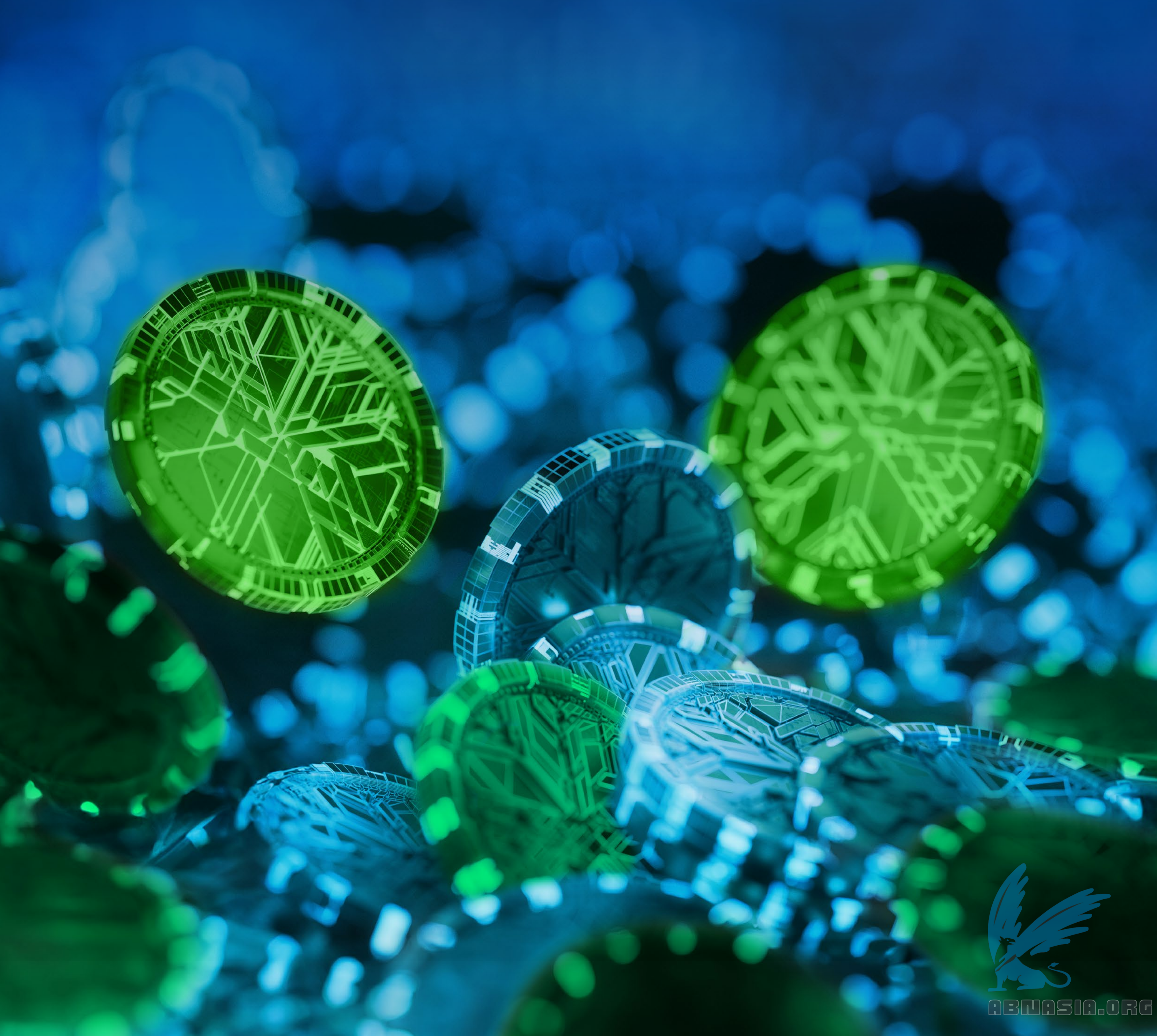
standard chartered | Zodia Markets

Stablecoins: The first killer app



Contents

Authors

Geoff Kendrick
Global Head of
Digital Assets Research

Nick Philpott
Co-Founder and Head of Partnerships,
Zodia Markets

What are Stablecoins?

Stablecoins are digital assets designed to maintain a stable value relative to a national currency or other reference rate (the vast majority in terms of market capitalisation are pegged to the USD).

Stablecoins were initially used primarily to facilitate trading, lending or borrowing in other digital assets, predominantly on or via digital asset trading platforms (centralised exchanges, or CEXs).

However, in more recent years, the dominant use case for stablecoins has been changing to other, non-CEX uses. There is growing evidence of increasing stablecoin use for a variety of purposes akin to those provided in traditional finance (TradFi). Stablecoins are being used to save in USD terms, to transact in USD terms, and for cross-border USD-to-USD transactions. This is a more stable and faster-growing use case for stablecoins than the original CEX use case. We expect this use case to continue to grow, particularly if US stablecoin regulation is passed, as now looks likely under a Trump administration.

Why are stablecoins being used for TradFi purposes?

In November 2020 the G20 endorsed a roadmap to improve cross-border payments, aiming to make them cheaper, faster, more transparent and more accessible by 2027.

This was in response to a declining trend in correspondent banking (which is used for cross-border payments) that the FSB had highlighted in 2015 with proposed actions. The focus has been on standardisation of the existing infrastructure, embodied by ISO20022. In parallel, work is underway between SWIFT and correspondent banks; for example, the SWIFT GPI standard is designed to enable financial institutions to send and receive funds quickly and securely with full transparency on where a payment is at any moment. Separately, the mBridge project is working to establish a multi-central bank digital currency platform between Hong Kong, Saudi Arabia, Thailand and the UAE.

The challenge with these approaches is that the risk of success is constrained by the 80:20 rule: 20% of the work will benefit 80% of the volumes, and the remaining 20% will require 80% of the work. Similarly, 80% of countries by volume could benefit and the other 20% are left further behind. There are 180 currencies in the world; if they were all bilaterally connected, this would result in over 16,000 links.

Data on the current state of correspondent banking is hard to find, but a 2020 report by the Bank for International Settlements (BIS) indicated that the decline observed in 2015 was continuing in 2024. Furthermore, the latest progress report for 2024 showed that:

- At the global level, costs have not improved during 2024, with no use case meeting the target cost of 1%
- The speed of retail payments has **deteriorated** since 2023
- Micro, small and medium-sized enterprises in lower-middle-income jurisdictions have seen their access slightly **reduced** since 2023
- The average cost of sending $200 remittances was slightly **higher** than in 2023

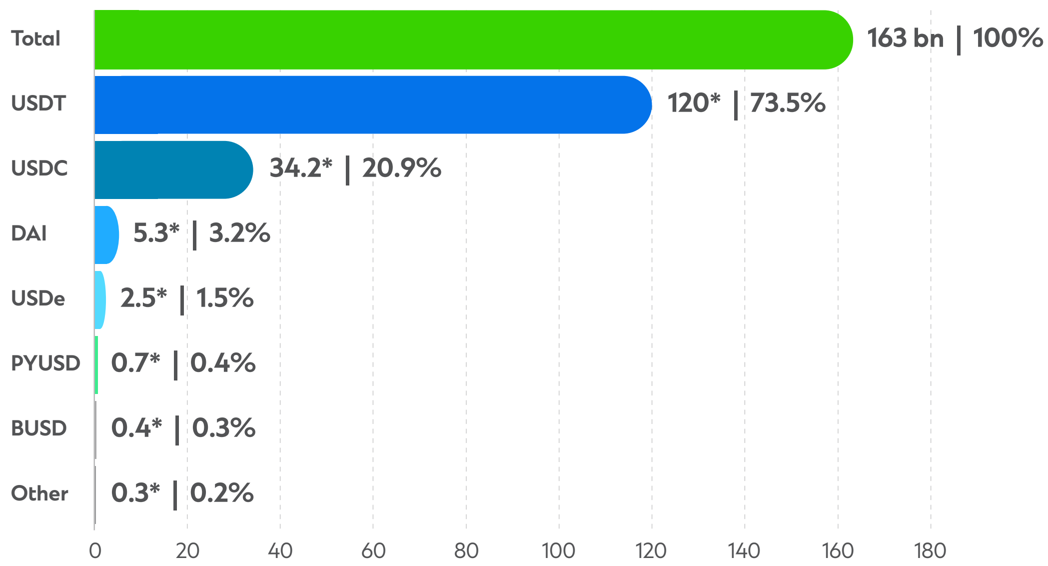
Continuous Linked Settlement (CLS), an industry utility designed to create a network for wholesale FX settlement, may indicate the scale of the challenge. CLS was established in 2002 and supports 18 currencies, just 10% of total currencies. While these currencies account for 80% of global volume, this calls into question the feasibility of networking the other 90% of currencies. At the current pace, work should be complete in about 200 years' time.

The G20 action plan called for "collaboration between the public and the private sectors". One private-sector development, which was not mentioned at all in the recent BIS progress report, has been growth in stablecoins. As the FSB and BIS continue to work on networking public-sector solutions, stablecoins offer a complementary ability to use an existing network for cross-border value transfer that currently reaches 66% of the world's population, according to Statista, the Open Internet.

Stablecoins are digital assets designed to maintain a stable value relative to a national currency or other reference rate (the vast majority in terms of market capitalisation are pegged to the USD). Most stablecoins are of the fiat-backed variety; they hold one-for-one reserves in cash or cash equivalents backing the coins on issue. Indeed, with short-end US rates earning reasonable returns for the last few years, this has become a very profitable business in and of itself (e.g., Tether's Q2 2024 profit was USD5.2 billion with just 125 employees).

The total stablecoin market cap is currently USD163 billion, of which the largest fiat-backed coins are Tether (USDT) with 73% and USD Coin (USDC) with 21%. Reflecting the growing importance of this digital asset sector, USDT is the third-largest digital asset overall, behind only Bitcoin and Ethereum.

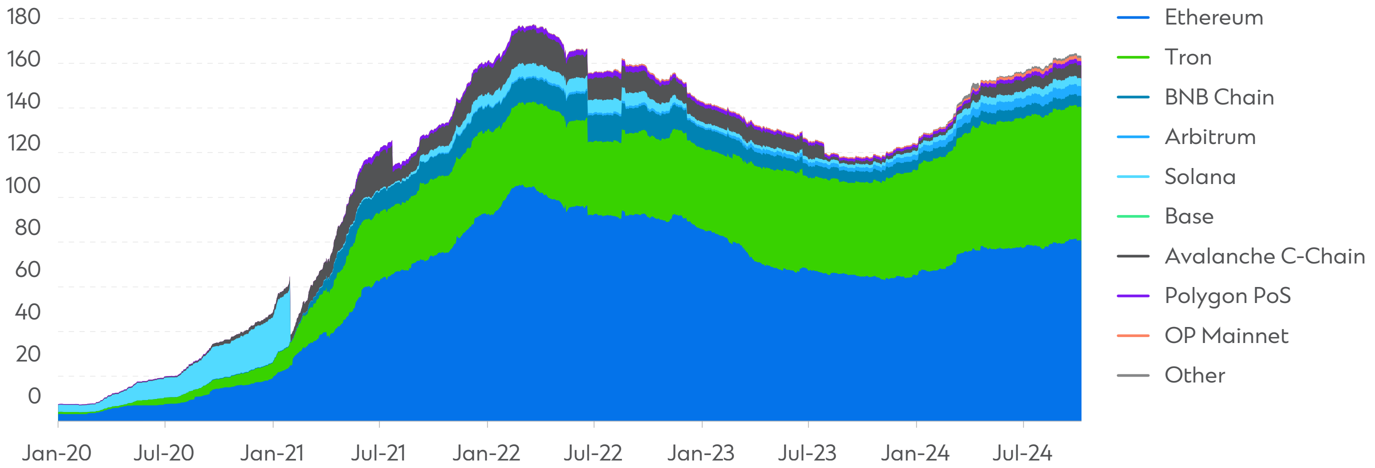
Stablecoins by market cap (USDbn)



*As of 7 October 2024

Source: Artemis

Stablecoins are mostly on Ethereum and Tron



Stablecoin supply by blockchain (USDbn)

Source: Artemis

Technically, stablecoins are utility tokens built on another blockchain. Ethereum was the original blockchain of choice and remains dominant, but higher fees on Ethereum versus other blockchains have seen stablecoins migrate to other chains as well. Most important has been the move by USDT onto Tron, such that Tron now accounts for more USDT (50% of the total) than Ethereum does (40%).

Stablecoins were initially used primarily to facilitate trading, lending or borrowing in other digital assets, predominantly on or via digital asset trading platforms (centralised exchanges, or CEXs). This meant that the original dominant use case for stablecoins was cyclical, driven by the rising and falling tides of digital asset prices, as depicted here by bitcoin (BTC) prices.

The original use case for stablecoins is cyclical, driven by rise and fall of digital asset prices

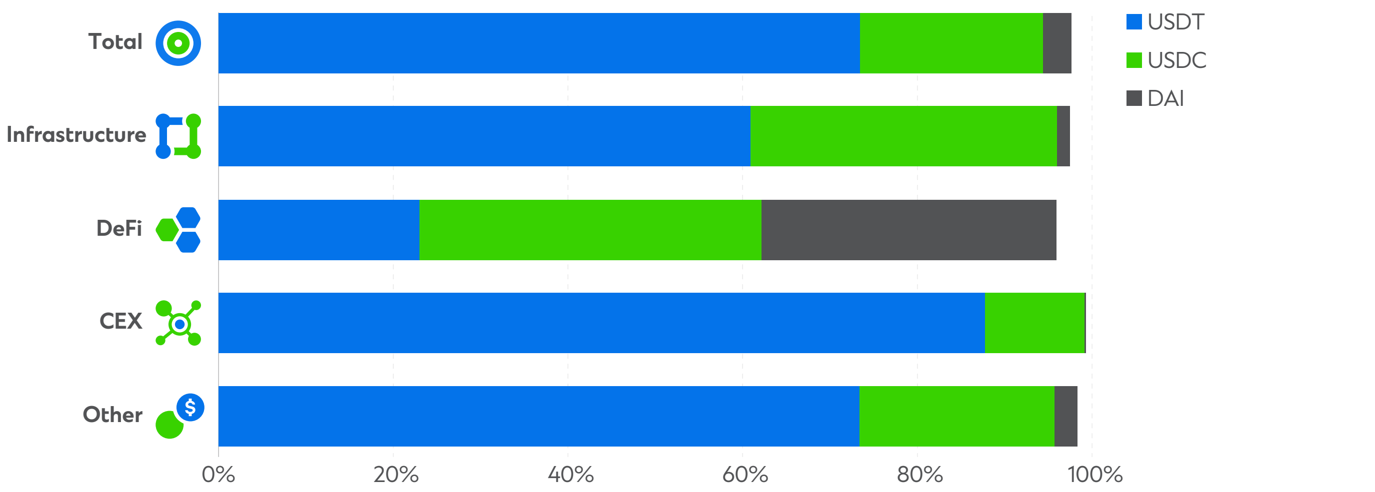
Stablecoin uses (by supply) on CEXs vs BTC price (USDbn LHS, USD RHS)

Source: Artemis, Bloomberg

By use case, USDT dominates CEXs. Dai is much stronger in DeFi than it is overall (perhaps due to its unique collateral backing within the Maker DAO ecosystem, as opposed to USDT and USDC which are fiat-backed), and USDC is strong in infrastructure.

However, in more recent years, the dominant use case for stablecoins has been 'other'. The question is, what is the 'other' use case, why is it growing, and how is it growing in what appears to be a sustainable, non-cyclical fashion?

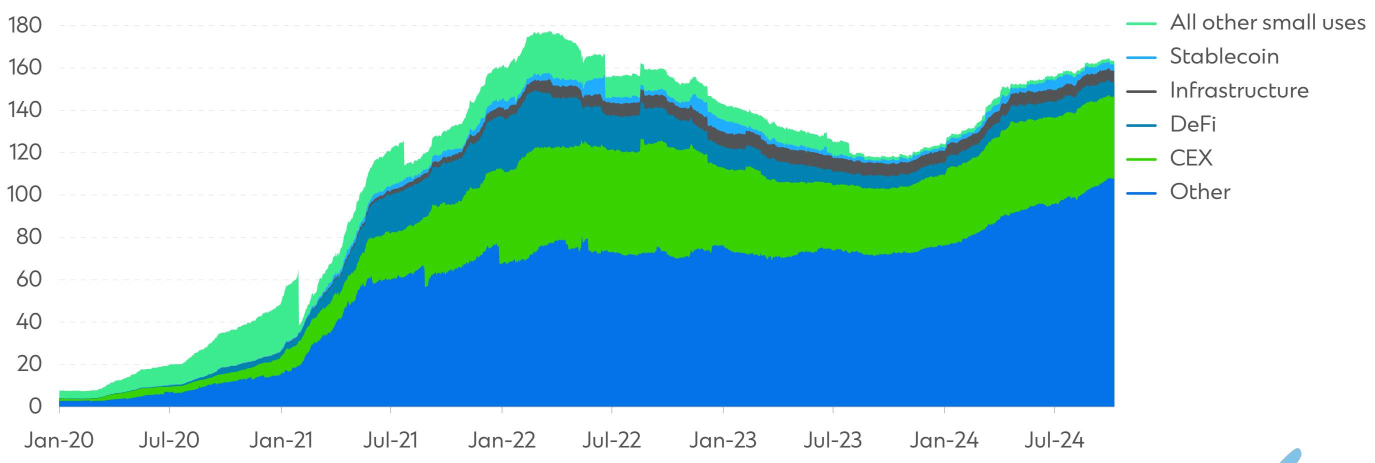
Different stablecoins have different strengths



Stablecoins' strengths as measured via sectoral uses (%)

Source: Artemis

The new use for stablecoins 'other' is growing in a stable, structural way



Stablecoin supply by sectoral use (USDbn)

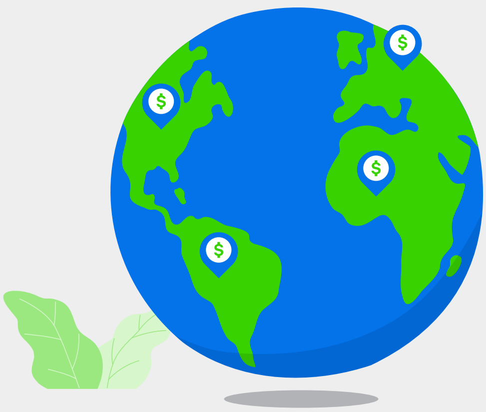
Source: Artemis

The 'other' use case for stablecoins

There is growing evidence that 'other' represents the use of stablecoins for a variety of purposes akin to those provided in TradFi. That is, stablecoins are being used to save in USD terms, to transact in USD terms, and for cross-border USD to USD transactions.

A recent joint report by Castle Island Ventures, Brevan Howard Digital and Artemis ('Stablecoins: The Emerging Market Story' September 2024) made the following findings, based on a survey conducted by YouGov of 500 adults from each of Brazil, Turkey, Nigeria, India and Indonesia:

1. Users globally value the ability to hold tokenised representations of fiat currencies (in the case of stablecoins, mainly USD) directly in their own custody, rather than relying on a bank account, which may be unreliable or inaccessible
2. Stablecoins are also being adopted for cross-border payments, payroll, trade settlement, and remittances
3. In emerging markets, adoption of stablecoins for payments, currency substitution, and access to high-quality forms of yield is accelerating
4. When asked about non-crypto stablecoin activities, the most popular use of stablecoins is currency substitution (69%), followed by paying for goods and services (39%), and cross-border payments (39%)
5. It is abundantly clear that stablecoins have evolved from mere trading collateral to a general-purpose digital dollar instrument in the countries surveyed



World Bank estimated in 2022

1.4 bn people in the world remained unbanked

In terms of economic scale, World Bank estimated in a 2017 report

Annual transactions of the unbanked totalled around

USD20 trn globally

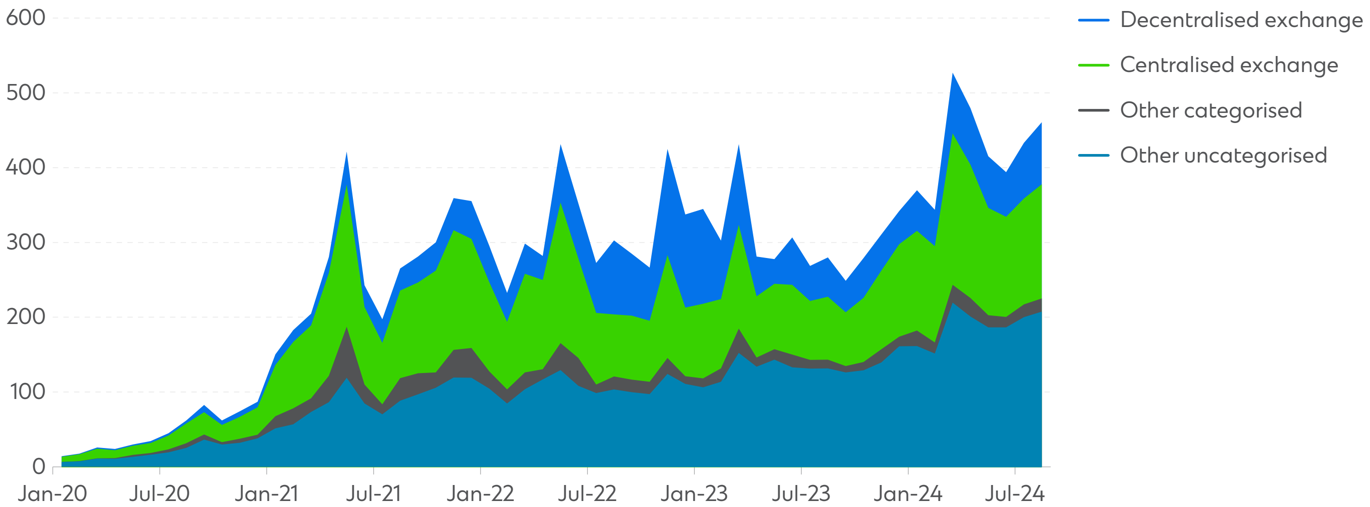
There is likely reasonable crossover between respondents of this survey and the global 'unbanked'. In other words, stablecoins are fulfilling one of the early tenets of digital assets – to create greater financial inclusion globally.

While users of stablecoins for 'other' purposes so far are not necessarily the unbanked, the annualised scale of the 'other uncategorised' transactions on stablecoins is around USD2.5 trillion.

Unbanked potential aside, stablecoins' share of global money/transactions remains very small. The total market cap for stablecoins, USD163 billion, compares to US M2 of USD21 trillion (source: Federal Reserve). In 2024, transactions in stablecoins have averaged USD425 billion a month, or USD14 billion a day. This compares to USD2.1 trillion a day of spot FX transactions (source: BIS). Both stock (versus US M2) and flow (versus spot FX) are less than 1%.

In other words, stablecoins are fulfilling one of the early tenets of digital assets – to create greater financial inclusion globally.

Transactions for 'other' are also growing steadily and now account for around 50% of all stablecoin transactions



Stablecoin transactions accounted for by use (USDbn)

Source: Visa on-chain analytics

What next for stablecoins?

At present, stablecoins are equivalent in size to only 1% of US M2 transactions and just 1% of FX transactions. As the sector becomes legitimised, a move to 10% on each measure is feasible. We think both cross-border payments and (via non-USD stablecoins) FX-equivalent transactions are key growth areas that could achieve this.

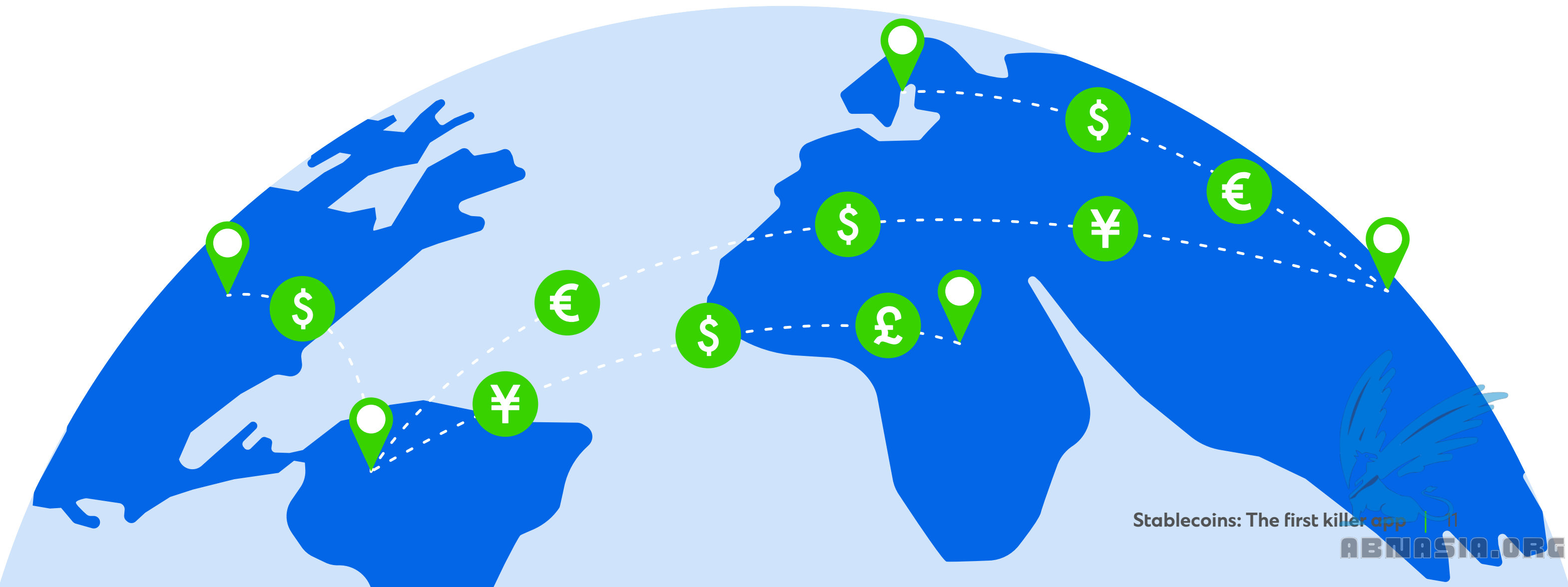
The main way for stablecoin market cap and use to increase tenfold as per this suggestion would be via US regulation of stablecoins. Three significant bills were brought forward during the Biden administration but little progress was made. Each aimed to create the guardrails for banks to issue stablecoins. More progress on this is likely under the Trump administration when it takes power in early 2025.

Cross-border payments

Stablecoins are representations of money on the internet. This compares with modern finance, where money is moved via centralised databases usually operated by the local central bank.

The suppliers of these systems tend to be the likes of Montran in the US, SIA in Italy and CMA Small Systems in Sweden. Fedwire, the US settlement system, is built on Oracle infrastructure. Since these systems are centralised, they need to be directly bridged (as is the case between GBP and EUR, for example), be connected from the internet using payment gateways such as PayPal, or use the correspondent banking system and SWIFT to address gaps between the databases. Finally, they can also use infrastructure providers like CLS to allow the settlement systems to operate in unison.

This system has not changed much since the wider adoption of Real Time Gross Settlement Systems in the early 1990s. Fees are generally charged based on membership fees, transaction charges and volume-based discounts. Settlement is governed on a price-time basis that is opaque to most customers. It is, in effect, a queue based on the 'first come, first served' principle. Yield management pricing (which was first introduced in the airline industry in the 1980s and is now common in many industries) is absent. Fixed pricing comes at a cost. Those willing to pay more for rapid settlement cannot, and those willing to wait cannot pay less. There is also a level of timing uncertainty embedded in the system.



Permissionless digital asset blockchains are different. Using gas fees, a client can pay more, or instruct their custodian to pay more, for faster settlement. Should these excess fees incentivise more mining or staking power to be deployed on the chain, the resulting capacity increase and improvement in security benefit all.

Permissionless chains also offer a clear view to customers, their custodians and their payees as to where a particular transaction is, providing transparency and more direct recourse that wholesale cross-border settlement systems lack. Finally, the use of gas fees offers a form of yield management pricing that is similar to airline pricing. Two transactions in the same block may have paid different gas fees based on the urgency of their need to settle.

This flexibility, speed and availability is key to the increased adoption of stablecoins.

Since stablecoins are representations of money on the internet, they enable the cross-border transfer of a USD asset at speeds that are closer to email than the days a SWIFT transfer can take using the correspondent banking system. This lack of speed and availability is particularly acute in emerging markets, where the BIS has noted a decline in active correspondent banking relationships. Stablecoins are stepping in to help address this decline.

Non-USD stablecoins

In June 2023, Cumberland research highlighted that 99.3% of stablecoins by market capitalisation are linked to the USD.

This dominance is disproportionate compared with the fiat FX market, where 88% of transactions involve the USD (according to the Bank for International Settlements) and in cross-border payments, where it accounts for 40% of all flows.

Given USD dominance in traditional finance, it is logical that the USD is dominant among stablecoins. 20 or so of the top 25 stablecoins by market capitalisation are linked in some way to the USD. Of the remaining five, two are linked to gold and two are linked to EUR. However, the remaining one is linked to the Turkish lira, which is perhaps not what many would expect.

The lira is a relatively volatile currency. Its 12-month foreign exchange volatility is approximately 22 (November 2024). To put that into perspective, the equivalent measure is about 14.4 for the Brazilian real and 6.6 for the euro. It is counterintuitive that consumers and businesses would demand a stablecoin that is linked to something that is itself unstable.

Stablecoins in volatile FX jurisdictions started for similar reasons to the USD stablecoins, although they tend to be newer than the USD coins.

First, they were a means to access cryptoasset exchanges, particularly where those exchanges were offshore and not connected to the local banking system. Another driver was the demand for a store of value that was not as volatile as crypto assets such as Bitcoin or Ethereum. Similarly, there was a desire to be able to transfer this value between different exchanges, which stablecoins enabled (considering the lack of banking services available to exchanges, as noted above).

Another motivation is to address the operational risk of trading fiat currencies against cryptoassets. Where fiat currencies are only able to settle during business hours on weekdays, cryptoassets suffer no such limitations. This means that settling fiat legs of cryptoassets versus fiat currencies is always a source of risk, since the bank payments tend to be slow and unpredictable. Stablecoins, while introducing certain types of credit, market and operational risk, do address this significant operational headache when it comes to using fiat currencies in cryptoasset markets.

Remittances have also become another important use case. Globally, remittance flows were [estimated at USD857 billion in 2023].

Risks

The risks of using stablecoins, as with any new technology, are different but can still be assessed. In addition, since many stablecoins have similarities with deposits, e-money and money-market funds, some of the frameworks used to assess the risks around those can be applied.

S&P is a leader in assessing stablecoin risks. It divides the risks into credit, market, custody and operational risk. Within that, S&P focuses on governance, legal, liquidity, third-party dependencies and reputation. Similarly, banks such as Standard Chartered – through its **relationship with Circle**, a major USD stablecoin issuer; its digital asset brokerage **Zodia Markets**; and its digital asset custody businesses, **Zodia Custody** and in **Dubai International Financial Centre** – can help new entrants navigate this technology and understand the risks involved.

Real-world spotlight

Navigating T+1 equity settlement: Harnessing stablecoins for efficient cross-border transactions

On May 28, 2024, the US Securities and Exchange Commission (SEC) mandated a shift to T+1 settlement for US and Canadian equity transactions. This move, intended to enhance market safety after the 2021 meme stock frenzy, is a return to the settlement cycle of 1933. However, despite technological advancements, the transition to T+1 poses challenges for global investors, especially those outside the Americas.

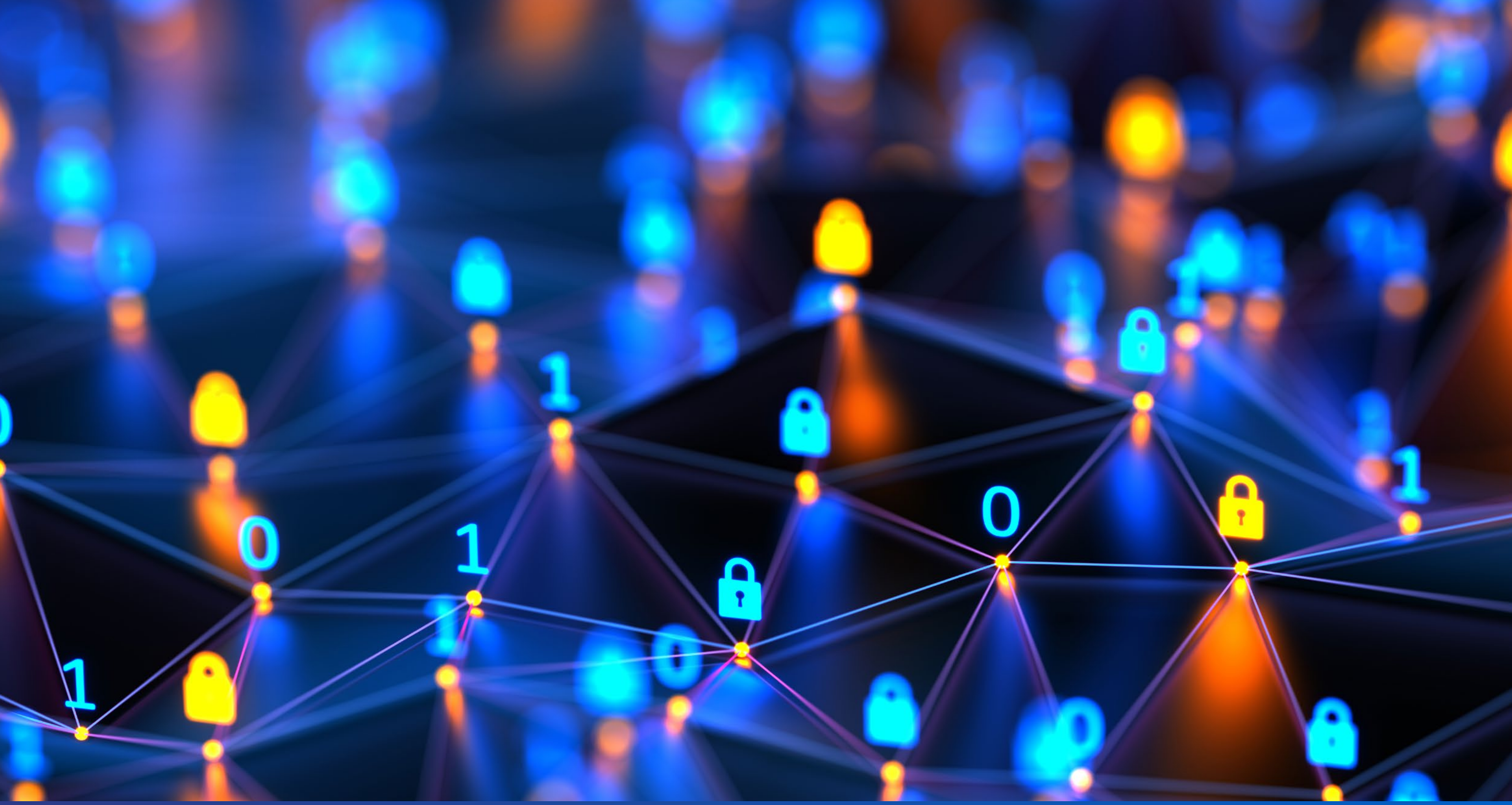
As a result, investors in locations like Australia, Hong Kong, and Singapore face the daunting task of synchronising currency and equity settlement schedules within a significantly shortened timeframe. The shift to T+1 disrupts the traditional settlement cycle, leaving FX traders with little time for post-trade processes, potentially forcing them to consider pre-funding transactions or altering execution and settlement strategies.

The shorter settlement time under T+1 raises concerns about the availability of Continuous Linked Settlement (CLS), which may increase settlement limit requirements with FX dealers and prime brokers.

Under the previous T+2 settlement regime, investors had ample time to hedge FX related to US equity transactions, benefiting from favourable liquidity during European hours. However, T+1 significantly reduces this window, posing challenges for investors in Asia, especially in meeting CLS deadlines.

Investors grappling with the T+1 transition have several options:

		Advantages	Disadvantages
1	**Executing through custodians**	Execution at the most liquid time of day; outsourcing the problem	Limits best execution by having fewer providers; may lead to loss of economies of scale for large asset managers
2	**Setting up a US desk**	Execution at the most liquid time of day	Potential struggles for liquidity; operational challenges and costs
3	**Pre-funding**	Execution at the most liquid time of day	Relies on estimates; creates operational complexity; higher funding costs; excess fiat cannot be liquidated until the next day



The stablecoin alternative

A novel approach to T+1 settlement involves using stablecoins. Investors can estimate USD proceeds, purchase stablecoins linked to various Eastern hemisphere currencies during Asian hours and use them to settle transactions 24/7 via blockchain platforms. This eliminates the constraints of traditional settlement cut-off times, providing synchronous settlement with the USD needed for equity purchases.

Advantages of stablecoins:

- **Eliminates the need to synchronise settlement schedules**
- **Provides flexibility with 24/7 settlement**
- **Mitigates the impact of shortened FX settlement windows**

While stablecoins offer a promising solution, several steps will be required to implement it. Investors will need to set up digital asset wallets and assess the stablecoins, for example regarding their creditworthiness and operational risks.

Transitioning to T+1 settlement demands innovative solutions, and stablecoins present a viable tool to enable efficient cross-border transactions. By removing the constraints of FX settlement cut-off times, stablecoins offer breathing room for back-office teams adjusting to the new regime. As markets evolve, the move towards T+0 settlement cycles seems inevitable, aligning with the expectation of providing clients with more choice and faster settlement times.

Real-world spotlight

On-chain FX

Zodia Markets and Cumberland have performed a demonstration trade using USDC, the USD-backed stablecoin issued by Circle, and AUDD, the AUD-backed stablecoin issued by Novatti, to show that fiat FX liquidity can be used to price a stablecoin pair traded between two non-Australian entities.

In the USDC/AUDD trade, Zodia Markets played the role of customer and Cumberland played the role of liquidity provider. Zodia Markets bought USDC/AUDD during Asia hours. It then concluded a second trade with Cumberland, selling USDC/AUDD, during the US day after Australia had closed. Both trades were executed for value T+0, meaning that settlement happened on the same day as execution.

This demonstrates that, unlike USD/AUD, a USDC/AUDD trade can see the AUDD leg be delivered outside of Australian business hours. Were USD/AUD to be traded in US hours, it would almost certainly have to settle for value T+1, meaning that settlement could only occur the day after execution.

Zodia Markets, Cumberland and other partners plan to perform further demonstrations of the 'on-chain FX' capabilities of stablecoins. These are expected to include features such as weekend settlement, payment-versus-payment settlement, other currencies and more. Future trades will involve different stablecoins and networks.

Disclaimer

This communication has been prepared by Standard Chartered Bank (“**Standard Chartered Bank**”) and Zodia Markets (UK) Limited (“**Zodia Markets**”).

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 Chartered Bank is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority. Banking activities may be carried out internationally by different Standard Chartered Bank branches, subsidiaries and its affiliates (collectively “**SCB**”) according to local regulatory requirements.

Zodia Markets is incorporated in England (company registration number 13360649), its registered address is 1 Basinghall Avenue, London, EC2V 5DD. Zodia Markets is a majority-owned subsidiary of Standard Chartered Bank. Zodia Markets is registered with the Financial Conduct Authority (firm reference 954558) under the Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 in respect of its activities in cryptoassets only. Zodia Markets is also a Money Services Business registered with FinCEN in the United States (MSB Registration Number 31000244063837).

With respect to any jurisdiction in which there is an SCB entity (“**SCB Group Entity**”) or Zodia Markets corporate group entity (“**Zodia Markets Group Entity**”), this document is distributed in such jurisdiction by, and is attributable to, such local SCB Group Entity and Zodia Markets Group Entity (as applicable). Recipients in any jurisdiction would contact the local SCB Group Entity and Zodia Markets Group Entity (as applicable) in relation to any matters arising from, or in connection with, this document. Not all products and services are provided by all SCB Group Entities and Zodia Markets Group Entities (as applicable).

This material is provided for general information purposes only and does not constitute either an offer to sell or the solicitation of an offer to buy any security or any financial instrument or enter into any transaction or recommendation to acquire or dispose of any investment.

The information contained herein does not purport to identify or suggest all the risks (direct or indirect) that may be associated with conducting business.

This communication is prepared by personnel from SCB’s and Zodia Market’s. This material has been produced for the purposes of marketing and for reference only. It is not research material and is not a product of SCB’s or Zodia Market’s research and therefore not be relied upon as such.

This material is provided on a confidential basis and may not be reproduced, redistributed or transmitted, whole or in part, without the prior written consent of SCB and Zodia Markets.

This communication is not independent of SCB’s and Zodia Market’s own trading strategies or positions. Therefore, it is possible, and you should assume, that SCB and/or Zodia Markets have/has a material interest in one or more of the financial instruments mentioned herein. If specific companies are mentioned in this communication, please note that SCB and/or Zodia Markets may at times seek to do business with the companies covered in this communication; hold a position in, or have economic exposure to, such companies; and/or invest in the financial products issued by these companies. This communication may be a marketing communication as referenced in the Market in Financial Instruments Directive 2014/54/EU.

SCB and/or Zodia Markets may be involved in activities such as dealing in, holding, acting as market makers or performing financial or advisory services in relation to any of the products referred to in this communication. The Sales and Trading personnel who prepared this material may be compensated in part based on trading activity. Accordingly, SCB and/or Zodia Markets may have a conflict of interest that could affect the objectivity of this communication.

This communication should not be construed as a recommendation (except to the extent it is an “investment recommendation” under MAR (as defined below)) for the purchase or sales of any security or financial instrument, or to enter into a transaction involving any instrument or trading strategy, or as an official confirmation or official valuation of any transaction mentioned herein.

The information provided is not intended to be used as a general guide to investing and does not constitute investment advice or as a source of any specific investment recommendations as it has not been prepared with regard to the specific investment objectives or financial situation of any particular person.

Trading digital assets carries a high level of risk and may not be suitable for all investors. The value of digital assets can fluctuate significantly and may result in significant loss. You should carefully consider your investment objectives, level of experience, and risk appetite before deciding to trade in digital assets. The information provided in this [material] is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to law or regulation, or which would subject us to any registration requirement within such jurisdiction or country.

SCB and Zodia Markets do not provide, and have not provided, any investment advice or personal recommendation to you in relation to the transaction and/or any related securities described herein and is not responsible for providing or arranging for the provision of any general financial, strategic or specialist advice, including legal, regulatory, accounting, model auditing or taxation advice or services or any other services in relation to the transaction and/or any related securities described herein. The particular tax treatment of a service or transaction depends on the individual circumstances of each client and may be subject to change in the future. Accounting laws, rules, regulations, standards and other guidelines may differ in different countries and/or may change at any time without notice. SCB and Zodia Markets may not have the necessary licenses to provide services or offer products in all countries or such provision of services or offering of products may be subject to the regulatory requirements of each jurisdiction and you should check with your advisors before proceeding. Accordingly, SCB and Zodia Markets are under no obligation to, and shall not determine the suitability for you of the transaction described herein.

You must ensure that you have sufficient knowledge, experience, sophistication and/or professional advice to make your own evaluation of the merits and risks of entering into such transaction. You are advised to make your own independent judgment (with the advice of your professional advisers as necessary) with respect to the risks and consequences of any matter contained herein.

While reasonable care has been taken in preparing this document, SCB and Zodia Markets expressly disclaim any liability and responsibility for any damage or loss you may suffer from your use of or reliance of the information contained herein. Any past or simulated past performance including back-testing, modelling or scenario analysis contained herein is not an indication of future performance or results. Changes in rates of exchange may have an adverse effect on the value of investments. No representation is made as to the accuracy of the assumptions made within, or completeness of, any modelling, scenario analysis or back-testing.

Predictions, projections or forecasts contained herein are not necessarily indicative of actual future events and are subject to change without notice. You are cautioned not to place undue reliance on such statements. While all reasonable care has been taken in preparing this communication, SCB and Zodia Markets make no representation or warranty as to its accuracy or completeness.

Any opinions or views of third parties expressed in this material are those of the third parties identified, and not of SCB and Zodia Markets. Some of the information appearing herein may have been obtained from public sources and while SCB and Zodia Markets believe such information to be reliable, it has not been independently verified by SCB and Zodia Markets.

All opinions and estimates are given as of the date of the relevant document and are subject to change without notice. The value of any investment may also fluctuate as a result of market changes. SCB and Zodia Markets are not obliged to inform the recipients of this communication of any change to such opinions or estimates.

Where this material is an “investment recommendation” as defined in Article 3(1)(35) of the EU Market Abuse Regulation (“EU MAR”) and as it forms part of UK law by virtue of the European Union (Withdrawal) Act 2018 (UK MAR), distribution of this material is subject to the relevant provisions of UK and EU MAR. For more information, please consult the MAR disclosures page available at www.sc.com.

UK: This communication is not directed at Retail Clients as defined in 3.4.1R of the Conduct of Business Sourcebook in the Financial Conduct Authority Handbook.

Europe: Within the European Economic Area this communication is issued by (a) Zodia Markets (Ireland) Limited, an affiliate of Zodia Markets (UK) Limited, and (b) Standard Chartered Bank AG, a subsidiary of Standard Chartered Bank, authorised by the European Central Bank and supervised by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht-“BaFin”) and the German Federal Bank (Deutsche Bundesbank). This document is directed at persons Standard Chartered Bank AG can categorise as Eligible Counterparties or per se Professional Clients (such persons constituting the target market of this communication following Standard Chartered Bank AG’s target market assessment) as defined by the Markets in Financial Instruments Directive II (Directive 2014/65/EU) (“MiFID II”) and the German Securities Trading Act (“WpHG”). No other person should rely upon it. In particular, this is not directed at Retail Clients (as defined by MiFID II and WpHG) in the European Economic Area. Nothing in this document constitutes a personal recommendation or investment advice as defined by MiFID II and WpHG.

United States: Except for any documents relating to foreign exchange, rates or commodities, distribution of this document in the United States or to US persons is intended to be solely to major institutional investors as defined in Rule 15a-6(a)(2) under the US Securities Act of 1934. All US persons that receive this document by their acceptance thereof represent and agree that they are a major institutional investor and understand the risks involved in executing transactions in securities. Any US recipient of this document wanting additional information or to effect any transaction in any security or financial instrument mentioned herein, must do so by contacting a registered representative of Standard Chartered Securities (North America) LLC., 1095 Avenue of the Americas, New York, N.Y. 10036, US, Tel +1 212 667 0700. WE DO NOT OFFER OR SELL SECURITIES TO U.S. PERSONS UNLESS EITHER (A) THOSE SECURITIES ARE REGISTERED FOR SALE WITH THE U.S. SECURITIES AND EXCHANGE COMMISSION AND WITH ALL APPROPRIATE U.S. STATE AUTHORITIES; OR (B) THE SECURITIES OR THE SPECIFIC TRANSACTION QUALIFY FOR AN EXEMPTION UNDER THE U.S. FEDERAL AND STATE SECURITIES LAWS NOR DO WE OFFER OR SELL SECURITIES TO U.S. PERSONS UNLESS (I) WE, OUR AFFILIATED COMPANY AND THE APPROPRIATE PERSONNEL ARE PROPERLY REGISTERED OR LICENSED TO CONDUCT BUSINESS; OR (II) WE, OUR AFFILIATED COMPANY AND THE APPROPRIATE PERSONNEL QUALIFY FOR EXEMPTIONS UNDER APPLICABLE U.S. FEDERAL AND STATE LAWS.

Middle East: This document is available in Arabic upon request.
يرجى التكرم بالعلم بأننا سنقوم بتزويدكم بترجمة للعربية عن هذه الوثيقة عندالطلب

SCB DIFC: This communication is issued by Standard Chartered Bank, Dubai International Financial Centre Branch (“SCB DIFC”). SCB DIFC having its offices at Dubai International Financial Centre, Building 1, Gate Precinct, P.O. Box 999, Dubai, UAE is authorised by the Dubai Financial Services Authority (“DFSA”). This document is intended for use only by Professional Clients, as defined by the DFSA Rulebook.

SCB ADGM: This communication is issued by SCB, Abu Dhabi Global Market Brach (“SCB ADGM”). SCB ADGM having its offices at Unit 5, floor 7, Al Khatem Tower, ADGM, Al Maryah Island, Abu Dhabi, UAE is a branch of Standard Chartered Bank and is regulated by the Financial Services Regulatory Authority (“FSRA”). This document is intended for use only by Professional Clients or Market Counterparties and is not directed at Retail Clients by the ADGM Rulebook.

For SCB DIFC Islamic business: For Islamic banking business, SCB DIFC act under the supervision of the banks Shariah Supervisory Committee. Relevant information on the Shari’a Supervisory Committee is available on the Standard Chartered Bank website in the Islamic banking section.

For SCB UAE Islamic business: Please refer to our SCB UAE Islamic Banking page.

For SCB UAE Securities Services: This communication is used by Standard Chartered Bank, United Arab Emirates (“SCB UAE”), SCB UAE having its offices at Downtown Dubai, P.O. Box 999, Dubai, UAE is authorised by the Securities and Commodity Authority (“SCA”) and subject to SCA’s regulation, supervision, and control. SCB UAE holds a license to practice the activity of custody and fund administration.

For SCB Australia: Standard Chartered Bank has been granted an authority to carry on a banking business in Australia pursuant to section 9 of the Banking Act 1959 of Australia (“Banking Act”) and is a foreign authorised deposit taking institution (“ADI”) within the meaning of the Banking Act. Provisions in the Banking Act for the protection of depositors generally do not apply to foreign ADIs including Standard Chartered Bank. For example, depositors with foreign ADIs do not receive the benefit of the following protections:

- deposits are not covered by the financial claims scheme and are not guaranteed by the Australian Government;
- depositors do not receive priority ahead of amounts owed to other creditors. This means that if a foreign ADI were unable to meet its obligations or otherwise is in financial difficulties and ceases to make payments, its depositors in Australia would not receive priority for repayment of their deposits from the foreign ADI’s assets in Australia; and
- a foreign ADI is not required to hold assets in Australia to cover its deposit liabilities in Australia. This means that if the foreign ADI were unable to meet its obligations or otherwise is in financial difficulty and ceases to make payments, it is uncertain whether depositors would be able to access the full amount of their deposit.

The Banking Code of Practice 2020 (as amended, supplemented, revised, replaced and/or restated from time to time) does not apply to any transaction or service made available by Standard Chartered Bank in Australia.