

Real Estate EUR Corporate Bond Market

Liquidity on the real estate bond market has increased significantly in recent years. Around half of the outstanding bonds have IG ratings with benchmark qualities. The growth trend for green bonds is likely to continue

Analyst:

Elena Statelov, CIIA
elena.statelov@erstegroup.com

Will the recovery come in 2024?

The market for EUR real estate corporate bonds has grown strongly in recent years. This has enabled real estate companies to extend their financial liabilities and diversify their financing portfolios. After peaking in 2021, the primary market has been overshadowed over the last two years by the war in Ukraine and the ECB's restrictive monetary policy. In our opinion, access to the capital market is likely to remain tight for real estate companies in 2024. This is because the attractiveness of the real estate sector is currently suffering from the economic slowdown as a result of global economic and political uncertainties and the still high level of interest rates.

Contents

Will the recovery come in 2024?.....	1
Real Estate Corporate Bond Market.....	2
Development of Risk Premiums.....	4
Financial challenges.....	5
Relative valuation	7

The EU's sustainability efforts are shaping the real estate issuance market. The proportion of ESG placements has risen steadily since 2011, reaching around 40% of the total volume by 2024 (YTD), and the momentum remains upward. Green bonds are the most common form within the ESG categories.

Major Markets & Credit Research
Gudrun Egger, CEFA (Head)

Sub-Sovereigns & Agencies
Ralf Burchert, CEFA

Financials & Covered Bonds
Heiko Langer
Carmen Riefler-Kowarsch

Corporate Bonds
Peter Kaufmann, CFA
Bernadett Povazsai-Römhild, CEFA, CESGA
Elena Statelov, CIIA

Note: Information on past performance is not a reliable indicator of future performance.

Conditions on the real estate market have changed radically since 2022. The ECB's drastic and rapid increase in interest rates led to higher borrowing costs, while the sharp decline in transactions resulted in devaluations of real estate portfolios. The expected easing of the ECB's monetary policy should provide positive stimulus for the debt-intensive real estate economy. We expect the first interest rate cuts in June. Nevertheless, we consider the current low spreads to be excessive and expect slight upward pressure this year.

However, if sentiment continues to brighten, the investment grade real estate sector offers potential compared to the non-financial sectors. However, it remains to be seen whether 2024 will see the start of a recovery in the real estate sector. Many challenges still remain.

According to Moody's, the still relatively high (re)financing costs will pose the greatest risk to the credit quality of real estate issuers over the next 12-18 months, as the high interest rate level is not yet fully reflected in real estate valuations. Issuers' interest coverage ratios will remain under pressure and debt levels are likely to rise. However, the still relatively low refinancing requirements of real estate issuers in 2024 remain supportive.

Real Estate Corporate Bond Market

Rising issuing momentum was recently slowed by the war in Ukraine and the restrictive monetary policy

The EUR issue volume in the real estate sector, which is part of the financial segment, has risen significantly in recent years. While bonds worth just EUR 10bn were placed in 2012, the issue volume reached EUR 84bn in 2021. The low interest rate phase (2014-2021) undoubtedly contributed to this, which companies used to strengthen their liquidity and extend the maturity profiles of their financial liabilities. Issuance activity was overshadowed by the war in Ukraine and the restrictive monetary policy over the last two years, meaning that it was significantly below the long-term average in 2022 and especially in 2023.

Primary market reaches its peak in 2021

EUR issue volume in bn



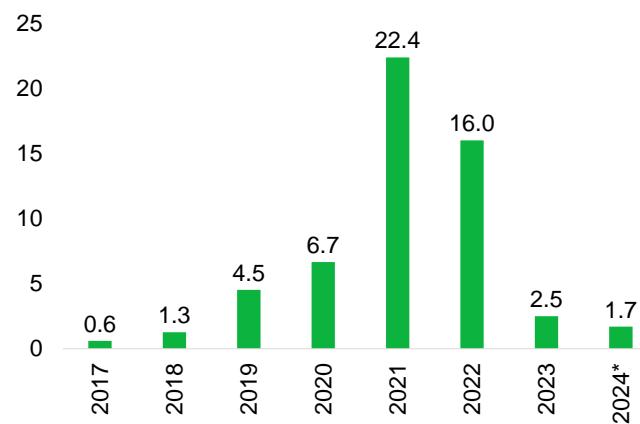
* As of: 15.3.2024

Source: Market data provider, Erste Group Research

Growth trend in sustainability-related bonds likely to continue; green bonds remain the most common form

ESG-bonds are gaining in importance

Issue volume of EUR ESG-Real Estate in bn



* As of: 15.3.2024

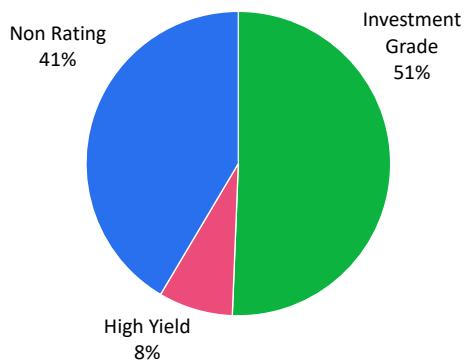
Source: Market data provider, Erste Group Research

The EU's sustainability efforts are shaping the real estate market and thus the issuing market for sustainability-related bonds. This has successfully established itself in recent years. While only a single green bond with a volume of EUR 600mn was issued by French real estate group Icade (BBB+ stable) in 2017, real estate issuers have been able to enter the primary market on a larger scale in recent years in particular. In 2022, the proportion of sustainability-related bonds even exceeded that of conventional bonds for the first time. Within the ESG categories, green bonds, whose issue proceeds are used exclusively to (re)finance existing or new projects with environmental benefits, remain the most common form. This is also due to the fact that real estate groups are increasingly redeeming their conventional bonds if their existing real estate portfolios have already been renovated or modernized in terms of energy efficiency. Green bonds have now become the standard for new real estate projects that meet the green assets criteria. The average 5Y green bond ratio is around 27%. As demand for sustainable investment solutions from investors (including insurers, pension funds and banks) is increasing, the trend towards green real estate financing is also likely to remain high. By mid-March 2024, the green ratio had reached around 40%.

High number of benchmark issues increases liquidity on the real estate bond market

In total, the outstanding volume of EUR real estate bonds reached around EUR 370bn as at the end of February 2024. Broken down by rating category, around half of the bonds have investment grade (IG) ratings and only a small proportion (8%) have speculative ratings (High Yield, HY). Of the IG bonds, over 80% or EUR 158.2bn are currently benchmark-eligible (issue volumes of at least EUR 500mn), which significantly increases liquidity on the real estate bond market. The share of the top 5 issuers accounts for around 33% of the total IG benchmark volume. Unibail-Rodamco-Westfield and Vonovia are the most active issuers on the EUR real estate market with a share of 11% each.

Rated bonds dominate the overall EUR market
Share of outstanding volume by rating category



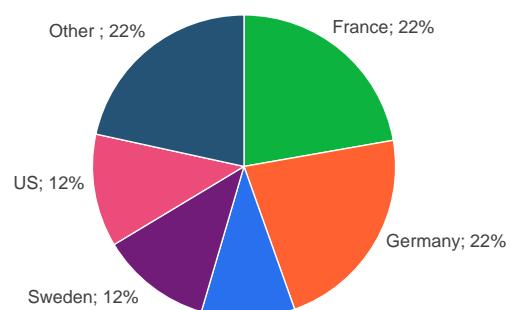
Source: Market data provider, Erste Group Research

Big 5 countries account for almost 80% of the total market

Austria: a small market with great ESG potential

CEE market concentrated on a few countries

FR and DE determine the overall EUR market
Share of outstanding volume by country



Source: Market data provider, Erste Group Research

The overall market is currently concentrated in five countries, which together account for around 80% of the outstanding volume on the secondary market. France and Germany lead the overall market with a combined market share of 44%.

In contrast, Austria represents a small issuance market with a share of around 1% of the total EUR volume or just under EUR 3.5bn. The major Austrian issuers include CA Immo (Baa3 neg, corporate bonds with a total value of around EUR 1bn, of which 35% green ratio), S Immo (no rating, corporate bonds with a total value of around EUR 570mn; green ratio 50%), UBM (no rating, corporate bonds with a total value of around EUR 440mn, green ratio 11%) and Immofinanz (no rating, corporate bonds with a total value of around EUR 238mn, green ratio 0%). For analyses of some of the major Austrian issuers included in our coverage list, please refer to our publication "[Corporate Credit Monitor Austria](#)" (only available in German).

Of the CEE countries, the Czech Republic, Poland and Romania are currently the main players in the EUR bond market, accounting for around 4% (just under EUR 8bn). For more information, please refer to our special report: "[The CEE Corporate Bond Market: Facts & Figures](#)".

Development of Risk Premiums

Significant increase in refinancing risk

Conditions on the real estate market have changed radically since 2022. The drastic and rapid increase in interest rates by the ECB has led to higher borrowing costs and a fall in property values. Since July 2022, the deposit rate has been raised ten times and is currently at 4.0% (base rate = 4.5%). The rapidly rising interest rates thus put pressure on the capitalization rates for property valuations, which can be interpreted as an indicator of the risk and profitability of a property investment or reflect an investor's return expectations.

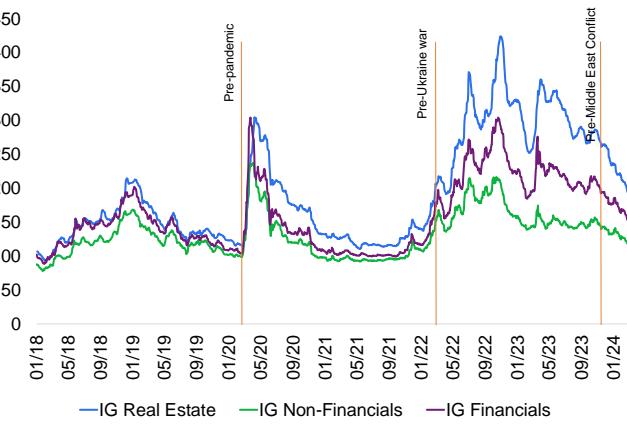
Perspective of falling key interest rates remains spread driver

After the increased volatility caused by the uncertainty surrounding the consequences of the war in Ukraine in 2022, sentiment brightened somewhat in 2023. This was mainly due to falling inflation and the associated hope that interest rates would soon fall. There were signs of an end to the interest rate hikes and the real estate sector closed 2023 with a positive performance of +9% (2022: -18.3%). Risk premiums remained under pressure for a short time due to the turbulence in the banking sector in mid-March 2023. Since around the beginning of April 2023, they have been on a downward trend, reaching levels seen before the outbreak of the war in Ukraine for the first time.

However, cautious economic outlook points to upward pressure on spreads

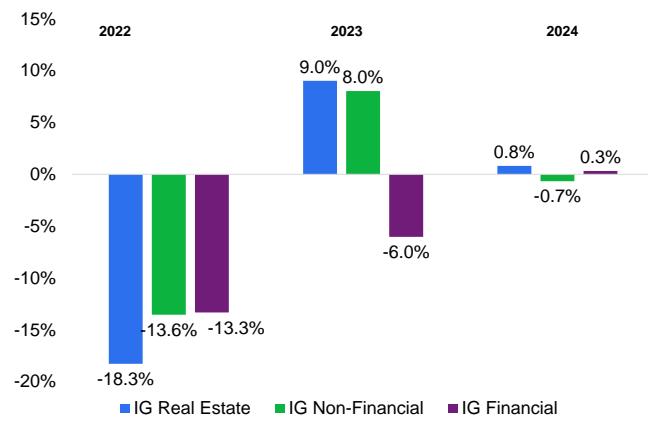
As the economy is likely to remain weak, we consider the low real estate spreads to be exaggerated and expect slight upward pressure this year. Important EZ sentiment indicators (EZ Purchasing Managers' Index, ifo Business Climate Index for Germany) have recently recovered slightly, but remain weak.

Downward spread trend from the beginning of 04/23
Development of benchmark spreads in bps



As of: 15.3.2024
Source: Market data provider, Erste Group Research

Real Estate bonds benefit from bet on falling interest rates, Performance in %



As of: 15.3.2024
Source: Market data provider, Erste Group Research

Financial challenges

Increased capital costs are reflected in the ratings

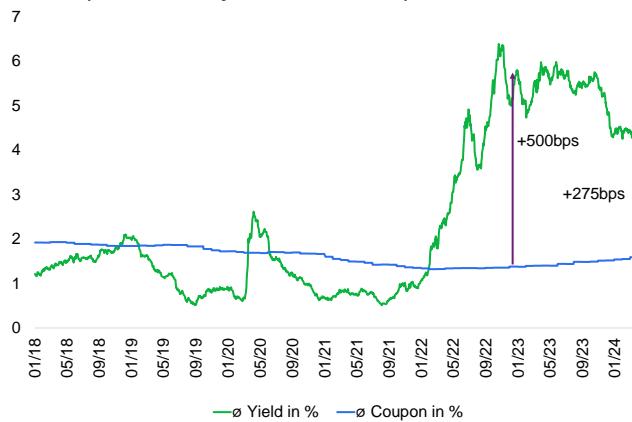
Financial conditions in the real estate market changed dramatically in 2022, due to the ECB's tighter monetary policy and a reassessment of real estate credit risk. The increased cost of capital has already led to a high number of negative rating adjustments since 4Q/22. The ratings of around 40 Real Estate companies, 20 in the Investment Grade segment and 22 in the High Yield segment, were downgraded. Including the changed outlooks, a total of 70 issuers were affected by negative rating actions. The highest number of rating adjustments took place in the first quarter of 2023.

Further rapid decline in financing costs remains limited

However, speculation about interest rate cuts in the near future after the ECB left key interest rates unchanged for the fourth time in a row in March has led to falling bond yields on the secondary market since the end of October 2023, which is currently making upcoming (re)financing somewhat easier. The average yield level on the secondary market is currently around 275bps (end of October/23: +500bps) above the average coupon of outstanding real estate benchmark corporate bonds. However, we believe that a further rapid fall in financing costs (difference between yields and coupons) is likely to be limited by the still challenging economic environment. The decline in yields has recently lost considerable momentum and has been moving sideways within a narrow corridor since the beginning of the year.

Fall in the cost of capital loses momentum

Development of Ø yield and Ø coupon, in %



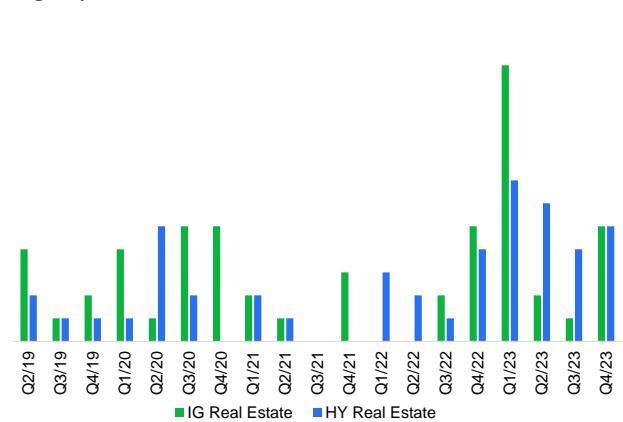
As of: 15.3.2024

Source: Market data provider, Erste Group Research

Credit quality will continue to suffer from the relatively high cost of capital

Number of downgrades rose sharply in 2023

Rating adjustments, number



Source: Moody's, Erste Group Research

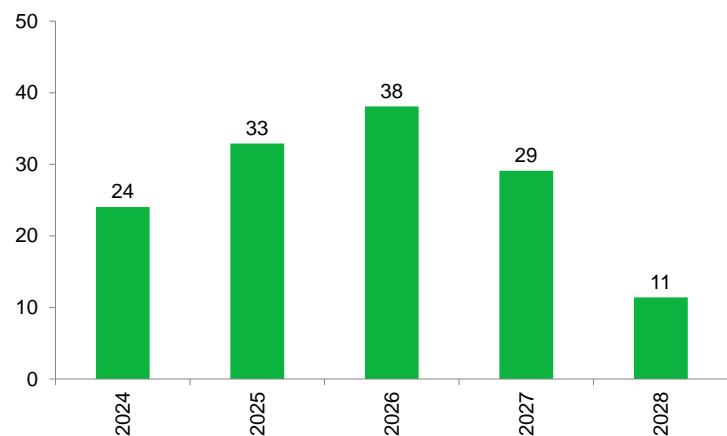
According to Moody's, the still relatively high (re)financing costs will pose the greatest risk to the credit quality of real estate issuers over the next 12-18 months, as the high level of interest rates is not yet fully reflected in real estate valuations. Issuers' interest coverage ratios will also remain under pressure and debt levels are likely to rise. The consensus for STOXX Real Estate companies expects a higher debt repayment period (= net debt to EBITDA) in the next two years, which at 10x is likely to be above the five-year average of 7x. However, the still relatively low refinancing requirements of real estate issuers in 2024 remain supportive, although these will gradually

Financing structure optimized in recent years

increase over the next few years, meaning that a cumulative volume of EUR 95bn will fall due between 2024 and 2026.

On a positive note, the financing structure in the real estate sector has improved noticeably in the last decade through the issue of corporate bonds. However, a return to bank financing has been observed in recent months due to a lack of alternatives. In our opinion, this trend is likely to continue for some time. Secured bank financing is currently being negatively affected by the lower portfolio values, which in turn is having an impact on conditions. This is because the collateralization of real estate loans often depends on how much these properties or loan collateral are actually worth. According to Moody's, an increasing number of real estate groups are currently resorting to the sale of their minority interests in order to secure liquidity.

Refinancing requirements will increase continuously until 2026
EUR Outstanding volume in bn



Source: Market data provider, Erste Group Research

Access to the capital market remains tight

We believe that access to the capital market for real estate companies is likely to remain tight in 2024, as the attractiveness of the real estate sector is currently suffering from the economic slowdown as a result of global economic and political uncertainties and the still restrictive interest rate level. This is also clearly reflected in issuing activity. By mid-March 2024, for example, 17 bonds had been placed, many of them with a smaller volume. The average coupon for these issues was around 4.4%, compared with around 2% at the beginning of 2022. This means that real estate companies are gradually having to accept significantly higher financing costs on the capital market and actually be able to afford them.

Relative valuation

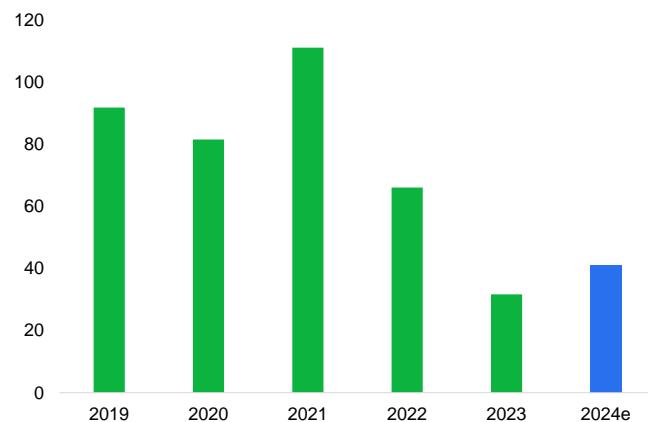
Monetary easing remains the driver

The expected easing of the ECB's monetary policy should provide positive impetus for the debt-intensive real estate industry. We expect the first interest rate cut in June and three more by a total of 100 basis points by the end of 2024.

Transaction market with slightly more momentum

After increasing confidence regarding interest rate cuts spread in the second half of the previous year, a slight increase in transaction volumes was also observed recently. For example, the German investment market for real estate saw a slight recovery in the second half of 2023, with transaction volumes showing a slight upward trend since the historic low in 2Q/23 (EUR 7.2bn). According to JLL¹, 2023 was the weakest investment year since 2011, with an investment volume of EUR 32bn or 52% below the previous year.

The transaction market has probably bottomed out
DE: Transaction volume in EUR bn

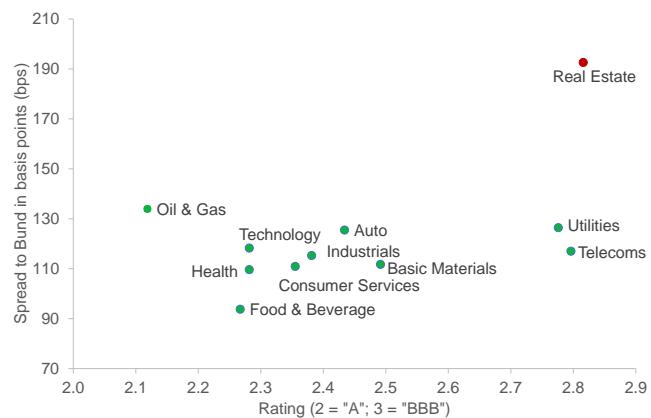


Source: JLL, Erste Group Research

Austria fares better than the European average

Housing market: high construction costs and more restrictive lending are a burden

IG Real Estate Sector currently offers potential returns
Ø Sector ratings and Spreads in comparison



Source: Market data provider, Erste Group Research

The development of the transaction market shows a differentiated picture in a European comparison. In general, the investment volume in the Real Estate Sector fell in all European countries in 2023, although the extent of the decline varied. In the top 7 countries (Germany, Italy, Spain, France, the UK, the Netherlands and Sweden), the decline ranged between -30% and -55% y/y. The real estate investment volume in Austria was better than the European average with a minus of 37%. Expectations for 2024 are generally positive for Austria. CBRE expects the transaction market in Austria to pick up again in terms of volume and number of transactions.

Within the Real Estate Sub-Sectors, the residential market, which has often been the strongest asset class in recent years, was hit the hardest in Austria in 2023. Rising construction costs and more restrictive lending by banks due to the sharp rise in interest rates played a major role here. In the meantime, the rising momentum of construction costs has slowed slightly month-on-

¹ Jones Lang Lasalle: service, consulting and investment management company in the Real Estate Sector

month, but they still remain at a high level. According to Statistics Austria, the construction cost index rose by 0.3% in February 2024 compared to January, but remained 3% above the February figure for the previous year. This is leading to a wait-and-see attitude on the part of many development companies and therefore to lower construction orders. Although the stricter lending guidelines² were relaxed somewhat in mid-March 2024, experts do not expect a sustained upturn in lending volumes. Housing completions are expected to decline in 2024, having risen steadily since 2020. Demand for housing is expected to grow steadily over the next few years due to the megatrends of urbanization and migration, but this could lead to bottlenecks due to the decline in completions.

Commercial Real Estate market
more sensitive to economic cycles

Compared to the residential market, the commercial real estate market (office, retail, logistics and industrial properties) is more exposed to economic fluctuations. Following the slump in the transaction market in 2023, more activity is expected this year, which could lead to a slight stabilization of market prices. More transactions, particularly in the office segment, would also create more flexibility for companies to reduce debt through sales. However, the still high level of interest rates will continue to have a negative impact on real estate valuations. The rating agency S&P assumes an average decline in real estate valuations of between 10% and a maximum of 24% for European Real Estate companies. Although this decline will not be fully offset by the indexation of rents, it will be partially mitigated.

Will the real estate crisis bottom
out in 2024?

Despite the negative rating adjustments in recent quarters, the issue volume-weighted rating in the investment grade real estate sector has only deteriorated marginally. On average, real estate issuers currently have a rating that is only slightly below that of utilities and telecoms in a sector comparison. The significantly higher risk premiums can be explained by the higher interest rate sensitivity of the real estate sector. There are currently slightly positive signals on the real estate market. If sentiment continues to brighten, the investment grade real estate sector offers potential compared to the non-financial sectors. However, it remains to be seen whether 2024 will see the start of a recovery in the real estate sector. Many challenges still remain.

² KIM V ([FMA issues Regulation for sustainable lending standards for residential real estate financing \(KIM-V\) - FMA Austria](#))

Contacts

Group Research

Head of Group Research
 Friedrich Mostböck, CFA®, CESGA®

+43 (0)5 0100 11902

CEE Macro/Fixed Income Research
 Head: Juraj Kotian (Macro/Fin)
 Katarzyna Rzantrewska (Fixed income)

+43 (0)5 0100 17357
 +43 (0)5 0100 17356
 +43 (0)5 0100 17384

Croatia/Serbia
 Alek Kovac (Head)
 Mate Jelic
 Ivana Rogic

+385 72 37 1383
 +385 72 37 1443
 +385 72 37 2419

Czech Republic
 David Navratil (Head)
 Jiri Polansky
 Michal Skorepa

+420 956 765 439
 +420 956 765 192
 +420 956 765 172

Hungary
 Orsolya Nyeste
 János Nagy

+361 268 4428
 +361 272 5115

Romania
 Ciprian Dascalu (Head)
 Eugen Sincu
 Dorina Ilasco
 Vlad Nicolae Ionita

+40 3735 10108
 +40 3735 10435
 +40 3735 10436
 +40 7867 15618

Slovakia
 Maria Valachyova (Head)
 Matej Hornak

+421 2 4862 4185
 +421 902 213 591

Major Markets & Credit Research

Head: Gudrun Eger, CFA®
 Ralf Burchert, CFA® (Sub-Sovereigns & Agencies)
 Hans Engel (Global Equities)
 Margarita Grushanina (Austria, Quant Analyst)
 Peter Kaufmann, CFA® (Corporate Bonds)
 Heiko Langer (Financials & Covered Bonds)
 Stephan Lingnau (Global Equities)
 Carmen Rieffel-Kowarsch (Financials & Covered Bonds)
 Rainer Singer (Euro, US)
 Bernadett Povazsai-Romhild, CFA®, CESGA® (Corporate Bonds)
 Elena Statilev, CIIA® (Corporate Bonds)
 Gerald Walek, CFA® (Euro, CHF)

+43 (0)5 0100 11909
 +43 (0)5 0100 16314
 +43 (0)5 0100 19835
 +43 (0)5 0100 11957
 +43 (0)5 0100 11183
 +43 (0)5 0100 85509
 +43 (0)5 0100 18574
 +43 (0)5 0100 19632
 +43 (0)5 0100 17331
 +43 (0)5 0100 17203
 +43 (0)5 0100 19641
 +43 (0)5 0100 16360

CEE Equity Research
 Head: Henning Eickuchen
 Daniel Lion, CIIA® (Technology, Ind. Goods&Services)
 Michael Marschallinger, CFA®
 Nora Nagy (Telecom)
 Christoph Schultes, MBA, CIIA® (Real Estate)
 Thomas Unger, CFA® (Banks, Insurance)
 Vladimira Urbankova, MBA (Pharma)
 Martina Valenta, MBA

+43 (0)5 0100 19634
 +43 (0)5 0100 17420
 +43 (0)5 0100 17906
 +43 (0)5 0100 17416
 +43 (0)5 0100 11523
 +43 (0)5 0100 17344
 +43 (0)5 0100 17343
 +43 (0)5 0100 11913

Croatia/Serbia
 Mladen Dodig (Head)
 Boris Pevalek, CFA®
 Marko Plastic
 Matej Pretkovic
 Bruno Barbic
 Davor Spoljar, CFA®
 Magdalena Basic

+381 11 22 09178
 +385 99 237 2201
 +385 99 237 5191
 +385 99 237 7519
 +385 99 237 1041
 +385 72 37 2825
 +385 99 237 1407

Czech Republic
 Petr Bartek (Head, Utilities)
 Jan Safranek

+420 956 765 227
 +420 956 765 218

Hungary
 József Miró (Head)
 András Nagy
 Tamás Pletsner, CFA® (Oil & Gas)

+361 235 5131
 +361 235 5132
 +361 235 5135

Poland
 Cezary Bernatek (Head)
 Piotr Bogusz
 Łukasz Jachczak
 Krzysztof Kawa, CIIA®
 Jakub Szkopek

+48 22 257 5751
 +48 22 257 5755
 +48 22 257 5754
 +48 22 257 5752
 +48 22 257 5753

Romania
 Caius Rapanu

+40 3735 10441

Group Markets

Head of Group Markets
 Oswald Huber

+43 (0)5 0100 84901

Group Markets Retail and Agency Business
 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

Markets Retail Sales CZ
 Head: Roman Choc

+420 956 765 374

Markets Retail Sales HUN
 Head: Peter Kishazi

+36 1 23 55 853

GM Retail Products & Business Development
 Head: Martin Langer

+43 (0)50100 11313

Corporate Treasury Product Distribution AT
 Head: Martina Kranzl-Carvell

+43 (0)5 0100 84147

Group Securities Markets

Head: Thomas Einramhof

+43 (0)50100 84432

Institutional Distribution Core

Head: Jürgen Niemeier

+49 (0)30 8105800 5503

Institutional Distribution DACH+

Head: Marc Frieberthäuser

+49 (0)711 810400 5540

Bernd Bolthof

+49 (0)30 8105800 5525

Andreas Goll

+49 (0)711 810400 5561

Mathias Gindelé

+49 (0)711 810400 5562

Ulrich Inhofner

+43 (0)5 0100 85544

Sven Kienzle

+49 (0)711 810400 5541

Rene Klasen

+49 (0)30 8105800 5521

Christopher Lampe-Traupe

+49 (0)30 8105800 5523

Daniel Popovic

+49 1704144713

Michael Schmitz

+43 (0)5 0100 85542

Christoph Ungerböck

+43 (0)5 0100 85558

Klaus Vosseler

+49 (0)711 810400 5560

Slovakia

Šariola Šipulová

+421 2 4862 5619

Monika Směliková

+421 2 4862 5629

Institutional Distribution CEE & Insti AM CZ

Head: Anton Buric

+385 (0)7237 2439

Jaromír Malák

+43 (0)5 0100 84254

Czech Republic

Head: Ondrej Čech

+420 2 2499 5577

Milan Bartoš

+420 2 2499 5562

Jan Povrlich

+420 2 2499 5566

Pavel Zdichynec

+420 2 2499 5590

Institutional Asset Management Czech Republic

Head: Petr Holeček

+420 956 765 453

Petra Madérová

+420 956 765 178

Martin Perina

+420 956 765 106

David Petráček

+420 956 765 809

Blanka Weinervá

+420 956 765 317

Petr Valenta

+420 956 765 140

Croatia

Head: Antun Buric

+385 (0)7237 2439

Zvonimir Tukač

+385 (0)7237 1787

Natalija Zujic

+385 (0)7237 1638

Hungary

Head: Peter Csizmadia

+36 1 237 8211

Gábor Bálint

+36 1 237 8205

Gergő Szabó

+36 1 237 8209

Romania

Head: Octavian Florin Munteanu

+40 746128914

Group Institutional Equity Sales

Head: Michal Řízek

+420 224 995 537

Werner Fürst

+43 (0)50100 83121

Viktoria Kubálová

+43 (0)5 0100 83124

Thomas Schneidhofer

+43 (0)5 0100 83120

Oliver Schuster

+43 (0)5 0100 83119

Czech Republic

Head: Michal Řízek

+420 224 995 537

Jiří Fereš

+420 224 995 554

Martin Havlan

+420 224 995 551

Pavel Krabička

+420 224 995 411

Poland

Head: Jacek Jakub Langer

+48 22 257 5711

Tomasz Galaniak

+48 22 257 5715

Wojciech Wysocki

+48 22 257 5714

Przemysław Nowosad

+48 22 257 5712

Maciej Sendeck

+48 22 257 5713

Croatia

Matija Tkalicancic

+385 72 37 21 14

Hungary

Nandori Levente

+36 1 23 55 141

Krisztian Kandik

+36 1 23 55 162

Balázs Zankay

+36 1 23 55 156

Romania

Valerian Ionescu

+40 3735 16541

Group Fixed Income Securities Markets

Head: Goran Hoblaj

+43 (0)50100 84403

Fixed Income Flow Sales

Head: Goran Hoblaj

+43 (0)5 0100 84403

Margit Hraschek

+43 (0)5 0100 84117

Christian Kienlesberger

+43 (0)5 0100 84323

Ciprian Mitu

+43 (0)5 0100 85612

Bernd Thaler

+43 (0)5 0100 84119

Zsuzsanna Toth

+36 1 23 55 8209

Poland

Pawel Kielek

+48 22 538 6223

Michał Jarmakowicz

+43 50100 85611

Fixed Income Flow Trading

Head: Goran Hoblaj

+43 (0)5 0100 84403

Group Fixed Income Securities Trading

Head: Goran Hoblaj

+43 (0)50100 84403

Group Equity Trading & Structuring

Head: Ronald Nemec

+43 (0)50100 83011

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 general information pursuant. 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 a marketing communication pursuant to Art. 36 (2) delegated Regulation (EU) 2017/565 as no direct buying incentives were included in this publication, which is of information character. This publication provides only other information without making any comment, value judgement or suggestion on its relevance to decisions which an investor may make and is therefore also no recommendation. Thus this publication does not constitute investment research pursuant to Art. 36 (1) delegated Regulation (EU) 2017/565. 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 for a transaction in any financial instrument or connected financial instruments, 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 financial or connected financial instrument in a trading strategy. Information provided in this publication is 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 or 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 does 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 a financial or connected financial instrument is not indicative for future results. No assurance can be given that any financial instrument or connected 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 financial instruments incl. connected financial instruments. Erste Group, principals or employees may have a long or short position or may transact in financial instrument(s) incl. connected financial instruments 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 financial instruments, connected financial instruments or companies resp. issuers discussed herein and may also perform or seek to perform investment services for those companies resp. issuers. 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 restrictions.

Erste Group is not registered or certified as a credit agency in accordance with Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies (the Credit Rating Agencies Regulation). Any assessment of the issuers creditworthiness does not represent a credit rating pursuant to the Credit Rating Agencies Regulation. Interpretations and analysis of the current or future development of credit ratings are based upon existing credit rating documents only and shall not be considered as a credit rating itself.

© Erste Group Bank AG 2024. 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