Alternatives Research Real Estate

February 2021



GLOBAL REAL ESTATE STRATEGIC OUTLOOK

First Quarter

N A NUTSHELL

- We expect 2021 to mark the beginning of a sustained period of recovery, and see an increasingly compelling case for investment in global real estate.
- Looking forward our forecasts again show few differences in regional returns. We anticipate higher returns in the U.S. market, but not significantly more than Europe and Asia-Pacific.
- Residential is projected to see the highest returns over the next five years, closely followed by industrial.

 Office conditions should gradually improve while retail remains a concern.

1 / Market Overview

The global real estate market performed remarkably well over the past 12 months. This is not to say performance didn't suffer as a result of the pandemic, but given one of the sharpest economic contractions in living memory, the impact on real estate as a whole has so far been fairly small.

In some ways the resilience of the market came as no surprise. With the onset of the pandemic we stressed that low vacancy and a muted pipeline should support rents. However we hadn't anticipated the sheer volume of stimulus governments and central banks would pump into the market. Despite a collapse in global GDP, real estate rents fell by a fraction of what could have been expected from past economic downturns, while yields were broadly unchanged. We estimate that by the end of 2020, global real estate values had fallen just 5%, well below the almost 25% reduction recorded during the Global Financial Crisis (GFC).¹

Going into 2021 it may feel that economic conditions are once again deteriorating, however we're optimistic that as vaccination programmes are rolled out across the globe, restrictions will start to ease, prompting a rebound in economic activity. And while real estate returns may only be slightly higher this year, we expect this year will mark the beginning of a sustained period of recovery.

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.

For Professional Clients (MiFID Directive 2014/65/EU Annex II) only. For Qualified Investors (Art. 10 Para. 3 of the Swiss Federal Collective Investment Schemes Act (CISA)). For Qualified Clients (Israeli Regulation of Investment Advice, Investment Marketing and Portfolio Management Law 5755-1995). Outside the U.S. for Institutional investors only. In the United States and Canada, for institutional client and registered representative use only. Not for retail distribution. Further distribution of this material is strictly prohibited. In Australia and New Zealand: For Wholesale Investors only. For finvestors 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.

¹ DWS, PMA, JLL, NCREIF, January 2021



Importantly we expect higher returns to be fueled by both rental growth and further yield compression. Transaction volumes may have fallen by 30%2 last year, yet it may be wrong to conclude that this was due to a lack of investor interest. Indeed, fundraising remains robust and available dry powder is close to record high levels.3 Relative real estate pricing has rarely been more attractive, and once the current physical constraints on transacting real estate start to fade, investor activity should increase. Indeed, with interest rates forecast to remain exceptionally low for the rest of the decade, we suspect that once recovery takes hold transaction activity may well be elevated for some time.⁴

1,200 ■US □Total APAC ■ Europe 1,000 800 600 400 200 0 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Exhibit 1: Real Estate Transaction Volumes by Region (US\$ Billion)

Source: Real Capital Analytics. As of February 2021.

Note: Excludes development land sales

² Real Capital Analytics, January 2021

³ Preqin, February 2021

⁴ DWS, February 2021



2 / Investment Outlook and Strategy

There is an increasingly compelling case for investment in the real estate sector. As ever though, not all investments are alike, and this is certainly the case today. While performance across the three main regions may be similar, between cities, sectors and strategies the divergence in outlook has rarely been greater.

Convergence in performance between APAC, Europe and the United States

Despite clear differences in economic performance, we've not seen this translate into a divergence in real estate performance across our three regions. In fact, we expect that the final outturn for 2020 will show little difference in performance, with the United States only slightly ahead of Europe and Asia-Pacific. This convergence in performance is something we've been witnessing for a number of years now. If we look back over the past decade the total return of all three regions has been almost identical – in part, we suspect, the result of increased global capital flows.

Looking forward our forecasts again show few difference in regional total returns. Similar to this year, we anticipate an outperformance for the U.S. market, however with annual returns over the coming five years forecast to be just 100-150 basis points above that of Europe and Asia-Pacific, there isn't a clear case for one region over another.



Exhibit 2: Real Estate Total Returns by Region (2021-25F, Per Annum)

Source: DWS. As of January 2021.

Notes: F = Forecast. Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect

2.2 Cross-border investments offering opportunities to enhance performance

While we've seen a convergence across regional returns, this is not to say that investors should only look for opportunities within their home market; far from it. From performance enhancement to portfolio diversification, there remain compelling reasons to look abroad. Indeed, with performance diverging at the national level, and when factoring in hedging, our forecasts show that Australian and Japanese investors aiming to better home returns could consider opportunities in Europe and the United States; Korean investors should the United Kingdom; and Swiss investors and Chinese investors willing to hedge should consider opportunities across almost all major global markets.

For U.K. and U.S. investors, there is perhaps a less compelling case to go abroad from a return perspective, however for the purpose of diversification countries like Korea, Germany, the Netherlands and Spain are not be expected to be a drag on performance, while for U.S. investors the United Kingdom could also provide opportunities for enhanced returns.



Exhibit 3: Relative Cross-Border Forecast Total Return by Investor Domicile (2021-25F)

Investor Domicile	Close to Expected Domestic Return*	Above Expected Domestic Return*
Australia	Japan, Germany, France, Italy	Korea, Netherlands, Spain, United Kingdom, United States
China		All Major Markets (ex. Switzerland)
Germany	Australia, Japan, Korea, France, Netherlands, Spain, United States	United Kingdom
Japan	Australia, Germany, France, Netherlands, Italy, United States	Korea, Spain, United Kingdom
Korea	Germany, Netherlands, Spain, United States	United Kingdom
Switzerland		All Major Markets
United Kingdom	Korea, Netherlands, Spain, Unites States	
United States	Japan, Korea, Germany, Netherlands, Spain	United Kingdom

Source: DWS. As of January 2021.

Notes: *Hedged. F = Forecast. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.

There are clearer differences in expected performance between individual cities. In all three regions there are cities which we expect to grow exceptionally strongly, gaining in both population and employment well above the average. While some of these cities are the traditional Gateways like London and Sydney, this is by no means a rule. This is particularly the case in the United States where population growth has over recent years been far greater in Sun Belt cities such as Austin and Raleigh than the Gateways; in New York and Chicago total population has actually being falling.⁵

It's difficult to pinpoint one single reason why some cities are expected to outperform. However in general we tend to favour places with a good standard of living, a highly educated workforce and an outsized exposure to the fast growth tech sector. This is noticeable in places like San Francisco, Seattle and Berlin, where our projections for office and residential rent growth are well in advance of the national average.

Having seen a significant reduction in values during 2020, the fast growing Australian cities of Melbourne and Sydney are both well positioned to bounce back strongly as recovery takes hold, while the London market which has largely been on hold since the 2016 E.U. Referendum, is today offering investors a significant yield premium over the other major European cities.

Finally, although short-term prospects are less compelling in Warsaw and Seoul, both cities stand out as possible long-term winners, as rising productivity and market maturity seem to shift capital values higher and more in line with the regional average.

⁵ Moody's Analytics, Census Bureau, DWS. As of December 2020.







Source: Bloomberg (sovereign bond yields); NCREIF, PMA, JLL (real estate yields); DWS (rent growth). As of December 2020.

Notes: F = Forecast. Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.

2.3 Residential expected to be top performing sector with logistics a close second

Industrial and residential once again top our sector outlook. Having sustained relatively strong performance throughout 2020, both look well placed to gain from structural advances in occupier demand and a sustained growth in investor interest.

The forecast outperformance of industrial and residential is a common theme across all parts of the globe. While we've seen a convergence in performance between the regions, we've seen the reverse at the sector level. In the United States for example the dispersion of total returns between the top and bottom performing sectors on the NCREIF Property Index is now at the highest level on record. As shown in the chart below, according to our forecasts, industrial and residential may not only be the top performers within each region, these sectors could take the top spot across all sectors and regions.

Following a surge in online sales, industrial was exceptionally resilient in 2020. With returns last year expected to have been above 10%, this would mark the eighth year in a row topping the performance league table. There is some concern that after such a strong run the sector may now start to lose momentum. And while it's true that yields are low and supply is rising, we remain convinced that the rapid growth of online sales has a long way to run.

We remain positive on the whole industrial sector but do tend to favour urban logistics within or at the edge of major urban areas. However, given the strength of demand and current low levels of vacancy in many locations, we also see taking on leasing and development risk in both urban and corridor locations as an attractive option, gaining access to product and possibly, boosting return.

Despite the current moment in industrials, it's residential that we expect to be the top performing global sector over the full five years. Through a combination of population growth, wage recovery, supply constraints and limits on mortgage availability, we forecast residential markets recording annual average rental growth of 3.3% in the years to 2025, almost twice the all property average. With investor interest also rising sharply – the sector topped this year's INREV Investor Intentions Survey⁶ – yield compression is also set to be a further driver of outperformance.

It's worth remembering, when compared to other sectors, there are greater structural differences between residential markets. Not only as a result of national and city level regulations, but also in respect to market maturity. Institutional investment in apartments may have a long history in Germany, Japan and the United States, but this is by no means universal. In Spain and the United Kingdom the sector still has some way to go before full maturity, while Italy, Korea

⁶ INREV, January 2021



and Australia are very much in their infancy. Market maturity will often dictate strategy, particularly when considering the merits of standing stock versus build to rent.

One common trend we're witnessing across many parts of the globe is suburbanisation. Whether driven by high city centre rents, aging millennials or the impact of the pandemic, this dynamic is increasing demand for well connected, commuter locations. Having been much maligned for several decades, we see demand for suburban living as a key investment theme over the coming years.

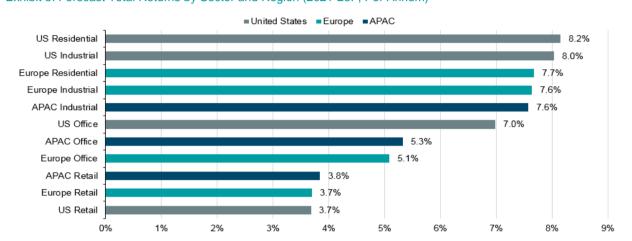


Exhibit 5: Forecast Total Returns by Sector and Region (2021-25F, Per Annum)

Source: DWS. As of January 2021.

Notes: F = Forecast. Past Performance and forecasts are not reliable indicators of future returns. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, opinions, models and analysis which may prove to be incorrect.

2.4 Cautious return to high quality office sector but most retail expected to continue to suffer

The office sector fared better than originally expected in 2020. At the start of the pandemic we had expected a sharp fall in rents, which didn't really materialise. Incentives and low deal volumes may have hidden the true extent of the rent correction, but it's also likely that with government support keeping businesses afloat, rent in often empty office buildings largely continued to be paid, in turn reducing the pressure on landlords to lower asking rents.

We see few reasons though to suggest the market will return to rental growth in 2021. The relationship may have weakened, but we think it unlikely that rent growth will resume until economic activity enters a period of sustained recovery. Also with less of a correction, we see less room for a bounce back in rents. There are exceptions to this, such as Sydney and Melbourne and the U.S. West Coast, but in general the rental growth projections for the next five years are fairly modest at less than 2%. And while we shouldn't overstate the impact of remote working, we can't ignore the long-term implications for demand, particularly for poorer quality, commodity stock. We tend therefore to favour a focus on the best in class, next generation office space, particularly as occupiers may well look to substitute total space for quality.



Turning to retail, it should come as no surprise that with many stores closed and sales flooding online, last year was an exceptionally difficult year for this sector. Across much of the globe, collection rates slumped, rents fell and with little investor interest, yields rose sharply. Having been a relative winner in past recessions, retail property experienced value declines of more than 15%. However underperformance is not new. This is the fifth year in a row retail has recorded the lowest return of the four main sectors, something we expect to continue for at least the next three years. The level of the price correction witnessed over the past few years may be enough to tempt some investors back into the market, however in general we don't think today's 100 basis point average yield premium sufficiently compensates for expected rental decline and the additional risk now associated with owning physical retail.

2.5 ESG increasingly influential for all aspects of real estate investment

The influence of ESG continued to gain prominence over the past twelve months. The pandemic shone a bright light on the intimate relationship between real estate, the environment and society, clearly showing this isn't something that any long-term investor can ignore. And indeed, many institutional investors are already actively engaged in this area, with participation in the GRESB assessment growing 22% in 2020 to cover over 1,200 portfolios with assets under management of around \$4.8 trillion.7

There are multiple reasons driving the growth in investor interest, but regulation and tenant demand are likely to be high on the list. With an increasing number of national and city level regulators requiring minimum energy efficiency standards, many assets face the risk of obsolescence, while according to CBRE, corporate occupiers are reporting a desire for both high environmental standards as well as buildings that facilitate employee wellness.8

With investor and occupier demands seemingly only moving in one direction, and regulation continuing to tighten, the demand for ESG compliance could well result in a notable divergence in the performance of assets and funds. We therefore see it as imperative that this is one of the cornerstone of all fund strategies and investment themes.



Research & Strategy—Alternatives

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

TEAM:

Global

Kevin White, CFA

Co-Head of Real Estate Research & Strategy kevin.white@dws.com

Gianluca Minella

Head of Infrastructure Research gianluca.minella@dws.com

Americas

Brooks Wells

Head of Research, Americas brooks.wells@dws.com

Ross Adams

Industrial Research ross.adams@dws.com

Ana Leon

Retail Research ana.leon@dws.com

Europe

Tom Francis

Property Market Research tom.francis@dws.com

Rosie Hunt

Property Market Research rosie.hunt@dws.com

Florian van-Kann

Property Market Research florian.van-kann@dws.com

Simon Wallace

Co-Head of Real Estate Research & Strategy simon.wallace@dws.com

Liliana Diaconu, CFA

Office Research liliana.diaconu@dws.com

Ryan DeFeo

Property Market Research ryan-c.defeo@dws.com

Joseph Pecora, CFA

Apartment Research joseph.pecora@dws.com

Siena Golan

Property Market Research siena.golan@dws.com

Martin Lippmann

Property Market Research martin.lippmann@dws.com

Aizhan Meldebek

Infrastructure Research aizhan.meldebek@dws.com

Asia Pacific

Koichiro Obu

Head of Research & Strategy, Asia Pacific koichiro-a.obu@dws.com

Seng-Hong Teng

Property Market Research seng-hong.teng@dws.com

Natasha Lee

Property Market Research natasha-j.lee@dws.com

Hyunwoo Kim

Property Market Research hyunwoo.kim@dws.com



Important Information

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.

Investment in real estate may be or become nonperforming after acquisition for a wide variety of reasons. Non-performing real estate investment may require substantial workout negotiations and/ or restructuring. Environmental liabilities may pose a risk such that the owner or operator of real property may become liable for the costs of removal or remediation of certain hazardous substances released on, about, under, or in its property. Additionally, to the extent real estate investments are made in foreign countries, such countries may prove to be politically or economically unstable. Finally, exposure to fluctuations in currency exchange rates may affect the value of a real estate investment.

Investments in Real Estate are subject to various risks, including but not limited to the following:

- Adverse changes in economic conditions including changes in the financial conditions of tenants, buyer and sellers, changes in the availability of debt financing, changes in interest rates, real estate tax rates and other operating expenses;
- Adverse changes in law and regulation including environmental laws and regulations, zoning laws and other governmental rules and fiscal policies;
- _ Environmental claims arising in respect of real estate acquired with undisclosed or unknown environmental problems or as to which inadequate reserves have been established;
- Changes in the relative popularity of property types and locations;
- Risks and operating problems arising out of the presence of certain construction materials; and
- Currency / exchange rate risks where the investments are denominated in a currency other than the investor's home currency.

An investment in real estate 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.

War, terrorism, economic uncertainty, trade disputes, public health crises (including the recent pandemic spread of the novel coronavirus) and related geopolitical events could lead to increased market volatility, disruption to US and world economies and markets and may have significant adverse effects on the global real estate markets.

This marketing communication is intended for professional clients only.

DWS is the brand name of DWS Group GmbH & Co. KGaA and its subsidiaries under which they operate their business activities. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. 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 has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS Group, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, 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 giving investment advice.

The document was not produced, reviewed or edited by any research department within DWS and is not investment research. Therefore, laws and regulations relating to investment research do not apply to it. Any opinions expressed herein may differ from the opinions expressed by other legal entities of DWS or their departments including research departments.

The information contained in this document does not constitute a financial analysis but qualifies as marketing communication. This marketing communication is neither subject to all legal provisions ensuring the impartiality of financial analysis nor to any prohibition on trading prior to the publication of financial analyses.

This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. Source: DWS Investment GmbH



This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author's judgment as of the date of this document. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements or to any other financial information contained in this document. Past performance is not guarantee of future results.

We have gathered the information contained in this document from sources we believe to be reliable; but we do not guarantee the accuracy, completeness or fairness of such information. All third party data are 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, 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. Furthermore, substantial fluctuations of the value of any investment are possible even over short periods of time. The terms of any investment will be exclusively subject to the detailed provisions, including risk considerations, contained in the offering documents. When making an investment decision, you should rely on the final documentation relating to any transaction.

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 or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.

DWS does not give taxation or legal advice. Prospective investors should seek advice from their own taxation agents and lawyers regarding the tax consequences on the purchase, ownership, disposal, redemption or transfer of the investments and strategies suggested by DWS. The relevant tax laws or regulations of the tax authorities may change at any time. DWS is not responsible for and has no obligation with respect to any tax implications on the investment suggested.

This document may not be reproduced or circulated without DWS written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including the United States. 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.

© 2021 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).

© 2021 DWS Investments ÚK 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.
© 2021 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.
© 2021 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. © 2021 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.

© 2021 DWS Group GmbH & Co. KGaA. All rights reserved. (2/21) 081497_1