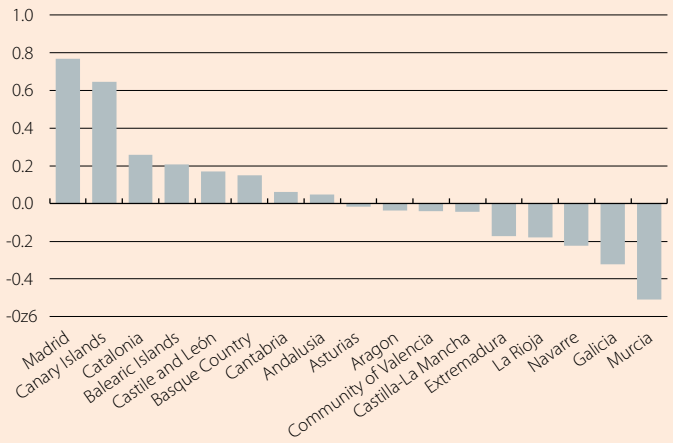
Change in the Gini-pre index compared to the pre-pandemic level (points)



Notes: ** Impact of the sectoral composition of the autonomous community regions on the change in wage inequality measured by the Gini index before public transfers (in comparison with the average sectoral composition of Spain). Estimated average impact using a linear regression which controls the restrictions on mobility, the percentage of urban population, as well as the month in question. For further details on the estimate, see O. Aspachs* et al. *(2021a), «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, forthcoming.*
Source: *CaixaBank Research, based on internal data.*

Change in inequality with respect to Spain as a whole: impact of mobility in each region*

Change in the Gini-pre index with respect to the average for Spain (points)



Notes: ** Impact of mobility on the change in wage inequality as measured by the Gini index before public transfers (in comparison with the average for Spain). Estimated average impact using a linear regression which controls the percentage of urban population and the sectoral composition. For further details on the estimate, see Aspachs* et al. *(2021a), «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, forthcoming.*
Source: *CaixaBank Research, based on internal data.*

1. To this end, we produced a regression at the regional level of the change in inequality month by month according to the mobility restrictions, the percentage of urban population, the sectoral composition of the region as well as the month in question:

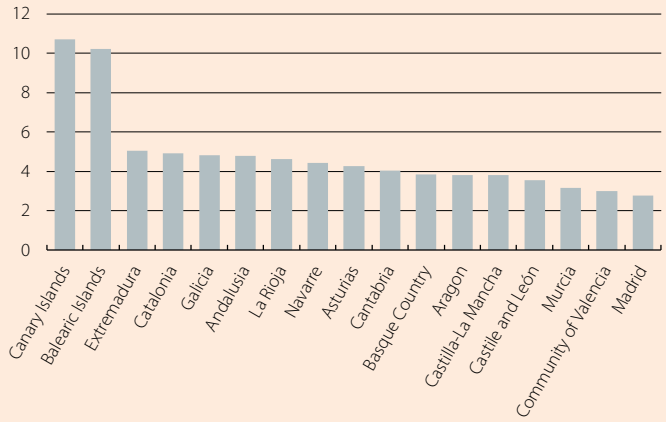
$$Ln((Gini_{i,t} - Gini_{i,February2020}) - (Gini_{i,t-12} - Gini_{i,February2019})) = ßo + \sum_{j=1}^{J} ß_j X_{ijt} + \varepsilon_{it}$$

For more details on the methodology used, see O. Aspachs *et al.* (2021), «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, forthcoming.

2. The Gini indices have been calculated using data from more than 3 million payrolls deposited into CaixaBank accounts. For a detailed explanation of how the indicators have been built, see the Dossier «The impact of the COVID-19 crisis on inequality in Spain» in the MR11/2020.

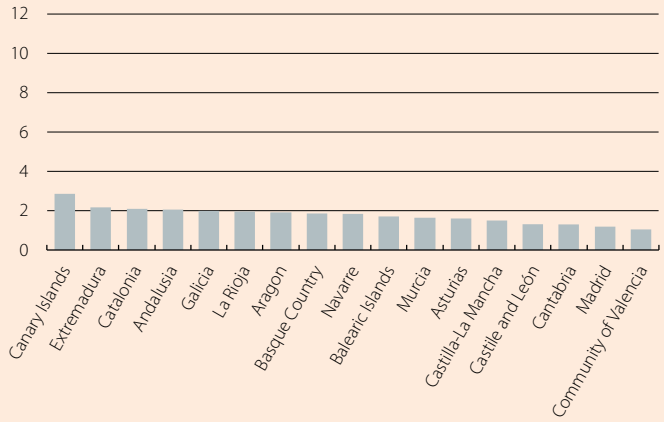
Change in the Gini index before public sector transfers in each region *

Level (pps)



Change in the Gini index after public sector transfers in each region *

Level (pps)



Note: ** Average of the change experienced between March 2020 and July 2021 compared to February 2020 and corrected for the average seasonal variation experienced in 2018 and 2019.*
Source: *CaixaBank Research, based on internal data.*

manufacturing industry, which plays an important role in this region, has been less affected by the restrictions, and this has dampened the increase in the region's Gini-pre index by 1.9 points. The Community of Madrid has also been favoured by its sectoral composition. Here, services which have been able to maintain a relatively normal level of activity thanks to teleworking play an important role in the economy, dampening the increase in the Gini-pre index by 1.6 points. Catalonia lies somewhere in the middle. Although tourism plays a relatively important role, this has been offset at the aggregate level by the good performance, in relative terms, of industry, which is also a significant part of the economy in this region. Overall, the sectoral composition of Catalonia has offset the increase in the Gini-pre index by 0.6 points.

The decline in mobility, key to understanding the rise in inequality in all regions

The restrictions on mobility drastically reduced travel in all regions. In May 2020, mobility in Spain as a whole was 51% lower than in the pre-COVID reference period, and certain regional differences can be observed. Whereas in Madrid the reduction in mobility reached almost 68%, in Andalusia and Galicia the decrease was 52% and 44%, respectively.[3] Mobility gradually recovered in the following months in all regions, and by September 2021 it stood only around 5% below the pre-COVID period. But during the harshest months of the pandemic, this reduced mobility resulted in a reduction in economic activity, especially for those employees who were unable to telework, with a significant impact on wage incomes.

Let us put some figures to the impact of the reduction in mobility on wage inequality. In May last year, when the fall in mobility was very pronounced, this contributed to an increase in the Gini-pre index of 2.2 points in Spain as a whole. In other words, the impact was both severe and widespread cross all regions. There are two additional results to be considered. Firstly, in the following months, the relationship between the decline in mobility and economic activity weakened. In other words, we gradually became better at adapting to the new environment in order to resume economic activity with lower levels of mobility. This also resulted in lower impacts on wage inequality. Secondly, the differences in the fall in mobility between regions did not affect inequality to the same extent as the differences in the production structure did. Indeed, the gap is significant. For example, in the Community of Madrid, the bigger fall in mobility in May compared to that experienced across Spain as a whole drove the Gini-pre index up by 0.8 points more than for all of Spain. In Galicia, in contrast, the smaller decline in mobility dampened the drop in the Gini-pre index by 0.3 points.

The public sector transfers are successful in reducing regional differences

Finally, it is worth noting that, although the intensity of the shock has been different in each region, when we analyse the evolution of the Gini index taking into account the redistributive effect of unemployment benefits and furlough payments using the Gini-post index, the regional differences virtually disappear. Specifically, 90% of all the autonomous community regions show an average increase in this index since the outbreak of the pandemic of between 1.1 and 2.1 points. In other words, almost all regions lie within a 1-point difference of each other in the increase in the index. In contrast, the dispersion in the average increase in the Gini-pre index is much greater: within a 1-point difference, such as an increase between 3.8 and 4.8 points, we find only 50% of the regions. The welfare state has helped tremendously to cushion the pressure which the economic shock has applied on inequality, and it has virtually eliminated differences between regions. In the next article we look more closely at the important role played by the welfare state and the impact which an improvement in the efficiency with which it is managed could have.

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3. Mobility is defined using data from the Ministry of Mobility, Transport and Urban Agenda, specifically urban and interurban mobility data.

The effectiveness and efficiency of the welfare state in reducing inequality

Although the storm caused by the COVID-19 pandemic is not yet over, we can already analyse what impact the response from the public administrations has had on wage inequality. Public sector payments to workers on furlough or those unemployed cushioned the fall in income for many workers, but to what extent did they dampen the rise in inequality? Internal CaixaBank data allow us to answer this question already, as well as allowing us to assess what would be the implications of greater efficiency in the management of these benefits.

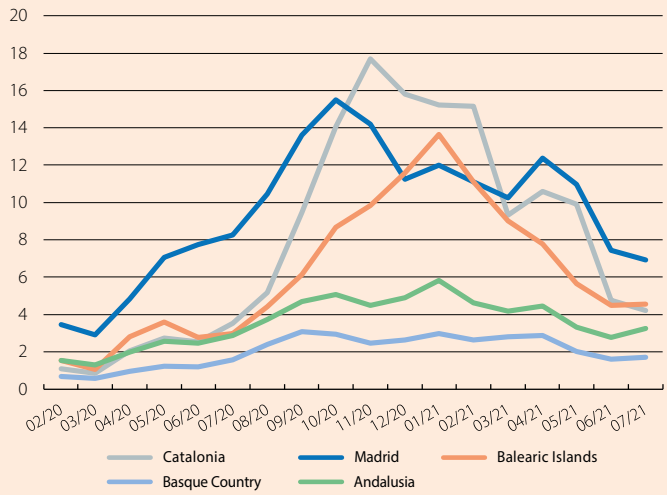
The welfare state mitigated most of the increase in inequality

The actions of the public administrations played a vital role in this crisis. At the height of the pandemic in April and May of last year, unemployment benefits and, above all, payments to workers on furlough cushioned 80% of the increase in wage inequality.[1] In recent months, the crisis generated by the pandemic has moderated, but even so, between April and July this year public sector transfers still offset around 56% of the rise in wage inequality.

All of this has entailed an enormous effort for the general government, and not just in monetary terms. The massive increase in benefit applications has been very difficult to manage, and in many cases processing times have become longer (see first chart).[2]

Average processing time for an unemployment subsidy application by the SEPE *

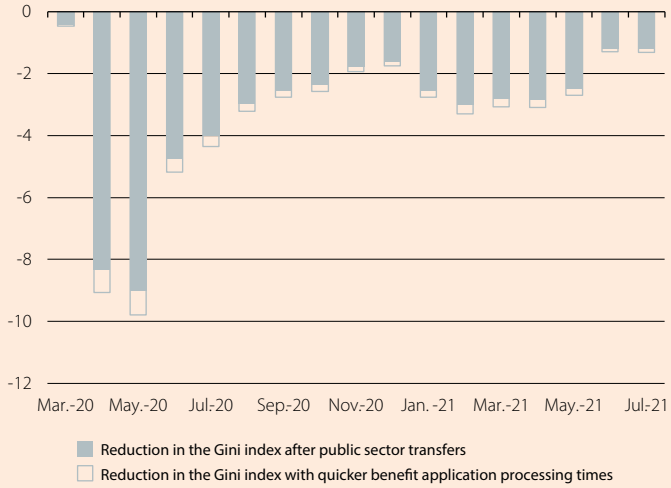
(Number of days)



Notes: ** Average processing time for unemployment benefit applications by the Public Employment Service (SEPE) in each autonomous community region. 2-month moving average of the average processing time in each province weighted by population.*
Source: *CaixaBank Research, based on data from the public employment service (SEPE).*

Impact of the welfare state on reducing inequality and improvements in its efficiency *

Change in the Gini index (pps)



Notes: ** The chart shows the difference between the Gini index before and after public sector transfers. Simulation of the impact of 5% faster unemployment benefit processing times on the reduction of inequality. Impact estimated using a regression of the differences between the Gini index before and after public sector transfers, according to the processing time for an unemployment benefit application (in days), after controlling the mobility restrictions, the percentage of urban population, as well as the month in question. For further details on the estimate, see O. Aspachs* et al. *(2021), «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, soon to be published.*
Source: *CaixaBank Research, based on internal data.*

Greater efficiency in the management of public sector transfers would have a major impact

Reducing inequality not only requires a good system of public aid, but the efficiency with which it is managed is also key. As an example, if in November 2020 unemployment benefit applications had been processed 5% quicker, then the Gini index would have been reduced by 0.2 points (see second chart).[3,4] Viewed another way, if the processing time for unemployment benefit applications in Catalonia and Madrid had increased by only half as much as it did between October and December 2020, then the Gini index would have increased by 0.9 points less. This is a substantial figure, but it should be borne in mind that this effect refers only to the delay due to processing times, since individuals entitled to a benefit end up receiving the arrears. In any case, this illustrates the potential impact of a more efficient public

1. In April and May 2020, the Gini-pre index (excluding public sector transfers) registered an increase of 11 points. In contrast, the Gini-post index (which takes into account public sector transfers) rose by 2.3 points.
2. In 2019, the average processing time for an unemployment benefit application in Spain was 1.22 days.
3. Alternatively, a 1% increase in the number of cases resolved in less than 15 days would reduce the inequality gap before and after transfers by 9.2%.

administration. Reducing the processing time for unemployment benefit applications, for instance through greater digitalisation of public employment services, has a direct and significant impact on the welfare of families.

Greater action by the welfare state in reducing inequality boosts political participation

Better functioning of the welfare state may also have implications in other areas, such as politics. To prove a point: we analysed whether the reduction in inequality provided by public sector transfers had any impact on the regional elections in Galicia and the Basque Country in July 2020. The results leave no room for doubt. In towns and cities where the welfare state had a greater dampening effect on the rise in inequality, there was greater electoral participation. Specifically, a narrowing of wage inequality measured by a 1-point reduction in the Gini index boosted voter turnout by 0.3%.[5] On the other hand, the vote for the ruling party was penalised in areas where state action was most needed to reduce inequality. Both results show the relationship between the public response to the crisis and voting in elections.

In most developed countries it will take years until we have reliable information on the impact of the crisis on wage inequality and the effectiveness of public-sector measures. In Spain, on the other hand, it is already known that the public sector response has been key, effective and has had implications in many spheres. Spain can boast of being the first country in the world to have this type of information. If it is also incorporated into decision-making, then this could provide a significant boost to the effectiveness of the public sector.

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4. To this end, we produced a regression at the regional level of the change in inequality due to public sector transfers (Gini-pre/Gini-post) month by month, according to the processing time for an unemployment benefit application, controlled by the mobility restrictions, the percentage of urban population, the sectoral composition of the region as well as the month in question:

$$Ln\,(GiniPre_{i,t} - GiniPost_{i,t}) = \gamma_0 + \sum_{j=1}^{J} \gamma_j X_{ijt} + \pi_{i,t}$$

For more details on the methodology used, see O. Aspachs *et al.* (2021), «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, soon to be published.

5. *Ibidem*, for the detailed results, as well as for the complete specification of the analysis.

Employment, the key factor for reducing inequality

Debates about inequality often focus on dispersion in wage levels and omit one very important aspect: inequality in wage income also depends on the «intensity» of employment, that is, on whether people are working at all and, if so, how frequently. Spain is a prime example, with a high rate of temporary employment (25.1% in Q2 2021) and a proliferation of ever-shorter labour contracts which has a marked impact on inequality. During the financial crisis (2007-2011), the sharp increase in inequality in Spain was 80% attributable to the drop in employment and 20% to an increase in wage dispersion among workers.[1] These proportions were almost the polar opposite of the OECD average, where only 18% of the increase in inequality between 2007 and 2011 was explained by changes in employment and 82% was due to the greater dispersion of wages among workers. What happened during the pandemic?

Employment, the main factor behind the changes in wage inequality during the COVID-19 crisis

During the crisis triggered by the pandemic, the evolution of inequality in Spain was once again heavily influenced by swings in employment. For instance, between February and April 2020, almost 90% of the increase in wage inequality (before public transfers) was due to the fall in employment, while the rest resulted from increases in wage inequality among those in work.[2] Therefore, in order to understand the evolution of inequality, we must review the dynamics in employment, in particular among the most affected groups.

The likelihood of remaining in employment was not equal for all workers during the COVID-19 crisis

To begin with, we looked at what happened during the pandemic to those who had been working in the months prior to the outbreak. Specifically, from March 2020, when restrictions on mobility and activity began to be imposed, the likelihood of remaining in employment[3] was significantly reduced for the population as a whole, but the impact was very different depending on the characteristics of each worker.

- Workers with lower wage incomes before the pandemic were the ones most likely not to be employed in the following months. Specifically, for workers in the lowest wage quintile, the probability of being employed was reduced by as much as 38% in May 2020, 23 pps higher than in the case of those in the highest quintile. These differences declined somewhat in the following months, although workers in the lower wage quintiles continued to be more likely not to be employed than those in the upper quintiles.
- By age, young people have been the group hardest hit by the pandemic in the labour market. In May 2020, the probability of being on a payroll was 18 pps lower, and the recovery in the following months was only partial.
- The probability of employment was also reduced more for foreign-born workers than for Spanish-born workers. The gap in the probability of being employed was 8 pps in April 2020 and, surprisingly, it continued to widen as the months passed, reaching 11 pps in November.
- Women were less likely than men to remain in employment in the first few months of the pandemic, with a gap in the probability of being employed which exceeded 4 pps and did not begin to recover until September.

More and higher-quality employment, the recipe for reducing wage inequality

Lower-income workers, young people, immigrants and women have once again been those most affected in the labour market. The recovery in employment is not yet complete, especially for the most vulnerable groups. That is why the increase in inequality compared to the pre-pandemic level is still considerable, and employment, as the main factor affecting inequality, will once

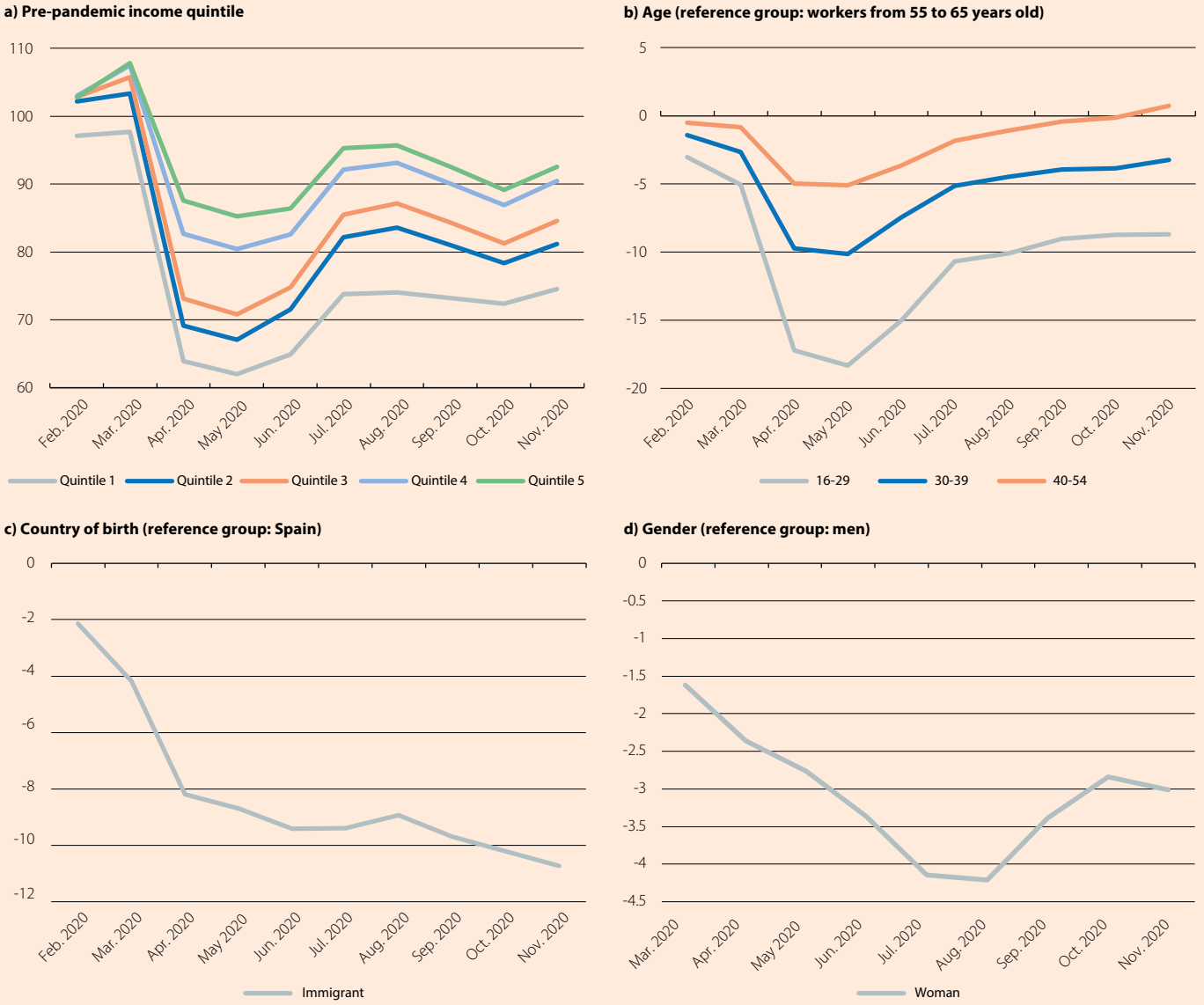
1. Internal calculations based on data from the OECD (2015). «In it together. Why Less Inequality Benefits All». OECD Publishing, Paris.
2. See O. Aspachs, R. Durante, A. Graziano, J. Mestres, J. Montalvo and M. Reynal «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, soon to be published, for a detailed explanation of this estimate.
3. For this exercise we do not consider workers on furlough as being in employment, since they do not work while they are on furlough, and we restrict the analysis to the period from March to November 2020. We computed a regression at the individual level of the probability of being employed month by month according to a worker's individual characteristics (gender, age and country of birth) and their income quintile prior to the pandemic (in February 2020), also controlling mobility restrictions at the provincial level as well as the province in question:

$$E_{ijt} = \sum_{k=1}^{5} \alpha_{kt} I(qk) + \sum_{g=1}^{G} \beta_{gt} X_{ijtg} + \sum_{j=1}^{49} \delta_j I(Prov = j) + \varepsilon_{ijt}$$

Ibidem, for more details on the methodology used.

Probability of employment during the COVID-19 crisis *

*Change in probability (pps) ***



Notes: ** Coefficients resulting from a regression at the individual level of the probability of being employed month by month. controlled by the mobility restrictions at the provincial level in question and according to the worker's individual characteristics (gender, age and country of birth) and their income quintile prior to the pandemic (e.g. February 2020) except for in the case of gender. For further details on the methodology employed, see O. Aspachs* et al. *(2021), «Real-time inequality and the welfare state in motion: evidence from Covid-19 in Spain», Economic Policy, soon to be published.*
*** For the income quintiles the chart shows the probability of employment rather than the change in probability.*
Source: *CaixaBank Research, based on internal data.*

again be the main lever for correcting it. Improving workers' employability so that no one is left behind, as well as increasing the «intensity» of their employment, are the key tools for ensuring that the rise in inequality does not become a permanent scar left by the pandemic.

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A new element has appeared on the US fiscal radar: the proximity of the debt limit, or «ceiling», and the need to resolve this situation by the end of October or early November so that the government can fund itself normally.

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