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MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

MARCH 2021

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BPI

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK

March 2021

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

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Date this issue was closed:
28 February 2021

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The last mile

A year ago, a race began in which the participants did not know the distance to be travelled or the height of the obstacles they would encounter along the way. Now, it has become clear that not everyone has faced the same race. Many are now running the final lap of a 10,000-metre race, while others still have the unforgiving last mile of a marathon ahead of them. The priority at present is for the maximum number of participants to reach the finish line safe and sound.

Of course, the runners participating in this metaphorical race are self-employed workers and businesses. The marathon runners are those who have been hardest hit by the restrictions on mobility, opening hours and capacity. The recovery has been pushed back for everyone, but particularly for them. If they do not have good provisions, they may not be able to finish the race. A company cannot survive many months if its revenues do not cover its costs. There is a limit to the level of debt that can be taken on, as well as to shareholders' stamina. Liquidity problems can become solvency problems.

Fiscal policy is best suited to respond to this situation. Monetary policy provides essential support by keeping interest rates low and ensuring that there is adequate liquidity, which also paves the way for the fiscal authorities. However, fiscal policy is the one best placed to mitigate the risks of insolvency. The central banks can supply the oxygen that banks help circulate throughout the system, but it is fiscal policy that can conduct precision surgery.

This has been the case since the beginning of the pandemic. The furlough schemes have been a key fiscal policy tool. So have the ICO guarantees, which have provided government backing for loans and credit lines and can be considered a quasi-fiscal tool. These measures, together with others such as the postponement of taxes and moratoria, have been very useful and largely sufficient for those running the 10,000-metre race. However, they have proven insufficient for those running the marathon. For them, direct aid to cover the fixed costs they must incur just to stay alive is essential.

There are often two arguments used against greater support in the form of direct aid: its potential fiscal costs and the inefficiency that can result from aid being provided to companies that are not actually viable in the medium term. Although they must both be taken into account, I do not believe they have enough weight at the current juncture.

As for the fiscal cost, at this stage of the crisis it should be manageable because the recovery is drawing increasingly close. Over the coming months, the vaccines should allow the restrictions that are holding back many activities to be lifted, or at least significantly eased. With this, business earnings can begin to normalise and the aid will no longer be necessary. We are in a completely different situation compared to a year ago, when the outlook regarding the duration of the crisis was extremely uncertain. On the other hand, we are now in a much better position to narrow down which activities have been hardest hit by the crisis and to gauge the impact of the restrictions.

In relation to the cost in terms of efficiency of helping non-viable or so-called zombie companies, this should be compared against the cost of failing to help those that are viable. Right now, distinguishing between those that are and are not viable is immensely difficult, so making one of these two mistakes is unavoidable. Failing to help viable companies would result in destroying the productive fabric of the economy as well as employment, which would take time to recover. Helping companies that are not viable wastes resources and delays the necessary reallocation of resources towards productive activities. At times like these, again bearing in mind that the situation will soon improve, it seems preferable to opt for too much rather than too little. This has been the approach taken by other countries around us. Furthermore, the aid can be designed to provide greater benefit to companies that are truly viable – for instance, limiting them to losses caused by the restrictions, or partially tying them to incentives for contributions of private capital. The banking sector can also play a role in distinguishing between viable and non-viable companies.

The important thing now is to finish the race. When we do so, it will be time to begin another one, this time on a more equal footing, without constraints and, yes, without aid.

Chronology

FEBRUARY 2021

13 The US Senate absolves Donald Trump from impeachment for the second time.
24 Ghana is the first country to receive a vaccine package as part of COVAX, the WHO-led programme aimed at ensuring equitable access to COVID-19 vaccines among developing countries.

DECEMBER 2020

2 The United Kingdom becomes the first Western country to approve the use of a vaccine against COVID-19.
10 The ECB increases the PEPP budget to 1.85 trillion, prolongs its net purchases until March 2022 and launches three new TLTRO-III operations.
24 The EU and the United Kingdom reach a trade agreement to regulate their economic relations from 1 January 2021, when the United Kingdom leaves the single market and customs union.

OCTOBER 2020

16 The rating agency Moody's downgrades the United Kingdom's credit rating from Aa2 to Aa3.
25 The Spanish government declares a new state of emergency.
28 France announces a new lockdown and other European countries (such as Germany) also impose tighter mobility restrictions than in previous months.

JANUARY 2021

15 The official global COVID-19 death toll surpasses 2 million people.
20 Joe Biden takes the oath of office to become the new US president. Earlier in the month, Donald Trump supporters had stormed Congress in protest at the election results.

NOVEMBER 2020

15 Australia, New Zealand and 13 Asian economies (including China) sign a large-scale trade agreement known as the Regional Comprehensive Economic Partnership.
20 The first COVID-19 vaccines seek official approval from the authorities after the trial phase comes to an end.

SEPTEMBER 2020

25 The European Council approves the granting of 87.4 billion euros in SURE loans to 16 Member States. Spain will receive 21.3 billion.
28 The official global COVID-19 death toll surpasses 1 million people.

Agenda

MARCH 2021

2 Spain: registration with Social Security and registered unemployment (February).
3 Portugal: employment and unemployment (January).
5 Spain: Moody's rating.
11 Governing Council of the European Central Bank meeting.
12 Portugal: S&P rating.
16-17 Federal Open Market Committee meeting.
17 Spain: quarterly labour cost survey (Q4).
19 Spain: S&P rating.
Portugal: Moody's rating.
22 Spain: loans, deposits and NPL ratio (Q4).
23 Portugal: home prices (Q4).
25 Spain: balance of payments and NIIP (Q4).
25-26 European Council meeting.
26 Spain: GDP breakdown (Q4).
Portugal: GDP breakdown (Q4).
30 Spain: CPI flash estimate (March).
Euro area: economic sentiment index (March).
31 Spain: household savings rate (Q4).
Spain: state budget execution (February).

APRIL 2021

5 Portugal: employment and unemployment (February).
6 Spain: registration with Social Security and registered unemployment (March).
9 Portugal: international trade (February).
14 Portugal: tourism activity (February).
15 Spain: financial accounts (Q4).
16 Portugal: state budget execution (March).
22 Spain: loans, deposits and NPL ratio (February).
Governing Council of the European Central Bank meeting.
27-28 Federal Open Market Committee meeting.
29 Spain: CPI flash estimate (April).
Spain: labour force survey (Q1).
Euro area: economic sentiment index (April).
US: GDP (Q1).
Portugal: CPI flash estimate (April).
30 Spain: GDP flash estimate (Q1).
Spain: state budget execution (March).
Portugal: GDP flash estimate (Q1).
Euro area: GDP (Q1).

The great economic theatre: inflation returns to the scene and constrains the *Economic Reconstruction*

Like a meteorologist when a change of weather is approaching, a doctor who has a patient to treat, an engineer who is tasked with designing a new mechanism, or an artist as they begin painting a picture... finally, we know how they feel. After months behind epidemiologists trying to decipher the implications of their diagnoses for the economic outlook, one of our favourite characters has suddenly reappeared on the scene and has ignited a passionate debate. I am referring to inflation, which had been absent for many years. Depending on how it behaves, and how we react to its return, the long-awaited *Economic Reconstruction* could go one way or another. Allow me to explain.

Inflation's absence is clear when we look back at the trajectory it has followed in recent years. In the euro area, for instance, it has been below 1% per year since 2014. This has been its most usual (if not, its average) behaviour, but on several occasions it remained stationary or even receded while economic activity continued to forge ahead. In the previous 10 years, in contrast, it seemed to be more steadfast, with a rate of more than 2% per year and always remaining hand in hand with economic activity. However, the disconnect it has recently shown relative to the rest of the economy, and which still has us somewhat perplexed, is not confined to the European scenario alone. Globally, it also seemed that the history of inflation had come to an end, culminating in a gradual but sustained loss of prominence on the international economic stage.

Inflation's return has been sudden. In the euro area, it climbed to 0.9% in February after ending 2020 at –0.3%. In the US it also approached negative levels last year, but it is already flirting with 1.5%. There are several factors behind this shift in behaviour (technical aspects, the impact of tax changes and the normalisation of oil prices) and all of them will play a similar role: they will raise inflation even more over the coming months and will temporarily push it up to around 3% (slightly below in the euro area, and slightly above in the US). However, the support from these factors will be temporary, and they will later fade away.

But the history of inflation will continue. Other elements will enter the scene, changing the set completely and helping inflation to maintain a prominent – or perhaps even a leading – role. You can image the title of the new season: *Economic Reconstruction*, and you will probably get to see it sooner than you might imagine, I hope. In the major developed countries, the rate of vaccinations is progressing well, albeit with differences between them. Most importantly, the vaccine is proving to be highly effective. In the US, there are already states in which the restrictions have been significantly eased, and the economic activity indicators suggest a GDP growth of around 2% quarter-on-quarter in Q1 and an even higher rate in Q2, when much of the population could be already immunised. The euro area remains in second place and will have to wait until Q2 to begin lifting the restrictions on mobility and activity. Only then will economic activity begin to pick up the pace.

In such events in the past, when economic activity entered the scene inflation would take on a more prominent role, but the lack of harmony between the two in recent years will force us to keep a close eye on how they interact. If inflation reappears as a result of bottlenecks or a stronger-than-expected revival of pent-up demand, it could challenge fiscal and monetary policy.

Monetary policy has played a seemingly placid role over the past few years. In the absence of inflation, it has taken highly aggressive action, maintained extremely dovish financial conditions and become a mainstay of economic activity. However, the rebound in inflation expectations that is already apparent in various financial indicators and the rise in long-term interest rates have put the major monetary authorities on guard. Fabio Panetta, a member of the ECB's Executive Board, has made it clear that they interpret the rebound in inflation as a temporary phenomenon and that they will do whatever it takes to keep financial conditions highly accommodative. In Europe, where the economic recovery is still in its infancy, this is a necessity. In contrast, in the US the Fed is being more permissive with the rise in interest rates, but it may end up with a difficult role to play. A sudden tightening of the financial conditions would slow the recovery in economic activity and trigger episodes of turbulence in the financial markets, since financial asset prices are currently sustained by the expectation that interest rates will remain very low for a long time to come. To a large extent, this expectation has been fuelled by the Fed's own actions in recent years.

In the fiscal sphere, there is a broad consensus that it is better to be overly generous than overly responsible (the debate is often raised in these terms, as through they were antagonistic positions and using words loaded with prejudices). However, inflation's return to the scene, and the lack of predictability in how it will behave, is stoking fears that the Biden administration's 1.9-trillion-dollar fiscal package could contribute to the risks of overheating in the US economy.

All in all, it seems that the history of inflation will continue and that the great economic theatre will have one of its main and most controversial protagonists back on stage. I trust that this will not force us to change the script. To avoid such a shift, bold action will need to be taken over the coming months. Beyond warning of the upcoming change in weather, we must put appropriate mechanisms in place to ensure that the patient makes a quick and full recovery. As you can see, in practice, economics feels like more of an art than a science.

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

Financial markets

	Average 2000-2007	Average 2008-2017	2018	2019	2020	2021	2022
INTEREST RATES							
Dollar							
Fed funds (upper limit)	3.43	0.55	2.50	1.75	0.25	0.25	0.25
3-month Libor	3.62	0.75	2.79	1.91	0.23	0.25	0.35
12-month Libor	3.86	1.26	3.08	1.97	0.34	0.50	0.70
2-year government bonds	3.70	0.80	2.68	1.63	0.13	0.25	0.50
10-year government bonds	4.70	2.58	2.83	1.86	0.93	1.40	1.50
Euro							
ECB depo	2.05	0.32	–0.40	–0.50	–0.50	–0.50	–0.50
ECB refi	3.05	0.90	0.00	0.00	0.00	0.00	0.00
Eonia	3.12	0.55	–0.36	–0.46	–0.47	–0.45	–0.45
1-month Euribor	3.18	0.67	–0.37	–0.45	–0.56	–0.48	–0.43
3-month Euribor	3.24	0.85	–0.31	–0.40	–0.54	–0.50	–0.40
6-month Euribor	3.29	1.00	–0.24	–0.34	–0.52	–0.48	–0.38
12-month Euribor	3.40	1.19	–0.13	–0.26	–0.50	–0.45	–0.35
Germany							
2-year government bonds	3.41	0.55	–0.60	–0.63	–0.73	–0.60	–0.45
10-year government bonds	4.30	1.82	0.25	–0.27	–0.57	–0.40	0.00
Spain							
3-year government bonds	3.62	2.06	–0.02	–0.36	–0.57	–0.39	–0.06
5-year government bonds	3.91	2.59	0.36	–0.09	–0.41	–0.28	0.12
10-year government bonds	4.42	3.60	1.42	0.44	0.05	0.10	0.50
Risk premium	11	178	117	71	62	50	50
Portugal							
3-year government bonds	3.68	4.02	–0.18	–0.34	–0.61	–0.32	0.05
5-year government bonds	3.96	4.67	0.47	–0.12	–0.45	–0.32	0.14
10-year government bonds	4.49	5.35	1.72	0.40	0.02	0.10	0.53
Risk premium	19	353	147	67	60	50	53
EXCHANGE RATES							
EUR/USD (dollars per euro)	1.13	1.29	1.14	1.11	1.22	1.22	1.22
EUR/JPY (yen per euro)	129.50	126.40	127.89	121.40	126.39	130.54	130.54
USD/JPY (yen per dollar)	115.34	98.97	112.38	109.25	103.83	107.00	107.00
EUR/GBP (pounds per euro)	0.66	0.83	0.90	0.85	0.90	0.89	0.90
USD/GBP (pounds per dollar)	0.59	0.64	0.79	0.76	0.74	0.73	0.74
OIL PRICE							
Brent ($/barrel)	42.3	82.5	57.7	65.2	50.2	60.0	62.0
Brent (euros/barrel)	36.4	63.2	50.7	58.6	41.3	49.2	50.8

Forecasts

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

International economy

	Average 2000-2007	Average 2008-2017	2018	2019	2020	2021	2022
GDP GROWTH							
Global	4 5	3.4	3.5	2.8	–3.3	5.5	4.2
Developed countries	*2.7*	*1.3*	*2.2*	*1.6*	*–4.8*	*4.6*	*3.2*
United States	2.7	1.5	3.0	2.2	–3.5	4.9	3.4
Euro area	2.2	0.7	1.9	1.3	–6.8	4.3	3.1
Germany	1.6	1.3	1.6	0.6	–5.3	3.2	2.8
France	2.2	0.8	1.7	1.5	–8.2	5.7	3.1
Italy	1.5	–0.5	0.8	0.3	–8.9	4.2	3.0
Portugal	1.5	0.0	2.9	2.5	–7.6	4.9	3.1
Spain	3.7	0.3	2.4	2.0	–11.0	6.0	4.4
Japan	1.4	0.5	0.6	0.3	–4.9	3.5	1.3
United Kingdom	2.9	1.1	1.3	1.4	–9.9	6.2	4.1
Emerging and developing countries	*6.5*	*5.1*	*4.5*	*3.6*	*–2.2*	*6.2*	*4.9*
China	10.6	8.3	6.7	6.0	2.3	8.3	5.6
India	9.7	6.9	6.7	5.0	–7.0	9.5	7.3
Brazil	3.6	1.6	1.8	1.4	–4.1	3.0	2.5
Mexico	2.4	2.1	2.2	0.0	–8.2	3.5	2.2
Russia	7.2	0.9	2.5	1.3	–3.1	3.0	2.2
Turkey	5.4	5.1	2.8	0.9	1.6	4.0	3.4
Poland	4.2	3.4	5.4	4.5	–2.8	3.6	4.3
INFLATION							
Global	4.1	3.7	3.6	3.5	3.2	3.4	3.2
Developed countries	*2.1*	*1.5*	*2.0*	*1.4*	*0.6*	*1.5*	*1.4*
United States	2.8	1.7	2.4	1.8	1.2	2.3	1.9
Euro area	2.1	1.4	1.8	1.2	0.3	2.0	1.1
Germany	1.7	1.3	1.9	1.4	0.4	2.4	1.2
France	1.8	1.2	2.1	1.3	0.5	2.0	1.1
Italy	1.9	1.5	1.2	0.6	–0.1	1.8	1.0
Portugal	3.0	1.2	1.0	0.3	0.0	0.9	1.3
Spain	3.2	1.4	1.7	0.7	–0.3	1.1	1.5
Japan	–0.3	0.3	1.0	0.5	0.0	0.0	0.0
United Kingdom	1.9	2.4	2.5	1.8	0.9	2.4	1.2
Emerging countries	*6.7*	*5.7*	*4.9*	*5.1*	*5.1*	*4.2*	*4.3*
China	1.7	2.6	2.1	2.9	2.5	1.3	2.3
India	4.5	8.0	3.9	3.7	6.6	5.5	4.7
Brazil	7.3	6.1	3.7	3.7	3.2	4.1	3.5
Mexico	5.2	4.2	4.9	3.6	3.4	3.8	3.7
Russia	14.2	8.7	2.9	4.5	4.9	3.5	4.0
Turkey	27.2	8.4	16.2	15.5	14.6	10.4	8.0
Poland	3.5	2.0	1.2	2.1	3.7	2.4	2.4

Forecasts

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

Portuguese economy

	Average 2000-2007	Average 2008-2017	2018	2019	2020	2021	2022
Macroeconomic aggregates							
Household consumption	1.7	0.1	2.6	2.6	–5.9	2.0	4.1
Government consumption	2.3	–0.6	0.6	0.7	0.5	3.5	0.2
Gross fixed capital formation	–0.3	–2.0	6.2	5.4	–2.2	6.3	5.5
Capital goods	1.2	1.2	8.9	2.8	–	–	–
Construction	–1.5	–4.4	4.7	7.2	–	–	–
Domestic demand (vs. GDP Δ)	1.3	–0.5	3.1	2.8	–4.6	3.9	3.8
Exports of goods and services	5.2	4.0	4.2	4.0	–18.7	10.8	8.7
Imports of goods and services	3.6	2.2	5.0	4.7	–12.1	4.8	10.2
Gross domestic product	**1.5**	**0.0**	**2.9**	**2.5**	**–7.6**	**4.9**	**3.1**
Other variables							
Employment	0.4	–0.6	2.3	1.0	–2.0	–0.3	1.3
Unemployment rate (% of labour force)	6.1	11.8	7.0	6.5	6.8	9.1	7.7
Consumer price index	3.0	1.2	1.0	0.3	0.0	0.9	1.3
Current account balance (% GDP)	–9.2	–3.6	0.4	–0.1	–1.2	–1.0	–0.6
External funding capacity/needs (% GDP)	–7.7	–2.2	1.4	0.9	0.1	0.0	1.0
Fiscal balance (% GDP)	–4.6	–6.1	–0.3	0.1	–6.3	–5.7	–3.2

Forecasts

Spanish economy

	Average 2000-2007	Average 2008-2017	2018	2019	2020	2021	2022
Macroeconomic aggregates							
Household consumption	3.6	–0.6	1.8	0.9	–12.6	7.9	3.5
Government consumption	5.0	0.9	2.6	2.3	4.5	6.3	2.4
Gross fixed capital formation	5.6	–2.8	6.1	2.7	–12.4	5.6	7.5
Capital goods	4.9	–0.5	5.4	4.4	–13.4	12.7	8.0
Construction	5.7	–5.2	9.3	1.6	–15.8	0.8	7.1
Domestic demand (vs. GDP Δ)	4.4	–0.7	2.7	1.5	–8.7	6.7	4.0
Exports of goods and services	4.7	3.1	2.3	2.3	–20.9	6.6	7.6
Imports of goods and services	7.0	–0.3	4.2	0.7	–16.8	7.8	6.6
Gross domestic product	**3.7**	**0.3**	**2.4**	**2.0**	**–11.0**	**6.0**	**4.4**
Other variables							
Employment	3.2	–1.0	2.6	2.3	–7.5	1.6	2.1
Unemployment rate (% of labour force)	10.5	20.5	15.3	14.1	15.5	16.5	15.3
Consumer price index	3.2	1.4	1.7	0.7	–0.3	1.1	1.5
Unit labour costs	3.0	0.1	1.2	2.4	5.8	–3.9	–0.6
Current account balance (% GDP)	–5.9	–0.8	1.9	2.1	0.7	1.5	1.6
External funding capacity/needs (% GDP)	–5.2	–0.3	2.4	2.6	1.1	1.7	1.8
Fiscal balance (% GDP)[1]	0.4	–6.7	–2.5	–2.8	–11.3	–8.8	–6.3

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

Forecasts

The financial markets reassess the outlook

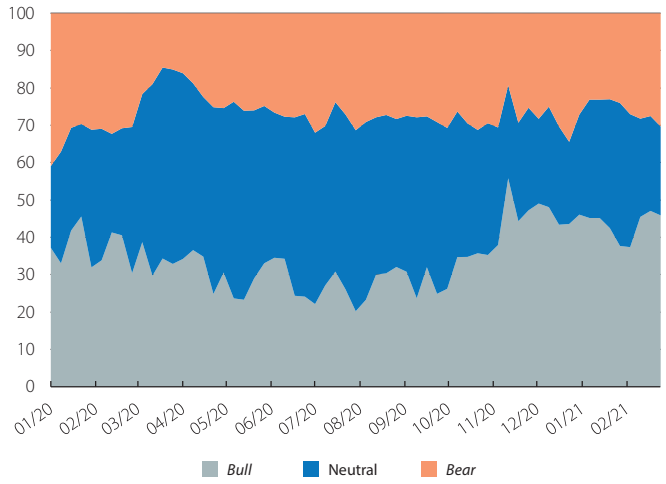
Investors bet on reflation. In the year to date, financial asset prices have been adjusting to what has been called a reflation scenario, that is, the expectation that global economic activity will enjoy a sustained revival and that inflation will leave its weakness behind and become more buoyant, both backed by the recent fiscal and monetary stimuli. Thus, on the one hand, optimism about economic growth has driven up stocks and other risky assets such as commodities, while on the other hand, expectations of higher inflation have led to a rise in market interest rates, especially in the long tranches of the curves. Although in the short term the global economy remains severely restricted by the pandemic, this readjustment of investor expectations gained momentum in the financial markets in February, leading to significant rallies in sovereign yields and most commodity prices. Moreover, in the stock markets, this adjustment favoured the sectors most sensitive to the business cycle, which pushed up the major stock market indices while prices in other sectors were somewhat more wavering. Initially, the major central banks did not appear to be concerned about the rise in market interest rates, noting that the movement reflects an improvement in the economic outlook. However, when rates also began to be stressed in real terms, in a month without monetary policy meetings, various members of the Fed and the ECB took advantage of their public interventions to recall the need and their intention to maintain accommodative financial conditions in an economic environment that remains fragile and uncertain.

Treasury interest rates surge to pre-pandemic levels. Driven by expectations of reflation in the financial markets, the yields of US sovereign bonds (so-called treasuries) surged in February, mainly in the medium- and long-term maturities, continuing the rise registered in January and approaching pre-pandemic levels. Much of the increase in the year to date was supported by heightened inflation expectations, with investors' eyes focused on the Biden administration's proposal for a new fiscal package. However, since mid-February, nominal interest rates continued to rise as inflation expectations tempered, putting stress on real interest rates, which had previously been relatively stable. In the face of this stress, the chair of the Federal Reserve, Jerome Powell, took advantage of his regular appearance before the US Senate to reiterate the central bank's intention to maintain an accommodative monetary policy and recalled that the US' economic recovery will take time to approach the Fed's objectives.

In Europe, sovereign yields also reflect the optimism of the medium-term outlook. The increase in interest rates observed in the US yield curve also drove up the euro area's long-term interest rates, both in the core and in the periphery.

US: market sentiment

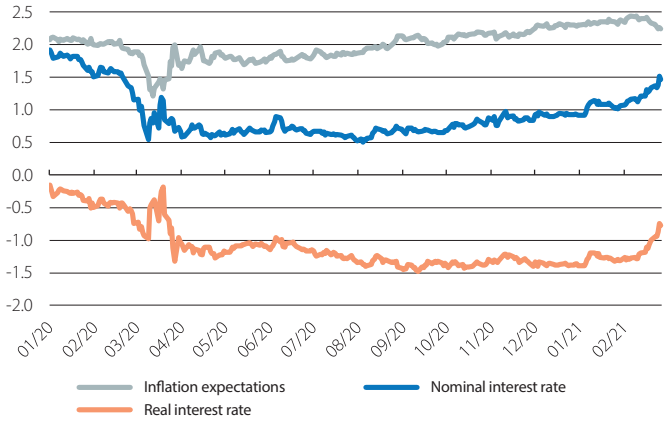
(%)



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

US: interest rates and inflation expectations

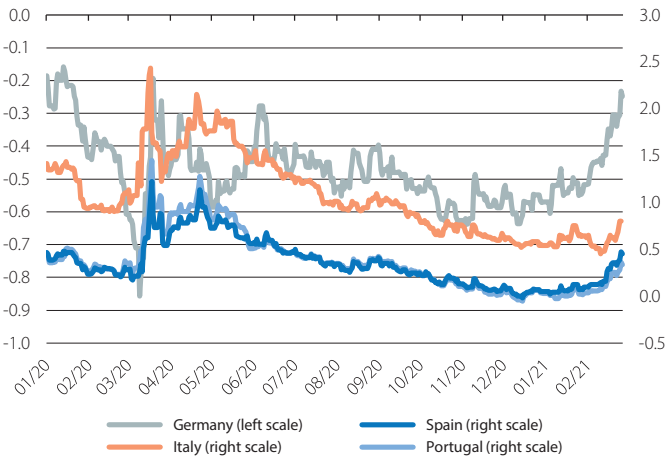
Yield on the 10-year bond (%)
5-year, 5-year forward inflation expectation rate (%)



Note: *The real interest rate is the result of subtracting inflation expectations from the nominal interest rate.*
Source: *BPI Research, based on data from Bloomberg.*

Euro area: yields on 10-year sovereign debt

(%) *(%)*



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

As occurred in the US, European real interest rates also began to be stressed in February. In response, various ECB members sent out messages of reassurance, pointing out that this trend is being closely monitored by the ECB, reiterating the need to maintain highly dovish financial conditions and recalling that the central bank has the capacity and the will to act if conditions begin to tighten. Meanwhile, in the euro area periphery, Spain and Portugal's risk premiums remained contained despite suffering a slight increase, while Italy's continued to decline following the formation of the new government with Mario Draghi as prime minister, temporarily falling below 100 bps (a low point not seen since 2015).

Sector rotation sets the pace in the stock markets. The main stock market indices began the month with significant gains, driven by higher-than-expected corporate earnings in Q4 2020, as well as the resilience of economic activity and the expectation that it will become more sustained over the coming quarters. Thus, the sectors most sensitive to the business cycle showed the best performance. Nevertheless, the sharp rise in sovereign yields on both sides of the Atlantic generated doubts among equity market investors. All in all, the greater relative weight of the cyclical sectors in the euro area indices resulted in them ending the month with widespread gains (EuroStoxx 50 +4.5%, DAX +2.6%, CAC +5.6%, MIB +5.9%, Ibex 35 +6.0%, and PSI-20 –1.9%). In the US, meanwhile, the sectoral composition was less favourable and the indices closed the month with a more mixed tone (S&P 500 +2.6% and Nasdaq –0.1%). In emerging countries, stock markets registered widespread losses in Latin America (–3.1%) and a more cautious tone in emerging Asia (+0.9%) due to concerns about the rise in US interest rates.

The rise of commodity prices fuels inflation expectations. Optimism about the global recovery also spread to the commodity market, where oil and industrial metals led the charge, isolated from investors' fears. On the one hand, the price of a barrel of Brent rose to briefly touch 67 dollars for the first time in 13 months. This rally was supported, on the supply side, by the ongoing production cuts by OPEC and its allies and the temporary decline in inventories in the US (in the midst of a cold spell), as well as being favoured by the upward revision of expectations for oil demand in the coming quarters. On the other hand, industrial metals also joined the rally. Copper, an advanced indicator of industrial sector activity and a vehicle for upward pressure on inflation, rose by 15% in the month, followed by aluminium and nickel.

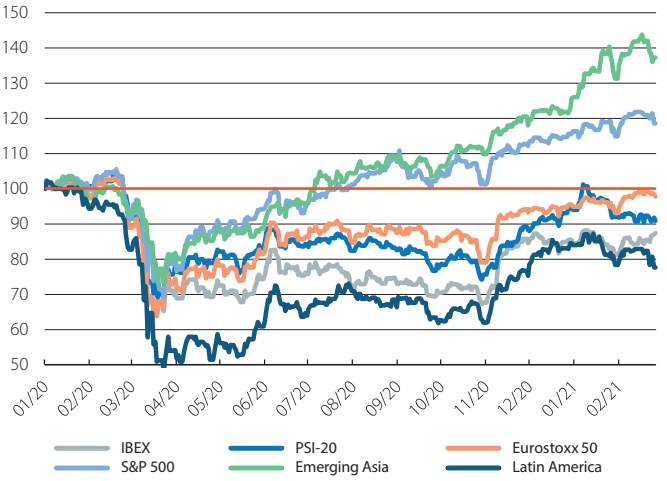
Euro area: market inflation expectations

5-year, 5-year forward inflation expectation rate (%)

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

Major international stock markets

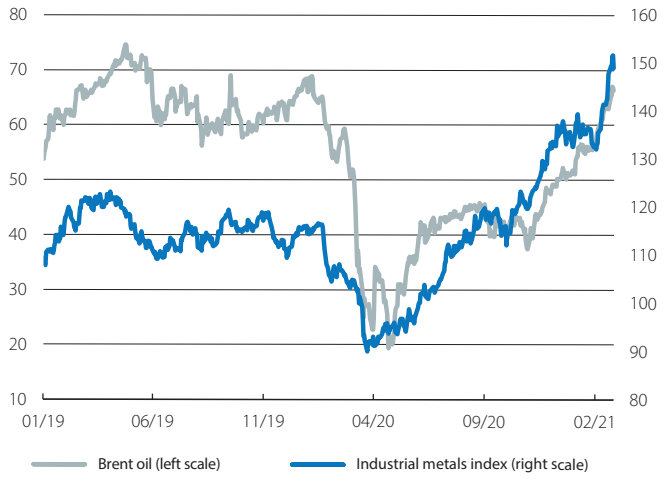
Index (100 = January 2020)



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

Oil and industrial metal prices

(Dollars per barrel) *(Price index in dollars)*



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

US stock market: rational exuberance?

Since its low point last March, the main index of the US stock market, the S&P 500, has risen, with few pauses, by around 70%. This stock market rally has been accompanied in recent weeks by dynamics in certain segments of the US stock markets that have reminded us of events which were followed by significant stock market corrections in the past.

Retail investment activity has reached its highest peak since the crash of 2008, with the addition of the use of financial derivatives, instruments designed in principle for professional uses. The more than exponential growth of certain technology or emerging technology stocks have drawn parallels with the rise and fall of the Nasdaq in the year 2000 (the so-called dot-com bubble). Furthermore, all this is occurring in a context of significant growth in assets that carry risk (other stock markets, particularly emerging ones), high risk (commodities) or extremely high risk (cryptocurrencies).

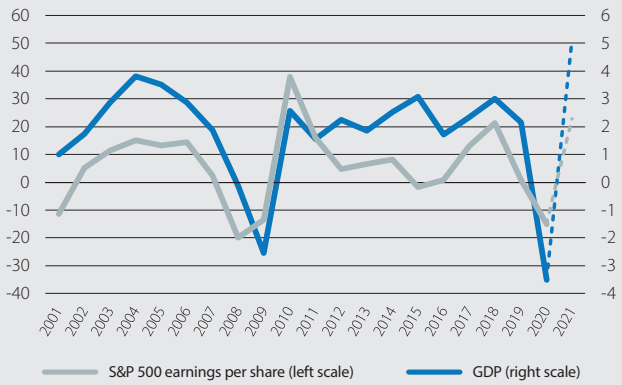
Beyond the financial and media noise, the combination of a certain «vertigo», with the US stock market at very high levels, and these atypical behaviours raises reasonable doubts over whether the US stock market could be disconnecting from the economic fundamentals.

To address this issue, we first need to recall that the current bullish phase is occurring in the context of a long cycle which began in April 2009. The key to this long take-off is the coexistence of two major supporting factors, low interest rates and the strong performance of the US economy and, by extension, of corporate earnings. Both of these factors are also behind the stock market rally which has been taking place since April 2020. Thus, thanks to an unprecedented fiscal stimulus and monetary expansion policy implemented by the Fed, expectations of economic recovery have been greatly reinforced in the markets. The improved expectations for economic growth have also been reflected in the expectations for growth in corporate earnings. In other words, expected economic growth and corporate earnings are in line with the historical evidence.

Nevertheless, this alignment of economic growth and earnings growth may not be enough to dispel all the doubts. The first concern, and perhaps the most critical one, is that, despite the expected good profits, stock prices may have been higher than would be reasonable, causing metrics that have traditionally captured moments of overvaluation to become stressed. If we focus on what is perhaps the key measure, the price/earnings (CAPE) ratio over the past 10 years, the data suggest that it is indeed rather high. While not as extreme as in the year 2000, it is currently double the historical average.

US: S&P 500 corporate earnings and GDP

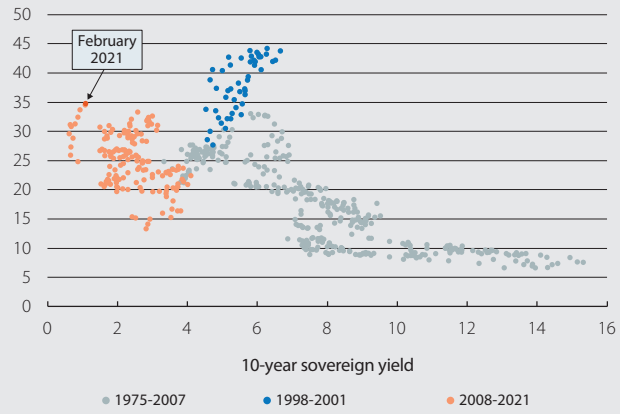
Annual change (%) *Annual change (%)*



Source: *BPI Research, based on data and forecasts from Bloomberg (earnings per share), from the Bureau of Economic Analysis (historical GDP) and internal forecasts (GDP).*

US: CAPE ratio of the S&P 500 and sovereign yield

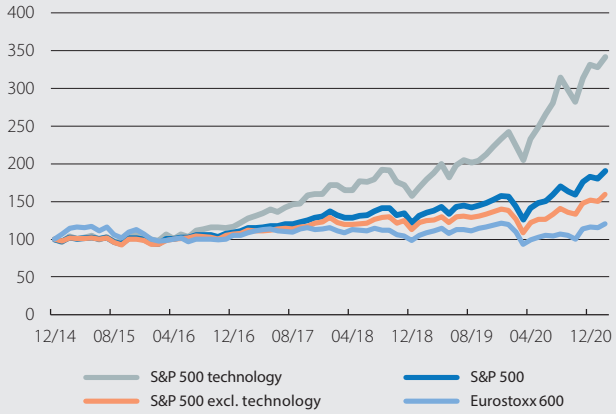
*CAPE ratio (points) **



Note: *The CAPE ratio shows the ratio between the valuation of the S&P 500 stock market index and the average earnings of the companies that comprise the index over the last 10 years.*
Source: *BPI Research, based on data from Robert J. Shiller, available at http://www.econ.yale.edu/~shiller/data.htm*

Stock market indices

Index (100 = December 2014)



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

However, there is one important element missing in this intertemporal comparison, namely the risk-free interest rate: on equal terms, a lower interest rate justifies higher valuations.[1] Indeed, when we compare the CAPE ratio and interest rates over a long time span, the strength of this relationship is evident. What does this tell us about current valuations and interest rates? While they have not deviated significantly from the historical relationship, they are far away enough to suggest caution.[2]

A second source of concern stems from the signs of exuberance in certain segments, such as those with which we opened this article. Here we must distinguish between situations of a different nature. The least worrying among them are no doubt those which have attracted the most headlines. The entry of retail investors should not, in itself, pose a major market risk. The use of investment apps, the use of complex financial instruments without having sufficient knowledge, or even the coordination of retail positions in certain securities are, of course, important issues for regulation and consumer protection. In terms of market risk, however, they tend to be contained phenomena. In any case, the underlying trend of the growing role of retail investors has been developing gradually since 2009 and does not appear to have soared in 2020.

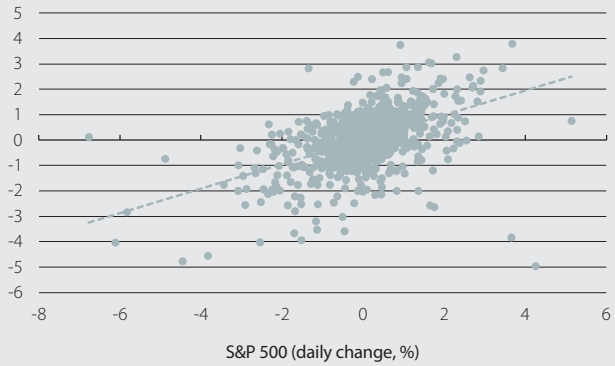
What is more significant is the differential performance of tech companies. Here we must take care to distinguish between companies with a consolidated trajectory which are benefiting from the acceleration of global trends such as digitalisation, e-commerce and teleworking, from others dedicated to emerging technologies. Broadly speaking, the fundamentals of the big tech firms are good and they particularly benefit from low interest rates, as much of their current valuation reflects the expectation of future earnings. The same cannot be said for businesses that are not yet able to generate profits, especially in technology sectors that are still very much emerging and often low-cap. In this area, the risk is higher.

Therefore, if the current rally seems largely to take the recovery of the US economy as a given, can we definitively dismiss the stock market as a source of risk? Unfortunately not, as there are two important aspects to consider: the risk that the macro scenario anticipated by the markets may not come to fruition and the risks of contagion.

With regard to the first risk, we previously stated that the stock markets are pricing in a sustained economic recovery and, moreover, one without excessive inflationary pressures. However, there is a possibility that inflation expectations, which have remained contained

Reaction of the S&P 500 and the Eurostoxx 600 to US economic data *

Eurostoxx 600 (daily change, %)



Note: ** The points correspond to sessions in which an initial estimate of US inflation (CPI) or labour market data was published.*

Source: *BPI Research, based on data from Bloomberg and the US Bureau of Labor Statistics.*

to date, could begin to experience upward pressure, which in turn would drive interest rates up as well.[3] What happened with the long-term US interest rate is a reminder that this risk is present in investors' minds: between the beginning of this year and mid-February, the nominal yield of 10-year sovereign debt had increased by around 40 bps, of which 25 bps reflected higher inflation expectations.

The second risk, as mentioned, is that of financial contagion. It is true that some of the arguments set out above, and in particular that relating to the relative overvaluation of the US stock market, are less prevalent in other sectors of the North American stock market or in the European and emerging markets. Nevertheless, if we limit ourselves to the international contagion channel, in the event of a major correction in the US stock market, investors may not discriminate sufficiently between assets, at least in the short term. As can be seen in the chart, European stock markets are conditioned by developments in the fundamentals of the US economy.[4] If these fundamentals were to take a turn for the worse, it would be logical to expect some contagion in Europe. Following this hypothetical correction, idiosyncratic factors will undoubtedly operate, and investors could be expected to discriminate between countries and sectors. But while it is raining, there may not be an umbrella for everyone.

1. In more formal terms, if we understand that market price is equivalent to the discounted present value of future earnings, then the lower the interest rate, the higher the present value of those earnings.
2. At current interest rates, the historical ratio would suggest a CAPE ratio of between 27 and 32 points, compared to the actual ratio of almost 35 in February (or 33 if the expected recovery in corporate earnings in 2021 had already materialised). i.e. it would suggest a valuation for the S&P 500 of at least 4% lower.
3. For illustrative purposes, if we previously mentioned that the historical relationship would suggest a CAPE ratio of between 27 and 32 points based on current interest rates, with a sovereign yield of 2.5% (+100-150 bps) the predicted CAPE ratio decreases to 25-28.5 points. This would suggest a valuation for the S&P 500 of at least 14% lower.
4. With daily data since 1987, the S&P 500 and the Eurostoxx 600 have moved in the same direction in 65% of all sessions. This figure rises above 70% if we focus exclusively on sessions in which inflation or labour market data have been published in the US. In addition to contagion to Europe, it may also reflect the synchrony between the business cycles in the US and Europe: the US inflation indicators and labour market also provide clues about the state of the European business cycle.

Interest rates (%)

	28-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	–0.53	–0.55	2	1.5	–13.7
1-year Euribor	–0.48	–0.51	3	1.6	–19.9
1-year government bonds (Germany)	–0.61	–0.65	5	10.6	–0.5
2-year government bonds (Germany)	–0.66	–0.73	7	3.7	0.7
10-year government bonds (Germany)	–0.26	–0.52	26	30.9	17.4
10-year government bonds (Spain)	0.42	0.10	33	37.6	18.8
10-year government bonds (Portugal)	0.32	0.04	28	28.7	5.1
US					
Fed funds	0.25	0.25	0	0.0	–150.0
3-month Libor	0.19	0.20	–1	–5.0	–156.3
12-month Libor	0.28	0.31	–3	–5.8	–152.3
1-year government bonds	0.07	0.08	–1	–3.8	–135.7
2-year government bonds	0.13	0.11	2	0.6	–118.6
10-year government bonds	1.40	1.07	34	49.2	–10.2

Spreads corporate bonds (bps)

	28-Feb.	31-Jan.	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Itraxx Corporate	51	52	–1	3.2	4.8
Itraxx Financials Senior	63	63	0	3.7	8.6
Itraxx Subordinated Financials	118	118	–1	6.7	3.0

Exchange rates

	28-Feb.	31-Jan.	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
EUR/USD (dollars per euro)	1.208	1.214	–0.5	–1.2	8.9
EUR/JPY (yen per euro)	128.670	127.130	1.2	2.0	7.1
EUR/GBP (pounds per euro)	0.867	0.886	–2.1	–3.0	3.2
USD/JPY (yen per dollar)	106.570	104.680	1.8	3.2	–1.6

Commodities

	28-Feb.	31-Jan.	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	486.5	458.4	6.1	9.6	20.4
Brent ($/barrel)	66.1	55.9	18.3	27.7	13.7
Gold ($/ounce)	1,734.0	1,847.7	–6.1	–8.7	9.1

Equity

	28-Feb.	31-Jan.	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	3,811.2	3,714.2	2.6	1.5	18.2
Eurostoxx 50 (euro area)	3,636.4	3,481.4	4.5	2.4	–0.1
Ibex 35 (Spain)	8,225.0	7,757.5	6.0	1.9	–12.2
PSI 20 (Portugal)	4,702.2	4,794.6	–1.9	–4.0	–10.5
Nikkei 225 (Japan)	28,966.0	27,663.4	4.7	5.5	24.8
MSCI Emerging	1,339.3	1,329.6	0.7	3.7	26.1

International economic activity, awaiting an acceleration in immunisations

The COVID-19 pandemic continues to be the main factor determining the economic outlook in 2021. With the notable exception of China, in the early stages of the year economic activity in the major international economies remains below pre-pandemic levels and continues to be constrained by the restrictions required to contain the spread of infections. That said, in recent months the world's major economies have shown greater resilience, as already demonstrated by the better-than-expected GDP figures for Q4 2020 in the midst of the wave of infections. In addition, the PMI business sentiment indicators reflect the fact that the global economy remains resilient to the impact of the pandemic in the first few months of 2021, with the figures for January and February at similar levels to those of Q4 2020, slightly above the 50-point threshold that separates contraction from expansion. This resilience denotes the more targeted nature of the restrictions in place, which have posed less of a constraint for the industrial sector, and a certain capacity shown by economies to adapt, as well as the support from economic policies and the accommodative financial environment. Over the coming quarters, as the vaccinations progress and especially once the risk groups are immunised, we can expect the reduced pressure on the health system to trigger a more sustained economic revival.

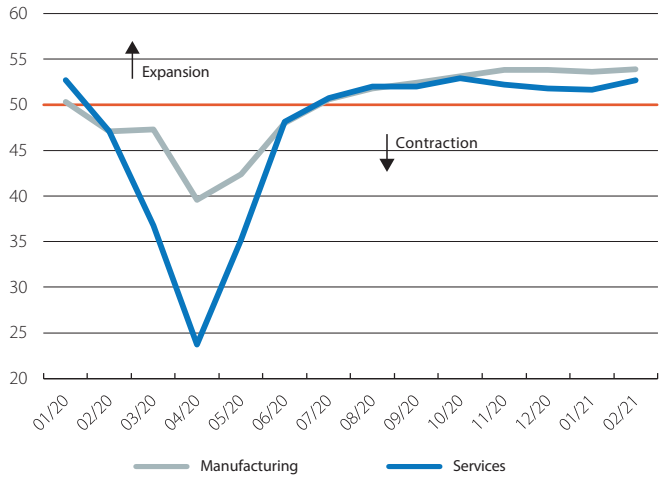
The recovery faces high – and uncertain – risks. Although the latest wave of SARS-CoV-2 infections began to temper somewhat in February, the vaccination campaigns still have some way to go in most counties and the more infectious strains of the virus pose a risk to economic performance in the short term. In addition, the medium-term risk map is complex. On the one hand, support from economic policies remains key to preventing the destruction of the productive fabric of the economy which could occur in the event of a premature withdrawal of the stimulus measures. On the other hand, when the economic recovery gains traction, the push from demand and pent-up savings following the pandemic could generate stress if they are met with bottlenecks in production chains. This stress should fade as economies normalise, but in a context marked by significant monetary and fiscal expansions, the combination of upside surprises in the first inflation data of the year and the presentation of a significant new fiscal stimulus in the US has generated fears of overheating and shaken some financial asset prices, as set out in the Financial Markets section.

ADVANCED ECONOMIES

The Biden Administration boosts the fiscal stimulus in the US. At the end of February, the House of Representatives approved the proposal for a new aid package to combat the COVID-19 crisis presented by President Biden in January, with

World: PMI

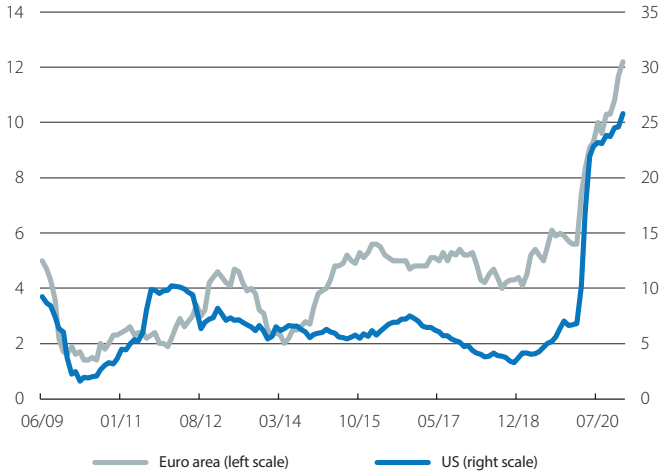
Level



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

Money supply: M2 aggregate

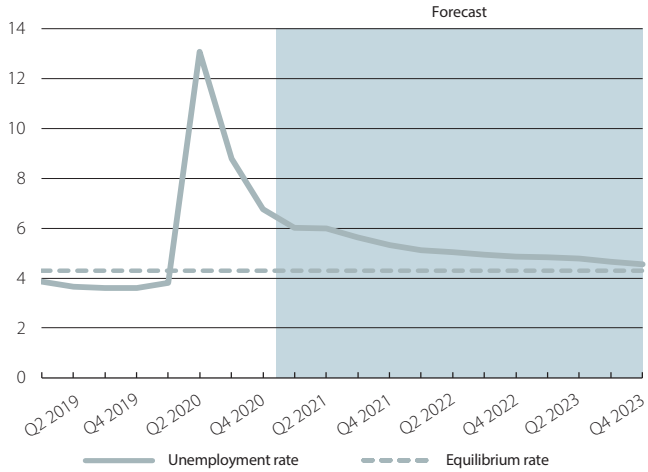
Year-on-year change (%) *Year-on-year change (%)*



Source: *BPI Research, based on data from the ECB and the US Federal Reserve.*

US: unemployment rate

(% of the labour force)



Source: *BPI Research, based on data from the US Bureau of Labor Statistics and forecasts and estimates from the US Congressional Budget Office.*

a budget of 1.9 trillion dollars. Once ratified in the Senate, it will be an addition to the 0.9 trillion approved in December (bringing the total to around 15% of GDP). The proposal sparked a debate among prominent economists, with experts such as Olivier Blanchard and Larry Summers warning that it could entail inflation risks. US Treasury Secretary and former Fed Chair Janet Yellen, meanwhile, acknowledged the risks of inflation but argued that the biggest risk today is not doing enough for an economy that is «injured» by the pandemic. In this context, inflation expectations in the financial markets were volatile in February, while headline inflation remained stable at 1.4% in January.

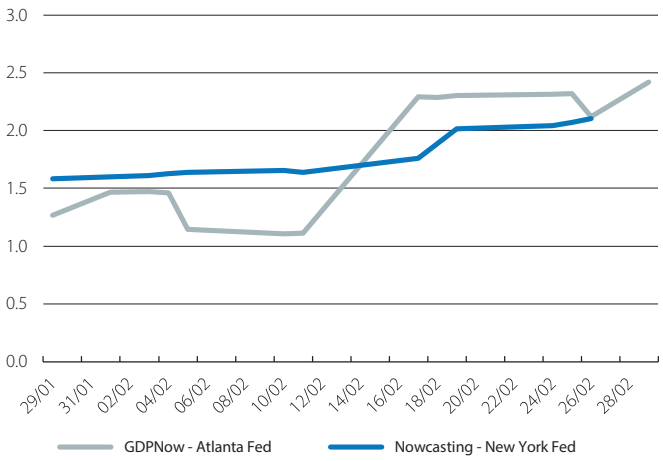
US economic activity forges ahead. The available data indicate that the US economy continues to grow in the first quarter of the year. In particular, in January and February, the PMI and ISM business sentiment indices remained at levels indicative of growth in economic activity (i.e. above the 50-point threshold) in both the manufacturing and the services sector (the ISM for February stood at 60.8 and 55.3 points for manufacturing and services, respectively). The indicators also show a labour market that continues to recover employment at a notable rate, although the unemployment rate remains above 6% (still a far cry from the 3.5% recorded before the COVID-19 outbreak). Thus, at the end of February, short-term forecast models suggested that US GDP could grow by around +2% quarter-on-quarter in Q1 2021 (although they do not yet incorporate the impact that the winter storm may have had in many southern states).

One step behind, the European economy holds up. In the euro area, the economic indicators show that activity is resilient but more constrained by the COVID-19 restrictions than in the US. In January, retail sales fell by 5.9% compared to December 2020 (–6.4% compared to January 2020), a bigger decline than expected by the consensus of analysts. The unemployment rate, meanwhile, remained stable at 8.1% (+0.7 pps compared to the 7.4% of January 2020, a very contained increase thanks to the furlough schemes still in force in European economies). The composite purchase managers' index (PMI) for February was in slightly contractionary territory (48.8 points), weighed down by the difficulties in the services sector (45.7 points, also below the recession-expansion threshold of 50 points), while manufacturing remained in expansive territory (57.9 points). These sentiment indices suggested a certain disparity in economic activity from country to country, with better performance in Germany than in the rest of the euro area's major economies.

Volatility shakes inflation in the euro area. The price index for the euro area registered a surprising and widespread rally in the first two months of the year. Headline inflation rose by +1.2 pps in January to 0.9% year-on-year, where it stabilised in February, while core inflation (which excludes the most volatile components) also surged, reaching 1.4% in January (+1.0 pps, the biggest increase in the historical series) and 1.1% in February. This sharp rise does not reflect an increase

US: GDP forecasts for Q1 2021

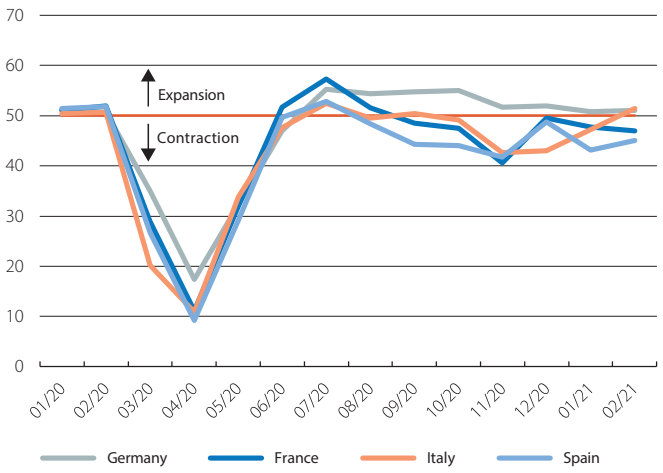
Quarter-on-quarter change (%)



Note: *Evolution of the GDP growth forecast over time according to different models.*
Source: *BPI Research, based on data from the Federal Reserve Banks of Atlanta and New York.*

Euro area: composite PMI

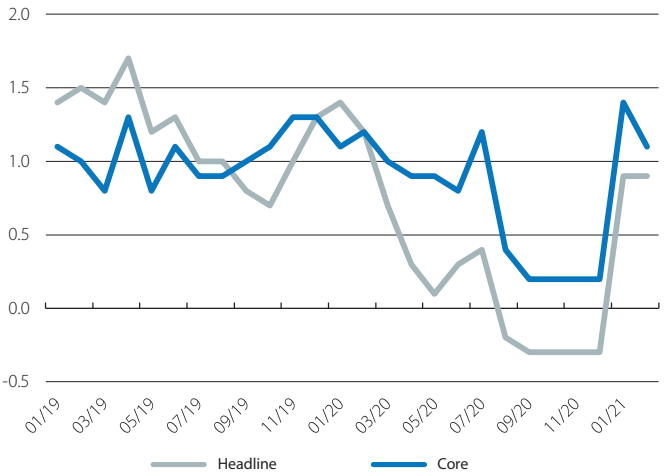
Level



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

Euro area: (harmonised) index of consumer prices

Year-on-year change (%)



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

in the underlying inflationary pressures; rather, it is the result of a combination of factors related to the pandemic. These include the delay in the January sales season, the new relative weights of the various components that make up the index (skewed towards goods and services that suffered higher rates of consumption and inflation in 2020) and German VAT (since January, the tax rate has returned to the same level as prior to the pandemic, but its temporary cut last July generated a base effect that pulled inflation down in the second half of 2020). These factors, and other similar ones (such as a base effect due to the low oil prices in the spring of 2020), will make European inflation volatile in 2021. Nevertheless, as these effects fade with the normalisation of the economy, they ought not to condition the ECB.

Japan contracted 4.8% in 2020. Japanese GDP grew by 3.0% quarter-on-quarter in Q4 2020 (−1.2% year-on-year), a notable figure, especially following the sharp rebound in Q3 (+5.3% quarter-on-quarter). Despite these two quarters of significant growth, the total for the year stood at −4.8%. It should be recalled that the economic shock of the COVID-19 crisis came at a time of weakness in the country, as the economy was feeling the negative effects on economic activity of the VAT rise and the devastating typhoons of late 2019. With a view to Q1 2021, the resurgence of the pandemic and the restrictions on activity and mobility could lead to a slight decline in Japan's economic activity.

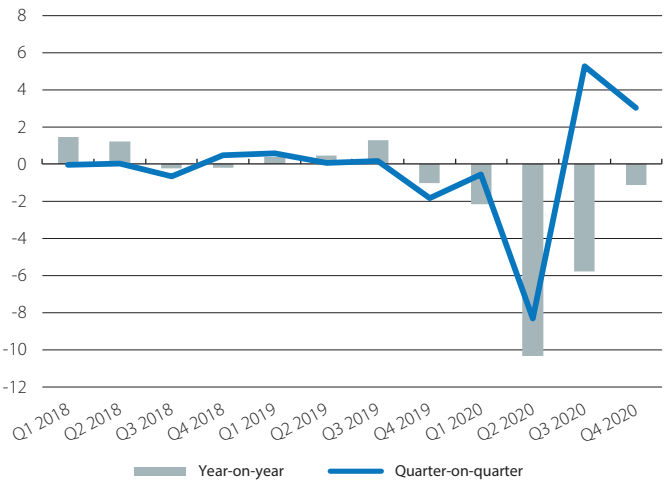
EMERGING ECONOMIES

China is a few steps ahead. The pandemic remains well under control in China, and the data show that the rise in infections suffered in January in some provinces was rapidly quelled by the authorities. This control of the COVID-19 pandemic has allowed China's GDP to rise above pre-pandemic levels for several quarters now, and although the publication of economic data was somewhat scarce with the celebration of the Lunar New Year in February, the indicators continue to show buoyant economic activity. In this context of strength, the authorities recently announced a GDP growth target («above 6% in 2021») which should be easy to achieve given the base effect of the pandemic (for instance, in Q1 and Q2 2021, GDP growth could average around 10% year-on-year, as it will be calculated relative to GDP levels that were greatly depressed in Q1 and Q2 2020).

Divergence among other emerging economies. For 2020 as a whole, Turkey registered a surprising positive growth of 1.8%, making it one of the few emerging countries that managed to avoid recession. Data released in February also showed that Russia and Brazil resisted the pandemic better than other emerging economies (in 2020 as a whole their GDP contracted by 3.1% and 4.1%, respectively), while India's GDP fell by an uncompromising 7.0%. It should be recalled that during Q2 2020 India was among the economies hardest hit by the pandemic, with a sharp drop in economic activity and insufficient stimuli.

Japan: GDP

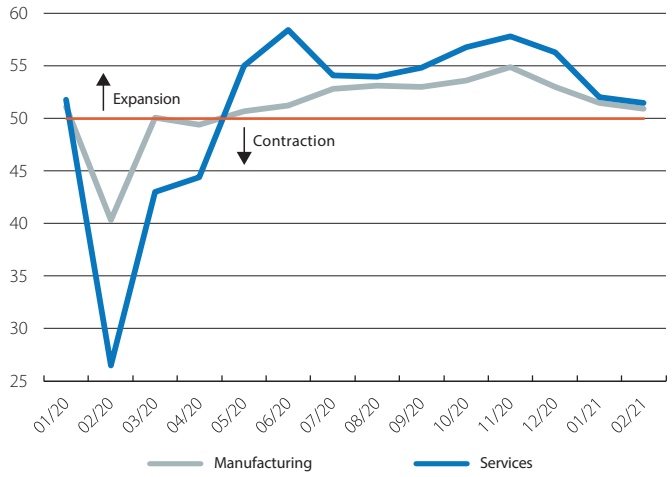
Change (%)



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

China: PMI

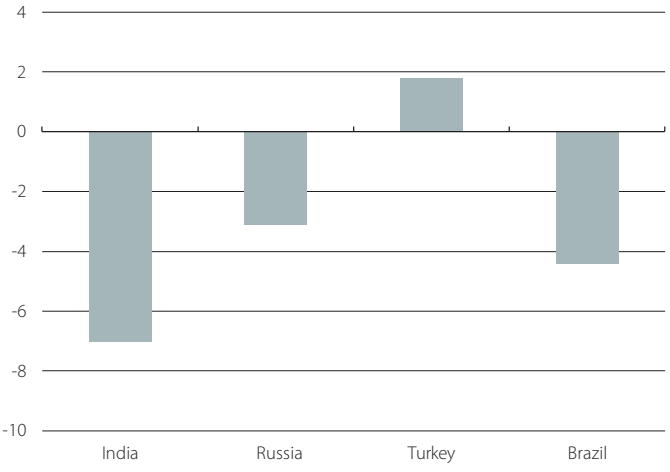
Level



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

Emerging economies: 2020 GDP

Annual change (%)



Source: *BPI Research, based on data from the statistics offices of the respective countries.*

European fiscal rules: an end to the 60% limit?

- There is a broad consensus on the need to reform European fiscal rules, which are too complex, unpredictable and insufficiently sensitive to the state of the business cycle.
- In fact, the COVID-19 crisis has forced their suspension and the Commission is debating their reform.
- The design of fiscal rules must take into account all the factors that affect debt sustainability and must be flexible enough to enable the stabilising role of fiscal policy.

European fiscal rules, which dictate the maximum deficit and debt that European countries can have, were suspended in March 2020 (until at least the end of 2021) due to the COVID-19 crisis.

As we explained in a Focus last year,[1] prior to this crisis there was already consensus that the rules were inadequate (even after several reforms over the years) and at the beginning of 2020 the European Commission had begun a debate process with the aim of reforming them. If the rules, which centred around a public debt ceiling of 60% of GDP, were already inadequate before the pandemic, this latest crisis has left them clearly obsolete. In fact, it is estimated that the euro area's public debt in 2020 exceeded 100% of the bloc's GDP, while in some countries it reached ratios of around 120% (Spain) or even 160% (Italy). Faced with such high levels of debt, the current fiscal rules would require a huge and sustained fiscal effort from many countries (see first chart). For instance, for a country with a public debt of 160% of GDP, primary surpluses of greater than 3% of GDP would be needed for the next 20 years, even in a relatively favourable growth and interest rate scenario. Such a fiscal effort is rather infeasible, and perhaps even counterproductive, as it would pose a substantial restriction for growth.

Debt sustainability cannot be reduced to a single number

The above example illustrates the fundamental problem with Europe's fiscal rules: they are based on debt and deficit criteria which do not vary by country or over time and do not take into account potential changes in the factors that determine debt sustainability. This characterisation is overly simplistic, as the level of debt and deficit are not the only factors that determine debt sustainability, for at least four reasons.

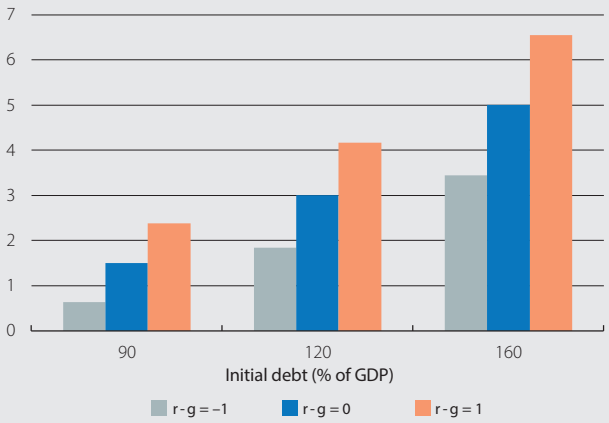
First, debt sustainability depends not only on its level as a percentage of GDP and the deficit, but also on future growth and interest rates. In Italy, for example, the debt ratio continued to rise due to weak growth and a high interest burden despite the country maintaining an almost uninterrupted primary fiscal surplus over the past 25 years (see second chart). In contrast, in a case where the interest rate of the debt is lower than nominal GDP growth, a country can reduce its debt ratio despite having a deficit.

Second, there is uncertainty over future growth and interest rates. In particular, a given primary balance may no longer be sufficient to stabilise the debt ratio if interest rates rise or growth falls. Even if interest rates are low today, the factors behind this phenomenon are complex and their future path is uncertain. Therefore, we cannot rule out a reversal of the decline in interest rates seen in recent decades, a shift that would have significant fiscal implications.

Third, the fiscal effort that is feasible depends on many factors, such as the type of government, the level of taxes at the outset, and many other political, economic, and social considerations. As a result, a level of debt that is sustainable in one country may not be so in another country if it requires an infeasible fiscal effort (remember the questions about the political and economic feasibility of the fiscal adjustments that Greece

Primary balances required to reduce debt to 60% of GDP in 20 years (with different assumptions about growth and interest rates)

Primary balance required (% of GDP)

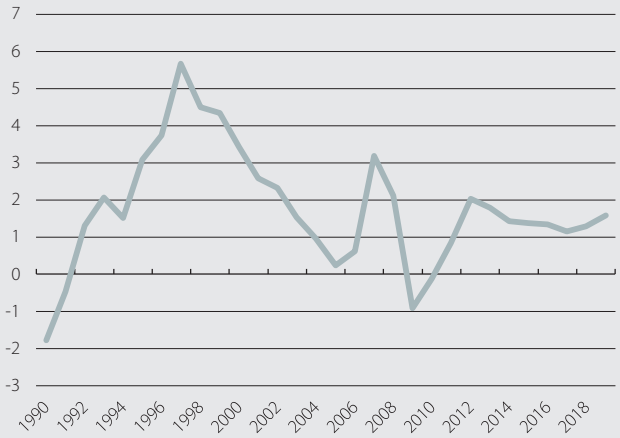


Note: *r is the average interest rate of public debt, g is nominal GDP growth and r-g is the difference between these two variables. The assumptions for r-g were chosen to illustrate different scenarios. In 2019 r-g was equal to -1.96% in Germany, -1.81% in France, -0.82% in Spain and 0.25% in Italy, according to Eurostat and the International Monetary Fund's GDP growth forecasts. The primary fiscal balance pb_t^* required to reduce the debt ratio d_t to a target d^* in n years is calculated as follows: $pb_t^* = \left(\frac{r_t - g_t}{1+g_t}\right) d_{t-1} + \frac{1}{n}(d_{t-1} - d^*)$, where r_t and g_t are assumptions for interest rates and growth.*

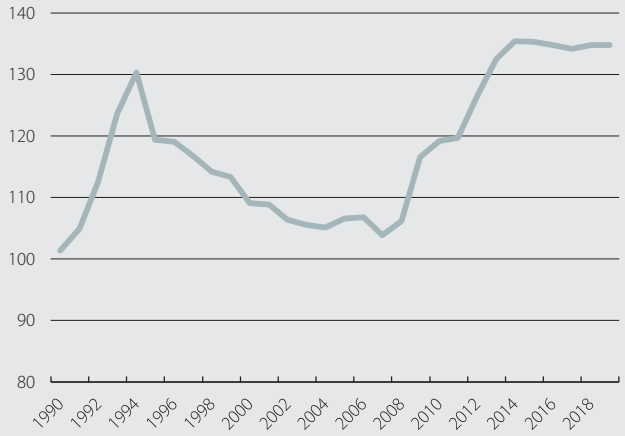
Source: *BPI Research, based on data from Eurostat and the International Monetary Fund.*

1. See the Focus «A step towards a reform of the fiscal rules in Europe?» in the MR03/2020, in which we pointed out that the rules were too complex, unpredictable and insufficiently sensitive to the state of the business cycle.

Italy: primary fiscal balance
(% of GDP)



Italy: public debt
(% of GDP)



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

was required to undertake in order to receive European aid, requiring a high primary balance for more than 20 years).

Fourth, investor confidence is also important for debt sustainability. The current environment, with low interest rates and long debt maturities, favours investor confidence because it makes the burden of this debt more bearable (in terms of payment flows). However, a loss of investor confidence in a country's ability to repay its debt could result in interest-rate stress and a «self-fulfilling prophecy» as the feedback from interest-rate rises drives up the debt towards unsustainable levels.[2] Although the ECB can avoid these situations in some cases, it cannot eliminate differences in the credibility of different countries' fiscal policies.

These four elements show that debt sustainability should not be reduced to a single number. Its evaluation is more complex, full of nuances and must take into account many other factors such as expected growth and interest rates, as well as other economic, political, and institutional factors.

A broader view of sustainability in fiscal rules

If debt sustainability cannot be whittled down to a single number, fiscal rules should not be reduced almost entirely to a debt target either. Fiscal rules should take into account all the factors affecting sustainability mentioned in this article, and they should be flexible enough to enable the stabilising role of fiscal policy (the rules had to be suspended in 2020 precisely because they would not have allowed the fiscal measures required to combat the COVID-19 crisis).

Nevertheless, the debt limit of 60% of GDP is stipulated in the EU Treaty, so the revision of the fiscal rules is unlikely to eliminate it. Unless it is decided to alter the Treaty (which is unlikely), ways will have to be found to reduce the importance of this limit, perhaps, as proposed by the European Fiscal Board,[3] by dictating different correction speeds by country, taking into account all the factors
that are important for debt sustainability. However, it will be a challenge to achieve this more holistic view of sustainability without losing transparency and predictability in the rules. Transparency and predictability are important for allowing more effective application and monitoring, as well as for better comprehension of the rules by the rest of society.

All in all, we expect that this debate will play an important role in 2021, given the urgency of reforming the rules before their suspension comes to an end. The process of reforming the European fiscal framework (which was originally due to be completed by the end of 2020) has been interrupted by the COVID-19 crisis and the Commission has not yet decided on a new date to re-start it, but the debate will undoubtedly intensify during the course of the year given its importance.
In this new world of high public debt in most European countries, the new fiscal rules will need to encourage a gradual reduction in debt to safer levels, but without damaging the recovery or the green and digital transformations of the European economy. It will be a difficult balance to achieve, but not an impossible one.

2. The speed at which interest rate rises result in increases in debt depends on the debt maturity profile: in a country with more longer-term debt, this increase will occur more slowly.

3. See European Fiscal Board. «Annual Report 2020».

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

UNITED STATES

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Activity									
Real GDP	2.2	–3.5	0.3	–9.0	–2.8	–2.4	–	–	–
Retail sales (excluding cars and petrol)	3.9	2.0	3.1	–4.9	5.3	4.7	5.5	2.2	7.6
Consumer confidence *(value)*	128.3	101.0	127.3	90.0	93.1	93.8	92.9	87.1	88.9
Industrial production	0.9	–6.6	–1.9	–14.2	–6.3	–4.2	–4.7	–3.2	–1.8
Manufacturing activity index (ISM) *(value)*	51.2	52.5	50.4	45.7	55.0	59.0	57.7	60.5	58.7
Housing starts *(thousands)*	1.295	1.396	1.484	1.079	1.432	1.588	1.553	1.680	1.580
Case-Shiller home price index *(value)*	217	228	222	224	229	239	239	242	...
Unemployment rate *(% lab. force)*	3.7	8.1	3.8	13.1	8.8	6.8	6.7	6.7	6.3
Employment-population ratio *(% pop. > 16 years)*	60.8	56.8	60.7	52.9	56.1	57.4	57.4	57.4	57.5
Trade balance[1] *(% GDP)*	–2.7	–3.2	–2.6	–2.7	–2.9	–3.2	–3.1	–3.2	...
Prices									
Headline inflation	1.8	1.2	2.1	0.4	1.2	1.2	1.2	1.4	1.4
Core inflation	2.2	1.7	2.2	1.3	1.7	1.6	1.6	1.6	1.4

JAPAN

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Activity									
Real GDP	0.3	–4.9	–2.1	–10.3	–5.8	–1.1	–	–	–
Consumer confidence *(value)*	38.9	31.1	36.0	24.7	30.5	33.0	33.7	31.8	29.6
Industrial production	–2.7	–10.3	–4.3	–20.5	–12.6	–3.5	–3.1	–4.2	–2.1
Business activity index (Tankan) *(value)*	6.0	–19.8	–8.0	–34.0	–27.0	–10.0	–10.0	–	–
Unemployment rate *(% lab. force)*	2.4	2.8	2.4	2.8	3.0	3.0	2.9	2.9	...
Trade balance[1] *(% GDP)*	–0.3	0.1	–0.2	–0.5	–0.3	0.1	0.0	0.1	0.3
Prices									
Headline inflation	0.5	0.0	0.5	0.1	0.2	–0.8	–1.0	–1.2	–0.6
Core inflation	0.6	0.2	0.7	0.3	0.1	–0.3	–0.3	–0.4	0.1

CHINA

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Activity									
Real GDP	6.0	2.3	–6.8	3.2	4.9	6.5	–	–	–
Retail sales	8.1	–2.9	–18.2	–4.0	0.9	4.6	5.0	4.6	...
Industrial production	5.8	3.4	–7.3	4.4	5.8	7.1	7.0	7.3	...
PMI manufacturing *(value)*	49.7	49.9	45.9	50.8	51.2	51.8	52.1	51.9	51.3
Foreign sector									
Trade balance[1,2]	421	535	361	411	450	535	449	480	...
Exports	0.5	3.6	–13.6	–0.2	8.4	16.7	20.6	18.1	...
Imports	–2.7	–1.1	–3.1	–9.9	2.9	5.0	3.9	6.5	...
Prices									
Headline inflation	2.9	2.5	5.0	2.7	2.3	0.1	–0.5	0.2	–0.3
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	6.9	6.9	7.0	7.1	6.9	6.6	6.6	6.5	6.5

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

EURO AREA

Activity and employment indicators

Values, unless otherwise specified

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Retail sales *(year-on-year change)*	2.4	–1.2	–1.2	–6.8	2.4	0.9	–2.2	0.6	...
Industrial production *(year-on-year change)*	–1.3	–8.6	–5.8	–20.2	–6.9	–1.7	–0.6	–0.8	...
Consumer confidence	–7.0	–14.3	–8.6	–18.5	–14.4	–15.6	–17.6	–13.8	–15.5
Economic sentiment	103.7	88.2	100.8	72.0	88.5	91.4	89.3	92.4	91.5
Manufacturing PMI	47.4	48.6	47.2	40.1	52.4	54.6	53.8	55.2	54.8
Services PMI	52.7	42.5	43.8	30.3	51.1	45.0	41.7	46.4	45.4
Labour market									
Employment (people) *(year-on-year change)*	1.2	...	0.4	–3.0	–2.1	...	...	–	–
Unemployment rate *(% labour force)*	7.6	8.0	7.3	7.6	8.6	8.3	8.3	8.3	...
Germany *(% labour force)*	3.1	4.2	3.6	4.2	4.5	4.5	4.5	4.6	...
France *(% labour force)*	8.5	8.2	7.7	7.1	9.1	8.8	8.8	8.9	...
Italy *(% labour force)*	9.9	9.1	9.2	8.5	9.6	9.1	8.8	9.0	...
Real GDP *(year-on-year change)*	1.3	–6.8	–3.2	–14.7	–4.3	–5.0	–	–	–
Germany *(year-on-year change)*	0.6	–5.3	–2.2	–11.3	–4.0	–3.6	–	–	–
France *(year-on-year change)*	1.5	–8.2	–5.6	–18.6	–3.7	–4.9	–	–	–
Italy *(year-on-year change)*	0.3	–8.9	–5.8	–18.2	–5.2	–6.6	–	–	–

Prices

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
General	1.2	0.3	1.1	0.2	0.0	–0.3	–0.3	–0.3	0.9
Core	1.0	0.7	1.1	0.9	0.6	0.2	0.3	0.2	1.4

Foreign sector

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Current balance	**2.4**	**2.4**	**2.1**	**2.3**	**2.1**	**2.4**	**2.2**	**2.4**	**...**
Germany	7.1	7.1	7.1	6.8	6.9	7.1	7.0	7.1	...
France	–0.7	–2.3	–0.8	–1.4	–1.8	–2.3	–2.0	–2.3	...
Italy	3.0	3.6	3.2	3.0	3.5	3.6	3.5	3.6	...
Nominal effective exchange rate [1] *(value)*	**92.4**	**93.9**	**91.2**	**93.4**	**95.6**	**95.7**	**95.2**	**96.1**	**96.3**

Credit and deposits of non-financial sectors

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Private sector financing									
Credit to non-financial firms [2]	3.8	6.3	3.9	7.1	7.1	7.0	6.9	7.1	7.0
Credit to households [2,3]	3.4	3.2	3.6	3.0	3.1	3.2	3.1	3.1	3.0
Interest rate on loans to non-financial firms [4] *(%)*	1.2	1.2	1.1	1.2	1.3	1.3	1.2	1.3	1.2
Interest rate on loans to households for house purchases [5] *(%)*	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Deposits									
On demand deposits	8.0	12.9	9.3	12.9	14.1	15.2	15.1	16.3	17.1
Other short-term deposits	0.3	0.6	–0.2	0.3	1.0	1.4	1.2	1.7	1.1
Marketable instruments	–1.9	10.1	3.8	7.2	11.0	18.3	15.5	25.0	18.2
Interest rate on deposits up to 1 year from households *(%)*	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2

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

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

Resilience will favour the Portuguese recovery

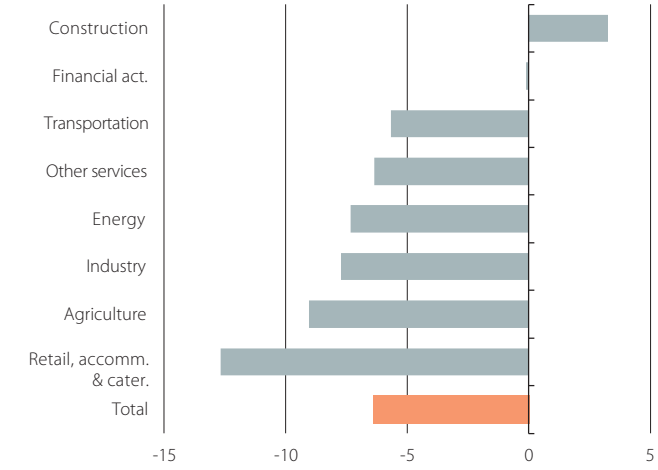
A historic contraction of 7.6% in 2020 has been confirmed, dragged down by the sharp fall in economic activity in the first semester. In contrast, the significant recovery in the second semester demonstrates the Portuguese economy's capacity to rebound and its resilience to the restrictions, reinforcing the view that economic activity will resume a stronger recovery once control of the pandemic allows the lockdown to be eased. By productive sector, only construction managed to maintain a positive contribution to growth (its gross value added grew by 3.3%), while all other sectors registered declines for the year as a whole, especially retail and catering (–12.7%), industry (–7.7%) and other services grouped together (–6.4%).

Portuguese economic activity, constrained at the beginning of 2021 by the tightening of the lockdown. While waiting for the vaccination of the risk groups to relieve pressure on the health system and allow for a more widespread easing of the restrictions, the indicators suggest that the economic recovery has been put on hold by the measures taken to curb the spread of infections in these first few months of 2021. In particular, the Bank of Portugal's daily economic activity indicator (the so-called DEI, which shows a close correlation with year-on-year GDP growth) has declined to an average of –6.2% so far this year, suggesting a somewhat lower rate of activity than that of Q4 2020 (when the DEI stood at –5.4%). In addition, the confidence indicators for February deteriorated in the consumer category, as well as in the services and trade sectors, while the industrial sector appears more optimistic. This optimism is expected to spread as the vaccinations progress, since this should alleviate the pressure on hospitals and lead to a more sustained recovery in economic activity over the coming quarters.

The labour market continues to hold up. Employment increased by 59,600 people in Q4 2020 (+1.2% quarter-on-quarter and –1.0% year-on-year) and practically recovered to pre-pandemic levels (–6,400 people compared to Q1 2020). The unemployment rate, meanwhile, fell to 7.1%, compared to 7.8% in Q3, placing the rate for 2020 as a whole at 6.8%. This increase from the 6.5% of 2019 has been much smaller than expected, reflecting the support provided by the measures introduced to protect jobs in the face of the drop in economic activity. Nevertheless, the outlook for the labour market in 2021 remains highly challenging, marked by the deterioration of the pandemic in early 2021, the slow vaccination process and uncertainty surrounding the ability of companies to relaunch their activity once the lockdown is lifted. In this context, the unemployment rate may increase in the second half of the year when the economic support measures in their current configuration expire.

Portugal: gross value added by sector

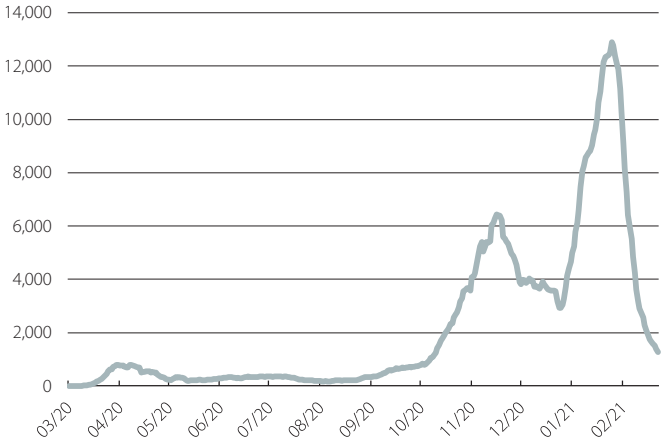
Annual change (%)



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

Portugal: new cases of COVID-19

Cases (7-day moving average)



Note: *The latest figure is from 25 February.*
Source: *BPI Research, based on data from the General Health Directorate of Portugal.*

Portugal: economic activity and employment

Year-on-year change (%)

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

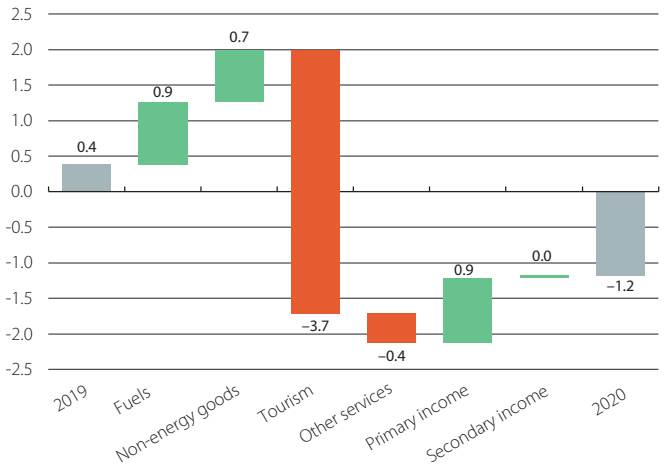
Current account deficit in 2020 in the face of the collapse in tourism in Portugal. The current account deficit stood at 2,377 million euros, equivalent to 1.2% of GDP, compared to a surplus of 0.4% in 2019. The main factor behind this deterioration was the surplus in the balance of services, which fell to 4.3% GDP (–4.1 pps below the 2019 level) as a result of the slump in international tourism, whilst the deficit in the balance of goods slightly improved (bringing it to –6% of GDP). The capital account balance, meanwhile, increased by 862 million euros to +2,633 million (equivalent to +1.3% of GDP), supported by an increase in revenues from EU funds. This allowed the Portuguese economy to maintain a positive external lending capacity, while waiting for the impact of Next Generation EU and an incipient recovery in tourism to support a certain improvement in the external accounts in 2021.

In 2020, tourism was severely affected by the COVID-19 pandemic. The number of overnight stays plummeted to 1993 levels, and the total income of tourist accommodation establishments fell to the lowest level since records began (2013), with a year-on-year decline of 66.1% to 1,457 million euros. Tourism suffered a drop both in the number of Portuguese resident guests (–39.2%, down to 6.5 million) and especially in the number of non-resident guests, which plummeted by 76% (to 4 million). The countries with the biggest declines in the flow of tourists to Portugal were Ireland (–89.6%), the US (–87.7%) and China (–82.8%). An incipient recovery in the sector is expected in 2021, supported by the roll-out of the vaccinations. In fact, there have already been some positive signs for tourism in Portugal: following the British Prime Minister's speech setting out the UK's process for the easing of restrictions, airlines registered a 600% increase in demand for flights to Portugal, Spain and Greece from the British public, who represent the largest source of tourists visiting Portugal (16.3%).

Mixed impact of the pandemic in the credit market. The stock of credit issued to private individuals grew by 1.4% year-on-year in December, down from the beginning of 2020 (2.3%) and with a slight decline in consumer credit (–0.3%). In fact, new lending in this segment fell sharply (–17.4% in the year to date), driven by lower demand from consumers. On the other hand, the stock of housing credit grew by 2.1% year-on-year in December, driven by the buoyancy of new lending (+8.1% in the year to date) and the application of credit moratoria In fact, repayments of housing credit are estimated to have fallen by around 20% in 2020. As for the corporate segment, new lending increased slightly (0.6%) for the year as a whole. After increasing in May and June, when the government-backed credit lines were first introduced, the second half of the year saw a decline in new lending, possibly affected by uncertainty about the economic environment. All in all, the stock of corporate credit increased by 10.4% year-on-year in December, underpinned by adhesion to moratoria (repayments are estimated to have declined by 25% in 2020).

Portugal: current account balance

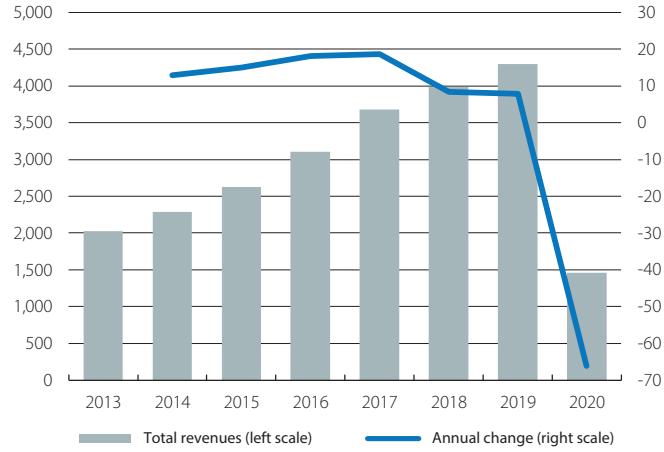
12-month cumulative balance (% of GDP)



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

Portugal: tourist accommodation revenues

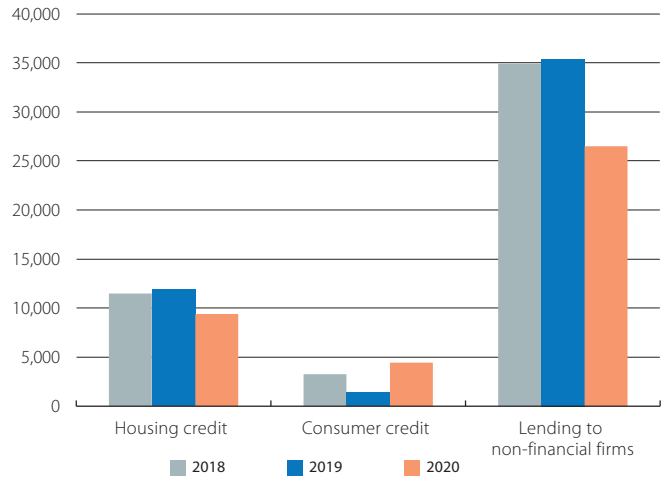
(EUR millions) *(%)*



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

Portugal: credit repayments

Year to date (EUR millions)



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

Activity and employment indicators

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	12/20	01/21	02/21
Coincident economic activity index	0.9	–5.3	–3.1	–6.3	–6.6	–5.1	–4.7	–4.2	...
Industry									
Industrial production index	–2.2	–7.0	–1.4	–23.5	–0.7	–2.5	–4.6	–6.5	...
Confidence indicator in industry *(value)*	–3.2	–15.8	–4.6	–24.8	–19.1	–14.5	–14.3	–14.7	–14.1
Construction									
Building permits *(cumulative over 12 months)*	5.9	–0.7	2.2	–0.8	–0.6	–0.7	–0.7	...	...
House sales	1.7	...	–0.7	–21.6	–1.5	...	...	...	...
House prices *(euro / m² - valuation)*	10.4	8.3	11.2	9.0	6.9	6.0	6.0	6.1	...
Services									
Foreign tourists *(cumulative over 12 months)*	7.8	–75.7	3.2	–29.7	–57.6	–75.7	–75.7	–79.9	...
Confidence indicator in services *(value)*	12.9	–21.6	5.8	–36.9	–37.2	–18.0	–17.2	–18.3	–21.3
Consumption									
Retail sales	4.4	–3.8	3.0	–12.9	–2.2	–3.2	–3.9	–11.1	...
Coincident indicator for private consumption	2.0	–5.4	–3.3	–7.1	–7.1	–4.0	–2.8	–1.4	...
Consumer confidence index *(value)*	–8.0	–22.4	–8.6	–27.7	–26.9	–26.2	–26.2	–25.7	–24.4
Labour market									
Employment	1.0	–2.0	–0.3	–3.8	–3.0	–1.0	–1.7	–3.5	...
Unemployment rate (% *labour force*)	6.5	6.8	6.7	5.6	7.8	7.1	6.8	7.2	...
GDP	**2.5**	**–7.6**	**–2.2**	**–16.3**	**–5.7**	**–6.1**	**...**	**...**	**...**

Prices

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	12/20	01/21	02/21
General	0.3	0.0	0.4	–0.3	0.0	–0.2	–0.2	0.3	0.5
Core	0.5	0.0	0.2	–0.1	–0.1	–0.1	–0.1	0.6	0.7

Foreign sector

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	12/20	01/21	02/21
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	3.6	–10.2	1.5	–6.8	–7.8	–10.2	–10.2	...	...
Imports *(year-on-year change, cumulative over 12 months)*	6.0	–15.2	2.8	–7.6	–12.0	–15.2	–15.2	...	...
Current balance	**0.8**	**–2.4**	**0.7**	**–0.2**	**–2.2**	**–2.4**	**–2.4**	**...**	**...**
Goods and services	1.6	–3.6	1.1	–0.6	–3.0	–3.6	–3.6	...	...
Primary and secondary income	–0.7	1.2	–0.3	0.4	0.8	1.2	1.2	...	...
Net lending (+) / borrowing (–) capacity	**2.6**	**0.3**	**2.9**	**2.4**	**0.3**	**0.3**	**0.3**	**...**	**...**

Credit and deposits in non-financial sectors

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	12/20	01/21	02/21
Deposits [1]									
Household and company deposits	5.2	10.1	6.4	9.0	9.2	10.1	10.1	...	...
Sight and savings	14.8	18.8	17.6	20.1	18.4	18.8	18.8	...	...
Term and notice	–2.9	1.4	–3.2	–1.0	0.4	1.4	1.4	...	...
General government deposits	5.6	–17.1	–10.4	–15.7	–13.8	–17.1	–17.1	...	...
TOTAL	**5.2**	**9.1**	**5.7**	**7.9**	**8.2**	**9.1**	**9.1**	**...**	**...**
Outstanding balance of credit [1]									
Private sector	–0.1	4.6	0.5	0.5	2.1	4.6	4.6	...	...
Non-financial firms	–3.7	10.4	–2.6	1.0	4.4	10.4	10.4	...	...
Households - housing	–1.3	2.1	–0.7	–0.1	0.7	2.1	2.1	...	...
Households - other purposes	16.5	–1.2	15.0	1.5	1.3	–1.2	–1.2	...	...
General government	–4.7	–4.3	–4.9	–9.7	–5.7	–4.3	–4.3	...	...
TOTAL	**–0.3**	**4.3**	**0.2**	**0.1**	**1.8**	**4.3**	**4.3**	**...**	**...**
NPL ratio *(%)* [2]	**6.2**	**...**	**6.0**	**5.5**	**5.3**	**...**	**...**	**...**	**...**

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

Spain faces a first quarter still highly restricted by the COVID-19 pandemic

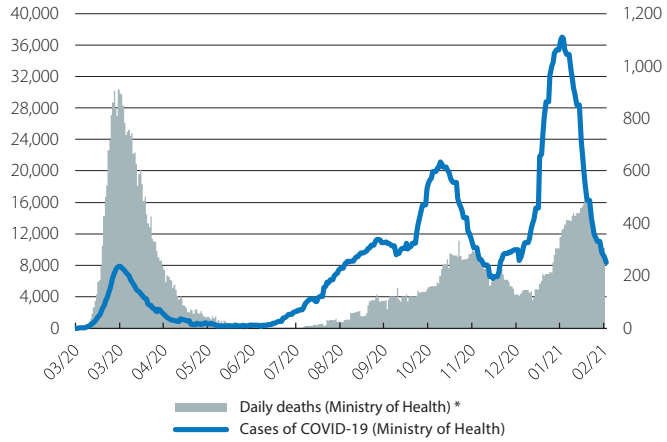
A first quarter of 2021 marked by COVID-19. February passed without major developments in the outlook for the Spanish economy in 2021, for which we continue to anticipate an average growth of 6%. In particular, the latest economic activity indicators suggest a stagnation or a slight decline in GDP in Q1. This should not come as a surprise considering that most of the mobility restrictions have remained unchanged so far this quarter. The pandemic has loosened its intensity in February – the cumulative 14-day incidence has fallen below the extreme risk level (250 cases per 100,000 inhabitants) for the first time in two months, and the pressure on hospitals continues to decline – but for Q1 as a whole we can expect to see a similar level of restrictions as in Q4. In this regard, our outlook scenario foresees a Q1 with the economy held back by the restrictions and a recovery beginning in the spring with the vaccination of the highest risk groups. After all, it should be recalled that over 60s account for the bulk of hospitalisations and ICU admissions (around 70%) as well as deaths (over 90%), with only 20% of the total infections. Therefore, the vaccination of this age group is key for enabling a more widespread easing of the restrictions. The recent acceleration of the vaccination rate is an encouraging sign, supported by the growing volume of Pfizer and AstraZeneca vaccine shipments to Spain.

The data show economic activity is holding up but not improving. The latest data are consistent with a rate of economic activity in Q1 similar to that of Q4. For instance, the CaixaBank consumption indicator – which measures spending on cards issued by CaixaBank, non-client spending registered on CaixaBank POS terminals and cash withdrawals carried out at CaixaBank ATMs – shows an 11% year-on-year decline in February. This is slightly worse than the figure for January (–8%) and brings us back to where we were last November (also –11%). Data on workplace mobility remained below the levels of Q4 2020, despite some improvement this month. Finally, the services PMI for February remained at contractionary levels (43.1 points), while the manufacturing PMI returned to expansionary territory (52.9 points in February and 49.3 points in January) with the highest figure since July 2020. Taken together, these data indicate that the Spanish economy remains on hold in Q1.

Setbacks in the labour market in February. After several months of higher-than-expected resilience in the labour market, the weakness of the services sector took its toll in February: in seasonally adjusted terms, social security affiliation declined (–30,000 people in the economy as a whole and –49,000 in the services sector) and registered unemployment

Spain: daily new confirmed cases and deaths

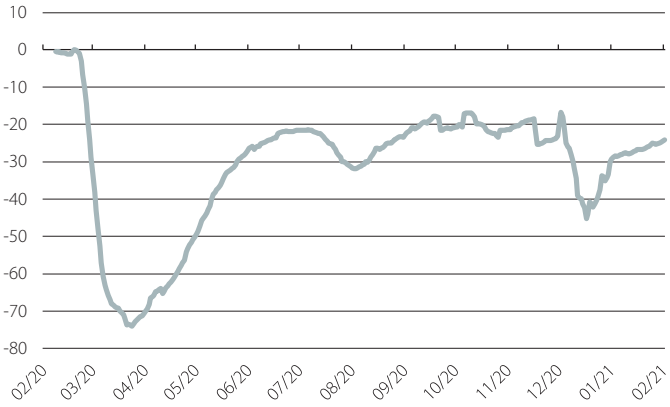
*(Daily confirmed cases) * (Daily deaths) ***



Notes: *7-day averages for infections and deaths.*
** Positive PCR and antigen tests by notification date. ** Deaths by notification date.*
Source: *BPI Research, based on data from the Ministry of Health.*

Spain: mobility of the population in centres of work

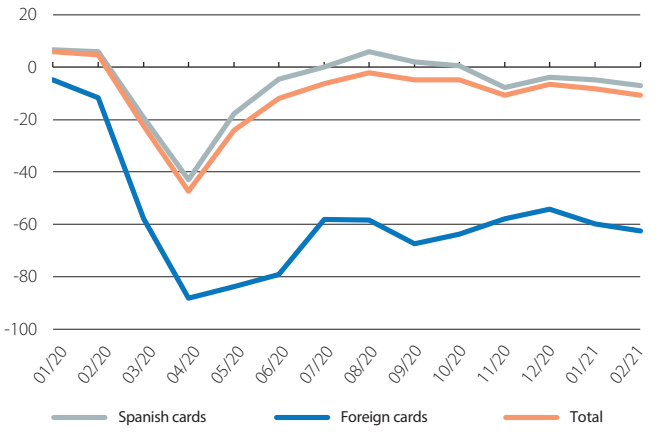
*Change relative to the baseline level * (%)*



Note: *14-day average data. * The baseline level corresponds to the average mobility recorded on the same day of the week between 3 January and 6 February 2020.*
Source: *BPI Research, based on data from Google Mobility Report.*

Spain: CaixaBank consumption indicator *

Year-on-year change (%)



Note: ** This indicator includes spending on cards issued by CaixaBank, non-client spending on CaixaBank POS terminals and withdrawals from CaixaBank ATMs.*
Source: *BPI Research, based on internal data.*

increased (+20,000), bringing it to over 4 million people. In addition, the number of employees on furlough was revised upward to 928,000 at the end of January (a revision of +189,000) and stood at around 900,000 at the end of February, while the number of social security affiliates not on furlough declined by 6.8% year-on-year in February (worse than the –6.0% decline in January). Looking ahead to the next few months, we expect the labour market to remain highly affected by the pandemic and to show uneven performance between sectors, with gradual improvements in those sectors less affected by the restrictions on activity (such as industry and construction) and more modest performance in the case of those most affected (such as hospitality and retail).

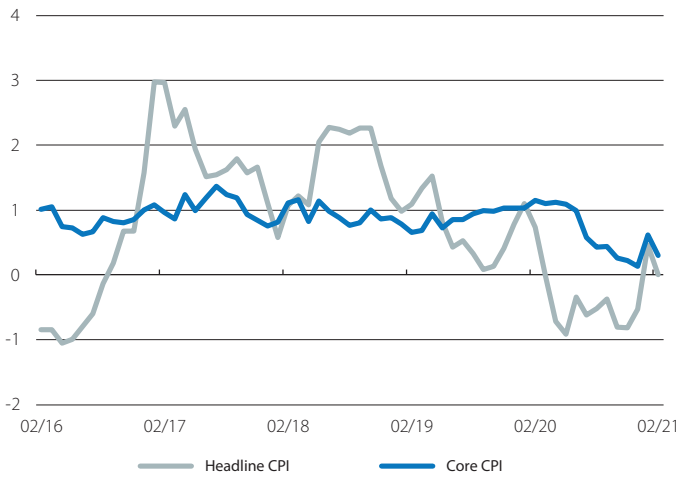
Inflation applies the brakes following the surge in January. In January, there was a significant rebound in inflation, which climbed from –0.5% in December last year to 0.5%, driven by the surge in electricity prices. This surge was undone in February and inflation fell to 0%, although the decline went beyond the energy components, as the core indicator (which excludes energy and unprocessed foods) fell by 3 decimal points to 0.3%. For the rest of the year, inflation is likely to be volatile as various pandemic-related base effects are undone. One of the most significant of these will be the low oil prices, which have returned to pre-pandemic levels in early 2021, having fallen below 30 dollars in the spring of 2020.

The current account balance fell in 2020, despite maintaining the foreign surplus. Specifically, the current account balance stood at +0.7% of GDP (8 billion euros), compared to +2.1% in 2019 (26.6 billion euros). Indeed, the trade deficit in goods improved during the year, although this was largely due to the collapse of imports in the face of the pandemic. In contrast, the surplus in the balance of service deteriorated considerably in the face of the massive decline in the tourism sector, the external balance of which fell by slightly more than 80% last year. For further details, see the Focus «COVID-19 and international trade: an asymmetric impact» in this same *Monthly Report*.

Public debt ended 2020 at 117% of GDP, while in 2021 the deficit will be reduced but will remain high. Debt stood at 1.3 trillion euros, an increase of just over 122 billion. In GDP terms, debt reached 117.1%, +21.6 pps compared to the 2019 year end. This is a very significant increase, albeit a logical one in the context of the pandemic. This final figure was slightly lower than the government's forecast (118.8% of GDP), owing to higher than expected economic growth in the second half of last year. We expect the public deficit, meanwhile, to have stood at around 11% of GDP last year (we will find out the final figure at the end of March). Although very high, this is somewhat better than expected thanks to a stronger recovery in tax revenues in the second half of 2020. For this year, the economic recovery will help to bolster the public accounts, although total public spending is expected to remain at levels similar to 2020, so the deficit will remain significant.

Spain: CPI growth

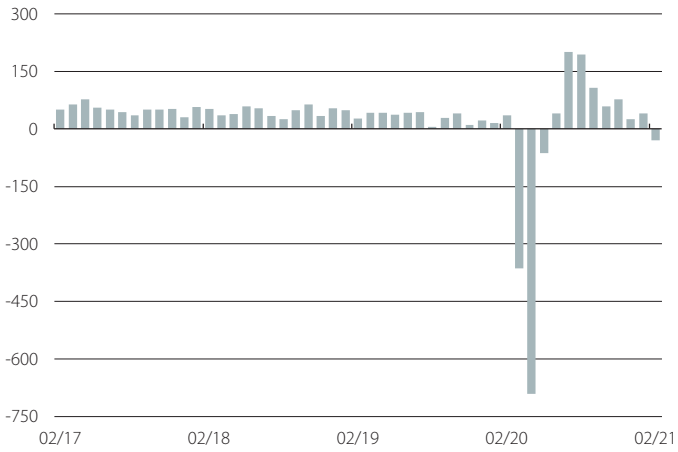
Year-on-year change (%)



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

*Spain: registered workers affiliated to Social Security **

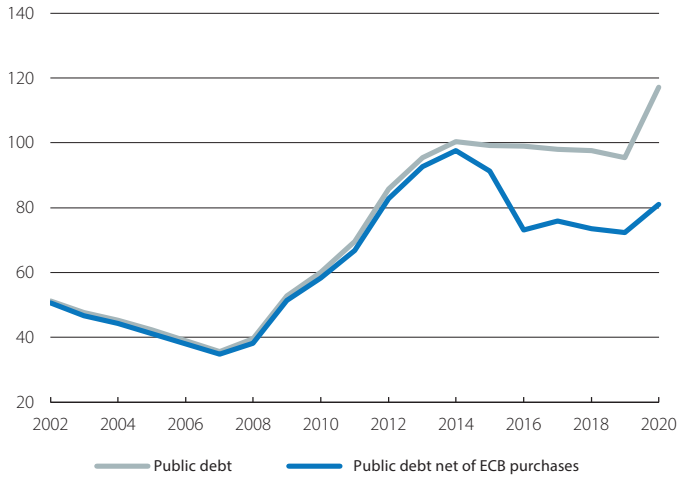
Month-on-month change (thousands of people)



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

Spain: public debt

(% of GDP)



Source: *BPI Research, based on data from the Bank of Spain and the ECB.*

COVID-19 and international trade: an asymmetric impact

The pandemic caused a sharp drop in international trade and tourism in 2020, leading to a significant contraction in exports of goods and services. Nevertheless, the Spanish current account balance remained positive and ended the year with a surplus of 0.7% of GDP.

The multi-gear response of international trade to the COVID-19 crisis

In 2020, both exports of goods and services as well as imports fell sharply, by 20.9% and 17.8% respectively, but there were disparate underlying trends.

On the one hand, the services sector ended the year with an erosion of its external balance of around 38 billion euros (around 3 pps of GDP). This fall almost entirely reflects the *annus horribilis* endured by tourism, the external surplus of which fell by some 37 billion euros (from 46 billion in 2019 to 9 billion in 2020). Nevertheless, not all was bad news: non-tourism services managed to maintain a positive (albeit somewhat lower) balance, also reflecting the growing consolidation of their international competitiveness over the past few years.[1]

On the other hand, the balance of goods behaved quite differently and offset part of the collapse in tourism services, while the energy balance managed to reduce its deficit by some 11 billion euros bringing it to levels not seen since 2004, mostly due to the fall in the price of oil. The balance of non-energy goods also made a significant contribution and improved its balance by 7.5 billion euros to end the year in surplus, reflecting a smaller contraction in exports than in the case of imports (–8.3%, or 22.7 billion euros, versus –10.9%, or 30.2 billion euros, respectively).

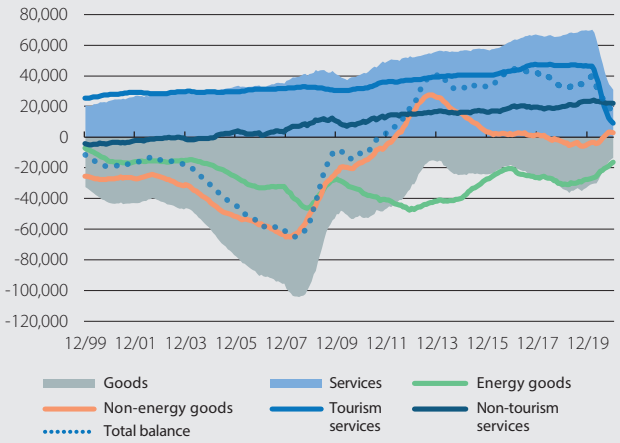
A tale of two sectors affected by the COVID-19 crisis

Within the balance of non-energy goods, the food and automotive sectors made an especially notable improvement. The former increased its trade surplus by some 4 billion euros and surpassed the 20-billion-euro threshold for the first time. This improvement has not only been the result of the fall in imports (–7.9%) – exports increased by 5.3% too, driven by factors in the wider economic environment and the sector's improved competitiveness at the international level.[2] On the other hand, although automotive sector exports fell by 10.2% in 2020 as a whole, this figure is highly driven by the collapse that occurred during the spring as a result of the strict lockdown imposed during the first wave (a contraction of almost 90% was registered in April).

1. See the Focus «The rise in exports of non-tourism services» in the MR04/2016.
2. These other factors include the export boom caused by swine flu in China, an effect that should vanish during the course of 2021. In addition, in the context of the pandemic there was a sharp rise in citrus fruit exports. Both effects should dissipate in 2021. See the Sectoral Article «The resilience of Spanish agrifood exports», published in October 2020.

Historical evolution of the cumulative balances of goods and services

(EUR millions)



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

In contrast, the sector experienced a strong recovery in exports beginning in June (in the second half as a whole, the sector's exports managed to register a year-on-year growth of 7.2%). Meanwhile, weak domestic demand led to a sharp fall in the sector's imports in 2020 as a whole (of 35.2% compared to 2019). The sector thus ended the year with a balance of over 15 billion euros (a figure not reached since 2016), representing an improvement of some 4 billion euros compared to 2019.

Overall, the loss of 37 billion euros in the tourism surplus was thus partially offset by the improvement in the energy balance, a certain degree of resistance in the exports of goods (especially in the case of food and cars), and a contraction in domestic demand and imports. For 2021, with a recovery in domestic demand and in the price of oil, our forecasts point to a deterioration in the energy balance of some 5 billion euros. In addition to maintaining the positive signals in the export sector, the capacity to revive tourism will be key. If our projections of an incomplete but notable revival are met, then the surplus in the balance of services would rebound by around 16 billion euros and the total current account balance could stand at around +1.5% of GDP, still some 10 billion euros below the pre-pandemic surpluses.

In physics, kinetic energy – that which a body of mass possesses because of its relative movement – is defined as the work required to accelerate that body up to a certain speed. In 2021, the recovery of the current account balance will follow a similar equation: the speed of its recovery will be determined by the rate of vaccine production and the success of the vaccination programmes in Spain and the EU.

Luís Pinheiro de Matos

(See an extended version of this article at http://www.bancobpi.pt/)

Big fish and not so big fish in the e-commerce retail sector

- The pandemic has accelerated the growth of e-commerce in the retail sector. Even with the reopening of the face-to-face channel in the second half of 2020, this growth remained well above pre-pandemic levels.
- Although the contribution from new entrants had its ups and downs throughout the year, on the whole it was quite significant.

The COVID-19 outbreak has led to a paradigm shift in many aspects of the economy, such as consumption habits and e-commerce in the retail sector in particular.[1] As shown in the first chart, which is built using internal data on card payments registered on CaixaBank POS terminals, e-commerce in the retail sector experienced strong growth between the end of March and April, reaching unprecedented levels of growth. After moderating as the mobility restrictions were eased and businesses reopened, this growth continued during the second half of 2020 and remained well above pre-pandemic levels.

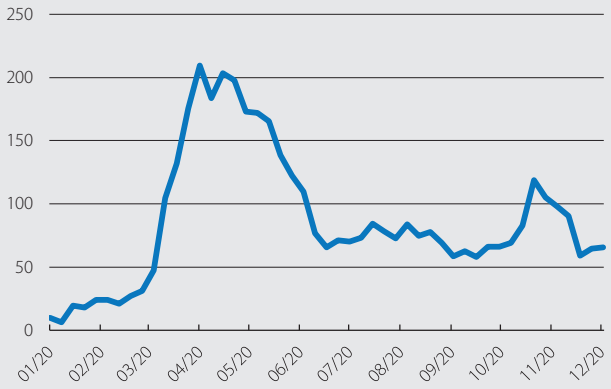
With this knowledge, it is worth asking to what extent this growth in e-commerce can be attributed to businesses that were already selling online prior to the pandemic compared to new entrants.

As the second chart shows, during the first part of the year (from January to mid-March) the contribution from new entrants steadily increased. However, this upward trend was truncated when the state of emergency was declared.

In our view, there are two non-exclusive hypotheses that could explain this shift. On the one hand, the residential lockdown and the resulting restrictions on mobility prevented many businesses that may have wanted to open the online channel from doing so for operational reasons.[2] On the other hand, we cannot rule out the possibility that some of the new consumers who joined the world of e-commerce during the residential lockdown, and who were unaccustomed to using this sales channel, may have opted to buy from better-known businesses whom they considered more trustworthy.[3] Indeed, part of this effect can be seen in the third chart, which shows how the market share of the top 10

Spain: e-commerce spending in the retail sector

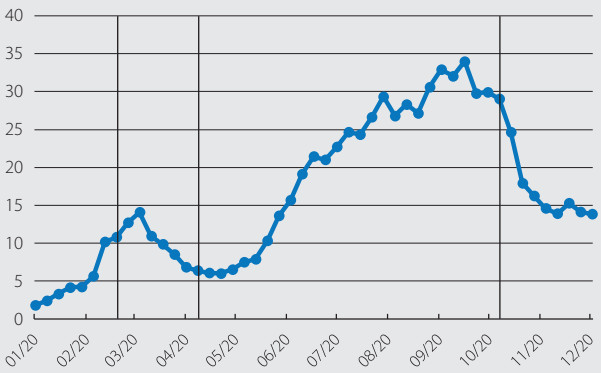
Year-on-year change (%)



Note: *A simple four-week moving average has been applied to the series.*
Source: *BPI Research, based on internal data.*

Spain: contribution from new entrants to the growth of e-commerce in the retail sector

(%)



Note: *To calculate the series, first we select businesses which had no online sales in 2019 but did in 2020. Then, for each week of 2020, we divide the turnover of those businesses by the increase in total turnover between 2019 and 2020 in that same week. The complementary series would be the contribution from businesses that were already present in 2019. A simple four-week moving average has been applied to the series.*
Source: *BPI Research, based on internal data.*

e-commerce businesses (measured by turnover in this segment during 2019) increased considerably with the start of the residential lockdown in March.[4]

In a third phase of the year, marked by the gradual lifting of restrictions and the «new normal» (starting from May), there was a further change. As the restrictions were

1. Retail is defined as encompassing all textile, footwear, jewellery, furniture, book and stationery, domestic appliance, sport and department store shops. Food shops are not included, as the consumption of essential goods has followed a very different pattern from the rest since the outbreak of the pandemic (see the Focus «Analysing private consumption during the COVID-19 crisis» in the MR07/2020).
2. In addition to acquiring the necessary knowledge, operational aspects such as developing an efficient logistics system and building a team to handle administrative and digital marketing tasks (social media, SEO, SEM, etc.) are also very important in the world of e-commerce.
3. Another possible explanation could be the difference in web positioning between businesses with a long history in online sales and new entrants. In this regard, consumers who are less accustomed to buying online are more likely to choose businesses that appear higher up in the list of results of the major search engines.
4. Unlike the first two charts, which use card payments registered on CaixaBank POS terminals, the third chart has been built with payments made using cards issued by CaixaBank. In this way, we can capture retail businesses that have a POS terminal registered outside Spain.

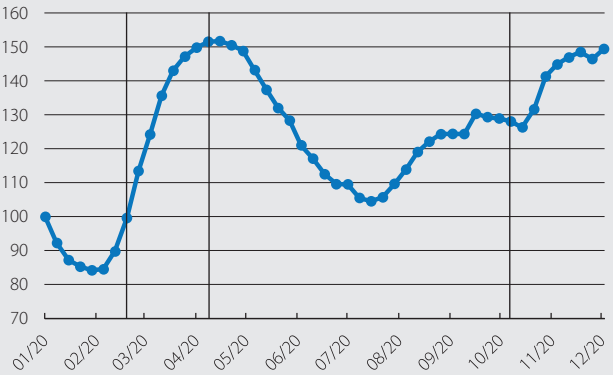
lifted, those businesses which had been unable to start selling online during the residential lockdown were finally able to do so.[5] This intuition is clearly reflected in the second chart, where the contribution from new entrants recovered the upward trend which it had shown in the pre-pandemic period. At the same time, the other side of the coin can also be seen in the third chart, which shows how during this period the market share of the top 10 remained above pre-pandemic levels but below the high point reached during the residential lockdown.

The story of e-commerce in the retail sector during 2020 does not end here: we still have a final phase of the year to analyse, marked by the November sales which culminate in the last week of the month with Black Friday and the beginning of the Christmas campaign. In the second chart we can see how, in this period, new entrants once again lost steam. This change could be explained by the greater capacity which large e-commerce businesses have to carry out more aggressive promotional campaigns compared to new entrants, many of which had been hit hard by the fall in sales in the face-to-face channel. Again, this intuition is confirmed in the third chart, where we can see how from November the share of the top 10 rebounded and converged with the peak registered during the residential lockdown.

In short, the pandemic triggered many changes in 2020 that are likely to persist over time. One of them affects e-commerce in the retail sector, which has experienced vastly accelerated growth. Although the contribution from new entrants had its ups and downs throughout the year, on the whole it was quite significant. In fact, this sales channel has been the main mechanism for offsetting the decline in turnover in the face-to-face channel experienced by new entrants into the online sales channel. For this reason, we can expect to see more and more retail businesses jumping on the e-commerce bandwagon in the short and medium term.

Spain: market share of the top 10 in total retail e-commerce turnover

Index (100 = January 2020)



Note: *To calculate the series, we first select the 10 businesses with the highest turnover in 2019. Then, for each week of 2020, we divide the turnover of those businesses by the total turnover in that same week. A simple four-week moving average has been applied to the series.*
Source: *BPI Research, based on internal data.*

5. This desire to start selling online should not come as a surprise, since the outbreak of the pandemic highlighted how the online channel could serve as a buffer for the sharp drop in sales registered in the face-to-face channel.

Activity and employment indicators

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Industry									
Industrial production index	0.7	–9.4	–6.4	–24.3	–4.9	–1.9	–3.7	–0.6	...
Indicator of confidence in industry *(value)*	–3.9	–14.0	–5.4	–27.8	–11.9	–11.0	–11.7	–10.6	–6.6
Manufacturing PMI *(value)*	49.1	47.5	48.2	39.4	51.4	51.1	49.8	51.0	49.3
Construction									
Building permits *(cumulative over 12 months)*	17.2	–12.8	0.1	–12.5	–19.1	–19.9	–18.2	–19.5	...
House sales *(cumulative over 12 months)*	3.6	–13.1	–3.7	–12.3	–18.2	–18.1	–17.9	–17.7	...
House prices	5.1	2.3	3.2	2.1	1.7	...	–	–	–
Services									
Foreign tourists *(cumulative over 12 months)*	1.4	–36.8	–1.0	–22.8	–50.7	–72.5	–72.8	–77.1	...
Services PMI *(value)*	53.9	40.3	42.5	28.4	47.3	43.0	39.5	48.0	41.7
Consumption									
Retail sales	2.3	–7.1	–3.9	–18.4	–3.4	–2.7	–3.9	–1.5	...
Car registrations	–3.6	–29.2	–27.6	–68.6	–7.5	–13.2	–18.7	0.0	–51.5
Consumer confidence index *(value)*	–6.3	–22.8	–10.3	–27.9	–26.9	–26.3	–29.0	–23.1	–23.7
Labour market									
Employment [1]	2.3	–2.9	1.1	–6.0	–3.5	–3.1	–	–	–
Unemployment rate (% labour force)	14.1	15.5	14.4	15.3	16.3	16.1	–	–	–
Registered as employed with Social Security [2]	2.6	–2.0	1.2	–4.4	–3.0	–2.0	–1.8	–1.9	–1.7
GDP	**2.0**	**–11.0**	**–4.2**	**–21.6**	**–9.0**	**–9.1**	**–**	**–**	**–**

Prices

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
General	0.7	–0.3	0.6	–0.7	–0.5	–0.7	–0.8	–0.5	0.5
Core	0.9	0.7	1.1	1.1	0.5	0.2	0.2	0.1	0.6

Foreign sector

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Trade of goods									
Exports *(year-on-year change, cumulative over 12 months)*	1.8	–10.0	1.0	–7.2	–8.9	–10.0	–9.6	–10.0	...
Imports *(year-on-year change, cumulative over 12 months)*	1.0	–14.7	–1.0	–9.3	–13.3	–14.7	–14.4	–14.7	...
Current balance	**26.6**	**8.0**	**27.1**	**17.7**	**11.0**	**8.0**	**9.5**	**8.0**	**...**
Goods and services	37.5	17.5	38.0	27.8	20.5	17.5	18.4	17.5	...
Primary and secondary income	–10.9	–9.5	–10.9	–10.2	–9.5	–9.5	–8.9	–9.5	...
Net lending (+) / borrowing (–) capacity	**30.8**	**12.8**	**31.3**	**21.6**	**15.1**	**12.8**	**14.1**	**12.8**	**...**

Credit and deposits in non-financial sectors [3]

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

	2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	11/20	12/20	01/21
Deposits									
Household and company deposits	5.4	7.5	4.4	8.0	9.0	8.7	7.9	9.0	...
Sight and savings	10.7	12.3	8.9	13.0	13.8	13.7	12.8	13.9	...
Term and notice	–13.4	–16.5	–16.4	–16.1	–16.5	–17.1	–16.8	–18.1	...
General government deposits	8.8	1.0	–6.2	–6.6	5.2	11.8	14.6	16.3	...
TOTAL	**5.6**	**7.1**	**3.8**	**7.1**	**8.7**	**8.9**	**8.4**	**9.4**	**...**
Outstanding balance of credit									
Private sector	–1.5	1.2	–1.0	1.5	2.0	2.4	2.2	2.5	2.3
Non-financial firms	–3.4	4.9	–1.7	6.1	7.1	7.9	7.6	8.2	8.1
Households - housing	–1.3	–1.8	–1.7	–2.1	–1.8	–1.5	–1.6	–1.3	–1.1
Households - other purposes	3.2	0.8	2.5	0.7	0.3	–0.1	–0.3	–0.8	–1.8
General government	–6.0	3.0	1.7	0.1	1.1	8.8	8.3	15.5	5.5
TOTAL	**–1.7**	**1.3**	**–0.9**	**1.5**	**1.9**	**2.7**	**2.5**	**3.2**	**2.5**
NPL ratio (%) [4]	**4.8**	**4.5**	**4.8**	**4.7**	**4.6**	**4.5**	**4.6**	**4.5**	**...**

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: *BPI 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.*

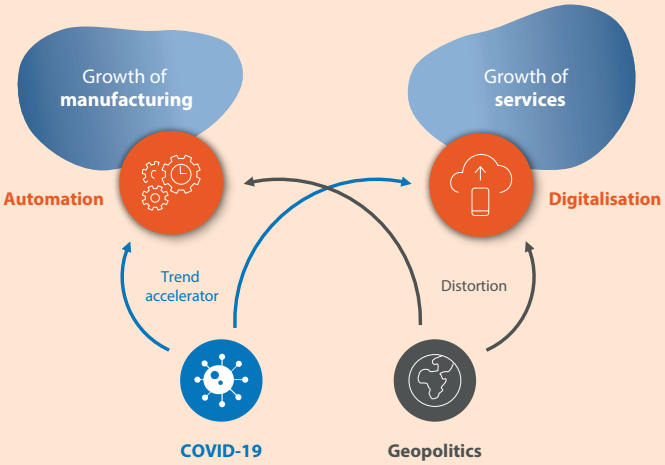
Digitalisation and automation: what will we produce tomorrow?

Digitalisation and advances in automation have the potential to change countries' productive specialisation: what and how we produce. As an example, the huge leap in information and communication technologies (ICTs) since the 1990s paved the way for the fragmentation of production processes, allowing companies to carry them out in multiple countries – taking advantage of their various expertise. This process led to the well-known phenomenon of global value chains (GVCs), linked to the offshoring of numerous manufacturing processes from advanced economies to emerging ones.

Some of the latest technological advances have the ability to reverse this trend. For instance, in this article we will see that new forms of automation (such as robots) could favour the return of some manufacturing to advanced countries. On the other hand, it seems that the continuing evolution of ICTs and the growing importance of digitalisation will continue to favour the «servitisation» of developed countries, a point which we will also address in detail in this article. In addition to new technologies, other factors such as the pandemic or the technology and trade conflict between the US and China have the potential to impact production specialisation.

Given such a multiplicity of forces, it is difficult to forecast changes in what and how economies (advanced ones in particular) will produce in years to come, but this is what we will endeavour to do in this article.

Trends and their impact on the productive specialisation of advanced countries



Source: *BPI Research.*

New automation and new consumers: the return of factories to advanced economies?

Today's robots – which are equipped with artificial intelligence, are more digitally connected, and are available at prices that have declined substantially over the last few decades – represent a veritable revolution.[1] The improved productivity of these new robots could lead to some manufacturing processes, which had previously been relocated to emerging countries in the last three decades to take advantage of low labour costs, returning to advanced countries. In other words, we would shift from a trend dominated by offshoring to one of reshoring.

But just how much manufacturing activity could we be talking about? Recent analyses suggest that manufacturing could increase by around 10% in advanced countries thanks to new forms of automation over the next decade.[2]

One factor that boosts this trend of the reshoring of manufacturing to advanced countries is the change that has occurred among consumers in these countries, having developed more varied tastes as a result of greater global connectivity. Consumers are also more aware of their impact on the environment. Both characteristics favour GVCs that are shorter and closer to the end consumer, since such production chains facilitate a quicker response to changing tastes and are more environmentally friendly given their proximity.[3]

ICTs and digitalisation: advanced countries' advantage in services

The continued evolution of ICTs (through 5G, to name an example) will favour the international trade of a greater number of services: while in essence most services are non-tradable digital technologies are making it possible for some of them to become tradable. At the end of the 1980s, services (excluding tourism) accounted for just under 6% of total international trade, whereas today this percentage exceeds 13%. Indeed, engineering projects, consultancy services or even clinical diagnostics through

1. The price of robots in real terms has halved in the last 30 years (McKinsey, 2017).
2. Figure based on Krenz *et al.* (2020), who estimate that an increase of 1 robot per 1,000 workers results in a 3.5% reshoring of manufacturing activity that had previously been offshored, and also based on estimates by Boston Consulting Group of the increase in automation in the manufacturing sector: amounting to 50% over the next decade.
3. Prudence is essential when estimating changes driven by reshoring. One of the main reasons for this is that offshoring is relatively stable over time, since establishing global outsourcing strategies involves the company incurring significant sunk costs. See P. Antràs (2020). «De-Globalisation? Global Value Chains in the Post-COVID-19 Age». NBER Working Paper (w28115).

imaging have become increasingly prevalent services within international trade, and this trend will only continue with better global connections. An example would be the possibility to perform remote surgery thanks to the speed, immediacy and security of 5G connections. In this regard, advanced countries, with a more qualified workforce and more experience in the production of many services, have a clear advantage over emerging ones.

On the other hand, huge digital advances have opened the door to a world in which data and their use have become a product and/or service in themselves, with the potential to substantially improve many companies' and industries' competitiveness. Once again, as in the case of more classic services, advanced countries, with their better-trained and more experienced workforce, have the upper hand when it comes to exploiting these data flows.

At this point, however, we must not forget that countries such as India and especially China are emerging as clear competitors in this novel business of data flows and their utilisation. As an example, in China, enrolment in higher education stood at around 3% in the early 1990s, compared to 25% in 2010 and more than 50% today.[4] Moreover, some 45 million university students graduate in the country every year, and in 2018 the number of scientific, technical, and medical articles published by Chinese researchers exceeded those published by Americans for the first time.[5]

COVID-19 and geopolitics: disruptive elements

Beyond the automation and digitalisation of economies themselves, elements such as the current coronavirus crisis or geopolitics play an important role in production specialisation worldwide.

Specifically, the COVID-19 pandemic has the potential to accelerate some technological trends. The health crisis has highlighted the greater resilience of the most digitalised and automated companies in disruptive contexts such as the present. We can therefore expect companies to increase their investment in automation and digitalisation in the medium term. As we have already said, this will favour the reshoring of manufacturing towards advanced countries,[6] although it also has the potential to increase the amount and range of services offered by advanced countries worldwide.[7]

On the other hand, besides the other factors already mentioned, the current trade and technology conflict between the US and China represents a geopolitical factor that also has the potential to alter advanced countries' production specialisation. The process of the US' decoupling from China, with a broad bipartisan consensus in the country, could have an impact not only on the US economy but also on the various European economies. If Europe sides with the US in the fight against China's technological rise, it is at risk of suffering a delay in its transition towards greater digitalisation and automation, since the so-called old continent is highly dependent on Chinese equipment for deploying its 5G network, which is key to the new Industry 4.0.

In short, after decades in which the hyper-globalisation of production chains has led to a significant disparity in production specialisation between advanced and emerging countries, these specialisations will change with the rise of new technologies. While we do not anticipate a radical and sudden transformation, we could see a shift in the trend at the global level over the coming years.

4. According to data from the World Bank.
5. World Education News and Reviews.
6. See Chernoff, W. Alex and C. Warman (2020). «COVID-19 and Implications for Automation». National Bureau of Economic Research (w27249).
7. Furthermore, the COVID-19 crisis could also encourage a strategic shift towards more robust GVCs (see the article «How COVID-19 will change the way we produce» in the Dossier of the MR05/2020).

Spain in the digital race

The coronavirus crisis has highlighted the importance of digitalisation in disruptive contexts such as the present. Economic activity has held up better in more digitalised countries: a greater number of companies have continued to operate at the height of the pandemic, the public sector has been more effective and quicker in helping households and firms most in need, and in people's homes digitalisation has enabled teleworking and has allowed the younger generations to continue to study remotely.

Not only are these important technologies for cushioning global shocks like the pandemic; digitalisation is also a key transformation in the current industrial revolution (which will bring us Industry 4.0). Where does Spain stand in this field? A good diagnosis can help us to allocate the European recovery funds to areas whose digitalisation will bring greater economic returns in the short and medium term (topics covered in the next two articles of this same Dossier).[1]

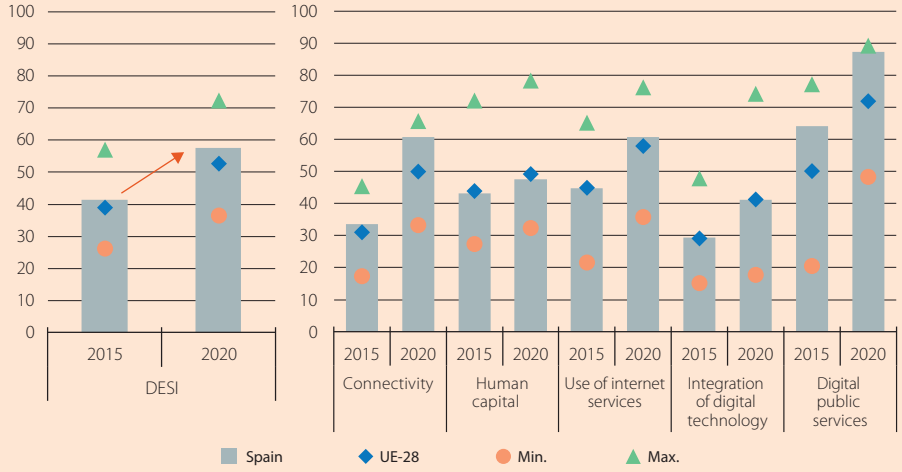
Digitalisation: significant level and pace of progress

In order to measure Spain's situation and progress in the field of digitalisation, we use the Digital Economy and Society Index (DESI), published by the European Commission,[2] which also allows us to compare with the main EU countries. This is a synthetic indicator which encompasses five dimensions: connectivity, human capital, the use of internet services, the integration of digital technology in enterprises, and digital public services.

Spain ranked 11th in the DESI of the EU-28 in 2020 and is making significant progress in its digital transition. While it is natural to see an upward trend as countries make progress in adopting new digital technologies, between 2015 and 2020 Spain has made relatively rapid progress compared to the EU average. In fact, Spain has experienced the fourth biggest increase (after Ireland, the Netherlands and Malta) in its DESI index in the last five years (see first chart, left-hand panel).[3] This is allowing the country to narrow the gap with Nordic countries, which are the leaders in digitalisation within the Union.

Digital Economy and Society Index (DESI) and its components

(Level)



Source: *BPI Research, based on data from the European Commission.*

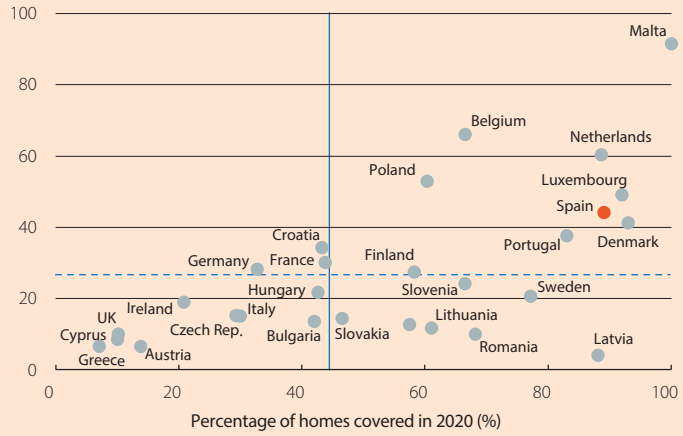
If we analyse the components of the DESI, we see that Spain stands out in two of the five dimensions: connectivity and, especially, digital public services, a component in which Spain ranks second in the 2020 DESI (see first chart, right-hand panel). In terms of connectivity, Spain is one of the countries with the largest deployment of very high capacity networks, covering 89% of households in 2019. This contrasts with the EU average of 44%, as well as with Spain's own 45% in 2015. In addition, the improvement in the coverage of high-capacity networks over the past five years has been clearly higher than the European average (see second chart). Looking ahead, the successful deployment of 5G technology will be crucial,[4] as this technology is paramount for the development of the new 4.0 industrial paradigm.

In contrast, Spain lies below the EU average for digital indicators relating to human capital. While an improvement can be seen in several aspects of this component, slightly over 40% of Spain's population still lacks basic digital skills and 8% have never used the Internet. Portugal is also lagging far behind in the sphere of digital human capital, slightly behind Spain, pushing it down to nineteenth position in the overall DESI, below the EU-28 average.

1. See the following articles «The digital policies of Next Generation EU» and «NGEU: a very timely boost for digitalisation» in this same Dossier.
2. See https://ec.europa.eu/digital-single-market/en/digital-economy-and-society-index-desi
3. Spain's DESI has increased by 16.2 points, compared to 13.7 points for the average of the EU-28.
4. In 2020, Spain made little progress in its preparation for 5G because it had to suspend the auctions of the radio frequency bands due to the COVID-19 pandemic. However, this tender process is being held in the first few months of 2021. On 22 February, 20 MHz were auctioned in the 3.5-GHz band, one of the priority bands for the deployment of 5G networks.

High-capacity network home coverage

2015-2020 growth rate (%)



Note: *The blue horizontal and vertical lines correspond to the average of the selection of countries.*
Source: *BPI Research, based on data from the 2015 and 2020 DESI.*

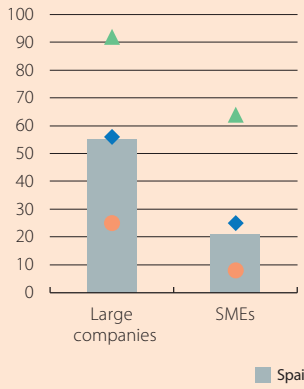
Still in the area of human capital, it is worth noting that one of the objectives of the Spain Digital Agenda 2025 is for 80% of people to have basic digital skills by 2025,[5] since having a workforce with these capabilities is essential in order to take advantage of the opportunities offered by new technologies. In addition, digital skills in the population are another element highlighted by the European Commission as being important for ensuring a strong and sustained economic recovery in the current context (like connectivity, mentioned above).

Finally, the integration of digital technologies by companies is another aspect that deserves special attention. While Spain's DESI score for this component matches the EU average, the gap with the leading countries has widened between 2015 and 2020. In this area, and given the important of SMEs in Spain's productive fabric (above the EU average), it is important to analyse the degree of digital adoption by business size. The third chart shows that the percentage of SMEs which use digital technologies (i.e. buying cloud computing services, conducting big data analysis, or selling through e-commerce) is much lower than it is for larger enterprises. Furthermore, the percentage of Spanish SMEs which use these technologies is slightly below the EU average, a gap that is not generally observed among large enterprises.[6]

The purchase of cloud computing services is an interesting measure, since the adoption of this technology is associated with a substantial increase in business productivity through several mechanisms which act at the same time (for example, more efficient collaborative work, lower maintenance costs, or easier use of other digital tools such as systems for customer relationship management, or CRM).[7] Despite its proven benefits for productivity and the flexibility it provides for SMEs, its use is still limited. Again, human capital is an area in which there is a need for improvement, as it is key for the deployment of digital technologies.

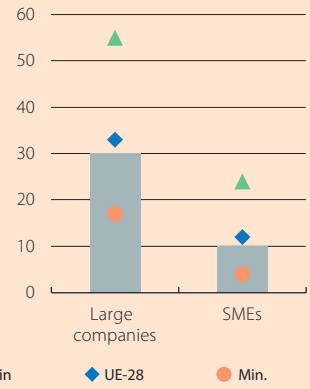
Cloud computing

(% of companies)



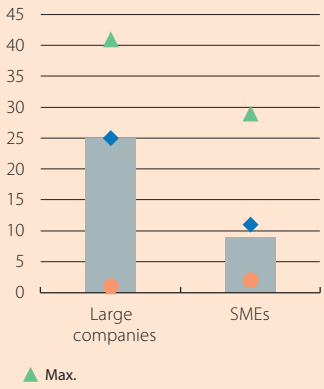
Big data analysis

(% of companies)



E-commerce turnover

(% of total turnover)



Notes: *Enterprises by number of workers: small (10-49), medium (50-249) and large (over 250 workers). Companies with fewer than 10 workers are not included. Data for the year 2018 (latest available).*
Source: *BPI Research, based on data from Eurostat.*

Digitalisation: a sectoral view

Having examined the digital situation of the Spanish economy on aggregate, it is interesting to take a more sectoral approach. Firstly, this is an interesting exercise because not all sectors are at the same stage in the adoption of new digital technologies. For instance, Spanish firms in the most technological sectors, such as information and communications, or professional, scientific and technical activities, have a high degree of digital technology penetration similar to that of their European counterparts. Indeed, 64% of Spanish companies in the information and communications sector buy cloud computing services, the same percentage as the EU average. The tourist accommodation sector is also in a good position: 31% of companies in the sector buy cloud computing services (compared to 25% for the EU as a whole) and 14% perform big data analysis (similar to the 13% for the EU overall).

5. See https://avancedigital.mineco.gob.es/programas-avance-digital/Paginas/espana-digital-2025.aspx
6. These data come from the Eurostat ICT survey.
7. See D. Andrews, G. Nicoletti and C. Timiliotis (2018, May). «Going digital: What determines technology diffusion among firms». The 3rd Annual Conference of the Global Forum on Productivity. Ottawa, Canada.

In contrast, Spanish firms in sectors that are typically less digitalised, such as the agri-food industry or construction, are somewhat lagging behind their European counterparts. In this regard, the Spanish government's Recovery, Transformation and Resilience Plan is intended to boost the digitalisation of sectors that are considered strategic: the health, automotive, tourism and retail sectors, as well as the agri-food sector, which is lagging behind in the digital race and is also very important for our economy.

Nevertheless, Spain's sectoral specialisation, with a high relative weight of sectors that have a low degree of digitalisation, such as the agri-food sector, is not responsible for the differences in digitalisation we observe with respect to the EU average. In fact, just 20% of the gaps in cloud computing services, for example, can be attributed to these differing specialisations.[8]

In short, Spain must do more in some areas of digitalisation if it wants to be at the forefront of the new industrial revolution. It is clear that we must improve the digital capabilities of workers, and of the population in general. It is also important to influence the digitalisation process of companies. In particular, there is a lot of room for SMEs to take advantage of the enormous potential offered by new digital technologies.

8. In this regard, the gap relative to the EU is explained by the lower degree of digitalisation of the various sectors of economic activity and not by the different sectoral composition (within variation, in economic jargon).

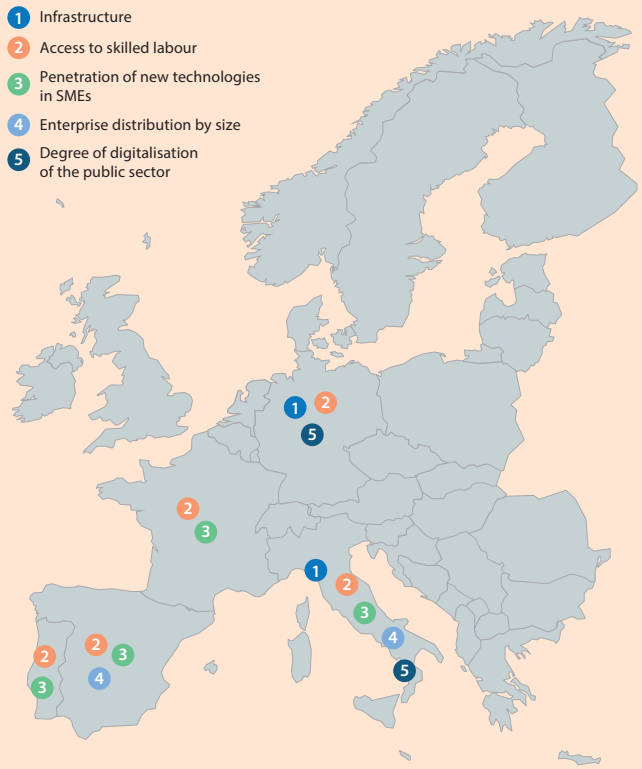
The digital policies of Next Generation EU

The Next Generation EU (NGEU) European Recovery Programme is centred around three pillars: the economic recovery and strengthening of the health system, the green transition and the digital transformation. Under NGEU, a total of 750 billion euros is due to be mobilised between 2021 and 2023, an unprecedented figure equivalent to 5.4% of EU GDP.[1,2] In this article, we will focus on the policies that must drive the digital transformation of EU Member States and, in particular, the Spanish economy.

Priority areas of action for digitalisation: a European perspective

The European Commission (EC) has identified a set of key areas for digitalisation: the quality of digital infrastructure (broadband internet access, the deployment of 5G, etc.), access to skilled labour in the digital sphere, the penetration of new technologies (artificial intelligence or IA, big data, cloud computing, etc.) in small and medium-sized enterprises, the distribution of enterprises by size (the relative weight of SMEs in the productive fabric of the economy) and the degree of digitalisation of the public sector. In the attached map we summarise the main weaknesses in the sphere of digitalisation of the largest EU countries, according to the EC, and therefore the areas in which each of these countries should direct their efforts. As can be seen, the weaknesses that the EC identifies for the case of Spain correspond to those discussed in the previous article of this same Dossier.[3,4]

Areas for improvement in digitalisation identified by the European Commission



Source: *BPI Research, based on data from the European Commission (Assessment of Country Specific Recommendations 2020).*

A weakness that is common to all the countries is the difficulty in finding skilled labour, and the EC therefore places a great deal of emphasis on policies that boost the training of citizens in new digital technologies. This is a particularly important area for improvement for Spain and Portugal, since both countries lie below the EU average in most digital indicators relating to human capital, as we discussed in the article referred to above.

Another area requiring fairly widespread improvement according to the EC is the use of new technologies by SMEs. The limited use of these technologies (such as cloud computing) is particularly concerning in economies such as Spain, where SMEs account for a large proportion of the productive fabric, as is clear in the analysis performed in the previous article of this same Dossier.

Finally, the case of Germany is worthy of mention. Despite having a notable innovative environment and a high penetration of new digital technologies in the productive fabric of its economy, it has room for improvement in terms of infrastructure, especially due to the low coverage rate of digital networks (broadband and 4G). Moreover, Germany is still below the European average in terms of digitalisation of the public sector, an aspect in which Spain leads the way, just behind Finland.

1. To be more precise, NGEU will finance payment obligations incurred between 2021 and 2023, but the funds will be distributed over a longer period of time (2021-2026).
2. Percentage relative to the GDP of the EU-27 (excluding the United Kingdom) in 2019.
3. See the article «Spain in the digital race» in this same Dossier.
4. This close connection is not surprising given that the EC's recommendations are based, among other elements, on the results of the DESI, which is published by the Commission itself and is the subject of the analysis of the above-mentioned article.

Spain's digital agenda

After learning the priority areas of action for boosting digitalisation in the major EU countries according to the EC, below we analyse the actions proposed in our economy in particular. More specifically, the Spanish government has presented six plans for promoting digitalisation in our country:[5]

- The SME Digitalisation Plan (which foresees a public investment of around 5 billion euros up until 2023 to accelerate the digitalisation of 1.5 million small and medium-sized enterprises) and the National Digital Skills Plan (3.75 billion euros in the period 2021-2023). Both plans propose actions to improve the Spanish economy's performance in two specific areas: improving human capital and integrating digital technologies into the productive fabric of the economy. In both cases, Spain lies below the European average, so they are key actions.
- The Connectivity Plan (with a public investment of more than 2.3 billion euros up until 2025), which proposes to extend high-speed broadband internet coverage throughout the country, and the 5G Stimulus Strategy (which will mobilise 2 billion in public funds up until 2025) for the deployment of the fifth generation of mobile technology. 5G will be fundamental for facilitating hyper-connectivity and will act as an enabler for other technologies (e.g. the development of Industry 4.0, consisting of interconnected and smart factories, or autonomous vehicles).
- The Digital Plan of the General Government, which foresees an investment of 2.6 billion euros over the next three years to improve the accessibility of public services and promote the digitalisation of areas such as health and justice. This area of action is important for maintaining our economy's leadership in this field and for improving the efficiency of the public sector.[6]
- The National Artificial Intelligence Strategy (with a public investment of 600 million euros in the period 2021-2023), which aims to promote the penetration of this technology in our economy and promote scientific research and innovation in AI. After all, AI is emerging as one of the most important technologies in this new digital age. In order to make the strategy's objective possible, it will first be necessary to develop infrastructure and to train the labour force, as proposed in the previous programmes.

Together, these initiatives entail a mobilisation of 16.25 billion in public investment, of which 15.4 billion will be financed by European funds from the NGEU's Recovery and Resilience Facility.[7,8] In all, adding other smaller programmes to this amount, the government will allocate 20 billion euros in non-repayable grants from the NGEU to digital capital between 2021 and 2023, as the Minister of Economy signalled in October. This represents around one-third of the total funds that Spain will receive from the Recovery and Resilience Facility (some 69.5 billion euros).

The investment programme is ambitious and aims to promote digitalisation in the main areas identified by the EC, namely, improving the technological skills of the public and promoting the use of new technologies in the business sphere. There will also be significant investment in improving digital infrastructure as a whole and in accelerating the digital transition of the general government. Of course, the success of these plans will largely depend on the effectiveness of the policies envisaged to achieve their objectives. The European scope of NGEU will facilitate the leap towards the digital economy. As explained in the article «NGEU: a very timely boost for digitalisation» in this same Dossier, new digital technologies (especially AI) have a high capacity to radically transform society and the economy and to boost productivity (these technologies are known as general purpose technologies, or GPTs).[9] In order for a GPT's potential impact on growth to be deployed, it needs to reach a critical mass. Thus, the fact that the transition to the digital economy is being addressed at the European rather than national level could be key for its success.

Finally, the success of digitalisation will also require further action besides an ambitious investment programme and a critical mass. In particular, it will be necessary to adjust the legislative framework in order to give economic players the flexibility to adapt their productive processes to the new digital environment. In the absence of these flexibility tools, it will be very difficult to harness the growth potential of new digital technologies.

5. These plans are part of the Digital Spain 2025 agenda, which sets out the main areas of action envisaged by the government in the field of digitalisation. View the full document here.
6. As mentioned earlier in this article, according to the 2020 DESI, Spain is leading the way in terms of digitalisation of the public sector, just behind Finland. It should be noted, however, that being at the top of the ranking does not mean that there is no room for improvement.
7. This facility is the main instrument of NGEU. Spain will also receive 12.4 billion in transfers from the REACT-EU fund (cohesion policies).
8. 15.4 billion represents 1.2% of GDP in 2019, a considerable figure bearing in mind that investment, excluding that for residential housing, amounted to 10.7% of GDP in 2019.
9. Examples of GPTs include the steam engine, the railway and electricity.

NGEU: a very timely boost for digitalisation

Having analysed in the previous articles the digital needs of our economy and the policies proposed in order to meet those needs, in this article we address the impact that NGEU will represent in quantitative terms for the digital transformation. Before embarking on the numerical exercise, however, it is essential to understand the importance of digital technologies as well as the characteristics that usually define them.

Digital technologies: the new «currents» of change, the new forms of «electricity»

Technologies with the capacity to dramatically change societies are known as General Purpose Technologies (GPTs). Electricity is a clear example of such revolutionary technologies. Digital technologies (especially AI) are destined to join the ranks too.

One characteristic that usually defines GPTs in their early stages is the delay in showing a real positive impact on productivity. The main reason for this delay is the high cost of implementation. For instance, although the first power plants in the US date back to 1881, in 1900 less than 5% of US factories had adapted to electricity. After all, for the first few years, the price of these technologies is often very high. The cost of adopting new technologies also tends to be very high: significant investments are needed to acquire new technology, as well as to adapt production processes to the new technology in order to make it fully efficient. In the digital age, beyond investing in hardware, software and R&D, investment in organisational capital is essential – particularly in human capital, productive processes, organisational practices and even the business model.

When this «implementation delay» is overcome is when the three characteristics which GPTs tend to have in common, and which give them their enormous capacity to foster change, are manifested: (i) omnipresence, (ii) the potential for constant technical improvements and (iii) complementarity with other innovations.[1] After all, omnipresence is usually achieved when the installation and adaptation costs are sufficiently low. On the other hand, complementarities tend to manifest themselves when there is sufficient critical mass.

It is precisely these characteristics which define GPTs and give them this potential for change that also make impact analyses difficult. In fact, the effects of AI on productivity is an issue that the economic literature has not yet clarified, although its potential is perceived to be very high. Looking back, consider the deployment of the use of electricity. In the US between 1890 and 1914, when electricity usage was still low (in 1913 it accounted for only 36% of the total energy used), average labour productivity growth was 1.4% per year. In contrast, between 1915 and 1953, when electricity usage expanded very rapidly (in 1953 electricity accounted for 85% of the total energy used), average growth more than doubled (up to 3.5%).[2,3]

The growing role of investment in intangible assets

The development and implementation of digital technologies, and of AI in particular, requires significant investment in intangible assets. Examples of such assets include software, databases, innovation (through R&D) and organisational capital. Unlike the more traditional form of capital (tangible assets), which largely consists of machines and buildings, intangibles lack a physical component.

In the case of digital investment, as Anderton and co-authors analyse,[4] between one-third and two-thirds tends to consist of investment in intangibles. Thus, beyond requiring good telecommunications infrastructure (physical, or tangible, capital), AI also requires many other intangible assets in order for its benefits to fully flourish. Software and the use of big data are a given, since they are the main inputs for their use, but it also requires changes in companies' organisational models and substantial investments in human capital.

Given the importance of intangibles in the digital age, where does investment in intangibles in Spain stand and how does it compare with other major advanced economies? In the chart we show the investment in intangible assets (as a percentage of GVA) of the major European countries and the US. We can see how the US leads the way in investment in intangibles, at just over

1. Characteristics first defined by T.F. Bresnahan and M. Trajtenberg (1995). «General purpose technologies 'Engines of growth'?» Journal of Econometrics, 65(1), 83-108.
2. See A. Bergeaud *et al.* (2016). «Long-Term Productivity Database». Bank of France.
3. If productivity in the US had continued to grow by 1.4% instead of 3.5%, in 1953 US GDP would have been around 60% below its actual level.
4. R. Anderton *et al.* (2020). «Virtually everywhere? Digitalisation and the euro area and EU economies». ECB Occasional Paper (2020244).

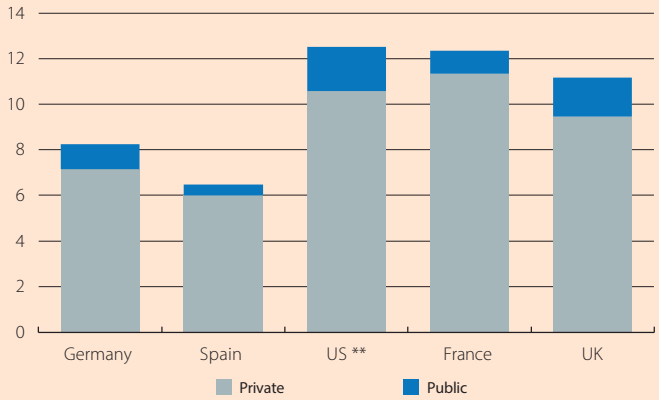
12% of GDP, although France and the UK are close behind. In contrast, Germany and Spain are lagging far behind, with investment of 8% and 6.5%, respectively. We can also see how much of the investment in intangibles is private, although here there are also differences from country to country: in the US, the UK and Germany, public investment in intangibles represents around 15% of the total, whilst in Spain and France it stands at around 8%.

Where will NGEU place us?

One of the cornerstones of the NGEU European economic package is the digital transformation. In this regard, and given the importance of investment in intangibles for boosting the digital transition, we wonder what impact NGEU will have on this type of investment. To answer this question, we proceed in two phases. First, we estimate the average increase in the relative weight of investment in intangibles as a proportion of GDP in Spain in recent years: between 1995 and 2017, the period for which we have data, the relative weight of investment in intangibles grew on average by 0.11 pps per year. This is a higher rate than that registered by the US over the same period, at 0.08 pps per year, probably due to the North American economy being at a more mature phase in terms of digitalisation. We then measure the impact that NGEU will have on investment in intangibles, considering in the calculation the carry-over effect that this programme could have on private investment.

Investment in intangibles: international comparison

*Percentage of GVA (average for 2013-2017 *)*



Notes: ** The figures for public investment in intangibles only reach up to 2015; for the period 2016-2017 the increase in public investment is projected based on the average annual growth between 1996 and 2015. ** The average for the US relates to the period between 2013 and 2016.*
Source: *BPI Research, based on data from Intan, Spintan, Eurostat and the World Bank.*

As set out in the previous article of this same Dossier, the investment in digitalisation envisaged in the six action plans announced by the government for the period 2021-2023 amounts to 16.25 billion euros, of which 15.4 billion will be financed by NGEU. Of this amount, we must exclude 4.7 billion destined for the Connectivity Plan, the 5G Plan and other investments in ICT equipment, since infrastructure investment, although crucial for the digitalisation of the economy, does not count as investment in intangibles. Thus, in annual terms, NGEU represents a direct investment in intangible assets of almost 3.6 billion annually over the next three years, equivalent to 0.29% of GDP per year.

This boost to public investment is also expected to attract private investment in intangibles. More specifically, the government expects that, during the three-year period in which these investments are made under NGEU, some 26 billion euros will be attracted in private investment in intangibles.[5] This knock-on effect would add between 0.2% and 0.7% of GDP in additional investment in intangibles to the impact mentioned above, depending on whether all of the private investment anticipated by the government is finally attracted or whether a more conservative estimate of one quarter of the anticipated amount is applied. Therefore, the sum of the direct impact plus the knock-on effect would increase the relative weight of investment in intangibles as a proportion of GDP by between 0.5 and 1.0 pp. This is a significant figure which, according to our estimates for the implementation of the budgeted funds, will enable us to achieve levels of investment in intangibles in 2022 which, in the absence of NGEU, would not have been achieved until at least 2026.

5. See the Digital Agenda 2025 publication here. The government expects to attract 50 billion euros in private investment, but estimates that 24 billion will be allocated to developing the Connectivity Plan and the 5G Plan. As these represent investment in tangible assets, we exclude this amount from the calculation.

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