Sunday Wrap

A belated Happy New Year,

What a year 2022 turned out to be! But let's move on to 2023, which seems bewildering on so many fronts:

First the good news: Faced with the existential crisis of the past 75 years, and the second serious crisis in the past three, Europe has a lot to celebrate. Both the external forces which wanted to tear Europe apart (think Trump, Brexiteers and latest Putin) and the internal ones (particularly the political extreme right and nationalists) are either defeated, on their back heels or converted to the wisdom of pan-European cooperation. Meanwhile, the eurozone and Schengen expanded their memberships to now also include Croatia.

And while the reasons for the commodity price shock are truly devastating, the effects include some positive aspects. European energy consumption per GDP, already the lowest in the industrialised world, was cut further in 2022, and decades of European dependency on Russian fossil fuel has been basically eliminated in less than a year.

Meanwhile, the EU's NGEU, funded by no less than EUR 100bn raised in markets by the European Commission last year alone, is being rolled out in a spectacular fashion, with visible benefits, politically and economically. The EU funds, earmarked for structural changes, have been supplemented by huge short-term national fiscal support, made possible by the flexibility of the fiscal rules (and in the case of Germany by trickery to circumvent its own - ill-advised - national debt brake). On ECB calculations, the eurozone enjoyed total fiscal support in 2022 of a whopping 0.7pp of GDP, which has kept domestic demand broadly afloat despite the biggest hit to real income in modern times, and the greatest biggest tightening in financial conditions since 2008.

And the global economic world looks slightly better. This past Monday, my colleagues in the UniCredit Research team published their proprietary Global Leading Indicator for December, showing the strongest monthly rise – out of negative territory - for global trade since August 2020. On this indicator (which has a great track record) global trade is set to growth by about 1% annualised during the next three months or so.

This all goes to explain the better than expected economic indicators we have enjoyed in Europe this past month or two – and the rally in stock markets, bringing several indices back roughly to, or near, their end-2021 levels.

So, was 2022 just a bad dream?

Unfortunately not. 2022 is almost certainly going down in history as a major turn in the road of global affairs, including governance, trade and investment. Russia's invasion of Ukraine may be the headline for the year. But the equally important story is the stark reality that China – itself increasingly aggressive in global affairs - and many other major EM countries haven't stood against Russia's blatant violation of the UN charters and several international treaties it, itself, had signed on to.

With multilateralism as we have known it for the past 30, if not 75, years demolished, Europe needs to adjust its policy responses across the entire policy front.

On defence matters, so far so good. This past week, the EU and Nato signed their new joint declaration on the strategic partnership. Past talk of greater independent European defence capabilities seems buried by Putin's military aggression: The declaration establishes that "Nato remains the foundation of collective defence for its allies and essential Euro Atlantic security", and the planned greater European military capability "is complementary to, and interoperable with Nato".

But what about monetary, fiscal and structural policies? In today's note, I'll outline the challenges facing the ECB – and return to fiscal and structural policy challenges in the following weeks.

I see four key challenges for the ECB during 2023:

- **How to strengthen the communication to better explain its reaction function.**
- **When to stop the rate hikes and how to calibrate the reduction in the balance sheet.**
- **The desire to incorporate climate change into monetary policy – in the right way.**
- **The need to reconsider the inflation target.**

1. How to strengthen the communication to better explain the reaction function.

In my assessment, the collective ECB communication became blurred in 2022. The good communication during most of 2020-2021 was anchored in "financing conditions" as the key variable to explain their reaction function in the pursuit of the inflation target, but this term was clearly downgraded once we got into 2022.

Instead, as the thinking about the elevated inflation levels increasingly changed from "temporary supply shocks" to "partly demand driven", relatively poorly defined and unobservable terms were upgraded in the communication. We learned of the need to "normalise" rates as we were – apparently – heading towards "the neutral rate", all in the pursuit of getting to the inflation target "in a timely manner". These new terms might sound either comforting (normalisation and timely manner) or scientific (neutral rate) to the general public, but they blurred the picture for professional central bank watchers.

For rates guidance, the deterioration in communication was particularly pronounced when several Governing Council members (as opposed to the president and the Executive Board) in speeches and briefings began to outright dismiss forward-looking models altogether as useless, while emphasizing the importance of present inflation. Maybe in reaction, Philip Lane wrote his impressive blog in December on inflation, in which he insisted on the usefulness of models, rightly used and interpreted. Following the ECB December meeting's press conference, there is hope that the reaction function may have been re-anchored in forward-looking analysis.

Yet, given the dramatic change in the December forecast, one is easily left with the impression of an uncomfortable sequence as follows: About a year ago, the models were de facto replaced as the guiding vehicle for policy changes by concern about present inflation, political pressure via the tabloids and "gut feelings" – leaving us all struggling to understand the reaction function. By the time of the IMF annual meetings in Washington in October, this was the overwhelming impression I, and everyone I talked to, took away. And the "gut feeling" message was an aim for a terminal policy rate around 3.5% (and a Fed rate of 5.0%-5.5%), as I wrote in a note upon my return from Washington. By December, the models had been recalibrated and are now producing inflation forecasts for 2024 which leave many analysts (me included) with an expectation of such a policy path. In other words, did the models drive the end-point, or did the end-point drive the models?

In the process, "normalisation" of rates has been replaced by something like "whatever it takes to bring inflation to the target" (read: a tightening stance), but the "normalisation" term then popped up again as recently as the December press conference as guidance – or justification – for the reduction in the size of the balance sheet. But just like "what is a normal rate", what is "a normal" central bank balance sheet", in size or composition? I, for one, don't know, and I surely don't know what the ECB's GC thinks it is.

This leads me to the following conclusion for communication: With the ECB's desire to adjust several parameters in the monetary policy toolbox at the same time, including the policy rate and the balance sheet, and as market rates and the euro get impacted by the Fed and other major central banks, as well as markets' reading of incoming economic data, it is more important than ever to recall that financing (or financial) conditions are the sum-total of it all, and that is solely what impacts inflation.

So here's the ECB's Challenge Number One for 2023: Clarify to a greater extent what "in a timely manner" means for the time when inflation needs to be back at target (possible answer: Within two years unless we are hit by new supply shocks), and anchor the communication how to get there by discussing in much greater detail the stance and changes in "financing conditions" – while recognising that a central bank is not all-powerful when it comes to hitting a specific inflation number on a specific day…

2. When to stop the rate hikes and how to calibrate the reduction in the balance sheet.

If the ECB's GC gets internal clarity on those two questions – what is "a timely manner" and what are the "financing conditions" necessary to get it there – and if that's communicated to markets, much would be gained to answer the questions when the ECB thinks it'll end the rate hike cycle and how far the balance sheet should shrink. Uncertain as they are, and surely subject to change, these are immensely important issues to get a better grasp of for businesses and households alike.

Until then, the best guidance for the ECB's thinking on this is no doubt the forecast, published in December. And it was an eye-opener for most of us because of the significant up-revision of inflation in 2024. As far as I understand, the key reason for this revision was the input from the national central banks (which happens every June and December), many of which seemed to drive the hawkish turn last year. Several national banks estimated a much longer and more serious carry-through of the commodity price shock to core inflation, partly as the fiscal support is withdrawn, partly for pricing policies by utility companies.

In this light, it wasn't surprising to read in Isabel Schnabel's speech in Stockholm on 10 January that "we judge that interest rates will still have to rise significantly at a steady pace to reach levels that are sufficiently restrictive to ensure a timely return of inflation to our 2% medium-term target". As my colleague, Marco Valli, wrote on Friday when he revised his ECB forecast for 2023: The present message is too clear to ignore – but he kept his forecast for rate cuts in 2024, which I very much doubt the ECB is considering. If they were, they surely shouldn't hike all the way through the summer of 2023! But I think Marco is right when he forecasts a much sharper reduction in inflation than the ECB – and a weaker economy. The question is when the ECB recognises this and changes tone.

Remember, the significant turn in fiscal support this year (on ECB estimates: from +0.7pp in 2022 to an estimated -0.1pp this year, followed by a fiscal drag of some 0.3pp in each of 2024 and 2025) and the arrival later this year of the full love of the already implemented monetary tightening will very likely slow the economy. I did a scanning of the news across Europe this past week and talked to a number of small business owners, and the news – if purely anecdotal - is not great. The order books are weakening, and lays-offs are picking up at a rather worrying pace.

So, here's the ECB's Challenge Number Two for 2023: What would be the signals during 2023 that would change their mind and end the hiking cycle earlier in the summer and land on a lower terminal rate than 3.5%? I think the answer is either a dramatically faster decline in core inflation to virtually 2% and/or a measurable recession setting in. None of those seems particularly likely at this time, which means that Banque de France governor, Villeroy de Galhau's, suggestion the week before last that we may reach the terminal rate around summer (probably with a policy rate of around 3.5%) seems rather likely to me. In my assessment, this will be an excessive tightening, which ultimately will slow the economy more than necessary. And a rate cut in 2023? Forget it, short of a major shock.

3. The desire to incorporate climate change into monetary policy – in the right way.

The fight against climate change has to be led by governments via the use of primarily structural and tax policies – and God knows that they still have a long way to go to get the right policies into place!

That said, everyone in society needs to contribute, including the central banks, but should this be in terms of how to run their organisations or also via explicit policies?

The central bank community is split on this question: Fed chair, Jay Powell, has made his view clear, latest this past week: “We are not, and will not be, a climate policymaker”, adding that “without explicit congressional legislation, it would be inappropriate for us [at the Fed] to use our monetary policy or supervisory tools to promote a greener economy or to achieve other climate-based goals.” Former Bank of England governor Mervyn King is in the same boat, while more recent BoE governor, Mark Carney, is a strong advocate of an explicit role for monetary policy, as is ECB president Christine Lagarde.

In her speech on 10 January, Isabel Schnabel laid out the land for how the ECB thinks about its role, which promises to be extensive. She pointed out that the ECB has already started to integrate climate change considerations into their macroeconomic models, and added that they’ll soon publish new experimental statistical indicators related to climate change. She also said that they’ll beef-up climate risks assessments in their risk control and collateral frameworks, “including by eventually making climate-related corporate disclosures compulsory for bonds to remain eligible as collateral in our refinancing operations”.

Specifically, Schnabel said that “we are now tilting our corporate bond portfolio towards issuers with better climate scores, with a view to removing the existing bias towards emission-intensive firms” but outlined three areas which “require additional efforts”, namely:

(i) The inherent dilution of this effort as they reduce the holding of corporate bonds on their balance sheet (to be addressed by a shift from flow to stock based reduction, she said); (ii) how to handle their holding of sovereign bonds, a segment of the market with only a very small share of green bonds (two options, she said, namely to increase the share of bonds issued by supranational institutions and agencies, and “steadily reshuffle our sovereign bond portfolio towards green bonds as governments expand their supply of green bonds over time”); and (iii) an intensification “to green our lending operations, including the collateral framework” (to be addressed by limiting the share of assets issued by entities with a high carbon footprint that can be pledged as collateral by individual counterparties …[and] consider climate-related risks when determining haircuts for corporate bonds”). Her speech is highly recommended in its entirety:

Monetary policy tightening and the green transition

But here is the greater question for society: Assuming we have reliable measures for the carbon footprint of individual companies, why do our governments not use these measures to tax (or regulate them) them according to an overall assessment of how to achieve the agreed climate goals?

And here is question for the ECB, and other central bank wanting to use its tool for the greater good of climate change: With or without a proper a policy approach by our governments, is it right for the central banks to take matters into their own hand? Specifically, is the squeezing of financing in the Eurosystem of companies not meeting certain standards (established by whom?) the right way of achieving the overall goal? And while the directional effect of such squeezing is clear, how does one properly calibrate the right amount of squeezing, relative to other companies?

And what is the risk of mission-creep, politically and legally? Powell seems concerned that an explicit green agenda in policies might dilute the central bank’s focus on the overarching objective of price stability, and lead to a loss of independence. Legally, I would be surprised if the measures outlined by Schnabel will not be challenged in court by those worrying that the ECB is over-stepping its mandate. And to be fair, how does the weighing of a corporate’s exact carbon footprint in the determination of its eligibility as collateral when borrowing from the Eurosystem contribute to the overall price stability and financial stability?

So here's the ECB's Challenge Number Three for 2023: How to use its influence with the governments to get first-best green policies in place, how to support the development of more robust indicators for carbon footprints – and navigate what seems to me as a tricky challenge to the legal landscape as well-meant green policies get moulded into something defendable under the ECB's mandate.

4. The need to reconsider the inflation target.

The debate about whether the existing inflation target is appropriate has occupied academics, think-tankers, markets and policymakers for more than ten years. My view has long been that the 2% target is no longer appropriate. But I struggled to see the usefulness in raising the target – to e.g. 3%-4% - at a time when the central banks couldn't even get inflation up to the 2%. But now is different.

Here is why a 3%-4% inflation target would be better than a 2% target: As the economy goes through the massive changes necessary to adjust to the green agenda, home-sourcing in critical sectors and greater military capabilities, relative prices – including wages - between sectors will have to adjust to facilitate the necessary resource reallocation. And since most prices, particularly wages, are sticky downwards, and definitely so when one approaches zero, an average inflation rate slightly higher than 2% would facilitate these urgent changes in relative prices.

An average inflation rate of e.g. 3% would also reduce the risk of deflation during periods of shocks than did the 2% inflation target – and hence reduce the risk of central banks being chased into extraordinary policy measures, including QE and negative rates, which come with serious side-effects when employed for too long.

And, importantly, there is no evidence what-so-ever that an inflation target of e.g. 3%-4% would lead to a less stable rate of inflation (and hence less stable real interest rates) than a 2% target does – or that real GDP performs any worse with average inflation of 3%-4% than of 2%.

Former IMF Chief Economist, now at the Peterson Institute, Olivier Blanchard, has written extensively – and persuasively – about the benefits of a slightly higher inflation target. Please go read!

So, here's the ECB's Challenge Number Four for 2023: As headline inflation declines and enters the 3%-4% range (my guess is that this will happen around Q4), acknowledge that the world and the global economy have changed profoundly since the latest monetary policy review, even if it's only a couple of years back, and adjust the inflation target to a range a bit higher than 2%. And make it a range instead of a point-target to acknowledge the limitations of what can be expected from a central bank when it comes to the inflation rate in any one month or quarter.

And with that, I'll be on my way to Milan, not only for a bowl of pasta at my favourite place tonight, but also for what promises to be a fun event tomorrow morning.

Best

Erik

Erik F. Nielsen, Group Chief Economics Advisor* (UniCredit Bank, London)
+44 207 826-1765
erik.nielsen@unicredit.eu

** Erik Nielsen is an advisor to the UniCredit group and not a member of the research team. This note, however, is published and confined within the laws and regulation for research.*

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 15 January 2023 at 13:14.

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

Marco Valli
Global Head of Research,
Chief European Economist
+39 02 8862-0537
marco.valli@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
Global Head of 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

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

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

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

UniCredit Research, UniCredit Bank AG, Arabellastraße 12, D-81925 Munich, globalresearch@unicredit.de
Bloomberg: UCGR, Internet: www.unicreditresearch.eu

MR 22/3

*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.