

Interest Rate Outlook Eurozone, USA

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How Will the Recovery Play Out?

In this issue of the Interest Rate Outlook, we want to discuss how interest rate markets in the euro zone and the US will be affected by the economic upturn. Along with progress in the vaccine rollout, markets have already been anticipating the economic recovery since the beginning of the year. That was the easy part; however, the next phase will be more difficult for the markets. This is due to the fact that the prospective pattern of the recovery will be driven by factors that are specific to the ending crisis and for which therefore no empirical data exists. Open questions inter alia include: How pronounced will the increase in bankruptcies be with the end of government support? How will the ramp-up of the labor market proceed?; For how long will supply bottlenecks persist and how widespread will they be?; And what is probably the most widely discussed issue at present: Will there be a surge in inflation?

Upcoming economic data releases will therefore be erratic and make it hard for market participants to distinguish between transitory developments and sustainable trends. This suggests jittery markets. In this environment it will be particularly challenging for central banks to provide market guidance with clear communication.

Apart from our assessment of the interest rate markets, this issue of the Interest Rate Outlook contains two focus topics as well. In one of them we take a look at the past and compare the effects of public crisis programs in the euro zone and the US. In the other one, we look toward the future and consider what will remain of the crisis once it has ended.

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Note: Past performance is not necessarily indicative of future results.

Euro Zone: ECB Communication Needed

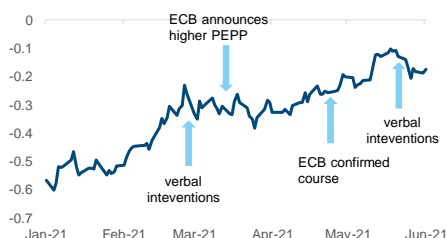
Interest Rates	current	Sep-21	Dec-21
ECB MRR	0.00	0.00	0.00
3M Euribor	-0.55	-0.54	-0.54

In March the ECB Council decided to increase the pace of monthly securities purchases under the PEPP program compared to the first three months of the year. This was in response to the increase in bond yields and was supposed to remain limited to the second quarter. In the future decisions on the pace of monthly asset purchases will be made on a quarterly basis for each subsequent quarter. At the June meeting of the ECB Council the third quarter will therefore be under consideration.

The decision will depend on whether the ECB Council considers financing conditions to be favorable relative to the outlook for inflation. This was declared an objective in a December decision. However, the ECB Council has hardly committed itself to anything with this decision. It is neither known what inflation outlook justifies which financing conditions, nor how the two variables are measured. When looked at from outside, the decision on the pace of securities purchases will therefore appear largely discretionary, making it difficult to assess it in advance.

A few clues nevertheless do exist after all is said and done. In December financing conditions - relative to the inflation outlook - were regarded as favorable. At the time 10-year German Bunds were trading at yields ranging from -0.6% to -0.5%. In March, yields of -0.3% were apparently not considered to be favorable, which triggered an increase in PEPP asset purchases. Naturally the ECB is not evaluating funding conditions solely based on German Bund yields. However, these risk-free rates serve as the basis for most other interest rates (leaving short tenors aside) and are therefore a critical variable.

Yield on 10-yr. German Bund, in %



Source. Market data providers, Erste Group Research

Lately the picture has become more muddled again. When yields continued to increase significantly in April and particularly in May, the central bank took its time issuing some verbal push-back. We would have expected this earlier, as from the perspective of the ECB higher yields could only have been justified by a change in the inflation outlook, which had just been confirmed to be largely unchanged as recently as in April.

Occasionally the ECB discusses the importance of real yields as well. In this context one could (temporarily) come up with a justification for tolerating higher nominal yields. Higher inflation rates ensure continued low real yields even amid higher nominal yields. However, this rationale would be problematic for at least two reasons. First, the ECB has never highlighted the critical importance of real yields in its market guidance. Secondly, it is clear that the recent surge in inflation rates will be transitory. With nominal yields unchanged, real yields would therefore increase again very soon once inflation rates decline.

Our assessment of the upcoming decision of the governing council is based on the determinants set by the ECB, regardless of their vagueness. We do not believe that the inflation outlook has changed to such an extent that recently prevailing yields could be regarded as favorable. The relatively firm exchange rate of the euro against the US dollar actually rather dampens the inflation outlook. Securities purchases in the third quarter should therefore be continued at the same pace as in the second quarter. With this decision, the ECB Council would also avoid exposing itself to the risk of fueling additional selling pressure and triggering a further increase in bond yields.

The smartest thing for the ECB to do would be to withdraw completely from these muddled attempts at steering the markets and provide the markets with clearer guidance. This would be particularly important in the second half

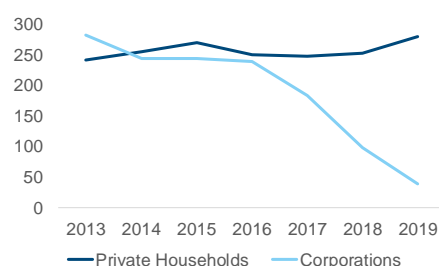
of the year, as conditions are bound to become more difficult for the bond market.

Yields	current	Sep-21	Dec-21
Germany 2y	-0.66	-0.70	-0.70
Germany 5y	-0.57	-0.50	-0.40
Germany 10y	-0.19	-0.10	0.00

This is due to the fact that inflation rates will rise again in the autumn. Levels in excess of 2% should be reached temporarily in the fourth quarter at the latest. This will be driven by VAT cuts implemented in Germany from July 2020 onward, which will result in a lower basis of comparison until December. In addition there may be supply-side effects. These concern bottlenecks resulting from the ramp-up of the economy that will temporarily trigger strong price increases in specific areas. There are already well-known examples for this such as massive increases in freight rates and a shortage of computer chips.

All of this could generate uncertainty. This is due to the fact that in a strong economic recovery combined with extremely expansionary monetary policy by the ECB and a possible consumer spending boom, markets will perceive the conditions for accelerating inflation rates being in place. While this should create volatility, it should fall short of pushing yields up significantly. Ultimately market participants will ask themselves whether a basis for a sustained increase in inflation exists. We do not believe that to be the case. A corresponding trend in wage growth would be required for a lasting higher inflation, which in turn would have to be underpinned by appropriate strength in the labor market, which we do not expect to emerge.

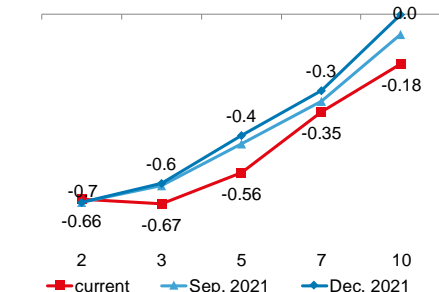
Net financial position of companies and households, in EUR bn.



Source. Ameco, Erste Group Research

The ECB is attempting to set off a wage-price spiral by means of extreme policy measures since at least 2015, with no discernible success. The excess of savings over borrowings of households has remained unchanged, while that of companies has at least decreased somewhat. To really trigger a sustained increase in inflation, a significant decline in the balance would have been necessary (lower savings, higher borrowings), subsequently leading to increases in employment and wage growth. It is highly unlikely that the ECB will succeed this time in achieving an objective that has remained elusive for years at an earlier stage.

German government bond yield curve, in %



Source. Market data providers, Erste Group Research

Despite a buildup of savings to the extent of 4.4% of GDP in 2020, we believe an inflationary boom in consumer spending is unlikely for several reasons. Mainly high income earners were able to save during the crisis. It seems likely these savings were chiefly the result of not spending on services, but there are only limited opportunities to make up for foregone services consumption. Moreover, part of the recent strong spending on goods was attributable to the lack of availability of services. As the economy is opening up, spending should therefore merely be reallocated. In addition, households that were hit particularly hard by the crisis are bound to rebuild their savings and will consequently be spending relatively little on consumption. In our opinion all of this clearly argues against a wage-price spiral being set into motion.

We believe the bond market has got slightly ahead of itself with the increase in yields in recent weeks. The ECB should see it that way as well and continue to rein in the markets in the second half of the year. This will actually be necessary, as the environment suggests that selling squalls will persist. Thus the second half of 2021 will be volatile, but ultimately the moderate medium-term inflation outlook should gain the upper hand in the markets.

USA: Greater Risks

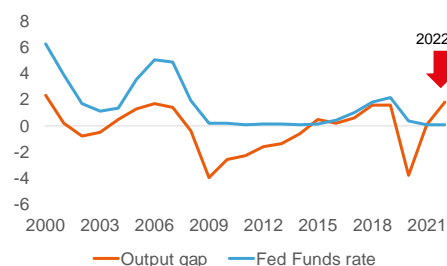
Yields	current	Sep-21	Dec-21
Germany 2y	-0.66	-0.70	-0.70
Germany 5y	-0.57	-0.50	-0.40
Germany 10y	-0.18	-0.10	0.00

The questions for US dollar interest rate markets are the same as those for the euro zone. When will the central bank begin to taper its securities purchases? And will there be a sustained increase in inflation rates? However, the US environment is different. The economic slump of 2020 was significantly less substantial, and it is predictable that the 2021 recovery will be stronger than that of the euro zone. The US economy will already reach its potential output this year, while according to European Commission estimates, euro zone GDP will remain 3.3% below its potential.

This would certainly suggest that a reassessment of the extremely expansionary monetary policy stance is coming into greater relief in the US than in the euro zone. However, the guidance communicated to the markets by the Federal Reserve does not reflect this. The Fed is showing no urgency with respect to getting out of crisis mode. Only when progress toward reaching monetary policy targets is substantial in the associated data for several consecutive months will a decision to taper monthly asset purchases be made. In addition the Fed has assured the markets that there will be considerable time to prepare before tapering of securities purchases actually begins. We expect that by the time of the meeting of the policy-setting FOMC in July or September the preconditions will have been fulfilled and that monthly securities purchases will actually be tapered from January 2022 onward.

The generally laid-back attitude of the Fed can be explained by the realignment of monetary policy adopted last year. Since then, the objective has been a temporary, moderate overshooting of the inflation rate above the 2% target, in response to inflation having remained below target for quite a long time. Interest rates will not be hiked before three conditions are met: maximum employment must have been attained, the inflation rate must have reached 2 percent and has to be on track to moderately overshoot this level for some time. The final condition is incidentally the reason why the most recent increase in headline inflation to 4.2 percent (core inflation: 3 percent) is irrelevant for monetary policy. This elevated reading was attributable to base effects from the previous year and to price increases likely to have been triggered by the ramp-up of the economy. The Fed expects the latter to continue throughout the year. As these effects are all classified as transitory, they do not fulfill the Fed's third criterion.

Output gap and US federal funds rate, in %



Source: European Commission, Fed, Erste Group Research

Just how uncommonly loose US monetary policy is - or will be - can be seen from the following comparison. We have contrasted the output gap of the U.S. economy (i.e., the degree of resource over- or under-utilization relative to potential) with the federal funds rate. After all, there should be a correlation between the resource utilization rate of the economy and the level of interest rates. In fact, closely tracking parallel trends can be readily discerned until about 2012/13. From 2015 until the outbreak of the crisis, the output gap and the federal funds rate are congruent. This reflects the structural reduction in interest rate levels as well. If the Fed leaves policy rates unchanged in 2022, which surely no one doubts, the next stage of monetary easing would then be reached: the output gap would begin to exceed policy rates. In 2023, the gap should widen, as the markets (and we) expect only minor rate hikes in 2023, while economic growth should once again exceed potential growth.

Yields	current	Sep-21	Dec-21
USA 2y	0.15	0.16	0.19
USA 5y	0.81	1.00	1.00
USA 10y	1.61	2.00	2.10

As the economic recovery progresses, this monetary policy stance will put the bond market's confidence in the Fed to a severe test in the second half of the year. Just as in the euro zone, we do not expect a sustained increase in inflation in the US that will necessitate early intervention by the central

bank. However, an economy that reaches its potential at least in terms of the data and continues to receive maximum support from the central bank should give rise to the assessment that inflation risks have increased, and thus lead to a steepening of the yield curve.

Slope of the US yield curve, 10yr – 2yr, in %

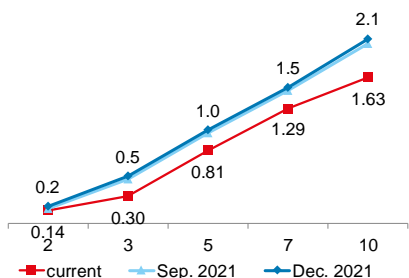


Source: Market data providers, Erste Group Research

This is supported by the fact that the steepness of the yield curve is not particularly pronounced yet for an economic recovery either. At the peak of the previous economic cycle, the spread between 10-year and 2-year treasury yields reached more than 250 basis points; currently it stands at 150 basis points, thus it would have the potential to widen even under "normal" monetary policy.

Moreover, longer-term risks for the bond market will increase as well. In the course of the summer, decisions on two of the Biden administration's economic packages will be made, the size of which is USD 2trn (American Jobs Plan) and USD 1.8trn (American Families Plan), which includes USD 800bn in tax cuts. The programs will extend until the end of this decade. They are supposed to be financed primarily by raising corporate taxes, plugging loopholes and raising income taxes of high income earners. It remains to be seen whether all these items can actually be shepherded past Congress. The USD 3.8trn total already corresponds to 17% of expected GDP in 2021 and would therefore still represent noticeable support for the economy over the above-mentioned time periods, even in the event of cuts.

US treasury yield curve, in %



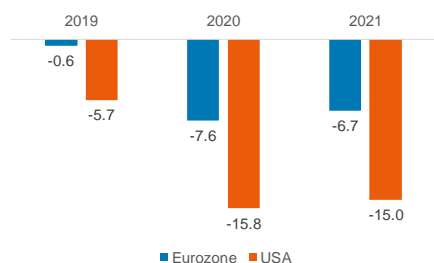
Source: Market data providers, Erste Group Research

In our view the path for US treasuries is therefore fairly clear-cut and consists of further increases in yields. We believe that as the economic recovery progresses and the prospect of tapering comes into greater relief, the markets will price in higher risks for US treasuries. Only short tenors (2 years and less) should be exempt from this, as we continue to believe a first rate hike is not to be expected before mid-2023.

Compared with German Bunds, US treasuries are coming off as having the worse prospects. Despite the fact that the yield premium is substantial, it is not sufficient to compensate for the significantly greater market risk. This is not only due to greater US inflation risks, but also because - unlike the ECB - the Fed has so far not countered the increase in yields by providing additional liquidity, which we believe will remain the case. We only consider yields on short-dated US treasuries to be relatively attractive. However, our expectations for the exchange rate of the US dollar do not argue against treasuries. We essentially expect the dollar to move sideways at a moderately firmer level. Downside risks to the dollar exist, but are manageable in our opinion. This view is based on the fact that the ECB is closely monitoring the exchange rate and may even respond to significant dollar depreciation with a rate cut.

Euro Zone or the US: Which Region Has Weathered the Crisis Better?

Budget deficits, in % of GDP



Source: IMF, Erste Group Research

In 2020, the economy of the euro zone suffered a 6.6% slump, almost twice as large as that of the US, where economic output declined by 3.5%. This year the outlook for the US is better as well. For 2021 we expect GDP growth of 6.1% in the US and 4.0% in the euro zone. Is there anything the US has done better? If one is looking exclusively at GDP growth, then yes. However, if one considers the trade-off between resource use and the result, the answer is probably no.

In the crisis year 2020 the US supported its economy with much more public stimulus spending than the euro zone and will continue to do so in 2021. The US budget deficit increased by ten percentage points in 2020 while that of the euro zone increased by seven percent. In 2021, the US will once again post a deficit of 15 percent of GDP, the euro zone of seven percent. However, a look at the largest spending blocks shows that in the US the use of funds was not well-targeted and thus more inefficient.

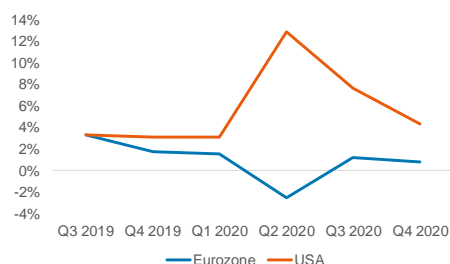
One indication of this is the evolution of the unemployment rate. In the euro zone, it gained only half a percentage point in 2020 compared to 2019, which was undoubtedly attributable to the wide variety of programs at both the national and EU levels (SURE) to absorb wage costs (short-time work). This made it possible to avoid large-scale layoffs. In the US the paycheck protection program (PPP) has been launched, which also covers personnel costs in return for employers foregoing layoffs. It is impossible to gauge how many jobs the program has saved, as they were not counted. However, they cannot have been very numerous, given that the US unemployment rate rose by 4.4 percentage points from 2019 to 2020, a multiple of the increase in the euro zone. This is undoubtedly disappointing, as the size of the PPP has in the meantime reached nearly a trillion US dollars. The unemployment rate is still 2.6 percentage points above the level prevailing before the crisis. Obviously the funds from the paycheck protection program have primarily flowed to employers without the required compensation being provided.

Another part of the high public expenditures in the US consisted of a massive increase in unemployment benefits - which are generally quite low. From the outbreak of the crisis until the end of July, unemployment benefits were increased by USD 600 per week. Thereafter the additional payment still amounted to more than USD 300 per week and will remain at this level until at least September. Beyond this, the group of persons entitled to receive unemployment benefits was expanded to include self-employed persons and those in precarious employment relationships, and the duration of benefits eligibility was extended. Since mainly low-wage sectors were affected by unemployment, their wages increased strongly in the initial phase until July, with many of the people concerned enjoying higher incomes in unemployment than previously when they had a job. One study estimates that the median income increased by 46%.

Lastly, all eligible Americans up to a certain income threshold received a one-time payment of USD 1200 (children USD 500). Another USD 2000 in payments have been added this year.

All these measures combined have resulted in a massive increase in disposable income in the US in the second quarter of 2020 and beyond, despite skyrocketing unemployment. This is indicative of misallocation by itself, as the government measures more than compensated for the impact of the crisis. Thus, not only the incomes of unemployed persons have

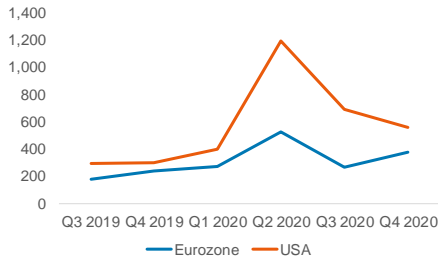
Disposable income, y/y in %



Source: Eurostat, Fred, Erste Group Research

increased sharply, but due to the one-off payments also those of households that did not suffer any economic damage as a result of the crisis, which certainly raises the question whether these measures made sense.

Savings per quarter, EUR/USD bn



Source: Eurostat, Fred, Erste Group Research

The question is all the more pertinent as spending money and thus supporting the economy was only possible to a very limited extent on account of the containment measures. As a result of this there was a vast increase in aggregate quarterly savings, which are still well above pre-crisis levels.

Thus, the inefficiency of the US stimulus programs is evident in two respects. Obviously many recipients received payments that went beyond the economic damage they suffered (if there actually was any), and at a time when this group was unable to increase its spending as numerous services were actually not accessible. Without a doubt the programs also saved many people and companies, but it appears that this could just as well have been achieved by spending less. The US overpaid for its better economy.

However, the final verdict on the US stimulus programs is not yet in. If the savings accumulated during the crisis are at least partially reduced again or if the savings rate falls below pre-crisis levels in coming quarters, the programs would have a more pronounced impact on demand. However, in that case the issue of timing would arise. US consumer demand would receive a boost after the lifting of the containment measures, when the economy is in an upswing anyway. However, in our opinion one should not expect too much, as there is little potential for catch-up effects in services.

By contrast, in the euro zone the patterns of both incomes and savings are far less erratic. For us, this is an important indication that public spending has been more successful in offsetting the effects of the crisis, even though GDP slumped severely in 2020. The inefficiency of the measures taken in the US is best summarized by the fact that despite incomes growing strongly year-on-year due to government spending, GDP still contracted - precisely because a lot of money ended up in savings accounts. In other words, from a demand perspective the stimulus fell flat.

What Will Remain of COVID-19?

The Corona crisis is coming to an end - what will remain of it? In any type of forecasting exercise one tends to place too much weight on events of the recent past. Often one actually has no choice but to resort to linear extrapolation into the future, because no better guideposts than the events of the recent past are available. This will not apply to economic forecasts this time; it is clear that with the end of the pandemic the economy will leave the plight of last year behind.

What the upswing will look like is more difficult to predict. Fears of an increase in inflation are once again making the rounds. But issues playing a less prominent role in public debate are just as important. How large will the increase in insolvencies be, and in which sectors? What does this entail for the industries concerned? Will the industries hardest hit by the crisis be able to rehire enough personnel?

Apart from these relatively specific questions for which answers will probably be forthcoming in the second half of the year, there are those one will only be able to answer in the long term. How has the crisis affected our awareness? Will the economic recovery make us want to forget the past 15 months relatively quickly and will we actually proceed to do so? Or will something remain behind?

With the impressions of the COVID-19 pandemic still vivid and deep-seated, the risk of a forecast is all the greater at this point in time. Will we remain more united, more prudent and more aware after the crisis? Probably not. The world has not changed, but the experience of the pandemic will have a lasting impact.

On the one hand, the pandemic has shown how rapidly our lives can change, but also that one can successfully adapt. We are capable of changing quickly. We didn't know that before the crisis. Working from home is possible to a large extent, as are digital meetings and events. Even if this comes with limitations, it offers new opportunities as well. New concepts of life and work will develop, which we are only at the beginning of. This will not only alter existing activities, but could be an incubator for new services which are only possible and/or efficient as a result of these new concepts.

The pandemic will also turn out to be a catalyst in many areas. Digitalization is actually not really new, but the pandemic has shown the wide range of possibilities for its use. The need to address climate change has also been known for some time. In contrast to digitalisation, the health crisis has not brought any new possibilities for the fight against climate change. However, the pandemic is definitely comparable to climate change. Both the COVID-19 pandemic and climate change are global crises, both are beset by small but very vocal minorities denying the problem, in both the extent of the economic impact varies greatly between people, in both "doing nothing" was and is not an option and both crises require behavioral change. Lastly, combating both crises costs money. So, the necessary and ultimately successful fight against the pandemic might give us more courage to seriously confront climate change.

The pandemic also highlighted the importance of government institutions. From support programs for those affected by the crisis to the health care system and the organization of vaccination campaigns, no successful fight against the pandemic would have been possible without the public sector. This experience will likely resonate for a long time and be a factor in

discussions about the responsibilities of the State in other areas as well – justifiably or not.

The COVID-19 crisis demonstrated that while global free trade has its benefits in times of abundance, in times of scarcity the very same global trade can mean dependence. At the beginning of the crisis, this became obvious in medical protective clothing, more recently in shortages of semiconductors and an astonishing increase in freight rates. The latter are likely to be temporary phenomena as well. But the experience of snarled supply chains will encourage efforts toward attaining self-sufficiency in some areas and could generally encourage protectionist tendencies in trade policy, which already began with the British Brexit decision and the election of Donald Trump. President Biden is e.g. staying the course of his predecessor with respect to trade policy toward China and is committed to promoting US industry, irrespective of COVID-19.

All in all, the Corona pandemic will have considerable repercussions. Some of these already appear to be visible, others have yet to unfold. One thing is certain - we will definitely not forget COVID-19 anytime soon.

Forecasts¹

GDP	2019	2020	2021	2022
Eurozone	1.3	-6.6	4.0	3.4
US	2.3	-3.5	6.1	3.3

Inflation	2019	2020	2021	2022
Eurozone	1.2	0.3	1.5	1.2
US	1.8	1.2	2.7	2.0

Interest rates	current	Sep.21	Dec.21	Mar.22	Jun.22
ECB MRR	0.00	0.00	0.00	0.00	0.00
3M Euribor	-0.54	-0.54	-0.54	-0.54	-0.54
Germany Govt. 2Y	-0.66	-0.70	-0.70	-0.60	-0.60
Germany Govt. 5Y	-0.57	-0.50	-0.40	-0.40	-0.40
Germany Govt. 10Y	-0.19	-0.10	0.00	0.00	0.10
Swap 10Y	0.12	0.20	0.30	0.30	0.40

Interest rates	current	Sep.21	Dec.21	Mar.22	Jun.22
Fed Funds Target Rate	0.05	0.13	0.13	0.13	0.13
3M Libor	0.13	0.20	0.20	0.20	0.20
US Govt. 2Y	0.15	0.16	0.19	0.26	0.34
US Govt. 5Y	0.81	1.00	1.00	1.10	1.20
US Govt. 10Y	1.61	2.00	2.10	2.10	2.20
EURUSD	1.22	1.18	1.20	1.20	1.22

*Mid of target range

Prices from June 2, 2021

Source: Market data providers, Erste Group Research

¹ Note: In accordance with regulations, we are obliged to issue the following statement:
Forecasts are not a reliable indicator of future performance.

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