EU securities infrastructures: on-going initiatives and prospects of DLT

1. The state of play in EU securities post-trading and ongoing initiatives

1.1 The progress made on competitiveness, resilience and integration

The Chair emphasised that securities infrastructures are an essential part of the backbone of the EU financial system and significantly contribute to the efficiency and safety of capital markets. The objective of enhancing the functioning of EU securities infrastructures has existed since the launch of the euro and discussions on how to lift the barriers to cross border clearing and settlement were initiated in 2001 and 2003 with the Giovannini reports. Much progress has been made in this area by regulators, central banks and market participants, even though some legal and fiscal barriers remain to be tackled. In addition, the process of digitalisation and the increasing adoption of new technologies create new opportunities and challenges in this space.

A Central Bank official agreed that significant progress has been made from a regulatory and infrastructure perspective. The European market is more integrated in terms of infrastructure, with TARGET2-Securities (T2S) in particular and the resilience of the post-trading system was once again proven during the stress events in 2020. However, securities post-trading remains fragmented along national lines, with most transactions taking place within domestic central securities depositaries (CSDs) with limited cross border activity. EU trading and post-trading regulations such as the CSD Regulation (CSDR) aim at enhancing EU integration. This is difficult, however, because the root causes of fragmentation lie in the differences in taxation, insolvency law and corporate law regulations across member states, which are mostly determined at a domestic level and are partly outside the scope of financial authorities.

An industry representative emphasised that, while the EU post-trading market is still split across 31 CSDs, huge efforts have been made at industry level on the harmonisation of systems and on developing synergies across platforms. Another industry speaker agreed, noting that much has been done to lift the technical and operational barriers identified in the Giovannini report in particular, which has fostered liquidity and efficiency in the EU post-trading market.

1.2 Ongoing regulatory initiatives

Answering a question about the expected impacts of the ongoing CSDR review, a Central Bank official expressed support for the proposals regarding passporting and supervisory colleges and also for the proposed amendments concerning the provision of banking-type ancillary services by CSDs. This could foster cross-border settlement activity and facilitate multicurrency settlements, especially for currencies where CSD access to central bank money is not practical or available.

Regarding the settlement discipline regime, it is sensible that the current proposals exclude two kinds of settlement fails from penalty calculation: settlement fails caused by factors not attributable to the transaction participants and settlement fails occurring in the context of transactions that do not involve two trading parties. The mandatory buy in provisions, however, should be omitted entirely, the Central Bank official felt. They impose a high operative burden on the non failing counterparty and therefore also increase risk without addressing illiquidity in the market, which is the main cause of settlement fails due to missing securities. In addition, ESMA has made relevant proposals to simplify the process of collection and distribution of cash penalties for settlement fails relating to cleared transactions. ESMA's proposals would change the existing practice by allowing the central securities depositories (CSD) to collect and distribute all types of penalties, including those for settlement fails relating to cleared transactions. Currently, central counterparties (CCPs) are responsible for the collection and distribution of cash penalties for settlement fails on cleared transactions.

An industry speaker agreed that the mandatory buy in regime would impose an unnecessary burden on market participants and clients and could hurt liquidity and negatively impact the European post-trade market. The discussion about post-trading is related to the ongoing Capital Markets Union (CMU) initiative, which promotes the development and integration of EU capital markets. In the context of Brexit, this is an essential objective for reasons of strategic autonomy in particular, although it is a challenging one to achieve.

Quick actions are needed on the regulatory side to solve some of the technical issues that impede EU post-trade. First, the Shareholder Rights Directive (SRD2) should be reviewed as quickly as possible to harmonise certain elements of it. Since SRD2 is a directive, it was transposed differently across EU member states. A key issue is the definition of 'shareholders', which is different across the EU27. This makes it difficult for cross border investors to exercise their voting rights. Secondly, an EU wide system for withholding tax should be introduced. This was part of the original Giovannini barriers. The idea would be to simplify the withholding tax process for cross border transactions for investors and intermediaries in the EU. Tax issues are usually dealt with at national level, however. Political will is required to move this issue forward at a European level.

Moreover, it is important to maintain a fair competitive landscape for all players operating in the European market, the industry representative stressed. On the clearing side, the work launched by the Commission aiming to strengthen clearing in the EU and reduce the excessive exposure of EU market participants to UK CCPs for euro denominated interest rate swaps (IRSs) in particular seems relevant, but focusing measures only on EU based clearing members would put them at a disadvantage and would go against the objectives of the CMU.

1.3 Evolutions at Eurosystem level

A Central Bank official emphasised that in addition to the CSDR review and other CMU related legislative proposals led by the Commission, much work is being done by the Eurosystem to improve the EU post-trading infrastructure with the consolidation of TARGET2 (T2) and T2S, and also with the Eurosystem Collateral Management System (ECMS), which will increase efficiency and reduce the cost of liquidity in the post-trading system.

Another Central Bank official stated that much is indeed being done by the Eurosystem to provide the necessary infrastructure and act as a catalyst for a further integration of EU capital markets. Over the last 10 years, this can be seen with T2S and the T2S related harmonisation journey. Significant progress has been made in the tackling of the Giovannini barriers in the field of settlement in particular. This has created momentum and new markets are currently migrating into T2S, such as Finland, Croatia and Bulgaria and also Euroclear Bank. Larger issuers and the European Commission via its NextGenerationEU (NGEU) programme are also increasingly relying on the T2S settlement space, which is increasing volumes and creating further synergies and efficiency gains.

Beyond the narrow field of settlement, the ECB has an important role to play in other post trade areas which are less harmonised, by acting as a catalyst and a provider of infrastructure. Experience shows that a combination of these two actions is the most effective approach. The Single Collateral Management Rulebook for Europe (SCoRE), which covers areas such as tri party repo, corporate actions and billing is an example of this catalyst role. The ECB has worked together with the industry in the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on the SCoRE rulebook and there is a collective commitment to implement it in the coming years. There is a link to infrastructures in this project, since the SCoRE rules will be implemented in ECMS in particular.

There has been a strong push on ECMS, and it will be going live from November 2023 with a migration of national central banks' (NCBs) systems for accepting collateral towards a common one. A large amount of standardisation is required to make this project manageable and to avoid the coexistence of different sets of rules for treating post trade actions. One element of standardisation and simplification that has been agreed with the industry is the use of ISO 20022 for messaging in asset servicing, although it may not need to be fully adopted by clients in the post trade downstream beyond the CSDs and custodians. There is still a need to consider an end date for full migration to the new messaging standard, however. As long as different standards and systems coexist, it will not be possible to reap the full benefits of collateral harmonisation and of T2S.

Finally, the Debt Issuance Market Contact Group (DIMCG) can also play an important role in this space, the Central Bank official mentioned. The DIMCG is a follow up to the European Distribution of Debt Issuance (EDDI) initiative[1] which aims to act as a catalyst and infrastructure provider on the primary market issuance side. DIMCG is a catalyst in this project, bringing together Eurosystem representatives and industry professionals involved in the euro area primary debt markets. The DIMCG group delivered a report which was strongly supported by the industry. In 2023, there will be a review of its progress and objectives going forward.

An industry speaker observed that there is a growing interest from policy-makers and the industry to discuss the opportunity to move to a shorter T+1 settlement cycle in Europe, as in the US and other jurisdictions, in order to reduce post-trade risks and margin requirements. However the competitive impact of this project on EU firms needs to be carefully assessed. In Europe, the implementation of T+1 will be much more complex than in the US. Europe has many currencies and many financial market infrastructures (FMIs) including 31 CSDs and a number of CCPs. There are significant differences also between member states' legal frameworks, particularly in areas such as insolvency law.

The Central Bank official mentioned that the European authorities are at a very early stage in assessing the implications of T+1 settlement. It is still uncertain whether T+1 can be imposed in the European market. There is no incompatibility from a T2S perspective, but there are many complexities and differences in the market that need tackling. A first step will be to discuss these issues within the AMI SeCo.

2. Prospects and challenges of digitalisation and DLT in the post-trading space

2.1 Opportunities from DLT in the post-trading space and relevance of the DLT pilot regime

An industry representative considered that distributed ledger technology (DLT), while not being a 'silver bullet', can contribute to increasing efficiency and reducing costs in the capital markets, which should benefit both issuers and investors. DLT can potentially bring many benefits, including a reduction of the reconciliation load between intermediaries and a facilitation of the identification of end investors and of the management of registers. DLT also supports innovative models combining trading and settlement, which are currently separate activities. An interesting experiment was recently conducted by the

1. EDDI aims to support integration in the current issuance and initial distribution ecosystem in the EU by providing new choice for the location of issuance. In particular, with EDDI, European issuers will be able to issue debt securities into all national EU markets on an equal basis.

Banque de France, which tested the possibility of issuing and trading French government bonds against Central Bank Digital Currency (CBDC). The test was successful, but it revealed that implementing DLT in the existing market architecture does not allow the realisation of all the benefits of DLT. Core custody and settlement activities are a complex area with high stakes. It would be preferable to prioritise use cases in other areas to test the added value of DLT. For instance, DLT could bring many improvements in the area of primary debt market issuance on which the DIMCG is focusing, and where manual processes involving Excel spreadsheets still prevail.

The DLT pilot regime, which will go live in March 2023, provides an appropriate framework for the testing of potential uses of DLT in the post-trading space and may bring significant value to the market. The DLT pilot regime will create an experimentation zone that is limited in terms of issuance size and duration, the industry representative explained. It will provide exemptions from the current legislative framework, i.e. Markets in Financial Instruments Directive (MiFID), CSDR and the Settlement Finality Directive (SFD), for the trading and settling of tokenised securities. DLT could be deployed under CSDR, but the choice was made to exempt tests under the pilot regime from these requirements. Another foreseen exemption is the possibility of retail participation, which is not possible under MiFID. The underlying idea is that changes are needed in the legislative framework to reap the benefits of DLT in the securities market. One caveat of the DLT pilot regime is the potential difficulty of drawing conclusions from an environment in which both a technology and a regulatory framework with exemptions are being tested. There is also the risk of creating further fragmentation in the market with systems that may only work for certain groups of issuers and investors or under specific rules.

Another industry speaker concurred that implementing DLT for core settlement processes would be a very complex issue and is a long term objective for the market. As for T+1, the competitive impact of the rollout of DLT on EU firms will need to be carefully assessed.

A Central Bank official agreed that, in advance of rolling it out, it was important to consider exactly what can be achieved with DLT and the extent to which it can be a game changer in the post-trading space. While DLT has great potential, many of the suggested changes to market architecture could be achieved using other technologies. It is therefore essential to distinguish the incremental benefits specifically provided by DLT from those attributable to the changes made to the existing securities post trade architecture. This is something that should be better understood before any decisions on DLT are made.

2.2 Implementation challenges and possible solutions concerning the cash leg

An industry representative emphasised that DLT also creates many challenges in terms of implementation. Implementing DLT in the post-trading space will require a very long transition period with a need for interoperability between new and old platforms. This transition phase should be managed over time in a centralised way with a potential role to be played by CSDs in accompanying the market towards a new market architecture. In addition, DLT implementation may be hindered by existing sources of fragmentation such as the differing national laws that apply to digital assets. It is also essential to avoid the creation of new barriers during this transition process, e.g. related to digital finance rules, which would undermine the success of this new model.

A Central Bank official observed that the cash leg of securities settlement also raises questions, i.e. how securities will be paid for on the blockchain. There are three possibilities for handling the cash leg of securities transactions on DLT. The first would be for the cash leg to be in commercial bank money, i.e. the market would be allowed to handle transactions fully. From the perspective of central banks, this option should be excluded because it could result in the piling up of huge credit risk in the system. Secondly, central bank money could be introduced to the ledger, which would involve tokenisation. This is technically feasible and has been done experimentally. However, this raises questions of monetary policy control. If digitalised money can be traded on DLT, it reduces visibility on liquidity in the Eurosystem since tokens can easily be exchanged around the world. The full implications of such a move must be evaluated. This leaves a potentially more pragmatic third option, which would be to use the current centralised system, i.e. the TARGET system, to settle transactions on DLT. This is possible. Banca d'Italia has just published a paper demonstrating the relative ease of connecting any DLT system with the TARGET system and the Bundesbank has also been experimenting this. There could be a transition scenario in which the market can trade on DLT while benefitting from the security and resilience in settlements provided by the present system and allowing an appropriate conduct of monetary policy. This would also overcome the problem of liquidity fragmentation inherent to DLT platforms. It is an experiment that can be refined, but it shows that a pragmatic path already exists for implementing DLT in the securities environment.

A second Central Bank official was convinced of the advantages of the third solution mentioned by the previous speaker, consisting in the development of a bridge technology between platforms trading digital assets on DLT and more traditional payment systems. This is the basis of the 'trigger solution' developed last year by the Bundesbank. It is technically possible, but it should not be positioned as a long term solution. In the longer run, the introduction of a wholesale CBDC (wCBDC) should be considered. Such a setup would nevertheless provide more time to develop a solution around wCBDC and to define more precisely the form of the CBDC and how it will be built. It is expected that the issues with the cash leg can eventually be solved, which will allow the industry to reap the advantages of DLT in the post-trade space. Progress on these issues will also be contingent on the private sector's commitment to conduct further experiments with DLT applications.

A third Central Bank official noted that the proposed bridge between a DLT platform for the trading of tokenised assets and existing payment infrastructures does not necessarily need to be linked to DLT technology and could be applied to a number of systems beyond DLT.

While this 'trigger solution' has significant potential, its implications should be carefully considered, particularly in terms of re fragmentation of the system. The idea behind this solution is to make wholesale central bank money available 24/7 via application programming interfaces (APIs) for any usage with immediate settlement. This is a powerful idea that is feasible, but its precise workings and its policy implications need to be fine tuned. Additionally, it is worth considering the potential to use private stablecoins in such an environment. The ninth principle of the Principles for financial market infrastructures (PFMI) stipulates that central bank money should be used by infrastructures where practical and relevant. At the same time, it is important to be open to innovation. If transactions can be securely settled using stablecoins, such an approach should be tested by the market on a limited scale.

The Central Bank official disagreed with the concerns raised about the potential difficulty of exercising monetary control when using wCBDC on a DLT securities settlement platform. This should not change the set of counterparties, and the same banks will be using central bank money albeit in a different form. It would not necessarily mean that a bank in a non-EU jurisdiction could directly hold wCBDC.

The Chair noted that central banks appear willing to accommodate or support an evolution of the market towards a more decentralised settlement system and that different options are available. What remains to be seen, however, is the practical form this might take. Further evolutions such as decentralised finance (DeFi) should also be considered. There is not yet any visibility on what type of settlement asset might dominate in such an environment.