Sunday Wrap

Happy Sunday – and I mean HAPPY Sunday,

Joe Biden won the US presidency, Kamala Harris will become the first woman to be VP, and the nightmare of the past four years' "US government TV reality show" will soon be over. The man who wanted to buy Greenland and who "fell in love" (his words) with North Korean Supreme Leader Kim Jong-un a year after having threatened in his speech to the UN to "totally destroy" North Korea (to pick just two items from Trump's endless catalogue of bizarre foreign policy ideas) will soon be gone – but to where and to do what?

I'm aware that Trump hasn't conceded defeat, and he probably won't (let alone join Biden at the inauguration), but all the major media outlets, including Fox news, have now accepted Biden's victory, and Trump's staunch supporters, including Fox commentators Hannity and Carlson and most of the GOP leadership, have gone quiet. Only a few extreme-right organizations and individuals are backing Trump's many lawsuits, which he is launching in a desperate attempt to overturn the vote count in multiple states. His chance of success is extremely small, so I think it's a waste of time to spend more time on that scenario.

So, here are my topics for today:

- **In the US: What now?**
- **And as the US "normalises", it's back to our normal work: The European Commission published its new forecast this past week, but it also stuck with its problematic approach to output gaps, with potentially serious consequences for fiscal guidance.**
- **The role of monetary policy. Following the clear and positive message from the ECB in late October, we got good news from the Bank of England and the Fed this past week – but a problematic story from an unknown ECB source.**

1. The US: What now, and what it may mean for Europe.

As noted above, I think the risk that Trump manages to overturn the election outcome is too small now for us to spend any time on it, so let's assume that Biden is inaugurated on January 20. This leaves three questions on the table: What will – and can – Biden do? What will Trump do? And what does it all mean for Europe?

First, what will, and can, Biden do as president?

The New Yorker's David Remnick sets the stage very well in yesterday's piece: "There can be no overstating the magnitude of the tasks facing Biden. If he survives whatever challenges, legal and rhetorical, that Trump throws his way in the coming days and weeks, he will begin his term facing a profoundly polarized country, one even more divided and tribal than the polls have suggested. It is a nation in which one half cannot quite comprehend the other half. He also confronts a country that is suffering from an ever-worsening pandemic, an ailing economy, racial injustice, and a climate crisis that millions refuse to acknowledge." Remnick's very read-worthy piece is here: The Biden Era Begins

Biden will enter the White House with a decent amount of political legitimacy. First, it's important to recognise that it's really hard to beat a sitting president. Last time it happened was in 1992, when Bill Clinton unseated George Bush (and what a gracious concession speech Bush delivered!) but he only did so with the considerable help of third party candidate Ross Perot. And when Ronald Reagan unseated Jimmy Carter in 1980, it followed the Iran hostage crisis and the failed rescue attempt shortly before the election. When Carter unseated Jerry Ford four years earlier, he did so to an unelected president who had pardoned disgraced Nixon.

Admittedly, Biden has won with the skin of his teeth – yet, he'll have a greater political mandate than Trump received four years ago. While the victory in the electoral college will be amazingly similar to Trump's four years ago, the turnout this year was a record high, delivering more votes to Biden (some 75 million) than any president in history, and by a record 4.0-4.5 million margin over Trump's. That said, Trump received more than 70 million votes (which is three million more than he received four years ago, and more than Obama received in 2008 and 2012), which is a reminder of the huge number of Americans who see things very differently from the other half of their fellow Americans – and the vast majority of Europeans.

As an opener for Biden's policy agenda, former Senate majority leader Tom Daschle has suggested the following five headlines for the agenda: (i) a federal plan to deal with the pandemic; (ii) a comprehensive fiscal recovery plan; (iii) policies to address the racial tensions, including via healthcare, housing and employment projects; (iv) climate change, including bringing the US back to the Paris Afford; and (v) reinstatement of the US' international status via a recommitment to multilateralism.

How much of this he can achieve will largely depend on the outcome of the re-run on January 5 of the two senate elections in Georgia. By all probability, the democrats will need to win both races for the Democratic party to gain the critical 50 senators, which makes the VP's vote decisive. It seems a tall order, but as veteran political analyst and Messina Group CEO, Mark Medish, has pointed out to me, one of the real heroes in this election was voting rights activist Stacey Abrams of Georgia, who was not only instrumental in turning Georgia blue for Biden, but also managed to deny the two GOP senate candidates a majority, leading to the run-offs. Abrams will surely be out in force again, as will two huge campaign operations directed from the federal levels.

Unless the democrats are successful in Georgia in early January, one should probably expect the GOP senators to make Biden's appointments to the cabinet a long and painful affair, leaving the government in a weak shape for possibly a long time. All the way to the mid-term elections in two years?

I'm less worried about an agreement on a fiscal stimulus plan. Politicians love fiscal stimulus, so it'll be more a battle of details (who gets the biggest tax cuts and spending allocations?) than the fiscal package itself. And here, one would think Biden – the veteran and consummate politician – would know how to navigate the art of the deal (pun intended). In other words, I very much doubt the GOP leadership in the senate will be able to remain unified on fiscal policy if Biden offers fiscal goodies to a few well selected states – and he will!

Second, what will Trump do now?

Yes, he'll leave the White House before January 20 (maybe through one of the tunnels), and there is, of course, a risk that he'll try to encourage his base to demonstrate, civil unrest or maybe even violence. But let's see. The feared intimation at the polling stations didn't really pan out.

And once gone from Washington, I can think of three (not entirely exclusive) possibilities for Trump: He clearly loves the limelight so he may start a new TV station/show to keep his base energized, be a constant nuisance for Biden, and to set the stage for a re-run in 2024. In four years, he'll be 78, which is the same age as Biden will be when he is sworn in in January. I see discussions whether Trump's son, Donald Jr, who now has political ambitions, will run, but I just can't Donald Trump give anything to anyone, including his son. (Whether Biden will run again in four years at the age of 81-82 or whether he'll hand over the mantle to Harris – or someone else - remains to be seen.) Alternatively, Trump might devote his time to the golf courses, which he obviously loves just about as much as he loves the limelight, and limit his public appearance to the occasional shows and tweets.

Either way, he'll be busy fighting multiple lawsuits himself and – reportedly - fighting off creditors as his cashflow gets stretched with repayment needs the next year or two. Could the many legal challenges he is facing possibly lead to a prison sentence during the next four years? I have no clue, of course, but he'll be busy no doubt.

Third, what does a Biden presidency mean for Europe and the world?

Without a doubt and in spite of Biden's fine words and a huge amount of goodwill around the world, the prestige and political legitimacy that comes with a democratic system is a critical factor in global leadership, and a good chunk of that has probably evaporated from the US for the foreseeable future.

But things are not all lost. Biden will take the US back to the table of multilateralism, although the US will not be able to play a role remotely like it did until quite recently. That said, for Europe, it will be good to get the US back on its side in its ambition to further integrate. On the one hand, as former Italian PM Letta tweeted, with Trump gone, European nationalists and populists have lost their megaphone. On the other hand, a second Trump term would have done wonders to the greater European ambition of integration.

For the EU's foreign policies, it will also be good to get the US back at the table, whether it's in the dealings with Russia, Turley, Iran or China – or the UK. Surely, when it comes to Brexit, the Biden victory means that the Good Friday Agreement is now safe, and Boris Johnson will therefore now need to knock his "hard-Brexit advisors" into place and get the deal done. They have just about a week to do so …. We still think it'll happen, although it will be a very limited bare-bone type of thing.

Okay, now back to more normal work….

2. The European Commission: new forecasts, but sticking with their troublesome output gap analysis which could have fiscal policy implications.

This past Thursday, the European Commission published its revised 2020-21 forecasts and introduced its outlook for 2022. The Commission is some two weeks ahead of us and four weeks ahead of the ECB in terms of adjusting its outlook following the onset of the second wave of the pandemic – but it comes at a price: Their cut-off date is October 22, so they had to use estimates for Q3, which doesn't look good at a time when forecast errors don't run in tenths of percentage points but in full, or multiple, percentage points.

That all said and given the huge uncertainties we all face now, the Commission's numbers look mostly reasonable to me, and I rather suspect that our revised forecasts for the eurozone, less so for CEE, (to be published on November 19) and the ECB's new forecast (out on December 10) won't differ materially from the Commission's new numbers.

In a nutshell, the Commission fine-tuned its 2020 GDP forecast for the eurozone to -7.8% (-7.4% for the entire EU), and lowered its expectation for the 2021 recovery to +4.2% (+4.1% for the EU), down from the +6.1% forecast in July.

To be sure, 2021 looks a little optimistic on the Commission's forecast, partly because its estimate of the positive impact of "Next Generation EU" already next year seems too great, not least for CEE. As a result, the Commission has a pick-up in growth in Q1 despite being constrained "by virus containment measures and the impact of the less beneficial trading relations with the UK." (The Commission expects UK growth to be hit harder, of course. They see this year's -10.3% followed by only +3.3% next year. It has +3.7% for the US and +7.3% for China.) Our estimate is for a slower start – and impact – of Next Generation EU and our assumptions are more likely to include higher infection numbers and lockdowns in Europe and the US in early 2021, following the lifting of several European lockdown restrictions in December in time for the Christmas season. So our present thinking is for a bit more subdued activity during the winter.

The Commission expects the (moderate) 2021 recovery to continue into 2022 with a growth rate of 3.0% for both the eurozone and the entire EU. (They have 2.1% in 2022 for the UK, 2.5% for the US, and 5.6% for China.) This would imply a European GDP level by the end of 2022 not far off the pre-pandemic level of end-2019. We are still working on our 2022 outlook, but we are broadly in the same ballpark in terms of likely growth. But with a weaker 2021, I guess it'll be well into 2023 before we get back to pre-pandemic GDP levels.

This is important because – on present policy thinking – the exceptional measures, including the ECB's PEPP and the Commission's suspension of the fiscal rules, will almost certainly remain in place until the GDP level has reached pre-crisis levels. At least that's what I understand is the present thinking in policy circles, although I would argue that they ought to remain in place until the level has reached the likely trend line from before the pandemic, i.e. where we would have been in terms of income levels had it not been for the pandemic. More on that another day.

While the Commission's forecasts are reasonable enough, and there is a lot of good stuff in there, my heart sank when I got to its discussion of output gaps. As you know, output gap estimation is based on estimates of potential output, and they are important for the assessment of fiscal policy and - ultimately - for the fiscal rules, if they come back from suspension in their present form. The Commission's approach is very problematic, analytically and policy-wise.

To remind you, there are two types of forces impacting potential output, namely the short-term cyclical stuff (during business cycle recessions some people leave the labour force and investment drops, but a lot of this reverses as the economy picks up again) and the longer term structural stuff, including demographics, productivity trends etc. Of course, as is now the hot topic, during longer (cyclical or shock-imposed) downturns, some of the decline in potential output triggered by the actual downturn may turn into longer term elimination of potential output via the so-called scarring process (hysteresis to us economists). A big part of the potential output discussion among us economists relates to how much of this short term effect becomes longer term – which is precisely the argument for a robust policy response to downturns, particularly aimed at limiting the longer term destruction of potential output.

So here's the mystery of the Commission approach: On the one hand, as noted above, they include a very optimistic estimate of the positive impact on actual growth of Next Generation EU, while also estimating a surprisingly great destruction of potential output - which lowers the output gap and will one day lead to calls for the (premature) removal of policy stimulus.

To illustrate, the Commission estimates the German output gap will decline from 5% of (the unobservable) potential GDP this year to just 1% in 2022. For France, it drops from over 8% this year to 2% in 2022, and in Italy from almost 10% this year to less than 4% in 2022. As pointed out by Philipp Heimberger of the WIIW, this implies that the Commission thinks that for every one percentage point drop in the predicted actual GDP during 2020-22, European countries lose an average whopping 0.6pp of potential output. Think about this, for a moment: More than half the drop in GDP during the lock-down would be lost forever, across transportation, hospitality etc. This would indeed be an absolutely stunning fact, if accurate, and it would be a devastating blow to the policymakers across Europe who really have done an outstanding job rolling out support programs for those hardest hit by the lockdowns.

So, is the Commission's estimate of destroyed potential output reasonable? No, that's highly unlikely.

First, one really has to question the logic of severely different output gaps in closely integrated economies. Beyond that, these estimates are nothing more than an econometric exercise that's run off track of an even simple reality check. In a nutshell, as illustrated, in the Commission's (and most others) framework, actual (projected) output impacts potential output to a very large degree. This may, or may not, be reasonable in normal times (I don't think it is, and others, particularly the IIF's Robin Brooks, have run an important campaign against the nonsense of output gap estimations since long before the pandemic), but once the devastation of the pandemic and the lockdown hit, this methodology has gone from being problematic to being outrageously misleading.

And it matters tremendously because these crazy output gap estimates will guide the Commission's views on the national fiscal room and hence fiscal policy in member states going forward. As Philipp Heimberger tweeted on Friday, there is ample evidence that the Commission's too-pessimistic view on potential output (and hence smaller output gaps) during 2010-2014 triggered highly counterproductive pro-cyclical fiscal policies which, in turn, placed a way too great burden on monetary policy, causing all the hoopla since then about negative rates, and balance sheet expansion.

Now, as this unprecedented economic shock rolls through Europe, we are - it seems from the Commission's report - at a grave risk of repeating this terrible mistake once the pandemic eases and the suspension of the fiscal rules ends, possibly already at the end of next year.

Of course, as I discussed last Sunday, the fiscal rules are being revisited, but my sense is that policymakers are not (yet) tuned in to take onboard the advice from the experts. The overwhelming input from economists is clear: the rules don't work and they do more harm than good, so fix them. I think it's fair to say that the advice ranges from the European Fiscal Board's relatively modest call for making some key adjustments to the rules to e.g. Olivier Blanchard's (et al) suggestion to replace the rules with a set of standards – and plenty of nuances in between.

My view is very close to Blanchard, but I'm afraid to say that the sense I get from the European capitals is not encouraging. If I should make a rough guess, at least half of the EU's finance ministries think that the fiscal rules should be reinstated with no, or only minor, changes once the emergency is over (presumably) at the end of next year. That said, I think there is movement in some of the most important ones, including in Berlin and Paris.

One would hope the Commission and its many outstanding economists would understand the deeply flawed analytics here, acknowledge the wrong signals they sent in recent years, and draw the appropriate policy conclusion that revisions are needed to the way their guidance of fiscal policy is formulated - even if the desired wholesale adjustment may not be politically feasible at this time.

… which, conveniently, leads me to the issue of monetary policy.

3. Monetary policy: doing the right thing, but watch out!

As I discussed last Sunday, the ECB sent all the right messages at its press conference on October 29, basically promising a comprehensive and robust new set of measures on the back of its new forecast at its December 10 meeting. This will enable them to continue to assure that monetary conditions don't tighten as a result of the new round of fiscal measures now being launched. And rightly so.

In a speech this past week, Bundesbank President Jens Weidmann endorsed this view, although (as expected) his emphasis was on the - equally reasonable - view that this subordination of monetary policy to the fiscal needs cannot remain forever. Unfortunately, Weidmann did not spell out what he sees as reasonable markers for an end to the present exceptional circumstances, and, while speaking quite a bit about inflation expectations, he didn't mention with a single word the issue of output gaps, which I thought was a bit strange, given the context.

Weidmann also worried about "fiscal dominance", which is a topic I'll address another day. I don't think anyone needs to worry about this in Europe. Had Trump somehow managed to remain president in the US, I do think it could become a concern in Washington – and in Ankara, of course, we were reminded just yesterday with the dismissal of the central bank governor of the real threat to policies, and economic stability, when an all-powerful political leader with an unusual understanding of economics don't believe in independent institutions. (If you want to discuss Turkey, please do reach out to me, or to my colleague Gokce Celik.)

Also this past week, we got the more-aggressive-than-expected policy response by the Bank of England to its revised forecast. On Thursday, the MPC voted unanimously to increase its target stock of UK government bond purchases by GBP 150bn (compared with the widely expected, including by us, GBP 100bn, while leaving the bank rate unchanged at 0.10%. The MPC decision was in reaction to its sizable revision of the GDP numbers, to (a realistic) -11% for this year, and a (still way too optimistic) +7¼% next year.

Later on Thursday, the Fed left both its policies and communication unchanged, as expected. Yet, as my colleague Daniel Vernazza noted, while understandably remaining vague given the election uncertainties, Jay Powell hinted that more action could be coming: he said that the Fed is in talks with the Treasury regarding a possible extension of its emergency lending facilities, and that the FOMC had a "useful discussion" on their options for adjusting the asset-purchase program. Presently, the Fed is buying USD 80bn of Treasuries and USD 40bn of MBS per month. As Daniel noted, Thursday's statement suggests that it will probably increase the size, and lengthen the duration of these purchases, probably at the next meeting on December 15-16.

So here's a bit of frustration: While the MPC moved unanimously to secure that monetary conditions don't tighten at this difficult time, and while the Fed explains its coordination with the Treasury (while Powell went to great length in the Q&A to assure us of the Fed's independence) and suggests that they stand ready to do more, the ECB seemed to send a bit of mixed signals this past week, or at least a lack of common cause.

As widely discussed in the market, Reuters quoted an unnamed ECB source, which suggested that if Southern Europe does not take the EU's borrowed money under the EUR 750bn program, as hinted by some in Madrid and Rome, for example, then the ECB might do less on the PEPP in December than otherwise. The argument, supposedly, was that the ECB then would worry that those countries simply borrow more themselves at these low (ECB-supported) interest rates (even if still slightly higher than what they would have to pay at the EU). By doing less PEPP, the ECB could then force them into the EU program where some policy objectives (not conditionality) would have to be articulated and followed.

Needless to say, either Reuters misunderstood a message, or someone at the ECB lost it for a moment. As BlackRock's Isabelle Mateos y Lago astutely tweeted: "Can someone point me to anywhere in ECB mandate that would provide it basis to nudge member states liability management in any direction?" It is, of course, a crazy argument, and you can safely ignore the Reuters story. But why is there anyone – anyone at all – at the ECB who would even contemplate such an idea? And if it didn't happen, the ECB should come out and deny it.

To be sure, this past week was also blessed by two excellent - and clear - speeches by Isabel Schnabel on monetary policy during the pandemic and on the risk of scars in the real economy. I think a safe bet would be that if an ECB board member of staff dares not put his or her name on a statement, let's ignore them.

And on that note, I'll walk out and watch the ongoing celebrations here of Biden's victory. I'm sure there's a lot for us Europeans (and the rest of the world) to celebrate here, but I also suspect that after being hit by the second lockdown, we really just need to get out and see other people with broadly the same values as ourselves, and to feel happy again. I know that I certainly do.

Best

Erik

Erik F. Nielsen, Global Head of CIB Research, Group Chief Economist (UniCredit Bank, London)
+44 207 826-1765
erik.nielsen@unicredit.eu

Legal Notices

Glossary

A comprehensive glossary for many of the terms used in the report is available on our website: https://www.unicreditresearch.eu/index.php?id=glossary

Disclaimer

Our recommendations are based on information obtained from or are based upon public information sources that we consider to be reliable, but for the completeness and accuracy of which we assume no liability. All information, estimates, opinions, projections and forecasts included in this report represent the independent judgment of the analysts as of the date of the issue unless stated otherwise. We reserve the right to modify the views expressed herein at any time without notice. Moreover, we reserve the right not to update this information or to discontinue it altogether without notice. This report may contain links to websites of third parties, the content of which is not controlled by UniCredit Bank. No liability is assumed for the content of these third-party websites.

This report is for information purposes only and (i) does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for any financial, money market or investment instrument or any security, (ii) is neither intended as such an offer for sale or subscription of or solicitation of an offer to buy or subscribe for any financial, money market or investment instrument or any security nor (iii) as marketing material within the meaning of applicable prospectus law . The investment possibilities discussed in this report may not be suitable for certain investors depending on their specific investment objectives and time horizon or in the context of their overall financial situation. The investments discussed may fluctuate in price or value. Investors may get back less than they invested. Fluctuations in exchange rates may have an adverse effect on the value of investments. Furthermore, past performance is not necessarily indicative of future results. In particular, the risks associated with an investment in the financial, money market or investment instrument or security under discussion are not explained in their entirety.

This information is given without any warranty on an "as is" basis and should not be regarded as a substitute for obtaining individual advice. Investors must make their own determination of the appropriateness of an investment in any instruments referred to herein based on the merits and risks involved, their own investment strategy and their legal, fiscal and financial position. As this document does not qualify as an investment recommendation or as a direct investment recommendation, neither this document nor any part of it shall form the basis of, or be relied on in connection with or act as an inducement to enter into, any contract or commitment whatsoever. Investors are urged to contact their bank's investment advisor for individual explanations and advice.

Neither UniCredit Bank AG, UniCredit Bank AG London Branch, UniCredit Bank AG Milan Branch, UniCredit Bank AG Vienna Branch, UniCredit Bank Austria AG, UniCredit Bulbank, Zagrebačka banka d.d., UniCredit Bank Czech Republic and Slovakia, ZAO UniCredit Bank Russia, UniCredit Bank Czech Republic and Slovakia Slovakia Branch, UniCredit Bank Romania, UniCredit Bank AG New York Branch nor any of their respective directors, officers or employees nor any other person accepts any liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this document or its contents or otherwise arising in connection therewith.

This report is being distributed by electronic and ordinary mail to professional investors, who are expected to make their own investment decisions without undue reliance on this publication, and may not be redistributed, reproduced or published in whole or in part for any purpose.

This report was completed and first published on 9 November 2020 at 12:05.

Responsibility for the content of this publication lies with:

UniCredit Group and its subsidiaries are subject to regulation by the European Central Bank

a) UniCredit Bank AG (UniCredit Bank, Munich or Frankfurt), Arabellastraße 12, 81925 Munich, Germany, (also responsible for the distribution pursuant to §85 WpHG). Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany.

b) UniCredit Bank AG London Branch (UniCredit Bank, London), Moor House, 120 London Wall, London EC2Y 5ET, United Kingdom. Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany and subject to limited regulation by the Financial Conduct Authority, 12 Endeavour Square, London E20 1JN, United Kingdom and Prudential Regulation Authority 20 Moorgate, London, EC2R 6DA, United Kingdom. Further details regarding our regulatory status are available on request.

c) UniCredit Bank AG Milan Branch (UniCredit Bank, Milan), Piazza Gae Aulenti, 4 - Torre C, 20154 Milan, Italy, duly authorized by the Bank of Italy to provide investment services.

Regulatory authority: "Bank of Italy", Via Nazionale 91, 00184 Roma, Italy and Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany.

d) UniCredit Bank AG Vienna Branch (UniCredit Bank, Vienna), Rothschildplatz 1, 1020 Vienna, Austria. Regulatory authority: Finanzmarktaufsichtsbehörde (FMA), Otto-Wagner-Platz 5, 1090 Vienna, Austria and subject to limited regulation by the "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany. Details about the extent of our regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht are available from us on request.

e) UniCredit Bank Austria AG (Bank Austria), Rothschildplatz 1, 1020 Vienna, Austria. Regulatory authority: Finanzmarktaufsichtsbehörde (FMA), Otto-Wagner-Platz 5, 1090 Vienna, Austria

f) UniCredit Bulbank, Sveta Nedelya Sq. 7, BG-1000 Sofia, Bulgaria. Regulatory authority: Financial Supervision Commission (FSC), 16 Budapeshta str., 1000 Sofia, Bulgaria

g) Zagrebačka banka d.d., Trg bana Josipa Jelačića 10, HR-10000 Zagreb, Croatia. Regulatory authority: Croatian Agency for Supervision of Financial Services, Franje Račkoga 6, 10000 Zagreb, Croatia

h) UniCredit Bank Czech Republic and Slovakia, Želetavská 1525/1, 140 92 Praga 4, Czech Republic. Regulatory authority: CNB Czech National Bank, Na Příkopě 28, 115 03 Praga 1, Czech Republic

i) ZAO UniCredit Bank Russia (UniCredit Russia), Prechistenskaya nab. 9, RF-119034 Moscow, Russia. Regulatory authority: Federal Service on Financial Markets, 9 Leninsky prospekt, Moscow 119991, Russia

j) UniCredit Bank Czech Republic and Slovakia, Slovakia Branch, Šancova 1/A, SK-813 33 Bratislava, Slovakia. Regulatory authority: CNB Czech National Bank, Na Příkopě 28, 115 03 Praha 1, Czech Republic and subject to limited regulation by the National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia. Regulatory authority: National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia

k) UniCredit Bank Romania, Bucharest 1F Expozitiei Boulevard, 012101 Bucharest 1, Romania. Regulatory authority: National Bank of Romania, 25 Lipscani Street, 030031, 3rd District, Bucharest, Romania

l) UniCredit Bank AG New York Branch (UniCredit Bank, New York), 150 East 42nd Street, New York, NY 10017. Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany and New York State Department of Financial Services, One State Street, New York, NY 10004-1511

Further details regarding our regulatory status are available on request.

ANALYST DECLARATION

The analyst's remuneration has not been, and will not be, geared to the recommendations or views expressed in this report, neither directly nor indirectly.

All of the views expressed accurately reflect the analyst's views, which have not been influenced by considerations of UniCredit Bank's business or client relationships.

POTENTIAL CONFLICTS OF INTERESTS

You will find a list of keys for company specific regulatory disclosures on our website https://www.unicreditresearch.eu/index.php?id=disclaimer.

RECOMMENDATIONS, RATINGS AND EVALUATION METHODOLOGY

You will find the history of rating regarding recommendation changes as well as an overview of the breakdown in absolute and relative terms of our investment ratings, and a note on the evaluation basis for interest-bearing securities on our website https://www.unicreditresearch.eu/index.php?id=disclaimer and https://www.unicreditresearch.eu/index.php?id=legalnotices.

ADDITIONAL REQUIRED DISCLOSURES UNDER THE LAWS AND REGULATIONS OF JURISDICTIONS INDICATED

You will find a list of further additional required disclosures under the laws and regulations of the jurisdictions indicated on our website https://www.unicreditresearch.eu/index.php?id=disclaimer.

E 20/1

UniCredit Research*

Macro Research

Erik F. Nielsen
Group Chief Economist
Global Head of CIB Research
+44 207 826-1765
erik.nielsen@unicredit.eu

Dr. Ingo Heimig
Head of Research Operations
& Regulatory Controls
+49 89 378-13952
ingo.heimig@unicredit.de

Head of Macro Research

Marco Valli
Head of Macro Research
Chief European Economist
+39 02 8862-0537
marco.valli@unicredit.eu

European Economics Research

Dr. Andreas Rees
Chief German Economist
+49 69 2717-2074
andreas.rees@unicredit.de

Dr. Loredana Federico
Chief Italian Economist
+39 02 8862-0534
loredanamaria.federico@unicredit.eu

Stefan Bruckbauer
Chief Austrian Economist
+43 50505-41951
stefan.bruckbauer@unicreditgroup.at

Tullia Bucco
Economist
+39 02 8862-0532
tullia.bucco@unicredit.eu

Edoardo Campanella
Economist
+39 02 8862-0522
edoardo.campanella@unicredit.eu

Walter Pudschedl
Economist
+43 50505-41957
walter.pudschedl@unicreditgroup.at

Chiara Silvestre
Economist
chiara.silvestre@unicredit.eu

Dr. Thomas Strobel
Economist
+49 89 378-13013
thomas.strobel@unicredit.de

International Economics Research

Daniel Vernazza, Ph.D.
Chief International Economist
+44 207 826-7805
daniel.vernazza@unicredit.eu

EEMEA Economics Research

Dan Bucşa
Chief CEE Economist
+44 207 826-7954
dan.bucsa@unicredit.eu

Gökçe Çelik
Senior CEE Economist
+44 207 826-6077
gokce.celik@unicredit.eu

Mauro Giorgio Marrano
Senior CEE Economist
+43 50505-82712
mauro.giorgiomarrano@unicredit.de

Artem Arkhipov
Head, Macroeconomic Analysis
and Research, Russia
+7 495 258-7258
artem.arkhipov@unicredit.ru

Hrvoje Dolenec
Chief Economist, Croatia
+385 1 6006-678
hrvoje.dolenec@unicreditgroup.zaba.hr

Dr. Ágnes Halász
Chief Economist, Head, Economics and
Strategic Analysis, Hungary
+36 1 301-1907
agnes.halasz@unicreditgroup.hu

Ľubomír Koršňák
Chief Economist, Slovakia
+421 2 4950 2427
lubomir.korsnak@unicreditgroup.sk

Anca Maria Negrescu
Senior Economist, Romania
+40 21 200-1377
anca.negrescu@unicredit.ro

Kristofor Pavlov
Chief Economist, Bulgaria
+359 2 923-2192
kristofor.pavlov@unicreditgroup.bg

Pavel Sobíšek
Chief Economist, Czech Republic
+420 955 960-716
pavel.sobisek@unicreditgroup.cz

UniCredit Research, Corporate & Investment Banking, UniCredit Bank AG, Am Eisbach 4, D-80538 Munich, globalresearch@unicredit.de
Bloomberg: UCCR, Internet: www.unicreditresearch.eu

MR 20/2

*UniCredit Research is the joint research department of UniCredit Bank AG (UniCredit Bank, Munich or Frankfurt), UniCredit Bank AG London Branch (UniCredit Bank, London), UniCredit Bank AG Milan Branch (UniCredit Bank, Milan), UniCredit Bank AG Vienna Branch (UniCredit Bank, Vienna), UniCredit Bank Austria AG (Bank Austria), UniCredit Bulbank, Zagrebačka banka d.d., UniCredit Bank Czech Republic and Slovakia, ZAO UniCredit Bank Russia (UniCredit Russia), UniCredit Bank Romania.