

Session 3

The integration of securities market infrastructures in Europe: the example of settlement (*)

Post-trading operations cover the activities of confirmation, clearing and settlement of securities transactions. This note doesn't cover the CCP function.

Largely invisible to investors, these activities are nonetheless indispensable for the smooth functioning of modern financial markets. It is thus essential to provide the European Union with a framework of infrastructures serving the creation of an efficient and integrated financial market.

1. Central Securities Depositories provide public interest services

In the post-trade operations chain, each infrastructure fulfils its own role in relation to the infrastructures immediately before and after it in the chain - to the benefit of all market participants. In parallel, participants in an infrastructure typically fulfil the role of intermediary between their clients and the infrastructure, but may use numerous infrastructures and thus offer clients a more or less comprehensive service.

The national Central Securities Depositories (CSDs) ensure a primary function of providing book-entry accounting and settlement for all securities eligible for the CSD operations⁽¹⁾). As a result, they operate a technical platform called a "securities settlement system" open to all market participants. The securities settlement system interconnects the securities account held in the CSD with a cash account held with a cash settlement agent. Typically, one Central Securities Depository was established per Member State. In any case in countries where more than one was established, it was on per type of securities without possible competition between them. The cash settlement agent is usually the National Central Bank and this "essential facility" has been operated on a full cost recovery basis.

The International Central Securities Depositories (ICSDs) were created to provide book-entry settlement for internationally securities, in particular the eurobonds, where they act as settlement infrastructure (in which case the initial issuance and deposit of bonds is made with the ICSDs' depository banks) and expanded into the processing of cross-border transactions in internationally-traded national securities (in which case the initial issuance and deposit of securities is made with the national Central Securities Depositories). In the European Union, there are two ICSDs in competition: Euroclear Bank Brussels and Clearstream Banking Luxembourg. The ICSDs run as well as a securities settlement system, but

(*) Eurofi thanks warmly Mr. Robert Raymond, Former Director General of the European Monetary Institute for its valuable contribution.

(1) They verify at all times that the total number of securities of a given securities issue equals the number of securities recorded on the accounts of participants, so as to avoid the fictitious creation or destruction of securities.

at the same time act as cash settlement agent, operating on a pure commercial basis.

Custodians provide access to the infrastructure for a wide range of clients (issuing companies, retail and institutional investors, etc). They hold and manage securities accounts on their books for clients, and in turn hold securities accounts at the CSDs and ICSDs. In addition they offer competing, value-added services such as cash management, foreign exchange, the extension of credit, securities lending and borrowing, services to issuers, fund administration etc. Some of these activities can be managed in separate departments such as Corporate Trust/Issuer Services department or in separate legal entities.

The search for the greatest level of efficiency in handling cross-border securities transactions has resulted in concentration around a limited number of institutions which enjoy critical mass.

The settlement mechanism ensures the payment of cash before or at the same time as the delivery of securities in order to avoid risk; there exists different settlement model, the preferred model being delivery versus payment through the simultaneous irrevocable exchange of cash and stock.

The settlement of cash consists in the payment of the (net or gross) balances resulting from the processing of securities transactions. Cash balances are actually reduced by the netting which occurs through the clearing process. Cash payments are settled either in central bank money (transfer from one account to another in the Eurosystem) or in commercial bank money (transfer from one account to another in a commercial bank).

A bank or intermediary can settle its cash debit position, in theory via three ways:

- Borrowing cash in the inter-bank market or from the central bank, which is inconvenient for a real time processing insofar as funds have to be made readily available to the securities settlement system,
- borrowing cash from the bank associated with the settlement function, which is the case of Euroclear Bank or Clearstream Luxembourg; this bestows a comparative advantage to the settlement system which is dependent on those banks, since the national CSDs do not (or not allowed to) perform this function and other banks are not invited to compete.
- Borrowing cash from the central bank, upon request from the settlement system (there must be a direct and automated connection between the two) providing the system participants holds in advance securities eligible as collateral. Such is the case in France (the cash-securities “bridge”). One could imagine this technique being extended throughout the Eurosystem upon the rollout of Target 2 or generally speaking through the System of European Central Banks (SECB).

The use of central bank money for the settlement of cash has two main advantages: the absence of settlement risk, since the cash transfers occur on the books of central

banks, and the easiness of the transfers, thanks to the perfect liquidity of the assets held at the relevant national central bank.

This being said, not all participants in securities settlement systems have the status required to open an account with the central bank. Moreover, certain securities settlement systems offer multi-currency settlement, for which at the present time there is no direct mechanism available on the books of central banks.

2. A unified settlement system in Europe is necessary to reduce cross-border transaction costs and ensure a “level playing field” between the various market actors.

The European financial markets is fragmented, inter alia, by the co-existence of a large number of trading, clearing and settlement systems⁽²⁾ which fragments liquidity and raises costs, in particular for cross-border clearing and settlement.

In its January 1997 report, the European Monetary Institute recommended even then the “establishment of direct links between the central securities depositories of the EU member states to facilitate cross-border borrowings”.

In a fully efficient and integrated financial market - a natural extension of the single currency - the settlement function must provide for the transfer of securities at a low and common cost, whether the transfer of securities takes place within a member state of the Union or between member states of the Union. There is thus a need for a “borderless” securities settlement mechanism which can perform the necessary post-trade services on a pan-EU basis, and may be compared to the TARGET system for real-time transfers in central bank money, or with European rules on cross-border retail payments.

In other words, in order for financial intermediaries participating in post-trade infrastructures to operate on a “level playing field”, the issuer account mechanism at central securities depositories must be made identical; and the cost of transferring securities from one account holder to another on the books of the CSD managing that issuer account must be low and uniform whether it concerns national or European securities and irrespective of the nationality or location of the EU account holder.

However, part of the costs of cross-border transactions originates in the tax and legal differences which govern securities and their transfer. This explains why the harmonisation of the legal treatment of securities, a long-term and ambitious process - because it concerns numerous aspects of national legislation of member states such as property law and bankruptcy law - must be undertaken forthwith.

3. The consolidation underway in the post-trade sector:

(2) This analysis only covers at this stage the settlement function. A study relating to clearing will be undertaken in the future.

The introduction of the Euro in 1999 and the concentration occurring among Stock Exchanges (Euronext, OM Group, etc.) have spurred a vast movement of consolidation in Europe amongst post-trade infrastructures which is far from being fully completed .

This process took place along three major lines/axes:

- A horizontal integration: Clearnet has integrated Clearing Houses in Belgium, France, the Netherlands, Portugal and has more recently decided to merge with the Clearing House in United Kingdom.
- A vertical integration: integration between the Stock Exchange, the Clearing House and the Central Securities Depositories was achieved in Germany, Spain, Italy and Finland.
- A mixed integration : Euroclear. At the same time as operating as an intermediary in banking activities, (Euroclear Bank), this group has led to:
 - a horizontal integration through the merger/acquisition of Central Securities Depositories (Belgium, Ireland, France, the Netherlands, Great-Britain and Portugal).
 - a vertical integration through non exclusive arrangements (preferred partnership) and cross-holdings with stock exchanges and clearing houses .
 - the expansion of its activities through internal growth: Euroclear began by settling Eurobonds and has since developed into processing internationally traded national securities such as government bonds and major equities.

As for custodian activities, they have become industrial in nature. They generate significant technology investments and have given birth to specialized entities, if not subsidiaries.

Settlement infrastructures are historically core or public utilities services operating on a non for profit basis. They were set up as monopolies. But the consolidation process described above has led Europe to a blurring of the roles between intermediaries and CSDs/ICSDs who are now offering value added services.

This situation leads to decreasing transparency (blurring of governance rules and of the allocation of investments between infrastructure and value added services) and increasing the possibilities for product bundling and price cross-subsidisation.

4 The separation and subsequent integration in Europe of the “notary function” and settlement in Central Bank Money of Central Depositories : Towards a European Central Depository

The delivery of securities and the Central bank Money payment offered by Depositories should be separate from other services, then integrated at the European level and treated as a “common interest” infrastructure. This would allow a

generic regrouping of the CSDs into a integrated system open to all market participants and seeking cost efficiency and high level of safety. This can be achieved in different ways which will be analysed below.

4.1 Interoperability between CSDs is not a satisfactory route : Why a single system is preferable to interoperability

There is little prospect of competition between CSDs in a world of full interoperability between CSDs for the following main reasons:

- The existence of legal, regulatory and fiscal differences in the various jurisdictions in which European CSDs operate makes it very costly for end users to move security holdings away from the original CSD in which those securities were issued. In particular, high costs of local agents/custodians would have to be incurred for asset servicing and corporate actions, as explained more fully below.
- The current inter-system settlement and custody charges over inter-CSD links are much higher than intra-system charges. As a result, moving securities over such links and holding foreign securities in a CSD is relatively costly to end-users when compared to moving and holding domestic securities in that same CSD. This cost difference makes it less attractive for users to, for example, move their entire holdings from one CSD to another.

The current structure tends to discriminate against retail investors who will normally have direct access to their home CSD only, even under full interoperability. Accordingly, they have little real choice between CSDs. CSDs do not compete for the business of retail investors. Interoperability does give them enhanced access to securities held in foreign CSDs –i.e., they can use their home CSD rather than having to use intermediary agents or custodians. Bypassing custodians may appear to result in cost savings although it is rarely as cheap to hold securities indirectly in this way as it is to hold them directly in their "home" CSD. This is partly because the CSDs themselves sometimes need to use custodians or other intermediaries to achieve interoperability.

Interoperability between these CSDs could in principle allow these users to move all their security holdings to a single CSD (or a reduced number of CSDs). In this scenario, there could be competition between CSDs in order to become the "favoured provider" for institutional investors and intermediaries.

Full harmonisation across the EU of legal, regulatory and fiscal requirements on electronic shareholdings would make the transfer to an single CSD very attractive for investors and intermediaries to centralise all their holdings (and hence settlement business) into a single CSD. Paradoxically, full harmonisation might also make it possible to have an inter-linked system but because clearing and settlement is a low (or even zero) marginal cost industry, economies of scale create a clear incentive toward concentration in the provision of these services. So, the result would be a concentration into the hands of one single provider.

4.2 The example of the US Depository Trust Company (DTC)

It should be remembered that when the SEC reviewed the US market infrastructure in 1975, it considered the merits of three options :

- Introduce interoperability by linking the seven existing settlement systems - estimated to provide savings of 9,6%.
- Maintain and link three of the existing systems – estimated to provide savings of 32,7%.
- Move to one settlement system, properly regulated – estimated to provide savings of 63,5%.

The SEC opted for the single settlement system and, as confirmed by the analysis set out above seems to have gained the considerable cost savings implied in option 3. Although the world has moved on since 1975, there is no reason to believe that the underlying structure of costs has changed. It is also worth noting that the 10 individual CSDs (which were owned by Exchanges in the USA) expressed considerable opposition to the proposals.

Established in 1975, the Depository Trust Company (DTC) today holds 99% of non federal U.S. shares and bonds. Three more Central Securities Depositories are still in operation. Although the US legislation allows free competition between Central Securities Depositories, the Depository Trust Company has de facto emerged as a quasi monopoly.

This system offers the possibility for operators (brokers, financial intermediaries, providers of clearing and custodian services) to participate equally in it. In the 24 hours following the execution of an buy-sell order, the broker communicates trade information via a confirmation (which includes the details of the trade), which is directed simultaneously towards his client's « custodian » and his counterparty. The counterparty then validates the confirmation and the trade is matched. The order is then recorded in the DTC Conclusion System on each intermediary's accounts.

DTC's shareholders are financial institutions which elect a Board of Directors. The DTC is an entity providing "General Interest Services" and is « user-owned, user governed ». Invoicing is calculated as a function of cost. Its domain of competence is limited to the minimum range of services where a monopoly is beneficial for the market (engaging banking activity is forbidden). It does not pay dividends, however it rebates profits customers at the end of year in proportion to commissions actually paid.

4.3 Leave it to the market only?

Euroclear : a success story

At the end of the 90s, Euroclear attempted to merge with Cedel (which then became Clearstream), in order to achieve the complete integration of infrastructures within

the sector of eurobonds and so as to make possible the co-ordination different participants in the market. This attempt failed twice. The failure of the merger spurred Euroclear to concentrate on other acquisitions, such as:

- The repurchase of banking activities belonging to JP Morgan and the creation of Euroclear Bank in 2000.
- The absorption between 2000 and 2003 of national CSDs and the creation of privileged links with Euronext / Clearnet /Liffe/LCH : to this day, Euroclear Bank has acquired 5 national CSDs (Belgium, France, the Netherlands, Great-Britain and Portugal) and represents the « preferred settlement solution » as regards transactions executed on the markets of the Euronext area.

Following the purchase of 5 CSDs, the Euroclear Group (including Crest) represents about 60% of the payment –delivery in Europe. It is creating a unique example of a platform whose aim is to give operators a single entry point for all settlement and custody services in Europe via a “hub” (centralised access) and “spokes” (decentralised access) structure.

Within this platform, the function of Central Depository will be identified. It could be separate and its cost should be known.

This pragmatic approach has numerous advantages:

The new entity expects to deliver a single settlement engine by early 2005, allowing customers to access all securities through one securities account, with one interface, one payment relationship and choice of service levels and tariffs. The new entity will be a very large player, covering five countries, providing settlement for over 60% of the Eurotop 300 shares, and over 50% of domestic fixed income securities and Eurobonds outstanding in Europe. This means the new entity may have a critical mass to attract other providers and customers, and thus grow further.

The new entity may become the preferred place of settlement for many investors, thus “tipping” the market in its favour, along the lines described above in the analysis of competition between CSDs.

However, it raises questions from the point of view of the implementation of a Pan European Central Depository:

- The first question one may ask is how long it will take to cover the whole of Europe, when one sees another prosperous ICSD operating (Clearstream) alongside with several other CSDs.
- The second question covers the discrepancy between a European project and a private international company which may legitimately wish to expand outside the EEC rather than cover all the member countries of the Union. Euroclear is not a Community entity. However it might become a pan European CSD, if the case arises, after its activity has been subsidised by European customers.

- The third question concerns the guarantee of independence that a private company can offer. It would be important for Euroclear Bank to put the function of central depository at the disposal of all its potential users under conditions of equal treatment (same tariffs applied).
Nevertheless, there is a question that may arise regarding the respect and the rights of the firm's owners. At present, the latter are numerous and none holds significant shares in the firm's capital. However, this may change. One can envisage a change in shareholders' behaviour, implying an evolution towards a for-profit operation and possible listing on a Stock Exchange- with all the consequences therein...
- The fourth question relates to the nature of the single platform which is being created by Euroclear and which should be operating by 2008. Euroclear has expanded in parallel to the countries covered by Euronext. However, this pan-European Stock Exchange, after having unified its platform for trading and clearing (Clearnet), is legitimately seeking to unify the Settlement of all Euronext securities within the same CSD or ICSD location. This integration could be achieved either by upgrading each relevant CSD (extension from local to all Euronext securities) or by using one single technology. The objective is to implement domestic environment to full Euronext value chain (trading, clearing, settlement). It requires starting quickly some harmonisation process and managing key priorities (as settlement window harmonisation).
- Lastly, as was noted by the Directors of the London Stock Exchange, "customers will only benefit (from the CrestCo – Euroclear merger), if the winner is a user owned utility, appropriately regulated as such and which provides fair and open access to all companies, intermediaries and investors" whereas general interest services are at the moment carried out by a profit organisation "Euroclear bank", which gives rise to a number of questions from the viewpoint of competitive and regulatory frameworks. In particular, if custodians banks were regulated as ICSDs (which are now offering banking activities), they would need to mobilize additional collateral, which would result in costs passed to the end investors.

Optional strategies

Instead of using existing institutions as a starting point, it is conceivable to design a network among national CSDs and ICSDs which would interconnect their central depository function or possibly make it into a single platform.

In the long run, the implementation of TARGET II will also offer an opportunity to direct linking the settlement in central bank money with the delivery of securities by a European CSD.

Within the Union, deals on securities are settled through accounts on the books of resident financial intermediaries which, in turn, hold central bank money on their own account at the central bank. Non-resident intermediaries, not holding directly central bank money, may act through a European correspondent. There would therefore be no difficulty in requesting a settlement in central bank money before any transfer of securities at the level of the central depository agency, either national or European. It

is then enough to separate the central depository function, the so-called notary function, and to build a bridge with the central bank (either the Eurosystem or the central bank of a country with a derogation). This would be the basis for a European system of delivery versus settlement which would be simple, safe, open to all users trading securities in euro or another EU currency.

5. The part played by the politician

The integration process should largely be in the hands of the private sector but the public sector can be expected to intervene at some stage and to play an efficient role⁽³⁾.

As mentioned in the Giovannini report, “consolidation in the clearing and settlement infrastructures raises issues of legitimate interest to public policy makers. Public policy should focus on cost-effectiveness, competition and risk”.

- Efficient and safe securities clearing and settlement systems are a necessary condition for integrated capital markets, the sound execution of monetary policy, the smooth functioning of payment systems and the preservation of financial stability.
- The complexity of the consolidation process and the different interests at stake requires conditions of fair competition and co-ordination between competitors, as well as co-operation between market participants and the public authorities and, possibly, policy decisions.

Eurofi supports the position outlined by the Giovannini report of a clear strategy and timetable to eliminate technical, tax and legal barriers to cross-border clearing and settlement in the EU. This requires considerable resources from the private sector but also considerable involvement by the EU Commission and national governments. In other words, the conclusions of the Giovannini report must be promptly enforced and a monitoring of these solutions is indispensable.

As far as settlement arrangements are concerned, the part played by the European Authorities should limit itself to:

- The definition of the various functions of « Post Trade Activities» and the provision of a European Passport.
- The separation of the central depository function from other activities. It should be subject to specific rules to ensure a safe functioning market and equal treatment for users.

⁽³⁾ It is appropriate to point out that the existing infrastructures in a certain number of countries –USA (SEC 1975), Italy (Banca d’Italia in the late 1980s), France (« Rapport Perouse », in the 1980s), Great Britain (Task force on securities settlement established by the Bank of England in 1993) are in part the result of a certain kind of public intervention.

A specific regulation would probably require the creation of either a specific entity, or a network of similar specialised entities.

The central depository function should include the cash settlement in central bank money. It should be managed according to rules applicable to a non-profit-making or « cost plus » entity (transparency in terms of accountancy, would, in any event, be imposed). This could require a legal structure and a separate computerised platform accessible on a non-discriminatory basis.

It is sometimes argued that a single European entity would not make progress due to the lack of competitors. It seems that competition between Europe, the United States and other financial centres around the world would be a sufficient incentive to innovation.

With the co-operation of the central banks, it would be possible to link the final delivery with a settlement in central bank money. Resident intermediaries may borrow central bank money on the interbank market or even directly from their central bank through collateralised repos, as has been done in France for years. Non-residents would have to use correspondent banking with resident financial institutions, as is the case for all other categories of payment. The linkage between the central banks and the settlement in central bank money might be associated with the reform of TARGET.

By acting in this fashion, the European Authorities would create the conditions for the effective integration of Central Depositories within Europe.

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