

# MIR05

MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

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## ECONOMIC & FINANCIAL ENVIRONMENT

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### FINANCIAL MARKETS

*On the increase in sovereign debt yields*

### INTERNATIONAL ECONOMY

*EU and China: mapping out a strategic interdependence*

### SPANISH ECONOMY

*How might rising interest rates affect households' mortgage payments?*

*Fill the tank? What Spanish households' spending at petrol stations tells us*

## DOSSIER: THE RESPONSE OF WAGES TO THE RISE IN INFLATION

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*Inflation on the rise: will wages follow?*

*Wage dynamics: another concern for the ECB?*

*The relationship between inflation and wages in Spain: it exists, but with important nuances*

*Wage dynamics in Spain: what does the CaixaBank Research wage growth tracker tell us?*

## MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK

May 2022

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

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## In search of the lost balance

More than two months after the outbreak of the war in Ukraine, the feeling is that the economic outlook remains very much open, subject to the high degree of uncertainty surrounding how the war will develop and its economic implications, as well as to the effect of the partial shutdowns of activity in China under the zero-COVID policy and the implications of the general tightening of financial conditions. The interaction of the dynamics (and imbalances) that had been at play since the outbreak of the pandemic, with the new reality in the face of heightened geopolitical instability and rising rates, comprise a new and challenging scenario in which households, businesses and governments alike will need to adapt their decisions. Above all, we will need to adapt to the emergence of a threat not seen in a generation – that of inflation – which we are now living with on a daily basis after decades under the radar.

It will not be easy for economic policy to protect the incomes of the most vulnerable economic agents, to equitably distribute the loss of activity triggered by a supply shock, to allow prices to send the right signals in order to rebalance the markets hardest hit by the war and, at the same time, to normalise interest rates as they emerge from extremely expansionary territory. More precisely, it will not be easy to do so without triggering a sharp cooling of economic activity in economies that are heavily indebted, with the additional difficulty of taking decisions without having full visibility over how the successive rounds of sanctions on Russia and their potential effects on the energy markets will develop. At the umpteenth crossroads that economic policymakers have had to face in recent years, the price to pay for a suitable response to the current challenges – both political and economic – may be stagnant growth for two or three quarters. In return, however, the threat of the consolidation of a process of stagflation, the correction of which would likely require much greater sacrifices in the medium term, would be minimised. Coordination in economic policy responses, in a world that is at risk of fragmentation into geopolitical blocs, will also be needed in order to limit the risks of financial instability and exchange-rate mismatches.

The difficulty is that we are still operating in a highly volatile scenario, with a lot of noise and few clear signals. The diagnosis of how all the events of recent months will affect economic activity is still very much incomplete, as we only have the Q1 growth data to go on and the signals coming from business and consumer surveys are not particularly conclusive. In general, consumers appear to be more cautious than business leaders, and among the latter, managers in manufacturing sectors seem more concerned than those on the services side, although they are all consistent with an economy that is still on the up. The key, as almost always, will lie in what happens with private spending, as it navigates the negative effects of inflation on agents' purchasing power and the existence of pent-up savings from the last two years that can be mobilised and serve as a counterbalance. For now, the only certainty is that inflation has continued to climb month by month, becoming the main risk threatening the outlook. The meagre consolation is that we should be very close to reaching the peak in much of the OECD. The major source of concern, meanwhile, is the tensions that are beginning to show in core readings (especially in the US) and the risk that they could lead to long-term inflation expectations on both sides of the Atlantic creeping closer to 3% than 2%, which would explain the sudden shift in the central banks' communication policy.

In this context, the major change in the scenario is the sharp rise in the nominal yields being demanded by investors throughout the interest rate curve to offset the inflationary risks. So far, the good news is that real interest rates remain very moderate, reflecting investors' vote of confidence for central banks to stop being behind the curve, and this will no doubt lead them to bring rates at least into neutral territory within the next 18 months. Therefore, we can expect monetary policy to follow a clear and steady path towards normalisation until official interest rates reach around 3% in the US and 1.5% in the euro area. The potential impact of rates at such levels on financial stability and growth would be moderate, especially if they are sufficient to anchor inflation expectations at 2%, even through they contrast with the financial conditions to which we have been accustomed in the last decade (average 12-month Euribor of 0.05%). In short, over the coming months we will continue to operate in a tempestuous business cycle characterised by geopolitical realignments, persistent supply chain disruptions, volatility in the financial markets and central banks trying to make up for lost time.

**José Ramón Díez**  
May 2022

## Chronology

### APRIL 2022

- 1-31** The Russia-Ukraine war continues as Russia suspends gas supplies to Bulgaria and Poland. China places numerous cities in lockdown to curb the new COVID outbreak.
- 24** Emmanuel Macron is re-elected president of France.

### FEBRUARY 2022

- 1-23** Escalation of tensions between Russia and the West over military manoeuvres on the Russian-Ukrainian border.
- 24** Russian invasion of Ukraine. Start of international sanctions on Russia.

### DECEMBER 2021

- 3** The European Commission authorises the disbursement of 10 billion euros of NGEU funds to Spain.
- 8** Tension rises in the Ukraine crisis.
- 28** An agreement is reached on labour reform in Spain.

### MARCH 2022

- 1-31** The war in Ukraine, the peace negotiations and the sanctions continue. Refugee crisis (more than 4 million Ukrainians have taken refuge outside Ukraine).
- 23** The Taliban maintain the ban on women's secondary education.

### JANUARY 2022

- 1** Sixth wave of COVID in Spain.
- 23** A Taliban delegation begins talks with European powers and the US in Oslo.
- 24** The James Webb telescope reaches its final destination from which it will study the origins of the universe.

### NOVEMBER 2021

- 13** The COP26 Climate Summit closes with a new deal on climate.
- 15** Migration crisis on the border between Belarus and Poland.
- 22** New mobility restrictions in Europe and spread of the Omicron variant.

## Agenda

### MAY 2022

- 3** Portugal: industrial production index (March).
- 3-4** Federal Open Market Committee meeting.
- 4** Spain: registration with Social Security and registered unemployment (April).
- 6** Spain: industrial production index (March). Portugal: Fitch rating.
- 11** Portugal: employment and unemployment (Q1).
- 13** Portugal: labour cost index (Q1).
- 17** Spain: foreign trade (March).
- 18** Japan: GDP (Q1).
- 19** Portugal: coincident indicators (April).
- 20** Portugal: Moody's rating.
- 26** Spain: loans, deposits and NPL ratio (March).
- 30** Spain: CPI flash estimate (May). Spain: state budget execution (April). Euro area: economic sentiment index (May).
- 31** Portugal: GDP breakdown (Q1).

### JUNE 2022

- 2** Spain: registration with Social Security and registered unemployment (May).
- 8** Portugal: turnover in industry (April).
- 9** Governing Council of the European Central Bank meeting.
- 10** Spain: Fitch rating.
- 14-15** Federal Open Market Committee meeting.
- 16** Spain: quarterly labour cost survey (Q1).
- 23** Spain: loans, deposits and NPL ratio (Q1 and April). Portugal: home prices (Q1).
- 23-24** European Council meeting.
- 24** Spain: quarterly national accounts (Q1). Spain: balance of payments and NIIP (Q1). Portugal: household savings rate (Q1).
- 29** Spain: CPI flash estimate (June). Portugal: employment and unemployment (May). Euro area: economic sentiment index (June).
- 30** Spain: household savings rate (Q1). Spain: state budget execution (May). Portugal: NPL ratio (Q1).

## Economic activity holds up

Can you imagine living through the current context without any information on how the economy is doing? I am referring to objective, reliable data such as employment, production, wages or prices. Most likely, it would be utterly bewildering. In the current circumstances, each person's perception of the economic situation is very different and may be heavily influenced by the sector in which they work or the region in which they live. Fortunately, we have data which we can use to check our impression of the economic reality. The key indicators that tell us about the economic situation for the quarter just ended have been released this month, and they are very helpful for getting our bearings in these very uncertain times.

Thus, we can say that the rate of economic activity growth slowed during Q1, but with important nuances when we assess the particular situation in each country. It is the US economy that has suffered one of the sharpest slowdowns relative to the pace of progress it had been enjoying in recent quarters. GDP registered a negative growth rate in Q1 2022, with a quarter-on-quarter decline of 0.4%. However, this poor figure should be interpreted with caution, since the major growth drivers such as consumption and investment continued to show steady progress. In the euro area, the economic activity data have maintained a modest pace of progress in line with expectations, with growth at 0.2%, and there have been no major differences between the major countries. While Italy's GDP fell by 0.2%, France's remained flat, and Germany's and Spain's advanced by 0.2% and 0.3%, respectively.

The labour market, which normally lags behind changes in economic activity, continues to offer broadly positive figures. In the US, we have seen a highly buoyant labour market for some months now and the labour shortages are still present, with an unemployment rate that remains close to historic lows. In the euro area, the figures are also maintaining a very positive trend and in March the unemployment rate fell to 6.8%, a historically low level by European standards. In the euro area too, and especially in countries such as Germany and France, labour shortages are proving to be a limiting factor for growth capacity.

In Spain, the labour market is holding up well despite the various adversities it is currently facing. The rate of employment growth remains strong, standing at 1.1% in Q1 2022 in quarter-on-quarter (and seasonally adjusted) terms, and the number of hours actually worked (a particularly useful indicator in the context of the pandemic) has shown particularly high growth, reaching 3.2% quarter-on-quarter. Moreover, the good performance of the labour market is being accompanied by a notable fall in the incidence of temporary employment, as the number of wage earners on permanent contracts is increasing very significantly, while those on temporary contracts is decreasing.

Despite the resilience shown by economic activity to date and the good figures in the labour market, the economic outlook has been deteriorating over the past few months. To a large extent, this is due to the sharp rise in inflation in the major developed countries. However, once again, the nuances are very important. In the US, prices have increased across all components of the consumer price index, and this is also going hand in hand with a sharp rise in wages, which are growing at over 5%. In European countries, in contrast, the bulk of the price increase is due to higher energy and food prices, while the contagion to other goods, although present, is still limited.

These nuances are very important when assessing the reaction of the central banks. All the indicators suggest that the Fed will have to carry out a rapid and significant rise in interest rates over the coming months in order to curb economic activity and, indirectly, inflationary pressures. This year the Fed will most likely end up raising the reference rate by around 2 pps, the steepest rate hike since 1995. In the euro area, the ECB is also expected to raise interest rates. However, given that the inflationary pressures are lower, we expect it to do so much more gradually, raising the reference rate by between 0.50 and 0.75 pps over the course of the year.

But beyond the rise in inflation and financing costs, and despite the marked deterioration in the growth outlook that this entails, the fact is that the growth rate anticipated by the consensus of analysts for 2022 and 2023 is still relatively high. The boost to economic activity that is likely to result from the end of the mobility and activity restrictions will be significant, provided there are no new mutations of the virus. Therefore, despite the downward revisions in recent months, we expect the US economy to grow by more than 3% this year, while the European economy could grow by around 2.6% and the Spanish economy, above 4%.

It is true that the risks surrounding this scenario are significant, especially those on the downside. The possibility of further tensions in energy prices, due to an escalation of the sanctions and counter-sanctions between Russia and European countries, is one of the sources of greatest concern. We will also have to closely monitor the implications of the new wave of infections and lockdowns in China, which could once again collapse global supply chains and increase supply problems in a number of sectors. Nevertheless, things could also end up going better than expected, even if it seems impossible today. There are no data for futurology, but we must try to consider all plausible scenarios, and just as we must not indulge in complacency when things are going well, we must also not fall victim to pessimism when times are hard.

**Oriol Aspachs**

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

### Financial markets

	Average 2000-2007	Average 2008-2018	2019	2020	2021	2022	2023
<b>INTEREST RATES</b>							
<b>Dollar</b>							
Fed funds (upper limit)	3.43	0.68	1.75	0.25	0.25	2.50	2.75
3-month Libor	3.62	0.89	1.91	0.23	0.21	2.65	2.70
12-month Libor	3.86	1.40	1.97	0.34	0.52	3.15	3.00
2-year government bonds	3.70	0.95	1.63	0.13	0.62	2.55	2.60
10-year government bonds	4.70	2.61	1.86	0.93	1.45	3.00	3.10
<b>Euro</b>							
ECB depo	2.05	0.26	-0.50	-0.50	-0.50	0.00	0.75
ECB refi	3.05	0.82	0.00	0.00	0.00	0.50	1.25
Eonia	3.12	0.47	-0.46	-0.47	-0.49	0.05	1.00
1-month Euribor	3.18	0.58	-0.45	-0.56	-0.60	0.04	0.97
3-month Euribor	3.24	0.74	-0.40	-0.54	-0.58	0.12	1.03
6-month Euribor	3.29	0.88	-0.34	-0.52	-0.55	0.32	1.16
12-month Euribor	3.40	1.07	-0.26	-0.50	-0.50	0.53	1.29
<b>Germany</b>							
2-year government bonds	3.41	0.45	-0.63	-0.73	-0.69	0.75	1.30
10-year government bonds	4.31	1.70	-0.27	-0.57	-0.31	1.10	1.70
<b>Spain</b>							
3-year government bonds	3.62	1.87	-0.36	-0.57	-0.45	1.38	1.88
5-year government bonds	3.91	2.39	-0.09	-0.41	-0.25	1.58	2.08
10-year government bonds	4.42	3.40	0.44	0.05	0.42	2.30	2.70
Risk premium	11	171	71	62	73	120	100
<b>Portugal</b>							
3-year government bonds	3.68	3.66	-0.34	-0.61	-0.64	1.47	2.04
5-year government bonds	3.96	4.30	-0.12	-0.45	-0.35	1.72	2.24
10-year government bonds	4.49	5.03	0.40	0.02	0.34	2.25	2.70
Risk premium	19	334	67	60	65	115	100
<b>EXCHANGE RATES</b>							
EUR/USD (dollars per euro)	1.13	1.28	1.11	1.22	1.13	1.10	1.18
EUR/GBP (pounds per euro)	0.66	0.84	0.85	0.90	0.86	0.84	0.84
<b>OIL PRICE</b>							
Brent (\$/barrel)	42.3	81.6	65.2	50.2	74.8	95.0	80.0
Brent (euros/barrel)	36.4	62.9	58.6	41.3	66.2	86.4	68.4

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
<b>GDP GROWTH</b>							
<b>Global</b>	4.5	3.4	2.9	-3.1	6.1	3.5	3.7
<b>Developed countries</b>	2.7	1.4	1.8	-4.5	5.2	3.0	2.5
United States	2.7	1.6	2.3	-3.4	5.7	3.2	2.4
Euro area	2.2	0.8	1.6	-6.5	5.4	2.6	3.1
Germany	1.6	1.3	1.1	-4.9	2.9	1.2	2.8
France	2.2	0.9	1.8	-8.0	7.0	2.9	2.3
Italy	1.5	-0.4	0.5	-9.1	6.6	2.4	2.0
Portugal	1.5	0.3	2.7	-8.4	4.9	4.2	2.8
Spain	3.7	0.5	2.1	-10.8	5.1	4.2	3.8
Japan	1.4	0.5	-0.2	-4.5	1.7	2.3	1.5
United Kingdom	2.6	1.3	1.7	-9.4	7.5	3.2	1.1
<b>Emerging and developing countries</b>	6.5	5.0	3.7	-2.0	6.8	3.9	4.6
China	10.6	8.2	6.0	2.2	8.1	4.7	4.9
India	7.2	7.0	4.5	-6.7	9.0	7.5	7.5
Brazil	3.6	1.7	1.2	-3.9	4.6	0.8	2.1
Mexico	2.4	2.1	-0.2	-8.2	4.8	2.5	2.3
Russia	7.2	1.3	2.2	-2.7	4.8	-8.1	-0.3
Turkey	5.5	4.9	0.9	1.8	11.0	3.3	3.9
Poland	4.2	3.6	4.8	-2.5	5.7	4.3	3.2
<b>INFLATION</b>							
<b>Global</b>	4.1	3.7	3.5	3.2	4.7	7.0	4.1
<b>Developed countries</b>	2.1	1.6	1.4	0.7	3.1	5.8	2.1
United States	2.8	1.8	1.8	1.3	4.7	6.9	2.3
Euro area	2.2	1.5	1.2	0.3	2.6	6.7	2.0
Germany	1.7	1.4	1.4	0.4	3.2	6.8	2.1
France	1.9	1.3	1.3	0.5	2.1	5.4	1.7
Italy	2.4	1.5	0.6	-0.1	1.9	6.6	1.9
Portugal	3.1	1.2	0.3	0.0	1.3	5.4	1.8
Spain	3.2	1.4	0.7	-0.3	3.1	6.8	1.1
Japan	-0.3	0.4	0.5	0.0	-0.2	0.9	0.7
United Kingdom	1.6	2.4	1.8	0.9	2.6	6.9	2.2
<b>Emerging countries</b>	6.7	5.6	5.1	5.2	5.9	7.9	5.6
China	1.7	2.6	2.9	2.5	0.9	1.9	1.7
India	4.5	7.7	3.7	6.6	5.1	5.5	4.5
Brazil	7.3	5.9	3.7	3.2	8.3	8.7	4.7
Mexico	5.2	4.2	3.6	3.4	5.7	6.2	4.0
Russia	14.2	8.2	4.5	3.4	6.7	14.0	7.5
Turkey	22.6	9.1	15.2	12.3	19.6	52.3	23.4
Poland	3.5	1.9	2.1	3.7	5.2	7.6	4.6

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
<b>Macroeconomic aggregates</b>							
Household consumption	3.6	-0.1	0.9	-12.2	4.7	3.3	4.5
Government consumption	5.0	1.0	2.0	3.3	3.1	0.1	0.4
Gross fixed capital formation	5.6	-1.9	4.5	-9.6	4.3	3.6	5.0
Capital goods	4.9	0.0	3.2	-12.9	16.0	4.5	5.0
Construction	5.7	-3.8	7.1	-9.6	-2.8	1.3	5.0
Domestic demand (vs. GDP Δ)	4.2	-0.3	1.3	-9.0	5.1	3.7	3.5
Exports of goods and services	4.7	2.9	2.5	-20.2	14.7	10.1	3.0
Imports of goods and services	7.0	0.1	1.2	-15.2	13.9	6.1	2.5
<b>Gross domestic product</b>	<b>3.7</b>	<b>0.5</b>	<b>2.1</b>	<b>-10.8</b>	<b>5.1</b>	<b>4.2</b>	<b>3.8</b>
<b>Other variables</b>							
Employment	3.2	-0.7	2.6	-7.6	6.6	3.8	2.9
Unemployment rate (% of labour force)	10.5	20.0	14.1	15.5	14.8	13.6	12.5
Consumer price index	3.2	1.4	0.7	-0.3	3.1	6.8	1.1
Unit labour costs	3.0	0.3	3.1	5.0	0.7	2.2	2.2
Current account balance (% GDP)	-5.9	-0.5	2.1	0.8	0.9	0.1	1.3
External funding capacity/needs (% GDP)	-5.2	-0.1	2.4	1.2	1.9	1.0	1.9
Fiscal balance (% GDP) <sup>1</sup>	0.4	-6.9	-3.1	-10.3	-6.9	-5.5	-4.8

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

■ Forecasts

### Portuguese economy

	Average 2000-2007	Average 2008-2018	2019	2020	2021	2022	2023
<b>Macroeconomic aggregates</b>							
Household consumption	1.7	0.3	3.3	-7.1	4.5	4.1	2.5
Government consumption	2.3	-0.5	2.1	0.4	4.1	1.8	0.2
Gross fixed capital formation	-0.4	-1.3	5.4	-2.7	6.4	4.7	6.6
Capital goods	3.2	2.7	1.6	-6.2	12.5	-	-
Construction	-1.5	-3.5	7.7	1.6	4.0	-	-
Domestic demand (vs. GDP Δ)	1.3	-0.2	3.0	-5.6	5.1	3.9	2.9
Exports of goods and services	5.2	3.9	4.1	-18.6	13.1	11.4	12.5
Imports of goods and services	3.6	2.4	4.9	-12.1	12.9	9.7	12.0
<b>Gross domestic product</b>	<b>1.5</b>	<b>0.3</b>	<b>2.7</b>	<b>-8.4</b>	<b>4.9</b>	<b>4.2</b>	<b>2.8</b>
<b>Other variables</b>							
Employment	0.4	-0.6	1.2	-1.9	2.8	1.0	0.4
Unemployment rate (% of labour force)	6.1	11.8	6.6	7.0	6.6	6.7	6.5
Consumer price index	3.1	1.2	0.3	0.0	1.3	5.4	1.8
Current account balance (% GDP)	-9.2	-3.2	0.4	-1.2	-1.1	-2.2	-1.6
External funding capacity/needs (% GDP)	-7.7	-1.9	1.2	0.1	0.7	0.1	0.7
Fiscal balance (% GDP)	-4.6	-5.5	0.1	-5.8	-2.8	-2.1	-0.9

■ Forecasts

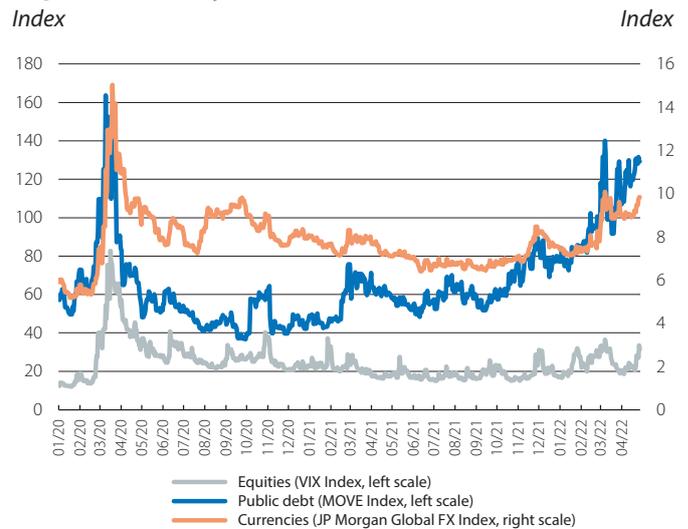
## The central banks in the spotlight

**Volatility increases across all asset classes.** The financial markets entered Q2 with the same unstable profile as the previous two months. On the one hand, the continued upward pressure on prices was accompanied by the tightening of rhetoric from monetary policymakers in the major developed economies, all of whom pointed out the need to take measures to quell the current high levels of inflation. On the other hand, the increase in lockdowns in China in the face of a rise in Omicron cases, coupled with the persistence and intensification of the war in Ukraine, added new doses of uncertainty to the global growth outlook. In short, all of these components weighed on investor sentiment, indicating a short- and medium-term outlook marked by an acceleration in interest rate hikes and a moderation of economic growth. Volatility also spiked and spread to all asset classes, especially sovereign yield curves.

**The Fed could accelerate the pace of interest rate hikes.** Although there was no FOMC meeting in April, the future of monetary policy in the US has been a major point of interest for investors. The rally in inflation in March (reaching 8.5% in the case of headline inflation), the likelihood of the inflationary pressures persisting for much of 2022 and the strength of the US labour market were sufficient grounds for several members of the Fed, including Jerome Powell, to adopt a more hawkish tone. Specifically, Powell pointed out that, as long as the strength of the economy permitted it, the Fed was contemplating several interest rate hikes, potentially even bringing rates into neutral territory (estimated by the Fed to be 2.4%) by the end of the year. These statements fed investors' expectations of a more aggressive pattern of rate hikes, which could be kicked off at the May meeting with a 50-bp rise, bringing rates up to the 0.75%-1.00% range, and they caused yields to rise along the sovereign yield curve. Similarly, investors assumed that the process of reducing the size of the central bank's balance sheet (quantitative tightening) will begin in May at a rate of 95 billion dollars a month, as noted in the minutes of the Fed's latest meeting.

**The ECB is also considering further steps for monetary normalisation.** At its April meeting, the central bank announced that the latest economic indicators reinforced its intention to bring asset purchases under the APP to an end in Q3 2022. Among these indicators, Christine Lagarde highlighted inflation expectations, which had risen above 2% following the start of the war in Ukraine, and which the Governing Council was monitoring closely in view of the risk of them moving above target. This statement, and Lagarde's words that the ECB would begin to raise rates «some time after» the end of asset purchases, were sufficient grounds for investors to estimate that the ECB would introduce its first rate hike before the end of the year. This is despite the fact that the ECB's own assessment of the economic outlook was not particularly optimistic, as a result of the uncertainty

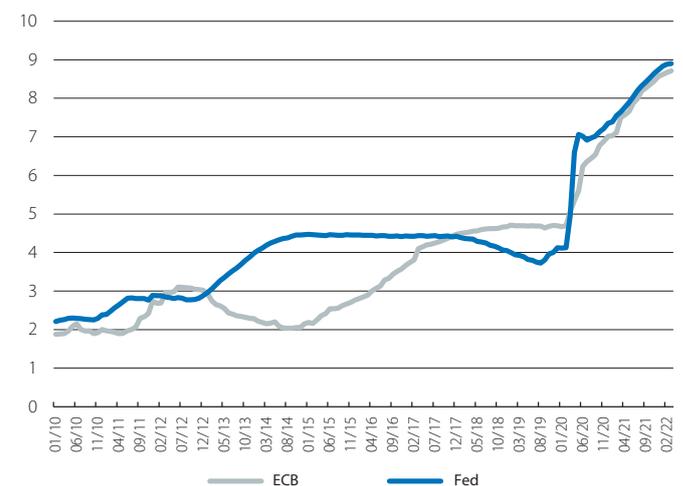
### Implicit volatility in the financial markets



Source: CaixaBank Research, based on data from Bloomberg.

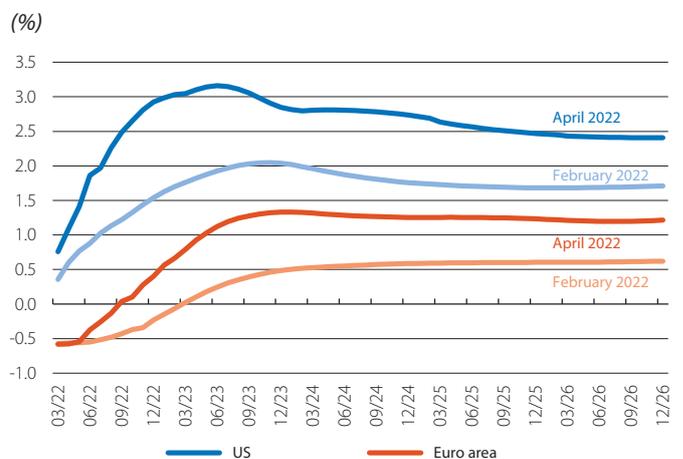
### Central bank balance sheets

(EUR and USD trillions)



Source: CaixaBank Research, based on data from Bloomberg.

### Expectations for Fed and ECB reference interest rates



Note: Forwards on the EFR and the OIS of the euro area derived using the NSS model based on market yield curves

Source: CaixaBank Research, based on data from Bloomberg.

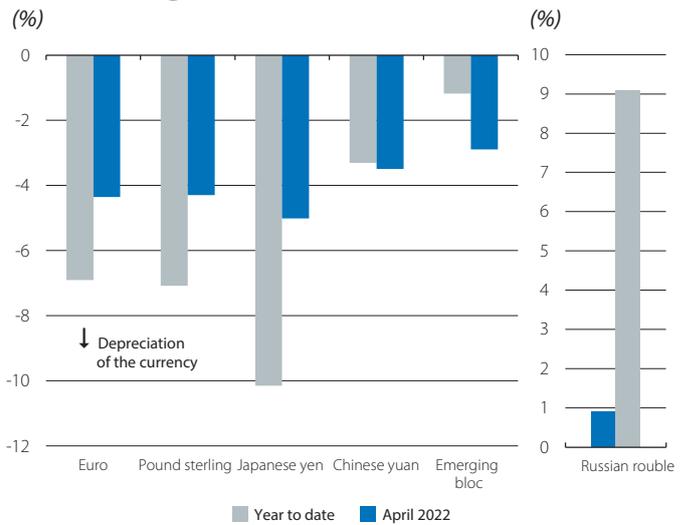
triggered by the war. Nevertheless, euro area sovereign yield curves rose significantly in the month, with the 10-year bund approaching 1% and an increase in the periphery risk premia.

**The dollar goes from strength to strength.** The more aggressive tone shown by the members of the Fed stood in contrast to the ECB's gradual approach and to the uncertainty triggered by the health situation in China and the war in Ukraine. In short, these factors supported the dollar, which, favoured by its role as a safe-haven asset, continued to appreciate against all other currencies. In particular, it registered notable gains against the Japanese yen (another currency considered a safe-haven asset), where the divergence in monetary policy between the two economies and the absence of measures from the Japanese authorities to support its currency weakened the yen to a 20-year low.

**Energy prices remain highly volatile.** For yet another month, the uncertainty arising from the war in Ukraine was the main factor behind the instability in the energy markets. On the one hand, the interruption of the supply of Russian gas to Poland and Bulgaria (due to their refusal to pay for imports in roubles) triggered a new episode of volatility in European natural gas prices, which was partly offset by the increase in imports of liquefied natural gas. All these swings occurred as the EU was discussing the possibility of imposing a new round of sanctions on Russia that could affect the gas market. On the other hand, the price of a barrel of Brent remained above 100 dollars, supported by new supply barriers in some producing countries and despite the downward revision of estimates of global crude oil demand following the surge in the pandemic in China.

**The stock markets register new declines.** Expectations of a tightening of monetary policies, signs of moderation in China's growth and the war all weighed on investors' risk appetite for yet another month, causing the major stock market indices to end the month with losses, with the S&P 500 down more than 8%. In the background, the Q1 2022 corporate earnings campaign got underway, and despite a widespread tightening of margins due to rising inflation there was still a large proportion of positive surprises (in more than 65% of cases up until the end of April). The MSCI EM Index, meanwhile, fell by nearly 6%, where the poor performance of the Chinese indices (punished by the worsening domestic economic outlook and the limited actions by its central bank) combined with losses in the main Latin American indices.

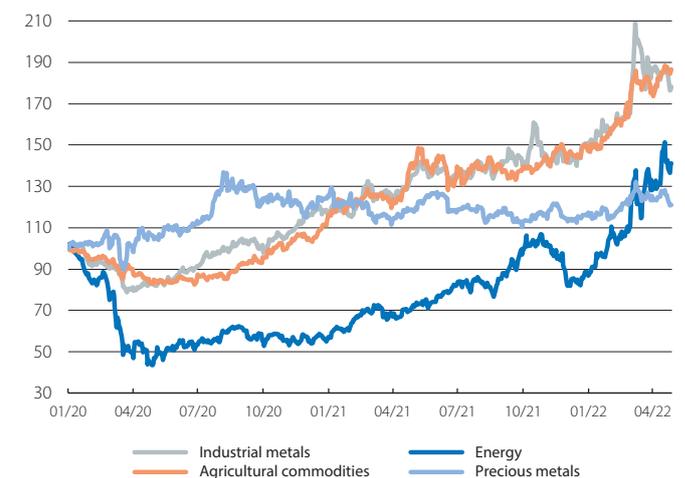
**Currencies against the US dollar**



Source: CaixaBank Research, based on data from Bloomberg.

**Commodity price index**

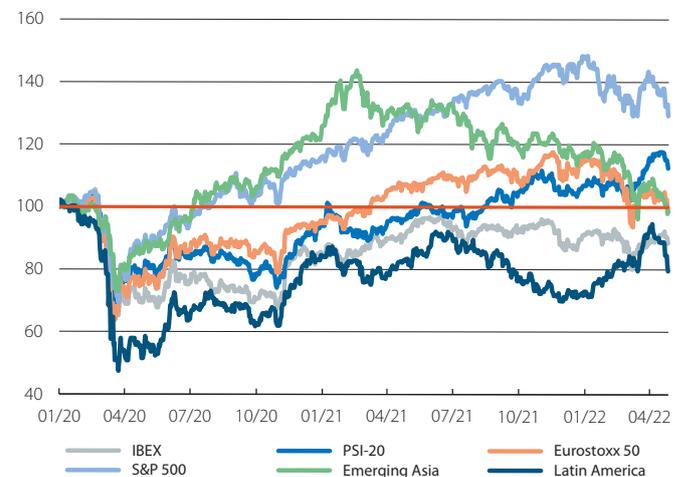
(100 = January 2020)



Source: CaixaBank Research, based on data from Bloomberg.

**Major international stock markets**

Index (100 = January 2020)



Source: CaixaBank Research, based on data from Bloomberg.

## On the increase in sovereign debt yields

The intensification of inflationary pressures, a phenomenon aggravated by the war in Ukraine, has led to a sharp shift in the direction of monetary policy. Mass bond purchases by the central banks are being left behind, while official rates are already being ratcheted up.

In the financial markets, this change has been reflected in a sharp rise in sovereign debt yields – a trend which, due to their role as a benchmark, has also affected other financial assets.

In the US, for instance, investors are demanding that a 10-year Treasury bond provides a yield 140 bps higher than that of last December (2.9% at the end of April). Similarly, the yield on the German *bund* is clearly in positive territory (0.9% at the end of April) and has already accumulated a 110-bp rise so far this year. In the rest of the euro area, yields have increased by around 140-150 bps (see first chart), implying a moderate response from risk premia.

### What is behind the increase?

The breakdown of sovereign bond yields between inflation expectations and real rates reveals somewhat differentiated patterns from region to region (see second chart).

Whereas in European debt the upward adjustment in nominal rates is due to the expected increase in inflation over the next decade, in the US the rise in Treasury yields is largely driven by an increase in real rates. In the US, the term premium – another important component of nominal sovereign rates – has also followed a downward trend according to Fed estimates.

These different patterns between the two regions are most likely a reflection of different positions in the business cycle (with the US being well ahead of the euro area), on the one hand, and of a more aggressive stimulus withdrawal strategy from the Fed compared to the ECB, on the other. These factors have been reflected in an appreciation of the dollar against the euro (7% since the beginning of the year).

However, even in the US real 10-year rates have remained in negative territory, far from the pre-pandemic range and well below their level during the decade prior to the financial crisis of 2008-2009. As the Fed proceeds with its monetary-policy normalisation process, we expect real rates to continue to climb to more «normal» levels, perhaps settling around the average rate of the five years prior to the pandemic (0.5%-1.0% for the 10-year bond). This would be consistent with a nominal 10-year rate of

### 10-year sovereign debt yields



Note: US, Spain, Italy and Portugal, right-hand scale.  
Source: CaixaBank Research, based on data from Bloomberg.

### Breakdown of 10-year sovereign debt yields



Note: Average for the period.  
Source: CaixaBank Research, based on data from Bloomberg.

around 3.0%, assuming that inflation expectations stabilise at 2%.

In Europe, we expect real rates to rise as well, as the ECB proceeds with its own stimulus withdrawal process, first ceasing net purchases and then gradually raising official rates.

For both regions, the equilibrium level at which real rates end up settling will depend on structural factors associated, among other things, with the potential growth of the economy, a subject which we will analyse in more detail in another Focus.<sup>1</sup>

1. The equilibrium rate is that at which saving equals investment, i.e. that which places the economy's growth at its potential. See the Focus «[What is the new equilibrium interest rate?](#)» in the MR09/2017.

### What does the shape of the curve in the US tell us?

In this section, we focus on a theme that tends to attract a lot of attention in the financial markets: the shape of the sovereign yield curve and, in particular, the slope of the US Treasury curve.

Indeed, the spread between rates in certain segments of the curve is frequently seen by investors as a barometer for expectations regarding the direction of monetary policy and long-term economic growth.

In fact, the inversion of the sovereign yield curve has correctly predicted every recession in the US over the last 60 years, with the exception of 1966 and the brief episode in 1998. It is therefore no surprise that the recent inversion of the Treasury yield curve in certain segments (e.g. the 10-year bond versus the 2-year bond) has set off some alarm bells about the possibility of a recession.

An scenario, however, that is not reflected in the consensus expectations, which, like ours, projects positive (albeit declining) GDP growth in the coming years.

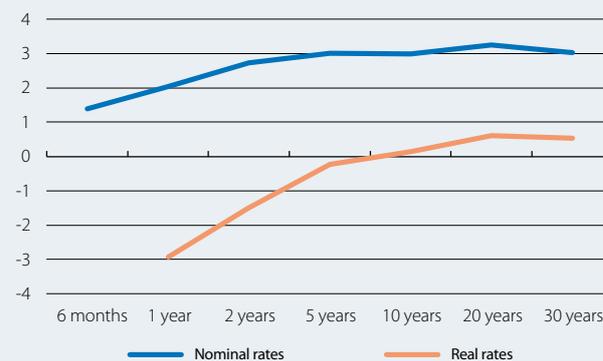
In our opinion, this divergency can be explained by various factors:

Firstly, the yield curve is distorted by technical factors, which in turn is a reflection of the Fed's sudden shift in its asset purchase policy. After all, in a matter of just a few months the central bank not only stopped adding government bonds to its balance sheet (at a monthly rate of 80 billion dollars), but it also announced that it expects to begin reducing its asset portfolio this year (with a monthly limit of 60 billion).

Secondly, we must take into account how quickly the central bank's communication regarding the normalisation of official rates has also shifted. In just six months, the FOMC's median voter went from ruling out rate hikes in 2022 (at the September 2021 meeting) to favouring at least seven rate hikes this year (at the March 2022 meeting), with a view to bringing the rate range above the estimated long-term level in 2023. This adjustment has pushed up both implicit rates in the money markets and sovereign rates in the short segments of the curve, which are more heavily influenced by the level of official interest rates.

Thirdly, the apparent distortion in the sovereign yield curve also reflects a somewhat unusual trajectory in inflation expectations, with very high levels over the next 24 months but moderating towards the central bank targets over the long term. In fact, in inflation-indexed bonds, the 10-2-year spread remains positive and close to the peak since 2015, giving little sign of recession (see third chart). This is consistent with estimates produced using our statistical model, which, based on the spread

### US: sovereign debt yields over different terms (%)



Note: At the close of 30 April 2022.

Source: CaixaBank Research, based on data from Bloomberg.

between 3-month and 10-year nominal rates, assigns a probability of less than 15% to a recession occurring, similar to recent statements by the Fed.<sup>2</sup>

Our baseline scenario of economic resilience is based on the assumption that, on the one hand, the buoyancy of the labour market and the strong financial position of the private sector could more than offset the negative effects of high inflation and monetary stimulus withdrawal. On the other hand, the supply disruptions and the conflict in Ukraine ought to gradually improve. Nevertheless, the balance of risks around this outlook remains skewed to the downside.

Antonio Montilla

2. See <https://www.federalreserve.gov/econres/notes/feds-notes/dont-fear-the-yield-curve-reprise-20220325.htm> and the Focus «On the likelihood of a recession in the US» in the MR05/2018.

**Interest rates (%)**

	30-April	31-March	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
<b>Euro area</b>					
ECB Refi	0.00	0.00	0	0.0	0.0
3-month Euribor	-0.43	-0.46	3	14.3	10.6
1-year Euribor	0.17	-0.07	24	66.7	64.7
1-year government bonds (Germany)	-0.23	-0.45	22	41.4	41.4
2-year government bonds (Germany)	0.26	-0.07	34	88.1	94.3
10-year government bonds (Germany)	0.94	0.55	39	111.5	114.0
10-year government bonds (Spain)	1.97	1.44	54	140.9	149.8
10-year government bonds (Portugal)	2.02	1.35	67	155.2	153.7
<b>US</b>					
Fed funds (upper limit)	0.50	0.50	0	25.0	25.0
3-month Libor	1.33	0.96	37	112.6	115.8
12-month Libor	2.63	2.10	53	204.5	234.7
1-year government bonds	2.06	1.60	46	168.2	201.0
2-year government bonds	2.71	2.33	38	198.2	255.6
10-year government bonds	2.93	2.34	60	142.4	130.8

**Spreads corporate bonds (bps)**

	30-April	31-March	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Itraxx Corporate	90	73	17	42.1	39.9
Itraxx Financials Senior	102	81	21	47.2	43.6
Itraxx Subordinated Financials	197	153	44	89.3	89.7

**Exchange rates**

	30-April	31-March	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
EUR/USD (dollars per euro)	1.055	1.107	-4.7	-7.3	-12.3
EUR/JPY (yen per euro)	136.950	134.670	1.7	4.6	4.2
EUR/GBP (pounds per euro)	0.839	0.842	-0.4	-0.3	-3.6
USD/JPY (yen per dollar)	129.700	121.700	6.6	12.7	18.7

**Commodities**

	30-April	31-March	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	643.3	634.4	1.4	11.2	20.9
Brent (\$/barrel)	109.3	107.9	1.3	40.6	62.6
Gold (\$/ounce)	1,896.9	1,937.4	-2.1	3.7	7.2

**Equity**

	30-April	31-March	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	4,131.9	4,530.4	-8.8	-13.3	-1.2
Eurostoxx 50 (euro area)	3,802.9	3,902.5	-2.6	-11.5	-4.3
Ibex 35 (Spain)	8,584.2	8,445.1	1.6	-1.5	-2.6
PSI 20 (Portugal)	5,930.0	6,037.0	-1.8	6.5	17.4
Nikkei 225 (Japan)	26,847.9	27,821.4	-3.5	-6.8	-6.8
MSCI Emerging	1,076.2	1,141.8	-5.7	-12.6	-20.1

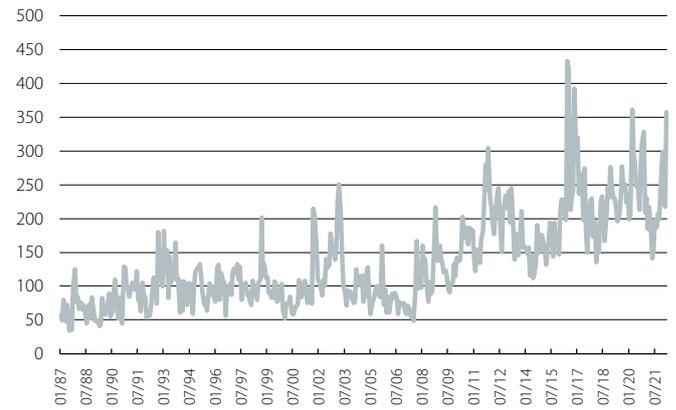
## The prices of war

**Global impact of the Russia-Ukraine conflict.** With no sign of a truce in the invasion of Ukraine, the multiple economic effects of the war continue to add up. The recent surge in the price of the major commodities is rapidly translating into higher inflation, which will dent households' purchasing power and lead to the global economy growing significantly less than was expected a few months ago. In this regard, the IMF cut its growth forecasts for the global economy by 0.8 pps for this year and by 0.2 pps for 2023, anticipating growth of 3.6% in both years (3.5% and 3.7%, respectively, are our projections here at CaixaBank Research). By geographic area, the biggest adjustment affected emerging economies, with their growth being cut by 1 pp this year (to 3.8%, according to the IMF) due to the collapse of the Russian economy (expected to shrink by more than 8% this year) and weaker growth in India and China. Uncertainty will remain the key factor in this macroeconomic environment, particularly in Europe, where it has reached levels similar to those seen at the start of the pandemic and following the Brexit referendum.

**Economic activity indicators in the EU show signs of weakness.** In a turbulent Q1 2022, still marked by the outbreaks of the Omicron variant and the outbreak of the war in Ukraine, euro area GDP growth managed to remain in positive territory, advancing by 0.2% quarter-on-quarter (5.0% in year-on-year terms). Yet, growth figures are somewhat uneven from country to country. On the downside, France disappointed by stagnating relative to the previous quarter and Spain grew less than we had anticipated (0.3% quarter-on-quarter, see the [Spanish Economy section](#)). On the other hand, Germany provided a positive surprise by growing by 0.2% and avoiding a technical recession in the first half of the year. The impact of the war in Ukraine, however, will begin to become more visible in Q2 2022. Indeed, the March and April confidence indicators, although above expectations, show a clear deterioration in economic agents' expectations. In particular, households are being affected by inflation, while industry is feeling the impact of the high commodity prices and persistent global bottlenecks. On the other hand, the services sector continues to be favoured by the boost from the lifting of health-related restrictions. In this context, it should be noted that the French presidential elections gave a landslide victory to Macron, with 58.5% of the votes in the second round against Le Pen. This result will provide stability to the markets at a time when uncertainty in Europe due to the war in Ukraine is very high.

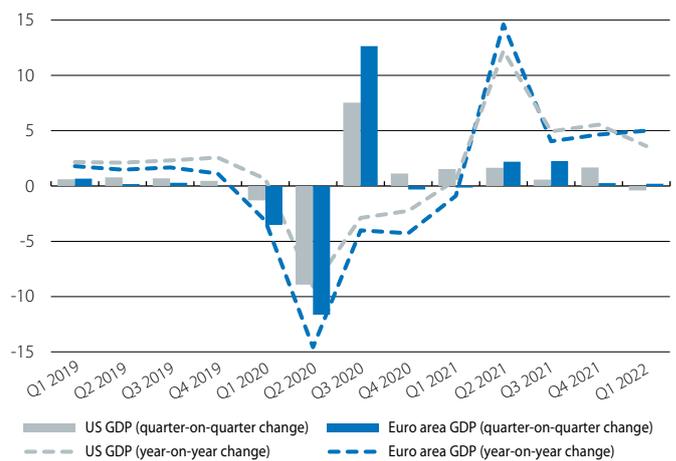
**Inflation: the high energy prices are spreading to the rest of the components and core inflation reaches 3.5% in the euro area.** Headline inflation rose by 1 decimal point in the euro area, bringing it to 7.5%, while core inflation rose to 3.5%, representing a 0.6-pp increase in a single month.

**Europe: uncertainty index**  
(100 = average up until December 2010)



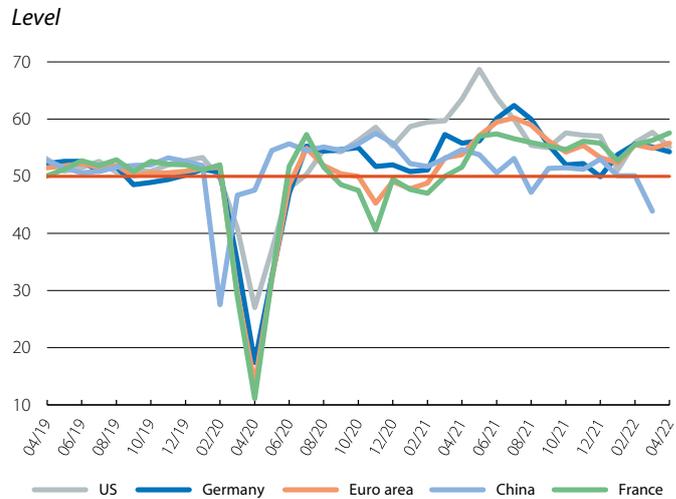
**Note:** The uncertainty index is calculated using archives from 10 European newspapers. The number of newspaper articles containing the terms «uncertain» or «uncertainty», «economic» or «economy», and one or more relevant terms on public policy, is counted and compared against the total number of articles in the same newspaper and period.  
**Source:** CaixaBank Research, based on data from S. Baker, N. Bloom and S. Davis (2022). «Measuring Economic Policy Uncertainty» from [www.PolicyUncertainty.com](http://www.PolicyUncertainty.com) (data available up to 25/04/2022).

**US and euro area: GDP**  
(%)



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

### Global: PMI



**Note:** For some countries, we use the flash estimate.  
**Source:** CaixaBank Research, based on data from Markit PMI and from S&P Global, via Refinitiv.

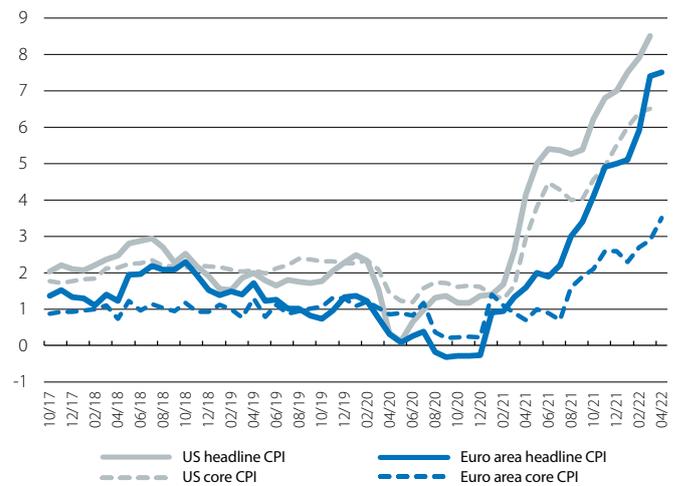
The latest data suggest that the increase in energy prices is rapidly spreading to the other components of the consumer price index, which will lead to further pressure on the ECB to accelerate its monetary policy normalisation process (see the [Financial Markets section](#)). Both food prices and those of goods and industrial services registered significant year-on-year increases this month. Despite the slight cooling in energy prices, as a result of both base effects and reduced tensions in the main commodity markets, inflation is expected to remain high in the coming months and the core components could still rise a few more decimals. On the other hand, in the US there are some signs that inflation could be approaching its peak. In March, headline inflation reached 8.5% year-on-year (compared to 7.9% in February), primarily as a result of the increase in the energy component. Thus, core inflation rose to 6.5% (6.4% in February).

**US: unexpected fall in GDP in Q1, but with encouraging signs from consumption.** US GDP fell by 0.4% quarter-on-quarter in Q1 2022 (+3.6% in year-on-year terms), in contrast with the 1.7% quarter-on-quarter growth in the previous quarter. This change of gear is mostly explained by the negative contribution from the foreign sector and the change in stocks. Domestic demand, meanwhile, continued to register strong growth, favoured by the strength of the labour market and the savings accumulated in recent years. Specifically, private consumption grew by 0.6% quarter-on-quarter (versus 0.7% in Q4 2021) and business investment accelerated, with non-residential investment up 2.2% quarter-on-quarter (versus 0.7% in Q4 2021). In April, the monthly data continue to withstand the uncertainty, although the risks to the US economy are by no means insignificant: the pandemic itself, the persistence of inflationary tensions and the risks surrounding the monetary normalisation process initiated by the Fed.

**The Chinese economy in lockdown.** China's GDP grew by 4.8% year-on-year in Q1 (versus 4.0% in Q4 2021), following a recovery in January and February. However, the economic activity data for March suggest a significant weakening of the economy. This downward trend has been exacerbated by the recent lockdowns in many important cities in the country, as a result of the circulation of the Omicron variant and the maintenance of a strict zero-COVID policy. Thus, retail sales declined by 3.5% year-on-year in March, the first fall since July 2020. China's official manufacturing PMI fell by more than 2 points in April to 47.4 points, its lowest level since February 2020, while the Caixin manufacturing PMI also registered a marked decline, falling by the same amount. The official non-manufacturing PMI, meanwhile, plummeted to 41.9 points in April (48.4 in March), also marking the lowest level in business confidence since February 2020. This weakness at the heart of the Asian supply chain will undoubtedly be felt in global supply chains, which are already heavily stressed and are also affected by the conflict in Europe.

**US and euro area: CPI**

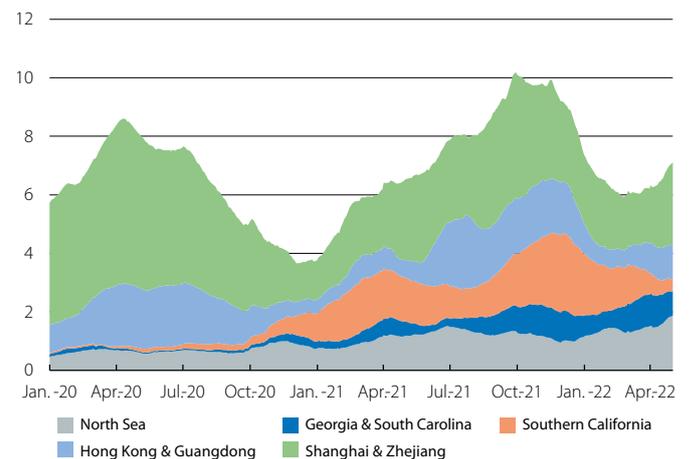
Year-on-year change (%)



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

**Global: congestion at major ports**

Waiting container ships (% of global capacity)

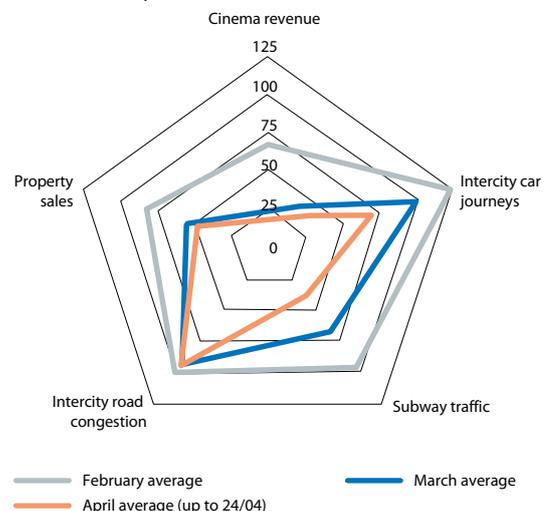


Note: A 60-day moving average is used.

Source: CaixaBank Research, based on data from the Kiel Institute for the World Economy.

**China: daily economic activity indicators**

(% of the 2019 level)



Source: Capital Economics.

## EU and China: mapping out a strategic interdependence

China's aspiration to become a global economic, military and geopolitical power has generated occasional tensions with Western countries since the early 2000s. These tensions culminated in a sharp escalation of trade restrictions with the US beginning in 2018 and a decoupling process between the two powers. The outbreak of the pandemic in 2020, and more recently the war in Ukraine, has accelerated this decoupling trend, and Europe also appears to have joined in, albeit somewhat timidly for now.

New terms are appearing in the political discourse, such as «strategic autonomy», «reshoring» and «nearshoring», in an attempt to increase supply chain resilience and guarantee security in the consumption of essential products in the face of supply shocks, whether triggered by tensions in the health, climate or geopolitical spheres.

But is this much-sought-after «strategic autonomy» possible, or even desirable? To answer this question, in this article we look at the EU's dependence on China.

### The Chinese origin of European final demand: 2% made in China

Over time, China has become the main source of imports into the European bloc. In 2020, China accounted for 22% of the EU's total gross imports of goods, compared with 12% for the US and 9% in the case of the UK. This contrasts with the situation back in the year 2000, when only 6% of European imports of goods came from China, well behind the United Kingdom's 19%, the US' 16% or even 8% in the case of Japan.<sup>1</sup>

The data on imports and exports in gross terms do not allow us to make an accurate assessment of the origin of

### Value added originating in China in final demand (% of final demand)

	Germany			Spain			France			Italy			EU-27			US			Japan	Brazil	Russia	India
	2015-2018	1995-2000	2002-2007	2015-2018	1995-2000	2002-2007	2015-2018	1995-2000	2002-2007	2015-2018	1995-2000	2002-2007	2015-2018	1995-2000	2002-2007	2015-2018	1995-2000	2002-2007	2015-2018	2015-2018	2015-2018	2015-2018
<b>TOTAL</b>	2.1	0.3	0.8	1.9	0.3	0.9	1.8	0.3	0.7	1.6	0.3	0.7	1.9	0.3	0.8	2.2	0.5	1.2	3.1	1.5	3.2	3.2
<b>Agriculture</b>	1.6	0.3	0.6	1.1	0.2	0.4	1.0	0.2	0.4	1.1	0.3	0.5	1.2	0.2	0.5	1.4	0.4	0.7	2.9	1.2	1.9	0.4
<b>Mining</b>	1.0	0.3	0.3	0.9	1.9	0.5	7.8	0.3	0.7	0.8	0.1	0.4	1.7	0.4	0.4	1.0	0.2	0.5	1.3	1.5	1.3	1.1
<b>Manufacturing</b>	5.7	0.8	2.1	6.1	0.9	2.4	6.1	0.9	2.3	4.6	0.7	1.8	5.7	0.8	2.2	8.4	1.5	4.2	9.4	4.8	8.7	7.5
Food	1.8	0.4	0.8	1.9	0.3	0.8	1.6	0.3	0.5	1.3	0.3	0.5	1.7	0.3	0.7	1.9	0.4	0.9	3.8	1.3	2.6	1.1
Textile & clothing	23.2	3.6	8.9	21.8	2.2	7.5	25.0	2.9	9.4	11.0	1.8	4.8	19.1	2.6	7.4	37.1	6.8	18.9	42.2	9.0	31.6	7.0
Wood & paper	1.8	0.4	0.7	1.7	0.4	0.8	2.1	0.5	0.8	1.5	0.3	0.6	1.7	0.4	0.7	3.2	0.8	1.4	2.5	1.5	2.7	3.0
Coke & refined oil prod.	1.1	0.3	0.7	1.0	0.4	0.3	1.9	0.4	0.5	0.9	0.2	0.5	1.2	0.3	0.5	0.8	0.3	0.4	2.1	1.5	0.8	1.6
Chemicals & pharma.	3.1	0.5	0.9	3.8	0.7	1.3	3.1	0.6	1.1	2.8	0.6	1.1	2.9	0.5	1.0	2.7	0.6	1.1	3.6	4.0	4.4	6.7
Rubber & plastics	3.1	0.6	1.1	4.7	0.8	1.5	4.5	0.9	1.4	3.3	0.6	1.1	3.8	0.7	1.3	6.2	0.9	2.3	5.7	3.7	7.1	9.6
Other non-metal minerals	3.5	0.4	1.7	3.3	0.3	1.3	3.4	0.3	1.4	3.0	0.3	1.2	3.4	0.4	1.6	5.8	1.0	3.4	4.8	2.4	4.3	2.8
Metals	3.3	0.6	1.4	4.5	0.6	1.8	4.2	0.5	1.4	2.7	0.3	1.2	3.6	0.5	1.4	4.8	0.7	2.4	3.7	3.6	5.1	4.0
Computers & electronics	19.0	2.0	7.8	20.5	2.7	8.6	22.9	2.6	9.6	12.4	1.8	5.0	17.8	2.0	7.5	19.8	2.0	9.2	19.5	16.7	26.4	26.5
Electrical products	9.3	0.6	1.9	12.9	0.7	2.6	16.7	1.2	3.8	9.6	0.5	1.9	11.1	0.7	2.7	18.8	1.9	6.4	19.2	11.3	14.1	16.3
Machinery	4.3	0.5	1.5	7.7	0.8	2.5	6.9	0.7	2.4	4.9	0.5	1.9	5.5	0.6	2.0	8.1	1.0	3.5	7.7	7.4	13.8	13.4
Motor vehicles & trailers	2.4	0.3	0.9	3.3	0.4	1.1	3.3	0.3	1.0	3.1	0.3	1.1	2.9	0.3	1.0	5.5	0.6	2.0	4.6	3.0	6.2	4.6
Other transport equipment	5.8	0.7	2.6	4.8	0.5	2.1	4.4	0.6	1.8	4.5	0.4	1.8	5.7	0.7	2.6	3.6	0.6	1.7	5.3	16.4	6.2	10.8
Other manufacturing	7.7	0.8	1.8	9.5	1.1	2.3	8.4	0.8	1.8	5.9	0.7	1.4	7.8	0.9	1.9	16.0	3.5	7.8	9.7	5.6	12.6	11.0
<b>Services</b>	1.2	0.2	0.5	1.1	0.2	0.5	1.0	0.1	0.4	0.8	0.2	0.4	1.1	0.2	0.5	1.0	0.2	0.5	1.7	0.6	1.8	1.9
Commercial services	1.6	0.2	0.5	1.5	0.2	0.6	1.6	0.2	0.5	1.2	0.2	0.5	1.6	0.2	0.5	1.8	0.4	0.9	2.9	0.9	2.0	2.6
Logistics	3.2	0.5	1.5	2.1	0.4	1.3	2.6	0.4	1.1	1.9	0.6	1.0	2.5	0.5	1.2	2.7	0.6	1.5	2.6	1.4	3.6	3.4
Hospitality	1.0	0.3	0.7	0.8	0.1	0.4	0.8	0.2	0.5	0.6	0.2	0.4	0.8	0.2	0.5	0.8	0.3	0.5	1.7	0.7	2.1	1.0
Information & communication	1.6	0.4	0.6	2.6	0.4	0.9	1.7	0.2	0.5	1.2	0.2	0.5	1.8	0.3	0.6	1.1	0.2	0.5	2.8	0.8	2.6	3.0
Finance	0.6	0.1	0.2	0.5	0.1	0.2	0.6	0.1	0.2	0.4	0.1	0.2	0.6	0.1	0.2	0.4	0.1	0.1	1.0	0.2	0.6	0.7
Real estate	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.0	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.3	0.1	0.6	0.3
Other services	1.2	0.3	0.5	0.9	0.2	0.5	0.9	0.1	0.3	0.7	0.1	0.3	1.0	0.2	0.4	0.8	0.2	0.3	1.8	0.6	2.2	1.7

**Notes:** The data refer to the average for the years 1995-2000 (before China joined the WTO in 2001), 2002-2007 (after China joined the WTO, pre-financial crisis) and 2015-2018 (the latest period). We use data from the most recent update of the OECD TiVA tables, in November 2021.

The colouring in the table reflects the degree of integration between the two economies. Blue and green indicate a lower percentage of final demand for each indicated country or region originating in China, while orange and red indicate a higher percentage of final demand originating in China.

**Source:** CaixaBank Research, based on data from OECD TiVA (November 2021).

1. According to data from the Observatory of Economic Complexity (OEC). Unlike the TiVA database, which we use next, these data only include trade in goods (i.e. they exclude services).

### Value added originating in China in exports (% of exports)

	Germany	Spain	France	Italy	EU-27			US			Japan	Brazil	Russia	India
	2015-2018	2015-2018	2015-2018	2015-2018	2015-2018	1995-2000	2002-2007	2015-2018	1995-2000	2002-2007	2015-2018	2015-2018	2015-2018	2015-2018
<b>TOTAL</b>	1.5	1.6	1.6	1.5	1.6	0.3	0.7	1.3	0.3	0.8	2.7	1.3	1.2	1.9
<b>Agriculture</b>	1.0	0.8	0.9	0.5	0.9	0.2	0.4	1.0	0.2	0.4	1.7	1.0	1.3	0.4
<b>Mining</b>	0.9	1.1	1.2	0.5	0.8	0.1	0.4	0.8	0.2	0.3	1.6	1.1	0.6	2.1
<b>Manufacturing</b>	1.9	2.4	2.4	2.0	2.1	0.3	0.9	2.3	0.5	1.4	3.4	1.9	1.7	2.9
Food	1.0	1.1	1.0	0.8	1.1	0.2	0.5	1.3	0.3	0.6	1.7	0.9	1.7	0.8
Textile & clothing	3.3	4.5	4.8	3.4	3.6	0.7	1.6	3.9	1.2	2.4	4.8	3.1	6.9	3.3
Wood & paper	1.1	1.4	1.5	1.1	1.1	0.2	0.4	2.0	0.4	0.9	1.7	1.2	1.7	2.3
Coke & refined oil prod.	0.9	0.9	2.3	0.7	1.1	0.3	0.3	0.7	0.2	0.2	1.9	1.5	0.6	0.9
Chemicals & pharma.	1.4	1.7	1.3	1.5	1.2	0.3	0.5	1.4	0.3	0.7	2.6	1.8	1.8	3.4
Rubber & plastics	1.7	2.4	1.6	1.7	1.8	0.3	0.7	2.3	0.4	1.0	2.8	2.0	3.5	3.8
Other non-metal minerals	1.2	1.7	1.4	1.3	1.4	0.2	0.6	1.7	0.4	0.9	1.9	1.1	2.1	1.9
Metals	1.6	2.0	1.8	1.8	1.7	0.3	0.8	2.1	0.4	1.1	1.8	1.5	1.7	2.6
Computers & electronics	3.9	4.5	3.4	2.8	4.6	0.6	2.3	2.1	0.7	2.4	4.4	6.3	7.5	5.0
Electrical products	3.0	3.6	3.9	3.2	3.4	0.4	1.2	3.3	0.6	1.6	4.9	2.9	4.6	3.7
Machinery	2.1	2.9	2.8	2.1	2.3	0.3	0.9	3.2	0.5	1.5	3.2	2.4	4.2	3.0
Motor vehicles & trailers	1.7	3.4	2.9	2.3	2.2	0.3	0.8	4.2	0.5	1.8	3.6	2.0	4.2	4.1
Other transport equipment	2.5	2.7	3.5	2.5	3.1	0.4	1.2	2.7	0.5	1.2	3.0	5.2	4.1	4.2
Other manufacturing	2.5	2.0	2.3	1.8	2.0	0.3	0.8	2.3	0.5	1.2	3.4	2.2	3.6	5.1
<b>Services</b>	0.7	0.8	0.8	0.5	0.8	0.1	0.4	0.5	0.1	0.2	1.3	0.4	1.1	0.7
Commercial services	0.5	0.6	0.8	0.5	0.7	0.1	0.3	0.6	0.1	0.2	1.5	0.3	0.8	0.4
Logistics	0.9	0.7	1.0	0.6	1.1	0.2	0.5	0.5	0.1	0.2	1.3	0.7	1.0	1.6
Hospitality	0.7	0.8	0.6	0.4	0.6	0.1	0.3	0.6	0.1	0.3	1.5	0.6	1.1	0.4
Information & communication	0.8	1.5	1.0	0.7	1.1	0.2	0.4	0.7	0.1	0.3	1.3	0.6	1.9	0.6
Finance	0.5	0.4	0.5	0.3	0.6	0.1	0.4	0.3	0.1	0.1	0.9	0.2	0.5	0.4
Real estate	0.2	0.1	0.2	0.1	0.2	0.0	0.1	0.3	0.0	0.1	0.3	0.1	0.5	0.3
Other services	0.5	0.8	0.6	0.6	0.6	0.1	0.3	0.5	0.1	0.2	0.9	0.4	1.9	0.8

**Notes:** The data refer to the average for the years 1995-2000 (before China joined the WTO), 2002-2007 (after China joined the WTO, pre-financial crisis) and 2015-2018 (the latest period). We use data from the most recent update of the OECD TiVA tables, in November 2021.

The colouring in the table reflects the degree of integration between the two economies. Blue and green indicate a lower percentage of final demand for each indicated country or region originating in China, while orange indicates a higher percentage of final demand originating in China.

**Source:** CaixaBank Research, based on data from OECD TiVA (November 2021).

the goods and services that are consumed. In this regard, the OECD's TiVA (Trade in Value Added) database, based on international input-output tables, offers us a more detailed view of the degree of economic integration between China and the EU, allowing us to measure the actual dependencies for each country and sector. By identifying the exact origin and destination of each good and service that is traded, we can investigate the composition and the actual origin of final demand and exports.<sup>2</sup>

In aggregate terms, Chinese goods and services have accounted for 2% of European final demand in recent years (see first table). This is a similar level to that in the US, but lower than in countries such as Japan or India, which have value chains that are more closely integrated with China.

Between the EU and other countries we find some common trends worth highlighting. Firstly, this dependence on China has increased significantly in the last two decades

and in all sectors analysed, including both manufacturing and services. Secondly, it is clear that the Asian giant has transformed itself into a global manufacturing power, accounting for 5%-10% of the manufacturing sector's final demand worldwide. In particular, the dominance of the Chinese value chain in the textile and electronics sectors is unquestionable, accounting for over 20% of the final demand of these sectors in the largest EU economies, 40% in the case of textiles in Japan and the US, and more than 25% in electronics in India and Russia.

Focusing on the EU in particular, the bloc's integration with China has increased in the last decade, particularly in more advanced sectors such as electronics and machinery, but also in commercial services and in information and communication services.

This strong integration of China into European value chains is evident when analysing the growing weight of Chinese goods and services in the European export sector (see second table), mainly in technologically advanced manufacturing sectors. This indicates the penetration capacity of intermediate products produced in China in highly integrated production chains, such as electronics,

2. For more details on the use of this database, also see the Focus «European dependence on Russia: a primary issue» in the MR04/2022.

machinery and transportation equipment. It is noteworthy that Spanish exports of electronics and French exports of transportation equipment incorporate a greater proportion of Chinese goods and services than the corresponding export sectors in Japan. Europe's textile industries are also among the most highly integrated with China in the world. Moreover, in the EU-27 this integration accelerated in the last decade, contrary to what has happened in the US, for instance, where exports of electronic products now contain a smaller proportion of Chinese goods than they did a few years ago.

At this point, it is also important to emphasise that at a more disaggregated level the interdependence between countries may be much greater in certain specific products. If, in addition to having a significant dependence on imports of a particular product, the exporting country also has market dominance, then the risk of disruptions in production chains is greater in the event of supply issues, whether due to logistical difficulties or diplomatic tensions.

In this regard, the EU's dependence on China is significant in the case of certain rare raw materials (crucial for the energy transition), such as manganese or scandium, as well as in various components that are essential to the production of pharmaceutical goods, such as active agents and vitamins, and in electronic components – both final and intermediate – such as LED lamps or permanent magnets. In all these products, China has a global market share of over 50%, representing as much as 90% of global production in some cases.<sup>3</sup>

### A sustainable attachment?

In the last *Monthly Report*, we analysed the impact of the current tensions with Russia, concluding that the negative effects of the decoupling process will be particularly visible in the short term and in economies that are more dependent on fossil fuels for their energy needs. However, in the medium term, and as some countries have already demonstrated in recent years, reducing dependence on Russian commodities is not impossible, and moreover it is compatible with a quicker and more coordinated energy transition.

China, however, is much more densely interconnected with the EU, as well as with the rest of the world's major economies. In the EU in particular, this integration has accelerated in the last decade and the Chinese value chain is key to a large number of sectors, especially in manufacturing. Furthermore, in recent years the Chinese economy has come a long way in increasing its

3. See European Commission (2021). «Strategic dependencies and capacities», Commission Staff Working Document. See also L. Salinas Conte (2021). «The dependency on China of Spain's supply chains», Elcano Policy Paper, Elcano Royal Institute.

### Economic Complexity Index (ECI)

Position in the ECI ranking

	2000	2010	2020
Japan	1	1	1
Switzerland	3	3	2
Taiwan	22	5	3
Germany	2	2	4
US	5	8	9
France	10	13	15
Italy	13	18	19
Hong Kong	48	34	23
China	54	31	28
Spain	19	28	34
India	50	50	40
Russia	25	30	43
Brazil	29	35	47

**Note:** The index can be interpreted as a measure of the relative intensity of knowledge in a particular economy and is calculated based on the profile of each country's exports.  
**Source:** CaixaBank Research, based on data from the Observatory of Economic Complexity (OEC).

technological specialisation (see third table), thereby reaffirming a vital role in the global trading system. As the recurring supply problems experienced during the pandemic have shown, decoupling from China would have costs for the entire economy, being insurmountable in many cases. Unlike the European Green Deal, the feasibility of achieving «strategic autonomy» in many of these sectors, through reshoring part of the value chain, is not entirely clear. If the world enters a new geopolitical era that results in a process of de-globalisation is confirmed, then the inevitable tensions between the various blocs would most likely result in more losers than winners. Furthermore, a long-lasting commercial relationship between the EU and China will increasingly need to be underpinned by strong diplomacy. Not only will the European economy depend on such a diplomatic effort, but so will domestic politics, global geopolitical stability and – because there is never a bad time to recall it – the global fight against climate change.

Luís Pinheiro de Matos

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

## UNITED STATES

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
<b>Activity</b>									
Real GDP	-3.4	5.7	12.2	4.9	5.5	3.6	-	-	-
Retail sales (excluding cars and petrol)	2.1	17.5	27.5	14.3	16.2	10.5	12.1	15.8	4.1
Consumer confidence (value)	101.0	112.7	122.1	116.7	112.9	108.1	111.1	105.7	107.6
Industrial production	-7.2	5.5	14.7	5.5	4.4	5.4	3.3	7.5	5.5
Manufacturing activity index (ISM) (value)	52.5	60.6	61.0	60.0	60.1	57.8	57.6	58.6	57.1
Housing starts (thousands)	1,396	1,605	1,588	1,562	1,670	1,753	1,679	1,788	1,793
Case-Shiller home price index (value)	228	267	262	274	283	...	292	299	...
Unemployment rate (% lab. force)	8.1	5.4	5.9	5.1	4.2	3.8	4.0	3.8	3.6
Employment-population ratio (% pop. > 16 years)	56.8	58.4	58.0	58.6	59.2	59.9	59.7	59.9	60.1
Trade balance <sup>1</sup> (% GDP)	-3.2	-3.7	-3.6	-3.7	-3.7	...	-3.8	-3.8	...
<b>Prices</b>									
Headline inflation	1.2	4.7	4.8	5.3	6.7	8.0	7.5	7.9	8.5
Core inflation	1.7	3.6	3.7	4.1	5.0	6.3	6.0	6.4	6.5

## JAPAN

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
<b>Activity</b>									
Real GDP	-4.5	1.7	7.3	1.2	0.4	...	-	-	-
Consumer confidence (value)	31.0	36.3	36.1	37.5	38.3	34.8	36.5	35.2	32.8
Industrial production	-10.6	5.6	18.4	6.6	1.1	-0.6	-1.6	0.5	-0.8
Business activity index (Tankan) (value)	-19.8	13.8	14.0	18.0	18.0	14.0	-	-	-
Unemployment rate (% lab. force)	2.8	2.8	2.9	2.8	2.7	2.7	2.8	2.7	2.6
Trade balance <sup>1</sup> (% GDP)	0.1	-0.3	0.6	0.3	-0.3	-1.3	-0.8	-1.0	-1.3
<b>Prices</b>									
Headline inflation	0.0	-0.2	-0.7	-0.2	0.5	0.9	0.5	0.9	1.2
Core inflation	0.2	-0.5	-0.9	-0.5	-0.7	-0.9	-1.2	-0.9	-0.7

## CHINA

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
<b>Activity</b>									
Real GDP	2.2	8.1	7.9	4.9	4.0	4.8	-	-	-
Retail sales	-2.9	12.4	14.1	5.1	3.5	1.6	...	6.7	-3.5
Industrial production	3.4	9.3	9.0	4.9	3.9	6.3	...	7.5	5.0
PMI manufacturing (value)	49.9	50.5	51.0	50.0	49.9	49.9	50.1	50.2	49.5
<b>Foreign sector</b>									
Trade balance <sup>1,2</sup>	524	681	605	636	681	735	704	699	735
Exports	3.6	30.0	30.7	24.4	23.1	15.7	24.1	6.2	14.6
Imports	-0.6	30.1	44.1	25.4	23.6	9.5	19.8	10.4	-0.1
<b>Prices</b>									
Headline inflation	2.5	0.9	1.1	0.8	1.8	1.1	0.9	0.9	1.5
Official interest rate <sup>3</sup>	3.9	3.8	3.9	3.9	3.8	3.7	3.7	3.7	3.7
Renminbi per dollar	6.9	6.5	6.5	6.5	6.4	6.3	6.4	6.3	6.3

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 &amp; 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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
Retail sales (year-on-year change)	-0.8	5.4	12.6	2.4	4.1	...	8.4	5.0	...
Industrial production (year-on-year change)	-7.9	8.8	24.4	6.0	0.2	...	-1.5	2.0	...
Consumer confidence	-14.3	-7.6	-5.5	-4.6	-6.7	-12.0	-8.5	-8.8	-18.7
Economic sentiment	88.0	110.1	113.2	116.8	115.7	111.7	112.7	113.9	108.5
Manufacturing PMI	48.6	60.2	63.1	60.9	58.2	57.8	58.7	58.2	56.5
Services PMI	42.5	53.6	54.7	58.4	54.5	54.1	51.1	55.5	55.6
<b>Labour market</b>									
Employment (people) (year-on-year change)	-1.5	1.1	2.0	2.1	2.1	...	-	-	-
<b>Unemployment rate (% labour force)</b>	8.0	7.7	8.1	7.5	7.1	...	6.9	6.8	...
Germany (% labour force)	3.9	3.6	3.7	3.5	3.3	...	3.1	3.1	...
France (% labour force)	8.0	7.9	8.2	7.8	7.5	...	7.5	7.4	...
Italy (% labour force)	9.3	9.5	9.8	9.1	9.0	...	8.6	8.5	...
<b>Real GDP (year-on-year change)</b>	-6.5	5.6	14.6	4.1	4.7	5.0	-	-	-
Germany (year-on-year change)	-4.9	3.1	10.4	2.9	1.8	3.7	-	-	-
France (year-on-year change)	-8.0	7.4	19.1	3.5	5.5	5.3	-	-	-
Italy (year-on-year change)	-9.1	7.0	17.7	3.9	6.2	5.8	-	-	-

## Prices

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
General	0.3	2.6	1.8	2.8	4.6	6.1	5.1	5.9	7.4
Core	0.7	1.5	0.9	1.4	2.4	2.6	2.3	2.7	3.0

## Foreign sector

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
<b>Current balance</b>	2.1	2.6	3.1	3.2	3.3	3.2	3.2	3.0	...
Germany	7.1	7.4	8.1	8.1	7.9	7.8	7.2	7.2	...
France	-1.9	-0.6	-1.6	-1.2	-0.9	-0.9	-0.4	-0.4	...
Italy	3.8	2.4	4.3	4.1	4.0	3.8	1.0	0.9	...
<b>Nominal effective exchange rate<sup>1</sup> (value)</b>	93.9	94.2	94.9	94.0	92.7	92.2	92.3	92.7	91.7

## Credit and deposits of non-financial sectors

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	01/22	02/22	03/22
<b>Private sector financing</b>									
Credit to non-financial firms <sup>2</sup>	6.3	3.5	2.3	1.8	3.3	4.4	4.4	4.5	4.2
Credit to households <sup>2,3</sup>	3.2	3.8	3.9	4.1	4.1	4.4	4.3	4.4	4.5
Interest rate on loans to non-financial firms <sup>4</sup> (%)	1.2	1.2	1.2	1.3	1.1	...	1.2	1.1	...
Interest rate on loans to households for house purchases <sup>5</sup> (%)	1.4	1.3	1.3	1.3	1.3	...	1.4	1.4	...
<b>Deposits</b>									
On demand deposits	12.9	12.6	12.4	11.4	10.5	9.1	9.4	9.3	8.7
Other short-term deposits	0.6	-0.8	-0.6	-2.0	-1.5	-0.3	-0.2	-0.3	-0.3
Marketable instruments	8.2	11.4	12.2	10.2	9.2	0.7	0.8	-0.4	1.6
Interest rate on deposits up to 1 year from households (%)	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 securitization. 3. Including NPISH. 4. Loans of more than one million euros with a floating rate and an initial rate fixation period of up to one year. 5. Loans with a floating rate and an initial rate fixation period of up to one year.

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

## The Spanish economy shows resilience in an adverse context

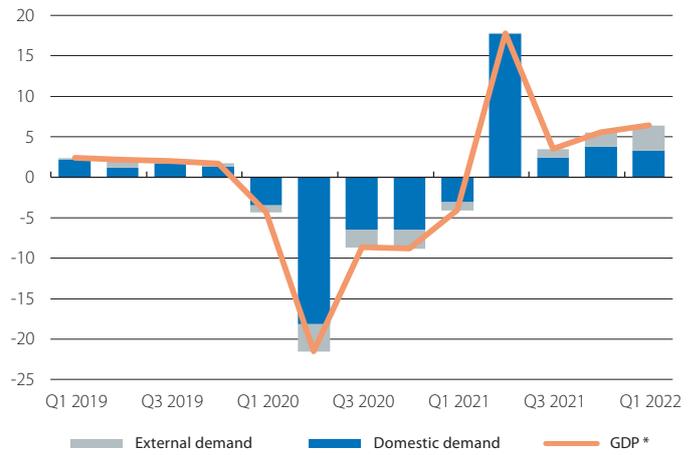
**GDP growth moderated to 0.3% quarter-on-quarter in Q1 2022.** In Q1 2022, conditioned first by the sixth wave of COVID-19 and later by the outbreak of the war in Ukraine and the increase in disruptions in industry due to the lorry strike, GDP growth weakened compared to the preceding quarter, with quarterly growth standing at 0.3% compared to the previous 2.2%, marking the most moderate growth rate in the last 12 months. In year-on-year terms, GDP was 6.4% above the level of Q1 2021 and 3.4% below the pre-pandemic level (Q4 2019). This slowdown was due to weak private consumption, which fell by 3.7% quarter-on-quarter, pushing it 9.8% below the pre-pandemic level. The rise in uncertainty and inflation, with a surge in the price of essential goods, led to a marked contraction in spending on durable consumer goods (-11.3% quarter-on-quarter). Conversely, investment in equipment and exports increased their contribution to GDP growth. Specifically, investment in equipment rose by 7.6% on a quarterly basis and exports by 3.4%, driven by tourism (+21.9 quarterly), which now stands at 95.3% of the level of Q1 2019.

**Ups and downs in the latest indicators.** On the downside, the crisis is taking a heavy toll on inflation and on the energy component of the trade balance, where the deficit in annual terms has reached its highest since 2015. The economic sentiment indicators, meanwhile, show mixed signals, with a slight recovery in April among consumers and the services sector, while it continues to recede in the case of industry. On the other hand, there were positive surprises in the form of the significant recovery in tourism and the resilience of the labour market, which, albeit at a more moderate pace, continue to create jobs.

**Headline inflation may have peaked in March, but core inflation is still on the rise.** According to the National Statistics Institute's flash estimate, there was a marked moderation in inflation in April, as it stood at 8.4% year-on-year (9.8% in March, the highest rate since 1985). While we await the breakdown by component, this reduction is most likely explained by the declines in electricity and fuel prices. The high energy prices continue to leak into the other components of the consumer price index. In particular, in April processed food prices pushed up core inflation (i.e. excluding the most volatile components), which climbed 1 point to 4.4%, the highest rate since December 1995. The agreement between Spain and Portugal and the European Commission to limit the price of gas used for electricity production to an average of €50/MWh over the next 12 months (a measure that has not yet entered into force) will help to contain inflationary pressures.

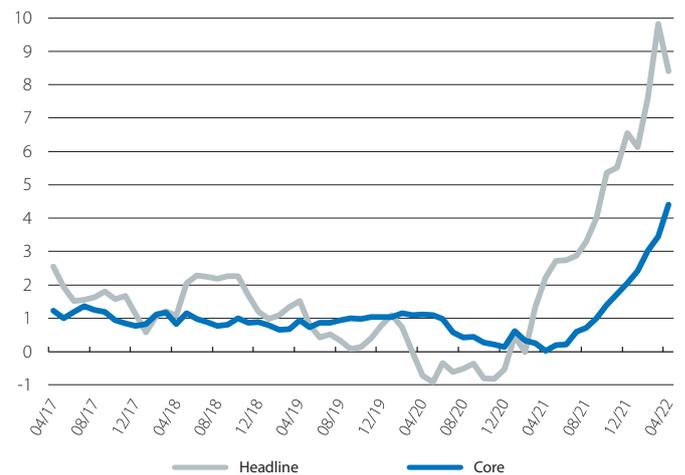
**Economic sentiment indicators, following the sharp deterioration in March, show a slight improvement.** The consumer confidence indicator published by the European

**Spain: GDP**  
Contribution to year-on-year growth (pps)



Note: \* Year-on-year change (%).  
Source: CaixaBank Research, based on data from the National Statistics Institute (CNTR).

**Spain: CPI**  
Year-on-year change (%)



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

**Spain: PMI**  
Level



Source: CaixaBank Research, based on data from Markit.

Commission improved slightly in April, +1.2 points to -27.1 points, while the services sector's PMI climbed 3.7 points to 57.1 points, its highest level since November 2021, thanks to the surge in activity following the lifting of COVID-related restrictions. However, the industrial sector is the one suffering the most at the hand of the rising costs and supply constraints. Hence, the manufacturing PMI posted a 0.9-point decline in April, bringing it to 53.3 points. This marks a 14-month low, albeit still in expansionary territory (above 50).

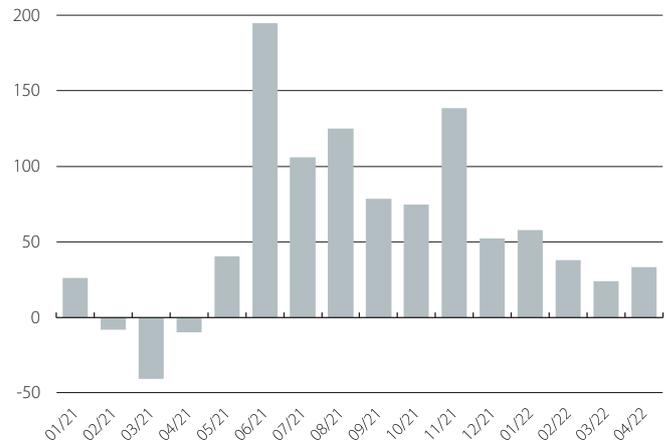
**The labour market exhibits a positive tone and recruitment on permanent contracts continues to grow.** Both the results of the Q1 2022 LFS and the rise in Social Security affiliation confirm the resilience of the labour market. The number of people in employment according to the LFS grew at a quarterly, seasonally adjusted rate of 1.08% and the unemployment rate stood at 13.65%, 2.3 pps less than a year earlier. Social Security affiliation, meanwhile, gathered pace in April, driven by the spike in the tourism sector over Easter, growing by 184,577 people compared to 134,396 in April 2021. In seasonally adjusted terms, job creation is once again on the rise following the moderation in the previous two months. For the first time, the total number of Social Security affiliates exceeds 20 million, standing at 20,019,080, which is 963,782 more than a year ago. One particularly encouraging aspect is the significant increase in permanent contracts, representing 48.5% of all the contracts registered in the month, compared with the typical level in the month of April of around 10%. This growth was driven by the conversion of temporary jobs into permanent ones following the three-month adaptation period for the labour reform's entry into force.

**The sharp deterioration in the energy trade balance counteracts the improvement in tourism revenues.** In the first two months of the year, the current account balance shows a deficit of 2,354 million euros, 35.9% more than in the same period of 2021. This deterioration is mainly explained by the widening of the energy deficit (-6,985 million compared to -3,110 million in 2021), in a context of a recovery in import volumes and a sharp rise in energy prices, which are 48.8% higher than in the first two months of last year.

**In contrast, the tourism sector shows a significant recovery, narrowing the gap separating it from the figures of 2019.** In particular, the surplus accumulated in the first two months of the year amounts to 4,639 million euros, compared to 281 million in 2021. The first indicators that have been revealed bode very well for the summer season. For now, overnight stays by foreigners in hotel accommodation establishments reached 81% of the pre-pandemic level in March (74.5% in February) and spending registered on foreign cards over Easter was 4% higher than in the same period in 2019. Also, tourist mobility is recovering and interest in travelling to Spain is rapidly picking up, as reflected by the number of flights operated at Spanish airports and Google searches on trips to Spain, which are already at levels similar to those of 2019.

**Spain: registered workers affiliated with Social Security \***

Month-on-Month change (thousands)



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

**Spain: trade balance**

12-month cumulative data (EUR millions)

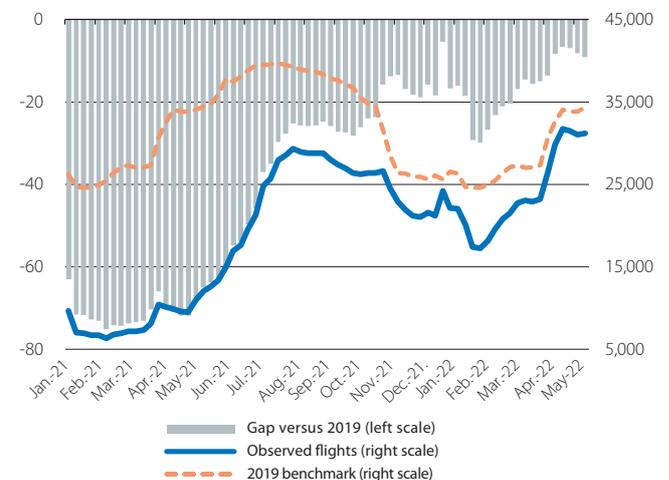


Source: CaixaBank Research, based on data from the Customs department.

**Spain: flights operated at Spanish airports**

Change versus 2019 (%)

Number of weekly flights



Source: CaixaBank Research, based on data from Eurocontrol.

## How might rising interest rates affect households' mortgage payments?

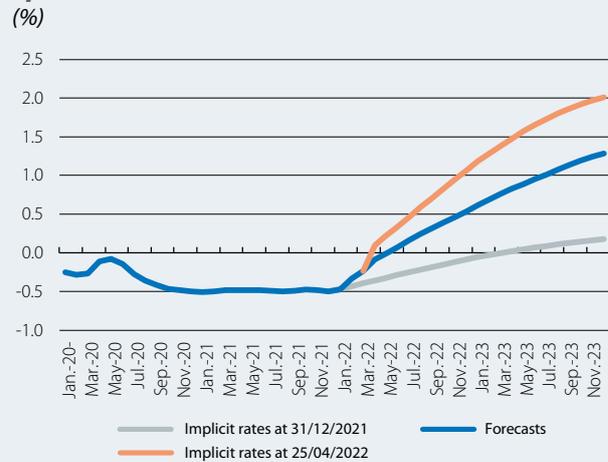
The rise in inflationary tensions in the euro area has triggered a major shift in the ECB's monetary policy. Expectations of official interest rate hikes are already being reflected in rates in the interbank market. Indeed, in mid-April, the 12-month Euribor entered positive territory after six years below zero, marking a significant increase compared to the low levels of last year (around -0.50% on average in 2021). The financial markets are expecting this upward trend to continue in the coming months, although the increases will be gradual and it should be borne in mind that the starting point was very low (see first chart).

Rising interest rates could take some of the steam out of the demand for housing by increasing the cost of mortgages associated with buying a home. To assess the extent to which housing demand could be affected, we calculated the expected trend in the theoretical mortgage burden ratio,<sup>1</sup> according to our current forecast scenario here at CaixaBank Research, which we recently revised following the invasion of Ukraine.<sup>2</sup> The main ingredients of this ratio are the forecasts for home prices, for the gross disposable income of the median household and those of mortgage interest rates.

According to our forecasts, the rise in home prices (which we expect to reach 3.5% in 2022, partly due to rising construction costs, before returning to a more moderate growth path from 2023 onwards) will be almost entirely offset by the increase in the gross disposable income of households as a whole, given the continued strength of job creation despite the recent downward revision due to the impact of the war in Ukraine (around 300,000 jobs per year on average in 2022-2023). On the other hand, the rise in mortgage interest rates will increase the burden ratio by around 3.2 pps in 2 years (from 33.4% of household income in Q4 2021 (latest available figure) to 36.6% in Q4 2023). This is a considerable increase, although the ratio is still a far cry from the levels reached during the housing crisis. However, the financial markets are currently anticipating somewhat more aggressive action by the ECB. In particular, as of 25 April 2022, the implicit market interest rates were anticipating that the 12-month Euribor interest rate would stand at 1.06% at the end of this year and at 2.0% at the end of 2023. Thus, if we use the implicit market interest rates as of mid-April,

1. The theoretical mortgage burden is a statistic published each quarter by the Bank of Spain which measures the percentage of income that the median household has to allocate to servicing mortgage payments in the first year after the acquisition of a standard home financed by a standard loan for 80% of the property value.  
 2. See the Focus «[The war between Russia and Ukraine will slow the recovery of the Spanish economy](#)» published in the MR04/2022.  
 3. For an analysis of the mortgage burden ratio according to the characteristics of households (income quintile, age group and mortgage contract year), see the article «[The financial situation of households during the COVID-19 crisis: this time it is different](#)», published in the Real Estate Sector Report for the first half of 2022 (content available in Spanish).

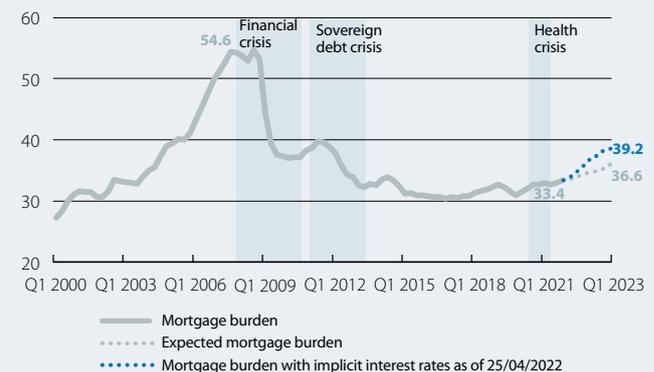
Spain: 12-month Euribor



Source: CaixaBank Research, based on data from Bloomberg.

Spain: theoretical mortgage burden

(% of the median household's gross disposable income)



Note: Amount of the median household's mortgage payments in the first year after the purchase of a standard home financed by a standard loan of 80% of the property value, expressed as a percentage of the household's annual disposable income.  
 Source: CaixaBank Research, based on data from the Bank of Spain.

the mortgage burden ratio shows a much steeper increase, climbing to 39.2% at the end of 2023 (see second chart).

In short, the expectation of interest rate hikes following the ECB's shift towards a strategy of monetary policy normalisation may somewhat cool the demand for housing, by increasing the mortgage burden of the median household in the first year after buying a home. In addition, rising interest rates will also tend to increase the mortgage burden of households that have already purchased their home on mortgage credit. Nevertheless, given the increased popularity of fixed-rate mortgages (which represented more than 60% of all those contracted in 2021, compared to less than 3% between 2003 and 2007), the rise in rates will have a limited impact on households who have taken out a mortgage in recent years.<sup>3</sup>

Judit Montoriol Garriga

## The significant savings of Spanish households will help mitigate the impact of the rise in inflation

The saving capacity of households is being reduced due to the rise in inflation. Nevertheless, the level of savings in 2021 was still high. Specifically, the savings rate in 2021 was 11.4% of gross disposable income (GDI), lower than in the year of the pandemic (14.9%) but still well above 2019 (8.3%). We are talking about 86.5 billion euros in gross savings: 24 billion euros less than in 2020, but 22 billion more than in 2019.

The fall in the saving rate last year is explained by the fact that nominal consumption increased by far more than GDI (6.7% vs. 2.2%, respectively). Looking ahead to this year, we expect that household consumption will continue to register significant growth in nominal terms, spurred by inflation, while GDI is also expected to enjoy steady growth but most likely at a slower pace. This could place the savings rate at around 7.0%, similar to the level registered in pre-pandemic years.

It should be noted that households' financing capacity fell significantly in 2021, from 68,700 million euros in 2020 to just 19,220 million in 2021. The reason for this reduction, besides the lower level of savings, was the sharp increase in investments made by households in 2021, particularly in housing: investment totalled 70 billion euros, practically 30 billion more than in 2020 and than the average for 2018-2019. There is no doubt that households used some of their savings in 2021 to invest in housing, in a context marked by low returns on deposits and favourable financial conditions. Indeed, it should be recalled that some 565,000 home sales were registered in 2021, the highest figure in the last 14 years.

### Strong household finances

One positive element worth emphasising is the fact that households' wealth continued to increase in 2021: at the end of 2021 their financial assets amounted to 2,695 billion euros, compared to 2,519 billion at the end of 2020. This increase of 176 billion can be broken down into a net acquisition of financial assets of 80 billion euros and a revaluation effect of 93.288 billion (the latter stands in contrast to the 20-billion-euro decline in asset values suffered in 2020).

What financial assets did households acquire in 2021? Looking at the different classes of financial assets, the volume allocated to deposits remained significant, albeit lower than in 2020, and there was a 25-billion-euro increase in investment funds (see third chart).

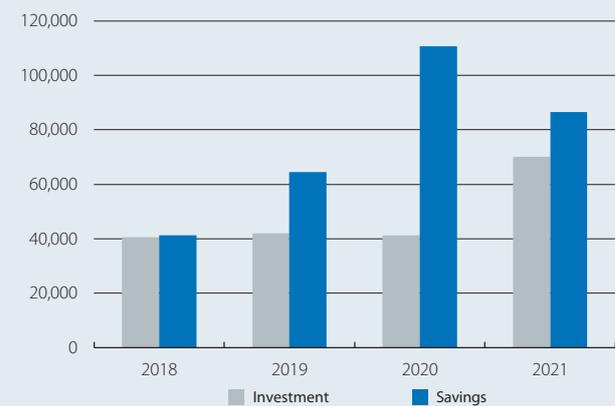
On the other hand, household debt barely changed, increasing by just 3.7 billion euros, bringing it to 704.1 billion (58.4% of GDP, 1.7 pps below the euro

**Spain: household savings rate**  
(% of gross disposable income)



Source: CaixaBank Research, based on data from the National Statistics Institute and internal forecasts.

**Spain: household savings and investment**  
(EUR millions)



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

**Spain: distribution of households' net acquisition of financial assets**  
EUR millions (flows)



Note: \* Includes non-transferable deposits, other shareholdings and commercial loans.  
Source: CaixaBank Research, based on data from the Bank of Spain.

area). This increase was driven by a rise in new loans of 6,690 million euros, partially offset by repayments amounting to 3,100 million.

Thus, households' net aggregate financial wealth (the difference between their assets and liabilities) rose in 2021 to 1.92 trillion, up 9.4% from the previous year, placing it at 159.7% of GDP, 2.9 points above the level of 2020. This healthy financial situation among households will prove helpful in overcoming the impact of the inflationary tensions.

*Javier García Arenas*

**Spain: households' financial balance sheet**  
(Percentage of GDP)



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

## Fill the tank? What Spanish households' spending at petrol stations tells us

The reader of this report will no doubt have noticed that it has cost more to fill the tank of their vehicle in recent weeks than before. The conflict in Ukraine has had a major impact on the global oil market, with Russia being one of the biggest producers,<sup>1</sup> triggering a sharp rise in fuel prices. This is also occurring following a period in which the demand for oil had plummeted during the pandemic, dragging prices down with it. But are all consumers reacting in equal measure?

To analyse this question, we have produced an indicator of monthly expenditure at petrol stations on the basis of the consumption registered by CaixaBank customers at these establishments.<sup>2</sup> The results show us that not everyone has adjusted their consumption in recent months in the same manner (see first chart).

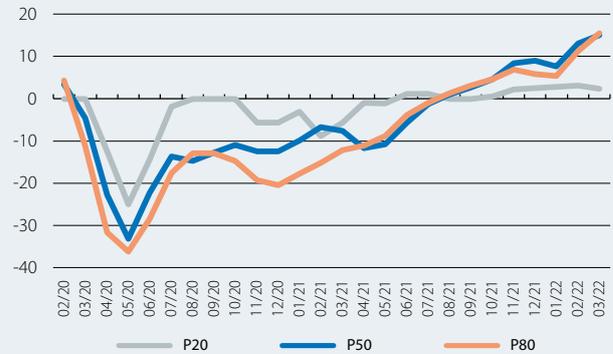
During the pandemic, there was a reduction in all levels of spending on fuel, including among both lower spenders (the 20<sup>th</sup> percentile) and higher spenders (50<sup>th</sup> percentile and above). As one would expect, the pattern of spending on fuel was closely correlated to the mobility restrictions imposed at the height of the pandemic (see second chart). Nevertheless, not everyone reacted in equal measure: in the month with the strictest mobility restrictions (April 2020), the amount spent on fuel fell by 13% in the 20<sup>th</sup> percentile, by 23% in the 50<sup>th</sup> percentile and by 32% in the 80<sup>th</sup> percentile.

In 2022, following the rise in fuel prices, not all consumers have reacted equally either. For the half of consumers spending the most, the amount spent on fuel was 15% higher in March 2022 than in the same month of 2019 (consumption in the 50<sup>th</sup> and 80<sup>th</sup> percentiles rose by almost the same proportion). However, in the case of customers spending less at the pump, there was little difference between the amount they spent in March 2022 and in March 2019. In the 20<sup>th</sup> percentile, for instance, the amount spent was just 2.3% higher, a much smaller increase than that observed among other customers as well as compared to the rise in the price of petrol.<sup>3</sup>

These results are indicative of how some consumers adjust their fuel consumption more than others

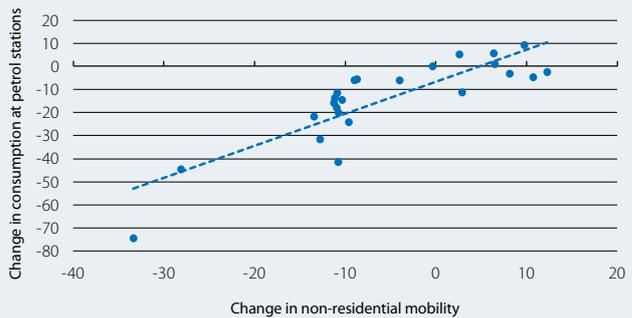
1. For further details, see the Focus «[Russia puts the global outlook for oil in check](#)» in the MR04/2022.  
 2. To calculate the monthly consumption at petrol stations, we add up all the purchases carried out by card by each customer at these establishments throughout the month, regardless of the number of times they have filled up.  
 3. In contrast, the liquid fuel component of the CPI for March 2022 was 63% higher than in March 2019.

**Spain: monthly consumption at petrol stations**  
 Monthly change versus the same month in 2019 (%)



Notes: Aggregate amount spent at petrol stations by individual customers each month. 2-month moving average.  
 Source: CaixaBank, based on internal data.

**Spain: correlation between mobility and consumption at petrol stations**  
 (%)



Notes: Monthly data between March 2020 and February 2022. In both cases, the figures correspond to the change relative to a baseline level. In the case of mobility, the baseline level corresponds to the average mobility registered on the same day of the week between 3 January and 6 February 2020. In the case of consumption at petrol stations, the baseline level corresponds to that of January 2020.  
 Source: CaixaBank, based on internal CaixaBank data (consumption at petrol stations) and data from the Google Mobility Report (non-residential mobility).

following a rise in prices, either because they have less purchasing power or because they can substitute their consumption with something else. Over the coming months we will analyse how the temporary cut in fuel prices of 20 cents per litre,<sup>4</sup> which was approved by the government in late March, has altered the spending habits of different consumers.

Alberto Graziano, Eduard Llorens and Josep Mestres

4. For more details on this measure, see the Focus «[Key points of the Action Plan: what measures will be taken in Spain to alleviate the impact of the war in Ukraine?](#)» in the MR04/2022.

## Activity and employment indicators

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
<b>Industry</b>									
Industrial production index	-9.4	8.7	28.5	2.0	1.6	-	3.0	...	...
Indicator of confidence in industry (value)	-13.6	0.6	-0.2	2.3	4.9	6.9	9.6	4.5	-1.1
Manufacturing PMI (value)	47.5	57.0	59.2	58.9	56.9	55.8	56.9	54.2	53.3
<b>Construction</b>									
Building permits (cumulative over 12 months)	-12.8	4.7	-1.8	15.0	24.6	-	32.7	...	...
House sales (cumulative over 12 months)	-12.5	9.6	0.7	22.3	32.4	-	43.1	...	...
House prices	2.1	3.7	3.3	4.2	6.4	...	-	-	-
<b>Services</b>									
Foreign tourists (cumulative over 12 months)	-77.3	64.7	-75.8	-34.5	64.7	...	225.4	...	...
Services PMI (value)	40.3	55.0	58.8	59.6	57.4	52.2	56.6	53.4	...
<b>Consumption</b>									
Retail sales	-7.1	5.1	20.4	-0.4	0.6	0.3	0.9	-4.2	...
Car registrations	-29.3	158.0	661.0	-24.5	-17.1	-7.5	6.6	-30.2	...
Consumer confidence index (value)	-22.8	-13.3	-11.1	-9.1	-10.8	-16.2	-9.4	-27.3	...
<b>Labour market</b>									
Employment <sup>1</sup>	-2.9	3.0	5.7	4.5	4.3	4.6	-	-	-
Unemployment rate (% labour force)	15.5	14.8	15.3	14.6	13.3	13.6	-	-	-
Registered as employed with Social Security <sup>2</sup>	-2.0	2.5	3.9	3.8	3.9	4.5	4.5	4.8	...
<b>GDP</b>	<b>-10.8</b>	<b>5.1</b>	<b>17.8</b>	<b>3.5</b>	<b>5.5</b>	<b>6.4</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Prices

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
General	-0.3	3.1	2.6	3.4	5.8	7.9	7.6	9.8	8.4
Core	0.7	0.8	0.1	0.8	1.7	3.0	3.0	3.4	4.4

## Foreign sector

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
<b>Trade of goods</b>									
Exports (year-on-year change, cumulative over 12 months)	-10.0	21.2	8.7	15.2	21.2	-	27.5	...	...
Imports (year-on-year change, cumulative over 12 months)	-14.7	24.8	3.3	13.5	24.8	-	35.2	...	...
<b>Current balance</b>	<b>9.3</b>	<b>11.3</b>	<b>9.2</b>	<b>11.6</b>	<b>11.3</b>	<b>-</b>	<b>10.7</b>	<b>...</b>	<b>...</b>
Goods and services	16.5	18.2	17.1	19.2	18.2	-	16.8	...	...
Primary and secondary income	-7.3	-6.9	-7.9	-7.7	-6.9	-	-6.1	...	...
<b>Net lending (+) / borrowing (-) capacity</b>	<b>13.7</b>	<b>22.3</b>	<b>15.2</b>	<b>19.7</b>	<b>22.3</b>	<b>-</b>	<b>22.4</b>	<b>...</b>	<b>...</b>

## Credit and deposits in non-financial sectors<sup>3</sup>

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
<b>Deposits</b>									
Household and company deposits	7.5	6.1	4.9	4.8	5.8	-	5.0	5.5	...
Sight and savings	12.3	10.3	9.2	8.9	9.2	-	9.2	9.6	...
Term and notice	-16.5	-24.4	-23.5	-26.0	-27.6	-	-26.7	-26.3	...
General government deposits	1.0	15.5	16.3	15.1	19.4	-	19.1	18.5	...
<b>TOTAL</b>	<b>7.1</b>	<b>6.7</b>	<b>5.5</b>	<b>5.5</b>	<b>6.6</b>	<b>-</b>	<b>5.8</b>	<b>6.2</b>	<b>...</b>
<b>Outstanding balance of credit</b>									
Private sector	1.2	0.3	-0.4	-0.7	-0.1	-	0.3	-0.1	...
Non-financial firms	4.9	1.1	-0.7	-1.9	-0.9	-	-0.2	-1.3	...
Households - housing	-1.8	0.2	0.0	0.6	1.0	-	1.2	1.3	...
Households - other purposes	0.8	-1.2	-0.7	-1.2	-1.2	-	-1.1	-1.2	...
General government	3.0	15.3	17.4	22.7	11.6	-	4.5	2.4	...
<b>TOTAL</b>	<b>1.3</b>	<b>1.1</b>	<b>0.6</b>	<b>0.7</b>	<b>0.6</b>	<b>-</b>	<b>0.5</b>	<b>0.0</b>	<b>...</b>
<b>NPL ratio (%)<sup>4</sup></b>	<b>4.5</b>	<b>4.3</b>	<b>4.5</b>	<b>4.4</b>	<b>4.3</b>	<b>...</b>	<b>4.3</b>	<b>...</b>	<b>...</b>

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: resilience in a challenging environment

**In Q1 2022, GDP exceeded its pre-COVID level by 1.2%.** Surprisingly, GDP grew by 2.6% quarter-on-quarter and by 11.9% year-on-year thanks to the strength of private consumption and the recovery in tourism. This result suggests that our current forecast for GDP growth for the year as a whole (4.2%) may prove to be too conservative. However, given the risk of a deterioration due to the impact of the conflict in Ukraine and the cooling of demand from the country’s European partners, we prefer to adopt a more conservative stance and not alter our forecasts for 2022, for now. The first indicators relating to Q2, meanwhile, do not show any signs of cooling. For instance, the daily economic activity indicator rose by 10.3% in April and the sentiment indicators have improved slightly compared to March. On the supply side, the economic climate indicator recovered 1 decimal point in April compared to March, thanks to improvements in sentiment in industry, services and retail, which more than offset the worsening of sentiment in the construction sector. The lower optimism in this latter sector is driven by a decline in the order book. In industry, there was an improvement in confidence to -1.5 points from the -4 points of March, thanks to a more positive outlook for production over the next three months and a slightly less negative level in global demand. The lack of commodities continues to be a major obstacle for industrial production, but it is not any worse than it was in the closing months of 2021 or in the first months of 2022.

**No let up in the consumer price rally in April.** The 7.2% year-on-year change in the CPI is the highest increase since March 1993. The energy component remains the main driver of this price increase, as has been the case since mid-2021, with its year-on-year increase now as high as 26.7% (19.8% in March). The other most volatile component of the CPI basket, that of unprocessed foods, also shows a high growth rate, at 9.5% (5.8% in March). All the data suggest that the inflationary pressures will remain high in the coming months: the conflict in Ukraine is applying pressure on energy and various commodity prices, the lockdowns in China are impeding the normalisation of logistics chains and the prices of industrial products registered a significant year-on-year rally in March (26.3%).

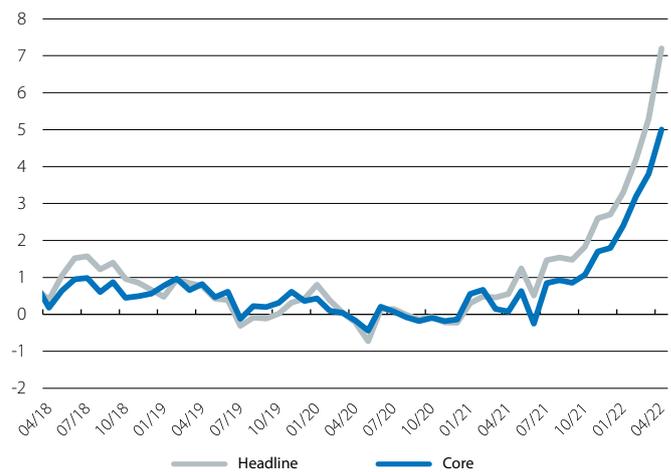
**The labour market, so far, remains unaffected by the geopolitical tensions.** Unemployment registered in job centres fell in March to below pre-pandemic levels, with a total of 326,251 people out of work. This represents 7,500 fewer people than in March 2019 and a reduction of 5.2% compared to February of this year (-18,000 people unemployed). This fall is largely explained by four sectors: accommodation and catering, real estate, administrative and support services, retail and construction. Unemployment in

**Portugal: GDP**  
Index (100 = Q4 2019)



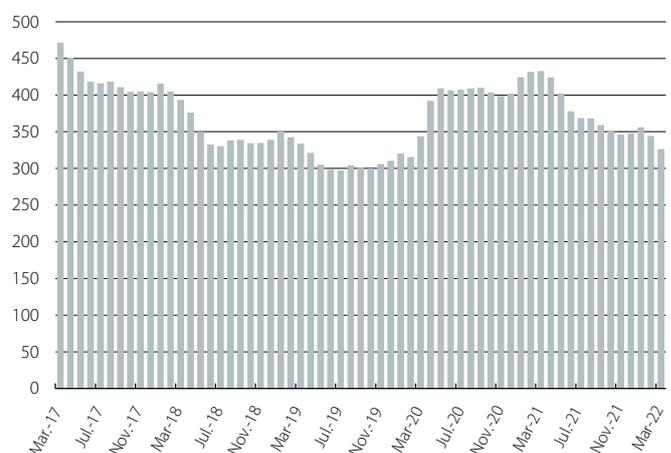
Source: CaixaBank Research, based on data from the National Statistics Institute of Portugal.

**Portugal: CPI**  
Year-on-year change (%)



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

**Portugal: unemployment registered in job centres**  
(Thousands of people)



Source: CaixaBank Research, based on data from the IEFP.

the construction and retail industries are already below pre-pandemic levels, consistent with the current labour shortages in these sectors. The latest data, meanwhile, indicate that the unemployment rate in February remained at 5.8% for the third consecutive month, with employment growth at 4.2% year-on-year and 2.7% compared to the pre-COVID period. There may be a slowdown in employment growth during the course of 2022, as a result of companies' reduced hiring plans in the face of rising energy and commodity costs.

**The central government funding needs are reduced in 2022.**

According to the General Government Budget for 2022, the funding needs will amount to 23 billion euros, 4 billion less than in 2021. Up to April, the Treasury has issued 8.3 billion euros in bonds, equivalent to 36% of the total funding needs. The average term of the issues is around 13.5 years and their average cost is around 1.26%. The ECB continues to be a major buyer of public debt, having bought 2.8 billion euros up to the end of Q1. By the end of the year we estimate that the ECB will have bought between 5 and 6 billion euros, equivalent to around 20-25% of the year's funding needs.

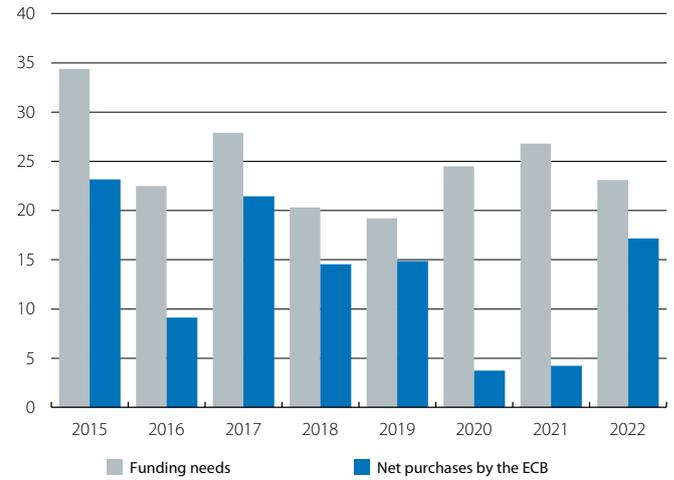
**The war aggravates the imbalance in the current account.**

In the first two months of the year, the external deficit deteriorated by around 810 million euros compared to the same period in 2020, bringing it to 1,023 million euros. The deterioration of the deficit in the balance of goods is the main factor behind this trend, owing to the rise in import prices, especially in the case of energy goods. Although it is insufficient to offset the worsening of the deficit in the balance of goods, the recovery in tourism was reflected in an improvement in the surplus of the tourism balance, bringing it close to that recorded in the same period of 2019. Specifically, in January and February the tourism balance stood at 1,118 million euros, just 100 million less than in the first two months of 2019. For the year as a whole, we anticipate that the current account deficit will increase to 2.2% of GDP (see the Focus «[In Portugal, the war in Ukraine \(also\) means a setback in the current account deficit](#)» on our website).

**The banks forecast an increase in demand for credit in Q2.**

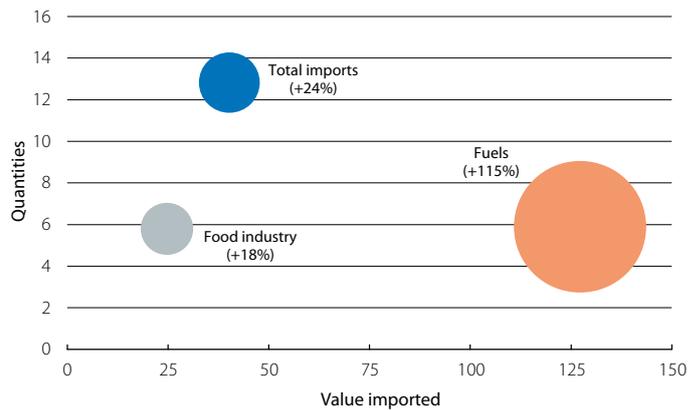
The banks have reported an increase in demand from SMEs and a reduction in the case of large corporations in Q1. In turn, demand from individuals has increased for both consumer credit and other purposes. For Q2, the banks anticipate an increase in demand from SMEs, especially in the case of short-term loans, as well as from individuals, both for home purchases and for consumption. With regard to the concession criteria, the banks have revealed slightly less restrictive criteria for consumer credit and other purposes, and stable criteria for the remaining credit segments in Q1 this year. For Q2, the banks anticipate slightly more restrictive criteria only for loans to SMEs. The results of this survey suggest that the level of indebtedness could continue to rise. In February, the debt of the non-financial private sector amounted to 428.6 million euros (280.3 million for non-financial companies and 148.3 million for individuals), 1.7 million more than at the end of 2021.

**Portugal: central government funding needs (EUR billions)**



Source: CaixaBank Research, based on data from the IGCP, the VCE and Portugal's 2022 General Government Budget.

**Portugal: imports of goods in January-February 2022**  
Year-on-year change (%)

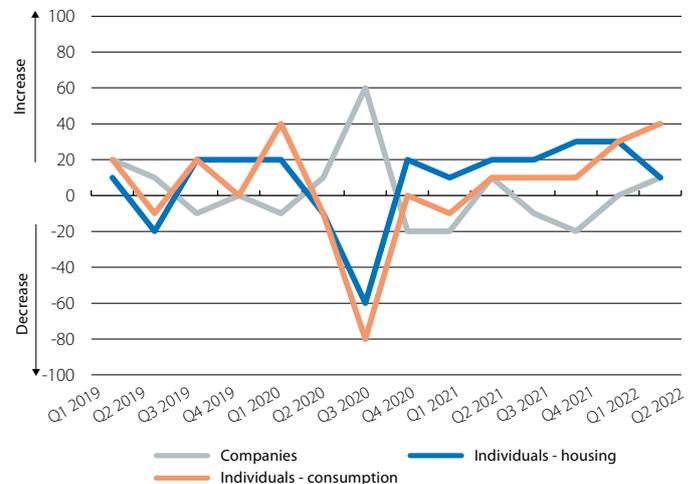


Note: The size of the circles represents the year-on-year change in the unit price of imports, with the figure shown in brackets.

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

**Portugal: demand for credit**

Diffusion index



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

## Activity and employment indicators

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
Coincident economic activity index	-5.4	2.6	2.3	4.8	5.3	5.6	5.6	5.5	...
<b>Industry</b>									
Industrial production index	-6.9	4.5	25.0	-4.7	-1.5	-2.3	-4.1	0.5	...
Confidence indicator in industry ( <i>value</i> )	-15.8	-5.7	-5.0	-1.5	-2.7	-1.2	-0.5	-1.6	-1.6
<b>Construction</b>									
Building permits - new housing (number of homes)	0.7	12.6	-28.7	-0.9	-7.2	...	27.5	...	...
House sales	-11.2	20.5	58.2	22.1	17.2	...	-	-	-
House prices ( <i>euro / m<sup>2</sup> - valuation</i> )	8.3	8.6	8.5	8.7	11.0	11.5	11.9	12.1	...
<b>Services</b>									
Foreign tourists ( <i>cumulative over 12 months</i> )	-76.2	52.0	-74.2	-38.7	52.0	259.0	175.9	259.0	...
Confidence indicator in services ( <i>value</i> )	-21.6	-2.9	-9.9	5.5	11.9	9.5	9.1	8.8	14.6
<b>Consumption</b>									
Retail sales	-3.0	4.9	16.5	3.1	7.3	12.7	17.2	10.0	...
Coincident indicator for private consumption	-6.2	4.3	4.4	7.0	6.6	5.1	5.2	4.5	...
Consumer confidence index ( <i>value</i> )	-22.4	-17.2	-17.3	-13.6	-13.5	-19.3	-17.1	-22.1	-27.2
<b>Labour market</b>									
Employment	-1.9	2.8	4.5	4.7	3.1	...	4.6	3.7	...
Unemployment rate (% <i>labour force</i> )	7.0	6.6	6.7	6.1	6.3	...	5.6	5.7	...
<b>GDP</b>	<b>-8.4</b>	<b>4.9</b>	<b>16.5</b>	<b>4.4</b>	<b>5.9</b>	<b>11.9</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Prices

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
General	0.0	1.3	0.8	1.5	2.4	4.3	4.2	5.3	7.2
Core	0.0	0.8	0.2	0.9	1.5	3.1	3.2	3.8	5.0

## Foreign sector

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
<b>Trade of goods</b>									
Exports ( <i>year-on-year change, cumulative over 12 months</i> )	-10.3	18.2	9.5	13.4	18.2	...	23.0	...	...
Imports ( <i>year-on-year change, cumulative over 12 months</i> )	-14.8	21.4	1.8	10.3	21.4	...	31.7	...	...
<b>Current balance</b>	<b>-2.1</b>	<b>-2.4</b>	<b>-1.6</b>	<b>-1.9</b>	<b>-2.4</b>	<b>...</b>	<b>-3.2</b>	<b>...</b>	<b>...</b>
Goods and services	-3.9	-5.6	-4.1	-4.4	-5.6	...	-6.5	...	...
Primary and secondary income	1.7	3.2	2.5	2.5	3.2	...	3.3	...	...
<b>Net lending (+) / borrowing (-) capacity</b>	<b>0.0</b>	<b>1.4</b>	<b>0.6</b>	<b>1.5</b>	<b>1.4</b>	<b>...</b>	<b>0.2</b>	<b>...</b>	<b>...</b>

## Credit and deposits in non-financial sectors

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

	2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	02/22	03/22	04/22
<b>Deposits<sup>1</sup></b>									
Household and company deposits	10.0	9.3	8.6	8.7	9.3	8.9	8.3	8.9	...
Sight and savings	18.8	16.3	15.3	15.5	16.3	15.3	14.2	15.3	...
Term and notice	1.2	1.2	1.0	1.0	1.2	1.1	1.4	1.1	...
General government deposits	-21.0	-4.1	-15.0	-5.2	-4.1	9.8	-2.1	9.8	...
<b>TOTAL</b>	<b>8.9</b>	<b>9.0</b>	<b>7.7</b>	<b>8.2</b>	<b>9.0</b>	<b>8.9</b>	<b>8.0</b>	<b>8.9</b>	<b>...</b>
<b>Outstanding balance of credit<sup>1</sup></b>									
Private sector	4.6	2.9	4.4	4.2	2.9	2.8	2.7	2.8	...
Non-financial firms	10.5	2.2	7.2	5.8	2.2	1.2	1.6	1.2	...
Households - housing	2.1	3.3	2.6	3.3	3.3	3.0	2.9	3.0	...
Households - other purposes	-1.1	3.1	3.0	3.2	3.1	6.4	4.7	6.4	...
General government	-4.2	3.8	4.5	4.1	3.8	5.4	6.0	5.4	...
<b>TOTAL</b>	<b>4.2</b>	<b>2.9</b>	<b>4.4</b>	<b>4.2</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>	<b>2.9</b>	<b>...</b>
<b>NPL ratio (%)<sup>2</sup></b>	<b>4.9</b>	<b>3.6</b>	<b>4.3</b>	<b>4.0</b>	<b>3.6</b>	<b>...</b>	<b>-</b>	<b>-</b>	<b>-</b>

Notes: 1. Residents in Portugal. The credit variables exclude securitisations. 2. Period-end figure.

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

## Inflation on the rise: will wages follow?

In recent months we have seen inflation rise to historic levels on both sides of the Atlantic. In addition, in the US the rising prices have been accompanied by substantial wage increases, a worrying trend given the danger of a feedback loop. In addition to this is the inflationary pressure exerted by the war between Russia and Ukraine, on the one hand through the rise in energy prices and, on the other, due to the effect that uncertainty could have on the economic recovery, especially in Europe. This set of elements undoubtedly complicates what is already a complex process of monetary normalisation for the Fed and the ECB, following the ultra-accommodative measures they introduced back in March 2020. Of all these elements, in this article we will look at the dangers of a possible wage-price spiral in the current context.

### Rising inflation: the pandemic and energy

Inflation rates in the US and the euro area have reached levels not seen in recent decades (8.5% and 7.5%, respectively, in March 2022). This situation is largely due to a series of imbalances generated by the pandemic. In particular, the reopening of the economy in 2021, coupled with relatively strong demand thanks to the support provided by economic policies, has come up against a supply that has been weakened by the disruptions associated with COVID. Although this imbalance between supply and demand ought to fade thanks to the improvement in the health context, the fact is that it has persisted for longer than expected. Moreover, new lockdowns in China in the face of recent outbreaks may increase tensions in global supply chains, thus affecting supply.

This situation of high inflation has also been fuelled by sharp rises in energy prices in global markets since 2021, which in turn have been driven by factors such as low gas reserves in Europe, at a time when Russia was reducing its supply in the gas spot market, and an increase in China’s energy imports due to problems at its coal mines – factors which have only been exacerbated this year with the war in Ukraine. The futures markets anticipate that the pressure on energy prices is here to stay.

### Wages and inflation: a two-way relationship

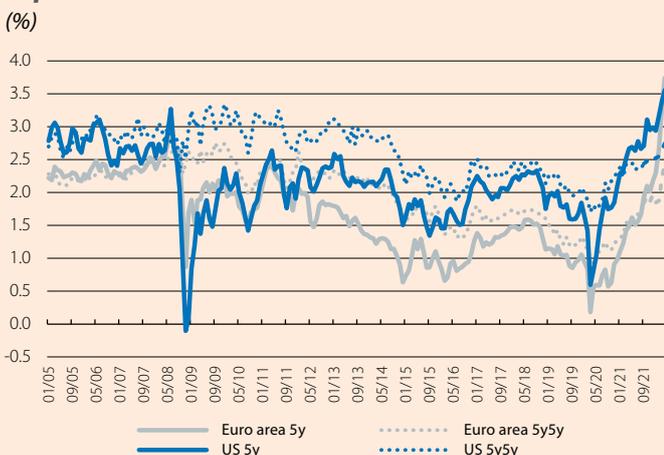
With these recent high inflation rates and the prospect of a certain degree of continuity during the remainder of 2022, one of the current concerns lies in the much-feared «second-round effects». That is, workers demand higher wages in order to maintain their purchasing power (in the face of past and/or future price increases). In the current context of supply shortages and rising logistics and energy costs, such wage increases add pressure to already dwindling business margins. Thus, firms could end up raising prices, which in turn would lead to renewed wage demands, triggering a «wage-price spiral» like that of the 1970s in the US.

In this two-way relationship between wages and prices, one of the key elements is that of inflation expectations, since the expected evolution of prices in the future is what drives wage demands. That is why the central banks pay such close attention to these expectations and strive to keep them anchored (or stable), close to their inflation target.

What has happened to inflation expectations in recent months? Very long-term inflation expectations based on financial instruments have risen, both in the euro area and in the US, but still within a reasonable range. In the US, longer-term expectations (five-year five-year) have risen from around 2% in December 2019 (before the pandemic) to around 2.7% at the end of April 2022. In the euro area, the rise has been larger still, from 1.3% to 2.4% over the same period. However, although they have increased, we could say they have remained relatively well-anchored, (see left-hand panel of the first chart).

Nevertheless, expectations according to consumer surveys (particularly relevant when assessing the risk of wage-price spirals) have increased more substantially, although the rise is more pronounced in the case of short-term expectations (1 year in the future) than in

### US and euro area: long-term inflation expectations



Note: Expectations based on 5-year (5y) financial instruments and 5-year 5-year (5y5y) financial instruments.

Source: CaixaBank Research, based on data from Bloomberg.

### US: consumer inflation expectations (1-year and 3-year)



Notes: Expectations based on consumer surveys: what they expect 1 year (1y) in the future and 3 years (3y) in the future.

Source: CaixaBank Research, based on data from the Fed and the University of Michigan, via Refinitiv.

medium-term expectations (3 years in the future), providing some peace of mind (at least for now). In particular, in the case of the US, where consumer surveys ask respondents about their expectations for both of these time horizons, at the end of 2019 the responses for both 1-year and 3-year expectations were around 2.5%. Today, in contrast, 1-year expectations are just over 6.5%, compared to just over 3.5% in the case of 3-year expectations (see right-hand panel of the first chart). In the euro area, the European Commission's consumer surveys only ask about 1-year expectations, and in this case the average value has risen from 4.5% in Q4 2019 to around 9% in Q1 2022. This increase in short-term expectations is due to the fact that they are more closely linked to current events (such as the bottlenecks or the Ukraine crisis). In contrast, medium-term expectations are often more closely linked to central banks' credibility and their ability to meet their objectives.

### Wages and inflation: other contributing factors

The recent path of inflation and future price expectations are not the only elements we must look at when analysing the current risks of second-round effects. There are other factors that also play an important role. Firstly, in recent decades the relationship between nominal wages and prices (or price expectations) has weakened due to phenomena such as globalisation, technology and the reduction in the proportion of workers employed in highly unionised sectors, all of which have reduced workers' bargaining power (see second chart). Also, the slowdown in labour productivity in advanced countries has contributed to the weakening of the price-wage relationship. Current developments in some of these factors, such as a slowdown in the process of globalisation (or even some reversal) or an increase in the relative weight of unions in a country like the US, could restrengthen the wage-price relationship. Others, such as the new technological advances as part of the Industrial Revolution 4.0, will continue to weaken the relationship.

On the other hand, it is important to differentiate between what is going on in Europe versus the US. Specifically, the biggest nominal wage increases seen so far in advanced countries have been fairly limited to the US. In the euro area, hourly wage costs in Q4 2021 rose by 1.9% year-on-year (in the EU as a whole they rose by just over 2%, while in Spain they increased by 1.2%), and the latest collective wage negotiations do not show substantial increases (2.4%, for example, in the case of Spain in March, a figure which incorporates both new negotiations and agreements already negotiated previously). In the US, meanwhile, in March 2022 wages rose by 5.6% year-on-year, according to the establishment survey conducted by the US Bureau of Labor Statistics (BLS). These differences reflect the fact that the US labour market is currently tightened due to the rigidity of the supply of labour in recent months – a phenomenon that is rare in a market as efficient as the US and which has not materialised in most European countries.<sup>1</sup>

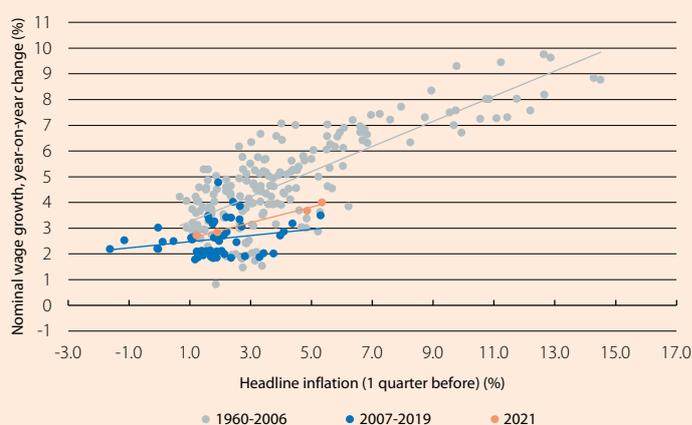
Even in the case of the US, however, the figures should be taken with caution. Some wage surveys are severely affected when there are significant inflows (and outflows) of workers, as has been the case during the pandemic. To avoid this variability, for a number of years now the BLS itself has been developing an employment cost index which keeps the composition of the labour force constant, thus providing a more reliable picture of changes in wages. According to this index, although the growth rate of this wage measure has increased, it is at somewhat more contained levels than those of other wage indicators, at around 4% as of the end of 2021.

Despite the latest increases, in real terms the remuneration of American workers is below pre-COVID levels and lies around 3% below where it would have been had the pre-pandemic growth trend continued. Also, since the 1980s the real wages of low- and mid-low-income workers in the US have barely increased.<sup>2</sup> In fact, even in recent years the wages in real terms of many workers in Europe, such as in Italy, Spain and Portugal, have remained flat.<sup>3</sup>

In short, in a context in which companies are suffering a decline in their margins as a result of the energy shock and the disruptions in global supply chains, and with workers affected by the recent high inflation rates as well as by more structural phenomena that have moderated their wage rises in recent years, a balanced deal between wage increases and corporate margins is needed. However, balancing the different preferences of all the agents involved will not be an easy task, given that we are still far from regaining normality following the series of shocks endured over the last two years.

Clàudia Canals

### US: nominal wage growth versus inflation



**Notes:** Quarterly data. Historical data on nominal wages based on employee compensation and total employees. From 2007 to 2019, wage data from the BLS. The data for 2021 correspond to the employment cost index, with a constant composition of employment. Inflation corresponds to the CPI. The lines correspond to the linear relationship between the two variables in the different time periods.  
**Source:** CaixaBank Research, based on data from the BLS and the BEA, via Refinitiv.

1. See the Focus «[The Great Resignation: paradigm shift in the US labour market?](#)» in the MR02/2022.

2. See S.A. Donovan and D.H. Bradley (2019). «Real Wage Trends, 1979–2018». Washington DC: Congressional Research Service.

3. In the case of Italy and Spain, real wages actually declined between 2000 and 2020 (according to OECD data: [https://stats.oecd.org/viewhtml.aspx?datasetcode=AV\\_AN\\_WAGE&lang=en](https://stats.oecd.org/viewhtml.aspx?datasetcode=AV_AN_WAGE&lang=en)).

## Wage dynamics: another concern for the ECB?

Wage dynamics are a very important variable for the [ECB's monetary policy](#). Indeed, the ECB's mandate is to ensure price stability, and wages are a key determinant of inflation: in the medium term, wages affect the evolution of prices, both on the supply side (because rising wages increase the cost of goods and services) and on the demand side (as higher wages increase the demand for goods and services, and hence their price).

In the current context of high inflation due to rising energy prices, one of the big questions is whether the increase in prices will spread to wages. Unsustainable wage increases could feed back into inflation, which would be an additional source of concern for the ECB. *A priori*, second-round effects (inflation spreading to wage rises) are less likely in a context of inflation triggered by an energy shock in a globalised world like ours, as it squeezes business margins and companies have less capacity to increase prices and wages. Thus, we must pay attention to current wage dynamics in the euro area and consider what path they might follow in the future.

### Wages, for now, remain contained

In the euro area, observing the evolution of wages is a somewhat more complicated task than in other advanced economies. The main problem we face is the delay in the publication of the data. Whereas in the US, for example, information on hourly wages is published every month on the first Friday of the following month; in the euro area, Eurostat's quarterly labour cost indicator is published two and a half months after each quarter end. Thus, as of the date of this article's publication, the latest data available in this series is that of Q4 2021.<sup>1</sup>

With this in mind, we can see in the first chart that the year-on-year growth in wages in Q4 2021 was 1.6%. This is a somewhat contained level; as a benchmark we can refer to the criteria established by Phillip Lane, the ECB's chief economist, according to which a 3.0% wage increase would be consistent with medium-term inflation of 2.0%, precisely the ECB's target.<sup>2</sup> This lower buoyancy in wages compared to in the US (+5.6% year-on-year in March) is due, among other factors, to the job-preservation mechanisms implemented during the pandemic in the euro area (such as Spain's ERTE furlough scheme). While these measures were highly effective in maintaining employment and avoiding drastic reductions in household incomes, when the economy finally reopened they did not allow workers to enjoy the wage rises that usually accompany job changes.<sup>3</sup>

### Euro area: evolution of wages and labour costs

Year-on-year change (%)



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

### The current high inflation and the low unemployment rate could push wages up

For now, wages are still contained, but how will they evolve in the future? To answer this question, we analyse their relationship with the main determining factors: the unemployment rate, inflation expectations and past inflation.<sup>4</sup>

The rise in inflation observed since the end of 2021 and the increase in medium-term inflation expectations could contribute to more dynamic wages in the coming quarters (it should be noted that price increases do not generally spread to wages immediately, as there is an adjustment period).

1. Another important issue to consider is the disparity between different countries, as the labour market in the EU is not as integrated as it is in the US and there are marked differences between countries, both in the unemployment rate and in terms of wages.

2. In this regard, the ECB has been assuring since July last year that it will not raise interest rates until it projects 2% inflation in the final year of its forecasting horizon, currently 2024. This is not quite the case for the moment, though, as the institution currently places inflation at 1.9% in 2024.

3. The OECD quantifies the wage increases obtained by US workers who moved jobs as amounting to four times those received by workers who stayed in their existing jobs. See O. Causa *et al.* (2021). «Labour market transitions across OECD countries: Stylised facts». OECD Economics Department Working Papers, n° 1692, OECD Publishing, Paris.

4. There are many other factors that determine wages, such as globalisation and institutional design, but for the calculations that follow we will focus on the more classic ones, in line with the approach taken by the IMF. See «Chapter 2: Recent Wage Dynamics in Advanced Economies: Drivers and Implications», World Economic Outlook, October 2017.

The inflation outlook also poses an upside risk for wages: we expect inflation to remain high in the euro area during the middle of the year, although it should gradually moderate (even in a scenario in which energy prices remain at their current levels, eventually the year-on-year inflation rate would fall due to base effects). Based on the historical relationship between inflation and wages, if average inflation in 2021 and 2022 were to be around 4.7% (the average rate consistent with our current inflation forecasts), this would imply a wage growth 0.54 pps higher in 2023, in year-on-year terms, than we would see if inflation were to average 2% between 2021 and 2022. Also, if we assume that this higher inflation would cause medium-term inflation expectations to move above target, increasing them by, say, 1.5 pps to 3.5%, then wage growth in 2023 would be 0.42 pps higher than in a scenario in which expectations remain anchored at 2%. Combining these two effects, wage increases in 2023 would be approximately 1 pp higher than they would be in a situation with controlled inflation and expectations anchored at 2%.

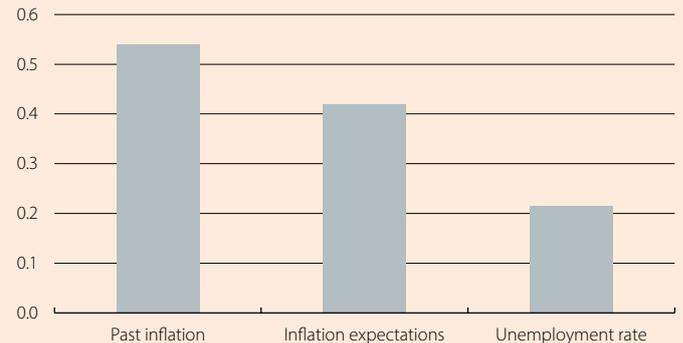
On the other hand, the unemployment rate could exert greater pressure on wages due to it being at historically low levels (6.8% in February 2022, or 2.6 pps below its historical average) thanks to the rapid recovery in the labour market.<sup>5</sup> However, what happens in the euro area's labour market in 2022 is uncertain and will largely depend on the duration of the war in Ukraine and the economic impact of the sanctions, especially for those economies that are more dependent on Russian gas (such as Germany and, to a lesser extent, Italy).

In summary, according to the available data, at the end of 2021 wage dynamics were not an additional concern for the ECB, being clearly below 3%. Indeed, the contained wage dynamics of the last year are one of the reasons why the ECB has not yet raised rates, despite the high inflation; in fact, the medium-term inflation projections have so far been below 2.0%.

However, the scenario is changing. On one hand, the ECB has made a recent shift in its communications, highlighting that inflation expectations are now above 2%, so it is likely to raise rates this year in order to prevent these expectations from remaining above the target. On the other hand, the wage increases we are likely to see (taking into account the high inflation and a historically low unemployment rate) should lead to medium-term inflation of around 2%, allowing the ECB to gradually raise interest rates. Thus, we are likely to see net asset purchases brought to an end in Q3 and the first interest rate hike before the end of 2022. This and subsequent rate hikes should prevent the current high inflation rates from becoming chronic, both through inflation expectations and unsustainable wage dynamics.

### Euro area: contributions to increased wage growth in 2023 \*

(pps)



**Notes:** \* We estimate a multiple regression model where the dependent variable is the evolution of wages and the explanatory variables are labour productivity, past inflation, inflation expectations and the unemployment rate. We calculate the effect of average inflation being 4.7% between 2021 and 2022 instead of 2%; of medium-term inflation expectations at 3.5% instead of 2%, and of an unemployment rate in 2022 of 6.5% instead of the 2021 average (7.7%).

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

Màxim Ventura Bolet and Ricard Murillo Gili

5. If the unemployment rate were to continue its downward trend in 2022 and the average rate for the year were 6.5%, we estimate that wage growth in year-on-year terms would be 0.21 pps higher in 2023 than we would see with an unemployment rate at the 2021 level (7.7%).

## The relationship between inflation and wages in Spain: it exists, but with important nuances

In the current context of high inflation, one cannot help but wonder about its impact on wage dynamics. To properly frame this burning issue, and in order to have sufficient information to answer it, it is essential to analyse the historical relationship between prices and wages.

### Wages and inflation: wages take a few months to react to price increases

To begin with, we analysed how long wages take to react to price increases in Spain. To this end, we studied the behaviour, since 2001, of the year-on-year growth of the wage cost per worker as a function of the evolution of core inflation. In doing so, we took into account other relevant factors that help to explain wage dynamics: productivity growth, the evolution of the labour market and labour policies.

The results (see first chart) confirm that if there is a surge in inflation (whether headline inflation or core inflation, the latter of which excludes energy and unprocessed foods), this increase is not immediately reflected in a rise in wage costs. In other words, there is an adjustment period before inflationary pressures begin to materialise in wage dynamics.

How long does this adjustment period typically last? According to the data, half a year. After that, wages begin to react to a rise in inflation. And we must wait nine months to a year after inflation begins to rise before the impact on wages is fully apparent (in the first chart we can see that the periods when the impact is greatest occur three quarters to one year after the rise in inflation). Specifically, according to the historical evidence, a 1-pp increase in core inflation would lead to an increase in the year-on-year change in wage costs of just under 0.4 pps one year later. From that point on, the magnitude of the impact begins to decrease, and a year and a half after the rise in inflation no impact is observed.<sup>1</sup>

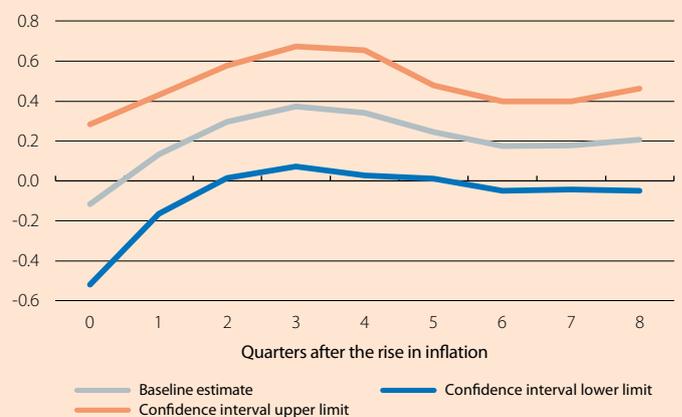
Another interesting fact is that the reaction of wages is stronger (about twice as strong, one year after the price increase) in the face of a rise in core inflation compared to a similar rise in headline inflation. This confirms the importance of core inflation for monitoring wage dynamics (not in vain, core inflation is the key monetary policy metric monitored by the major central banks).

### Dynamics over time: a fading relationship

Now that we have a more precise idea of the strength of the relationship between prices and wages, it is pertinent to analyse how this relationship has varied over time in Spain. Has it weakened or, on the contrary, intensified? The second chart provides the answer: the correlation between core inflation and wage rises agreed in collective labour agreements has gradually weakened over the last few years.<sup>2</sup>

A more detailed analysis confirms this first visual evidence: the impact of inflation on wage costs was higher in the period 2001-2011 – in that period, a 1.0-pp rise in core inflation would, on average, lead to an increase in the year-on-year change in wage costs one year later of more than 0.5 pps – whereas from 2012 onwards the impact is more modest. This fact suggests that certain structural elements – such as globalisation, technological change, the end of automatic indexation in collective labour agreements, or the 2012 labour reform – have contributed to weakening the channel through which price increases spread to

**Spain: historical reaction of the year-on-year growth in wage costs to a 1-pp increase in core inflation (pps)**



**Notes:** These estimates are obtained using a multiple linear regression model of the year-on-year change in wage costs, which incorporates not only core inflation (current or delayed) but also the unemployment rate, a binary variable equal to 1 from Q2 2012 onwards to take into account the effects of the labour reform and the 5-year moving average for labour productivity growth. Historical data on a quarterly basis since 2001. The wage cost is seasonally adjusted and corresponds to the series maintained by the National Statistics Institute.

**Source:** CaixaBank Research.

1. Although the coefficient after a year and a half is still positive, looking at the confidence interval we conclude that it is not statistically significant.

2. Specifically, these two variables had a correlation of 0.85 between 2000 and 2012 and of 0.13 from 2012 onwards.

wages. Another important factor is the sharp rise in the unemployment rate in the years following the Great Recession, during which it was far higher than in the pre-crisis years.

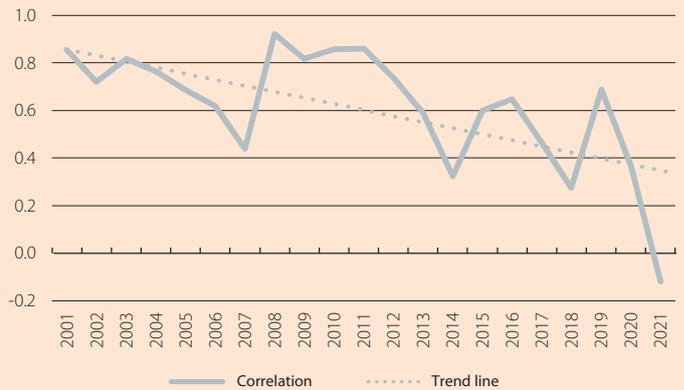
In short, based on the historical evidence we conclude that inflationary pressures do spread to wages, although there is an adjustment period of around a year before this occurs. Moreover, this relationship has been very moderate in the last 10 years.

What do these results tell us in the current context? On the one hand, it is not so strange that the high inflation has not yet been reflected in second-round effects (in March, the latest figure available, the wage rise in collective labour agreements was 2.4% year-on-year, while headline inflation stood at 8.4% in April and core inflation, at 4.4%). On the other hand, the current inflationary pressures can indeed be expected to have an impact on wages, although this impact should not be as pronounced as that which would have occurred in the Spanish labour market of the turn of the century with a similar inflation rate.

In any case, while these historical relationships are useful for framing the current context, it should also be noted that the situation we are currently experiencing is exceptional, given that the rise in energy prices is being exacerbated by the war in Ukraine and due to its leakage into a large part of the basket of consumer goods. In this exceptional situation, the wage deal currently being negotiated by the social agents will be key, as it will largely determine wage dynamics for the next few years.

### Spain: relationship over time between core inflation and wage rises

Level (between -1 and +1)



**Notes:** The correlation index between two variables takes values between -1 and +1 and measures the degree of the linear relationship between them; a correlation of 1 corresponds to a perfect positive linear relationship and a correlation of 0 corresponds to a non-existent linear relationship. Moving correlation of the last 5 years between core inflation and wage rises agreed under collective labour agreements with economic effects.

**Source:** CaixaBank Research.

Javier Garcia-Arenas and Eduard Llorens i Jimeno

## Wage dynamics in Spain: what does the CaixaBank Research wage growth tracker tell us?

In the current context of high inflationary pressures, there is concern that second-round effects will lead to a wage-price feedback spiral. In order to analyse wage dynamics in Spain, here at CaixaBank Research we have developed a real-time wage growth tracker based on payrolls deposited into CaixaBank accounts.<sup>1</sup> This indicator provides very up-to-date information on wage dynamics, with a high degree of detail at the geographic and sectoral level. This indicator therefore provides useful information not previously available, which can complement other wage income data sources.

CaixaBank Research’s wage growth tracker corresponds to the median year-on-year change in the monthly payroll, which is calculated in a completely anonymous manner. This monthly payroll corresponds to the net wage income received during the month.<sup>2, 3, 4</sup>

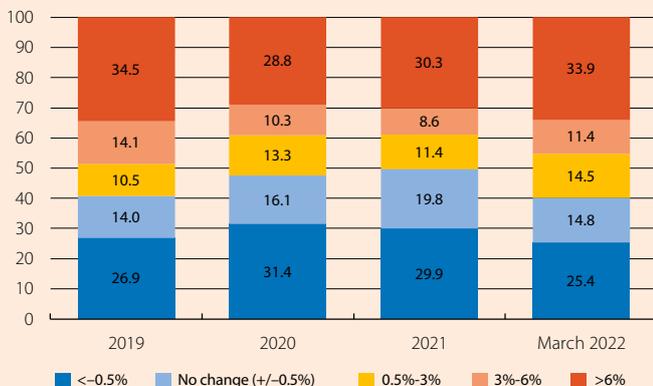
According to this internal indicator, in March 2022 wages in Spain rose by 2.2% year-on-year, a similar increase to that experienced prior to the pandemic (+2.1% year-on-year on average in 2018 and 2019) and higher than in 2020 and 2021 (see first chart). Thus, since last summer, workers’ payrolls have steadily improved, with moderate increases that leave behind the containment experienced during the pandemic.

**Spain: CaixaBank Research wage growth tracker**  
Year-on-year change (%)



**Notes:** CaixaBank Research’s wage growth tracker corresponds to the median year-on-year change in the monthly payroll, which is calculated customer by customer. All customers with a payroll present in the previous month are considered as a stabilisation criterion. Data in nominal terms (not deflated). The indicator corresponds to the 2-month moving average.  
**Source:** CaixaBank Research, based on internal CaixaBank data.

**Spain: year-on-year change in monthly payroll**  
Proportion (%)



**Notes:** The year-on-year change in the monthly payroll is calculated on a customer-by-customer basis and therefore requires that the customer was working in the same month of the previous year. All customers with a payroll present in the previous month are considered as a stabilisation criterion. Data in nominal terms (not deflated).  
**Source:** CaixaBank Research, based on internal CaixaBank data.

Another, complementary measure for analysing wage dynamics involves looking at the proportion of payrolls that increase and decrease (see second chart). This «wage thermometer» shows that the proportion of workers whose payrolls rose by more than 3% in March 2022 (45.3% of the total) was lower than before the pandemic (48.6%). If we look at the percentage of workers who experienced wage increases in excess of 0.5%, we see that the proportion in March 2022 (59.8%) was already slightly higher than in 2019 (59.1%).

### Wage dynamics by sector and region

The wage dynamics we observe are not the same across the board if we differentiate by type of employer (specifically, between the public and private sectors). Public sector employees saw their payrolls increase by 2.4% year-on-year in March 2022, somewhat lower than the growth they experienced prior to the pandemic (2.8% in 2018-2019) but

slightly higher than private sector wages. For the latter, the payroll growth stood at 2.1% year-on-year in March 2022, already above the average rate for 2018-2019 (1.7%).

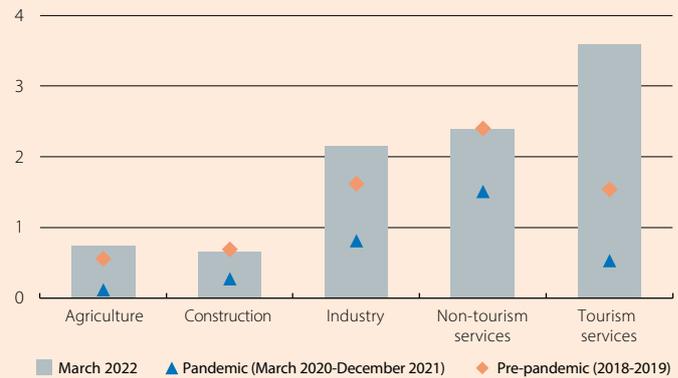
1. This indicator is part of a set of indicators used to monitor the economy in real time, due to be published shortly.  
2. Payrolls are identified as a specific type of transfer among CaixaBank customers’ account transactions (fully anonymised) and are stated in nominal terms (not deflated). All customers with a payroll present in the previous month are considered as a stabilisation criterion. The indicator corresponds to the two-month moving average. For further details, see the methodological note, due to be published shortly.  
3. The distribution of payrolls is very similar to the wage distribution observed in the 2018 wage structure survey (the latest year with microdata available from the survey), as discussed in O. Aspachs, R. Durante, A. Graziano, J. Mestres, M. Reynal-Querol *et al.* (2021). «Tracking the impact of COVID-19 on economic inequality at high frequency». PLOS ONE 16(3): e0249121. <https://doi.org/10.1371/journal.pone.0249121>.  
4. A similar indicator is the Wage Growth Tracker produced by the Atlanta Fed. This indicator measures the nominal wage growth of workers observed with a 12-month difference using data from the Current Population Survey (CPS) <https://www.atlantafed.org/chcs/wage-growth-tracker>.

The wage dynamics are also different from one economic sector to another. Wages increased by 2.4% year-on-year in March in non-tourism services and by 2.1% in industry, while they are lagging further behind in the case of construction and agriculture (both 0.7%) (see third chart). We can conclude that, in all these sectors, wages are recovering some buoyancy as we emerge from the pandemic, with wage rises similar to those of 2018-2019. On the other hand, for the tourism services sector, which includes retail and hospitality, the payrolls increased by 3.6% year-on-year in March 2022, a higher rate than in 2018-2019. This reflects the recovery of the sector following the two years of pandemic during which they were heavily affected by activity restrictions.

By autonomous community region, in March 2022 wage rises of between 1.9% and 2.4% year-on-year were observed in most regions (see fourth chart). Also, in all regions, the wage growth observed for this period was higher than during the pandemic. However, there are marked differences between regions, with Asturias (1.6% year-on-year), Cantabria (1.8%)

**Spain: wage dynamics in different productive sectors**

Year-on-year change (%)

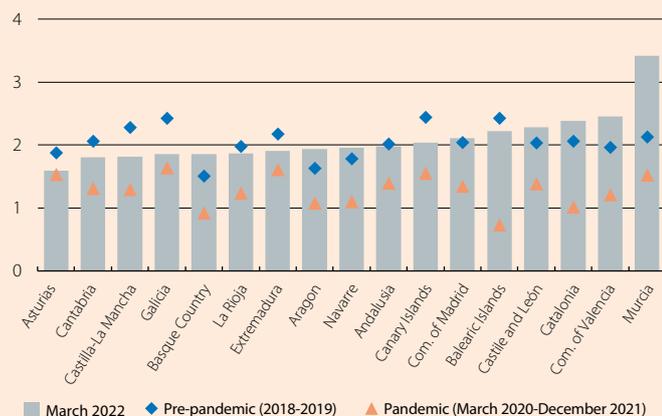


**Notes:** CaixaBank Research's wage growth tracker corresponds to the median year-on-year change in the monthly payroll, which is calculated customer by customer. The economic sectors are defined based on the National Classification of Economic Activities (CNAE): Agriculture (CNAE section A), Industry (B-E), Construction (F), Tourism services (two-digit CNAE groups 49-51, 55, 56, 77, 79, 90, 91 and 93) and Non-tourism services (sections G to J and L to U, excluding those included in tourism services). Financial and insurance activities (section K) are excluded, due to CaixaBank's internal data sample being insufficiently representative for this sector. The indicator corresponds to the 2-month moving average.

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

**Spain: wage dynamics by autonomous community region**

Year-on-year change (%)



**Notes:** CaixaBank Research's wage growth tracker corresponds to the median year-on-year change in the monthly payroll, which is calculated customer by customer. All customers with a payroll present in the previous month are considered as a stabilisation criterion. Data in nominal terms (not deflated). The indicator corresponds to the 2-month moving average.

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

and Castilla-La Mancha (1.8%) registering the lowest wage rises. Those registered in Catalonia and the Community of Valencia were higher (2.4% and 2.5%, respectively), as one would expect given that these regions have also registered a recovery in economic activity above the national average.

In conclusion, for the time being there are no signs of significant wage pressures in Spain, neither in general, nor differentiating by sector or region. Nevertheless, the inflationary pressures and the uneven impact of the war in Ukraine across different sectors could change this situation in the coming months.<sup>5</sup> Here at CaixaBank Research we will analyse the trend in wages month by month in order to quickly shed light on what is happening in our labour market.

Josep Mestres Domènech

5. See the Focus «Which sectors are most affected by the conflict in Ukraine?» in the MR04/2022.

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