BCR

Monthly Focus

Romania says hello to George

Motto:
" All we need is just a little patience*"*[1]

Chief Economist[2]:
Horia Braun Erdei,

+40 3735 10424
Horia.BraunErdei@bcr.ro

George has finally arrived to Romania and as we are welcoming him/her, I asked myself, how would I best describe ourselves in order to prepare George for what would come next in his/her Romanian journey. Well, the first thing that comes to mind when I look around is the lack of patience, which seems pervasive from the micro level of my children not being able to wait until Christmas to demand their gifts almost on a daily basis, to the macro level of our political leaders handing out gifts to their constituencies and failing to consider that the Christmas magic only lasts as long as there is a fool to finance their profligacy. Impatience is of course not only confined to children and governments, it is generally considered a defining trait of emerging market economies, a category that Romania broadly fits into. Such economies are characterized by lower wage levels than in the case of developed economies, which is to be explained, from an economic perspective, by a lower level of the employees' productivity. In a world characterized by free and fast circulation of information, such wage differences are obvious and they can cause particularly acute frustration for workers in emerging economies. And since there is also, at least within the EU, a free circulation of labor, such frustration sometimes ends in mass migration from emerging to developed economies and we all know Romanians are EU champions at that chapter.

Indeed, particularly for economies such as the Romanian one, which has gone through a painful and prolonged transition from a command economy to a functional market economy in the last almost 30 years, it's frustrating to still find that, for most of its residents, the light of dreamed-of prosperity is still far away and that getting there implies still more work. So I can understand that over-worked medium-income Romanians would like to see some of that prosperity handed to them today, through wage increases that exceed the advance of productivity gains (see graph 1). The case is even more relevant for pensioners, who after a lifetime of work often find themselves scrapping for help to make a decent living. I can further understand politicians playing along those tunes, as social pressure clearly exists for fast income growth, especially when the crisis argument no longer holds and the economy is trumpeted to have registered a record growth last year.

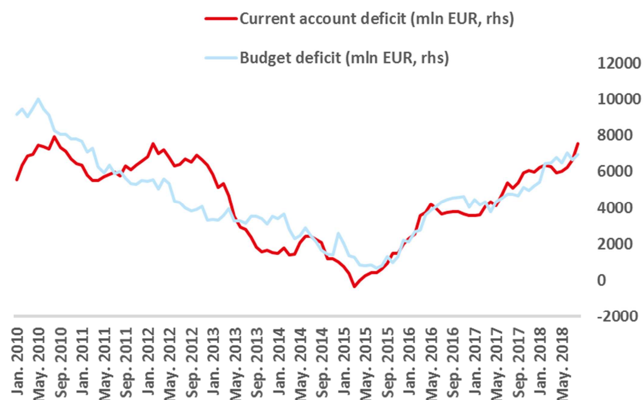
[1] From Guns N' Roses famous song „Patience".
[2] Since July 1st 2018, Horia Braun Erdei also fulfils the role of Adviser on ALM issues to the Financial Vicepresident of BCR.

Graph 1: Real wage growth exceeding productivity growth for 4 years in a row now

Source: Eurostat

With all the goodwill we can muster to understand these viewpoints, it still does not mean that the laws of economics no longer hold. And the letter of that law is that the wage rate should in equilibrium equal the marginal productivity of labor. But forget about the law and the theory, the fact of the matter is that wages are always a cost for somebody, be that an employer from the private or the public sector. If that employer cannot compensate the higher cost through improved revenues, it means he/she has to eat into its surplus, i.e. if we are talking about a business, to diminish its profits or to find other ways to make cost savings. Failing to do that, he/she will run into losses or deficits. If we view Romania as a business, this is exactly what it looks like: if Graph 1 showed the excess wage growth over productivity gains, Graph 2 shows the consequences in terms of the fast rising deficits, that of the current account of the balance of payments and that of the general consolidated budget.

Graph 2: Romania's twin deficits in expansionary mode



Source: NBR, Ministry of Finance

The problem with the deficits is that somebody has to finance them, often times running the risk of not being paid back. Now we know that

there are plenty of generous fools in the world, but, as a quote attributed to Abraham Lincoln wisely puts it: “You can fool all the people some of the time and some of the people all the time, but you cannot fool all the people all the time”. We also know that countries are not businesses and that they routinely run deficits and some of them even large debt overhangs. Still, that doesn’t mean they are doing so at no cost. Two recent examples should suffice: Turkey which has been running a large current account deficit (in excess of 6% of GDP) has had to pay the cost through the harsh year-to-date depreciation of its currency by more than half of its value vs USD. The other one is that of Italy, which for a meagre revision of its 2019 budget deficit target by 0.6% of GDP was forced by the market to pay an extra 0.7% in annual interest. That is an extra cost of deficit financing of 300 million EUR a year, a bill issued by markets in a matter of days.

This is all plain vanilla stuff for economists and financial market participants. It seems to be also for (some) Finance Ministry officials, otherwise the official letter sent to the European Commission in response to its requirements for fiscal adjustment would not pledge a freezing of wages in the public sector next year. However, another thing George has to learn about Romania is the double face of government officials that is almost schizophrenic. There is one message for the European officials and another one for the local general public. With respect to the latter, on the one hand, we have the Finance Minister himself declaring the letter sent to the European Commission does not equate to a commitment, but it is rather “a scenario”. On the other hand, the government has no problems pushing in Parliament a public pensions law which involves huge budget liabilities, both in the near and the longer term future, without ever stating where their funding will come from. At the same time, as if implying that higher wages in the public sector is a cost but for the private sector it shouldn’t be a problem, the government is pushing for earlier hike in minimum wages. They even have a nice paper to document the measure, which unfortunately only states the benefits of the measure: higher GDP growth, including higher potential GDP (this is a first!), a reduction of informal economy, higher youth employment, lower poverty and income inequality and even higher productivity (the so called efficiency wage theory). All that for a meagre cost in terms of higher inflation of 0.05% (per 1% net wage growth). Besides the inflated benefits and the estimations that are different from our own[3], what is clearly missing is the impact on firms’ competitiveness, especially in the case of manufacturing firms which operate in sectors where commercial margins are quite slim and competition is high, firms which are still responsible for a significant share of our exports. While it is true that over the long run we should not be relying on such sectors too much, because we no longer want to be exporters of cheap labor force, until we are in a position to boost exports of high value added products (by investing in infrastructure and human capital), we should have… patience. That is not to rush in killing the small, not-too-profitable businesses, which are nevertheless responsible for a high share of the employment. Patience is also a key ingredient for

[3] Our estimate of the inflation impact is actually double of that stated in the Prognosis and Strategy Commission’s document. Also, it’s interesting how the PSC can square the estimation of a minimum wage hike similar to the one in 2018 having a 0.8 pp impact on economic growth in 2019, when the evidence for this year is that of a fast decelerating consumption and economic growth to almost half of that from 2017 (that is of course if one believes in the figures of the National Statistics Institute rather than the 5.5% growth forecasts of the same PSC).

the concept of efficiency wages to work in practice, since it takes time for businesses to invest in order to boost the productivity of employees.

But since it is patience the very thing that we lack, there is another nice economic theory which says that, in case of a country where consumers are impatient, interest rates should be generally higher. The intuition is simple: consumers will consume more today because they are impatient, but since they run into budget constraints, in order to fund their consumption they demand more and more financing from markets, but at an increasing cost since (supposedly) the supply of capital is limited. In Romania, we have had a glimpse of such rise in interest rates happening in the past 13 months, but more recently interest rates – apart from some liquidity driven spikes – have become more stable. Also, consumer impatience is partly being tackled by the central bank through extra, prudential measures, which will be limiting the level of households' bank indebtedness. Our current outlook thus no longer points to similar or higher increases in interest rates. The underlying assumption is however that the scarcity of the capital supply does not hold in the short term. Global financial markets are still awash with liquidity and money chasing high yields in exchange for reasonable risks. And Romania, as part of the EU and having started 3 years ago from a very stable and healthy macroeconomic situation, can still provide a reasonable level of risk for the moment. Its current account deficit and its budget deficit can still be easily financed in the markets and through official (EU fund) inflows.

But if we continue on this path of government inspired impatience the balance can easily be tipped over. This can be all the more the case if global liquidity conditions and risk attitudes will change and the recent market turmoil, partly related to the spectre of higher wage inflation in the US, has given us a taste of what might come: higher volatility, a re-pricing of global inflation risk and an exacerbated prudence when investing in risky assets. Under such careful market scrutiny, the reckoning time for our current excesses will come. We therefore believe that it will become crucial to pass a first litmus test by the way in which we will handle the next year's budget draft and the pension law. And remember, it is not only the markets and the European Commission watching. It is also our new-found friend, George.

Macro Monitor

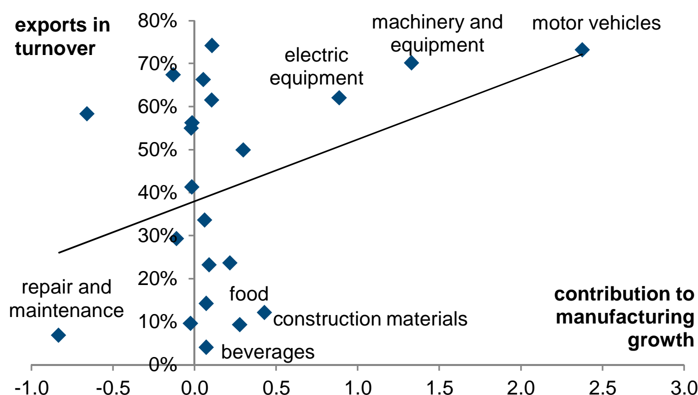
Senior analyst
Eugen Sinca,

+40 3735 10435
eugen.sinca@bcr.ro

Slower we go

Monthly indicators about economic activity in August were among the weakest since the beginning of this year, although in some cases, like retail sales, the soft patch was explained by a statistical effect, namely very strong growth in August last year. This bodes ill for the flash estimate of real GDP for 3Q18 due on November 14, our forecast being close to 3% y/y, the slowest pace of quarterly real GDP in y/y terms in four years. Agriculture could be a saving grace for 3Q18 economic growth, with the preliminary data showing an increase of the yield per hectare for maize of 28% vs. 2017.

Graph 3: Contribution to y/y growth of manufacturing by individual sectors, January-August 2018 (pp)



Source: NIS, BCR Research

A key question that arises is whether the current weakness of economic activity is due to domestic or external factors. Slower growth of manufacturing (+5.5% y/y cumulative growth in January-August 2018 vs. +7.4% y/y cumulative growth in January-August 2017) is explained mainly by weak demand for industries strongly geared towards the domestic market. As we can see in the chart above, the evolution of industries like repair and maintenance, food, beverages, manufacturing of non-metallic construction materials was very weak in the first eight months of 2018. This contrasts with the performance of industries oriented towards foreign markets, like motor vehicles, machinery and equipment and electric equipment.

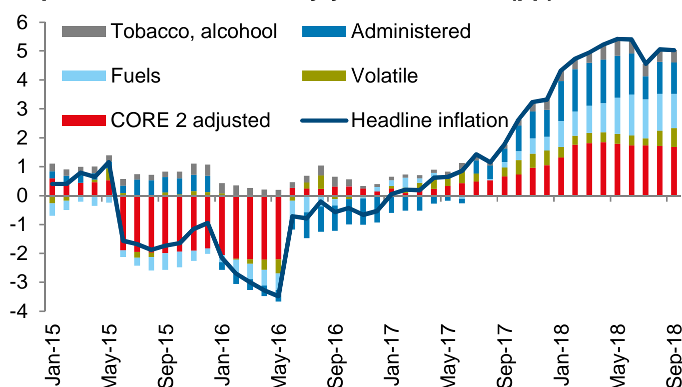
Negative results in the constructions sector (-10.3% y/y in August) can be read in the same way, namely limited local resources available for infrastructure investments along with the fading intention of the population to buy new houses. Retail trade (+1.5% y/y in August) adds to the picture of a domestically-driven economic slowdown, once the effects of the fiscal stimulus wear off.

Disappointing data released at the end of October about business activity in the Eurozone is worrisome for Romania's short-term growth. The decline of the Composite Markit PMI to a two-year low after spillovers from the trade war began to produce visible effects in the European manufacturing and services, which could feed into a further weakening of the local economy.

Inflation rate – not so fast towards the target

After the release of the September inflation data, we revised our inflation forecast for end-2018 to 3.8% y/y, from 3.5%. This means that the NBR will no longer reach its target this year and a more stable reentering of inflation inside the target band will only take place in 2H19. The top inflationary drivers will remain more or less the same as during the past year, when 2/3 of the inflation rate was due to volatile prices, administered prices, fuels, tobacco and alcohol. The much talked about household consumption has so far proved to have had little impact on the inflation rate and supply-side factors dominated the overall picture.

Graph 4: Contributions to y/y inflation rate (pp)



Source: BCR Research calculations based on NIS data

We see the NBR keeping the policy rate unchanged at the final MPC meeting for 2018 in November, but next year will bring hikes probably as early as in 1Q19. On top of the stubbornly high inflation, where supply-side shocks could boost inflation expectations, the monetary policy of the ECB will gradually begin to play a greater role in the calibration of the NBR's own monetary policy, especially once the first rate hike in the Eurozone comes nearer.

Bond monitor

Senior analyst
Eugen Sinca,

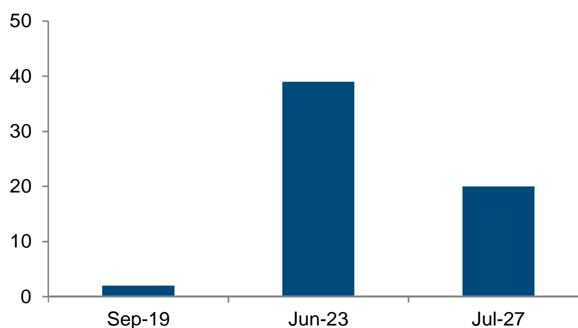
+40 3735 10435
eugen.sinca@bcr.ro

RON bond yields headed north during the last month, with the mid part of the yield curve (maturities between three and five years) seeing the steepest increases, to the tune of around 40 bps. Long-term bonds were probably shielded by a more benign Emerging Markets environment and a low investor positioning, rising by around 20-30 bps, while short-term yields were even more resilient. In their case, the global risk shock came against the background of improving liquidity conditions due to NBR's repo interventions and amidst receding expectations of further policy rate hikes, due to a more benign inflation outlook.

In Europe, meanwhile, October was yet another example of flight to safety, with a widening yield spread between German bunds and Italian government bonds as fiscal worries again came under the spotlight. But while the saga of the Italian budget and the response of the EC seem only to be beginning, the Romanian government chose a non-confrontational path and informed the EC that it plans to take a series of

measures on the expenditure side in 2019, although details were scarce and subsequent political statements made the whole picture look ambiguous. Equally true, it is hard to discern at present the impact of the loose fiscal and wage policy on RON bond yields, since the ample liquidity provided by the ECB and favorable investor sentiment supported local bonds in recent years, sending fiscal worries to the background. It is interesting by the way to see how the Ministry of Finance weathered an otherwise turbulent October, managing to issue an amount by more than 30% higher than its initial plan in a number of successful auctions which saw an average bid-to-cover higher than 2 times.

Graph 5: RON bond yields during the last month according to their maturity (bps)



Source: Reuters, BCR Research

Macro forecasts

	2011	2012	2013	2014	2015	2016	2017	2018f	2019f
Real economy									
GDP - %, y/y real change	2.0	2.1	3.5	3.4	3.9	4.8	7.3	3.8	3.4
GDP - RON bn	559	594	636	669	713	765	859	944	1007
GDP per capita - EUR thou.	6.5	6.6	7.2	7.5	8.1	8.6	9.6	10.4	11.0
Household consumption - %, y/y	1.6	1.6	2.0	4.2	5.9	8.3	10.1	4.9	4.0
Industrial production - % y/y	7.5	2.4	7.8	6.1	2.7	1.7	8.2	4.0	3.5
Retail sales - %, y/y	4.4	4.1	0.5	6.4	8.9	13.5	10.7	6.0	4.0
External sector									
Exports of goods, FOB - EUR bn.	45.3	45.1	49.6	52.5	54.6	57.4	62.6	68.3	72.7
Imports of goods, CIF - EUR bn.	55.0	54.7	55.3	58.5	63.0	67.4	75.6	82.8	87.9
Trade balance goods, FOB - CIF, % of GDP	-7.3	-7.2	-4.0	-4.0	-5.2	-5.8	-6.9	-7.2	-7.1
C/A balance - % of GDP	-5.0	-4.8	-1.1	-0.7	-1.2	-2.1	-3.3	-3.8	-4.1
Prices									
CPI - y/y (%)	3.1	5.0	1.6	0.8	-0.9	-0.5	3.3	3.8	2.8
CPI - average (%)	5.8	3.3	4.0	1.1	-0.6	-1.5	1.3	4.7	3.3
Labour market									
Unemployment rate - %	7.2	6.8	7.1	6.8	6.8	5.9	4.9	4.6	4.8
Net nominal wages - RON	1,475	1,547	1,622	1,706	1,848	2,088	2,384	2,703	2,974
Net wages - %, nominal	4.8	4.9	4.8	5.2	8.3	13.0	14.2	13.4	10.0
Public sector									
Fiscal deficit - % of GDP (Eurostat)	-5.4	-3.7	-2.2	-1.3	-0.8	-3.0	-2.9	-3.3	-3.0
Public debt - % of GDP (Eurostat)	34.0	36.9	37.6	39.1	37.7	37.1	35.0	35.2	35.8
Interest rates									
Policy rate, eop	6.00	5.25	4.00	2.75	1.75	1.75	1.75	2.50	3.00
ROBOR 3M - %, avg	5.8	5.3	4.2	2.5	1.3	0.8	1.2	2.7	3.2
10y bond yields, %, eop	7.3	6.4	5.3	3.6	3.7	3.5	4.3	5.2	5.4
FX rate									
EUR/RON eop	4.32	4.43	4.48	4.48	4.52	4.54	4.66	4.68	4.77
USD/RON eop	3.34	3.36	3.25	3.69	4.27	4.30	3.89	4.14	4.04

Source: NBR, Eurostat, INS, Ministry of Finance, Reuters, BCR Research

Macro and Fixed Income:

Horia Braun-Erdei	+4 (021) 312 67 73/10424	Horia.BraunErdei@bcr.ro
Florin Eugen Sinca	+4 (021) 312 67 73/10435	Eugen.Sinca@bcr.ro
Dorina Ilasco	+4 (021) 312 67 73/10436	Dorina.Ilasco@bcr.ro

Contacts

Group Research

Head of Group Research
Friedrich Mostböck, CEFA +43 (0)5 0100 11902

Major Markets & Credit Research
Head: Gudrun Egger, CEFA +43 (0)5 0100 11909
Ralf Burchert, CEFA (Agency Analyst) +43 (0)5 0100 16314
Hans Engel (Senior Analyst Global Equities) +43 (0)5 0100 19835
Christian Enger, CFA (Covered Bonds) +43 (0)5 0100 84052
Margarita Grushanina (Economist AT, Quant Analyst) +43 (0)5 0100 11957
Peter Kaufmann, CFA (Corporate Bonds) +43 (0)5 0100 11183
Stephan Lingnau (Global Equities) +43 (0)5 0100 16574
Carmen Riefler-Kowarsch (Covered Bonds) +43 (0)5 0100 19632
Rainer Singer (Senior Economist Euro, US) +43 (0)5 0100 17331
Bernadett Povazsai-Römhild (Corporate Bonds) +43 (0)5 0100 17203
Elena Statelov, CIIA (Corporate Bonds) +43 (0)5 0100 19641
Gerald Walek, CFA (Economist Euro, CHF) +43 (0)5 0100 16360

Macro/Fixed Income Research CEE
Head CEE: Juraj Kotian (Macro/FI) +43 (0)5 0100 17357
Zoltan Arokszallasi, CFA (Fixed income) +43 (0)5 0100 18781
Katarzyna Rzentarzewska (Fixed income) +43 (0)5 0100 17356

CEE Equity Research
Head: Henning Eßkuchen +43 (0)5 0100 19634
Daniel Lion, CIIA (Technology, Ind. Goods&Services) +43 (0)5 0100 17420
Michael Marschallinger +43 (0)5 0100 17906
Christoph Schultes, MBA, CIIA (Real Estate) +43 (0)5 0100 11523
Vera Sutedja, CFA, MBA (Telecom, Steel) +43 (0)5 0100 11905
Thomas Unger, CFA (Banks, Insurance) +43 (0)5 0100 17344
Vladimira Urbankova, MBA (Pharma) +43 (0)5 0100 17343
Martina Valenta, MBA +43 (0)5 0100 11913

Editor Research CEE
Brett Aarons +420 956 711 014

Research Croatia/Serbia
Head: Mladen Dodig (Equity) +381 11 22 09178
Head: Alen Kovac (Fixed income) +385 72 37 1383
Anto Augustinovic (Equity) +385 72 37 2833
Milan Deskar-Skrbic (Fixed income) +385 72 37 1349
Magdalena Dolenec (Equity) +385 72 37 1407
Ivana Rogic (Fixed income) +385 72 37 2419
Davor Spoljar, CFA (Equity) +385 72 37 2825

Research Czech Republic
Head: David Navratil (Fixed income) +420 956 765 439
Head: Petr Bartek (Equity) +420 956 765 227
Jiri Polansky (Fixed income) +420 956 765 192
Michal Skorepa (Fixed income) +420 956 765 172
Jan Sumbera (Equity) +420 956 765 218
Jan Žemlička (Fixed income) +420 956 765 456

Research Hungary
Head: József Miró (Equity) +361 235 5131
András Nagy (Equity) +361 235 5132
Orsolya Nyeste (Fixed income) +361 268 4428
Zsombor Varga (Fixed income) +361 373 2830
Tamás Pletser, CFA (Oil&Gas) +361 235 5135

Research Poland
Director of Research: Tomasz Duda (Equity) +48 22 330 6253
Cezary Bernatek (Equity) +48 22 538 6256
Konrad Grygo (Equity) +48 22 330 6254
Mateusz Krupa (Equity) +48 22 330 6251
Emil Poplawski (Equity) +48 22 330 6252

Research Romania
Head: Horia Braun-Erdei +40 3735 10424
Caius Raoanu (Equity) +40 3735 10441
Eugen Sinca (Fixed income) +40 3735 10435
Dorina Ilasco (Fixed Income) +40 3735 10436

Research Slovakia
Head: Maria Valachyova, (Fixed income) +421 2 4862 4185
Katarina Muchova (Fixed income) +421 2 4862 4762

Research Turkey
Ender Kaynar (Equity) +90 212 371 2530
Umut Cebir (Equity) +90 212 371 2537

Treasury - Erste Bank Vienna

Group Markets Retail Sales
Head: Christian Reiss +43 (0)5 0100 84012

Markets Retail Sales AT
Head: Markus Kaller +43 (0)5 0100 84239

Group Markets Execution
Head: Kurt Gerhold +43 (0)5 0100 84232

Retail & Sparkassen Sales
Head: Uwe Kolar +43 (0)5 0100 83214

Corporate Treasury Product Distribution AT
Head: Christian Skopek +43 (0)5 0100 84146

Fixed Income Institutional Sales

Group Securities Markets
Head: Harald Müller +43 (0)5 0100 84890

Institutional Distribution non CEE
Head: Jaromir Malak +43 (0)5 0100 84254
Bernd Bollhof +49 (0)30 8105800 5525
Charles-Henry La Coste de Fontenilles +43 (0)5 0100 84115
Rene Klasen +49 (0)30 8105800 5521
Christopher Lampe-Traupe +49 (0)30 8105800-5507
Thomas Rakosi +43 (0)5 0100 84116
Karin Rattay +43 (0)5 0100 84118
Bernd Thaler +43 (0)5 0100 84119

Bank Distribution
Head: Marc Friebertshäuser +49 (0)711 810400 5540
Sven Kienzle +49 (0)711 810400 5541
Michael Schmotz +43 (0)5 0100 85542
Ulrich Inhofner +43 (0)5 0100 85544
Klaus Vosseler +49 (0)711 810400 5560
Andreas Goll +49 (0)711 810400 5561
Mathias Gindele +49 (0)711 810400 5562

Institutional Distribution CEE
Head: Jaromir Malak +43 (0)5 0100 84254

Institutional Distribution PL and CIS
Pawel Kielek +48 22 538 6223
Michal Jarmakowicz +43 50100 85611

Institutional Distribution Slovakia
Head: Sarlota Sipulova +421 2 4862 5619
Monika Smelikova +421 2 4862 5629

Institutional Distribution Czech Republic
Head: Ondrej Cech +420 2 2499 5577
Milan Bartos +420 2 2499 5562
Barbara Suvadova +420 2 2499 5590

Institutional Asset Management Czech Republic
Head: Petr Holecek +420 956 765 453
Martin Perina +420 956 765 106
Petr Valenta +420 956 765 140
David Petracek +420 956 765 809
Blanca Weinerova +420 956 765 317

Institutional Distribution Croatia
Head: Antun Buric +385 (0)7237 2439
Željko Pavičić +385 (0)7237 1494
Natalija Zujic +385 (0)7237 1638

Institutional Distribution Hungary
Head: Peter Csizmadia +36 1 237 8211
Attila Hollo +36 1 237 8209
Gabor Balint +36 1 237 8205

Institutional Distribution Romania and Bulgaria
Head: Ciprian Mitu +43 (0)50100 85612
Crisitan Adascalita +40 373 516 531

Group Institutional Equity Sales
Head: Brigitte Zeitlberger-Schmid +43 (0)50100 83123
Werner Fürst +43 (0)50100 83121
Josef Kerekes +43 (0)50100 83125
Cormac Lyden +43 (0)50100 83120

Business Support
Bettina Mahoric +43 (0)50100 86441

Disclaimer

This publication was prepared by Erste Group Bank AG or any of its consolidated subsidiaries (together with consolidated subsidiaries "Erste Group") independently and objectively as other information pursuant to the Circular of the Austrian Financial Market Authority regarding information including marketing communication pursuant to the Austrian Securities Supervision Act. This publication serves interested investors as additional source of information and provides general information, information about product features or macroeconomic information without emphasizing product selling marketing statements. This publication does not constitute marketing communication pursuant to Art. 36 (2) Austrian Securities Supervision Act as no direct buying incentives were included in this publication, which is of information character. This publication does not constitute investment research pursuant to § 36 (1) Austrian Securities Supervision Act. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research and it is not subject to the prohibition on dealing ahead of the dissemination of investment research. The information only serves as non-binding and additional information and is based on the level of knowledge of the person in charge of drawing up the information on the respective date of its preparation. The content of the publication can be changed at any time without notice. This publication does not constitute or form part of, and should not be construed as, an offer, recommendation or invitation to subscribe for or purchase any securities, and neither this publication nor anything contained herein shall form the basis of or be relied on in connection with or act as an inducement to enter into any contract or inclusion of a security or financial product in a trading strategy. Information provided in this publication are based on publicly available sources which Erste Group considers as reliable, however, without verifying any such information by independent third persons. While all reasonable care has been taken to ensure that the facts stated herein are accurate and that the forecasts, opinions and expectations contained herein are fair and reasonable, Erste Group (including its representatives and employees) neither expressly nor tacitly makes any guarantee as to or assumes any liability for the up-to-dateness, completeness and correctness of the content of this publication. Erste Group may provide hyperlinks to websites of entities mentioned in this document, however the inclusion of a link does not imply that Erste Group endorses, recommends or approves any material on the linked page or accessible from it. Neither a company of Erste Group nor any of its respective managing directors, supervisory board members, executive board members, directors, officers of other employees shall be in any way liable for any costs, losses or damages (including subsequent damages, indirect damages and loss of profit) howsoever arising from the use of or reliance on this publication. Any opinion, estimate or projection expressed in this publication reflects the current judgment of the author(s) on the date of publication of this document and do not necessarily reflect the opinions of Erste Group. They are subject to change without prior notice. Erste Group has no obligation to update, modify or amend this publication or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. The past performance of securities or financial instruments is not indicative for future results. No assurance can be given that any financial instrument or issuer described herein would yield favorable investment results or that particular price levels may be reached. Forecasts in this publication are based on assumptions which are supported by objective data. However, the used forecasts are not indicative for future performance of securities or financial instrument. Erste Group, its affiliates, principals or employees may have a long or short position or may transact in the financial instrument(s) referred to herein or may trade in such financial instruments with other customers on a principal basis. Erste Group may act as a market maker in the financial instruments or companies discussed herein and may also perform or seek to perform investment services for those companies. Erste Group may act upon or use the information or conclusion contained in this publication before it is distributed to other persons. This publication is subject to the copyright of Erste Group and may not be copied, distributed or partially or in total provided or transmitted to unauthorized recipients. By accepting this publication, a recipient hereof agrees to be bound by the foregoing limitations.

© Erste Group Bank AG 2018. All rights reserved.

Published by:

Erste Group Bank AG
Group Research
1100 Vienna, Austria, Am Belvedere 1
Head Office: Wien
Commercial Register No: FN 33209m
Commercial Court of Vienna

Erste Group Homepage: www.erstegroup.com