

Student Housing in Europe

Resilient demand and constrained supply expected to sustain rental outperformance in key university cities

IN A NUTSHELL

- Potential for strong rental growth in student housing is containing yield expansion in this sector through the current period of price correction.
- Demand for student housing continues to grow due to a combination of demographics and increasing educational attainment rates both in Europe and in key countries exporting students to Europe.
- Germany stands out in having excellent educational offering and low quality and quantity of purpose-built student accommodation (PBSA), suggesting there is potential for strong rental growth in better quality stock.
- Southern Europe has the largest shortfall in student accommodation but key university cities in the UK, France, and the Netherlands also require investment to meet demand.
- Understanding microlocation and letting strategy remain critical factors for outperforming assets.

1. Why Student Housing?

Rent growth and resilience

Following several years of pandemic-related slowdown, recent investor surveys¹ show that student housing is back at the top of investors' wishlists. Undersupply is a feature of most European markets and demand continues to rise. Educational attainment rates are still growing in many European countries, particularly Southern and Eastern Europe. In addition, international students continue to find Europe an attractive study destination due to the concentration of high-quality universities and cultural offering. As a result, the sector has seen strong rental growth, which is likely to continue for the next few years as demand/supply imbalances persist.

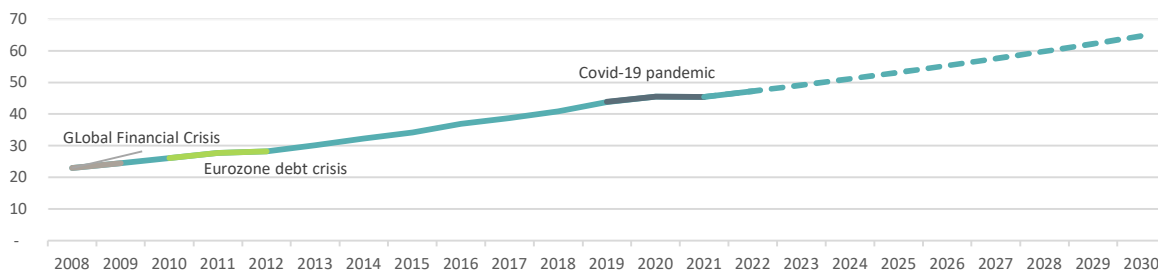
¹ ULI/PwC, 2024, 'Emerging Trends in Real Estate' Europe report. CBRE, 2023, 'Investor Intentions Survey Report'.

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries, such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas, Inc. and RREEF America L.L.C., which offer advisory services. There may be references in this document which do not yet reflect the DWS Brand.

Please note certain information in this presentation constitutes forward-looking statements. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered by this presentation report may differ materially from those described. The information herein reflects our current views only, is subject to change, and is not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein.

Marketing Material. In EMEA for Professional Clients (MiFID Directive 2014/65/EU Annex II) only; no distribution to private/retail customers. In Switzerland for Qualified Investors (art. 10 Para. 3 of the Swiss Federal Collective Investment Schemes Act (CISA)). In APAC and LatAm, for institutional investors only. In Australia and New Zealand for Wholesale Investors only. In the Americas for Institutional Client and Registered Rep use only, not for public viewing or distribution. In Israel for Qualified Clients (Israeli Regulation of Investment Advice, Investment Marketing and Portfolio Management Law 5755-1995). For investors in Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda.

Number of students studying abroad, millions



Source: UNESCO, November 2023; DWS, October 2023. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. Forecasts are not a reliable indicators of future performance.

In addition, at a time when market uncertainty is at a cyclical high due to a rapid rate hikes, geopolitical tensions and the possibility of recession, investors are looking for sectors which offer resilience through economic cycles. Student housing returns have tended to be less sensitive to economic cycles in the past. In the UK, where data goes back to before the Global Financial Crisis (GFC), rental growth actually increased in 2009 when real GDP growth fell by 4% as the newly unemployed returned to education or existing students chose to prolong their studies. The correlation between student housing and GDP is weaker than for offices, offering the potential to boost portfolio performance during an economic downturn.

2. Scoring Methodology

DWS model to identify outperforming markets

Given the positive demand and supply dynamics in the sector, student housing looks set for a strong run of rental growth. To identify which markets are most likely to outperform, we have put together a scoring model to compare 73 European markets across 15 different variables.

Scoring Factors and Weighting

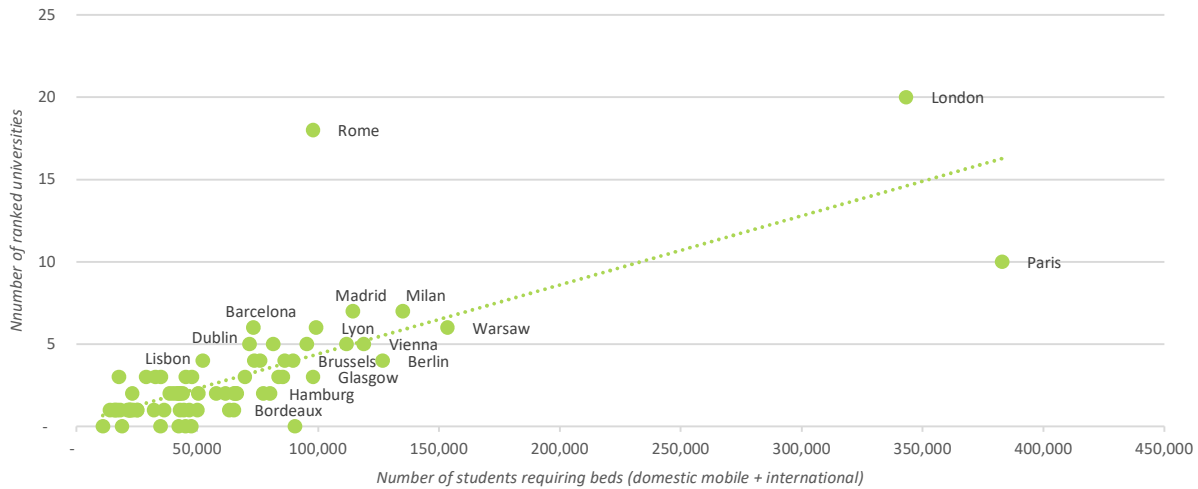
Demand (50%)	Supply (30%)	Investment Appeal (20%)
Growth in international student numbers	Provision rate (beds/domestic mobile+international students)	Historic transaction volumes
Growth in domestic student numbers	Pipeline of beds	Overall market liquidity
Number of students (domestic and international)	Vacancy rate of residential market	Currency risk
Number and ranking of universities	Relative cost of student housing compared to private rented sector	Summer hotel income potential
Future demographic trends		
Cost of tuition		
Cost of living		

Source: BONARD, September 2023; RCA, November 2023; Green Street, October 2023; QS Universities, October 2023; Oxford Economics, October 2023; STR, October 2023; Numbeo, October 2023

2.1. Demand

The factor given most weight in our scoring model is demand. This is largely determined by the quality and quantity of universities on offer. Not only do high quality universities attract more domestic mobile students, they can also draw from overseas.

Student demand and number of ranked universities



Source: BONARD, September 2023

In addition, educational attainment levels are still growing across much of Europe, albeit at a slower pace today than in the past 20 years. Southern and Eastern Europe in particular have a smaller proportion of the population achieving a university degree than the European average and are now catching up. Not only is there room for growth in Europe, but tertiary attainment rates continue to increase rapidly in countries with large populations such as India where a few percentage points of growth result in millions of additional students. The growth in educational attainment in India has resulted in intense competition for university places to the extent that The University of Delhi has a lower acceptance rate than Harvard. In this context, it is not surprising that India is one of the fastest-growing exporters of students to the U.K.

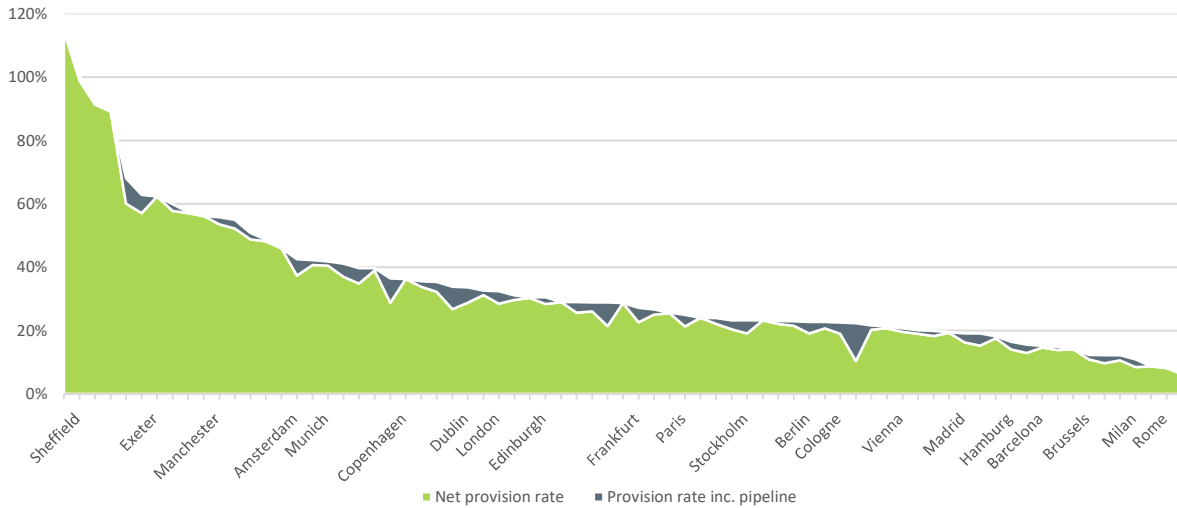
Demographic trends are also a supporting factor of student demand, although this is not true for every European country. The U.K, Sweden, Spain, and Poland still have strong growth in the number of 15-24 year-olds over the next decade. Most other European countries have some growth, while the Netherlands, Denmark, and Portugal are forecast to see numbers of domestic students decline.² Attracting international students by offering English-taught programmes will be important for universities in these markets to sustain student numbers.

2.2. Supply

The other main part of the equation is supply. With the exception of a handful of UK markets, most of Europe lacks supply of student housing to meet demand. In Italy, Poland, Portugal, and Spain, the issue is particularly acute. In Milan in early 2023 there were even student protests against the exorbitant rental prices students faced in the city.

² Oxford Economics, September 2023

Provision rate, total beds as % of students requiring accommodation (international + domestic)

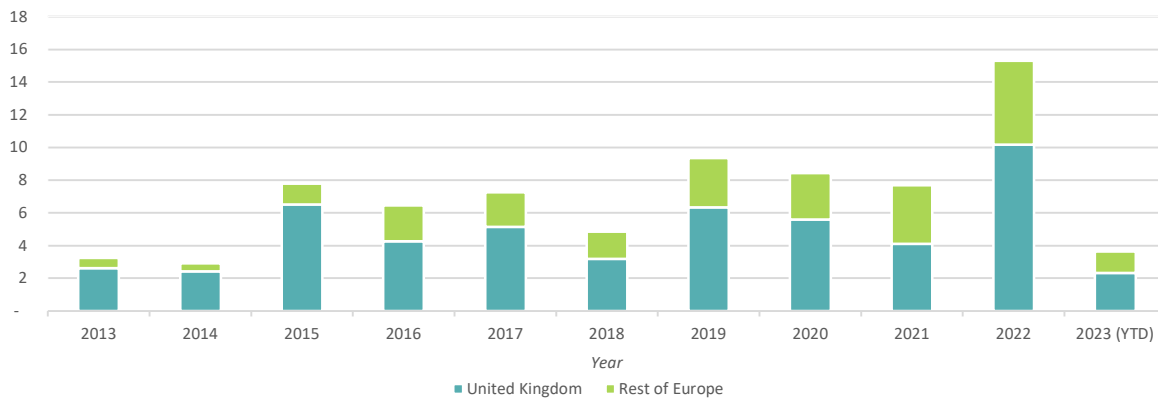


Source: RCA, October 2023

2.3. Investment appeal

The final area to consider is liquidity. In 2013, investment into student housing in Europe totalled €3.5 billion but by 2022, this figure was over €15 billion. While this still only represents 5% of overall real estate investment volumes, the growth is significant. A major source of this development in the market has been the growth in investment opportunities in European markets outside the UK. Ten years ago, the UK represented over 80% of investment volumes into the student housing sector in Europe. By 2022, this figure had fallen to two thirds of the total, despite a rise in total UK volumes.

Investment volumes, student housing Europe, billion €



Source: RCA, October 2023

The growth in investment, however, does not guarantee liquidity. Beyond the UK, most European markets do not have a track record of investment going back more than 5 years. It is therefore important to consider the level of liquidity across all real estate sectors in each market as a way to assess whether there is significant depth of investor demand to assess this risk.

3. Results

The results from the scoring showed that gateway cities in Germany combine a lack of supply with a high quality of educational offering and long track record of investment. The UK, Ireland, and Southern Europe also performed well in the analysis due to the chronic lack of supply.

Overall Results

Country	Primary Target Markets	Secondary Target Markets
Germany	Berlin	Hamburg Munich Frankfurt
UK & Ireland	London	Edinburgh Dublin
France	Paris	Lyon
Italy	Milan	Rome
Netherlands	Amsterdam	Rotterdam

Source: BONARD, September 2023; RCA, November 2023; Green Street, October 2023; QS Universities, October 2023; Oxford Economics, October 2023; STR, October 2023; Numbeo, October 2023

3.1. Spotlight on...

3.1.1. Hamburg

For international investors, Hamburg might not be an obvious pick as a promising PBSA market but a closer look reveals a combination of high quality universities and highly limited supply of accommodation. There are almost 30 universities in this city, two of which are ranked internationally. The top university in this city, the University of Hamburg, has expanded its offering of English-taught Masters. These can be taken as a two or one-year course and have attracted an increasing number of international students requiring accommodation for a shorter study period. In addition, at least half of the over 110,000 students in this city have come from other parts of Germany and require accommodation. The small number of beds available mean that Hamburg has the lowest provision rate of the cities we analysed in Germany. Availability in the private rented sector is low, suggesting the conditions are right for strong rental growth for PBSA.

3.1.2. Milan

Milan performed well in the scoring analysis largely because of a massive demand/supply imbalance in this market. The city is home to over 30 universities, seven of which are internationally renowned. The growth of English-taught programmes at these universities has helped attract international students from a wider range of countries, fuelling strong growth in student numbers. While the current offering of PBSA is both limited in quantity and quality, schemes can charge high prices as students have such limited options. A new generation of student housing is slowly emerging, but so far the high price point of these schemes is doing little to address affordability issues for most students. There is therefore a significant gap in provision at a lower price point of the market. With yields for student housing at around 5.5% (although there is limited market evidence at present), we estimate levered IRRs (post tax) in excess of 7% over a 10-year hold.

3.1.3. Madrid

In addition to being one of the most popular destinations for ERASMUS students, universities in Madrid have the benefit of being able to attract students from Latin America who comprise the largest group of non-European students. Over 50 universities in total are located in Madrid, seven of which are internationally renowned, drawing a high proportion of domestic mobile as well as international students. The total student population is over 270,000, approximately half of whom have come from other parts of Spain or

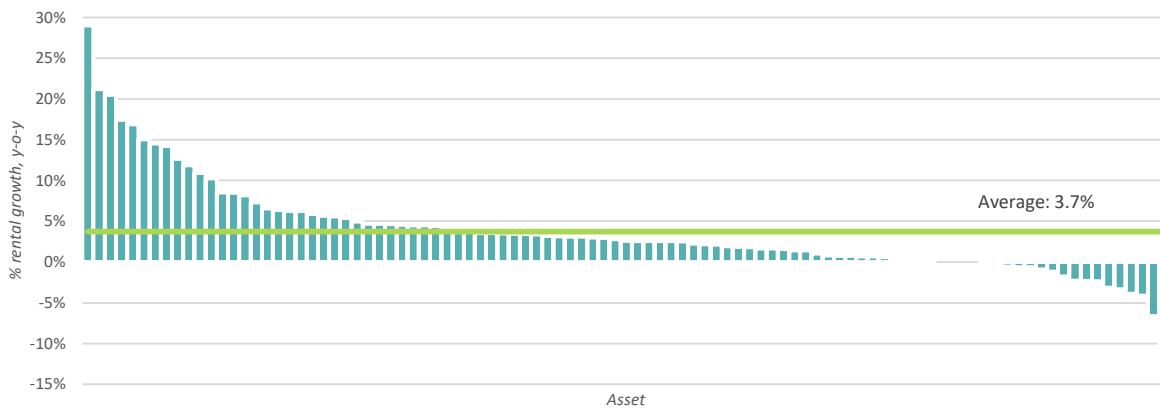
abroad and require housing. The number of beds is just under 20,000 at present, so the student to bed ratio is about 1:5. In addition, the private rented sector in Madrid is supply constrained and finding affordable accommodation can be a challenge, so there is ample scope to expand supply of PBSA.

The Spanish student housing market is unique in many ways. Religious orders play a significant role in providing student housing and, while the accommodation is relatively cheap, segregation of male and female student accommodation and curfews are common. Most students will live at home during their studies and for those who study outside their home region, catering is expected as part of the accommodation package. The international student population, on the other hand, is less likely to require catering. Getting the mix of services and amenities right for the target student group is therefore a key element of success in this market.

4. Importance of Microlocation and Operating Strategy

While the scoring model can tell us which markets are most attractive overall, the complexity of operating student housing and the paramount importance of location can result in a wide range of performance on an asset-by-asset basis.

Paris, 2022-2023 y-o-y rent growth by asset (single studio, private providers only)



Each bar represents each asset for which BONARD has data. Source: BONARD, September 2023

Rental growth is difficult to generate when an asset is further away from the university than competing schemes. How this plays out in different cities is a topic for further analysis. As a general rule, the closer to campus, the more demand, allowing operators to achieve high occupancy rates and drive rental growth when rooms become scarce. However, an unsophisticated operator can book out a scheme too quickly, missing out on rental growth that could have been captured by saving some rooms for booking later in the cycle. Choosing the right microlocation, the right operator, and the right incentive structure for that operator are therefore key in fulfilling the rent growth potential of an asset.

5. Summary and Conclusion

Student housing is once again proving its resilience through an economic downcycle. Having analysed as large a sample as possible of European student housing markets, we are now able to target specific markets which we believe are likely to offer the most attractive return on investment. Germany is one example. Existing stock often fails to meet expectations of international students who are attracted by the excellence of the educational offering available. With a clear view on which markets offer most opportunity and a strategy for expanding institutional stock, this market could deliver strong returns. Despite being a mature market for student housing, there is still room in the UK for rental outperformance in certain cities. Select markets in France such as Paris and Lyon also look attractive. Spain and Italy are most acutely undersupplied, particularly at the affordable end of the market.

In deploying capital in these markets, it will be important not to compromise on microlocation and operator choice as these two elements can define the performance of the asset on a long term basis.

AUTHOR



Siena Golan
Property Market Research Analyst

Real Estate Research Team

Office Locations

Chicago

222 South Riverside Plaza
34th Floor
Chicago
IL 60606-1901
United States
Tel: +1 312 537 7000

Frankfurt

Mainzer Landstrasse 11-17
60329 Frankfurt am Main
Germany
Tel: +49 69 71909 0

London

Winchester House
1 Great Winchester Street
London EC2N 2DB
United Kingdom
Tel: +44 20 754 58000

New York

875 Third Avenue
26th Floor
New York
NY 10022-6225
United States
Tel: +1 212 454 3414

San Francisco

101 California Street
24th Floor
San Francisco
CA 94111
United States
Tel: +1 415 781 3300

Singapore

One Raffles Quay
South Tower
20th Floor
Singapore 048583
Tel: +65 6538 7011

Tokyo

Sanno Park Tower
2-11-1 Nagata-cho
Chiyoda-Ku
18th Floor
Tokyo
Japan
Tel: +81 3 5156 6000

Teams

Global

Kevin White, CFA
Global Co-Head of Real Estate Research

Simon Wallace
Global Co-Head of Real Estate Research

Americas

Brooks Wells
Head of Research, Americas

Liliana Diaconu, CFA
Office Research

Ross Adams
Industrial Research

Sharim Sohail
Property Market Research

Europe

Ruben Bos, CFA
Head of Real Estate Investment Strategy, Europe

Tom Francis
Property Market Research

Siena Golan, MRICS
Property Market Research

Rosie Hunt
Property Market Research

Carsten Lieser
Property Market Research

Martin Lippmann
Head of Real Estate Research, Europe

Asia Pacific

Koichiro Obu
Head of Real Estate Research, Asia Pacific

Seng-Hong Teng
Property Market Research

Hyunwoo Kim
Property Market Research

Important information

For North America:

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries, such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas, Inc. and RREEF America L.L.C., which offer advisory services.

This material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only. It does not constitute investment advice, a recommendation, an offer, solicitation, the basis for any contract to purchase or sell any security or other instrument, or for DWS or its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein. Neither DWS nor any of its affiliates gives any warranty as to the accuracy, reliability or completeness of information which is contained in this document. Except insofar as liability under any statute cannot be excluded, no member of the DWS, the Issuer or any office, employee or associate of them accepts any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission in this document or for any resulting loss or damage whether direct, indirect, consequential or otherwise suffered by the recipient of this document or any other person.

The views expressed in this document constitute DWS Group's judgment at the time of issue and are subject to change. This document is only for professional investors. This document was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. No further distribution is allowed without prior written consent of the Issuer.

Investments are subject to risk, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time.

An investment in real assets involves a high degree of risk, including possible loss of principal amount invested, and is suitable only for sophisticated investors who can bear such losses. The value of shares/ units and their derived income may fall or rise.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models, and hypothetical performance analysis. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements. Past performance is no guarantee of future results.

War, terrorism, sanctions, economic uncertainty, trade disputes, public health crises and related geopolitical events have led, and, in the future, may lead to significant disruptions in US and world economies and markets, which may lead to increased market volatility and may have significant adverse effects on the fund and its investments.

For Investors in Canada. No securities commission or similar authority in Canada has reviewed or in any way passed upon this document or the merits of the securities described herein and any representation to the contrary is an offence. This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS Group. Without limitation, this document does not constitute an offer, an invitation to offer or a recommendation to enter into any transaction. When making an investment decision, you should rely solely on the final documentation relating to the transaction you are considering, and not the document contained herein. DWS Group is not acting as your financial adviser or in any other fiduciary capacity with respect to any transaction presented to you. Any transaction(s) or products(s) mentioned herein may not be appropriate for all investors and before entering into any transaction you should take steps to ensure that you fully understand such transaction(s) and have made an independent assessment of the appropriateness of the transaction(s) in the light of your own objectives and circumstances, including the possible risks and benefits of entering into such transaction. You should also consider seeking advice from your own advisers in making this assessment. If you decide to enter into a transaction with DWS Group, you do so in reliance on your own judgment. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates, and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Any projections are based on a number of assumptions as to market conditions and there can be no guarantee that any projected results will be achieved. Past performance is not a guarantee of future results. The distribution of this document and availability of these products and services in certain jurisdictions may be restricted by law. You may not distribute this document, in whole or in part, without our express written permission.

For EMEA, APAC & LATAM:

DWS is the brand name of DWS Group GmbH & Co. KGaA and its subsidiaries under which they do business. The DWS legal entities offering products or services are specified in the relevant documentation. DWS, through DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively "DWS") are communicating this document in good faith and on the following basis.

This document is for information/discussion purposes only and does not constitute an offer, recommendation, or solicitation to conclude a transaction and should not be treated as investment advice.

This document is intended to be a marketing communication, not a financial analysis. Accordingly, it may not comply with legal obligations requiring the impartiality of financial analysis or prohibiting trading prior to the publication of a financial analysis.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models, and hypothetical performance analysis. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements. Past performance is no guarantee of future results.

The information contained in this document is obtained from sources believed to be reliable. DWS does not guarantee the accuracy, completeness, or fairness of such information. All third-party data is copyrighted by and proprietary to the provider. DWS has no obligation to update, modify or amend this document or to otherwise notify the recipient in the event that any matter stated herein, or any opinion, projection, forecast, or estimate set forth herein, changes or subsequently becomes inaccurate.

Investments are subject to various risks. Detailed information on risks is contained in the relevant offering documents.

No liability for any error or omission is accepted by DWS. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. DWS does not give taxation or legal advice.

This document may not be reproduced or circulated without DWS's written authority.

This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country, or other jurisdiction, including the United States, where such distribution, publication, availability, or use would be contrary to law or regulation or which would subject DWS to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

© 2023 DWS International GmbH

Issued in the UK by DWS Investments UK Limited which is authorised and regulated by the Financial Conduct Authority (Reference number 429806).

© 2023 DWS Investments UK Limited

In Hong Kong, this document is issued by DWS Investments Hong Kong Limited and the content of this document has not been reviewed by the Securities and Futures Commission.

© 2023 DWS Investments Hong Kong Limited

In Singapore, this document is issued by DWS Investments Singapore Limited and the content of this document has not been reviewed by the Monetary Authority of Singapore.

© 2023 DWS Investments Singapore Limited

In Australia, this document is issued by DWS Investments Australia Limited (ABN: 52 074 599 401) (AFSL 499640) and the content of this document has not been reviewed by the Australian Securities Investment Commission.

© 2023 DWS Investments Australia Limited

For investors in Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

For investors in Taiwan: This document is distributed to professional investors only and not others. Investing involves risk. The value of an investment and the income from it will fluctuate and investors may not get back the principal invested. Past performance is not indicative of future performance. This is a marketing communication. It is for informational purposes only. This document does not constitute investment advice or a recommendation to buy, sell or hold any security and shall not be deemed an offer to sell or a solicitation of an offer to buy any security. The views and opinions expressed herein, which are subject to change without notice, are those of the issuer or its affiliated companies at the time of publication. Certain data used are derived from various sources believed to be reliable, but the accuracy or completeness of the data is not guaranteed, and no liability is assumed for any direct or consequential losses arising from their use. The duplication, publication, extraction, or transmission of the contents, irrespective of the form, is not permitted.

© 2023 DWS Group GmbH & Co. KGaA. All rights reserved. (11/23) 098804_1