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ECONOMIC RESEARCH

BNP PARIBAS

The bank for a changing world

CALL OPTIONS AS LOTTERY TICKETS: DOES IT MATTER?

Academic research shows that certain investors look at single stock call options as lottery tickets. They are aware they can lose money but nurture the hope of very big gains. To some extent, the share price behaviour in recent days of certain US small cap stocks illustrates this thinking. The combination of herd-type momentum buying and a short squeeze has caused huge share price swings. Should this become a recurrent phenomenon, it might reduce the informational efficiency of equity prices, increase the required equity risk premium and influence the cost of capital of companies.

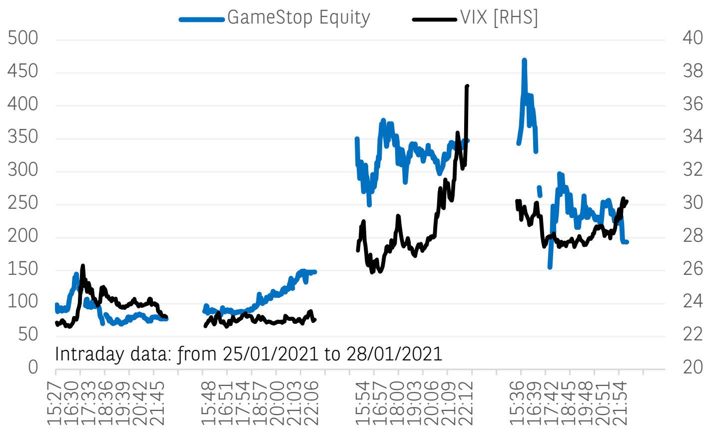
When buying lottery tickets, one should expect to lose money on average. Still, lotteries are popular because people are repeatedly willing to give up some money, hoping for a – very unlikely – outsized gain. In statistical terms, it means they expect a positive skewness in the distribution of possible outcomes. In Finance, similar behaviour has been noticed already many years ago giving rise to an abundant literature on 'stocks as lotteries' – in particular for stocks with a very low price, the so-called penny stocks – and 'single stock call options as lottery tickets'. Investors are very much aware they can lose some money – when a call option expires out-of-the-money – but they nurture the hope of a very big gain[1]. To some extent, the share price behaviour in recent days of companies like GameStop provides a concrete illustration of such thinking. It has given rise to extensive media coverage but has also had ripple effects on the rest of the market, witness the rise in the VIX index[2].

Can the recent events end up having broader repercussions? To a large degree, the answer depends on the breadth – how many stocks are concerned – and the intensity of the feedback loops. Consider a company with a small market capitalization and a low share price. Investors expecting the share price to go down have built considerable short positions. In addition, call options have been issued on the underlying stock. Suppose that some investors start to buy call options. This may trigger more purchases from others – herding behaviour – who have spotted the positive momentum or read about it on social media. The issuer of the call option needs to hedge his position and hence buys the underlying stock. If the share price increases enough, stop-losses may be triggered for those with short positions, further pushing up the price of the stock. If this happens simultaneously for several stocks, hedge funds that had shorted these stocks may decide to reduce their leverage[3], causing a share price decline of companies where they had long positions. In such a scenario, equity market volatility would increase, which in turn could influence other asset classes such as government bonds. The price of the latter typically rises when equity volatility spikes. It could also lead to a breakdown in the correlation between large cap equity indices and small cap indices.

If this is a one-off event, it should a priori not have any lasting consequences. If it becomes a recurrent phenomenon, certain effects could last. It might lead to a reluctance to short certain stocks, which would reduce the informational efficiency of equity prices[4]. Stock pickers would need to take it into account as well. It could influence the decision of asset allocators whether to invest in small or large companies, in equities versus bonds. It could increase the required risk premium and influence the cost of capital of companies.

William De Vijlder

GAMESTOP SHARE PRICE AND VIX



SOURCE: BLOOMBERG, BNP PARIBAS

1. Such investors consider the distribution of possible outcomes to be positively skewed: *"there is some probability to gain huge profits that can cover all the frequent small losses"* (Source: https://corporatefinanceinstitute.com).
2. The VIX index *"represents the market's expectation of 30-day forward looking volatility"*. It is derived from the prices of the S&P500 index options. Source: Investopedia.
3. On 28 January, Bloomberg TV reported hedge funds had been deleveraging at the fastest pace in 14 years.
4. According to Boehmer and Wu, *"stock prices are more accurate when short sellers are more active"*. Source: Ekkehart Boehmer and Juan Wu, Short selling and the price discovery process, The Review of Financial Studies, 2013.

In recent days, the combination of herd-type momentum buying and a short squeeze has caused huge price swings in certain US small cap stocks. Should this become a recurrent phenomenon, it might increase the required equity risk premium.

MARKETS OVERVIEW

OVERVIEW

Week 22-1 21 to 28-1-21

↘ CAC 40	5 560	▶	5 511	-0.9	%
↘ S&P 500	3 841	▶	3 787	-1.4	%
↗ Volatility (VIX)	21.9	▶	30.2	+8.3	pb
↘ Euribor 3M (%)	-0.54	▶	-0.54	-0.4	bp
↘ Libor $ 3M (%)	0.22	▶	0.21	-0.4	bp
↘ OAT 10y (%)	-0.33	▶	-0.37	-4.0	bp
↘ Bund 10y (%)	-0.54	▶	-0.57	-3.0	bp
↘ US Tr. 10y (%)	1.09	▶	1.06	-3.6	bp
↘ Euro vs dollar	1.22	▶	1.21	-0.4	%
↗ Gold (ounce, $)	1 854	▶	1 856	+0.1	%
↘ Oil (Brent, $)	55.6	▶	55.6	+0.0	%

MONEY & BOND MARKETS

Interest Rates		highest 21			lowest 21		
ECB	0.00	0.00	at	01/01	0.00	at	01/01
Eonia	-0.48	-0.47	at	26/01	-0.50	at	01/01
Euribor 3M	-0.54	-0.54	at	26/01	-0.56	at	06/01
Euribor 12M	-0.51	-0.49	at	25/01	-0.51	at	28/01
FED	0.25	0.25	at	01/01	0.25	at	01/01
Libor 3M	0.21	0.24	at	13/01	0.21	at	27/01
Libor 12M	0.31	0.34	at	01/01	0.31	at	26/01
BoE	0.10	0.10	at	01/01	0.10	at	01/01
Libor 3M	0.04	0.04	at	27/01	0.03	at	01/01
Libor 12M	0.09	0.09	at	13/01	0.07	at	11/01

At 28-1-21

Yield (%)			highest 21		lowest 21	
€	AVG 5-7y	-0.43	-0.38	at 22/01	-0.46	at 04/01
	Bund 2y	-0.73	-0.67	at 12/01	-0.75	at 01/01
	Bund 10y	-0.57	-0.50	at 12/01	-0.60	at 04/01
	OAT 10y	-0.37	-0.31	at 12/01	-0.41	at 04/01
	Corp. BBB	0.56	0.56	at 28/01	0.50	at 08/01
$	Treas. 2y	0.13	0.15	at 06/01	0.12	at 04/01
	Treas. 10y	1.06	1.14	at 12/01	0.91	at 01/01
	High Yield	4.75	4.86	at 12/01	4.71	at 21/01
£	gilt. 2y	-0.05	-0.01	at 12/01	-0.08	at 04/01
	gilt. 10y	0.31	0.38	at 12/01	0.21	at 04/01

At 28-1-21

EXCHANGE RATES

1€ =		highest 21			lowest 21			2021
USD	1.21	1.23	at	06/01	1.21	at	18/01	-0.9%
GBP	0.88	0.91	at	06/01	0.88	at	27/01	-1.3%
CHF	1.08	1.09	at	07/01	1.08	at	18/01	-0.4%
JPY	126.45	127.42	at	07/01	125.22	at	18/01	+0.1%
AUD	1.58	1.60	at	04/01	1.56	at	14/01	-0.3%
CNY	7.85	8.00	at	01/01	7.82	at	27/01	-1.9%
BRL	6.59	6.69	at	11/01	6.33	at	18/01	+3.7%
RUB	92.20	92.20	at	28/01	88.87	at	20/01	+1.9%
INR	88.55	89.88	at	07/01	88.17	at	27/01	-1.0%

At 28-1-21 *Change*

COMMODITIES

Spot price, $		highest 21			lowest 21			2021	2021(€)
Oil, Brent	55.6	56.7	at	12/01	51.2	at	04/01	+7.1%	+8.1%
Gold (ounce)	1 856	1 947	at	05/01	1 825	at	15/01	-2.2%	-1.3%
Metals, LMEX	3 468	3 580	at	07/01	3 415	at	01/01	+1.6%	+2.5%
Copper (ton)	7 880	8 167	at	07/01	7 749	at	01/01	+1.7%	+2.6%
wheat (ton)	251	2.6	at	15/01	247	at	22/01	+1.6%	+2.6%
Corn (ton)	206	2.1	at	14/01	188	at	04/01	+0.9%	+10.0%

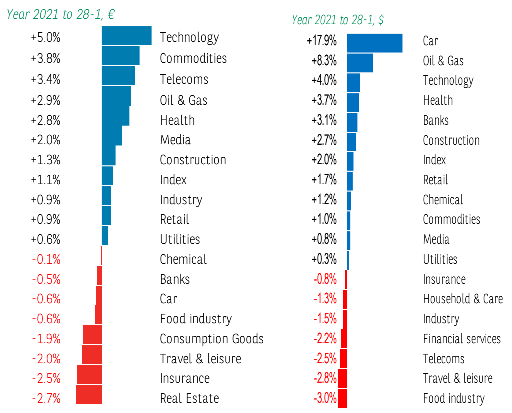
At 28-1-21 *Change*

EQUITY INDICES

	Index	highest 21			lowest 21			2021
World								
MSCI World	2 711	2 766	at	21/01	2 670	at	04/01	+0.8%
North America								
S&P500	3 787	3 855	at	25/01	3 701	at	04/01	+0.8%
Europe								
EuroStoxx50	3 557	3 645	at	08/01	3 536	at	27/01	+0.1%
CAC 40	5 511	5 707	at	08/01	5 460	at	27/01	-0.1%
DAX 30	13 666	14 050	at	08/01	13 620	at	27/01	-0.4%
IBEX 35	7 933	8 408	at	08/01	7 853	at	27/01	-0.2%
FTSE100	6 526	6 873	at	08/01	6 461	at	01/01	+0.1%
Asia								
MSCI, loc.	1 065	1 086	at	25/01	1 044	at	06/01	+0.2%
Nikkei	28 197	28 822	at	25/01	27 056	at	06/01	+2.7%
Emerging								
MSCI Emerging ($)	1 351	1 410	at	25/01	1 292	at	01/01	+0.5%
China	118	125	at	25/01	108	at	01/01	+8.4%
India	671	708	at	14/01	671	at	28/01	-0.6%
Brazil	1 794	1 941	at	14/01	1 760	at	27/01	+0.0%
Russia	660	722	at	14/01	660	at	28/01	+1.1%

At 28-1-21 *Change*

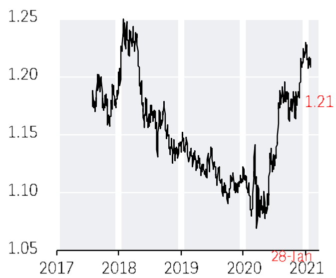
PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)



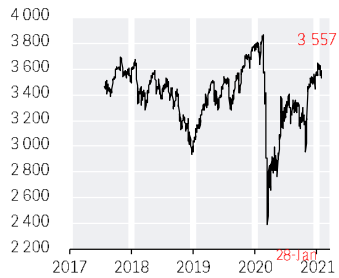
SOURCE: THOMSON REUTERS,

MARKETS OVERVIEW

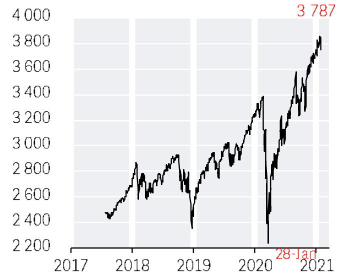
EURO-DOLLAR



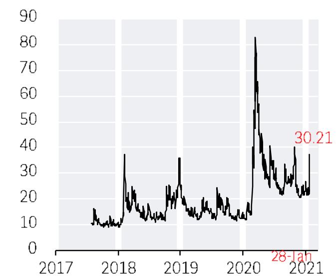
EUROSTOXX50



S&P500



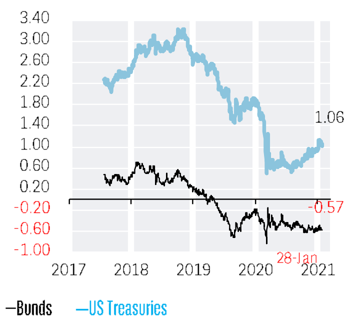
VOLATILITY (VIX, S&P500)



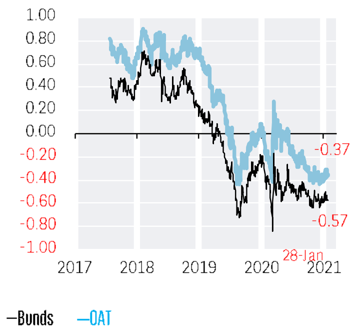
MSCI WORLD (USD)

MSCI EMERGING (USD)

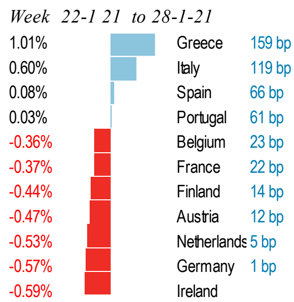
10Y BOND YIELD, TREASURIES VS BUND



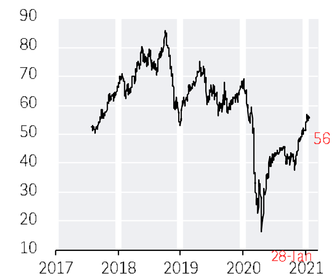
10Y BOND YIELD



10Y BOND YIELD & SPREADS

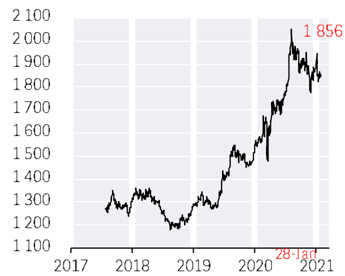


OIL (BRENT, USD)



METALS (LMEX, USD)

GOLD (OUNCE, USD)



SOURCE: THOMSON REUTERS,

ECONOMIC PULSE

GERMANY: DIVERGING FORTUNES FOR SERVICES AND INDUSTRY

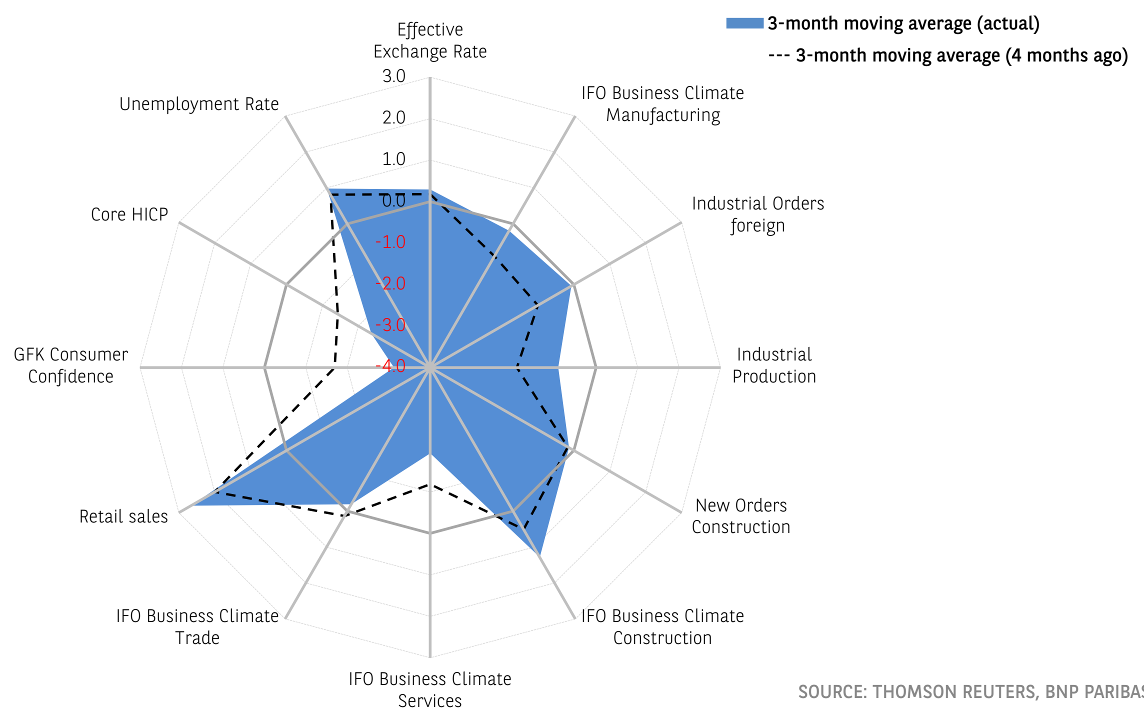
The Pulse for Germany highlights the dichotomy that characterises the economy at the moment. As can be seen on the left-hand side of the chart, the lockdown announced in early November and drastically tightened in mid-December is heavily weighing on the household sector and services. The GFK consumer confidence index and the IFO indices for trade and services worsened in the three months to January (blue area) compared to the preceding three-month period (dotted line). GFK noted that the propensity to consume has been in free fall since the closure of non-essential shops in mid-December, as there is not much to buy. In the chart, retail sales still expanded, but that is because the latest published data are from November.

The picture is different on the right-hand side of the chart, showing a spreading out of the blue area that covers manufacturing and construction. Manufacturing is supported by strong overseas demand, in particular from China. The IFO business climate index for the sector weakened in January, but the firms reporting expanding activity still outweigh those that experience a decline by a considerable margin. In November, industrial output was back at pre-pandemic levels, whereas orders even reached a highest since November 2018. In the construction sector, the prospects are mixed. Activity remains at relatively high levels for residential and public construction, but is declining for industrial construction, due to the fall in demand for office space.

The coming three months are likely to be crucial. Much depends on the course of the pandemic. Thanks to the tightening of the lockdown, the infection rate has come down. Moreover, the ongoing vaccination campaign should contribute to bringing the pandemic under control. However, the authorities are worried about prematurely lifting the lockdown restrictions (which were recently extended to 14 February), as that could be counterproductive. Once these restrictions are lifted, activity in services could pick up rapidly. In addition, the prospects for the manufacturing sector have brightened. According to a recent IFO survey, export expectations in manufacturing have reached their highest level since October, as the lifting of some uncertainties such as Brexit, the US presidency, and the start of the vaccination campaigns worldwide has led to cautious optimism.

Raymond Van Der Putten

QUARTERLY CHANGES



SOURCE: THOMSON REUTERS, BNP PARIBAS

The indicators in the radar are all transformed into 'z-scores' (deviations from the long-term average, as standard deviations). These z-scores have mean zero and their values are between -4 and +3. In the radar chart, the blue area shows the actual conditions of economic activity. It is compared with the situation four months earlier (dotted-line). An expansion of the blue area compared to the dotted area signals an increase in the variable.

ECONOMIC PULSE

FRANCE: SOME PLEASANT SURPRISES IN Q4 2020

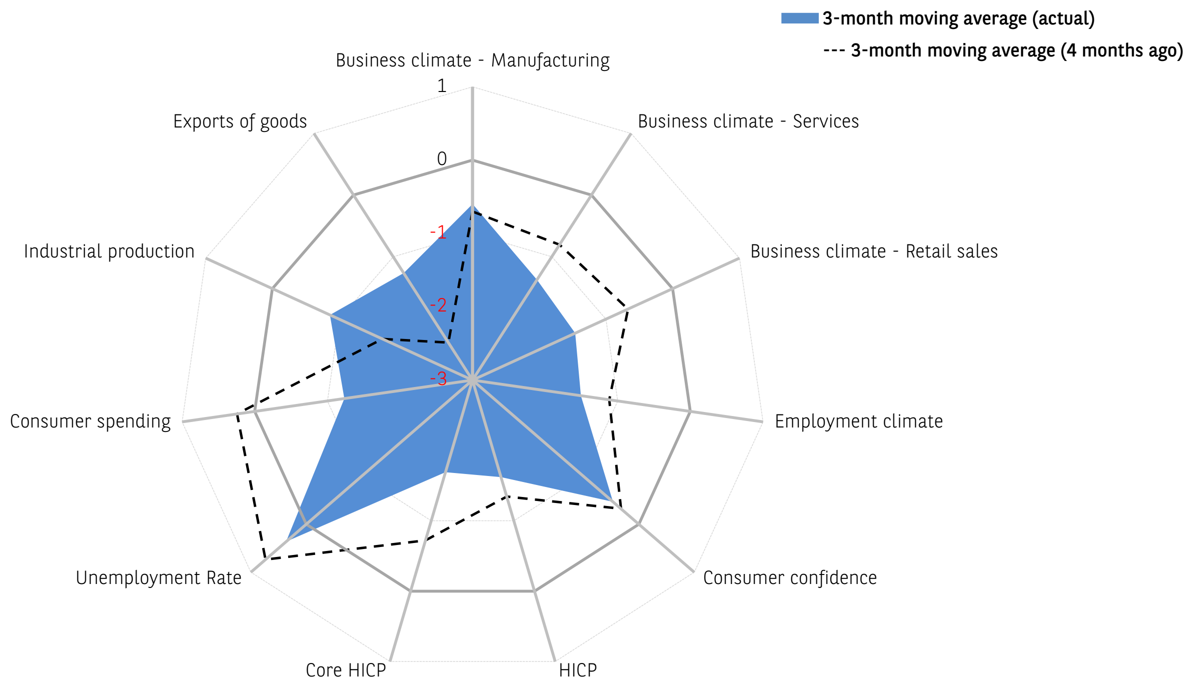
2020 closed with a quarter-on-quarter (q/q) fall in GDP of 1.3%, according to the first estimate of the Q4 national accounts published on Friday 29 January. This was a much smaller fall than expected (we had estimated -4% q/q, in line with INSEE and Banque de France estimates). The full year contraction in GDP was 8.3%. This good surprise came mainly from business and households' investment and exports, which rose instead of falling as expected. Household consumption took the biggest hit from the lockdown in November-December (-5.4% q/q). But this negative figure was partly offset by the 23% m/m rebound in consumption of goods in December. This wiped out the drop in November (-18% m/m) and brought consumption of goods above its pre-crisis level (up 3.7% relative to December 2019).

The number of jobseekers in Category A also bore the traces of the turbulence in economic activity during the phases of lockdown and relaxation, albeit in a less severe manner than in the spring. This figure was stable in December, having increased by nearly 1% m/m in November and fallen by nearly 2% m/m in October. Over the quarter as a whole, there was a fall (-3% q/q). This was a smaller decline than in Q3 (-11% q/q) and was remarkable given the simultaneous fall in GDP. On average over the year, the number of category A jobseekers increased by 8.8%, another remarkable figure in that it was so much lower than the increase seen in 2009 (22%) despite a GDP contraction (-2.8%) that was significantly smaller than in 2020. These figures reflect the effectiveness of the significant ramp-up of the job-retention scheme.

2021 is getting off to a mixed start, as reflected in our barometer (blue area in partial contraction relative to the dotted area). INSEE's composite business climate index improved slightly in January, gaining 1 point to 92, whilst Markit's Composite PMI saw a marked 3-point drop, to 47. Consumer confidence also fell 3 points, to 92. The details of the business climate survey data highlight a feature of the current crisis: the reversal of "sheltered" and "exposed" sectors. Services (in the broad sense, including retail trade) have generally fallen into the first category and industry into the second; this has now reversed, with industry coping better with the crisis than services.

Hélène Baudchon

QUARTERLY CHANGES



SOURCE: THOMSON REUTERS, BNP PARIBAS

The indicators in the radar are all transformed into 'z-scores' (deviations from the long-term average, as standard deviations). These z-scores have mean zero and their values are between -3 and +1. In the radar chart, the blue area shows the actual conditions of economic activity. It is compared with the situation four months earlier (dotted-line). An expansion of the blue area compared to the dotted area signals an increase in the variable.

ECONOMIC PULSE

ITALY: POLITICAL RISK ARISES AGAIN

Italy is one of the rare European countries whose propagation of the epidemic is still under control at the end of January, although the situation is still very delicate. On top of these health uncertainties, political risk is also on the rise again. Following the departure of Matteo Renzi – and several members of the Italia Viva party – from the coalition Government, Prime Minister Giuseppe Conte resigned with the hopes of securing a more solid majority. At the time of writing these lines, negotiations were still ongoing. Political instability could affect the elaboration of the economic stimulus plan that Rome must submit to Brussels in the coming weeks.

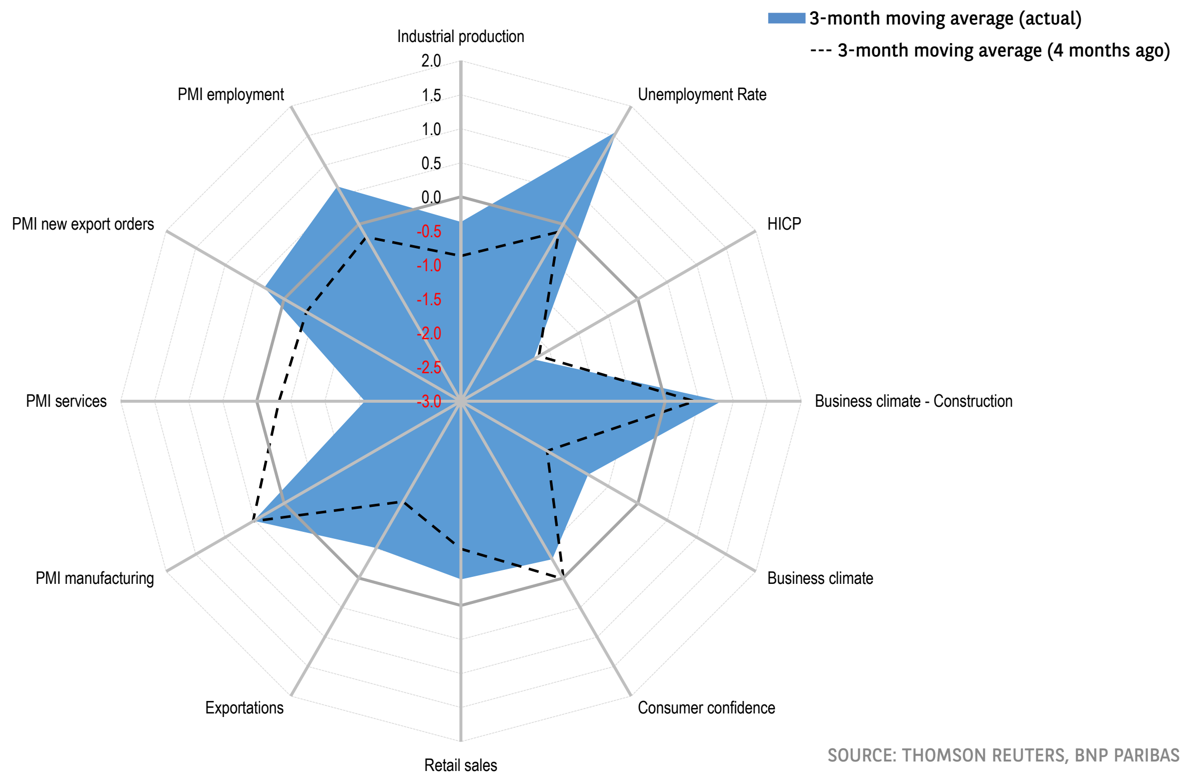
According to our barometer, economic activity continues to be driven primarily by industry, while activity in the services sector remains extremely depressed. Through the end of last year, Italian industry benefited greatly from the rebound in demand in Europe. In November, goods exports had nearly climbed back to their level reached at the end of 2019, driven mainly by demand within the European Union. On a three-month average basis, the trade balance hit a record surplus in last November. The rebound in external demand could also be seen in industrial orders, which have also rebounded significantly during the autumn. The resurgence of the pandemic in Europe this winter is likely to halt or at least sharply slow this positive trend in exports.

The IMF's latest growth forecast for 2021 is also somewhat pessimistic. The Washington-based institution significantly lowered its estimate for real GDP growth to 3.0% in 2021, compared with an initial forecast of 5.2%. Growth is expected to accelerate slightly thereafter, to 3.6% in 2022. If these figures are confirmed, that would mean that the recovery in activity would be only partial at the start of 2023.

On the labour market front, the latest Istat figures show a sharp decline in the unemployment rate in November (down 6 percentage points to 8.9%). Yet this decline is largely due to another drop-off in the active population, which remains still far below its pre-Covid level.

Guillaume Derrien

QUARTERLY CHANGES



SOURCE: THOMSON REUTERS, BNP PARIBAS

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SPAIN: THE EPIDEMIC IS WORSENING BUT CONFIDENCE SHOWS RESILIENCE IN JANUARY

Spain's health situation is still alarming. The pandemic continues to spread, forcing the public authorities to tighten restrictive measures, notably in the Madrid and Valencia regions. Yet the most recent confidence indicators have shown a certain resilience in January, notably the European Commission economic sentiment index. It gained 2.4 points to 93.9, the best reading since April 2020 and the introduction of the first lockdown measures. Confidence is rising in the industrial sector, and the gap with the services sector continues to widen.

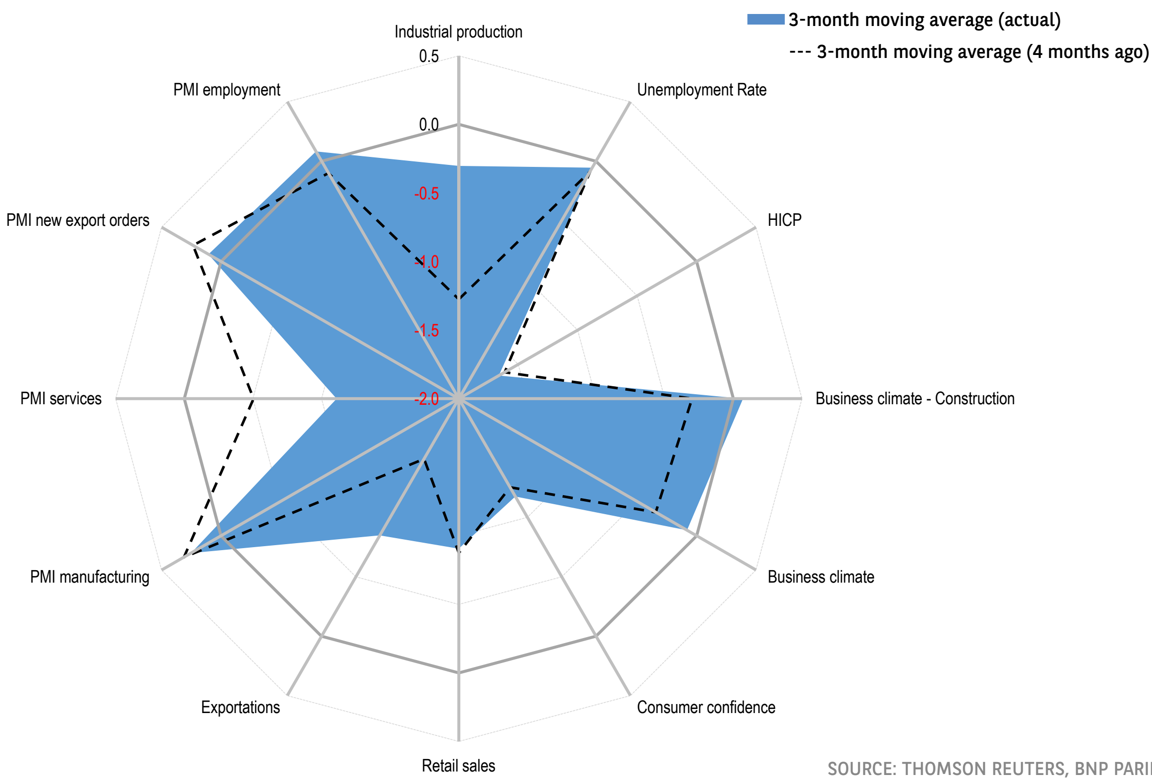
GDP figures for Q4 confirmed that the Spanish economy has experienced the worst year of recession in recent history. Real GDP fell by 11.0% in 2020. Nevertheless, activity grew slightly in Q4 on a quarterly basis (+ 0.4%). This indicates that the restrictions put in place to stem the second wave of the epidemic were less severe for the economy than last spring.

The labour market has shown some resilience, thanks to government support measures, especially the ERTE furlough scheme. According to INE – the Spanish statistical office – the unemployment rate rose to 15.5% in 2020. Employment declined by 2.9%, but the drop-off in the active population limited the increase in the unemployment rate. More than 4 out of 5 job destructions in 2020 were in the services sector.

One of the most apparent trends on our barometer is the consumer price index (CPI), which has been impacted significantly by the economic shock, especially in the services sector. In December, core CPI (excluding perishable goods and energy) reported the smallest annual increase in the past six years (+0.13%). Services CPI (excluding rent) slipped back into deflation territory, with annual declines visible in communications, transport and education. However, the CPI rebounded strongly in January, according to preliminary estimates from INE.

Guillaume Derrien

QUARTERLY CHANGES



SOURCE: THOMSON REUTERS, BNP PARIBAS

The indicators in the radar are all transformed into 'z-scores' (deviations from the long-term average, as standard deviations). These z-scores have mean zero and their values are between -2 and +0.5. In the radar chart, the blue area shows the actual conditions of economic activity. It is compared with the situation four months earlier (dotted-line). An expansion of the blue area compared to the dotted area signals an increase in the variable.

DECLINING MOBILITY AND GLOBAL ACCELERATION OF VACCINATION CAMPAIGNS

The biggest world-wide vaccination campaign in history began in 2020 Q4. According to the latest figures, released by Our World in Data on 27 January, more than 80 million doses have been given in 66 countries. The United-States leads by some distance, with 22.98 million doses given, followed by China and the European Union, with 21.17 million and 10.15 million doses respectively. On a per capita basis, Israel leads the field, with 49.1 doses given for every 100 people, a total of 4.3 million doses. The UAE takes second place with 28 doses per 100 people. The United Kingdom, the first country in the world to have authorised the vaccine produced by Pfizer/Biotech (on 2 December) is making progress with 11.3 doses per 100 people. The approval came at the right moment, as the country is facing a very virulent variant. The US, the country hit hardest by the pandemic, has achieved 7.1% coverage of its population. Denmark heads the EU table with 3.7%, followed by Ireland and Spain, both at 2.9%. Germany, the EU's most populous country ahead of France, has achieved 2.4% coverage, whilst France, which passed the 1% milestone on 19 January, is now at 1.7% (Figure 1). The acceleration of the vaccine campaign brings the end of the health crisis closer. This will have a positive effect on mobility around the world.

According to the Google Mobility Report of 26 January, visits to retail and recreation facilities have continued to fall in most countries, as a result of the tightening of health measures. In the US and Japan, visits have continued to fall since the beginning of the year, and stand at around 75% of their pre-crisis level (Figure 2). In France, visits recovered from 45% below the baseline* to 42% down, after substantial falls. In the United Kingdom, visits fell sharply following the application of new lockdown measures, with the 7-day moving average down nearly 64% relative to the baseline. In Germany, footfall was stable at a very low level.

Tarik Rharrab

COVID-19 VACCINE DOSES ADMINISTRED PER 100 PEOPLE[1]

		laste update
Israel	49.1	Jan 27
UAE	28.0	Jan 27
UK	11.3	Jan 26
US	7.1	Jan 26
Denmark	3.7	Jan 26
Ireland	2.9	Jan 24
Spain	2.9	Jan 27
Portugal	2.7	Jan 27
Italy	2.6	Jan 27
Poland	2.4	Jan 26
Germany	2.4	Jan 26
Canada	2.4	Jan 27
Finland	2.3	Jan 27
Switzerland	2.3	Jan 24
Greece	2.1	Jan 27
Belgium	2.0	Jan 26
Sweden	1.9	Jan 24
Turkey	1.8	Jan 27
Austria	1.8	Jan 27
France	1.7	Jan 26
China	1.6	Jan 27
Norway	1.6	Jan 26
Netherlands	1.1	Jan 27

[1] excluding countries with population of less than 500 00 and doses administred ratio

CHART 1 SOURCE: OUR WORLD IN DATA, BNP PARIBAS

RETAIL AND RECREATION MOBILITY

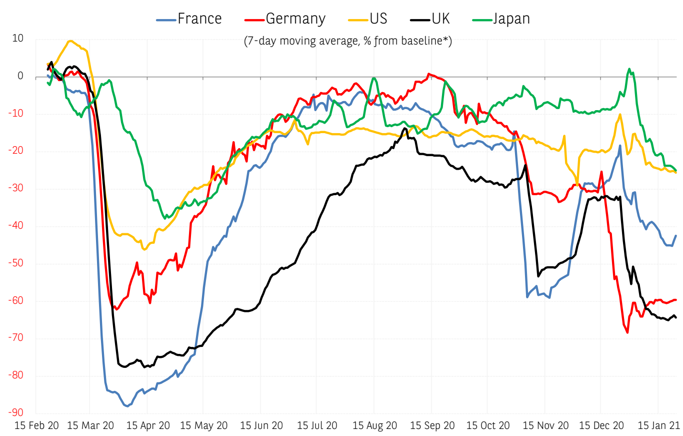


CHART 2 SOURCE: GOOGLE (26 JANUARY 2021), BNP PARIBAS

** Google Mobility Reports show how visits and length of stay at different places change compared to a baseline. The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020. A figure of negative 30% indicates that traffic was down 30% compared to a baseline. The reports show trends over several weeks with the most recent data representing approximately 2-3 days ago—this is how long it takes to produce the reports. In order to smooth the series, we use a seven-day moving average of the raw data in the Google Mobility Reports. Source: Google.*

ECONOMIC SCENARIO

UNITED STATES

With a drop in GDP of an estimated 3.6% in 2020, the USA has experienced a record-breaking recession, albeit one that has been less severe than in most other countries. The health cost of the Covid-19 epidemic has, however, been immense, with the USA having the highest number of deaths in the world and suffering a higher mortality rate than the European Union. As we move into winter, the disease is surging again, forcing certain states, such as New York and California, to tighten social distancing measures. Although the economy had seemed able to avoid a further contraction, it could be flatlining at the start of the new year, although a gradual return to normal is then expected as vaccines become available.

CHINA

After plummeting in Q1 2020, economic activity has experienced a V-shaped rebound since Q2. The recovery has first been driven principally by industrial production and investment in infrastructure projects and the real estate sector. Then exports have strengthened, supported by the rebound in global demand. Finally, the services sector and private consumption have regained growth momentum since last summer. In the short term, fiscal policy should continue to support economic growth. Domestic credit conditions, which have been eased prudently in 2020, have started to be tightened since Q4, as the authorities aim to contain risks in the financial system.

EUROZONE

After a solid rebound in Q3 2020 (+12.6%), even exceeding expectations, Eurozone GDP should slow sharply in Q4 2020. Given the resurgence of the pandemic and the implementation of new sanitary restrictions in most of the member states, the recovery is losing momentum. The activity loss caused by the Covid-19 crisis is unlikely to be fully erased before year-end 2021. Despite the hopes raised by the vaccines, worries about the pandemic and unemployment trends in eurozone member states in the months ahead are shaking consumer confidence, which remains low. The risk of corporate defaults continues to rise as long as the pandemic is not completely under control, which is undermining private investment. Support from fiscal policy at both the national and European levels will be essential, as is maintaining an accommodating and flexible monetary policy.

FRANCE

The risks have materialized for a W-shaped growth profile. After the massive recessionary shock of H1 2020 due to the first lockdown, the economy vigorously recovered in Q3 before relapsing again in Q4 under the impact of a new lockdown designed to curb the second wave of the Covid-19 pandemic. Yet the second V is bound to be less pronounced than the first: on the downside because the second lockdown was not as restrictive nor as long, and on the upside because this time the restrictive measures will be lifted gradually and conditionally. Major fiscal resources have been deployed that effectively buffered the double shock, but still the economy has been weakened, which is straining its rebound capacity. The start-up of a massive vaccination campaign in 2021 raises hopes that we might be seeing the light at the end of the tunnel. Growth should also get a boost from the first effects of the France Relance stimulus package. French GDP is expected to catch up pre-crisis levels during 2022 and the economy to return to 100% of its normal functioning. Inflation is also expected to pick up, but will hold at extremely low levels.

RATES AND EXCHANGE RATES

In the US, policy should remain on hold for quite some time, considering that the FOMC wants inflation to move beyond 2% to make up for past below target inflation. To this end, it has decided at its December meeting that the current pace of asset purchases will be maintained 'until substantial further progress has been made' toward reaching its goals in terms of maximum employment and inflation. Should the economic situation worsen, more measures are to be expected. Treasury yields should move higher on the back of fiscal stimulus and the economic recovery and because the Fed will accept and actually wants inflation to rise beyond 2%.

In the eurozone, at its December meeting, the ECB has eased policy further. In particular, it has decided to increase the envelope of the pandemic emergency purchase programme (PEPP) and to extend its horizon for net purchases to at least the end of March 2022. These measures aim to support the economy so as to create a pick-up in inflation, which has dropped to a very low level. This very accommodative stance –which will be maintained for a long time- should keep a lid on sovereign bond spreads, although at some point, speculation that the PEPP's end date might not be prolonged any further should cause some spread widening. As usual, eurozone bond yields will be very much influenced by what happens to US yields. The prospect of a more lasting recovery as a vaccine will be deployed, should contribute to somewhat higher bond yields.

The Bank of Japan is expected to maintain its current policy stance including its yield curve control strategy. We expect the dollar to weaken further versus the euro. Due to the limited short-term interest rate differential, international investors incur low costs when they want to hedge their dollar exposure, the euro is still undervalued versus the dollar and the Fed's new strategy of targeting average inflation implies a more dovish stance compared to the ECB. The 'risk-on' environment is also supportive for the euro. Similar arguments apply for the dollar versus the yen.

GROWTH & INFLATION

	GDP Growth				Inflation			
%	2019	2020 e	2021 e	2022 e	2019	2020 e	2021 e	2022 e
United-States*	2.2	-3.6	4.2	4.1	1.8	1.3	1.9	1.9
Japan*	0.3	-5.3	1.1	3.0	0.5	0.0	-0.4	-0.3
United-Kingdom*	1.5	-11.1	4.0	8.6	1.8	0.9	1.5	2.1
Euro Area*	1.3	-7.3	3.8	5.5	1.2	0.2	0.8	1.3
Germany*	0.6	-5.6	2.7	5.1	1.4	0.4	1.3	1.2
France*	1.5	-9.0	5.5	4.7	1.3	0.5	0.6	1.2
Italy*	0.3	-9.0	4.5	4.4	0.6	-0.2	0.5	1.3
Spain*	2.0	-11.6	5.4	5.9	0.8	-0.4	0.4	0.9
China*	6.1	2.3	9.5	5.3	2.9	2.6	2.3	2.8
India**	4.2	-11.4	11.6	5.0	4.8	5.8	4.3	3.8
Brazil	1.1	-4.5	3.0	3.0	3.7	3.1	4.0	4.0
Russia	1.3	-4.5	3.8	3.0	4.3	3.4	3.5	3.5

SOURCE: BNP PARIBAS GROUP ECONOMIC RESEARCH (E: ESTIMATES & FORECASTS)
*FISCAL YEAR FROM 1ST APRIL OF YEAR N TO MARCH 31ST OF YEAR N+1
LAST UPDATE: 23 NOVEMBER 2020, *GROWTH UPDATED ON 7 JANUARY 2021

INTEREST & EXCHANGE RATES

Interest rates, %		2021					
End of period		Q1e	Q2e	Q3e	Q4e	2021e	2022e
US	Fed Funds (upper limit)	0.25	0.25	0.25	0.25	0.25	0.25
	T-Notes 10y	1.10	1.20	1.30	1.40	1.40	1.50
Ezone	Deposit rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
	Bund 10y	-0.35	-0.50	-0.40	-0.20	-0.20	0.10
	OAT 10y	-0.10	-0.25	-0.15	0.10	0.10	0.50
	BTP 10y	0.75	0.60	0.80	1.20	1.20	1.70
	BONO 10y	0.35	0.20	0.40	0.60	0.60	1.00
UK	Base rate	0.10	0.10	0.10	0.10	0.10	0.10
	Gilts 10y	0.40	0.40	0.50	0.60	0.60	0.75
Japan	BoJ Rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
	JGB 10y	0.05	0.05	0.10	0.10	0.10	0.15

Exchange Rates		2021					
End of period		Q1e	Q2e	Q3e	Q4e	2021e	2022e
USD	EUR / USD	1.22	1.24	1.25	1.25	1.25	1.30
	USD / JPY	101	100	98	98	98	95
	GBP / USD	1.39	1.41	1.44	1.44	1.44	1.59
EUR	EUR / GBP	0.88	0.88	0.87	0.87	0.87	0.82
	EUR / JPY	123	124	123	123	123	124

Brent		2021					
Period-average		Q1e	Q2e	Q3e	Q4e	2021e	2022e
Brent	USD/bbl	56	54	55	59	56	-

LAST UPDATE: 23/11/2020

SOURCE: BNP PARIBAS GLOBAL MARKETS (E: ESTIMATES)

CALENDAR

LATEST INDICATORS

In Germany, the IFO business climate saw a broad-based weakening in January and both the current assessment and expectations declined. French consumer confidence declined more than expected. For the eurozone as a whole, consumer confidence was stable whereas economic confidence - which combines business and household sentiment - surprised positively although it recorded a decline versus the upwardly revised number for December. In the US, Conference Board consumer confidence picked up and initial unemployment claims also brought good news, declining more than expected. The level remains high however. Personal income increased more than expected and spending declined less than anticipated. University of Michigan sentiment declined slightly although expectations improved somewhat. US 4th quarter GDP growth came in slightly below expectations. In France, the release of the 4th quarter GDP brought a positive surprise with GDP shrinking far less than expected. In Germany GDP was basically unchanged, growing 0.1%. Source: Bloomberg.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	ACTUAL	PREVIOUS
01/25/2021	Germany	IFO Business Climate	Jan	91.4	90.1	92.2
01/25/2021	Germany	IFO Expectations	Jan	93.6	91.1	93.0
01/25/2021	Germany	IFO Current Assessment	Jan	90.6	89.2	91.3
01/25/2021	United States	Chicago Fed Nat Activity Index	Dec	0.1	0.5	0.3
01/25/2021	United States	Dallas Fed Manf. Activity	Jan	12.0	7.0	9.7
01/26/2021	United Kingdom	Employment Change 3M/3M	Nov	-104k	-88k	-144k
01/26/2021	United States	Conf. Board Consumer Confidence	Jan	89.0	89.3	87.1
01/26/2021	United States	Richmond Fed Manufact. Index	Jan	19.0	14.0	19.0
01/27/2021	Japan	Leading Index CI	Nov	--	96.4	96.6
01/27/2021	Germany	GfK Consumer Confidence	Feb	-7.9	-15.6	-7.5
01/27/2021	France	Consumer Confidence	Jan	94.0	92.0	95.0
01/27/2021	France	Total Jobseekers	4Q	--	3574.3k	3673.4k
01/27/2021	United States	Cap Goods Orders Nondef Ex Air	Dec	0.5%	0.6%	1.0%
01/27/2021	United States	FOMC Rate Decision (Upper Bound)	Jan	0.3%	0.3%	0.3%
01/27/21-02/02/21	Germany	Retail Sales MoM	Dec	-2.2%	--	1.1%
01/28/2021	Japan	Retail Sales MoM	Dec	-0.7%	-0.8%	-2.1%
01/28/2021	Eurozone	Consumer Confidence	Jan	--	-15.5	-15.5
01/28/2021	Eurozone	Economic Confidence	Jan	89.6	91.5	92.4
01/28/2021	Eurozone	Industrial Confidence	Jan	-7.0	-5.9	-6.8
01/28/2021	Eurozone	Services Confidence	Jan	-18.5	-17.8	-17.1
01/28/2021	United States	GDP Annualized QoQ	4Q	4.2%	4.0%	33.4%
01/28/2021	United States	Initial Jobless Claims	Jan	875k	847k	914k
01/28/2021	United States	New Home Sales MoM	Dec	3.5%	1.6%	-12.6%
01/28/2021	United States	Kansas City Fed Manf. Activity	Jan	13.0	17.0	14.0
01/29/2021	Japan	Tokyo CPI Ex-Fresh Food. Energy YoY	Jan	0.0%	0.2%	-0.4%
01/29/2021	Japan	Industrial Production MoM	Dec	-1.5%	-1.6%	-0.5%
01/29/2021	Japan	Consumer Confidence Index	Jan	29.0	29.6	31.8
01/29/2021	France	GDP QoQ	4Q	-4.0%	-1.3%	18.5%
01/29/2021	Germany	GDP SA QoQ	4Q	0.0%	0.1%	8.5%
01/29/2021	United States	Personal Income	Dec	0.1%	0.6%	-1.1%
01/29/2021	United States	Personal Spending	Dec	-0.4%	-0.2%	-0.4%
01/29/2021	United States	U. of Mich. Sentiment	Jan	79.3	79.0	79.2
01/29/2021	United States	U. of Mich. Current Conditions	Jan	87.7	86.7	87.7
01/29/2021	United States	U. of Mich. Expectations	Jan	74.1	74.0	73.8

CALENDAR: THE WEEK AHEAD

COMING INDICATORS

A light week ahead of us in terms of the number of data releases but certain publications will be particularly important: 4th quarter GDP growth for the euro area and the labour market report in the US. In addition, we also have euro area unemployment, inflation and retail sales and, in France, the survey of industrial investment and private sector payrolls in Q4 2020. The ECB will publish its economic bulletin. In the UK, the focus will be on the meeting of the Bank of England.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
02/01/2021	Eurozone	Unemployment Rate	Dec	8.3%	8.3%
02/02/2021	Eurozone	GDP SA QoQ	4Q	-1.7%	12.5%
02/03/2021	Eurozone	CPI Core YoY	Jan	--	0.2%
02/04/2021	France	Survey of Industrial Investment		--	--
02/04/2021	Eurozone	ECB Publishes Economic Bulletin		--	--
02/04/2021	Eurozone	Retail Sales MoM	Dec	--	-0.1
02/04/2021	United Kingdom	Bank of England Bank Rate	Feb	0.1%	0.1%
02/05/2021	Germany	Factory Orders MoM	Dec	-2.0%	2.3%
02/05/2021	France	Private Sector Payrolls QoQ	4Q	--	1.6%
02/05/2021	United States	Change in Nonfarm Payrolls	Jan	50k	-140k
02/05/2021	United States	Unemployment Rate	Jan	6.7%	6.7%
02/05/2021	United States	Labor Force Participation Rate	Jan	--	61.5%

SOURCE: BLOOMBERG

FURTHER READING

United Kingdom: A month after Brexit	EcoTVWeek	29 January 2021
France: old and new indicators for assessing the economic situation	Chart of the Week	27 January 2021
EcoWeek 21.03. January 22, 2021 issue	EcoWeek	22 January 2021
France's economic situation at the start of 2021	EcoTVWeek	22 January 2021
Spain: Towards a protracted increase in the public deficit?	EcoFlash	21 January 2021
The stock market's recovery in Brazil: a local story	Chart of the Week	20 January 2021
2021 1st quarter issue	EcoEmerging	18 January 2021
EcoWeek 21.02. January 15, 2021 issue	EcoWeek	15 January 2021
The migration of risk in 2021	EcoTVWeek	15 January 2021
The growing cost of negative interest rates on excess reserves has temporarily been offset by the terms of tltro iii	Chart of the Week	14 January 2021
Turkey: ending the stop-and-go growth?	Conjoncture	12 January 2021
Global: Why the level of public indebtedness matters: a market perspective	EcoWeek	11 January 2021
January 2021 edition	EcoTV	7 January 2021
Special Edition – 2021: hopes and challenges	EcoTVWeek	7 January 2021
United Kingdom: Brexit: The worst has been avoided	EcoFlash	6 January 2021
Climate change is accelerating	Chart of the Week	6 January 2021
EcoWeek 20.47. December 18, 2020 issue	EcoWeek	18 December 2020
2020: Entering a new era	EcoTVWeek	18 December 2020
Quarterly Economic Outlook for OECD countries and China	EcoPerspectives	17 December 2020
Egypt: foreign currency liquidity restored	Chart of the Week	16 December 2020

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