DWS

REGIONAL ECONOMIC MAPS

Research Report—May 2019

AFTER LOSING MOMENTUM IN LATE 2018 AND EARLY 2019, GLOBAL GROWTH APPEARS TO BE STABILIZING

— While the global economy continues to grow at a reasonable rate, there are downside risks

Overall, the U.S. economy remains strong

— The U.S. labor market continues to grow at a healthy pace. There is a record 1.7 million more job openings than unemployed workers.

— July 2019 will likely mark a new record for the longest U.S. economic expansion since the NBER started tracking economic cycles way back in the 1850s.

— As negotiations toward resolving the U.S.-China trade war stalled, the U.S moved to address festering trade disputes with allies, rolling back tariffs on Mexican and Canadian steel and aluminum to advance the USMCA and delayed any action on auto tariffs with the European Union and Japan.

— The Fed reversed its stance on policy earlier this year, eliminating all expectations for even a single rate hike for 2019. This follows four rate increases by the U.S. central bank in 2018.

— Over the past three years, the expansion for the U.S. construction industry has shown deceleration in its rate of growth, a pattern that typically takes place as an expansion matures.

— Trade tensions, a global slowdown and waning effects of the 2017 tax cuts present a growing downside risk to the economic forecast.

Growth surprises on the upside in first quarter

— Economic growth across the E.U. and the Eurozone accelerated to 0.5% and 0.4%, respectively, during the first quarter of 2019. Picking up from the previous quarter, this came despite lead indicators suggesting otherwise.

— Brexit negotiations have been front of mind over recent months, and despite a lull in proceedings following the April extension to the deadline, this risk is far from resolved.

— Following a slow start to the quarter, as indicated by the PMI surveys, activity across the Eurozone and United Kingdom is expected to be modest during the second quarter.

— Despite the specter of political disruption, as the year progresses we expect activity to gather pace. Supported by the ECB, Eurozone money supply figures have perked up in recent months.

— In March, the European Union's unemployment rate fell to its lowest level since records began in the year 2000.

— This is putting some upwards pressure on wage growth, but at just over 2% this is not at a level which would threaten substantially higher inflation, and therefore we see little chance of the ECB tightening monetary policy this year.

Growth concerns remain across Asia-Pacific

— Economic activity remains weighed down by contraction in exports due to falling Chinese import demand. Manufacturing PMIs stabilized in April though only South Korea saw a recovery.

— GDP growth across Asia (ex Japan) is expected to moderate to 5.4%-5.6% over the next two years, down from the five-year average of 6% since 2014.

— Concerns over the U.S.-China trade conflict and growth deceleration have weighed on investor confidence, evidenced by the ongoing correction in Asian stock markets.

— The region's aggregate unemployment rate continued to trend down marginally to 3.7% in the first quarter from 3.8% a year ago, though we expect employment growth to moderate going forward.

— Monetary policies across the region are expected to be driven by the modest growth outlook and benign inflation expectations with a rising likelihood of easing. New Zealand and Malaysia cut their benchmark interest rates in May.

Source: DWS, U.S. Commerce Dept., U.S. Bureau of Economic Advisors, U.S. Bureau of Labor Statistics, National Bureau of Economic Research, Wall Street Journal, Moody's Analytics, Bloomberg, Dodge Data & Analytics, IMF, World Bank, Eurostat, Oxford Economics, Bank of Japan, Bank of Korea, People's Bank of China, Reserve Bank of Australia, EIU. As of May 2019. No assurance can be given that any forecast or target will be achieved. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

UNITED STATES REGIONAL ECONOMIC MAP

May 2019

ECONOMIC HIGHLIGHTS AND PERSPECTIVE

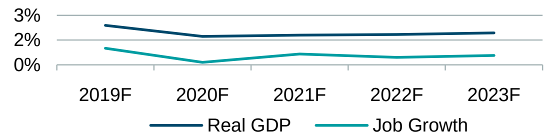
_ The U.S. economy grew at a 3.1% rate in the first three months of the year after expanding at a 2.2% pace in the fourth quarter of 2018. The pickup in growth came despite the federal government shutdown through most of January.

_ The economy added 263,000 jobs in April, and joblessness fell to 3.6%, the lowest level since December 1969. April's data from employers was consistent with solid hiring throughout this year, with the economy adding an average of 205,000 jobs to payrolls each month.

_ U.S. workers saw steady wage gains, with average hourly earnings up 3.2% in April from a year earlier, matching the prior month's increase.

REAL GDP & JOB GROWTH

(%)



Source: Moody's Analytics (Consensus View), April 2019.

EMPLOYMENT GROWTH: 2019 – 2020F

Below national average   Near national average   Above national average

San Francisco: Under SF's Prop M, which restricts the amount of office space built each year, tech firms are in fierce competition to lease space, where vacancy sits at just 6.4% .

San Jose: Home to some of the most valuable technology firms in the world, SJ should continue to outperform the U.S. for the foreseeable future.

Los Angeles: For the 4th year in a row, commercial real estate investors chose LA as the top target among metros in the Americas in CBRE's 2019 Investor Intentions Survey.

Inland Empire: Shippers recently rushed to fill **Riverside/Ontario** warehouses with imports because of strong U.S. consumer demand and the fear of a potential U.S.-China trade war.

Phoenix: At 3.3%, job growth in Phoenix during 2018 was almost twice the national average as the metro remains a magnet for corporate expansions and relocations.

Austin: For the third year in a row, Austin is the No. 1 place to live in America for 2019, according to U.S. News & World Report's 125 Best Places to Live in the US.

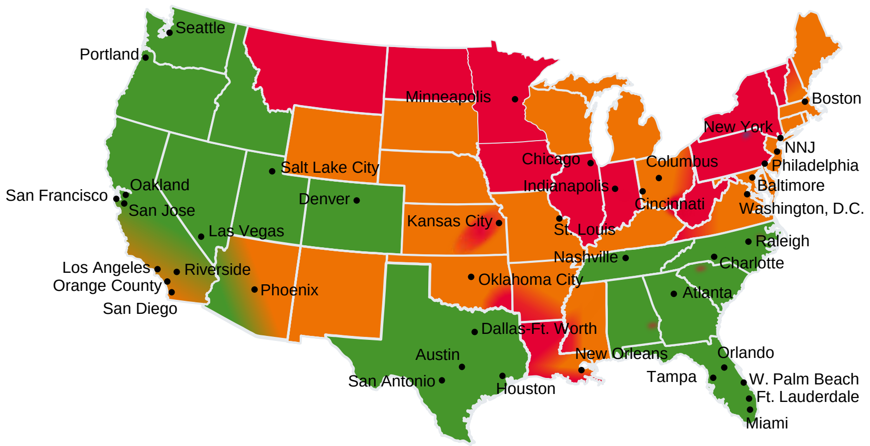
Dallas-Ft Worth: A record 30.1 milllion sq ft of warehouse space was under construction in 1Q19, fueled by a combination e-commerce and growing demand for consumer products.

Seattle: Seattle has become 'Cloud City' thanks to the growth of Amazon.com, Microsoft and a roster of Silicon Valley transplants..

Salt Lake City: LinkUp ranked SLC the highest in terms of job market diversification in 2018 among metros with a population over 1.1 million.

Denver: Tech jobs account for 11.4% of the Denver workforce and the sector's economic impact in the metro is estimated at $31 billion.

Chicago: Chicago lost population for the fourth consecutive year, continuing a statewide trend of decline that is particularly concerning in terms of the region's economy.



Boston: The life sciences industry is riding a wave of momentum with Boston-Cambridge ranked the No. 1 life sciences cluster in the US, according to a recent CBRE study.

New York: The area known as "Billionaire's Row" in Manhattan is becoming one of the biggest real estate gluts in all of the city. 40% of condos in the area are now sitting unsold in towers that top out at 100 stories.

Northern New Jersey: The arrivals of new transportation and logistics firms have helped to fuel strong industry job growth.

Wash D.C. & Nashville: Amazon's withdrawal from New York hasn't changed the company's plans to bring high wage jobs to **Northern Virginia** (25,000 jobs by 2030) and **Nashville** (5,000 jobs by 2026).

Charlotte: BB&T and SunTrust Banks have agreed to merge in a $66 billion deal to form a new bank that will be HQ'd in Charlotte.

Atlanta: Movie Maker magazine recently named Atlanta the No. 1 large city for filmmakers to live and work in.

Florida: Florida's annual private-sector job growth rate of 2.7% in March continues to exceed the nation's rate of 1.9%.

Orlando: Orlando is No. 1 in the US for job growth for the 4th consecutive year – adding 43,200 jobs in 2018, a growth rate of 3.4%.

Sources: DWS, U.S. Dept. of Commerce, U.S. Census Bureau, U.S. Dept. of Labor, U.S. Bureau of Economic Advisors, U.S. Conference Board, Moody's Analytics, National Association of Realtors, Wall Street Journal, Bloomberg, Reuters, CNBC, U.S. News & World Report, New York Post, CBRE, Cushman & Wakefield, bizjounal.com, Charlotte Observer, Movie Maker, LinkUp. As of May 2019.

This information is a forecast and due to a variety of uncertainties, and assumptions made in our analysis, actual events or results or the actual performance of the markets covered may differ from those represented. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved. This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

EUROPEAN REGIONAL ECONOMIC MAP

May 2019

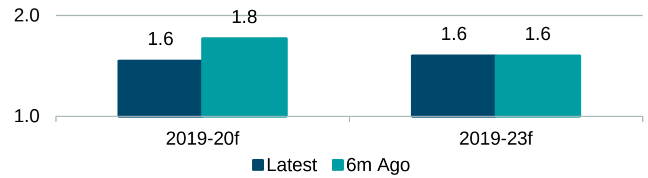
ECONOMIC HIGHLIGHTS AND PERSPECTIVE

_ GDP growth surprised to the upside in the first quarter of 2019. Despite a host of weak indicators, growth accelerated across the European Union, expanding by 0.5%, up 20 basis points on the previous quarter.

_ The E.U. unemployment rate fell to 6.4% in March. its lowest level on record. In total, unemployment has fallen by 1.5 million over the past twelve months, trending lower across almost all European countries.

_ The outlook for economic growth has been revised down over the past six months. Given current political risk, global economic slowdown and below target inflation, there are few signs to suggest the ECB will tighten monetary policy in 2019.

E.U. REAL GDP GROWTH (%)



Source: Oxford Economics, May 2018

EMPLOYMENT GROWTH: 2019 – 2020F:

Lagging European Average — Near European Average — Leading European Average

London: While U.K. unemployment hits a 44-year low in May, the number of finance job openings has halved in the two years since Brexit. Nomura is set to cut hundreds of jobs in London.

Paris: Yellow vest protests continue to cause disruption but protester numbers are dwindling. The EBA completed its move to La Defense in March, a decision prompted by Brexit.

Regional France: Lyon has become a hub for tech start-ups, with a young and skilled workforce. Working-age population there is expected to grow well ahead of the French average.

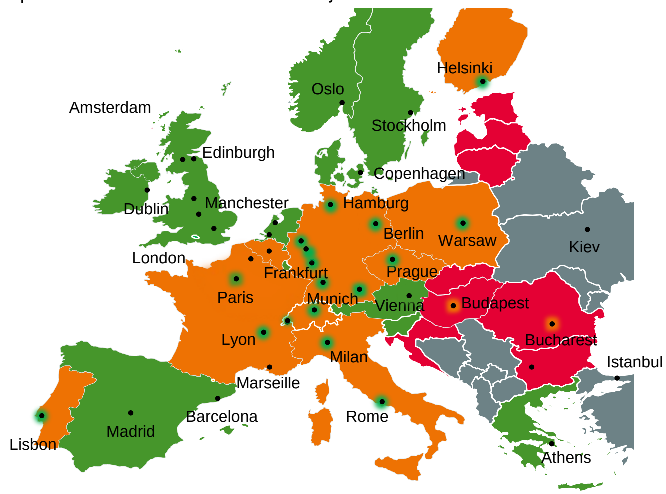
Frankfurt: Business sentiment remains positive, although expectations have weakened and seem in contrast to what is being experienced on the ground.

Berlin: Again showing some of the strongest employment growth. Room for further improvement as unemployment is still above the national average.

Regional UK: Risk around HS2 deliverability rising. In contrast, Manchester Airport's £1bn expansion underway while Birmingham Airport planning £500mn expansion.

Dublin: TMT remains a driver of jobs growth. DocuSign plans 1,000 new jobs.Indeed.com will create 600 jobs while U.S. software company LogMeIn announces 200 jobs.

Benelux: Dutch government says it has already gained 1,900 jobs from Britain in bid for Brexit leavers. Sony, Bloomberg and Panasonic redirected investments into the country.



Stockholm: Krona fell in May on concern around a broadening economic slowdown. The health sector is not immune with Karolinska Institute suggesting 550 jobs may need to go.

Other Nordics: Fiscal boost increases prospect of further rate rises in Norway. Denmark's economy showing signs of cooling. Recent elections in Finland create uncertainty for reform.

Warsaw: Business climate remains strong in construction, banking and retail. Job market still strong, for example Cap Gemini is looking to hire an additional 200 employees.

Prague: Czech employers report hiring slow down in early 2019. The economic cycle looks to be past its peak, and we still see GDP growth likely slowing to 2.6% in 2019.

Budapest: High-frequency indicators suggest that growth remained healthy at the start of this year. Labour market remains very strong for now.

Other Germany: Near-term prospects for manufacturing are weak but consumers are picking up the slack. Companies are worried about labour shortages.

Madrid and Barcelona: The incumbent Spanish Socialist Workers' Party won the most seats in April's general election, but having failed to win a majority must now look to form a coalition.

Milan and Rome: Despite continued economic worries at the national level, Milan, and to a lesser degree Rome, are performing well, recording jobs growth in excess of the European average.

Athens: Unemployment is falling. At 18.5% in February, the national unemployment rate was down 200 basis points from early 2018. Polling shows a likely change of government in October.

Source: DWS, Oxford Economics, Eurostat, FT, Markit, Bloomberg, Reuters, May 2019. F- forecast. This information is a forecast and due to a variety of uncertainties, and assumptions made in our analysis, actual events or results or the actual performance of the markets covered may differ from those represented. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved. This information is intended for informational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation.

ASIA PACIFIC REGIONAL ECONOMIC MAP

May 2019

ECONOMIC HIGHLIGHTS AND PERSPECTIVES

_ The region's economic momentum remains affected by rising trade tensions and the recent deceleration in manufacturing output.

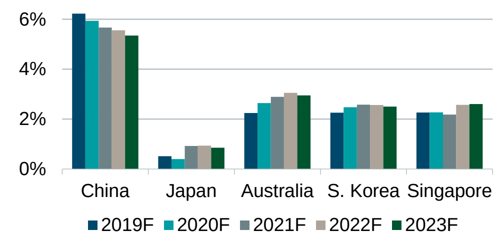
_ China's GDP growth slowed to 6.4% in Q1 2019, with factory output growing weaker-than-expected. The government has recently increased fiscal stimulus measures including corporate tax cuts and increased infrastructure financing to support growth.

_ Japan's GDP growth is expected to slow down to 0.7% in 2019 as concerns mount among manufacturing industries, while the service sector looks more resilient. New immigration policy was approved in efforts to cope with intensifying labor shortage.

_ The Bank of Korea forecasts South Korea's real GDP to grow by 2.6% in 2019, slightly lower than 2.7% in 2018, due to deteriorating global trade environment. The possibility of a further base rate hike in 2019 also remains low.

_ Australia's economy is expected to expand by 2.2% in 2019, supported by business investment and public infrastructure spending. Notwithstanding, consumer spending has been weighed down by subdued income growth and the soft housing market.

APAC GDP GROWTH



Source: Oxford Economics, April 2019.

EMPLOYMENT GROWTH 2019 – 2020F

Below 5-Year National Average   Near 5-Year National Average   Above 5-Year National Average

Beijing: The slowing economy has led the government to prioritize employment among key policies for this year.

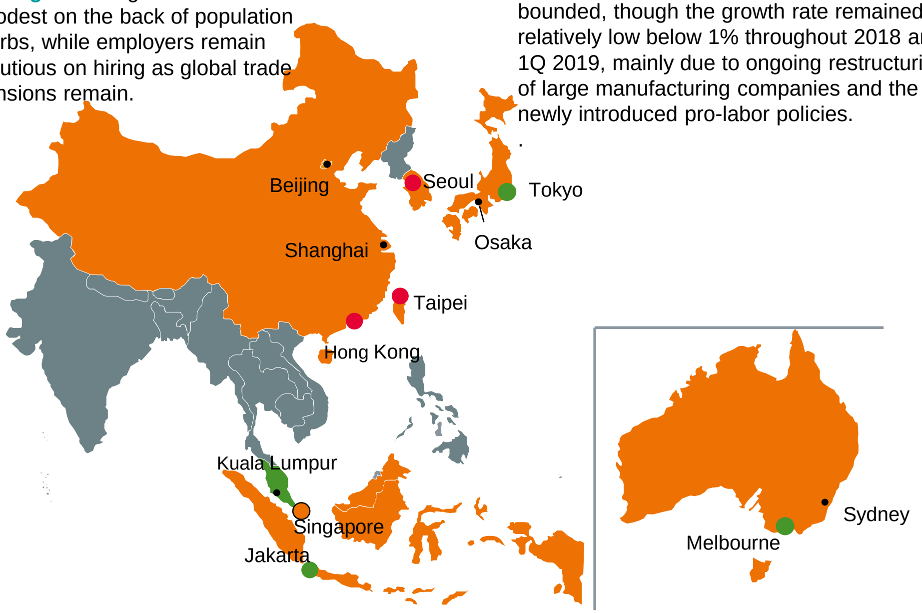
Hong Kong: Economic growth continues to slow amid unresolved trade tensions between U.S. and China. Notwithstanding, unemployment rate remains tight at 2.8% in April. GDP growth has been revised downwards from 2.2% to 1.6% for 2019.

KL: Increased exports underpinned jobs growth of 2.2% for 2018, though majority of vacancies filled are in the lower skilled manufacturing and services sectors.

Singapore: Labor conditions remain relatively stable with unemployment rate at 2.2% in Q1. Jobs creation mainly in the public sector and other services sectors including financial and trade activities.

Shanghai: Job growth remained modest on the back of population curbs, while employers remain cautious on hiring as global trade tensions remain.

Seoul: The number of employees hired re-bounded, though the growth rate remained relatively low below 1% throughout 2018 and 1Q 2019, mainly due to ongoing restructuring of large manufacturing companies and the newly introduced pro-labor policies.
.



Tokyo: Unemployment rate remained tight at a 26-year-low of 2.5%, pushing up core CPI to 0.8% in March 2019, a healthy level for the country with a long deflationary history.

Osaka: Despite the tax reform in China regulating overseas retail purchases, high street retail and department stores saw continuous robust growth, while hotel occupancy rate remains at a healthy level over 85%.

Sydney: The unemployment rate declined to a historic low level of 4.3% in March. However, employment growth is forecast to be modest along with a more moderate population projection.

Melbourne: Labor market remains strong with unemployment rate of 4.6% in March. Employment prospects will be supported by strong population growth of circa 2%.

RESEARCH & STRATEGY—ALTERNATIVES

OFFICE LOCATIONS

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

Frankfurt
Taunusanlage 12
60325 Frankfurt am Main
Germany
Tel: +49 69 71909 0

London
Winchester House
1 Great Winchester Street
London EC2A 2DB
United Kingdom
Tel: +44 20 754 58000

New York
345 Park Avenue
26th Floor
New York
NY 10154-0102
United States
Tel: +1 212 454 62600

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

Mark Roberts
Head of Research & Strategy
mark-g.roberts@dws.com

Jessica Elengical
Head of ESG Strategy
jessica.elengical@dws.com

Yasmine Kamaruddin
Global Strategy
yasmine.kamaruddin@dws.com

Gianluca Minella
Infrastructure Research
gianluca.minella@dws.com

Americas

Kevin White
Head of Strategy, Americas
kevin.white@dws.com

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

Ross Adams
Industrial Research
ross.adams@dws.com

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

Liliana Diaconu
Office Research
liliana.diaconu@dws.com

Ana Leon
Retail Research
ana.leon@dws.com

Joseph Pecora
Apartment Research
joseph.pecora@dws.com

Europe

Matthias Naumann
Head of Strategy, Europe
matthias.naumann@dws.com

Simon Wallace
Head of Research, Europe
simon.wallace@dws.com

Siena Carver
Property Market Research
tom.francis@dws.com

Tom Francis
Property Market Research
tom.francis@dws.com

Martin Lippmann
Property Market Research
martin.lippmann@dws.com

Aizhan Meldebek
Property Market Research
aizhan.meldebek@dws.com

Farhaz Miah
Property Market Research
farhaz.miah@dws.com

Asia Pacific

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

Hyunwoo Kim
Property Market Research
hyunwoo.kim@dws.com

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

Seng-Hong Teng
Property Market Research
seng-hong.teng@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.

DWS represents the asset management activities conducted by DWS Group GmbH & Co. KGaA or any of its subsidiaries. In the U.S., DWS relates to the asset management activities of RREEF America L.L.C.; in Germany: DWS Grundbesitz GmbH, DWS Real Estate GmbH, and DWS Alternatives GmbH ; in Australia: DWS Investments Australia Limited (ABN 52 074 599 401) an Australian financial services incense holder; in Japan: DWS Investments Japan Limited; in Hong Kong: Deutsche Bank Aktiengesellschaft, Hong Kong Branch (for direct real estate business), and DWS Investments Hong Kong Limited (for real estate securities business); in Singapore: DWS Investments Singapore Limited (Company Reg. No. 198701485N); in the United Kingdom: Deutsche Alternative Asset Management (UK) Limited, DWS Alternatives Global Limited and DWS Investments UK Limited; and in Denmark, Finland, Norway and Sweden: DWS Investments UK Limited and DWS Alternatives Global Limited; in addition to other regional entities in the Deutsche Bank Group. Key DWS research personnel are voting members of various investment committees. Members of the investment committees vote with respect to underlying investments and/or transactions and certain other matters subjected to a vote of such investment committee. The views expressed in this document have been approved by the responsible portfolio management team and real estate investment committee and may not necessarily be the views of any other division within DWS.

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. Nonperforming 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.

IMPORTANT INFORMATION (Continued)

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.

Any forecasts provided herein are based upon DWS's opinion of the market at this date and are subject to change dependent on the market. Past performance or any prediction, projection or forecast on the economy or markets is not indicative of future performance.

In Australia: Issued by DWS Investments Australia Limited (ABN 52 074 599 401), holder of an Australian Financial Services License (AFSL 499 640). This information is only available to persons who are professional, sophisticated, or wholesale investors as defined under section 761 G of the Corporations Act 2001 (Cth). The information provided is not to be construed as investment, legal or tax advice and any recipient should take their own investment, legal and tax advice before investing. DWS Investments Australia Limited is an asset management subsidiary of DWS Group GmbH & CO. KGaA ("DWS Group"). The capital value of and performance of an investment is not in any way guaranteed by DWS Group, DWS Investments Australia Limited or any other member of the DWS Group. Any forecasts provided herein are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance. Investments are subject to investment risk, including possible delays in repayment and loss of income and principal invested. DWS Investments Australia Limited is not an Authorised Deposit-taking Institution under the Banking Act 1959 nor regulated by APRA.

Notice to prospective Investors in Japan: This document is distributed in Japan by DWS Investments Japan Limited. Please contact the responsible employee of DWS Investments Japan Limited in case you have any question on this document because DWS Investments Japan Limited serves as contacts for the product or service described in this document. This document is for distribution to Professional Investors only under the Financial Instruments and Exchange Law.

Dubai International Financial Centre: Deutsche Bank AG in the Dubai International Financial Centre (registered no. 00045) is regulated by the Dubai Financial Services Authority. Deutsche Bank AG - DIFC Branch may only undertake the financial services activities that fall within the scope of its existing DFSA license. Principal place of business in the DIFC: Dubai International Financial Centre, The Gate Village, Building 5, PO Box 504902, Dubai, U.A.E. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available to Professional Clients, as defined by the Dubai Financial Services Authority.

Kingdom of Saudi Arabia: Deutsche Securities Saudi Arabia LLC Company, (registered no. 07073-37) is regulated by the Capital Market Authority. Deutsche Securities Saudi Arabia may only undertake the financial services activities that fall within the scope of its existing CMA license. Principal place of business in Saudi Arabia: King Fahad Road, Al Olaya District, P.O. Box 301809, Faisaliah Tower - 17th Floor, 11372 Riyadh, Saudi Arabia.

For Investors in Switzerland: This material is intended for information purposes only and does not constitute investment advice or a personal recommendation. This document should not be construed as an offer to sell any investment or service. Furthermore, this document does not constitute the solicitation of an offer to purchase or subscribe for any investment or service in any jurisdiction where, or from any person in respect of whom, such a solicitation of an offer is unlawful. Neither DWS CH AG nor any of its affiliates, gives any warranty as to the accuracy, reliability or completeness of information which is contained in this document. Past performance or any prediction or forecast is not indicative of future results.

The views expressed in this document constitute DWS Group's judgment at the time of issue and are subject to change. DWS Group has no obligation to update, modify or amend this letter 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, or if research on the subject company is withdrawn. Prices and availability of financial instruments also are subject to change without notice.

The information provided in this document is addressed solely to Qualified Investors pursuant to Article 10 paragraph 3 of the Swiss Federal Act on Collective Investment Schemes (CISA) and Article 6 of the Ordinance on Collective Investment Schemes. This document is not a prospectus within the meaning of Articles 1156 and 652a of the Swiss Code of Obligations and may not comply with the information standards required thereunder. This document may not be copied, reproduced, distributed or passed on to others without the prior written consent of DWS CH AG or its affiliates.

IMPORTANT INFORMATION (Continued)

For investors in the United Kingdom: FOR PROFESSIONAL CLIENTS ONLY

Issued and approved by DWS Investments UK Limited of Winchester House, 1 Great Winchester Street, London EC2N 2DB, authorised and regulated by the Financial Conduct Authority ("FCA").

This document is a "non-retail communication" within the meaning of the FCA's Rules and is directed only at persons satisfying the FCA's client categorisation criteria for an eligible counterparty or a professional client. This document is not intended for and should not be relied upon by a retail client. This document may not be reproduced or circulated without written consent of the issuer.

This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS Group GmbH & Co. KGaA and/or its affiliates ("DWS"). Without limitation, this document does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS to enter into or arrange any type of transaction as a consequence of any information contained herein. 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. Past performance is not a guarantee of future results. Any forecasts provided herein are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance. Investments are subject to risks, including possible loss of principal amount invested.

When making an investment decision, potential investors should rely solely on the final documentation relating to the investment or service and not the information contained herein. The investments or services 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 the transaction and have made an independent assessment of the appropriateness of the transaction in the light of your own objectives and circumstances, including the possible risks and benefits of entering into such transaction. For general information regarding the nature and risks of the proposed transaction and types of financial instruments please go to https://www.db.com/company/en/risk-disclosures.htm. You should also consider seeking advice from your own advisers in making this assessment. If you decide to enter into a transaction with us you do so in reliance on your own judgment.

Any opinions expressed herein may differ from the opinions expressed by Deutsche Bank AG and/or any other of its affiliates ("DB"). DB may engage in transactions in a manner inconsistent with the views discussed herein. DB trades or may trade as principal in the instruments (or related derivatives), and may have proprietary positions in the instruments (or related derivatives) discussed herein. DB may make a market in the instruments (or related derivatives) discussed herein. You may not distribute this document, in whole or in part, without our express written permission.

DWS SPECIFICALLY DISCLAIMS ALL LIABILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR OTHER LOSSES OR DAMAGES INCLUDING LOSS OF PROFITS INCURRED BY YOU OR ANY THIRD PARTY THAT MAY ARISE FROM ANY RELIANCE ON THIS DOCUMENT OR FOR THE RELIABILITY, ACCURACY, COMPLETENESS OR TIMELINESS THEREOF.

Any reference to "DWS", "Deutsche Asset Management" or "Deutsche AM" shall, unless otherwise required by the context, be understood as a reference to asset management activities conducted by DWS Group GmbH & Co. KGaA and/or any of its affiliates. Clients will be provided DWS products or services by one or more legal entities that will be identified to clients pursuant to the contracts, agreements, offering materials or other documentation relevant to such products or services. DWS's infrastructure investment business is part of the Alternatives platform. In the U.S., DWS relates to the asset management activities of RREEF America L.L.C.; in Germany: DWS Grundbesitz GmbH, DWS Real Estate GmbH, and DWS Alternatives GmbH; in Japan: DWS Investments Japan Limited; in Hong Kong: Deutsche Bank Aktiengesellschaft, Hong Kong Branch (for direct real estate business), and DWS investments Hong Kong Limited (for real estate securities business); in Singapore: DWS Investments Singapore Limited (Company Reg. No. 198701485N); in the United Kingdom: Deutsche Alternative Asset Management (UK) Limited, DWS Alternatives Global Limited and DWS Investments UK Limited; and in Denmark, Finland, Norway and Sweden: Deutsche Bank AG; in Australia: DWS Investments Australia Limited (ABN 52 074 599 401) an Australian financial services license holder.

IMPORTANT INFORMATION (Continued)

For investors in Nordics: Deutsche Bank AG is authorised under German Banking Law (competent authority: European Central Bank and the BaFin, Germany's Federal Financial Supervisory Authority). Deutsche Bank AG Stockholm branch ("DBS", Bolagsverket nr. 516401-9985) is authorised by BaFin and regulated by Finansinspektionen for the conduct of licensed activities in Sweden, Denmark, Norway and Finland. Deutsche Bank branches operate within the EEA on the back of the legal entity (Deutsche Bank AG) EU Passports within the European Economic Area ("EEA"). Reference is made to European Union Regulatory Background and Corporate and Regulatory Disclosures at https://www.db.com/en/content/eu_disclosures_uk.htm. Details about the extent of our authorisation and regulation by BaFin and respective Nordic Region Financial Supervisory Authority are available from us on request.

Without limitation, this document and any attachment does not constitute an offer or a recommendation to enter into any transaction with DBS. This material and attachments is for information purposes only and is not intended to be an offer or an advice or recommendation or solicitation, or the basis for any contract to purchase or sell any security, or other instrument, or for DBS to enter into or arrange any type of transaction as a consequence of any information contained herein. The implicit or explicit views and recommendations expressed in marketing or other financial presentation material as well as any financial proposals are solely those of the issuer of such material, and forwarded to you on behalf of the contracting party.

The views set out in this presentation are those of the author and may not necessarily the views of any other division within Deutsche Bank, including the Sales and Trading functions of the Corporate and Investment Bank or the Global Client Group of Deutsche Asset Management and Private Wealth Management: all services provided by these the Sales and Trading functions of the Corporate and Investment Bank are purely on a non-advised, execution-only basis. DB may engage in transactions in a manner inconsistent with the views discussed herein. DB trades or may trade as principal in the instruments (or related derivatives), and may have proprietary positions in the instruments (or related derivatives) discussed herein. DB may make a market in the instruments (or related derivatives) discussed herein. Sales and Trading personnel are compensated in part based on the volume of transactions effected by them. You may not distribute this document, in whole or in part, without our express written permission.

DBS is solely acting for and on behalf of Deutsche Bank AG and/or any of its affiliates. Potential investors should be aware that if they decide to enter into a transaction with Deutsche Bank AG or any of its affiliates acting in their capacity as principal to the transaction ("contracting party"), any and all agreements will be entered into with that contracting party (unless re-negotiated) and pursuant to the financial laws and regulations of the country where the contracting party is licensed.

Unless DBS is entering into a separate and explicit contractual relationship with you for the provision of investment services, it is neither obliged to categorise you in accordance with MiFID nor perform MiFID suitability and/or appropriateness assessment (as enacted into Swedish laws and regulations). The investments or services mentioned in this material or an attachment thereto may not be appropriate for all investors and before entering into a transaction you should take steps to ensure that you fully understand the transaction and have made an independent assessment of the appropriateness of the transaction 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 a contracting party you do so in reliance on your own judgment. For general information regarding the nature and risks and types of financial instruments please go to www.globalmarkets.db.com/riskdisclosures.

DB SPECIFICALLY DISCLAIMS ALL LIABILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR OTHER LOSSES OR DAMAGES INCLUDING LOSS OF PROFITS INCURRED BY YOU OR ANY THIRD PARTY THAT MAY ARISE FROM ANY RELIANCE ON THIS DOCUMENT OR FOR THE RELIABILITY, ACCURACY, COMPLETENESS OR TIMELINESS THEREOF.

IMPORTANT INFORMATION (Continued)

For Investors in Belgium: The information contained herein is only intended for and must only be distributed to institutional and/or professional investors (as defined in the Royal Decree dated 19 December 2017 implementing MiFID directive). In reviewing this presentation you confirm that you are such an institutional or professional investor. When making an investment decision, potential investors should rely solely on the final documentation (including the prospectus) relating to the investment or service and not the information contained herein. The investments or services mentioned herein may not be adequate or appropriate for all investors and before entering into any transaction you should take steps to ensure that you fully understand the transaction and have made an independent assessment of the suitability or appropriateness of the transaction 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 us you do so in reliance on your own judgment.

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.