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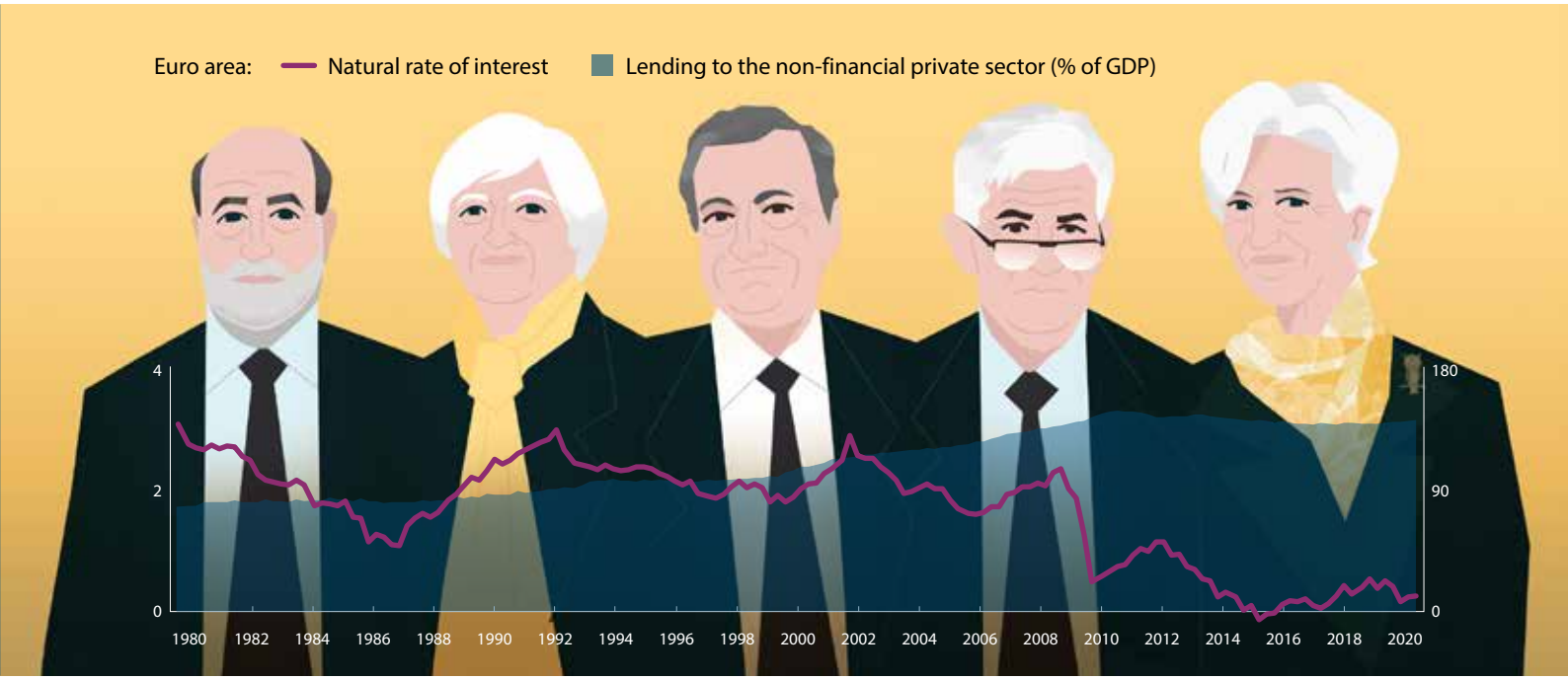

ECONOMIC & FINANCIAL ENVIRONMENT

FINANCIAL MARKETS
The coronavirus spreads to the financial markets

INTERNATIONAL ECONOMY
COVID-19 a new risk in 2020

SPANISH ECONOMY
Spain: slight moderation of growth, in anticipation of the coronavirus

PORTUGUESE ECONOMY
Portugal ended 2019 on a good note, but it is not immune to the uncertainty of the coronavirus

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Should monetary policy react to the financial cycle? Some reflections and possible answers

The uncertainty surrounding the natural rate of interest

CaixaBank Research

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK
March 2020

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A black swan, in the form of a coronavirus

There are events that are difficult to predict but which, when they do happen, have an enormous impact. They are black swans. At the beginning of this year, the unexpected attack by the US on Iran could have been such an event, but fortunately the tensions lasted only a few days and the conflict did not escalate further. Little did we suspect that, in reality, the black swan had already been gestating unchecked for some time in the capital of China's Hubei province, Wuhan, in the form of a coronavirus.

It is precisely the delay in detecting the coronavirus outbreak in Wuhan that contributed to its rapid spread throughout the province. The images of hospitals struggling to cope, corpses being taken away, factories shut down and empty streets have provoked a strong emotional impact. They have also contributed to feeding the sense of alarm as outbreaks of the virus have appeared in other countries.

In the face of emotions, however, it is important to respond with some data. In Hubei, the province of almost 60 million inhabitants at the epicentre of the crisis, the percentage of inhabitants that had been infected by the coronavirus up until the end of February was 0.1% (1 in every 1,000), and the rate of infections has slowed greatly some time ago. For China as a whole, the rate of the population affected is much lower, at 0.01% (less than 1 in every 10,000). Even if the true figures were twice as large, because not all cases are detected, we would be dealing with infection rates that are undoubtedly well below what the vast majority of people believe.

As for how aggressive the virus is, the latest estimates – published at the end of February in the prestigious *New England Journal of Medicine*– indicate a fatality rate of around 1% (previous estimates placed it at around 2%). This is a high figure compared with the common flu (0.1%) but lower than that of SARS (10%), MERS (33%) or avian flu (60%). It is also important to note that the mortality rate is especially concentrated in the elderly or those affected by chronic diseases. For the vast majority, the COVID-19 passes with symptoms similar to the flu.

The situation, which is serious, deserves a response that avoids complacency, but also alarmism. The priority, as the European health authorities have stated, is to contain the epidemic and, to this end, various measures will be needed depending on the situation. The goal is to prevent hospitals from being overwhelmed and to buy time in order to identify drugs that can combat the virus, design an effective vaccine and wait – fingers crossed – for the virus' contagious capacity to decline with the arrival of spring. We must avoid at all costs what happened in Wuhan: an uncontrolled expansion of the epidemic which saturated hospitals, making it difficult to manage the crisis and provide the necessary care to the most critical patients. The delay in adopting measures meant that, when they finally were taken, they had to be draconian.

There is also much talk of the economic impact of the coronavirus, and analysts and agencies have been quick to revise their forecasts. Certainly, the global economy will grow less than we had anticipated, but it is premature to try to accurately estimate how much less. The most reasonable approach at this stage is to provide a range which, by necessity, must be broad, spanning from a cost of just a few decimal points to a more substantial impact – perhaps as much as 1 pp. It will depend primarily on how long it takes to contain the epidemic and how drastic the measures to do so need to be. On the other hand, it will also be crucial to block the potential financial channels of contagion, with measures such as liquidity injections and fiscal aid for sectors that may be hardest hit (aid which could ensure, for instance, the maintenance of employment). In any case, it should be emphasised that we are facing a temporary shock which should last a few months, after which we will most likely witness a rebound in economic activity.

There will come time for drawing lessons from this health crisis but, for now, we can name two. Firstly, there is a need to be better prepared to cope with the risk of a future virus that could be much more lethal than COVID-19 – for instance, by having strategic reserves of healthcare equipment. Secondly, we must consider black swans when planning. If one is going to catch us by surprise, it would be better, insofar as possible, to have a safety buffer and levels of debt that are reasonably low when it does.

Enric Fernández
Chief Economist
29 February 2020

Chronology

FEBRUARY 2020

5 The US Senate acquits President Donald Trump of the charges for which he faced impeachment.
24 Italy detects an increase in coronavirus cases and a week of turmoil begins in the financial markets with sessions registering the biggest stock market losses in years.

DECEMBER 2019

5 OPEC and its partners raise crude oil production cuts to 1.7 million barrels per day until March 2020.
13 The US and China announce a preliminary trade deal (the first phase of a three-phase agreement).
20 Following the early election on 12 December, the United Kingdom's House of Commons approves the Brexit withdrawal agreement.

OCTOBER 2019

11 The US and China work on phase one of a trade deal, and the US suspends the implementation of a tariff increase due to take effect on 15 October.
17 The United Kingdom and the EU reach a new withdrawal agreement.
28 The EU extends the Brexit deadline to 31 January 2020.
31 The Fed cuts its benchmark interest rates by 25 bps down to the 1.50%-1.75% range.
Mario Draghi's mandate as ECB president comes to an end.

JANUARY 2020

15 The US and China sign a first trade agreement (the first phase of a three-stage negotiation process).
30 The World Health Organization declares the coronavirus outbreak that began in China a global health emergency.
31 The United Kingdom's withdrawal from the EU takes effect and a transition period begins, lasting until 31 December 2020.

NOVEMBER 2019

10 General elections are held in Spain.

SEPTEMBER 2019

1 The US implements a tariff increase on 112 billion dollars of Chinese imports and China imposes tariffs on around 2,000 US products.
12 The ECB announces a new stimulus package, with a 10-bp cut in the deposit facility interest rate (–0.50%), a tiered system for deposit remuneration and the resumption of net purchases of assets (20 billion per month).
18 The Fed cuts its reference interest rates by 25 bps, down to the 1.75%-2.00% range.
20 The rating agency S&P improves Spain's credit rating from A– to A.

Agenda

MARCH 2020

3 Spain: registration with Social Security and registered unemployment (February).
11 Portugal: international trade (January).
12 Governing Council of the European Central Bank meeting.
13 Portugal: S&P rating.
16 Portugal: tourism activity (January).
17 Spain: quarterly labour cost survey (Q4).
17-18 Federal Open Market Committee meeting.
20 Spain: Moody's and S&P ratings.
23 Spain: loans, deposits and NPL ratio (Q4).
25 Spain: balance of payments (Q4).
Spain: net international investment position (Q4).
Portugal: state budget execution (2019).
Portugal: household savings rate (Q4).
26-27 European Council meeting.
30 Spain: CPI flash estimate (March).
Euro area: economic sentiment index (March).
31 Spain: GDP breakdown (Q4).
Spain: household savings rate (Q4).
Spain: state budget execution (December, January and February).

APRIL 2020

2 Spain: registration with Social Security and registered unemployment (March).
Portugal: NPL ratio (Q4).
10 Portugal: CPI (March).
15 Spain: financial accounts (Q4).
Portugal: tourism activity (February).
17 Portugal: coincident indicators (February).
24 Spain: loans, deposits and NPL ratio (February).
25 Spain: labour force survey (Q1).
28-29 Federal Open Market Committee meeting.
29 Portugal: employment and unemployment (March).
Euro area: economic sentiment index (April).
US: GDP (Q1).
30 Spain: GDP flash estimate (Q1).
Spain: CPI flash estimate (April).
Spain: state budget execution (March).
Portugal: CPI flash estimate (April).
Euro area: GDP (Q1).
Governing Council of the European Central Bank meeting.

The COVID-19 spreads, temporarily, to the macro environment and the financial sector

The spread of the COVID-19 across the five continents and the high degree of uncertainty over its economic implications have already had a clear impact on the financial markets, which have experienced a surge in volatility. Economic activity data are still scarce, but all the indicators suggest that the impact of the coronavirus, while most likely temporary, will be far from negligible.

The financial markets have experienced an episode of major risk aversion, with capital flows shifting towards safe-haven assets, such as the dollar and US and German sovereign debt, while punishing assets more closely linked to the business cycle, such as stocks. The price of a barrel of Brent oil fell by over 10% in the month as a whole, also driven down by the forecasts for oil demand produced by OPEC. In FX markets, risk aversion and uncertainty over the performance of economic activity in emerging economies accelerated the depreciation of their currencies, which are closely linked to the performance of their commodity exports.

In this context, markets quickly turned to central banks the central banks which, as is common in this type of situation, are the quickest institutions to react. At an emergency meeting, the Fed cut the reference interest rate by 50 bps and hinted that it is very likely to implement further cuts in the coming months. Treasury yields fell to historic lows. Furthermore, the sovereign yield curve once again inverted, with the 10-year rate reaching well below the 3-month rate - something that has traditionally anticipated the onset of a recession in the US in the following year. On the other hand, financial asset prices also anticipate that the ECB will implement some adjustments to its monetary policy, albeit less significant ones given that it has much less much less policy space. In fact, it is likely to focus the bulk of its support in measures to ensure even more abundant liquidity, with the aim of preventing the coronavirus from causing difficulties for firms that are creditworthy but are experiencing liquidity problems due to disruptions in the production chain or a temporary drop in demand.

At the macroeconomic level, the available data are still limited, but the economic recovery that we were beginning to see materialise until recently has been temporarily called into question. The global economic activity indicators for the month of January showed a certain acceleration in the global economy, but they have been completely overshadowed by the historic correction that China's economic activity indicators suffered in February. For instance, the services and manufacturing PMI indices fell to historic lows and point towards a contraction of the economy in the first quarter.

In advanced economies, the available data do not yet capture the impact of the COVID-19, since the spread has occurred more recently and is much less severe than in China. In fact, US GDP figures reminded us that the US economy was in very good shape at the end of 2019, as it closed Q4 with growth of 2.3% in year-on-year terms, in spite of the protectionist measures and the trade tensions with China. In contrast, the euro area bid farewell to last year with a very modest growth rate, placing it in a relatively vulnerable position ahead of the foreseeable impact of the COVID-19 in the first half of 2020. Specifically, the region grew by 0.1% quarter-on-quarter in Q4 2019, leaving the figure for the year as a whole at a modest 1.2%.

In this context, the performance of the Spanish and Portuguese economies remains relatively favourable. Both ended last year with a growth rate well above that of most European countries, although it is also foreseeable that they will be affected by the spike in uncertainty and the slowdown of the global economy over the coming months. In addition, the tourism sector - one of the hardest hit by the situation generated by the COVID-19 - accounts for a significant portion of both countries' economies. The sector will suffer, but it is also true that, in this context, both countries can once again gain in appeal relative to alternative destinations such as Turkey or Egypt, which could help to cushion the impact.

Oriol Aspachs
Head of Research

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

Financial markets

	Average 2000-2007	Average 2008-2016	2017	2018	2019	2020	2021
INTEREST RATES							
Dollar							
Fed funds (upper limit)	3.43	0.48	1.50	2.50	1.75	1.25	1.25
3-month Libor	3.62	0.70	1.61	2.79	1.91	1.95	2.22
12-month Libor	3.86	1.20	2.05	3.08	1.97	2.10	2.68
2-year government bonds	3.70	0.73	1.84	2.68	1.63	1.60	2.11
10-year government bonds	4.70	2.61	2.41	2.83	1.86	1.90	2.36
Euro							
ECB depo	2.05	0.40	–0.40	–0.40	–0.50	–0.50	–0.50
ECB refi	3.05	1.00	0.00	0.00	0.00	0.00	0.00
Eonia	3.12	0.65	–0.34	–0.36	–0.46	–0.45	–0.45
1-month Euribor	3.18	0.79	–0.37	–0.37	–0.45	–0.43	–0.41
3-month Euribor	3.24	0.98	–0.33	–0.31	–0.40	–0.40	–0.36
6-month Euribor	3.29	1.14	–0.27	–0.24	–0.34	–0.33	–0.25
12-month Euribor	3.40	1.34	–0.19	–0.13	–0.26	–0.25	–0.13
Germany							
2-year government bonds	3.41	0.69	–0.69	–0.60	–0.63	–0.55	–0.35
10-year government bonds	4.30	1.98	0.35	0.25	–0.27	0.00	0.30
Spain							
3-year government bonds	3.62	2.30	–0.04	–0.02	–0.36	0.14	0.55
5-year government bonds	3.91	2.85	0.31	0.36	–0.09	0.32	0.76
10-year government bonds	4.42	3.82	1.46	1.42	0.44	0.70	1.00
Risk premium	11	184	110	117	71	70	70
Portugal							
3-year government bonds	3.68	4.42	–0.05	–0.18	–0.34	0.31	0.85
5-year government bonds	3.96	5.03	0.46	0.47	–0.12	0.55	1.01
10-year government bonds	4.49	5.60	1.84	1.72	0.40	0.75	1.05
Risk premium	19	362	149	147	67	75	75
EXCHANGE RATES							
EUR/USD (dollars per euro)	1.13	1.31	1.18	1.14	1.11	1.11	1.15
EUR/JPY (yen per euro)	129.50	126.36	133.70	127.89	121.40	117.66	121.90
USD/JPY (yen per dollar)	115.34	97.50	113.02	112.38	109.25	106.00	106.00
EUR/GBP (pounds per euro)	0.66	0.83	0.88	0.90	0.85	0.83	0.82
USD/GBP (pounds per dollar)	0.59	0.63	0.75	0.79	0.76	0.75	0.71
OIL PRICE							
Brent ($/barrel)	42.3	85.6	64.1	57.7	65.2	61.5	63.0
Brent (euros/barrel)	36.4	64.8	54.2	50.7	58.6	55.4	54.8

Forecasts

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

International economy

	Average 2000-2007	Average 2008-2016	2017	2018	2019	2020	2021
GDP GROWTH							
Global	**4.5**	**3.3**	**3.8**	**3.6**	**2.9**	**3.0**	**3.4**
Developed countries	***2.7***	***1.2***	***2.5***	***2.2***	***1.7***	***1.4***	***1.6***
United States	2.7	1.4	2.4	2.9	2.3	1.8	1.8
Euro area	2.2	0.4	2.7	1.9	1.2	1.0	1.3
Germany	1.6	1.1	2.8	1.6	0.6	0.6	1.3
France	2.2	0.6	2.4	1.7	1.2	1.0	1.5
Italy	1.5	–0.7	1.8	0.7	0.2	0.3	0.6
Portugal	1.5	–0.3	3.5	2.6	2.2	1.7	1.6
Spain	3.7	0.0	2.9	2.4	2.0	1.5	1.5
Japan	1.5	0.4	2.2	0.3	0.8	0.3	0.9
United Kingdom	2.9	1.1	1.9	1.3	1.4	1.2	1.4
Emerging countries	***6.6***	***5.1***	***4.8***	***4.5***	***3.8***	***4.2***	***4.5***
China	11.7	8.4	6.9	6.6	6.1	5.5	5.7
India	9.7	6.9	6.9	7.4	5.3	5.9	6.5
Indonesia	5.5	5.7	5.1	5.2	5.0	4.7	4.7
Brazil	3.6	1.7	1.3	1.3	1.1	1.8	2.0
Mexico	2.4	2.1	2.1	2.1	–0.1	1.0	2.0
Chile	5.0	3.2	1.3	4.0	2.3	2.6	2.7
Russia	7.2	1.0	1.6	2.5	1.3	1.8	1.8
Turkey	5.4	4.8	7.4	2.8	0.9	2.1	2.6
Poland	4.0	3.2	4.9	5.2	4.1	2.9	2.4
South Africa	4.4	1.8	1.4	0.8	0.2	0.8	1.0
INFLATION							
Global	**4.2**	**3.8**	**3.2**	**3.6**	**3.5**	**3.7**	**3.4**
Developed countries	***2.1***	***1.5***	***1.7***	***2.0***	***1.3***	***1.5***	***1.6***
United States	2.8	1.6	2.1	2.4	1.8	2.1	1.8
Euro area	2.1	1.4	1.5	1.8	1.2	1.2	1.4
Germany	1.7	1.3	1.7	1.9	1.4	1.3	1.5
France	1.8	1.2	1.2	2.1	1.3	1.4	1.4
Italy	1.9	1.5	1.3	1.2	0.6	0.9	1.2
Portugal	3.0	1.2	1.4	1.0	0.3	0.7	1.0
Spain	3.2	1.3	2.0	1.7	0.7	0.9	1.5
Japan	–0.3	0.3	0.5	1.0	0.5	0.9	0.8
United Kingdom	1.9	2.3	2.7	2.5	1.8	1.8	1.7
Emerging countries	***6.8***	***5.8***	***4.3***	***4.8***	***5.3***	***5.1***	***4.5***
China	1.7	2.6	1.6	2.1	2.9	3.1	2.6
India	4.5	8.5	3.3	3.9	3.7	5.8	5.1
Indonesia	8.4	5.7	3.8	3.3	2.8	3.3	3.4
Brazil	7.3	6.4	3.5	3.7	3.7	3.8	3.9
Mexico	5.2	3.9	6.0	4.9	3.6	3.5	3.5
Chile	3.1	3.5	2.2	2.7	2.3	2.8	3.1
Russia	14.2	9.3	3.7	2.9	4.5	3.5	4.0
Turkey	27.2	8.1	11.1	16.2	15.5	12.3	10.0
Poland	3.5	2.1	1.6	1.2	2.1	2.5	2.5
South Africa	5.3	6.2	5.3	4.6	4.1	5.2	5.0

Forecasts

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

Spanish economy

	Average 2000-2007	Average 2008-2016	2017	2018	2019	2020	2021
Macroeconomic aggregates							
Household consumption	3.6	–0.6	3.0	1.8	1.1	1.3	1.3
Government consumption	5.0	0.9	1.0	1.9	2.2	2.0	1.7
Gross fixed capital formation	5.6	–3.8	5.9	5.3	1.9	0.8	2.3
Capital goods	5.0	–1.5	8.5	5.7	2.7	1.2	2.4
Construction	5.7	–6.5	5.9	6.6	0.9	–1.2	2.3
Domestic demand (vs. GDP Δ)	4.5	–1.2	3.0	2.6	1.5	1.4	1.5
Exports of goods and services	4.8	2.8	5.6	2.2	2.3	2.6	2.4
Imports of goods and services	7.0	–1.0	6.6	3.3	1.2	2.4	2.6
Gross domestic product	**3.7**	**0.0**	**2.9**	**2.4**	**2.0**	**1.5**	**1.5**
Other variables							
Employment	3.2	–1.5	2.8	2.5	2.3	1.6	1.2
Unemployment rate (% of labour force)	10.5	20.8	17.2	15.3	14.1	13.6	13.2
Consumer price index	3.2	1.3	2.0	1.7	0.7	0.9	1.5
Unit labour costs	3.0	0.1	0.7	1.2	2.4	2.7	2.4
Current account balance (% GDP)	–5.9	–1.1	2.7	1.9	1.9	1.5	1.4
External funding capacity/needs (% GDP)	–5.2	–0.7	2.9	2.4	2.0	1.7	1.6
Fiscal balance (% GDP)[1]	0.4	–7.1	–3.0	–2.5	–2.3	–2.0	–1.6

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

Forecasts

Portuguese economy

	Average 2000-2007	Average 2008-2016	2017	2018	2019	2020	2021
Macroeconomic aggregates							
Household consumption	1.7	–0.2	2.1	2.9	2.3	1.9	1.7
Government consumption	2.3	–0.7	0.2	0.9	0.8	0.4	0.2
Gross fixed capital formation	–0.3	–3.5	11.5	5.8	6.4	4.1	4.4
Capital goods	1.2	–0.1	12.5	7.5	2.4	2.3	2.5
Construction	–1.5	–6.2	12.2	4.6	9.5	4.3	2.5
Domestic demand (vs. GDP Δ)	1.3	–1.0	3.3	3.1	2.8	1.8	1.9
Exports of goods and services	5.2	3.5	8.4	4.5	3.8	3.0	3.2
Imports of goods and services	3.6	1.6	8.1	5.8	5.2	3.2	3.9
Gross domestic product	**1.5**	**–0.3**	**3.5**	**2.6**	**2.2**	**1.7**	**1.6**
Other variables							
Employment	0.4	–1.1	3.3	2.3	1.0	0.5	0.2
Unemployment rate (% of labour force)	6.1	12.2	8.9	7.0	6.5	6.4	6.3
Consumer price index	3.0	1.2	1.4	1.0	0.3	0.7	1.0
Current account balance (% GDP)	–9.2	–4.1	1.2	0.4	–0.1	–0.1	0.0
External funding capacity/needs (% GDP)	–7.7	–2.7	2.1	1.4	0.9	0.9	1.0
Fiscal balance (% GDP)	–4.6	–6.4	–3.0	–0.4	–0.1	–0.1	0.2

Forecasts

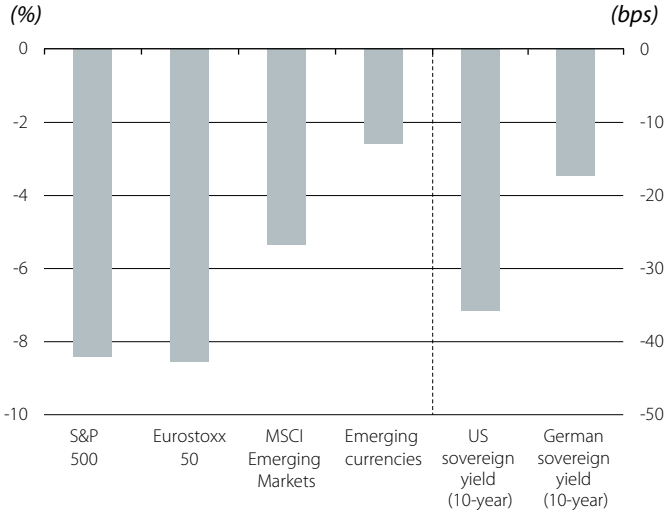
The coronavirus spreads to the financial markets

The coronavirus propagates through the financial markets. Just as occurred at the end of January, the coronavirus gained prominence in the financial markets and added a strong dose of caution to investors' mood. Its silent spreading across the five continents and the high degree of uncertainty over its economic implications at the global level (not only in China, as seemed to be the case in January) became the primary source of volatility and risk in the financial markets. Capital flows towards safe-haven assets, such as the dollar, US and German sovereign debt and gold intensified in the closing sessions of the month, punishing assets more closely linked to the business cycle, such as stocks, emerging currencies and commodities. In parallel with the health alert, business profits and the economic data began to show the first signs of weakness, mainly in China, and overshadowed the modest improvement in economic activity and business confidence that was still reflected in the indicators of advanced economies. In this context, all eyes turned towards the support of the central banks. In China, the central bank took various accommodative measures to soften the economic impact of the health crisis, while the Fed cut its target rate by 50 bps and the ECB will no doubt announce measures at its March meeting.

Uncertainty over demand drives down commodity prices. The fear among investors of a cooling of demand (China is the world's largest importer of crude oil and consumes 50% of all industrial metals) caused a widespread decline in commodity prices. On the one hand, the price of a barrel of Brent oil fell by over 10% in the month as a whole, also driven down by the forecasts for oil demand produced by OPEC for Q1 2020. On the other hand, the price of industrial metals linked to the business cycle (including copper, nickel and zinc) fell to levels of four years ago. In the currency market, risk aversion and uncertainty over the performance of economic activity in emerging economies accelerated the depreciation of their currencies, which are closely linked to the performance of their commodity exports, against currencies considered safe havens (the US dollar, the Swiss franc and the Japanese yen).

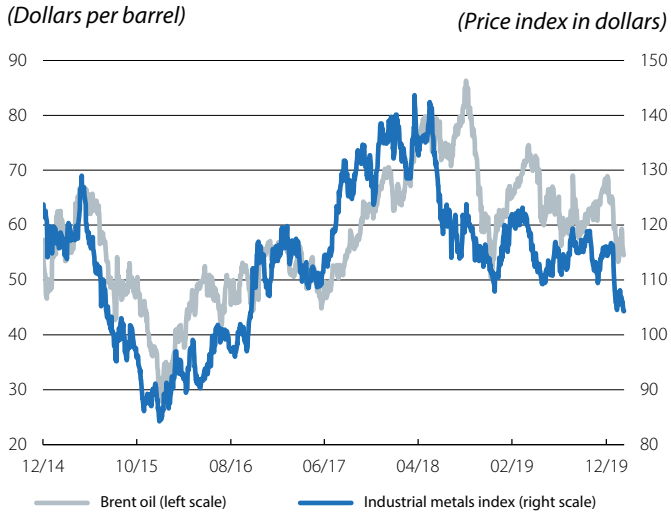
Sovereign yields plummet. In the face of economic uncertainty, a flight to quality saw investors take refuge in assets considered safe havens. As in the past, they sought refuge in US and German sovereign debt, which led to a sharp decline in 10-year yields, amplified by the expectation of a new relaxation of monetary policy by the Fed and the ECB. In the US, treasury yields fell to historic lows. Furthermore, the sovereign yield curve once again inverted, with the 10-year rate reaching 17 bps below the 3-month rate – something that has traditionally anticipated the onset of a recession in the US between 6 and 18 months later. In Germany, yields also fell to their lowest levels this year,

Select financial variables: change of February 2020



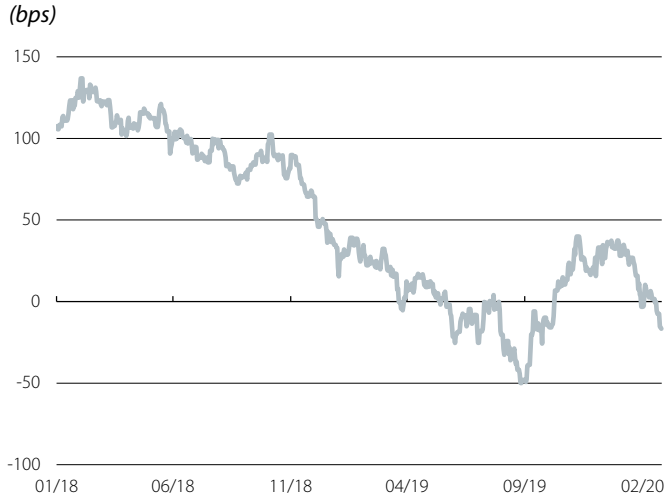
Source: *CaixaBank Research, based on data from Bloomberg.*

Brent oil and industrial metal prices



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

Slope of the yield curve: US



Note: *We show the difference between 10-year and 3-month sovereign yields.*
Source: *CaixaBank Research, based on data from Bloomberg.*

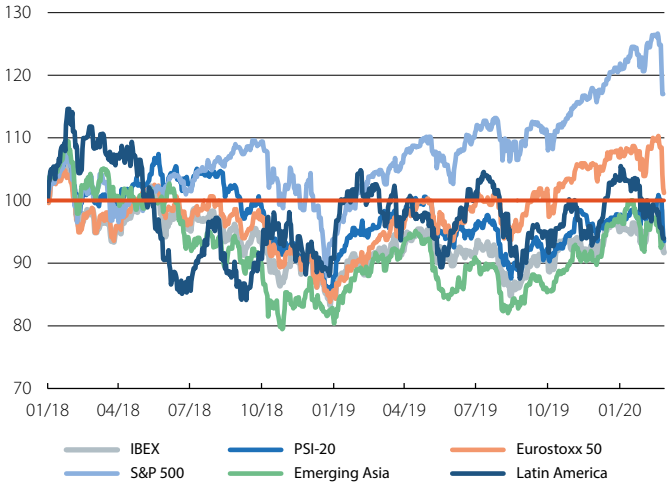
approaching the historic lows registered last summer. Risk premiums in the euro area periphery, meanwhile, were affected by the flows to less risky assets and experienced significant increases at the end of the month, following the rise in coronavirus cases in Italy and Spain.

The stock markets suffer their worst setbacks in years. In the context set out above, the increase in risk aversion among investors punished the stock markets, which at the beginning of the health crisis had cushioned the uncertainty with only modest declines. However, in February the faster advance of the epidemic was accompanied by warnings from major technology companies about the negative effect of the outbreak on their supply chains from China and, therefore, on their profits. Faced with the deterioration in investor sentiment, the major stock market indices in advanced economies experienced sharp falls (S&P 500 –8.4% and the EuroStoxx 50 –8.6%). In the case of Europe, there had not been a monthly correction of this magnitude since 2011, while in the US we have to go back to the decline of December 2018 (–9.2%) and, previously, to that of May 2010. All in all, stocks remain relatively high and, following the corrections seen in February, the S&P 500 and the Eurostoxx 50 are at the levels of last October and August, respectively.

The markets look to the central banks for support. In China, the central bank took an active role in the decision-making process to address the economic impact of the coronavirus. In particular, it cut the interest rate on the medium-term deposit facility and repo rates by 10 bps, as well as carrying out significant injections of liquidity, in order to cushion the negative impact of the stagnation of economic activity in the country. On the other hand, in advanced economies the central banks were initially apprehensive to act in the face of the coronavirus, recognising the risk posed by the epidemic but reiterating that economic activity indicators remained favourable. However, with the intensification of new cases of the virus outside of China and the turmoil that began to shake the financial markets, at the end of the month the Fed, the ECB and the rest of the central banks of advanced economies began to take steps, insinuating that they will announce a new relaxation of monetary policy in March. In fact, in the case of the Fed, it already made an urgent announcement of a 50-bp cut in reference rates, brining them to the 1.00%-1.25% range (at the end of the month, financial asset valuations reflected the expectation of a 100-bp cut in the year as a whole). The ECB, meanwhile, has much less scope to further reduce rates (the financial markets reflected the expectation of a single cut of 10 bps). Nevertheless, it could focus the bulk of its support in measures to ensure even more abundant liquidity, with the aim of preventing the coronavirus from causing difficulties for firms that are creditworthy but are experiencing liquidity problems due to disruptions in the production chain.

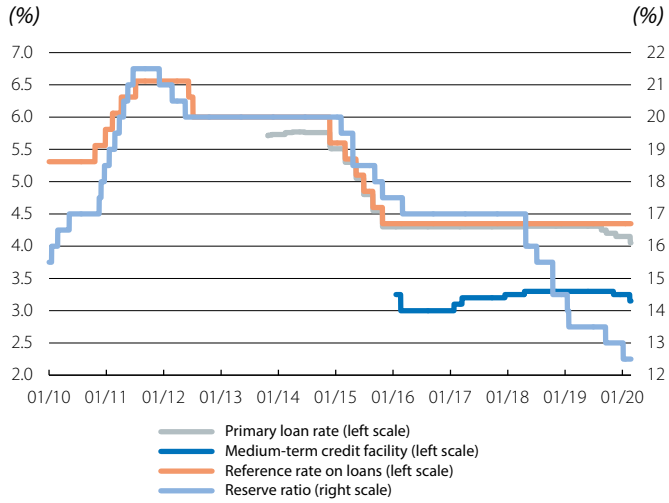
Main international stock markets

Index (100 = January 2018)



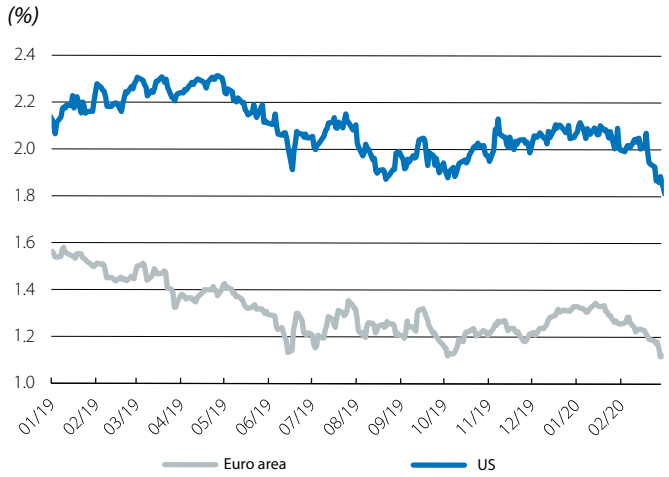
Source: *CaixaBank Research, based on data from Bloomberg.*

Main interest rates in China and the required reserve ratio for major banks



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

Market inflation expectations for the euro area and the US



Note: *5-year, 5-year forward inflation expectation rate.*
Source: *CaixaBank Research, based on data from Bloomberg.*

The cost of negative rates: the case of the Riksbank

• **The experience of the Riksbank highlights the doubts over negative interest rates: despite a worsening economic outlook for Sweden, it raised the interest rate from –0.25% to 0% in December.**

The ECB's immersion into more negative interest rates coexists with the uncertainty over whether this policy is effective. In theory, there is no law against (slightly) negative rates, which can be transmitted to the economy in the same way as positive ones.[1] However, the experience of the central bank of Sweden (Riksbank) illustrates that, in practice, there are doubts about its effectiveness.

2019 in Sweden: the outlook deteriorates... and the Riksbank raises rates

On 19 December 2019, the Riksbank raised its interest rate from –0.25% to 0%. In part, this increase (like the one implemented in December 2018 from –0.50% to –0.25%) was a reaction that came (voluntarily) late: the domestic health of the Swedish economy supported rate hikes in 2017 and 2018, but following a long period of low inflation, the Riksbank opted to prolong its accommodative monetary policy for a while longer. However, its decision to raise rates now, in a context of a deteriorating economic outlook (see first chart)[2] is somewhat unexpected. Indeed, it suggests, at least in part, that the decision reflects doubts about the effectiveness of negative rates. In fact, in a relatively explicit manifestation of these doubts, some members of the Riksbank stated that they preferred not to keep rates in negative territory unless the situation made it strictly necessary.[3]

The doubts over negative rates

The Riksbank had kept rates negative since 2015, and one of the widely-argued reasons for raising them back up to 0% was related precisely to this time span: operating with negative rates for a short period of time is not the same as prolonging this environment for many years. If such an environment persists, the compression of interest margins can end up eroding the capital positions of the financial system, increase the cost of access to credit for households and firms, and have a contractionary effect on the economy.

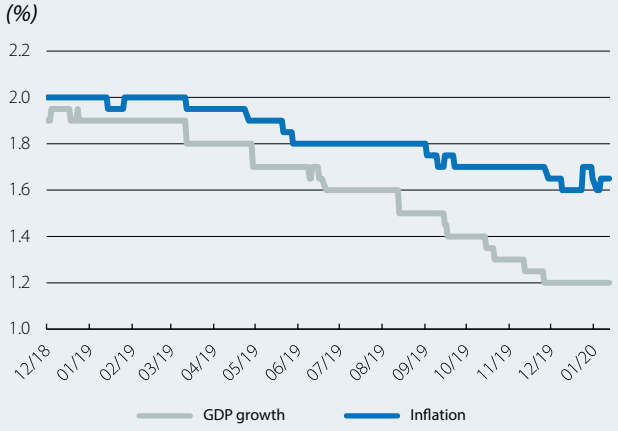
The central banks that have implemented negative rates argue that the net effect of their measures has, so far, been positive. However, some studies document the existence of adverse effects in some segments of the economy. In the case of Sweden, Eggertsson and co-authors[4] detected a breakdown in the transmission of monetary policy: when the Riksbank entered into negative territory, deposit rates stopped responding to cuts by the central bank (also see second chart), while interest rates on loans also lost sensitivity, and there were some instances in which rates actually increased.[5]

The Swedish central bank has been the first to withdraw from negative territory, but this does not mean it is abandoning accommodative monetary policy altogether. The Riksbank has publicly declared that it expects to keep rates low for a long time to come. Furthermore, December's rate hike has not stressed market expectations, which also point towards the continuity of a dovish monetary policy over the coming quarters.

Adrià Morron Salmeron

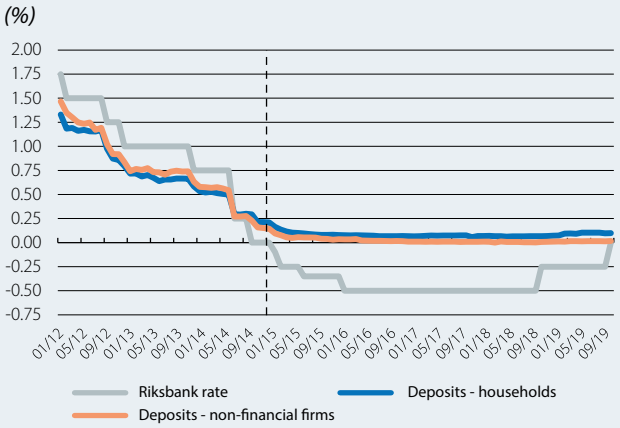
(See an extended version of this article at caixabankresearch.com)

Sweden: evolution of forecasts for 2020



Note: *Forecasts according to the Bloomberg consensus.*
Source: *CaixaBank Research, based on data from Bloomberg.*

Sweden: interest rates before and after negative rates



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

1. Cash, which offers an interest rate of 0%, puts a stop to negative rates, but the risks and costs of physically storing it allow for the implementation of slightly negative rates.
2. The deterioration was widespread worldwide, although there are idiosyncratic signs of maturity in Sweden's business cycle (such as the cooling of the real estate market and the increase in unemployment since early 2018).
3. In the words of Henry Ohlsson, «it is a good idea not to have negative interest rates unless it is quite necessary to have them», or Stefan Ingves, «a zero policy rate is a better vantage point than a negative policy rate».
4. G.B. Eggertsson *et al.* (2019), «Negative nominal interest rates and the bank lending channel». Working Paper 25416 of the National Bureau of Economic Research.
5. An increase in the cost of credit is more likely when institutions depend more on deposits as a source of funding.

Interest rates (%)

	29-Feb.	31-Jan.	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Euro area					
ECB Refi	0.00	0.00	0	0.0	0.0
3-month Euribor	–0.42	–0.39	–3	–4.1	–11.4
1-year Euribor	–0.31	–0.28	–3	–6.2	–20.3
1-year government bonds (Germany)	–0.72	–0.60	–12	–8.5	–19.7
2-year government bonds (Germany)	–0.77	–0.67	–10	–16.8	–26.1
10-year government bonds (Germany)	–0.61	–0.43	–17	–42.2	–79.0
10-year government bonds (Spain)	0.28	0.24	5	–18.6	–91.5
10-year government bonds (Portugal)	0.35	0.27	9	–8.9	–113.7
US					
Fed funds	1.75	1.75	0	0.0	–75.0
3-month Libor	1.46	1.75	–29	–44.6	–113.6
12-month Libor	1.38	1.81	–43	–61.5	–149.8
1-year government bonds	1.01	1.42	–41	–55.7	–153.5
2-year government bonds	0.91	1.31	–40	–65.6	–164.0
10-year government bonds	1.15	1.51	–36	–76.9	–160.5

Spreads corporate bonds (bps)

	29-Feb.	31-Jan.	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Itraxx Corporate	64	46	18	20.2	1.7
Itraxx Financials Senior	76	54	21	23.9	–0.2
Itraxx Subordinated Financials	157	115	42	43.5	1.7

Exchange rates

	29-Feb.	31-Jan.	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
EUR/USD (dollars per euro)	1.103	1.109	–0.6	–1.7	–3.0
EUR/JPY (yen per euro)	118.990	120.170	–1.0	–2.3	–6.4
EUR/GBP (pounds per euro)	0.860	0.840	2.4	1.7	0.0
USD/JPY (yen per dollar)	107.890	108.350	–0.4	–0.7	–3.6

Commodities

	29-Feb.	31-Jan.	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
CRB Commodity Index	395.1	404.2	–2.2	–1.6	–4.5
Brent ($/barrel)	50.5	58.2	–13.1	–23.5	–22.4
Gold ($/ounce)	1,585.7	1,589.2	–0.2	4.5	22.6

Equity

	29-Feb.	31-Jan.	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
S&P 500 (USA)	2,954.2	3,225.5	–8.4	–8.6	5.4
Eurostoxx 50 (euro area)	3,329.5	3,640.9	–8.6	–11.1	0.5
Ibex 35 (Spain)	8,723.2	9,367.9	–6.9	–8.6	–5.9
PSI 20 (Portugal)	4,765.7	5,252.0	–9.3	–8.6	–9.0
Nikkei 225 (Japan)	21,143.0	23,205.2	–8.9	–10.6	–2.1
MSCI Emerging	1,005.5	1,062.3	–5.3	–9.8	–4.4

COVID-19 a new risk in 2020

The recovery of economic activity in early 2020 put at risk. Driven by a reduction in geopolitical uncertainty, in the early stages of the year the economic indicators confirmed the continuity of the recovery in economic activity initiated in late 2019. For instance, the global composite Purchasing Managers' Index (PMI) for the month of January climbed up to 52.2 points, a clear improvement over the low point reached in October (50.9). However, this improvement is likely to suffer from the outbreak of the COVID-19 health emergency. The potential impact of this epidemic on economic activity in Q1 2020 is not negligible. Although these types of events usually pose a temporary shock to the economy, uncertainty is high. China has closed factories and urged its citizens to stay at home. This will undoubtedly have an impact on the country's own economy, but also on other economies that are highly integrated with the country, such as Japan. Furthermore, the epidemic has spread to other advanced economies (such as Italy), so their activity will suffer not only indirectly from the economic downturn suffered by China, but also directly as a result of the coronavirus. In this regard, at CaixaBank Research we have downgraded our forecast for global growth in 2020 by 2 decimal points, placing it at 3.0%. While this is still a reasonable growth rate, if the COVID-19 epidemic intensifies there could be further reductions in the forecasts.

Monetary and fiscal policy, tools for supporting the economy. China's central bank has begun to relax its monetary policy and it may take further steps in order to mitigate the impact of the COVID-19 outbreak. In fact, most emerging economies are cutting interest rates. Also, in advanced economies, the Fed announced a 50-bp interest rate cut, bringing it to the 1.00%-1.25% range, in response to the risk posed by the coronavirus. The Chinese cabinet, meanwhile, is designing fiscal measures to support the economy. Japan, another country hard hit by the coronavirus outbreak, had announced a major fiscal stimulus package focused on public expenditure measures prior to the health emergency. Finally, the euro area will also maintain a slightly expansionary fiscal policy in some regions, and the governments of Italy and Germany have already made reference to specific measures.

Another difficut year for trade flows. 2019 was a bad year for international trade. Although a far cry from the debacle of 2009, when trade flows of goods contracted by around 13% (in real terms), initial estimates point towards a slight decline in flows in the past year (–0.4%). The escalation of US protectionism dragged the trend of flows into negative territory. In 2020, the first phase of the trade deal reached between the US and China, a seemingly less belligerent US attitude towards trade and the slight recovery expected in global manufacturing activity led to expectations of an improvement in international trade. However, the outbreak of the coronavirus in China, the heart of one of the most important value chains in the world, has the potential to depress trade flows in the first few months of 2020.

GDP growth: CaixaBank Research forecasts

Annual change (%)

	2019	2020	
		Forecast as of February	Forecast as of March
Global	2.9	3.2	3.0
Developed countries	1.7	1.5	1.4
US	2.3	1.8	1.8
Euro area	1.2	1.1	1.0
Emerging countries	3.8	4.4	4.2
China	6.1	5.9	5.5

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

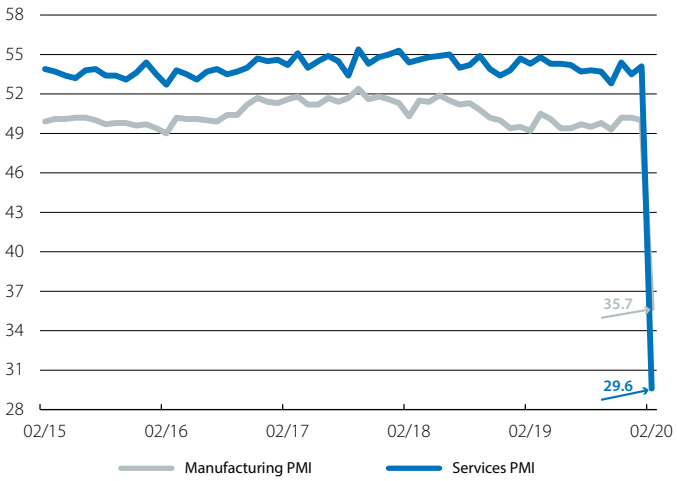
International trade of goods (volume)

Year-on-year growth (%, 3-month moving average)

Source: *CaixaBank Research, based on data from the CPB World Trade Monitor (Merchandise).*

China: economic activity indicators

Level



Source: *CaixaBank Research, based on data from the National Statistics Office of China.*

EMERGING ECONOMIES

China: the economy that will suffer the deceleration the most in early 2020. As the epicentre of the coronavirus outbreak, China's economy is likely to stagnate or even shrink in Q1 2020. In fact, the official Purchasing Managers' Index for the month of February indicates a significant deterioration in economic activity (35.7 points for the manufacturing PMI and 29.6 points in the case of services, historically low levels in both cases). Thus, despite the fact that the economic downturn caused by epidemics is followed by a rebound in activity in subsequent quarters, the economic stagnation that the country is suffering will be enough to subtract at least 4 decimal points from annual growth per our estimate of a month ago. China is therefore unlikely to grow by more than 5.5% in 2020, after advancing 6.1% in 2019. This is a sharper slowdown than expected, but it is the result of a factor that we consider to be temporary. In 2021, the country should return to the growth path it was on prior to the emergence of the coronavirus, with figures more in line with the gradual deceleration of the economy as it continues with the change of its productive model initiated some years ago (towards a greater role of the tertiary sector).

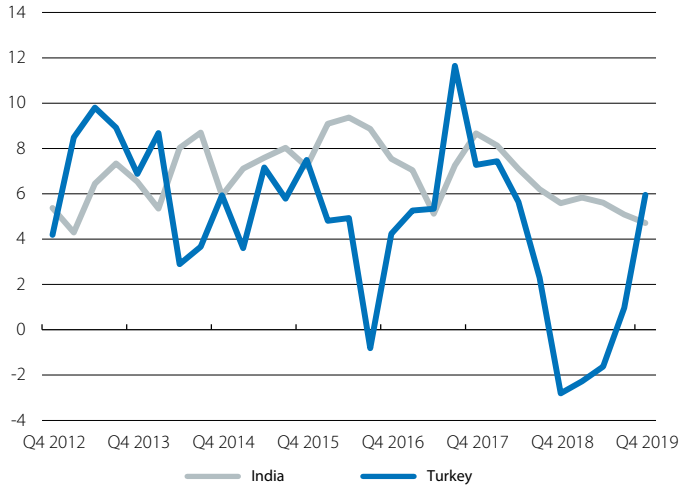
Turkey and India, the head and tails of growth at the end of 2019. The Turkish economy grew by a buoyant 6.0% year-on-year in Q4 2019, versus the 1.0% of the previous quarter, bringing annual growth to 0.9%. While this figure is clearly below the 2.8% of 2018, in recent quarters economic activity has made a significant recovery. That said, there are major concerns over the sustainability of Turkey's future growth, with its significant inflationary pressures and high levels of corporate debt. These risk factors are particularly relevant in the face of the global pressures brought about by COVID-19. India, meanwhile, grew by a meagre 4.7% in Q4 2019, compared to 5.1% in the previous quarter (the figure for Q3 was revised upwards from 4.5% to 5.1%). The loss of buoyancy in exports and the contraction of investment for the second consecutive quarter slowed growth. Thus, the rising star only grew by 5.3% in 2019, the most modest figure since 2012.

ADVANCED ECONOMIES

Significant contraction of Japan's GDP at the end of 2019, placing the annual figure at 0.8%. Japan's GDP fell by 1.6% quarter-on-quarter (–0.4% year-on-year) in Q4 2019. Whilst a drop in economic activity in the last quarter of the year was expected, as a result of the VAT increase introduced in October and the effect of the typhoons that hit the country, it proved to be much greater than anticipated. Moreover, this disappointing figure is compounded by the highly likely negative effects of the coronavirus in the first few months of the year: it is an open economy with close trade links with China through Asia's global value chain (China is the largest recipient of Japan's exports and the leading source of its imports). In addition, Japan is a very popular destination for Chinese tourists (it is the main source of international tourism in Japan). Thus, following the poor GDP figure, and taking into account the effects that the coronavirus could have in Q1 2020, we have significantly reduced the annual growth forecast for the Japanese economy (by around 5 decimal points, to 0.3% in 2020).

India and Turkey: GDP

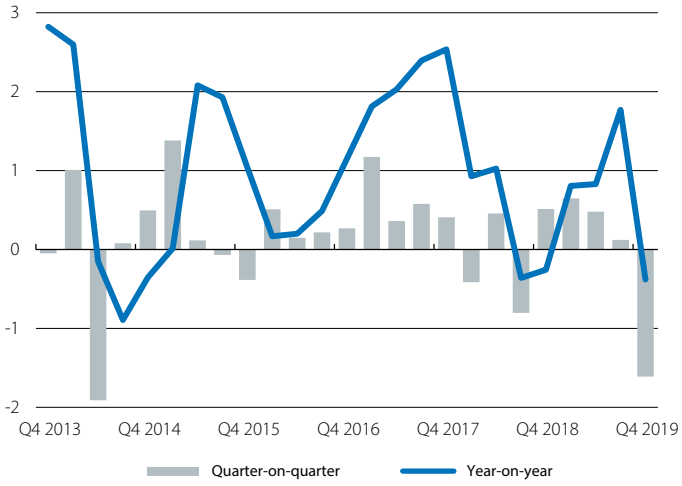
Year-on-year change (%)



Source: *CaixaBank Research, based on data from the national statistics institutes.*

Japan: GDP

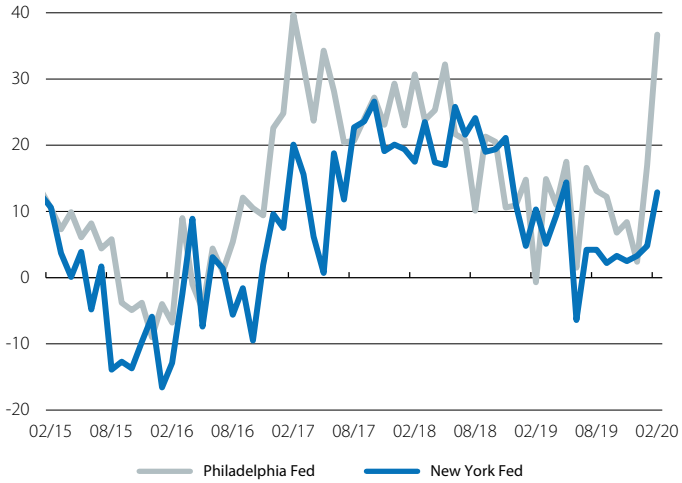
Change (%)



Source: *CaixaBank Research, based on data from the Cabinet Office of Japan.*

US: manufacturing indices

Level



Source: *CaixaBank Research, based on data from the Philadelphia Fed and the New York Fed.*

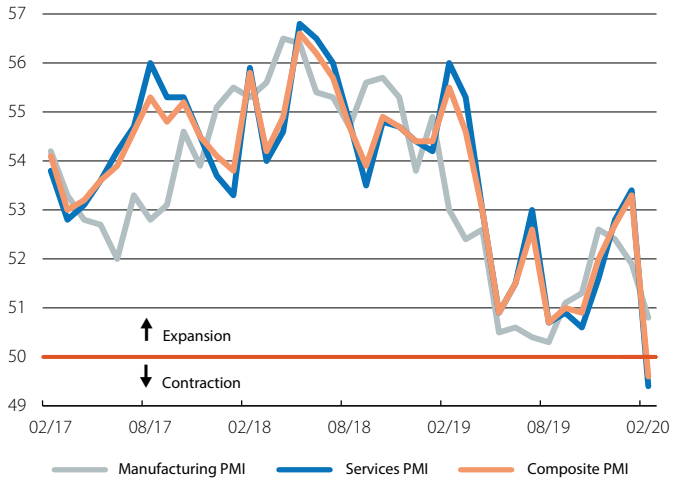
The US ended 2019 on a solid note, but it will experience a slowdown in 2020. The US economy grew by a robust 0.5% quarter-on-quarter in Q4 2019 (2.3% in year-on-year terms), thus closing the year with annual growth of 2.3%. This is a significant figure, in spite of the protectionist measures and trade tensions with China. In 2020, growth will reduce to levels more in line with the country's potential (around 1.8%). The very maturity of the business cycle and the fading of the fiscal boost implemented in late 2017 will support this gradual slowdown. That said, it could be more pronounced in the first few months of 2020 due to the potential impact of the coronavirus on economic activity, although this should not persist for too long. For now, the economic activity indicators show a mixed picture. On the positive side, the data for the labour market remain very strong, with healthy job creation in January (225,000 jobs). Similarly, the manufacturing indices of the New York and Philadelphia Feds indicated a significant rebound in activity in February in those parts of the country. On the other hand, both the manufacturing index of the Richmond Fed and the composite index produced by Markit for the same month fell sharply. These latest indicators may already reflect the uncertainty derived from the coronavirus outbreak.

The United Kingdom grew by 1.4% in 2019, after stagnating in Q4 2019 (1.1% in year-on-year terms). The stagnation of private consumption and the contraction of investment compared to the previous quarter, partly affected by uncertainty surrounding Brexit, explain the weak figure at the end of last year. For 2020, a somewhat clearer political outlook should favour more buoyant economic activity. Following the United Kingdom's official departure from the EU on 31 January, in February a transition period began that will last until the end of the year and during which the United Kingdom will remain within the European single market and subject to EU rules. In addition, the terms of the new relationship between the two regions will be negotiated during this period. This will be a complicated process and will no doubt require more time than stipulated.

In the euro area, the pace of growth was modest at the end of 2019 and the outlook for 2020 remains moderate. The region grew by 0.1% quarter-on-quarter in Q4 2019, which placed the total figure for the year at 1.2%. The latest economic activity indicators also suggest that the region will maintain positive but moderate growth rates. Among other factors, of particular concern is the weakness of the German economy. It registered 0.0% quarter-on-quarter growth in Q4 2019 (0.6% for the year as a whole), hampered by a decline in investment in machinery and equipment, as well as by a stagnation of private consumption. The trend in consumption is concerning, as it had proven resilient in the preceding quarters. In addition, the country will feel the loss of buoyancy in global trade flows expected in the early stages of the year. Finally, the coronavirus epidemic gained strength in Europe at the end of the month and will probably act as another restriction for economic activity. In this context, while we have reduced our forecasts for the growth of the euro area in 2020 by only 1 decimal point, to 1.0%, an intensification of the COVID-19 outbreak in Europe could lead to further reductions over the coming months.

US: economic activity indicators

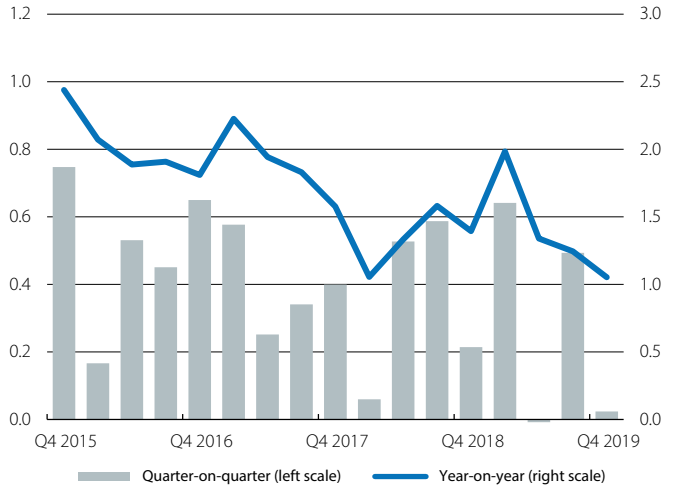
Level



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

United Kingdom: GDP

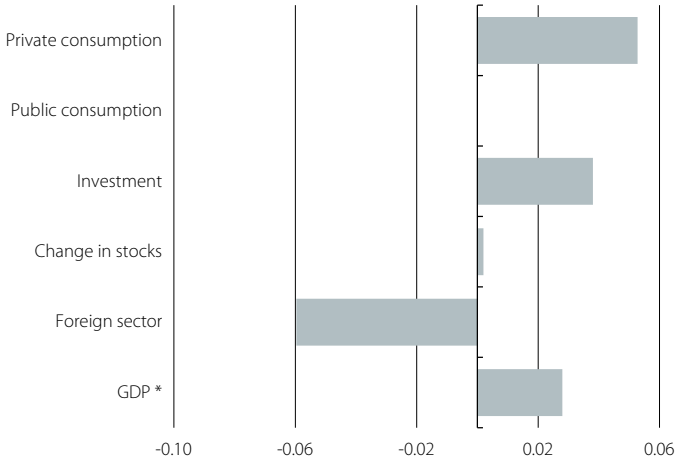
Change (%) *Change (%)*



Source: *CaixaBank Research, based on data from the United Kingdom Office for National Statistics.*

Germany: components of GDP

Contribution to quarter-on-quarter growth in Q4 2019 (pps)



Note: ** Quarter-on-quarter change (%).*
Source: *CaixaBank Research, based on data from Eurostat.*

The economic impact of the dreaded coronavirus: should we be worried?

- **Without a doubt, the coronavirus will have a negative impact on China's economy and that of the rest of the world in 2020.**
- **At present, however, it is very difficult to give a precise estimate of this impact. The level of uncertainty is very high, and estimates place the impact on China's GDP growth in 2020 between –0.4 pps and 2.0 pps, and the impact on the global economy between 0.2 and 1.0 pp.**

At the end of December, the Chinese authorities detected the existence of a new coronavirus (the so-called COVID-19) in the city of Wuhan. In January, the World Health Organization (WHO) declared a global health emergency and the financial markets were hit by fears that it could have a high economic cost. To what extent should we be concerned about the economic impact of the virus?

The economics of the coronavirus

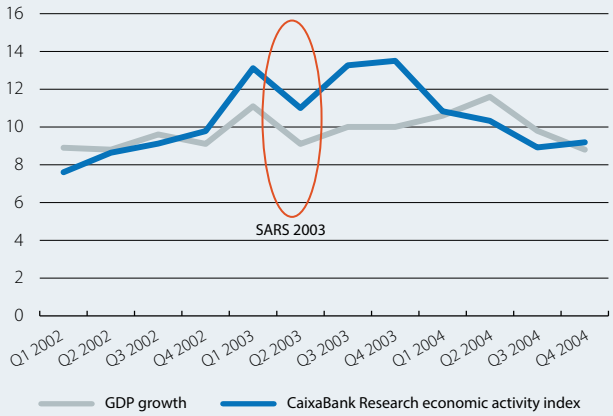
Through what channels could this negative impact on growth in China and in the world materialise? Starting with China, faced with the effects of the virus and the uncertainty that accompanies it, we will see a significant reduction in household consumption, linked to either fear or the restrictions imposed by some authorities on going to public spaces (a pattern already observed in another epidemic in 2003, with a 5.0-pp drop in the year-on-year growth of retail sales in the three most severely affected months). In parallel, the lower economic activity associated with mobility restrictions and the increase in workforce absenteeism are other factors that could erode the economy. In fact, there have already been disruptions of this type, with limitations on tourism, the prolongation of the Chinese New Year holiday, the closure of shops and problems in production due to interruptions in supplies.

At the international level, the lower influx of Chinese tourists, the reduction in exports to the Asian giant, disruptions in global supply chains and even the spread of the virus beyond China (the numbers we will present in this article assume that the epidemic is confined essentially to China) are the main channels through which it could take a toll on the global economy.

Before assigning figures to these disruptions, it is important to stress that it is very difficult at the present juncture to make accurate estimates of the impact of the coronavirus epidemic on global economic activity. This will largely depend on our ability to contain the virus, which in turn depends on how the health crisis is managed, the availability of vaccines, the possibility of the virus mutating and of the epidemic spreading to other countries.

China: economic impact of the 2003 SARS outbreak

(%)



Source: *CaixaBank Research.*

Quantifying the economic impact

In order to shed some light on the possible impact, it is useful to compare the current coronavirus episode with SARS (Severe Acute Respiratory Syndrome), a coronavirus that originated in China in 2003 and which shares some similarities with the current situation. This previous episode suggests that these types of phenomena can entail a substantial economic cost, but that their impact tends to be contained in both time and geographical scope, and they are followed by a rebound in economic activity in the following quarters.

All in all, while this is a useful comparison insofar as it provides a benchmark to compare against, it is far from conclusive in itself: they are different diseases, and the state and weight of China's economy in the global economy is very different now compared to back in 2003. In fact, the current coronavirus is more contagious than SARS (at the beginning of February, the number of people affected by the coronavirus was already triple those affected by SARS in 2003), suggesting that it could spread further and lead the authorities to impose bigger restrictions. However, it has a much lower mortality rate (around 2%, compared to 10% in the case of SARS). It should also be borne in mind that SARS reached its peak

in terms of the number of people affected daily fairly quickly, in April 2003 (the WHO had declared a global emergency on 12 March), but from then on the rate of its spread slowed and by July it ceased to be a threat.

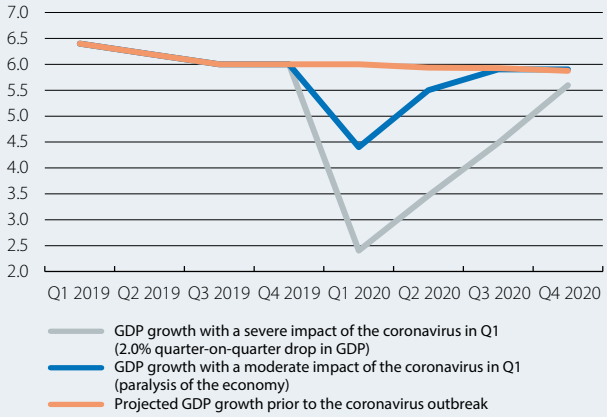
Focusing on the macroeconomic figures, the impact of SARS on China's GDP was concentrated in Q2 2003, in which growth slowed by 2.0 pps (going from 11.1% in the first quarter to 9.1%). This slowdown is very similar to that captured by our economic activity index, which measures the real-time evolution of the economy based on the main economic sectors. In the third quarter of that year, however, the growth rate recovered, propped up in part by fiscal and monetary stimulus programmes. Although estimates of the impact that SARS had on growth for the year as a whole differ, they tend to be in the range of a few decimal points. In fact, the IMF's report for the following year spoke of an insignificant impact, which is not surprising for an economy that ended up registering growth of 10% that year.

If we assume that, like SARS, the coronavirus reaches its peak in Q1 2020 and loses strength from then on, then the cost for the Chinese economy in terms of GDP growth would be around 0.4 pps, if the economy were to come to a complete standstill in the first quarter (0% growth relative to the previous quarter), with a rebound beginning in the following quarter. A complete standstill sounds rather foreboding, but it could be a somewhat benign scenario given the scale of the shock that stands before us. In fact, the scale of the restrictions that have been imposed in order to contain the virus suggests that economic activity in Q1 could contract. Thus, another more severe scenario that is plausible is that the Chinese economy could not only stop growing but could decline relative to Q4 2019. In this case, China's growth could be around 4.0% in 2020. This implies a negative quarter-on-quarter growth of 2.0% in Q1 and a recovery beginning in the following quarter. In any case, the extent of the negative figure for Q1 will largely determine the average growth that we will see in 2020.

Beyond the impact in China, what would be the impact on the global economy? The coronavirus will have an adverse effect on the global economy due to a direct impact of the cost in China, an indirect impact through the reduction of trade flows, tourism and confidence, and a direct impact on economies outside of China if the virus spreads. If we take our estimates for the effect of a slowdown in China and apply them to the rest of the world,[1] then the negative impact on global growth if China were to experience a 0.4-pp slowdown would be around 0.2 pps, with a variable effect depending on each economy's degree of integration with that of China. If, on the other hand, China were to experience a 2.0-pp slowdown, then the global economy could see a reduction in its growth of around 1.0 pp.

China: potential impact of the coronavirus

Year-on-year change (%)



Source: *CaixaBank Research.*

We cannot end the article without emphasising the high degree of uncertainty that exists over the impact of the coronavirus outbreak. At the global level, the repercussions are likely to be somewhat greater than in 2003, given that China is now much more integrated into the global economy (it currently represents 17% of global GDP, *versus* the 4% it represented in 2003). At the domestic level, the Chinese economy also has a very different productive structure compared to in 2003: the relative weight of private consumption is now lower (39% of GDP, *versus* 43% in 2003), while there has been a rise of e-commerce. This combination may dampen the negative impact of the COVID-19 to some extent. However, the message of this article is clear: the coronavirus is a source of significant risk that will affect the growth figures for this year. It is, therefore, a phenomenon to be monitored very closely, and not only from a medical perspective.

Javier Garcia-Arenas

1. See the Focus «China: in prosperity and in adversity», in the MR06/2018 for further details.

Latin America's «second lost decade»?

- **Latin America is on course to experience its worst phase of growth since the «lost decade» of the 1980s.**
- **The problems are not just contextual: in the past the continent benefited from a combination of reforms and demographic dynamism that looks unlikely to continue.**
- **The pattern of economic growth, together with the lethal combination of high inequality and the perception of a lack of opportunities, are the underlying factors giving rise to social instability.**

In 2019, growth in Latin America will have stood at 0.1%, the worst among the major emerging regions. Furthermore, this is not a one-off bad year: the average growth rate for the decade 2009-2019 is the worst since the grim «lost decade» of 1980-1990. If we also add that in 2019 the region has been ravaged by severe social and political unrest, the doubts over Latin America are amplified. In this situation, three major questions arise: what are the causes of this poor economic performance? What is causing the surge in social and political instability? What are the short- and long-term prospects for the region?

The causes of Latin America's low growth

Latin America is suffering from poor growth due to a combination of three factors: lower commodity prices, which have weighed down a region that is highly dependent on such exports, the impact of the uncertainty shock affecting international trade and the effects of political and social instability on confidence. Without a doubt, these three explanations are relevant, but perhaps not as much as one might think.

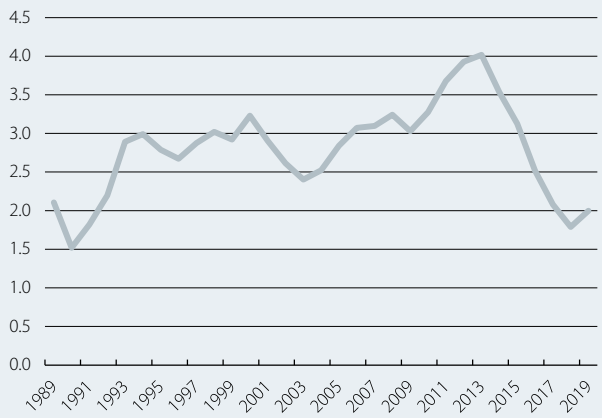
For instance, according to the historical relationship between commodity prices and regional growth, Latin America would have grown by 1.6% in 2019, not the 0.1% currently estimated. Furthermore, besides a few specific countries such as Mexico, it is not clear that the uncertainty shock has had such a negative impact to date. As for the social unrest and political shifts that have marred sentiment about the region, given that they mostly occurred in the latter phase of 2019, they appear to be an aggravating factor, rather than an underlying cause.

In fact, if we take a less shortsighted view, 2019 marks the culmination of a series of bad years that have already led to talk of the (possible) «second lost decade». When we adopt this structural perspective, it becomes clear just how different the pattern of growth in the region has been. In particular, in the period 2000-2015, labour productivity growth in Latin America was 0.6% per annum, while in emerging Europe and Central Asia it was 3.2%, and in the rest of Asia, 6.1%.[1]

The route cause of Latin America's problems now becomes clearer: the continent enjoyed good years in the past not only because commodities were experiencing an expansive cycle, but also because the region's demography provided strong support for growth. Moreover, the 1990s were a period of major structural reforms (independence of the central banks, strict fiscal rules that were respected, liberalisation and opening up to trade, etc.). These made a decisive contribution to improving the region's macroeconomic credibility (and, in particular, to containing inflation expectations), as well as to anchoring it within the system of global trade. It thus seems quite clear that from the mid-2000s the region was living off the benefits of the efforts of the past.

Latin America: GDP growth

10-year moving average (%)



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

Social and political instability

The irruption of social conflict has affected Chile, Colombia, Bolivia, Peru and Ecuador. At first sight, it might seem tempting to treat each case in isolation. However, even though one cannot deny that there are idiosyncratic factors at play, it is also certainly true that there is an underlying factor uniting all this social and political unrest: the lack of opportunities offered by an insufficiently inclusive form of growth.

As is well known, Latin America has some of the countries with the highest inequality in the world. According to the World Bank, of the 20 countries with the highest Gini index, 12 are in Latin America. What is less well known is that inequality has been declining in recent decades, albeit at an ever slower pace. Why, then, the current episode of instability? The key trigger is the slowdown in

1. See McKinsey Global Institute (2017). «Where will Latin America's growth come from». Discussion Paper, April.

economic growth: inequality was tolerated in the past because the well-being that Latin America generated by growing at a rate of 3% or 4% reached large swathes of society. When this mechanism grinds to a halt, a widespread perception of social injustice emerges: on top of income inequality, inequality of opportunities becomes perceived as unacceptable.

We analysed the issue of inequality of opportunities in a previous Dossier.[2] In that analysis, it was determined that societies can tolerate a relatively high degree of inequality, provided they consider that it reflects a disparity in the distribution of talent. What generates a perception of injustice is when this inequality is linked to factors such as a person's family background, or other factors unrelated to an individual's talent and capabilities. It seems clear that this perception is latent in phases of prosperity, but is activated in periods of lower well-being, such as the current one. In addition, the empirical evidence cited in the aforementioned Dossier identified several Latin American countries as being among those with the highest levels of inequality of opportunities.

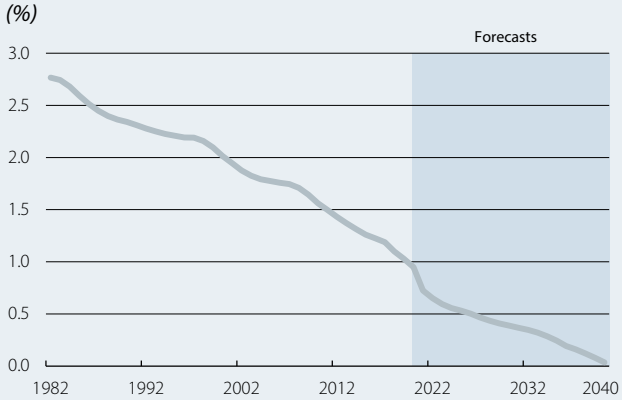
However, shifting towards a more inclusive model of growth is no easy task, especially if it must be done in a context of limited economic dynamism. Thus, the political and social problem will likely persist for the foreseeable future, although not necessarily continuously.

Prospects for growth

In the short term, the growth forecasts point towards a smooth recovery: while in 2019 there was practically no growth at all, in 2020 GDP could grow at a modest, but more positive, 1.6%. Nevertheless, moderate as it is, this growth is subject to major risks. The most significant among them are how the trade dispute between the US and its trading partners plays out and the impact of the coronavirus.

The trade deal between the US and China will help to reduce global uncertainty, and this will benefit Latin America, but it also entails some negative elements. Specifically, the agreement determines that China will increase its purchases of US soybeans in 2020 by as much as 66% compared to 2019.[3] Given the magnitude of this increase and the fact that it is in a sector with relatively rigid demand, it is reasonable to think that in 2020 China will replace the soybeans it purchases from other producing countries with those from the US. Brazil, which supplies 54% of China's imported soybeans, could be one of those other producers to be the hardest hit: the reduction of exports to China could deduct up to 0.4 pps

Latin America: annual growth of the working-age population *



Note: **Sum of the working-age population of Brazil, Mexico, Colombia, Argentina and Chile.*
Source: *CaixaBank Research, based on data from Oxford Economics.*

from the country's growth in 2020 (the impact on Latin America would be 1 decimal point).[4]

A second risk derives from the effects of the coronavirus in China and, by extension, on the global economy. According to calculations by CaixaBank Research, the epidemic could subtract between 0.4 and 2.0 pps from China's growth in 2020, which would translate into between –0.2 and –1.0 pp for Latin America.[5]

That said, the real challenge lies in the long-term outlook. Demography has been the key factor driving much of Latin America's growth in recent decades, while it was productivity growth that was wavering, lying at very low levels. Looking ahead to the next decade, the prospects on both fronts are not too promising. Latin America's demography is entering a stage of reduced dynamism: whereas between 2009 and 2019 the growth of the working-age population for the five main countries of the region was 1.3% per annum, in the next 10 years it will be 0.6%.

It is also hard to be optimistic with regard to productivity. Its greatest limiting factor is the prevalence of the informal economy. In some countries, this can account for as much as half of the working population, and it does little to encourage companies and workers to improve human capital or to invest in intangible assets.

While it is difficult to reach an encouraging conclusion, this does not rule out that if the previous boom was what followed the fateful «lost decade» of the 1980s, then perhaps the current «second lost decade» could help to sow the seeds of prosperity in a region that deserves to live better.

Àlex Ruiz

2. See the article «Equal opportunities: levelling the playing field for everyone» in the Dossier of the MR03/2018.
3. The trade deal does not specify the precise amount of soybean that China must buy, but it does indicate the total for agricultural products in general. To estimate the amount of soybean, it is assumed that it accounts for 52% of all the agricultural products covered by the agreement.
4. The impact could be less, given that there are doubts over both parties' ability to execute the agreement: the increase in US soybean production is a demanding target and China's actual purchasing capacity may be lower in the context of a drop in soybean consumption driven by a reduction of pig livestock.
5. See the Focus «The economic impact of the dreaded coronavirus: should we be worried?» in this same *Monthly Report*.

A step towards a reform of the fiscal rules in Europe?

- **The European Commission has initiated a review of the EU's fiscal framework, with the aim of proposing changes to the fiscal rules at the end of 2020.**
- **The need to reform the fiscal rules arises in response to a certain discontent over how they have been applied since the financial crisis, as well as to transformations which Europe must address (climate change, population ageing, inequality and the digital era).**

In February, the European Commission officially launched a review of the EU's fiscal framework. In addition to the requirement (under law) to evaluate them every five years, there are two main reasons for reviewing the current European fiscal rules:[1] a certain discontent over how they have been applied since the financial crisis and a need to adapt them to the new challenges laid down by the European Commission. In particular, the new Commission aims to make Europe the first «climate neutral» continent,[2] to adapt it to the digital era, to reduce inequality and to alleviate the effects of the ageing of the population. These challenges will be difficult to overcome without significant public investment (among other reasons, because of the public goods nature of some of the necessary investments, such as sustainable transport, the renovation of public buildings to make them more energy efficient, etc.). Such an increase in public investment is not feasible under the current fiscal rules.

The revision of the European fiscal framework has begun with an assessment of the rules by the Commission, which will involve reviewing their effectiveness in recent years. Following the publication of this assessment, which we set out below, the Commission will then begin a discussion period with stakeholders (national parliaments and governments, central banks, academics, fiscal authorities, the public, etc.). Finally, at the end of this period, proposals to change the fiscal framework will be presented.

What was the conclusion of the European Commission's assessment?

In its assessment, the Commission highlighted the strengths and weaknesses of the European fiscal framework, which was already updated in 2011 and 2013 under the Six Pack and Two Pack reforms.[3]

According to the Commission, the budget rules have been effective in reducing excessive deficits. After the economic and financial crisis, 24 member states were in the excessive deficit procedure (a procedure established in order for countries with a deficit of more than 3% of GDP to reduce it). In 2020, in contrast, no country has an excessive deficit (Spain emerged from the excessive deficit procedure in June 2019). At the aggregate level, public debt in the euro area has also been reduced since the crisis, albeit slowly and with high levels of debt persisting in some countries.

On the other hand, the preventive arm of the rules, which serves to prevent fiscal policies that could lead to excessive deficits, has been less successful. Today, many member states have a structural deficit in excess of the medium-term target. Additionally, one of the weaknesses identified by the Commission is that fiscal policy has been too procyclical in many countries, with an excessive increase in deficits during good times and an overly hasty fiscal consolidation during the crisis. Moreover, this consolidation was largely carried out through a drastic reduction in investment – a source of growth in the medium term. The Commission also admitted that the rules are too complex and unpredictable, as they are based on unobserved variables (such as the output gap and the structural balance) which are very difficult to estimate. Finally, the Commission considers that the rules take insufficient account of the state of the overall euro area economy. For instance, with ECB interest rates at an all-time low, the rules prevent a fiscal stimulus precisely at a time when fiscal policy should take on a more important role.

The questions for a reform in 2020

The Commission's assessment raises various questions for a future review of the rules: how to ensure the sustainability of public debt in the long term and, at the same time, enable economic stabilisation in the short term; how to encourage investment and structural reforms; how to simplify the rules and improve their transparency and how to take into account the state of the euro area economy as a whole?

Providing answers to all these questions before the end of 2020 is an ambitious task. In any case, the starting point is an encouraging one: the Commission has identified the main problems and is posing the right questions. The big question is whether member states will reach agreement on making the necessary changes to the rules.

Álvaro Leandro

1. These include the deficit and debt limits (3% and 60% of GDP, respectively) and the requirement to adjust the structural balance towards a medium-term target.
2. By «climate neutral», the Commission refers to net zero greenhouse gas emissions.
3. These two reforms, among other adjustments, introduced the possibility for sanctions to be imposed on countries that fail to follow the rules relating to the reduction of public debt and the procedure for macroeconomic imbalances.

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

UNITED STATES

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	11/19	12/19	01/20
Activity									
Real GDP	2.4	2.9	2.7	2.3	2.1	2.3	–	–	–
Retail sales (excluding cars and petrol)	4.5	4.7	3.4	3.6	4.2	3.9	2.6	5.6	3.3
Consumer confidence *(value)*	120.5	130.1	125.8	128.3	132.1	127.0	126.8	128.2	130.4
Industrial production	2.3	3.9	2.9	1.2	0.2	–0.7	–0.5	–0.9	–0.8
Manufacturing activity index (ISM) *(value)*	57.4	58.9	54.7	52.4	49.4	48.1	48.1	47.8	50.9
Housing starts *(thousands)*	1.209	1.250	1.213	1.256	1.282	1.449	1.381	1.626	1.567
Case-Shiller home price index *(value)*	200	211	215	216	217	219	219	220	...
Unemployment rate *(% lab. force)*	4.3	3.9	3.9	3.6	3.6	3.5	3.5	3.5	3.6
Employment-population ratio *(% pop. > 16 years)*	60.1	60.4	60.7	60.6	60.9	61.0	61.0	61.0	61.2
Trade balance[1] *(% GDP)*	–2.8	–2.4	–3.0	–3.1	–3.1	–2.9	–2.9	–2.9	...
Prices									
Headline inflation	2.1	2.4	1.6	1.8	1.8	2.0	2.1	2.3	2.5
Core inflation	1.8	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.3

JAPAN

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	11/19	12/19	01/20
Activity									
Real GDP	2.2	0.3	0.8	0.8	1.8	–0.4	–	–	–
Consumer confidence *(value)*	43.8	43.6	41.3	39.5	36.8	38.0	38.7	39.1	39.1
Industrial production	2.9	1.0	–1.1	–1.2	–1.1	–6.3	–6.7	–5.6	–2.4
Business activity index (Tankan) *(value)*	19.0	20.8	12.0	7.0	5.0	0.0	0.0	–	–
Unemployment rate *(% lab. force)*	2.8	2.4	2.5	2.4	2.3	2.3	2.2	2.2	2.4
Trade balance[1] *(% GDP)*	0.5	–0.1	–0.3	–0.5	–0.4	–0.3	–0.3	–0.3	–0.4
Prices									
Headline inflation	0.5	1.0	0.3	0.8	0.3	0.5	0.5	0.8	0.7
Core inflation	0.1	0.3	0.4	0.6	0.6	0.7	0.8	0.8	0.8

CHINA

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	10/19	11/19	12/19
Activity									
Real GDP	6.9	6.7	6.4	6.2	6.0	6.0	–	–	–
Retail sales	10.3	9.0	8.5	8.5	7.6	7.7	8.0	8.0	...
Industrial production	6.6	6.2	6.4	5.6	5.0	5.9	6.2	6.9	...
PMI manufacturing *(value)*	51.6	50.9	49.7	49.6	49.7	49.9	50.2	50.2	50.0
Foreign sector									
Trade balance[1,2]	420	352	381	395	428	424	435	424	...
Exports	7.9	9.9	1.3	–1.0	–0.4	1.8	–1.2	7.4	...
Imports	16.3	15.8	–4.4	–3.8	–6.3	3.0	0.3	16.2	...
Prices									
Headline inflation	1.6	2.1	1.8	2.6	2.9	4.3	4.5	4.5	5.4
Official interest rate[3]	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Renminbi per dollar	6.8	6.6	6.8	6.8	7.0	7.0	7.0	7.0	6.9

Notes: *1. Cumulative figure over last 12 months. 2. Billion dollars. 3. End of period.*

Source: *CaixaBank Research, based on data from the Department of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Standard & Poor's, ISM, National Bureau of Statistics of Japan, Bank of Japan, National Bureau of Statistics of China and Thomson Reuters Datastream.*

EURO AREA

Activity and employment indicators

Values, unless otherwise specified

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	11/19	12/19	01/20
Retail sales *(year-on-year change)*	2.5	1.6	2.5	2.1	2.7	1.8	2.3	1.3	...
Industrial production *(year-on-year change)*	2.9	1.0	–0.5	–1.4	–2.1	–2.8	–1.7	–4.1	...
Consumer confidence	–5.4	–4.9	–7.0	–7.0	–6.8	–7.6	–7.2	–8.1	–8.1
Economic sentiment	110.4	111.5	105.8	103.8	102.0	100.6	100.7	100.9	102.6
Manufacturing PMI	57.4	55.0	49.1	47.7	46.4	46.4	46.9	46.3	47.9
Services PMI	55.6	54.5	52.4	53.1	52.8	52.3	51.9	52.8	52.5
Labour market									
Employment (people) *(year-on-year change)*	1.6	1.5	1.4	1.2	1.0	1.0	1.1	–	–
Unemployment rate *(% labour force)*	9.1	8.2	7.8	7.6	7.5	7.5	7.5	7.4	...
Germany *(% labour force)*	3.8	3.4	3.2	3.1	3.1	3.2	3.2	3.2	...
France *(% labour force)*	9.4	9.1	8.7	8.5	8.5	8.4	8.4	8.4	...
Italy *(% labour force)*	11.3	10.6	10.3	10.0	9.8	9.8	9.8	9.8	...
Real GDP*(year-on-year change)*	2.7	1.9	1.4	1.2	1.2	0.9	0.9	–	–
Germany *(year-on-year change)*	2.8	1.6	1.0	0.3	0.6	0.5	0.5	–	–
France *(year-on-year change)*	2.4	1.7	1.3	1.5	1.5	0.9	0.9	–	–
Italy *(year-on-year change)*	1.8	0.7	0.1	0.2	0.5	0.0	0.0	–	–

Prices

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	11/19	12/19	01/20
General	1.5	1.8	1.4	1.4	1.0	1.0	1.0	1.3	1.4
Core	1.0	1.0	1.0	1.1	0.9	1.2	1.3	1.3	1.1

Foreign sector

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	11/19	12/19	01/20
Current balance	3.2	3.2	3.1	2.8	3.0	3.1	3.1	3.1	...
Germany	8.1	7.3	7.2	7.1	7.5	7.7	7.6	7.7	...
France	–0.7	–0.6	–0.5	–0.7	–0.8	–0.8	–0.7	–0.8	...
Italy	2.7	2.6	2.6	2.7	2.7	...	2.9	...	...
Nominal effective exchange rate[1] *(value)*	96.5	98.9	97.3	97.3	97.7	96.9	96.7	96.7	...

Credit and deposits of non-financial sectors

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	11/19	12/19	01/20
Private sector financing									
Credit to non-financial firms[2]	2.5	3.8	3.7	3.9	3.9	...	...	...	...
Credit to households[2,3]	2.6	3.0	3.3	3.3	3.4	...	...	...	...
Interest rate on loans to non-financial firms[4] *(%)*	1.3	1.2	1.2	1.1	1.1	...	...	...	...
Interest rate on loans to households for house purchases[5] *(%)*	1.7	1.6	1.6	1.6	1.5	...	...	...	...
Deposits									
On demand deposits	10.2	7.9	7.1	7.6	8.6	...	...	...	...
Other short-term deposits	–2.7	–1.5	–0.4	0.4	0.7	...	...	...	...
Marketable instruments	1.6	–4.2	–3.4	–4.9	–1.7	...	...	...	...
Interest rate on deposits up to 1 year from households *(%)*	0.4	0.3	0.3	0.3	0.3	...	...	...	...

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.*

Spain: slight moderation of growth, in anticipation of the coronavirus

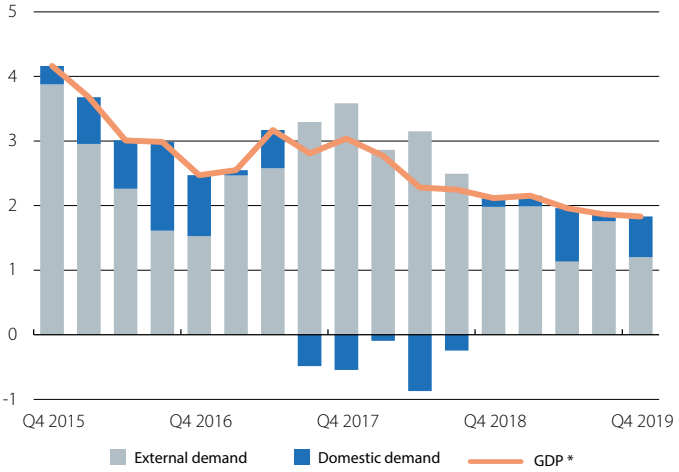
An orderly slowdown pending new developments. The Spanish economy ended 2019 giving continuity to a gradual and expected slowdown (annual GDP for 2019 of +2.0%, following the 2.4% of 2018), with growth rates significantly higher than in other major euro area economies (Germany +0.6%, France +1.2% and Italy +0.2%). In 2020, the reduced push from cyclical factors and the modest growth of the country's main trading partners (especially in the euro area) will give continuity to this slowdown. However, the emergence of the COVID-19 coronavirus and its spread to a number of OECD countries could erode economic activity indicators over the coming months. The impact of the coronavirus can be seen in lower trade flows, not only with China but also with other trading partners that have been affected by the COVID-19 outbreak. Furthermore, a context once again marked by uncertainty could hinder domestic demand. That said, the impact of the coronavirus is expected to be limited to a relatively short period. Therefore, after the temporary blip in the economic activity indicators, we can expect a rebound effect in growth in the quarters that follow. In addition, in this demanding global environment, the Spanish economy will continue to enjoy the benefit of having corrected many of the imbalances it suffered prior to the last financial crisis, as well as the continuity of accommodative financial conditions that are well supported by the ECB's monetary policy.

The latest indicators suggest slightly slower growth, but could be dampened by the coronavirus. In particular, in January, the services PMI index stood at 52.3 points. This is comfortably above the 50-point threshold (which separates expansive from recessive territory), but it is also the lowest figure of the past six years. In contrast, the counterpart indicator for the industrial sector rose 0.9 points, although in this case the figure remains below 50 points (48.5). The growth of turnover in the industrial sector, meanwhile, returned to positive territory in December 2019 (+0.1% year-on-year, based on the three-month moving average) with a 1.5-pp rebound compared to November, following five consecutive months of negative growth. In addition, the counterpart indicator of the services sector registered a lower rate of deceleration, growing by 3.2% year-on-year (three-month moving average). However, indicators that capture the change of sentiment described in the previous pages of this *Monthly Report* and resulting from the outbreak of the coronavirus medical emergency in multiple economies are not yet available.

The labour market began the year with modest performance. For seasonal reasons, January is traditionally a bad month for labour market data as it marks the end of the Christmas campaign. In this regard, the decline in Social Security affiliation (–244,044 people in seasonally adjusted terms) was not unusual. However, in seasonally adjusted terms,

Spain: GDP

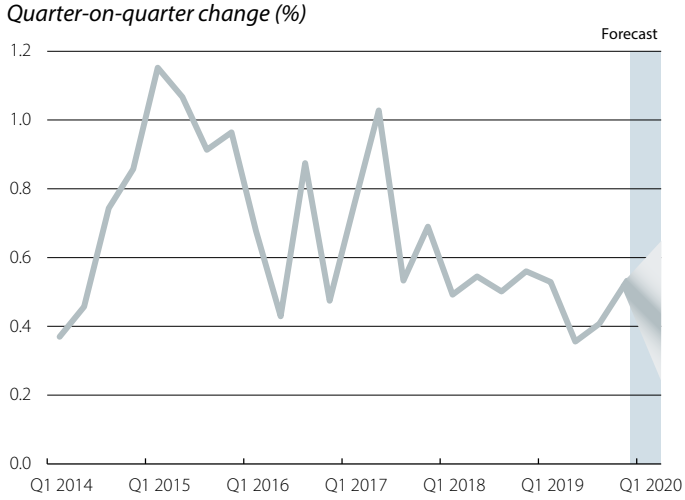
Contribution to year-on-year growth (pps)



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

Spain: GDP

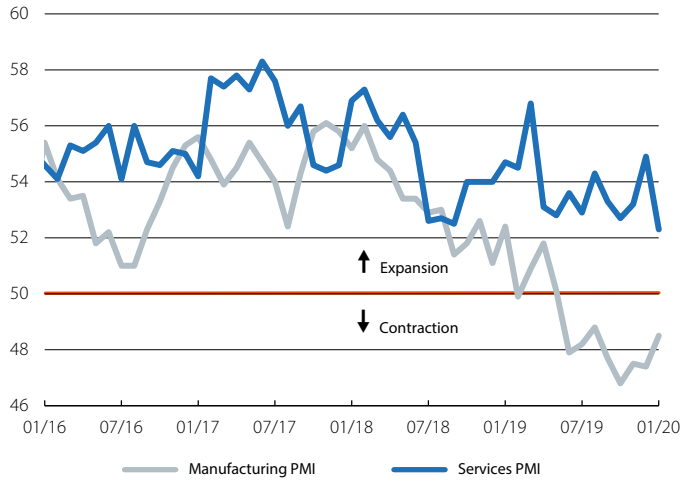
Quarter-on-quarter change (%)



Note: *90% confidence interval.*
Source: *CaixaBank Research, based on data from the National Statistics Institute.*

Spain: economic activity indicators

Level



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

the number of registered workers rose by just 5,324 people in January, well below the increase observed in January 2019 and 2018 (+42,415 and +58,487 people, respectively). This reflects the continuity of the gradual moderation in the pace of job creation (1.8% year-on-year in January, following 2.0% in December and 2.6% on average in 2019). Furthermore, the slowdown is occurring across all sectors: there was a moderation in the growth rate of registered workers affiliated with Social Security in the construction sector (2.3% year-on-year), in industry (0.9%) and in services (2.4%). The rate of decline in registered unemployment, meanwhile, fell to 1.0% year-on-year in January (–1.3% in December). This could, in part, be due to the increase in the overall labour force (as we explained last month, the labour force grew by 1.3% year-on-year in Q4 2019).

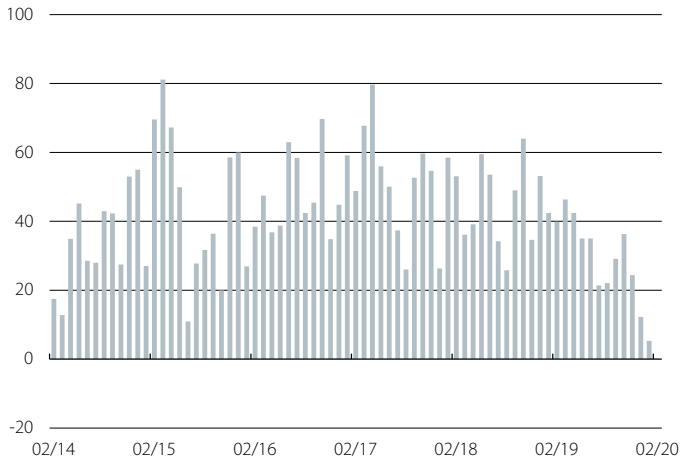
The government relaxes the deficit targets. Pending the publication of the figure for the year end, all the indicators suggest that Spain will have ended 2019 with a budget deficit of –2.3%. For the next few years, the government has proposed raising the fiscal deficit target in 2020 from –1.1% of GDP to –1.8% and, for 2021, from –0.4% to –1.5%. These figures are more in line with our existing projections here at CaixaBank Research, but they imply a slowdown in the reduction of public debt, which remains very high (estimated to be slightly above 95% in 2019). Thus, the new targets maintain a commitment to reducing the deficit, but at a much more gradual rate.

The foreign sector ends 2019 with a good tone. The current account balance stood at +1.9% of GDP in 2019 (23,943 million euros), a similar figure to that of 2018 but with a different composition. In particular, 2019 saw a 0.4-pp improvement in the deficit in the balance of energy goods, which was offset by the greater deficit of non-energy goods (–0.1 pp) and the lower surplus in the balance of services (–0.2 pps). Delving into the detail, the energy deficit benefited from a lower oil price, while the deterioration of the deficit in non-energy goods was driven by the slowdown in exports. The surplus in services, meanwhile, deteriorated due to the effect of imports, including both tourism imports (Spanish tourists travelling abroad) and non-tourism imports. Finally, the income balance had a minimal negative contribution.

Activity in the real estate sector ends the year with a more moderate performance. Sales of residential housing fell by 3.3% in 2019 as a whole, affected by the negative impact of the introduction of the real estate credit act (known as the LCI) in June. That said, the figure for December began to show a slight rebound following the effects of this act. The price of housing according to appraisals, meanwhile, regained some momentum in Q4 2019 (+0.9% quarter-on-quarter, after a modest 0.1% quarter-on-quarter growth in both Q2 and Q3). With this figure, in 2019 as a whole the price of housing grew by 3.2%, slightly below the figure for the previous year (3.4% in 2018). The indicators thus reflect a slowdown, in line with the slower pace of growth of the economy. However, this should not be interpreted as a sign of weakness in the sector, but rather as a normalisation towards more sustainable growth rates following the significant rebound experienced during the recovery.

*Spain: registered workers affiliated with Social Security **

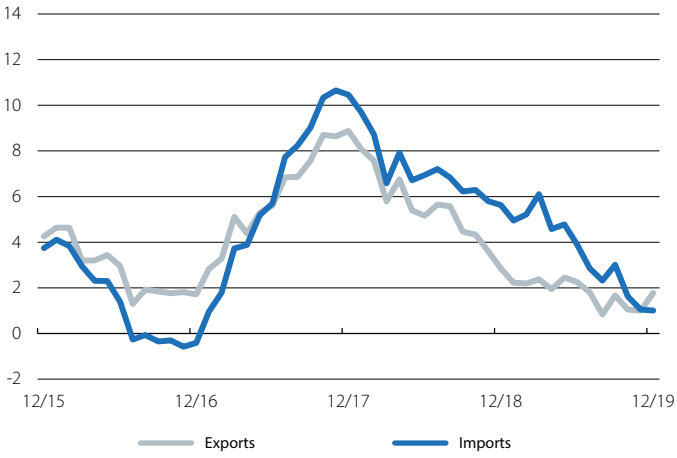
Monthly change (thousands of people)



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

*Foreign trade in goods **

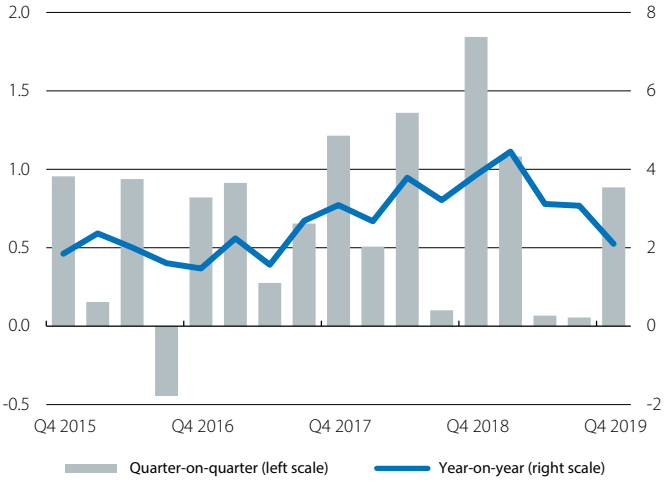
Year-on-year change in the 12-month cumulative balance (%)



Note: ** Nominal data, series not seasonally adjusted.*
Source: *CaixaBank Research, based on data from the Department of Customs.*

Spain: housing prices (appraisals)

Change (%) *Change (%)*



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

Activity and employment indicators

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
Industry									
Industrial production index	3.2	0.3	0.0	1.4	0.9	0.3	0.8	...	...
Indicator of confidence in industry *(value)*	1.0	–0.1	–3.8	–4.6	–2.0	–5.2	–2.6	–5.2	–4.0
Manufacturing PMI *(value)*	54.7	53.3	51.1	49.9	48.2	47.2	47.4	48.5	...
Construction									
Building permits *(cumulative over 12 months)*	22.9	25.7	25.8	21.9	13.0	8.0	5.5	...	...
House sales *(cumulative over 12 months)*	14.1	14.2	8.3	5.5	1.3	–2.8	–3.3	...	...
House prices	6.2	6.7	6.8	5.3	4.7	...	–	–	–
Services									
Foreign tourists *(cumulative over 12 months)*	10.0	4.0	1.0	1.5	2.1	1.4	1.1	0.9	...
Services PMI *(value)*	56.6	54.8	55.3	53.2	53.5	53.6	54.9	52.3	...
Consumption									
Retail sales	1.0	0.7	1.4	2.2	3.3	2.3	1.7	...	...
Car registrations	7.9	7.8	–7.0	–4.4	–7.9	5.1	6.6	–7.6	...
Consumer confidence index *(value)*	–3.4	–4.2	–4.8	–4.0	–5.8	–10.5	–12.1	–11.5	–7.9
Labour market									
Employment [1]	2.6	2.7	3.2	2.4	1.8	2.1	–	–	–
Unemployment rate (% labour force)	17.2	15.3	14.7	14.0	13.9	13.8	–	–	–
Registered as employed with Social Security [2]	3.6	3.1	2.9	2.8	2.5	2.2	2.0	1.8	...
GDP	**2.9**	**2.4**	**2.2**	**2.0**	**1.9**	**1.8**	**–**	**–**	**–**

Prices

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
General	2.0	1.7	1.1	0.9	0.3	0.4	0.8	1.1	0.8
Core	1.1	0.9	0.7	0.8	0.9	1.0	1.0	1.0	...

Foreign sector

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	8.9	2.9	2.4	2.3	1.7	1.8	1.8	...	...
Imports *(year-on-year change, cumulative over 12 months)*	10.5	5.6	6.1	3.9	3.0	1.0	1.0	...	...
Current balance	**31.1**	**23.3**	**19.6**	**20.6**	**21.0**	**23.9**	**23.9**	**...**	**...**
Goods and services	41.6	32.6	30.2	31.5	31.4	34.1	34.1	...	...
Primary and secondary income	–10.5	–9.3	–10.6	–10.9	–10.4	–10.1	–10.1	...	...
Net lending (+) / borrowing (–) capacity	**33.9**	**29.1**	**25.5**	**26.6**	**26.3**	**29.1**	**29.1**	**...**	**...**

Credit and deposits in non-financial sectors [3]

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

	2017	2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
Deposits									
Household and company deposits	2.8	3.2	5.2	5.8	5.4	5.4	5.0	4.3	...
Sight and savings	17.6	10.9	11.3	10.9	10.3	10.3	9.8	8.6	...
Term and notice	–24.2	–19.9	–13.7	–12.8	–13.2	–13.9	–14.8	–15.7	...
General government deposits	–8.7	15.4	17.8	15.7	3.7	–2.1	–3.3	–4.3	...
TOTAL	**1.9**	**3.9**	**5.9**	**6.3**	**5.3**	**4.9**	**4.4**	**3.8**	**...**
Outstanding balance of credit									
Private sector	–2.2	–2.4	–2.1	–1.1	–1.1	–1.5	–1.2	–1.1	...
Non-financial firms	–3.6	–5.5	–5.5	–3.0	–2.3	–3.0	–2.3	–2.1	...
Households - housing	–2.8	–1.9	–1.1	–1.2	–1.3	–0.7	–0.7	–0.8	...
Households - other purposes	3.7	5.1	4.2	3.8	2.3	–0.1	0.3	0.4	...
General government	–9.7	–10.6	–10.4	–7.2	–5.4	–1.2	–2.9	3.8	...
TOTAL	**–2.8**	**–2.9**	**–2.6**	**–1.5**	**–1.4**	**–1.5**	**–1.3**	**–0.8**	**...**
NPL ratio (%)[4]	**7.8**	**5.8**	**5.7**	**5.4**	**5.1**	**4.8**	**4.8**	**...**	**...**

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.*

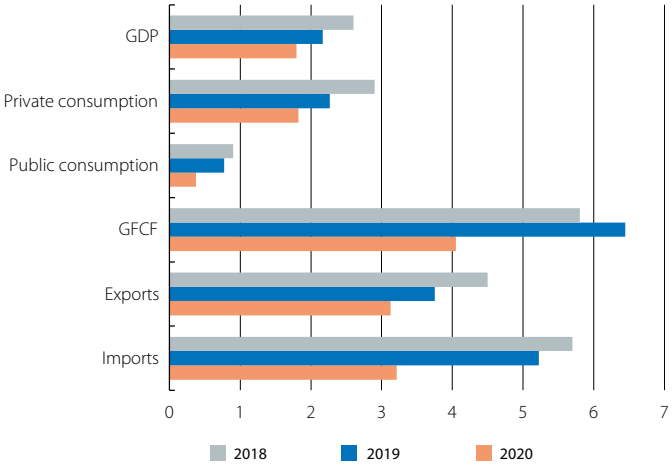
Portugal ended 2019 on a good note, but it is not immune to the uncertainty of the coronavirus

The economy grew by a solid 2.2% in 2019. Economic activity accelerated in Q4 2019 (2.2% year-on-year and 0.7% quarter-on-quarter) thanks to a better than expected contribution from external demand (+1.3 pps), partly as a result of the statistical revisions that the Bank of Portugal has carried out in the balance of payments series. Domestic demand, meanwhile, had a more moderate contribution in the last quarter of the year, although in 2019 as a whole it has remained the driving force behind the expansion. In particular, the 2.2% GDP growth rate in 2019 reflects a 2.7-pp contribution from domestic demand (this includes investment, which grew by an impressive 6.5%, boosted by the acceleration of investment in intellectual property products up to +6.5% and in construction up to 9.4%). External demand, on the other hand, provided a negative contribution to GDP of 0.6 pps for the year as a whole, largely explaining the slowdown of GDP compared with the 2.6% registered in 2018. In 2020, however, some indicators are starting to show some deterioration. Whereas in January the Bank of Portugal's coincident indicators remained strong (2.0% in aggregate activity and 2.4% in private consumption), in February the consumer and industry confidence indices declined to –8.1 points (the lowest level since June 2019) and –4.2 points, respectively. This decline is mainly due to less positive expectations with regard to the country's economic situation over the next 12 months, which may reflect the unknown impact of the COVID-19 coronavirus. In fact, this uncertainty factor is what leads us not to improve our growth forecast for 2020 (1.7%), in spite of the strong growth in 2019.

Slowdown in the labour market in the closing stages of 2019. The population in work continued to rise in Q4 2019 (+24,600 people), albeit at a slower pace than in the past (0.5% year-on-year, versus 0.9% in Q3 and 2.3% for 2018 as a whole). On the other hand, the unemployment rate rose to 6.7% (versus 6.1% in Q3). The deterioration in the unemployment rate at the end of the year is normal, but on this occasion it was higher than expected as a result of the significant rise in the overall labour force, and the foreign labour force in particular, in addition to the reduced capacity to generate employment in a more mature phase of the cycle. For 2020, we anticipate that the labour market will continue to improve, albeit at a much more moderate rate than in recent years.

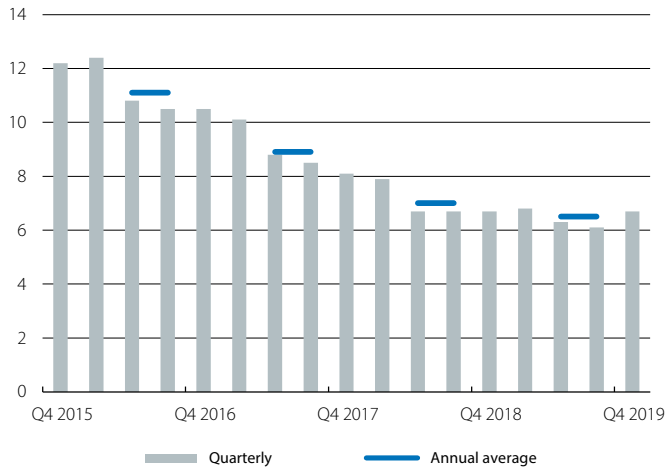
The current account balance ends 2019 with a slight deficit. After six years in positive territory, the current account balance ended 2019 with a deficit of –0.1% of GDP (181.5 million euros), which represents a deterioration of

Portugal: GDP and components
Annual growth (%)



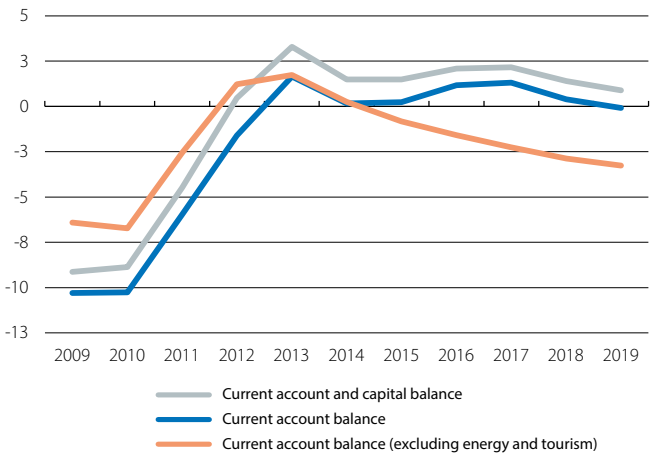
Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal.*

Portugal: unemployment rate
(%)



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

Portugal: current account and capital balance
Balance (% of GDP)



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

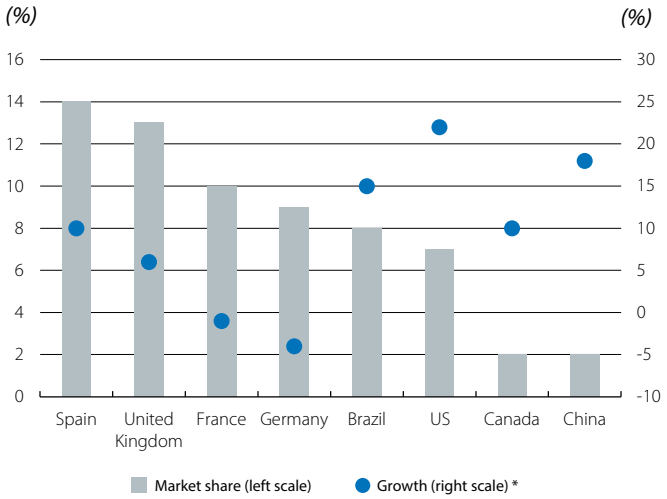
3 decimal points compared to the +0.2% registered in 2018. This was a result of the deterioration in the trade deficit in goods (7.9% of GDP; a deficit 2 decimal points greater than in 2018, affected by the import component of investment), as well as the lower surplus of non-tourism services (+2.1% of GDP, –0.25 pps compared to 2018), since the tourism surplus improved by 1 decimal point to reach 6.2% of GDP. The sum of the current account and capital balance, meanwhile, remained positive, allowing the country to continue to reduce its external indebtedness. In particular, the overall surplus stood at +0.9% of GDP (5 decimal points lower than in 2018), while external debt improved, falling to 85.1% of GDP (89.5% in 2018).

Tourism activity accelerated in 2019. Last year, Portugal registered a total of 27 million tourists, of which 11 million were domestic and 16 million, foreign. This represented a 7.3% increase in tourism activity in 2019 (5.3% in 2018), with a 7.1% increase in the number of international tourists (4.8% in 2018). Tourists from Spain, the US and Brazil were primarily responsible for this trend, accounting for more than half of the total growth in foreign tourists. Furthermore, the average revenue per available room increased once again in 2019, reaching 49.4 euros (48.5 euros in 2018), while revenues of tourist accommodation establishments grew by 7.3%. If these trends continue, Portugal could exceed 17 million international tourists in 2020. However, tourism will probably be one of the sectors to suffer the most from the coronavirus health emergency.

Meagre inflation rates persist. In February, headline inflation slowed to 0.4% year-on-year (0.8% in January), due to both the fall in energy prices and the slowdown in core inflation. The latter excludes energy prices and unprocessed food, and stood at 0.1% year-on-year, 0.3 pps lower than in January.

Demand for credit remained strong in 2019. New lending to the non-financial private sector grew by 8.9% year-on-year in 2019 (12.3% in 2018). By segment, new lending for the purchase of housing accelerated in the closing months of last year, following the slowdown in the first few months (in 2019 as a whole, it rose by 10.4%). Consumer lending was also buoyant, with growth of 14.8%. In both cases, however, the figures reflect a base effect: in the final months of 2018, both segments were adversely affected by the Bank of Portugal's implementation of stricter macroprudential measures in the granting of credit. Finally, growth was also robust in the field of non-financial firms (5.6%, versus 11.8% in 2018). Despite the buoyancy of new lending, the stock of credit to the non-financial private sector decreased again at the end of the year (–0.4% year-on-year), due to the contraction of credit of non-financial firms (–3.5% year-on-year; adjusting for sales of doubtful loans, it would have increased by 0.7%). As for households, the 1.5% year-on-year increase was largely due to the growth in consumer credit (+10.6% year-on-year).

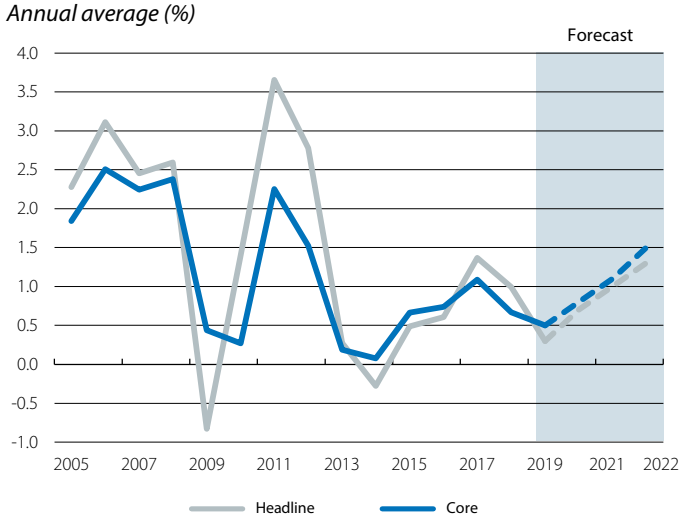
Portugal: non-resident tourism



Note: ** 12-month cumulative growth up to December 2019, year-on-year change*
Source: *CaixaBank Research, based on data from the National Statistics Institute of Portugal.*

Portugal: CPI

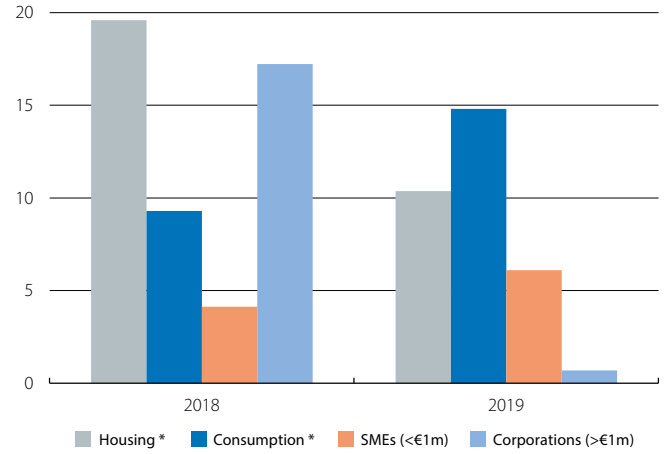
Annual average (%)



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

Portugal: new lending

Year-on-year change (%)



Note: ** Excludes refinancing arrangements.*
Source: *CaixaBank Research, based on data from the Bank of Portugal.*

Activity and employment indicators

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

	2018	2019	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
Coincident economic activity index	2.5	2.1	2.2	2.3	2.1	2.0	2.0	2.0	...
Industry									
Industrial production index	0.1	–2.4	–3.7	–2.2	–4.1	0.4	3.0	2.0	...
Confidence indicator in industry *(value)*	0.8	–3.2	–1.4	–3.3	–3.7	–4.3	–4.3	–3.4	–4.2
Construction									
Building permits *(cumulative over 12 months)*	19.1	6.7	21.1	16.3	13.0	6.7	6.7	...	...
House sales	16.8	...	7.6	–6.6	–0.2	...	...	...	...
House prices *(euro / m² - valuation)*	5.8	7.5	6.7	7.5	7.9	8.0	8.3	8.5	...
Services									
Foreign tourists *(cumulative over 12 months)*	4.8	7.1	4.5	4.9	5.8	6.8	7.1	...	...
Confidence indicator in services *(value)*	14.1	12.9	15.3	14.2	11.5	10.6	10.1	8.2	6.5
Consumption									
Retail sales	4.2	4.6	4.3	5.9	4.5	3.6	2.6	...	...
Coincident indicator for private consumption	2.6	2.3	2.2	2.2	2.4	2.5	2.5	2.4	...
Consumer confidence index *(value)*	–4.6	–8.0	–8.3	–8.9	–7.6	–7.1	–7.2	–7.8	–8.1
Labour market									
Employment	2.3	1.0	1.5	0.9	0.9	0.5	0.1	0.2	...
Unemployment rate (*% labour force*)	7.0	6.5	6.8	6.3	6.1	6.7	6.7	6.9	...
GDP	**2.6**	**2.2**	**2.4**	**2.1**	**1.9**	**2.2**	**...**	**...**	**...**

Prices

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

	2018	2019	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
General	1.0	0.3	0.8	0.5	–0.2	0.3	0.4	0.8	0.4
Core	0.7	0.5	0.8	0.6	0.1	0.4	0.4	0.4	0.1

Foreign sector

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

	2018	2019	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	5.1	3.6	5.8	3.3	2.1	3.6	3.6	...	...
Imports *(year-on-year change, cumulative over 12 months)*	8.2	6.6	9.2	8.3	7.9	6.6	6.6	...	...
Current balance	**0.8**	**–0.2**	**–0.4**	**–0.2**	**–0.6**	**–0.2**	**–0.2**	**...**	**...**
Goods and services	1.5	0.8	0.9	0.5	0.2	0.8	0.8	...	...
Primary and secondary income	–0.7	–1.0	–1.3	–0.8	–0.8	–1.0	–1.0	...	...
Net lending (+) / borrowing (–) capacity	**2.8**	**1.9**	**1.7**	**1.7**	**1.4**	**1.9**	**1.9**	**...**	**...**

Credit and deposits in non-financial sectors

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

	2018	2019	Q1 2019	Q2 2019	Q3 2019	Q4 2019	12/19	01/20	02/20
Deposits [1]									
Household and company deposits	3.8	5.0	4.9	4.5	5.3	5.2	5.2	...	...
Sight and savings	14.3	14.4	14.2	13.3	15.1	14.9	14.8	...	...
Term and notice	–3.0	–2.4	–1.9	–2.3	–2.5	–2.8	–2.9	...	...
General government deposits	–1.9	–13.6	–11.6	–11.9	–17.1	–13.7	5.6	...	...
TOTAL	**3.5**	**4.0**	**4.1**	**3.6**	**4.1**	**4.2**	**5.2**	**...**	**...**
Outstanding balance of credit [1]									
Private sector	–1.5	–1.2	–2.0	–1.3	–0.7	–0.6	–0.4	...	...
Non-financial firms	–4.0	–4.2	–6.0	–4.1	–3.3	–3.2	–3.5	...	...
Households - housing	–0.8	0.0	–0.1	0.0	0.0	–0.1	0.3	...	...
Households - other purposes	4.2	3.9	3.2	2.7	4.2	5.6	6.4	...	...
General government	2.4	–8.5	–12.5	–8.2	–6.4	–7.1	–4.7	...	...
TOTAL	**–1.4**	**–1.5**	**–2.5**	**–1.6**	**–1.0**	**–0.9**	**–0.6**	**...**	**...**
NPL ratio *(%)* [2]	**9.4**	**...**	**8.9**	**8.3**	**7.7**	**...**	**...**	**...**	**...**

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

The financial cycle: an essential tool for understanding the economy

Human beings love cycles. Whether vital, historical, political... or even in football. If you don't believe us, just ask all the coaches who have been dismissed with a trite «He had reached the end of his cycle». Economists, believe it or not, are also human and we are no exception. Real business cycles (i.e. the ups and downs in the production of goods and services) were the main focus of our studies for decades. However, following the 2008 financial crisis, we realised that it was not possible to analyse the macro-financial cycle without taking financial factors into account, and this gave rise to a new concept: the financial cycle.

While there is no universal definition of the financial cycle, the expression denotes how interactions between economic and financial players' perceptions and attitudes towards risk, coupled with the financing and credit conditions in the economy, end up generating cycles of boom and bust in the main financial variables. Today, a distinction is made between the domestic financial cycle and the global financial cycle, to the point that the economist from the Bank for International Settlements (BIS) Claudio Borio[1] speaks of a «tale of two cycles», paraphrasing the great Charles Dickens.

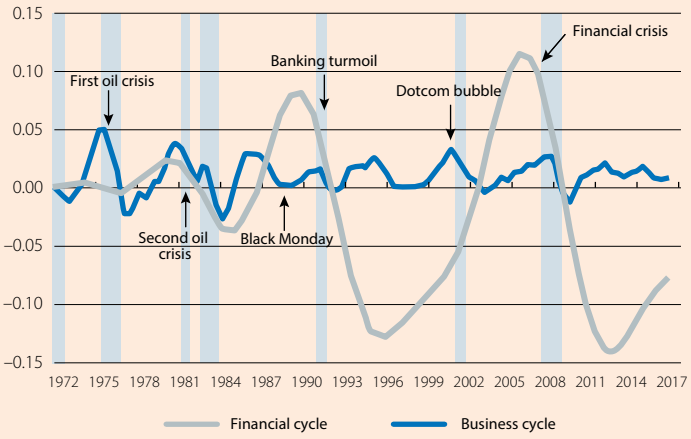
The domestic financial cycle

The domestic financial cycle is characterised by the evolution of credit and housing prices: credit provides a good description of the restrictions in access to financing for households and businesses, while prices reflect economic and financial players' perceptions of the value of their assets, as well as the risk associated with them.

In his seminal article on the financial cycle,[2] Borio combined the information on these two variables in the US to obtain a measure of the financial cycle. As can be seen in the first chart, the resulting cycle lasts longer than the real business cycle. Moreover, it has lengthened over the years. Furthermore, the peaks of the financial cycle occur close to the outbreak of financial crises of a domestic origin, something common to the rest of advanced economies. The reason for this is that, during boom periods, the risk incurred by economic and financial players increases, and this amplifies the credit boom and the rise in asset prices, in what is the prelude to a future crisis. In other words, the seeds of crises are sown during the booms of the financial cycle!

US: financial and business cycle

Deviations from the trend (logs)



Source: *Borio, C. (2012), «The Financial cycle and macroeconomics: What have we learnt?». BIS Working Papers n.º 395.*

This close association between the financial cycle and financial crises can help us to understand the significant impact that the financial cycle has on the real economy: recessions in advanced economies are twice as severe when they coincide with the contractionary phase of the financial cycle.[3] In other words, the financial cycle amplifies the real business cycle.

Of course, the characteristics of the financial cycle do not fall from the sky. What, then, do they depend on? Three main factors have been identified, namely: the financial system, monetary policy and the economic-institutional system. With respect to the first factor, the financial liberalisation that has occurred in recent decades has facilitated access to credit but, at the same time, it has also made the financial cycle more sensitive to players' attitude to risk. Monetary policy is also key. Indeed, in the following articles we will explore its role in detail. Here we will limit ourselves to saying that a monetary policy that is solely focused on controlling inflation would not act to address financial booms occurring in a context of low inflation (nevertheless, there are monetary policy alternatives that can correct the excesses of the financial cycle). Finally, with regard to the economic-institutional system, economic reforms that enhance countries' growth potential can generate changes in lending patterns and in the behaviour of the main financial variables.

1. See C. Borio (2019). «A tale of two financial cycles: domestic and global». BIS Lecture.
2. See C. Borio (2012). «The Financial cycle and macroeconomics: What have we learnt?». BIS Working Papers nº 395.
3. See M. Drehman, C. Borio and K. Tsatsaronis (2012). «Characterising the financial cycle: Don't lose sight of the medium term!». BIS Working Paper nº 380.

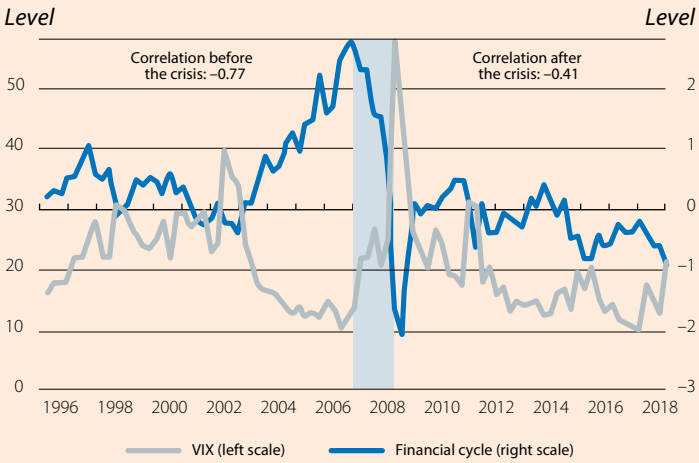
The global financial cycle

The other financial cycle that we have to keep in mind is the global one. Whereas the domestic financial cycle is focused on detecting macrofinancial imbalances that are specific to each economy, the global cycle refers to the financial factors that are generated in the world's major financial hubs - mainly the US - and how these are transmitted to the rest of the world through capital flows and financial asset prices. The economists Hélène Rey and Silvia Miranda-Agrippino[4] were the first to detect that there was a common factor that accounted for 25% of the movement of risk-bearing financial assets. Subsequently, it was noted that this factor also explained around one-quarter of gross capital flows.

What lies behind this common factor that describes the global financial cycle? It is risk appetite, a variable that tends to align with the VIX, the index that calculates the implicit volatility of options on the shares that make up the S&P 500 index. The lower the VIX, the greater the degree of complacency and risk appetite prevailing in the markets, which accelerates the growth of credit and generates an increase in asset prices. It is worth clarifying that the relationship between the global financial cycle and the VIX has weakened following the 2008 financial crisis (see second chart), possibly because many global banks reduced their international positions. Let us recall, for instance, that European banks had amassed abundant liquidity in dollars before the crisis.

On the other hand, the global financial cycle is closely related to US monetary policy: changes in this policy affect investors' expectations and, therefore, the VIX. Such changes end up being transmitted to all other economies (even those with a domestic cycle that substantially differs from that of the US) through international capital flows, which in turn affects the leverage of the big banks and the growth of aggregate global credit.

US: financial and business cycle



Source: *Borio, C. (2019), «A tale of two financial cycles: domestic and global». BIS Lecture.*

It should also be noted that the global financial cycle has important implications for economic policy: traditionally, macroeconomics supported the view that independent domestic monetary policies could only be achieved, in the presence of perfectly mobile capital, with flexible exchange rates (the renowned trilemma, or impossible trinity, of international macroeconomics). However, the existence of a global financial cycle has disrupted this traditional view: the financial conditions of the main global financial hubs are transmitted to the macrofinancial conditions of all other countries, such that domestic monetary policy cannot be fully independent, even if the exchange rate is flexible.[5] As an example, in recent years, with advanced economies in a context of low returns, the abundance of liquidity has been directed towards other neighbouring economies. In order to avoid sudden appreciations of their currencies and to contain capital inflows, these other economies have relaxed their monetary conditions, implementing interest rates lower than what would be justified by their domestic needs. Therefore, the only way to achieve an independent monetary policy is with policies that influence capital flows (i.e. shifting from the trilemma to a simple dilemma). Among others, these include cyclical macroprudential policies that limit the growth of credit and leverage during boom periods, or structural policies that place a cap on leverage and reduce intermediaries' procyclical nature.

In short, the existence of a dual financial cycle (domestic and global) is unquestionable. As such, studying the main macrofinancial variables (such as the natural rate of interest), business cycles and monetary policy itself, without taking the existence of this cycle into account, would be akin to attending a concert without music. For this reason, in the following articles of this Dossier we will focus on the financial cycle (or, continuing with the analogy, we will bring the music) in order to understand its impact on the economy.

Javier Garcia-Arenas

4. S. Miranda-Agrippino and H. Rey (2018). «US Monetary Policy and the Global Financial Cycle». NBER Working Paper 21722.
5. See Hélène Rey (2015). «Dilemma not trilemma: the global financial cycle and monetary policy Independence». NBER Working Paper 21162.

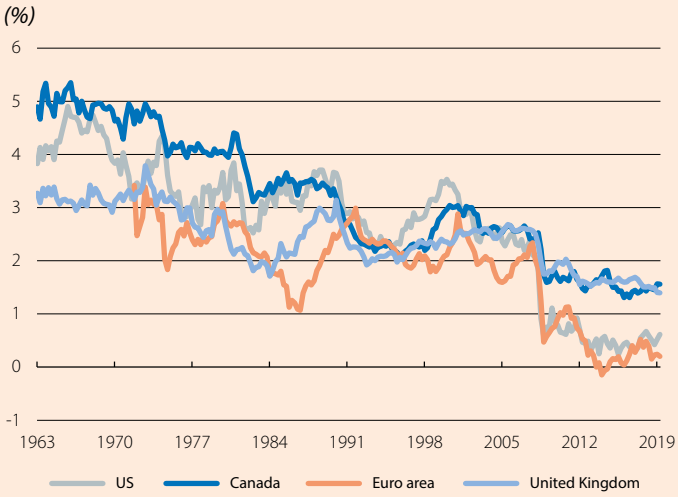
The widespread fall in interest rates: a global trend

The last 30 years have borne witness to a sustained fall in interest rates across the major developed economies. As we have already analysed in previous Dossiers, this phenomenon ultimately reflects a decline in the so-called natural rate of interest. This is a key concept for monetary policy which has its origin in the Swedish economist Knut Wicksell.[1]

A key concept: the natural rate of interest

The natural rate of interest is that which allows economic activity to grow in accordance with the economy's potential and with stable inflation. Thus, the natural rate of interest allows us to assess whether a particular interest rate is accommodative or restrictive. If the observed interest rate is above the natural rate, economic growth will be below the potential and there will be downward pressure on prices, and vice versa. By its very definition, the natural rate of interest offers us a point towards which interest rates can be expected to converge, given that it represents the level of rates at which the economy's performance is sustainable. Furthermore, the natural rate of interest depends on the economy's structural characteristics and is determined by all factors that affect supply and demand. Thus, as we saw in a previous analysis,[2] structural changes that are related to factors such as households' saving habits, demographic trends or productivity growth have an impact on the natural rate of interest.

Real natural rate of interest



Source: *CaixaBank Research, based on data from Holston, Laubach and Williams (2017).*

One of the problems with the natural rate of interest is that it is not directly observable in the data. However, it can be estimated using models and statistical techniques, although all these approaches are subject to a substantial degree of uncertainty.[3] One of the most widely-used methodologies is that proposed by Holston *et al.* (2017).[4] We reproduce their estimates in the chart, showing a sustained and widespread fall in interest rates across the major advanced economies.

Global factors affecting fluctuations and the decline in natural rates

The similarity in the pattern of the different interest rates shown in the chart has led many economists to conclude that there are global factors behind the fluctuations and the decline in natural rates.[5] Indeed, the main causes that explain this sustained fall are the loss of buoyancy in productivity, the ageing of the population and the scarcity of safe-haven assets, phenomena that are observed across the board in the major advanced economies.

Beyond the global nature of these forces, it should also be borne in mind that national economies do not operate in isolation. The movements in interest rates and central banks' decisions have immediate repercussions in the international financial markets. In this regard, globalisation turns them into a conveyor belt for transmitting the domestic trends of key economies, such as the US or the euro area, thereby influencing the actions of their central banks and determining their interest rates.

In fact, Rey (2015)[6] documents the existence of global dynamics in capital flows, asset prices and credit growth, and encompasses them all with the term «global financial cycle». In addition, Rey shows that one of the determining factors for the global financial cycle is the monetary policy of economies such as the US and the euro area, which play a pivotal role in the international financial system. Thus, trends that affect these economies more than the rest of the world and which have applied downward pressure on

1. See the article «Low interest rates: for how much longer?» in the Dossier of the MR02/2019.
2. *Ibidem*.
3. See the article «The uncertainty surrounding the natural rate of interest» in this same Dossier for a discussion on the role and the causes of this uncertainty.
4. K. Holston, T. Laubach and J.C. Williams (2017). «Measuring the natural rate of interest: International trends and determinants». Journal of International Economics, 108, S59-S75.
5. The consensus that the decline in interest rates is due, at least in part, to global factors is demonstrated by the large number of studies that state this to be the case. Among them, see K. Holston, T. Laubach and J.C. Williams (2017). «Measuring the natural rate of interest: International trends and determinants». Journal of International Economics, 108, S59-S75. Ò. Jordà and A.M. Taylor (2019). «Riders on the Storm» (No. w26262). National Bureau of Economic Research. R. Clarida (2019). «The global factor in neutral policy rates: Some implications for exchange rates, monetary policy, and policy coordination». International Finance, 22(1), 2-19.
6. H. Rey (2015). «Dilemma not trilemma: the global financial cycle and monetary policy independence» (n.º w21162). National Bureau of Economic Research.

their natural rates of interest (such as the ageing of the population and the loss of buoyancy in productivity) may have been transmitted to the rest of the world through the global financial cycle, eventually turning the decline in natural rates of interest into a global phenomenon.

Finally, having established both the presence of a global factor in the decline in natural rates of interest and the existence of a global financial cycle, another plausible hypothesis is that the financial cycle itself can help us to understand the trends in natural rates of interest. In the end, the financial cycle plays a key role in the economy, as discussed in the article «The financial cycle: an essential tool for understanding the economy» in this same Dossier. This is precisely the hypothesis that we will explore in the next article, «The financial cycle and the era of low interest rates: a change of narrative?».

Adrià Morron Salmeron

The financial cycle and the era of low interest rates: a change of narrative?

The financial cycle plays a key role in the functioning of the economy, as we have seen in the previous articles of this Dossier. But what are the specific consequences of the relationship between the financial and business cycle? Below we analyse its implications for one of the key macrofinancial relationships: the one that exists between the financial cycle and equilibrium interest rates.

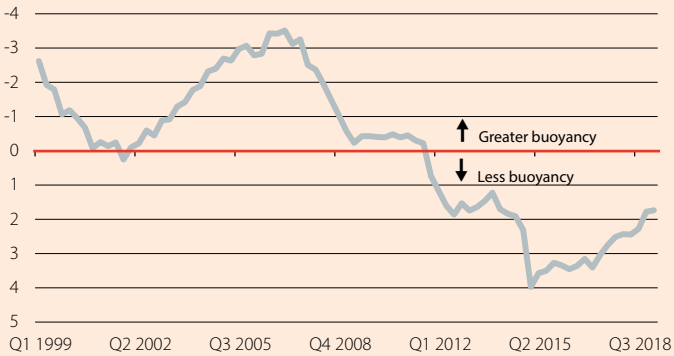
There is a broad consensus among economists that underlying transformations, such as the ageing of the population or the loss of buoyancy in productivity, have led to a drop in equilibrium, or natural, rates of interest.[1] According to this consensus, to the extent that this decline is structural, monetary policy must adapt and, in times of economic weakness, use new tools to relax financial conditions (such as asset purchases or forward guidance). However, this view has been built and has gained prominence without taking into account the role of the financial cycle. Below, inspired by the analysis that Juselius *et al.* (2017)[2] performed for the US, we study how the narrative of «the era of low interest rates» in the euro area changes when the financial cycle is incorporated into the equation.

The dominant narrative and its missing piece: the financial cycle

The natural rate of interest is the key benchmark for setting either accommodative (rates below the natural rate) or restrictive (above the natural rate) monetary policy. The difficulty for central banks lies in the fact that this rate is not observable. However, it is possible to infer it if we examine the economy carefully: when economic growth is accompanied by a rise in inflation, price pressures suggest that the economy is growing above its ability or its potential. From this situation, we can deduce that monetary policy is too lax, that is, the interest rate is below the natural rate (and vice versa). This simple relationship between economic activity, inflation and interest rates drives the estimates that show a widespread and sustained decline in natural rates of interest in the major advanced economies.[3] But what if this relationship is incorrect (for example, it may give too much weight to the link between inflation and economic activity) or incomplete (it omits relevant dynamics)?

Euro area: financial cycle indicator *

(pps)



Note: ** Deviation relative to the historical average of the ratio between credit to the non-financial private sector and the total non-financial assets of this sector. As in Juselius et al. (2017), negative (positive) values in the expansion (recession) indicate that asset prices are growing (falling) faster than credit.*

Source: *CaixaBank Research, based on data from the European Central Bank and the Bank for International Settlements.*

In the years leading up to the Great Recession, the economic activity of the euro area was highly buoyant. Under the prism of stable inflation close to 2%, this should have been sustainable. In retrospect, we know that this was not the case, but rather that the growth was fuelled by a significant expansion of credit. Also, in recent years there has been a weakening of the link between economic activity and inflation. This suggests that, at present, price trends give us less information about the sustainability of growth. Therefore, these experiences advise us to supplement the economic activity-inflation-interest rate relationship with an analysis of the state of the financial cycle. After all, if we do not incorporate the financial cycle (it is not normally not incorporated into the most widely-known estimates of the natural rate), then our only source of information for the sustainability of growth would be inflation. Moreover, we would attribute fluctuations in economic activity solely to changes in monetary policy.

Equilibrium interest rates and the financial cycle: an empirical incursion

To discover how the estimate of the natural rate of interest of the euro area changes with the incorporation of the financial cycle, we must include this cycle in the inflation-activity-interest rate trinomial. As we have seen previously, the classic view of the trinomial has two parts to it: the relationship between inflation and activity, on the one hand, and the link between activity and interest rates on the other. In order to incorporate the financial cycle into the analysis we will keep the first part intact and add it to the second part.[4] In other words, there will be two possible explanations for deviations in economic activity with respect to its potential: how accommodative or restrictive monetary policy is (as determined by the difference between the real observed interest rate and the natural rate) and the state of the financial cycle.

1. The natural rate of interest is that which balances the supply and demand of savings and allows economic activity to grow in accordance with the economy's potential and with stable inflation. See the article «The widespread fall in interest rates: a global trend» in this same Dossier. In addition, we present a complete analysis of the natural rate and the causes of its decline in the Dossier «The future of financial conditions: a paradigm shift?» in the MR02/2019.
2. M. Juselius *et al.* (2017). «Monetary Policy, the Financial Cycle, and Ultra-Low Interest Rates». International Journal of Central Banking. We would like to thank Mikael Juselius for sharing with us a version of the code with which they developed the econometric analysis.
3. Such as that of Holston *et al.* (2017). «Measuring the Natural Rate of Interest: International Trends and Determinants». Journal of International Economics 108, supplement 1 (May): S39–S75.
4. Analytically, we represent inflation, the output gap and the financial cycle with π, $\tilde{y}$, $\widetilde{lev}$ and we infer the natural rate r^* from the estimate of the following system of equations, using data for the euro area of the period between 1999 and the present:

$$\pi_t - \pi^* = a_\pi (\pi_{t-1} - \pi^*) + a_y \tilde{y}_t + \varepsilon_{\pi t}$$
$$\tilde{y}_t = \beta_y \tilde{y}_{t-1} - \beta_r (r_t - r^*) - \beta_{lev} \widetilde{lev}_t + \varepsilon_{yt}$$
$$\widetilde{lev}_t = \delta_{lev} \widetilde{lev}_{t-1} + \delta_r (r_t - r^*) + \delta_d \widetilde{dsr}_{t-1} + \varepsilon_{lt}$$

The first equation allows us to infer the output gap based on the observed inflation, while the second allows us to infer the natural rate of interest based on the output gap and the observed financial cycle. i.e. We reproduce the exercise that Juselius *et al.* (2017) carried out for the US, but using data for the euro area. The full description of the statistical methodology can be found in their article, which sets out the complete and somewhat more extensive system (for example, it expands on the role of the debt service ratio, $\widetilde{dsr}$, which we do not set out here). To estimate r^* in the absence of the financial cycle, we apply $\beta_{lev} = 0$, and ignore the third equation.

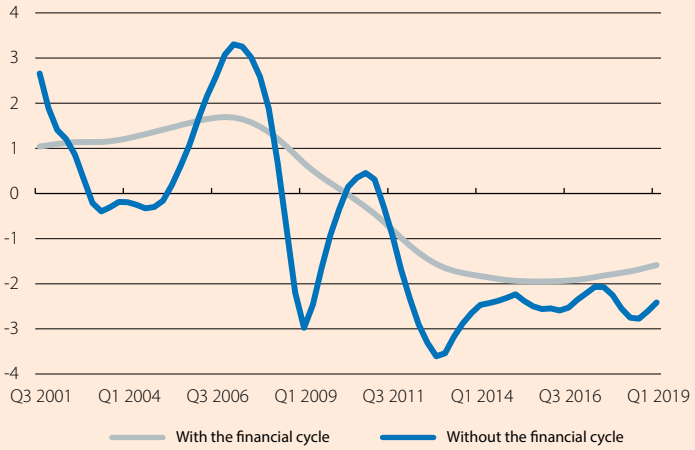
How do we measure the financial cycle of the euro area? Given that we reproduced the estimates of the natural rate of interest of the US according to Juselius *et al.* (2017), we will rely on the same indicator used by these authors: non-financial private sector leverage.[5] As shown in the first chart, this indicator plots a reasonable cycle for the euro area: the financial cycle experienced a phase of expansion in 2002-2008, followed by a correction after the financial and sovereign debt crisis, while in recent years it has recovered thanks to the consolidation of the economic recovery.

How does the story change?

Our revised estimate of the natural rate of interest for the euro area (see the technical details in footnote 4) shows the importance of the financial cycle. In fact, the message is similar to that offered by Juselius *et al.* (2017) for the US: the natural rate of interest continues to show a downward trend when we factor in the financial cycle (confirming the consensus view among economists), but its decline is less significant and more gradual (see second chart).[6]

Euro area: natural rate of interest

(%)

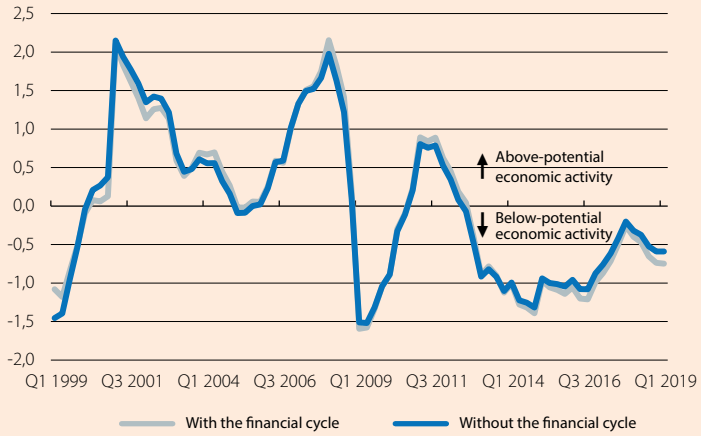


Source: *CaixaBank Research.*

To understand how the estimate of the natural rate changes with and without the financial cycle, we need to take a step back and observe something which, at first glance, might seem contradictory: in the third chart we see that the output gap of the euro area (i.e. the difference between the observed growth and its potential rate) which we estimate in both cases is very similar. However, in reality this finding is not unexpected: the financial cycle does not play a direct role in the inflation-activity relationship, given that we have not altered the first part of the trinomial.[7] The big difference is found in the factors that drive the output gap: if we ignore the financial cycle, its fluctuations should be fully transmitted to the natural rate (hence it is more volatile when we ignore it). As an example, if we ignore the financial cycle, the double recession in the euro area (2008-2009 and 2011-2013) translates into a significant and double fall in the natural rate. In contrast, when we take the financial cycle into account, we see that it explains a significant part of the two recessions and that the decline in the natural rate over the course of the crisis is much more gradual.

Euro area: output gaps

(%)



Note: *Both series have been normalised such that they have an average equal to 0 and a standard deviation equal to 1.*
Source: *CaixaBank Research.*

In addition, there are two other interesting periods during which, when we consider the financial cycle, we discover that the natural rate of interest was higher than it appeared. On the one hand, in the years 2002-2005, not only did economic activity experience a boom (which in itself suggests an accommodative monetary policy), but so did the financial cycle. This indicates that monetary policy was even more accommodative than we thought (this is reflected in a higher natural rate when we take the financial cycle into consideration). On the other hand, in recent years, the financial cycle is still in a recovery phase. This is why we observe a higher natural rate of interest in this period, which indicates that monetary policy has been more expansionary, and this has compensated for the lower momentum of the financial cycle.

In short, the financial cycle helps us have a richer and more accurate understanding of the behaviour of the natural rate of interest. Although the natural rate is showing a downward trend in both the US and the euro area, we see significant differences in their level, which raises the question about the extent to which the central banks have properly calibrated their reference interest rates. This invites us to reflect on the direction of monetary policy, a subject to which we dedicate the next article of this Dossier.

Javier Garcia-Arenas, Gabriel Lobato Ramos,
Adrià Morron Salmeron and Pablo Pastor y Camarasa

5. Specifically, we use the ratio between credit to the non-financial private sector and the value of the non-financial assets of this sector (in its deviation relative to the historical average).
6. The natural rates of interest presented in this article for the euro area differ from those of Holston *et al.* (2017) set out in the article «The widespread fall in interest rates: a global trend» of this Dossier. This reflects small methodological differences between the two methods and illustrates the uncertainty surrounding these estimates, an aspect which we discuss in more depth in the last article of this Dossier, «The uncertainty surrounding the natural rate of interest».
7. The informative role of inflation may have changed when including the financial cycle if the new estimates indicated very different values for a_y. However, in our estimates, a_y does not substantially change.

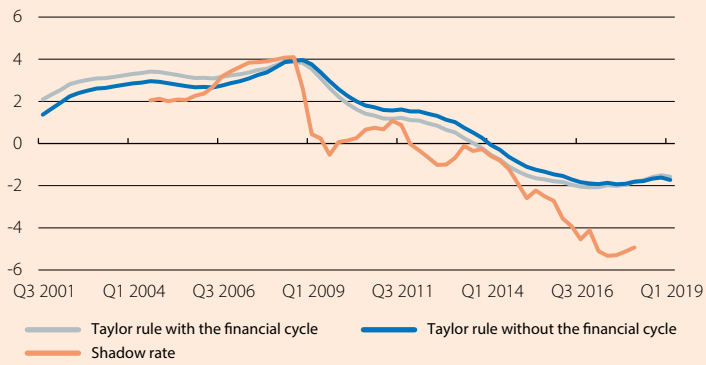
Should monetary policy react to the financial cycle? Some reflections and possible answers

To what extent should monetary policy react to the financial cycle, or lean against the wind, as it is known? This question has given rise to heated debates between leading economists and it will also be present in the discussions around the strategic reviews currently being carried out by the major central banks. The dilemma is well known: if monetary policy reacts to the financial cycle in an attempt to dampen it and smooth financial fluctuations, it affects economic activity and inflation.

A recent article by the prestigious economists Gourio, Kashyap and Sim[1] has helped to give credibility to the theses in favour of taking the financial cycle into consideration. In their research, the authors show that most analyses on optimal monetary policy did not take into account the potentially very high impact that financial crises can have on GDP. They also ignore the fact that monetary policy is a powerful tool for mitigating the negative impact of the financial cycle in times of crisis. In particular, in economies where a bad allocation of credit can generate financial shocks, the authors demonstrate that significant welfare gains in society can be generated by incorporating the financial cycle into monetary policy. In particular, a monetary policy that anticipates the coming crisis when there is a financial boom and raises interest rates allows the likelihood of a severe financial crisis occurring to be reduced (by preventing potential financial bubbles), as well as preventing less productive companies from capturing a large part of the credit and limiting risk appetite. These gains are especially important if the economic losses generated by a financial crisis are high.

Euro area: monetary policy rules taking the financial cycle into account

(%)



Note: *The interest rate of the Taylor rule with the financial cycle has been obtained as defined in note 2 of the article. The Taylor rule without the financial cycle uses the standard measures for output gap, inflation and the natural rate without taking the financial cycle into account. The shadow rate has been calculated based on the historical relationship between the official refi rate and a set of monetary variables that we would observe in the current environment if it were not anchored to 0%.*
Source: *CaixaBank Research.*

In our chart, we show what the reference interest rate for the euro area would be on the basis of a Taylor rule, amended to take the financial cycle into consideration. Specifically, like Juselius and co-authors in their original article, we allow the reference interest rate to react not only to fluctuations in the output gap and inflation, but also to changes in the debt service gap, that is, to the deviation relative to the historical average of the ratio of interest payments by households and firms in relation to their income. The intuition is that a low level of interest payments encourages households and firms to take on more debt, which ends up affecting their economy's GDP and the macrofinancial conditions. It therefore makes sense to include it in the monetary policy rule.[2] We call the interest rate which takes the financial cycle into account the «interest rate with an augmented Taylor rule», and we compare it with the shadow rate and the rate derived from a traditional Taylor rule. The shadow rate is simply the refi rate that we would observe if it were not anchored to 0%, that is, if it reflected the ECB's unconventional measures such as quantitative easing (QE).[3]

The results leave no room for doubt: in the booming years of the 2000s, the interest rate with an augmented Taylor rule was significantly higher than both the shadow rate and the rate according to a traditional Taylor rule. This is because these were years of financial boom, in which the debt service gap was in negative territory (i.e. interest payments were modest), which encouraged indebtedness and thus generated an overheating of the economy. This boom should have led monetary policy to set higher interest rates in order to cool the financial cycle. In fact, setting higher rates could have helped to reduce asset prices and thus contain the leverage and excessive risk appetite of those years.

1. F. Gourio, A.K. Kashyap and J.W. Sim (2018). «The trade offs in leaning against the wind». IMF Economic Review, 66(1), 70-115.

2. Specifically, $i_t^{Taylor\ Finance-Neutral} = \rho(i_{t-1}^{Taylor\ Finance-Neutral}) + (1-\rho)[(r_{t-1}^{n,Finance\ Neutral} + \pi^*) + 1{,}5(\pi_{t-1} - \pi^*) + 0{,}5\tilde{y}_{t-1} - 0{,}75\,\widetilde{DSR}_{t-1}]$, where $\rho = 0.9$ is the isolation parameter, $r_t^{n,Finance\ Neutral}$ is the estimated natural rate of interest according to the model by Juselius *et al.* (2017), π_t is the actual core inflation, $\pi^* = 2\%$ is the target inflation, $\tilde{y}_t$ is the measure of the output gap taking the financial cycle into account as obtained in the previous article, and $\widetilde{DSR}_t$ is the deviation of the debt service ratio relative to its historical average.

3. For further details on shadow rates and the methodology used by Wu and Xia to calculate them, see the Focus «Discovering monetary policy in the shadow» in the MR02/2016.

During the crisis period, in contrast, factoring in the financial cycle would enable better measurement of the economy's weakness, which helps to understand why somewhat lower rates than those prescribed by the Taylor rule may be more appropriate. Finally, in recent years, incorporating the financial cycle into the Taylor rule would lead to reference rates that are higher than the shadow rate. Therefore, according to what the shadow rate indicates, it appears that, in reality, rates have been too accommodative. Indeed, with an output gap that has been closing and a small recovery in credit after successfully completing the deleveraging process following the crisis, it is no wonder that incorporating the financial cycle prescribes higher rates and that, in fact, they would have already started to rise.

Ultimately, failing to take the financial cycle into account results in lower rates than would be desirable in times of economic expansion, which ends up accelerating the onset of the coming crisis and exacerbating its effects. Such effects forces central banks to implement aggressive rate cuts. The lesson here is that excessively low rates in the present also generates low rates in the future, creating a vicious circle. In contrast, taking account of the financial cycle and not allowing ourselves to be blinded by the (apparent) blessings of boom periods is key (in combination with the appropriate macroprudential policies) for ensuring a more balanced management of monetary policy.

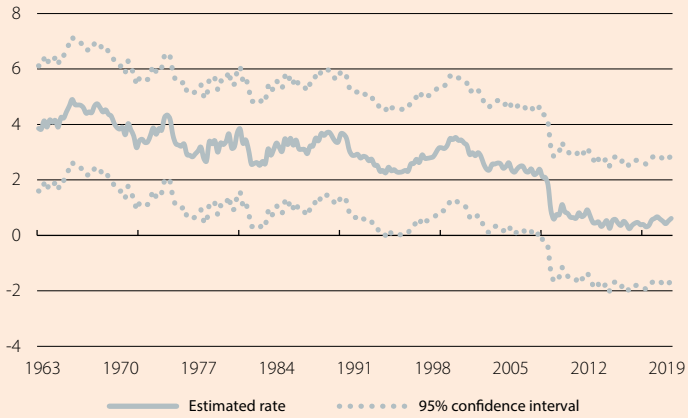
Javier Garcia-Arenas

The uncertainty surrounding the natural rate of interest

The equilibrium or natural rate of interest is a key benchmark for determining whether a central bank's monetary policy is accommodative (official rates lower than the natural rate) or restrictive (higher than the natural rate). However, one disadvantage of the natural rate is that it is not directly observable in the data, meaning that it needs to be estimated using economic models. The problem lies in the fact that the results of such estimations depend on which variables are included in the model, and what relationships are assumed to exist between them. If important variables are left out, or if the assumed relationships are incorrect, the information provided by the natural rate may not be entirely accurate. In other words, making numerical estimates of the natural rate of interest is shrouded in uncertainty.

US: uncertainty surrounding the real natural rate of interest

(%)

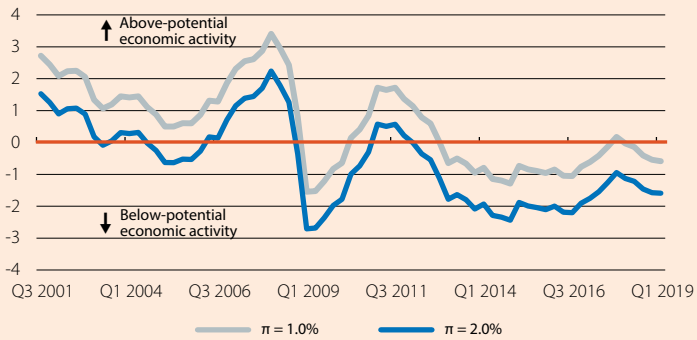


Source: *CaixaBank Research, based on data from Holston, Laubach and Williams (2017).*

The article «The financial cycle and the era of low interest rates: a change of narrative?» is, in a way, a demonstration of this uncertainty, as it shows that our view of the natural rate of interest changes when we incorporate the financial cycle into our models. We continue to see a decline in rates, albeit a more contained and gradual one. In fact, even within a given model, the level of uncertainty is high. This is illustrated by the margin of error that exists in the benchmark estimate for the natural rate of interest in the US, made by Holston *et al.* (2017).[1] As can be seen in the first chart, there is a clear downward trend, but we are unable to determine the level of the natural rate with great precision. In fact, this inaccuracy is a reflection of the uncertainty that surrounds the traditional relationships that are thought to exist between interest rates, economic activity and inflation – variables that are used to estimate the equilibrium rate –, since these relationships can be fragile and are not always supported by the data.

Output gap of the euro area: estimates in different inflation expectation scenarios

(%)



Note: *Estimates based on the model presented in the article «The financial cycle and the era of low interest rates: a change of narrative?» in this same Dossier, taking the financial cycle into account and using different initial assumptions about long-term inflation in the euro area.*
Source: *CaixaBank Research.*

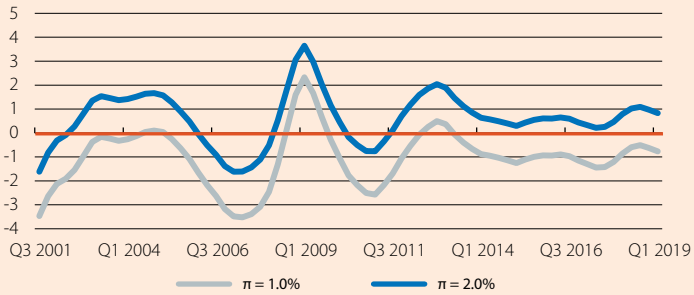
On the other hand, we can also play with our own estimates to demonstrate the instability of the results. In particular, the model used to calculate the natural rate of interest requires us to make initial assumptions about the different variables that we want to estimate. One of these variables is the inflation rate that should prevail in the long term. Typically, it is 2% (as indicated by the inflation targets of the Fed and, broadly speaking, the ECB) and we feed the model with this reasonable assumption. However, we could have used a lower long-term inflation rate, such as 1%. The results should not necessarily change (the model checks our assumption against the data and might conclude that long-term inflation is 2%), but in reality they do. Firstly, when applying a rate of 1%, we obtain a higher output gap than with the initial long-term inflation assumption of 2% (see second chart). The implications are by no means trivial: intuitively, evaluating an observed inflation of 1.5% in a world in which we aspire to reach 2% is not the same as doing so in a world with a 1% inflation target. In the former case, we will deduce that economic activity has margin to recover and apply more pressure on prices, whereas in the latter, 1.5% could be seen as exerting excessive pressure on prices and a symptom of an overheating of the economy.

1. K. Holston, T. Laubach and J.C. Williams (2017). «Measuring the natural rate of interest: International trends and determinants». Journal of International Economics, 108, S59-S75.

Secondly, under the 2% assumption, in the article «The financial cycle and the era of low interest rates: a change of narrative?» we stated that monetary policy is more accommodative than it seems when we take the financial cycle into account (i.e. we obtain a higher natural rate). However, this conclusion is inverted under the assumption of a long-term inflation rate of 1%: the last chart shows how, at present, the difference between the estimated natural rate when taking the financial cycle into account and the conventional natural rate (ignoring the financial cycle) is positive under the 2% assumption and negative in the 1% scenario.

Natural rate of interest of the euro area: estimates in different inflation expectation scenarios

Difference between the rate with and without considering the financial cycle in each inflation scenario (pps)



Note: *Estimates based on the model presented in the article «The financial cycle and the era of low interest rates: a change of narrative?» in this same Dossier, taking the financial cycle into account and using different initial assumptions about long-term inflation in the euro area. Positive values indicate that the natural rate of interest considering the financial cycle is greater than the natural rate ignoring it.*
Source: *CaixaBank Research.*

The tenuous nature of the results is corroborated by Beyer and Wieland (2019),[2] who also show that estimates of the natural rate are unstable and vary in response to small methodological changes. Such changes could include adjustments to the data (changes in the time span of the sample, or the use of gross national product instead of GDP), different functional forms or, as we have just illustrated with inflation, different initial assumptions.

In short, the natural rate is a key concept for monetary policy, but estimating it is fraught with difficulty. What should we do? The debate is served, and a nice anecdote from the life of Kenneth Arrow, Nobel Laureate in Economics, provides a humorous illustration of the dilemma. During the Second World War, Arrow was tasked with reviewing the long-range weather forecasts produced for a month ahead. Upon discovering their unreliability, he conveyed his concern to the senior officers. The answer: «The commanding general is well aware that the forecasts are no good. However, he needs them for planning purposes».

Adrià Morron Salmeron

2. R.C. Beyer and V. Wieland (2019). «Instability, imprecision and inconsistent use of equilibrium real interest rate estimates». Journal of International Money and Finance, 94, 1-14.

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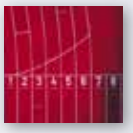

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