IMPACTS OF DIGITALISATION ON TRADING AND POST-TRADING

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DLT in the securities trading and post-trading: challenges and opportunities

The financial sector has always been at the forefront of reaping the benefits that innovation can bring. Major transformations occurred throughout all the value-chain, from the way in which investors interact with intermediaries to settlement of transactions. More recently, digitalisation has been a key tool for fostering efficiency, by reducing and managing risks (primarily operational and compliance risks) and providing better services to clients.

Innovation and its application to the financial sector has been incremental, with emerging disruptive digital technologies. New technologies have the potential to radically change the way in which services are performed.

In particular, the application of distributed ledger technologies (DLT) for the issuance, recording, storage, and transfer of financial instruments can change the way in which trading and post-trading activities are currently performed.

DLTs have specific features:

(i) the ability to record information in a safe and immutable format;
(ii) the transparency of data stored in the DLT for all the nodes participating to the DLT;
(iii) the possibility to reduce or even eliminate the need for a centralised authority, since trust is granted by the consensus mechanism.

Those features are appealing for the tokenisation of financial instruments. Recording all transactions in a decentralised ledger can speed up and collapse trading, clearing and settlement to nearly real-time. This could reduce counterparty risk and, consequently, the need for collateral. In addition, the use of DLT could enhance reporting and supervision functions, also by regulators, which can be granted special access rights to the DLT. Moreover, there could be benefits in enhanced resilience of the systems and in the implementation of smart contracts, that can reduce transaction and enforcement cost associated with contract performance.

It is key to start to figure out an exit strategy from the sandbox approach.

However, the EU financial services legislation separates the trading, clearing and settlement phases, requiring the presence of market intermediaries and market infrastructures, each of which has specific tasks and responsibilities that cannot be combined. This could limit the possibility to fully exploit the potential benefits of DLTs for trading and post-trading activities.

For this reason, the EU legislators adopted the regulation (EU) 858/2022 on a pilot regime for markets infrastructures based on DLT (applicable from 23 March 2023). It allows incumbent market participants, and new players to obtain a specific permission to operate under the DLT pilot regime as DLT market infrastructure (DLT MTF, DLT SS and DLT TSS), also combining trading and settlement tasks into the same market infrastructure (DLT TSS).

The DLT pilot regime adopts a sandbox approach to overcome the legal obstacles that have been identified in the EU legislation. This approach implies that there are specific limitations. First of all, it is applicable only to certain simple financial instruments (e.g. shares, bonds and other debt securities, units in UCITS funds). Moreover, there are specific thresholds applicable to the issuer and to the DLT market infrastructure to limit the magnitude of the testing. DLT markets infrastructures can obtain from their national competent authorities derogation from MiFID 2 and MiFIR requirements (above all the obligation of intermediation for accessing a DLT MTF) and from certain provisions of the CSDR, including the book-entry form and the need to make use of an authorised CSD for securities admitted to trading on a trading venue. This allows DLT SS to record financial instruments on the DLT and DLT TSS to combine trading and settlement of DLT financial instruments.

Finally, the sandbox approach prescribes that the DLT Pilot regime is temporary, the exemptions can last up to six years from the issuance of the specific permission to operate a DLT infrastructure. This method allows regulators to better assess the peculiarity of the application of the DLT to the securities trading and post-trading, before permanently changing the rules.

Considering the potential benefits of DLT for trading and post-trading market, and investments requested both from market participants and regulators involved in the DLT pilot regime, it is therefore key to start to figure out an efficient exit strategy from the sandbox approach. This would require re-assessing the legal framework, identifying the key risks that must be dealt with and verifying whether it would be possible to move from an entity-based approach, which essentially leverages on the presence of a gate-keeper, to a functional approach to regulation. In conducting such exercise, while striving to preserve the principle of technological neutrality, it might be needed to accept that in some instances the peculiar features of the technology involved would require to adapt the rules, so that it is granted the same level of protection with rules that are not completely identical to those applicable to traditional financial services.

CLAUDINE HURMAN
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Central banks: the need to accompany the safe tokenisation of finance

The tokenisation of finance is a nascent trend based on the conversion of existing financial assets on distributed ledgers, or the direct issuance of financial assets in a tokenised form. The growing interest of the industry relies on the potential of distributed ledger technologies (DLTs): their ability to enhance cost-efficiency with a greater integration between front-end and post-market activities, to provide availability around the clock, and to improve transparency with a better tracking of transactions and ownership that could for instance facilitate the compliance with ESG criteria.

In the future, the development of DLTs could change the way trading and settlement of transactions are operated. In this context, it is essential for public authorities to understand market demand and accompany innovative approaches, but also to continuously assess and monitor the risks posed by this new turn for financial markets. In particular, the use of central bank money as the safest settlement asset for wholesale payments could play a key role in securing financial transactions processed on DLTs.

To this end, the Banque de France launched an experimentation programme based on Central Bank Digital Currency (CBDC) issued on DLTs in the form of tokens. Involving private and public partners, twelve experimentations have been conducted since 2020, based on two main use cases.

The first one concerns the improvement of the functioning of financial markets. Some financial instruments do not benefit yet from automated Delivery-versus-Payment (DvP) process, in particular complex and OTC products or mid-cap market segments. The use of DLTs could bring automation for a lean process management of such financial instruments issued on DLTs, while allowing their development on a larger scale. Should such market segments become systemic, central bank money would be the settlement asset to secure transactions and avoid counterparty and liquidity risks, as the reference settlement asset for listed segments traded on systemic market infrastructures.

A wholesale CBDC would play as a safe anchor in the realm of tokenization.

The second use case concerns the improvement of cross-border and cross-currency payments based on wholesale CBDCs. Cross-border payments remain slow and costly due to a lack of standardisation and harmonisation across jurisdictions. CBDC experiments in a cross-border context have shown how wholesale multi-CBDC platforms could optimise the long chain of intermediaries. Under such new paradigm, financial intermediaries would remain at the core of financial transactions while their roles may evolve. This calls for further experimental work to understand and anticipate these developments.

As the adoption of tokenisation increases, so will the challenges – specific to DLTs or not – that need to be addressed and closely monitored.

One of the main concerns is the risk of liquidity fragmentation, which arises from the possibility that multiple DLT networks will emerge and operate independently, resulting in siloed markets. On the other hand, the risk of a monopolistic situation arises from the possibility that a single DLT network becomes dominant in the market, leading to a concentration of power and control over the market. As a consequence, interoperability will be key to the success of emerging projects to allow for smooth exchanges between jurisdictions and between platforms.

Another challenge is the operational risk management and resilience of systems based on DLTs, including security and integrity of data. In addition, scalability issues increase operational risks as DLT networks are currently limited in their capacity to handle large volumes of transactions. DLTs also enable the use of smart contracts, which are self-executing programs that can automate complex financial transactions. Therefore, it will be crucial to take into account the operational risk, in particular the risk to data security and integrity, whether through coding errors, hacking or electrical problems. Standardisation will help to address these challenges by providing a common framework for the operation of DLT networks, thus facilitating the growth and development of future markets. Governance will also be key in particular within central banks, should multi-CBDC platforms emerge.

Any development of DLT-based market infrastructures will require the complementarity with the well-established payment systems which have proven their efficiency, rather than competition for added value.

The European Pilot Regime is in line with this approach. Based on the issuance and transfer of financial assets on DLTs, it will allow policymakers and regulators to gain a better understanding of the challenges associated with the development of tokenisation while ensuring the safety and stability of the financial system.

A wholesale CBDC would play as a safe anchor in the realm of tokenisation: it would ensure the continuity of smooth and efficient payments on safe and stable market infrastructures, while fostering innovative and user-friendly solutions.

JULIAN REISCHLE
Director General Payments and Settlement Systems - Deutsche Bundesbank

DLT requires new functions for settlement in central bank money

The world of payments and settlements has always been characterised by constant change, innovation and progress. Money and its underlying payment rails have evolved over centuries from commodity money to coins and banknotes and finally to electronic transfer systems and digital banking. However, the invention of Bitcoin in 2009 marks another acceleration point on the path towards the digitalisation of money. In its aftermath, the payment landscape experienced a significant innovation boost. Of course, not every innovation has been beneficial, be it in terms of simplification, security, efficiency or even customer satisfaction. Nevertheless, it must be acknowledged that Bitcoin paved the way for what are now commonly known as crypto-tokens, stablecoins, decentralised finance applications and even, to some degree, central bank digital currencies (CBDCs).

It is worth taking a closer look at which innovations might stand the test of time once the market has matured. There is much to be said for distributed ledger technology (DLT), which could unfold its potential as basis technology for payment and settlement purposes. There has been broad industry uptake of DLT exploration activities. DLT basically has two promising benefits that make it an attractive investigation object for financial sector applications. First, the joint database enables mutually independent partners to settle financial transactions without the need for reconciliation processes.

Second, smart contracts permit a comparatively high degree of automation, as they allow transactions to be settled based on pre-defined conditions. DLT could therefore facilitate the settlement of complex business processes, which formerly required a wider range of time-consuming sequential interventions. This could not only save time, but also reduce transaction costs and increase security within the system. From a practical perspective, these benefits mainly accrue on the asset side, e.g. for central security depositors and custodians, especially for management along securities' lifecycle, i.e. post trade services. For plain vanilla cash settlement of large value payments, the perceived benefits are less obvious as centralised hub and spoke systems exist, which are proved in terms of throughput, latency and security. This realisation raises the question of what role central banks should play when it comes to DLT applications.

Central banks must contribute to safe, efficient and fit-for-purpose payment and settlement systems.

The answer is as easy as it is reasonable. Central banks must observe and accompany the adoption of DLT in the financial sector, with the overarching goal of keeping the settlement of large value payments in central bank money. Central bank money is the safest and most liquid settlement asset, fostering financial stability, facilitating monetary policy and ensuring trust among market participants. This certainly implies a policy reaction with regard to DLT: central bank money must be made fit for purpose. Specifically, the settlement of DLT-based transactions in central bank money should be possible. Otherwise, market participants might search for alternative settlement vehicles for their DLT-based business such as stablecoins or other private forms of money.

There are two different ways in which central banks could enable the settlement of DLT-based transactions for wholesale purposes in central bank money: the issuance of central bank money in tokenised form directly on DLT, referred to as wholesale CBDC; alternatively, a simple connection of DLT networks with conventional payment systems by building a technical bridge. The first option not only raises difficult questions in terms of policy and governance, it also involves some risks. The Bundesbank has, however, already successfully tested the second option, a trigger solution, as it is known, where a transaction on the DLT automatically initiates (triggers) the corresponding payment in the existing RTGS.

A trigger solution allows central banks to support DLT-based innovations – quickly, easily and almost free of risk. The connection of DLT networks with conventional payments systems combines the advantages of decentralised infrastructures with the reliability of the central bank. At the same time, it realises the benefits of DLT-based settlement on the asset side without the need for creating a new (tokenised) form of money on the cash side. Trigger solutions are therefore characterised by comparatively low technical and operational complexity. Since central bank money stays within the well-established infrastructures, even policy considerations seem manageable with potentially low effort. It therefore seems reasonable for central banks and policy makers to start with trigger solutions when considering the case for DLT settlement.

By providing a trigger solution, central banks would be contributing to safe, efficient and fit-for-purpose payment and settlement systems, but also to a safe and reliable financial system.

ROLAND CHAI

Executive Vice President, Head of Marketplace Technology - Nasdaq

Enhancing trust, transparency and resilience through technology change

Much has been made of a new wave of technologies sweeping global financial markets, their ability to transform the industry and disrupt the architecture underpinning international capital markets. Many are exciting and have the ability to do just that, but the ever-greater move to a real-time, 24/7 global trading and settlement cycle necessitates a relentless focus on cross-border coordination between market participants, regulators and infrastructure providers. Doing so will ensure that the technology is adopted in a way that enhances trust, transparency, and resilience of the system.

Smart contracts are a great example of a technology that is increasingly being deployed in various parts of the industry, which offers the potential to dramatically shorten the settlement process. For example, it's already being used within Nasdaq's Sustainable Bond Network, a platform where issuers can share all relevant sustainability documentation, data and qualitative information in a machine-readable format, which in turn empowers investors to discover, compile, and compare bonds and automatically generate impact reports.

Taking the technology a step further, we will soon start to see securities and collateral managed with smart contracts, able to manage securities transactions and generating substantial benefits for asset servicing including managing interest payments for securities or automating time-consuming legal processes. There are also implications for the payments industry, with providers such as Fnality establishing a network of regulated financial market infrastructures offering secure 24/7 central bank money-backed cash settlement of tokenized assets trades and cross-border liquidity.

Tokenisation or digitisation of existing securities is not a new concept when we look at the dematerialisation of securities. However, the ability to hold value in interoperable tokens, exchange them across jurisdictions and do this on a 24/7 basis along with a digitised payment infrastructure opens up possibilities of transforming markets.

We see the modernization of markets as a structural and long-term trend.

Significant debate remains on which technologies will prevail and how the standards of these technologies will interact. Organisations like ISSA and GBBC are paving the way by developing standards for interactivity and interoperability. Nasdaq is seeing amongst its customers across South America, Europe, Middle East, and Asia Pacific an accelerating trend to leveraging existing securities systems and payment rails to provide services for digitisation of equities and bonds. Customers are increasingly demanding that custodians and CSDs service all their investment and portfolio needs, including crypto and non-securities asset classes.

Artificial Intelligence has also long been spoken about for its ability to bring widespread benefits to capital markets, and more specifically the power to make exchanges reactive to prevailing market conditions. This includes the opportunity to make automated, intraday, symbol specific decisions rather than general, exchange wide decisions on a much lower cadence. And there is a slew of new smart ways to make and route orders. Nasdaq is actively exploring a reinforcement learning powered order-type, which actively learns in an interactive environment to improve fill rates and is employing AI in options listing operations to manage more effective listing of option strikes. There is the potential to bring similar improvements to Nasdaq's European exchanges.

In risk management, development of models and back-testing is greatly benefiting from machine learning and the vast capacities of the cloud to process data; and there is significant potential for market surveillance.

To successfully leverage AI, the cloud is a fundamental prerequisite to facilitating the technology, with the ability to run increasing amounts of data. Many financial firms are already harnessing that vision and there is the possibility that those who do so will have a substantial advantage in information and risk arbitrage over those that remain tied to legacy technology.

When it comes to implementing technology at scale, we are fortunate to benefit from decades of capital markets experience, both from operating our own 28 exchanges, CCP, and CSD, as well as from providing technology to 130+ organizations around the world.

Before widespread adoption of any new technology, there must be a relentless focus on what problem it's solving, and how the change maintains or enhances trust, transparency and resilience of the system. Indeed, there are many instances where existing technology and infrastructure is far superior, for example in the case of trading engines which remain by far the best option liquidity, price discovery and transparency.

We see the modernization of markets as a structural and long-term trend: it enhances market resiliency and scalability, makes markets even more accessible to market participants, and opens doors to new asset classes.

JENNIFER PEVE

Managing Director, Head of Strategy and Business Development - The Depository Trust & Clearing Corporation (DTCC)

Using the right technology at the right time will drive digital asset ecosystem

Emerging technology is driving market structure discussions globally, and it's increasingly clear that future financial markets will not be underpinned by just one technology as our use of these tools continues to evolve.

This rapidly changing ecosystem presents incredible opportunities to the industry predicated on identifying the right solution that generates client value. This means targeting new business models in underserved markets or assets, identifying enhancements to existing products and services, and/or finding opportunities to complement existing businesses with new features to enhance the client experience. Only when the opportunity is defined, can the appropriate technology be applied to enable and deliver that client value.

Much of this work, and technology enablement, also will depend on how quickly new technologies mature and are widely implemented. There have been several projects and initiatives that serve as excellent proofs of concepts regarding how the industry can embrace emerging technologies to streamline processes, broaden distribution, improve client service and ultimately reduce costs and risk.

While it's impossible to describe the myriad of ways that emerging technology is being used, there are three—blockchain, artificial intelligence and cloud—that are converging to create a new digital ecosystem.

First, firms are increasingly leveraging smart contracts to tokenize fixed income and alternative assets, such as private debt or equity markets. For example, some firms are executing pilot issuances across assets, with a majority leveraging bonds on a global basis. The tokenization of assets has the potential to enable faster, more transparent, secure and efficient processing for certain use cases today and will continue to be explored for asset issuance, new custody models and alternative payment/settlement rails.

But as the digital ecosystem grows, there are several protocols being used, inconsistent standards and varying regulatory regimes. All of which leads to fragmentation and siloes across the industry for digital assets. It's clear that the industry must work collaboratively to establish consistent standards, guardrails, network rules and protocols for digital securities to enable, rather than inhibit, the growth of this ecosystem.

It's increasingly clear that future financial markets will not be underpinned by just one technology.

Second, artificial intelligence is being used broadly—primarily in a way that is process-focused rather than asset-focused—and is enhancing the client experience and providing data insights for personalization and self-service. In addition to being used in algorithmic trading, AI also is assisting with reconciliation to help detect possible settlement failures before they occur and anomalies in data sets. The broad growth of AI and the development of large language models (LLMs) will offer opportunities for improving operational efficiencies and enhancements for clients in the future, but currently pose enormous—and yet unaddressed—challenges for maintaining privacy and ensuring proprietary information is not stored in chatbots.

Third, the effectiveness of AI depends on high-quality, unbiased data, and we're seeing cloud technology intensely leveraged to provide that data. For example, DTCC is using Snowflake's Data Cloud to support our Kinetics data business, which offers clients more immediate market insights across multiple asset classes and provides users with greater interactivity and access controls. Ideally, data from transactional systems that is placed onto the cloud becomes part of a data ecosystem that has analytical depth and breadth. That data can be analyzed by clients, often with applications that enable them to obtain data in near-real time, to develop strategic insights for more effective decision-making.

Clearly, challenges remain as the adoption and use of these technologies have not reached the maturity level to promote wide-scale use in financial markets. Looking to the future, the use of emerging technologies must be examined on a case-by-case basis, focusing on activity rather than asset classes.

As we have for 50 years, DTCC is exploring uses for emerging technology while working closely with regulators and industry stakeholders to help create the same confidence, operational and capital efficiencies in the digital asset ecosystem that investors rely on within traditional markets.

And as the industry moves forward, we must embrace one overarching theme: Any technology we use to enable growth and deliver client value must never introduce new risk into the system. We must understand the complexities and the interconnectedness of technology to establish governance models and move forward. By keeping that idea at the center of all we do, the opportunities are endless.

ARNAUD MISSET
Chief Digital Officer - CACEIS

Leveraging technology for clients through efficient partnerships with FinTechs

Technology has always been the cornerstone of Asset Servicing, with IT and best-in-class systems forming the backbone of the value chain for both marketplaces and players in the field. However, recent years have seen a quantum leap in technology offer and capacity, including DLT, data analysis, AI, alternative communication channels, and quantum computing. As client expectations have shifted, asset servicing companies are now expected to act as consultants, providing feedback and a detailed overview of new technology. It has therefore become crucial to reconcile these growing expectations with a suitable R&D budget and the capacity to deliver.

To address this challenge, it is essential to focus on what is core or and what is not, and what competitive advantages exist. For instance, DLT technology is such a potential game changer for the industry and should be managed internally in close relationship with regulators and participation in as many marketplace trials as possible. Technology offers more efficient ways of working but still requires specialist staff with securities servicing industry experience, so asset servicers must rapidly integrate it into their product range. Meanwhile, data analysis capacity is at the heart of the asset servicer's value proposition and is a major differentiating factor that provides competitive advantage.

Sometimes data held with third-parties is inaccessible, so it is often preferable to perform data analysis internally with the asset servicing firm because they are often the 'one true source' of the data and are therefore in the optimal position to provide the most accurate and reliable information.

For technologies outside the asset servicing provider's core offer or those requested by a low number of clients or specific segments, it is essential to find a balance between client satisfaction and profitability. Instead of simply purchasing a solution and integrating it as a white-labelled product, which may impact profitability, industry players should leverage their combined strength. The asset servicing provider should seek out solutions and provide the underlying data, while tech companies render the service based on cutting-edge technology products.

Asset servicing players must shift focus from technology development to technology aggregation ...

This streamlined technology development and integration process benefits the entire community, with clients gaining a massive increase in the available product catalogue offered by the asset servicing partner, a very light integration process, and the assurance that due diligence for the technology selection was performed professionally. The asset servicing firm benefits from major savings in terms of IT development and the opportunity to build a strong partnership with FinTechs or tech start-ups. Finally, FinTechs benefit from potential access to the scale of the asset servicer company's client base as well as their sales teams' knowledge and experience. We often hear about win win strategy with sometimes a reality hard to show. Where appropriate, the combination of large-group and fintechs approaches allows each to capitalize on the strengths of the other and lay the foundations for a healthy and sustainable relationship.

The final customer is also an actor in the process with the possibility to participate in the scouting of FinTechs of interest to him and his peers.

A streamlined integration process and an industrialised model are key to unlocking the full potential of this technology partner solution. The brand awareness of the best-in-class FinTechs partners can also be leveraged as a marketing tool for asset servicing groups, further reducing the attractiveness of a white labelling solution. This goes hand-in-hand with standardised data feed protocols between the asset servicing provider and the FinTechs, automated contractual and payment processes, and centralised monitoring via the asset servicing group's client web portal or even via API access.

This dual model for technology integration is key to addressing the new challenges the industry is facing such as cost, constantly changing technologies, time-to-market, and open finance. Asset servicing models must adapt, and asset servicing players must shift focus from technology development to technology aggregation, enabling the entire industry to benefit from broader technology access and streamlined integration.

By working together and streamlining the selection and integration process, asset servicing groups can continue to deliver best-in-class service while staying on top of the latest technology, and meeting client expectations.

LAWRENCE LOW

Managing Director, Global Head of Regulatory Affairs - Standard Chartered

Technology and the transformation of securities markets

Technological innovations can be game changers in securities markets. From electronification to dematerialisation, new technology has made improvements to the trading, settlement and reporting of securities transactions. However, these have not been transformative - today, we see the promise and possibilities of tokenisation and distributed ledger technology ("DLT"). Whether these innovations signal the beginning of a new and completely different in securities markets remains to be seen – for while we expect adoption of these to bring positive changes to securities markets, uncertainties remain as the underlying technology is still evolving and practical challenges have yet to be overcome.

Efficiency gains

Tokenisation involves the digital representation of physical assets on distributed ledgers or the issuance of traditional asset classes directly in tokenised form. In combination with DLT and smart contracts, tokenisation has the potential to improve efficiency in securities markets by simplifying processes, ensuring greater transparency as well as reducing cost of and time for transactions.

These new technologies can reduce the reconciliation workload and shortening the clearing and trading settlement cycle. This could, in turn, lower counterparty risk resulting in greater capital efficiency. At the same time, the use of smart contracts could also reduce operational risk by enhancing automation of back-office processes such as the processing of corporate actions.

Further, tokenisation and DLT can integrate trading venues with real-time settlement. On-ledger trade execution could further reduce operational and capital costs while facilitating fractional ownership of assets, which can generate additional liquidity by connecting more issuers and investors. For now, adoption of new technology has in practice focused on optimising processes under current market structures rather than leading to new DLT-based market infrastructure.

The full benefits of these innovations have yet to be realised.

At Standard Chartered, we are actively partnering with regulators to pilot trial applications of DLT and tokenisation technology. For instance, within the framework of the Monetary Authority of Singapore's Project Guardian, we are participating in an initiative to explore the issuance of tokens linked to trade finance assets. The project aims to digitise the trade distribution market, by transforming trade assets into transferable instruments that are more transparent and accessible to investors. In parallel, we are also constantly engaging with providers to identify areas in which digitalisation could bring concrete business benefits to us and our clients.

Practical challenges that still need to be overcome

The full benefits of these innovations have yet to be realised and could take time as the use of the underlying technology currently entails a series of challenges.

DLT-based systems need to be interoperable with each other and with legacy systems, particularly as their deployment is gradual. Otherwise, each ecosystem becomes isolated and the trading of tokenised assets will be fragmented. To avoid this, the development of common technology standards will be key.

The management of potential privacy issues is also important. As trust and confidence are key pillars underpinning securities markets, it is crucial that DLT networks are designed to protect privacy where most needed. Further, regulators will need to develop a regulatory framework that provides safeguards to the users of the technology and their clients. For example, the identification of accountable entities is essential for regulatory and supervisory actions to be effective and enforceable.

Finally, the operational resilience of DLT-based systems remains to be proven over time. Given the systemic nature of the major capital markets, we need robust assurance that DLT-based systems can work in different contexts and at a different scale.

Experimentation and cooperation as the way forward

As advances are made and the technology continues to evolve, some challenges still need to be overcome. We believe that tokenisation offers the possibility of a major transformation in securities markets that could yield significant benefit for the real economy. For this to happen, an open dialogue between the public and the private sector as well as regulatory initiatives allowing to assess the possibilities and complexities of implementation will be of paramount importance.

At Standard Chartered, we stand ready to contribute to this debate with the aim of bringing most benefits to securities markets while managing potential risks.