

standard chartered

WS Global CIO Office

360 Perspective

Is the Dollar's reign over?

June 2025



Content



Is the Dollar's reign over?

- > Understanding the US Dollar's global role
- The structural argument for and against de-dollarisation
- The cyclical argument for a weaker Dollar
- > Summary the case for and against a weaker Dollar
- What can investors do to protect themselves against US weakness?



Understanding the US Dollar's global role

Why is the US Dollar important?

Why is the US Dollar significant?

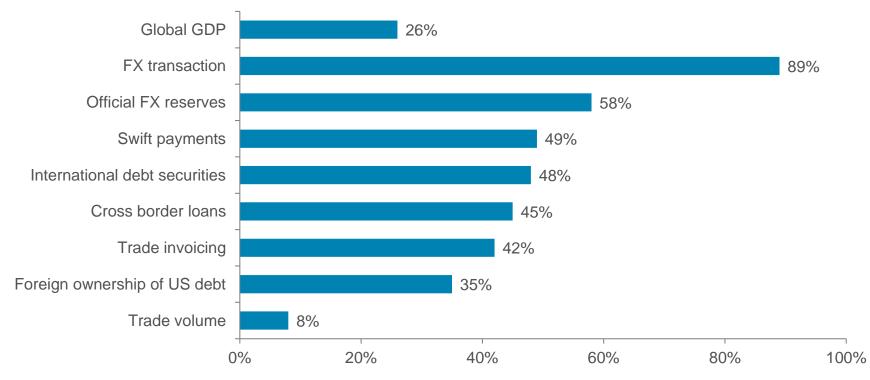
- The USD's global significance comes from its role as the world's primary reserve currency, unit of trade, and pricing benchmark in global finance
- It is also used extensively to issue non-US sovereign and corporate debt and, at times, act as a safehaven for global investors

What is de-dollarisation?

- De-dollarisation would mean that the USD's role as a reserve and trade settlement currency, as well as its dominance in financial markets, diminishes
- This is often discussed alongside the fading of 'US exceptionalism' i.e., the end of an era of outperformance of US financial market assets

The US Dollar remains dominant globally, well beyond what the share of US GDP would suggest

US share of global GDP and global trade volume and US Dollar's share of key global transactions*



Source: WTO, OECD, SWIFT, Bloomberg, BIS, IMF, US Dept of Treasury, Standard Chartered



^{*} With the latest available public data: GDP (2023), Transaction (2022), Reserves (2024), Payments (2024), Debt securities (2024), Loans (2024), Invoicing (2024), US Debt (2024), World Trade (2024)

Understanding de-dollarisation

Is the dollar losing its pre-eminence?

The shorter-term view

 The US dollar is trading near the bottom of its range since 2022 but is close to its 5-year average

Implications of de-dollarisation

- A decline in USD's dominance could alter trade dynamics, FX regimes, and capital flows
- This can have an impact on commonly-held macro assumptions, how investors are exposed to currency risks and, therefore, an overall portfolio strategy

The longer-term trend view

 USD remains by far the main reserve currency even with other alternatives coming up and multiple reserve currencies can co-exist The US dollar index (DXY) is commonly used as a measure of the US Dollar's value vs. other major currencies. After falling around 8% so far this year, it is trading close to its 5-year average USD Index (DXY)



Source: Bloomberg, Standard Chartered



The structural argument for de-dollarisation

US economic and policy uncertainty can undermine the perceived safety and stability of the USD

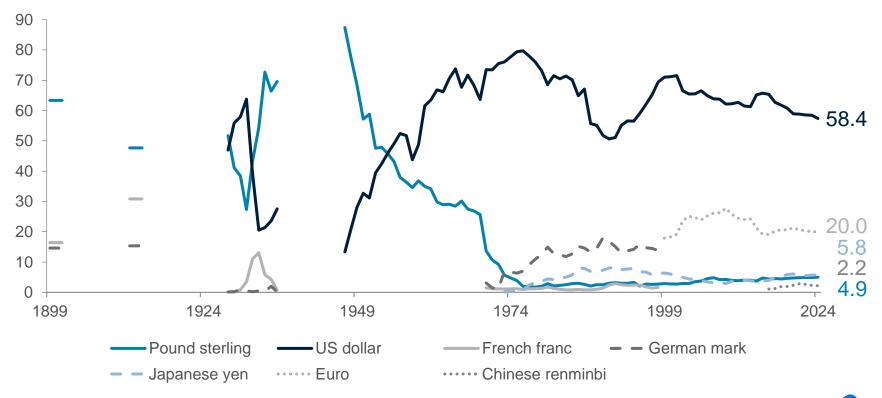
For example, increased
 polarisation within the US
 could jeopardise perceived
 economic and policy stability
 and the USD's role as a safehaven. Increased trade
 restrictions could limit the
 USD's use in trade settlement

Positive developments outside the US can boost the credibility of alternative currencies

 For example, greater bond market depth in the Euro area could boost the EUR or improved FX convertibility and perceived stability could boost China's CNH

History shows us that multiple reserve currencies can co-exist but changes can occur relatively quickly

Currency composition of globally disclosed foreign exchange reserves: 1899-2024



Source: Globalcurrenciesdatabase.com, Standard Chartered



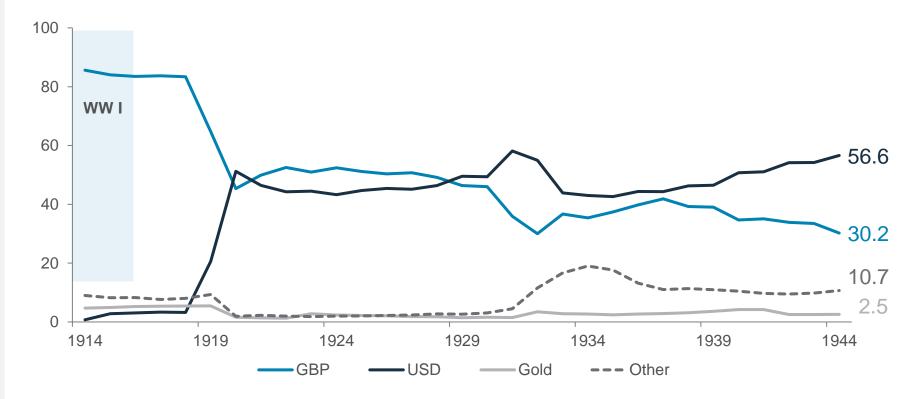
The structural argument for de-dollarisation

Regime shifts in reserve currencies can happen relatively rapidly, albeit following a significant shock

- Foreign entities' issuance of debt shifting from GBP to USD accelerated after World War I
- Could policies and events following the COVID pandemic, including surging US fiscal deficit and increased US protectionism, provide a shock to the global economic and financial system?

Shifts in currency usage can be rapid after major events such as the World Wars

Share of major currencies to raise foreign public debt



Source: Bloomberg, Standard Chartered



6

The structural argument against de-dollarisation

USD's share of global FX reserves

- Currently the USD accounts for ~58% of global reserves
- This is down from over 70% in the early 2000s, but still high

Dominant share in global trade

- Over 80% of trade finance involves the USD
- Most commodities (oil, gold) are priced in USD

Attractiveness of US equity markets

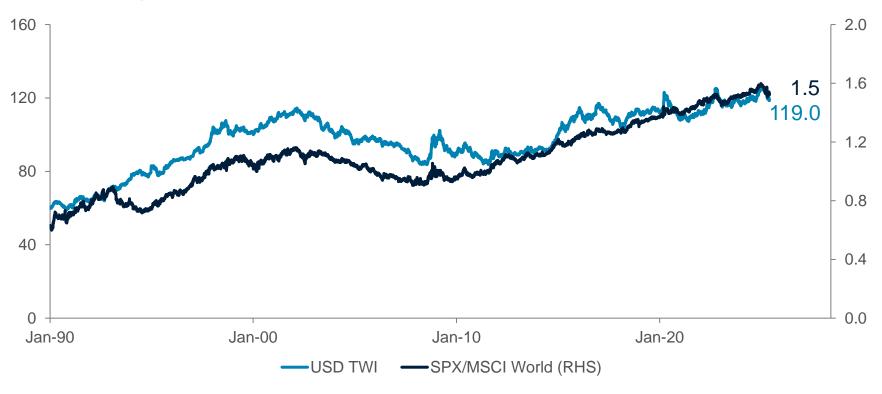
 USD's dominance has been supported by US equity market outperformance

Are there viable alternatives?

- EUR: Strongest case, no capital controls, but bond market liquidity limited by lack of fiscal union
- CNH: Rising trade influence, but capital controls limit use
- Other currencies (JPY, GBP) lack bond market depth

US exceptionalism: Over the past three and a half decades, the outperformance of US equities has coincided with USD strength. The US equity IPO valuation premium is also a positive

USD Trade Weighted Index and US vs. non-US equity market performance



Source: Bloomberg, Standard Chartered



The cyclical argument for a weaker US Dollar

A correction in valuations can result in cyclical USD weakness

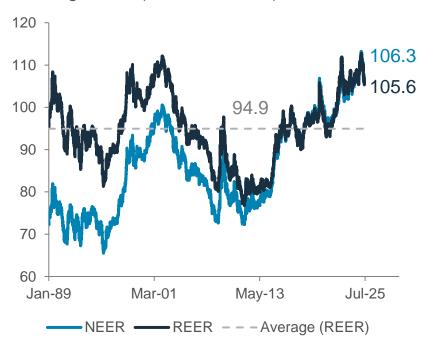
 USD valuations are well above their long-run average, in both nominal effective exchange rate and real effective exchange rate terms, these can persist for years

The relationship between interest rate differentials and the USD is loosening

 Recently, trade tariff concerns and a reduced preference for US assets amid US policy uncertainty meant the USD fell independent of the signal from rate differentials

A cyclical correction in USD valuations could easily result in 10-15% weakness

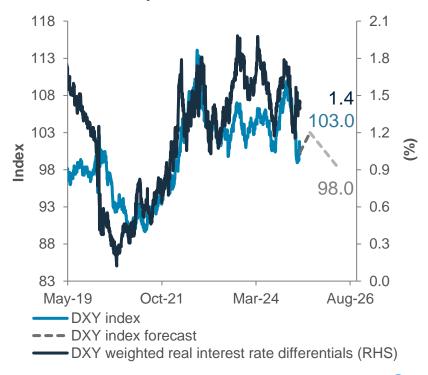
USD valuations as per nominal and real effective exchange rates (NEER & REER)



Source: Bloomberg, Standard Chartered

Recent USD weakness has occurred independent of interest rate differentials

USD index (DXY), DXY-weighted interest rate differential vs. key currencies; our 3m/12m forecasts





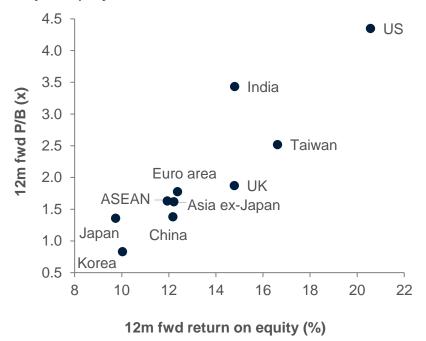
Can US exceptionalism and preference for the US Dollar persist?

Several trends support continued US exceptionalism, despite doubts raised thus far

- US corporate sector return on equity (a measure of the profitability of US companies) remains superior to other major global equity markets, underpinning "US exceptionalism" and sustaining investor flows into the US
- US productivity continues to argue the case for continued US equity market outperformance (and, therefore, continued support for the US Dollar)

Strong US corporate return on equity (RoE) argues that elevated US valuations can persist

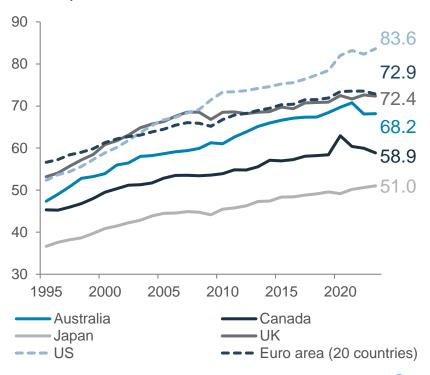
12-month forward P/B and return on equity for major equity markets



Source: Bloomberg, Standard Chartered

US productivity continues to outpace that of major peers

GDP per hours worked – US vs. Developed Market peers





Summary: The case for and against a weaker US Dollar

Favour USD decline

Favour 03D decline

Structural

A fundamental, long-term shift away from the USD as the dominant reserve, trade and payments currency.

Cyclical

Temporary macro and market factors driving USD weakness: valuations, interest rate differentials, inflation trends, and global risk sentiment. However, cyclical weakness does not imply long-term loss of confidence in the USD system.

Source: Standard Chartered

- 1) Long-term strategic shift: Geopolitical and policy environment favouring search for non-USD alternatives, as recently illustrated by central bank buying of gold and fall in USD share of global reserves to ~58% (from ~70% in 2000s)
- 2) Geopolitical diversification: Many countries and groups (like China or BRICs) are actively working to reduce USD usage in trade
- 3) Alternatives gradually available: Euro, Renminbi (CNH) and gold are gaining some ground as reserve assets
- 1) Dovish Fed: Slowing growth likely leads Fed to cut rates. This means the relative yield advantage of the USD narrows, especially in real terms if inflation rises
- 2) Elevated USD valuations: Results in pullback to average or inexpensive valuations, given a catalyst
- 3) Positioning and Sentiment: After prolonged USD strength, investor positioning may be stretched, leading to a technical correction

Favour continued USD supremacy

- Very slow-moving process: Reserve currency transitions take decades; markets often overreact prematurely. USD still dominant as share of global reserves
- 2) Lack of viable alternatives: No single currency currently matches USD's liquidity, convertibility, and trust. US productivity and US corporate profitability structurally still higher than peers
- 3) Over-emphasis on geopolitics: Many non-dollar trade arrangements remain symbolic or small-scale in impact
- Hawkish Fed: If macro conditions shift (US growth re-accelerates and/or Fed turns more hawkish amid inflation) the US dollar could rebound
- 2) Continued US exceptionalism: Continued earnings growth favours further outperformance of US over non-US equities



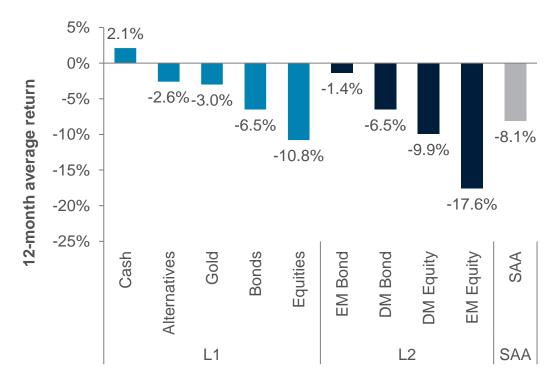
Asset class implications of a stronger US Dollar

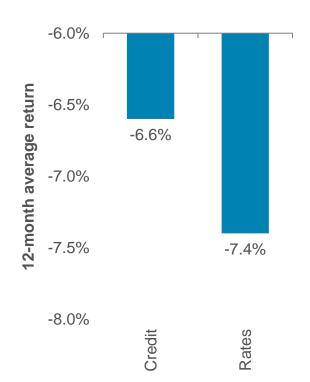
Periods of significant USD strength were positive for defensive assets, underscoring USD's historic role as a safe haven currency

- Risky assets generally underperformed defensive assets when the USD was strong
- Developed Market equities outperformed Emerging Market equities
- Many strong-USD periods coincided with US recessions

Strong USD historically coincided with underperformance of risky assets and outperformance of Developed over Emerging equity markets, underscoring the USD's traditional safe haven status

Historical* 12-month asset class returns when USD Index (DXY) rose by 10% or more







^{*}Data from Jan 1999, except credit and rates which starts in Sep 2005 due to limited history SAA (Strategic Asset Allocation) comprises 52.5% global equity, 37.5% global bond, 5% gold, 5% cash

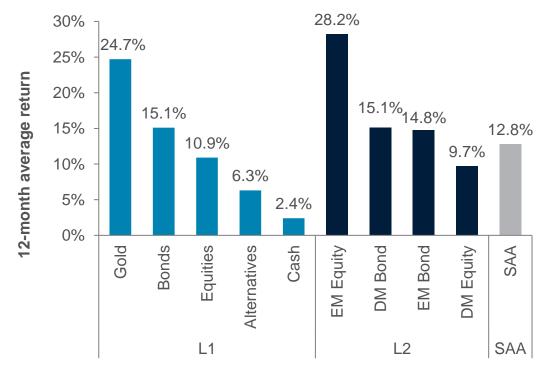
Asset class implications of a weaker US Dollar

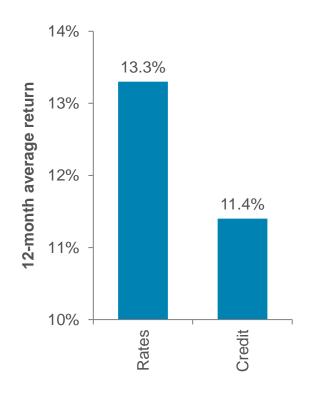
Periods of significant USD weakness were positive for equities and other risky assets

- Risky assets, including US equities, generally outperformed defensive assets
- Emerging Market equities outperformed Developed Market equities
- More broadly, non-US equities also tend to outperform US equities
- Gold, denominated in USD, did well

Weak USD environments were generally very positive for financial markets and risky assets

Historical* 12-month asset class returns when USD Index (DXY) fell by 10% or more







^{*}Data from Jan 1999, except credit and rates which starts in Sep 2005 due to limited history SAA (Strategic Asset Allocation) comprises 52.5% global equity, 37.5% global bond, 5% gold, 5% cash

What should an investor worried about USD weakness do?

Action #1: Get, and stay, invested in a multi-asset portfolio

Multi-asset portfolios usually offer well-diversified currency exposure beyond the USD

- Simple 60/40 portfolios or our own more diversified asset allocation result in relatively capped US asset and USD currency exposure
- This is before we account for some of the underlying assets providing their own currency diversification (e.g. US corporate revenues originating significantly from non-US sources provide a natural FX hedge when investors own US equities)

Being invested in a globally diversified multi-asset portfolio results in an investor being well-diversified across currency exposure as well

Coloured sections represent US and USD exposure in a 60:40 portfolio and our Strategic Asset Allocation



Source: Standard Chartered

Note: SAA = Strategic asset allocation



^{1.} Traditional 60:40 global equity/bond portfolio with Global equities represented by MSCI ACWI index and Global bonds by Global Agg

What should an investor worried about USD weakness do?

Action #1: Get, and stay, invested in a multi-asset portfolio

Potential investment strategies

01 02 03 04 05

Global multi-asset
portfolios offer
sizeable exposure to
non-US assets and
assets not
denominated in USD,
creating a natural
hedge. However, US
equities also
generally perform well
in a weaker USD

environment

Within equities, USD
weakness can be
particularly positive
for (i) non-US
markets, (ii) Emerging
Markets and (iii) US
equity sectors with
significant global
revenue

Within bonds, USD
weakness can be
positive for (i) Emerging
Market bonds,
particularly those
denominated in local
currencies, (ii) Sovereign
or corporate bonds
issued in currencies
other than USD

in USD can also rise in value to offset weakness in the Dollar. Gold an example of this

Direct currency
hedges, regardless of
the underlying asset
class, are also an
option if used carefully



What should an investor worried about USD weakness do?

Action #2: Ensure any cash is actively diversified away from USD, or USD-pegged currencies

Cash holdings
denominated in USD
(or USD-pegged
currencies such as
AED or HKD) do not
offer any currency
diversification

This means cash investors need to actively diversify into non-USD currencies in order to diversify their currency exposure.

We can use 3 key considerations when selecting alternative currencies:

- O I Use CIO Office currency market views to identify which currencies are likely to gain the most in a USD-weakness scenario
- O2 Identify currencies that have a high negative correlation with the USD, and thus most likely to gain from a weak-USD scenario
- O3 Seek currencies offering the highest interest rates as these create an additional source of return

The EUR, AUD and GBP are three currencies that rank highest on a balance of these criteria



We assign a 2/3 probability that the USD will weaken in the next 12 months

Our assigned probabilities that US Dollar Index (DXY) will end in the following ranges in 12 months

DXY Index	Probability*
>110	5%
100-110	30%
90-100	55%
<90	10%



^{*} mean value and rounded to nearest 5%

This document is confidential and may also be privileged. If you are not the intended recipient, please destroy all copies and notify the sender immediately. This document is being distributed for general information only and is subject to the relevant disclaimers available at our Standard Chartered Website under Regulatory disclosures. It is not and does not constitute research material, independent research, an offer, recommendation or solicitation to enter into any transaction or adopt any hedging, trading or investment strategy, in relation to any securities or other financial instruments. This document is for general evaluation only. It does not take into account the specific investment objectives, financial situation or particular person or class of persons. You should not rely on any contents of this document in making any investment decisions. Before making any investment, you should carefully read the relevant offering documents and seek independent legal, tax and regulatory advice. In particular, we recommend you to seek advice regarding the suitability of the investment product, taking into account your specific investment objectives, financial situation or particular needs, before you make a commitment to purchase the investment product. Opinions, projections and estimates are solely those of SC at the date of this document and subject to change without notice. Past performance is not indicative of future results and no representation or warranty is made regarding future performance. The value of investments, and the income from them, can go down as well as up, and you may not recover the amount of your original investment. You are not certain to make a profit and may lose money. Any forecast contained herein as to likely future movements in rates or prices or likely future events or occurrences (as the case may be). This document must not be forwarded or otherwise made available to any other person without the express written consent of the Standard Chartered Group, Standard Chartered Bank is autho

Copyright © 2025, Accounting Research & Analytics, LLC d/b/a CFRA (and its affiliates, as applicable). Reproduction of content provided by CFRA in any form is prohibited except with the prior written permission of CFRA. CFRA content is not investment advice and a reference to or observation concerning a security or investment provided in the CFRA SERVICES is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. The CFRA content contains opinions of CFRA based upon publicly-available information that CFRA believes to be reliable and the opinions are subject to change without notice. This analysis has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this analysis, CFRA, ITS THIRD-PARTY SUPPLIERS, AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOA PARTICULAR PURPOSE OR USE, to the full extent permitted by law, regarding the accuracy, completeness, or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. No content provided by CFRA (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of CFRA, and such content shall not be used for any unlawful or unauthorized purposes. CFRA and any third-party providers, as well as their directors, officers, shareholders, employees or agents do not guarantee the accuracy, completeness, timeliness or availability of such content. In no event shall CFRA, its affiliates, or their third-party suppliers be liable for any direct, indirect, sp

Market Abuse Regulation (MAR) Disclaimer

consent of Standard Chartered Group.

Banking activities may be carried out internationally by different branches, subsidiaries and affiliates within the Standard Chartered Group according to local regulatory requirements. Opinions may contain outright "buy", "sell", "hold" or other opinions. The time horizon of this opinion is dependent on prevailing market conditions and there is no planned frequency for updates to the opinion. This opinion is not independent of Standard Chartered Group's trading strategies or positions. Standard Chartered Group and/or its affiliates or its respective officers, directors, employee benefit programmes or employees, including persons involved in the preparation or issuance of this document may at any time, to the extent permitted by applicable law and/or regulation, be long or short any securities or financial instruments referred to in this document or have material interest in any such securities or related investments. Therefore, it is possible, and you should assume, that Standard Chartered Group has a material interest in one or more of the financial instruments mentioned herein. Please refer to our Standard Chartered website under Regulatory disclosures for more detailed disclosures, including past opinions/ recommendations in the last 12 months and conflict of interests, as well as disclaimers. A covering strategist may have a financial interest in the debt or equity securities of this company/issuer. All covering strategist are licensed to provide investment recommendations under Monetary Authority of Singapore or Hong Kong Monetary Authority. This document must not be forwarded or otherwise made available to any other person without the express written

Sustainable Investments

Any ESG data used or referred to has been provided by Morningstar, Sustainalytics, MSCI or Bloomberg. Refer to 1) Morningstar website under Sustainable Investing, 2) Sustainalytics website under ESG Risk Ratings, 3) MCSI website under ESG Business Involvement Screening Research and 4) Bloomberg green, social & sustainability bonds guide for more information. The ESG data is as at the date of publication based on data provided, is for informational purpose only and is not warranted to be complete, timely, accurate or suitable for a particular purpose, and it may be subject to change. Sustainable Investments (SI): This refers to funds that have been classified as 'Sustainable Investments' by Morningstar. SI funds have explicitly stated in their prospectus and regulatory filings that they either incorporate ESG factors into the investment process or have a thematic focus on the environment, gender diversity, low carbon, renewable energy, water or community development. For equity, it refers to shares/stocks issued by companies with Sustainalytics ESG Risk Rating of Low/Negligible. For bonds, it refers to debt instruments issued by issuers with Sustainalytics ESG Risk Rating of Low/Negligible, and/or those being certified green, social, sustainable bonds by Bloomberg. For structured products, it refers to products that are issued by any issuer who has a Sustainable Finance framework that aligns with Standard Chartered's Green and Sustainable Product Framework, with underlying assets that are part of the Sustainable Investment universe or separately approved by Standard Chartered's Sustainable Finance Governance Committee. Sustainalytics ESG risk ratings shown are factual and are not an indicator that the product is classified or marketed as "green", "sustainable" or similar under any particular classification system or framework.

Country/Market Specific Disclosures

Botswana: This document is being distributed in Botswana by, and is attributable to. Standard Chartered Bank Botswana Limited which is a financial institution licensed under the Section 6 of the Banking Act CAP 46.04 and is listed in the Botswana Stock Exchange. Brunei Darussalam: This document is being distributed in Brunei Darussalam by, and is attributable to, Standard Chartered Bank (Brunei Branch) | Registration Number RFC/61 and Standard Chartered Securities (B) Sdn Bhd | Registration Number RC20001003, Standard Chartered Bank is incorporated in England with limited liability by Royal Charter 1853 Reference Number ZC18, Standard Chartered Securities (B) Sdn Bhd is a limited liability company registered with the Registry of Companies with Registration Number RC20001003 and licensed by Brunei Darussalam Central Bank as a Capital Markets Service License Holder with License Number BDCB/R/CMU/S3-CL and it is authorised to conduct Islamic investment business through an Islamic window. China Mainland: This document is being distributed in China by, and is attributable to, Standard Chartered Bank (China) Limited which is mainly regulated by National Financial Regulatory Administration (NFRA), State Administration of Foreign Exchange (SAFE), and People's Bank of China (PBOC), Hong Kong, this document, except for any portion advising on or facilitating any decision on futures contracts trading, is distributed by Standard Chartered Bank (Hong Kong) Limited ("SCBHK"), a subsidiary of Standard Chartered PLC. SCBHK has its registered address at 32/F, Standard Chartered Bank Building, 4-4A Des Voeux Road Central, Hong Kong and is regulated by the Hong Kong Monetary Authority and registered with the Securities and Futures Commission ("SFC") to carry on Type 1 (dealing in securities), Type 4 (advising on securities), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activity under the Securities and Futures Ordinance (Cap. 571) ("SFO") (CE No. AJI614). The contents of this document have not been reviewed by any regulatory authority in Hong Kong and you are advised to exercise caution in relation to any offer set out herein. If you are in doubt about any of the contents of this document, you should obtain independent professional advice. Any product named herein may not be offered or sold in Hong Kong by means of any document at any time other than to "professional investors" as defined in the SFO and any rules made under that ordinance. In addition, this document may not be issued or possessed for the purposes of issue, whether in Hong Kong or elsewhere, and any interests may not be disposed of, to any person unless such person is outside Hong Kong or is a "professional investor" as defined in the SFO and any rules made under that ordinance, or as otherwise may be permitted by that ordinance. In Hong Kong, Standard Chartered Private Bank is the private banking division of SCBHK, a subsidiary of Standard Chartered PLC, Ghana: Standard Chartered Bank Ghana Limited accepts no liability and will not be liable for any loss or damage arising directly (including special, incidental or consequential loss or damage) from your use of these documents. Past performance is not indicative of future results and no representation or warranty is made regarding future performance. You should seek advice from a financial adviser on the suitability of an investment for you, taking into account these factors before making a commitment to invest in an investment. To unsubscribe from receiving further updates, please send an email to feedback, ghana @ sc., com. Please do not reply to this email. Call our Priority Banking on 0302610750 for any questions or service queries. You are advised not to send any confidential and/or important information to Standard Chartered via e-mail, as Standard Chartered makes no representations or warranties as to the security or accuracy of any information transmitted via e-mail. Standard Chartered shall not be responsible for any loss or damage suffered by you arising from your decision to use e-mail to communicate with the Bank. India: This document is being distributed in India by Standard Chartered in its capacity as a distributor of mutual funds and referrer of any other third party financial products. Standard Chartered does not offer any 'Investment Advice' as defined in the Securities and Exchange Board of India (Investment Advisers) Regulations, 2013 or otherwise. Services/products related securities business offered by Standard Charted are not intended for any person, who is a resident of any jurisdiction, the laws of which imposes prohibition on soliciting the securities business in that jurisdiction without going through the registration requirements and/or prohibit the use of any information contained in this document. Indonesia: This document is being distributed in Indonesia by Standard Chartered Bank, Indonesia branch, which is a financial institution licensed and supervised by Otoritas Jasa Keuangan (Financial Service Authority) and Bank Indonesia. Jersey: In Jersey, Standard Chartered Private Bank is the Registered Business



Name of the Jersev Branch of Standard Chartered Bank. The Jersev Branch of Standard Chartered Bank is regulated by the Jersev Financial Services Commission. Copies of the latest audited accounts of Standard Chartered Bank are available from its principal place of business in Jersey: PO Box 80, 15 Castle Street. St Helier, Jersey JE4 8PT, Standard Chartered Bank is incorporated in England with limited liability by Royal Charter in 1853 Reference Number ZC 18, The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. The Jersey Branch of Standard Chartered Bank is also an authorised financial services provider under license number 44946 issued by the Financial Sector Conduct Authority of the Republic of South Africa. Jersey is not part of the United Kingdom and all business transacted with Standard Chartered Bank, Jersey Branch and other SC Group Entity outside of the United Kingdom, are not subject to some or any of the investor protection and compensation schemes available under United Kingdom law. Kenya: This document is being distributed in Kenya by and is attributable to Standard Chartered Bank Kenya Limited. Investment Products and Services are distributed by Standard Chartered Investment Services Limited, a wholly owned subsidiary of Standard Chartered Bank Kenya Limited that is licensed by the Capital Markets Authority in Kenya, as a Fund Manager. Standard Chartered Bank Kenya Limited is regulated by the Central Bank of Kenya. Malaysia: This document is being distributed in Malaysia by Standard Chartered Bank Malaysia Berhad ("SCBMB"). Recipients in Malaysia should contact SCBMB in relation to any matters arising from, or in connection with, this document. This document has not been reviewed by the Securities Commission Malaysia. The product lodgement, registration, submission or approval by the Securities Commission of Malaysia does not amount to nor indicate recommendation or endorsement of the product, service or promotional activity. Investment products are not deposits and are not obligations of, not guaranteed by, and not protected by SCBMB or any of the affiliates or subsidiaries, or by Perbadanan Insurans Deposit Malaysia, any government or insurance agency. Investment products are subject to investment risks, including the possible loss of the principal amount invested. SCBMB expressly disclaim any liability and responsibility for any loss arising directly or indirectly (including special, incidental or consequential loss or damage) arising from the financial losses of the Investment Products due to market condition. Nigeria: This document is being distributed in Nigeria by Standard Chartered Bank Nigeria Limited (SCB Nigeria), a bank duly licensed and regulated by the Central Bank of Nigeria. SCB Nigeria accepts no liability for any loss or damage arising directly or indirectly (including special, incidental or consequential loss or damage) from your use of these documents. You should seek advice from a financial adviser on the suitability of an investment for you, taking into account these factors before making a commitment to invest in an investment. To unsubscribe from receiving further updates, please send an email to clientcare . ng @ sc . com requesting to be removed from our mailing list. Please do not reply to this email. Call our Priority Banking on 02 012772514 for any questions or service queries. SCB Nigeria shall not be responsible for any loss or damage arising from your decision to send confidential and/or important information to Standard Chartered via e-mail. SCB Nigeria makes no representations or warranties as to the security or accuracy of any information transmitted via e-mail. Pakistan: This document is being distributed in Pakistan by, and attributable to Standard Chartered Bank (Pakistan) Limited having its registered office at PO Box 5556, I.I Chundrigar Road Karachi, which is a banking company registered with State Bank of Pakistan under Banking Companies Ordinance 1962 and is also having licensed issued by Securities & Exchange Commission of Pakistan for Security Advisors. Standard Chartered Bank (Pakistan) Limited acts as a distributor of mutual funds and referrer of other third-party financial products. Singapore: This document is being distributed in Singapore by, and is attributable to, Standard Chartered Bank (Singapore) Limited (Registration No. 201224747C/ GST Group Registration No. MR-8500053-0, "SCBSL"). Recipients in Singapore should contact SCBSL in relation to any matters arising from, or in connection with, this document. SCBSL is an indirect wholly owned subsidiary of Standard Chartered Bank and is licensed to conduct banking business in Singapore under the Singapore Banking Act, 1970. Standard Chartered Private Bank is the private banking division of SCBSL. IN RELATION TO ANY SECURITY OR SECURITIES-BASED DERIVATIVES CONTRACT REFERRED TO IN THIS DOCUMENT, THIS DOCUMENT, TOGETHER WITH THE ISSUER DOCUMENTATION. SHALL BE DEEMED AN INFORMATION MEMORANDUM (AS DEFINED IN SECTION 275 OF THE SECURITIES AND FUTURES ACT. 2001 ("SFA")). THIS DOCUMENT IS INTENDED FOR DISTRIBUTION TO ACCREDITED INVESTORS. AS DEFINED IN SECTION 4A(1)(a) OF THE SFA, OR ON THE BASIS THAT THE SECURITY OR SECURITIES-BASED DERIVATIVES CONTRACT MAY ONLY BE ACQUIRED AT A CONSIDERATION OF NOT LESS THAN \$\$200,000 (OR ITS EQUIVALENT IN A FOREIGN CURRENCY) FOR EACH TRANSACTION. Further, in relation to any security or security or security experience, neither this document nor the Issuer Documentation has been registered as a prospectus with the Monetary Authority of Singapore under the SFA. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the product may not be circulated or distributed, nor may the product be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons other than a relevant person pursuant to section 275(1) of the SFA, or any person pursuant to section 275(1A) of the SFA, and in accordance with the conditions specified in section 275 of the SFA, or pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. In relation to any collective investment schemes referred to in this document, this document is for general information purposes only and is not an offering document or prospectus (as defined in the SFA). This document is not, nor is it intended to be (i) an offer or solicitation of an offer to buy or sell any capital markets product; or (ii) an advertisement of an offer or intended offer of any capital markets product. Deposit Insurance Scheme: Singapore dollar deposits of nonbank depositors are insured by the Singapore Deposit Insurance Corporation, for up to S\$100,000 in aggregate per depositor per Scheme member by law. Foreign currency deposits, dual currency investments, structured deposits and other investment products are not insured. This advertisement has not been reviewed by the Monetary Authority of Singapore. Taiwan: SC Group Entity or Standard Chartered Bank (Taiwan) Limited ("SCB (Taiwan)") may be involved in the financial instruments contained herein or other related financial instruments. The author of this document may have discussed the information contained herein with other employees or agents of SC or SCB (Taiwan). The author and the above-



mentioned employees of SC or SCB (Taiwan) may have taken related actions in respect of the information involved (including communication with customers of SC or SCB (Taiwan) as to the information contained herein). The opinions contained in this document may change, or differ from the opinions of employees of SC or SCB (Taiwan). SC and SCB (Taiwan) will not provide any notice of any changes to or differences between the above-mentioned opinions. This document may cover companies with which SC or SCB (Taiwan) seeks to do business at times and issuers of financial instruments. Therefore, investors should understand that the information contained herein may serve as specific purposes as a result of conflict of interests of SC or SCB (Taiwan). SC, SCB (Taiwan), the employees (including those who have discussions with the author) or customers of SC or SCB (Taiwan) may have an interest in the products, related financial instruments or related derivative financial products contained herein; invest in those products at various prices and on different market conditions; have different or conflicting interests in those products. The potential impacts include market makers' related activities, such as dealing, investment, acting as agents, or performing financial or consulting services in relation to any of the products referred to in this document. UAE: DIFC - Standard Chartered Bank is incorporated in England with limited liability by Royal Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number ZC18. The Principal Office of the Company is situated in England at 1 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, London, EC2V 5DD. Standard Charter 1853 Reference Number 2 Basinghall Avenue, London, L Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. Standard Chartered Bank, Dubai International Financial Centre having its offices at Dubai International Financial Centre, Building 1, Gate Precinct, P.O. Box 999, Dubai, UAE is a branch of Standard Chartered Bank and is regulated by the Dubai Financial Services Authority ("DFSA"). This document is intended for use only by Professional Clients and is not directed at Retail Clients as defined by the DFSA Rulebook. In the DIFC we are authorised to provide financial services only to clients who qualify as Professional Clients and Market Counterparties and not to Retail Clients. As a Professional Client you will not be given the higher retail client protection and compensation rights and if you use your right to be classified as a Retail Client we will be unable to provide financial services and products to you as we do not hold the required license to undertake such activities. For Islamic transactions, we are acting under the supervision of our Shariah Supervisory Committee. Relevant information on our Shariah Supervisory Committee is currently available on the Standard Chartered Bank website in the Islamic banking section. For residents of the UAE - Standard Chartered Bank UAE does not provide financial analysis or consultation services in or into the UAE within the meaning of UAE Securities and Commodities Authority Decision No. 48/r of 2008 concerning financial consultation and financial analysis, Uganda: Our Investment products and services are distributed by Standard Chartered Bank Uganda Limited, which is licensed by the Capital Markets Authority as an investment adviser. United Kingdom: In the UK, Standard Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. This communication has been approved by Standard Chartered Bank for the purposes of Section 21 (2) (b) of the United Kingdom's Financial Services and Markets Act 2000 ("FSMA") as amended in 2010 and 2012 only. Standard Chartered Bank (trading as Standard Chartered Private Bank) is also an authorised financial services provider (license number 45747) in terms of the South African Financial Advisory and Intermediary Services Act, 2002. The Materials have not been prepared in accordance with UK legal requirements designed to promote the independence of investment research, and that it is not subject to any prohibition on dealing ahead of the dissemination of investment research. Vietnam: This document is being distributed in Vietnam by, and is attributable to, Standard Chartered Bank (Vietnam) Limited which is mainly regulated by State Bank of Vietnam (SBV). Recipients in Vietnam should contact Standard Chartered Bank (Vietnam) Limited for any queries regarding any content of this document. Zambia: This document is distributed by Standard Chartered Bank Zambia Plc, a company incorporated in Zambia and registered as a commercial bank and licensed by the Bank of Zambia under the Banking and Financial Services Act Chapter 387 of the Laws of Zambia.

