

ASSI - Asian Securities Settlement Initiative - 50 theses

1. Although most countries have an efficient securities safekeeping, settlement and clearing infrastructure built around their CSDs, there is no global securities settlement and clearing system.

2. Globalization and transparency of national borders is currently increasing and is going to increase despite problems arising in some countries and regions and despite risks posed by global and regional crises.

3. Globalization is very likely to progress, thus increasing the volume and importance of cross-border securities transactions, which brings to us the need to create a global depository system for securities safekeeping, settlement and clearing.

4. National CSDs mostly cover local securities settlement and offer their customers a wide range of facilities, however quite a lot of CSDs do not possess all required services. Cross-border transactions, when investors purchase foreign securities, are much more cumbersome and it results in higher costs of the corresponding services.

5. Until recently this problem was not considered essential. At present the task of creating a global clearing and settlement system has not yet been set by anyone as prospective even as too ambitious. CSDs, ICSDs and global custodians are supposed to be providing all required services. Nevertheless, everything changes and it can be presumed that later the need for a global securities settlement and clearing system will be acknowledged.

6. We can make a list of current models for safekeeping of foreign securities:

- When a customer directly opens an account with a foreign custodian;
- When a custodian opens a correspondent account with a foreign CSD (ICSD) or with a foreign custodian;
- A system of global custodians;
- Bilateral correspondent accounts for CSDs and ICSDs.

7. Opening correspondent depo accounts is quite hard and expensive, which originated appearance of natural hubs to provide services for foreign securities safekeeping such as ICSDs - Euroclear and Clearstream, global custodians and to some extent regional custodians. An account in one of these depositories gives the investor access to markets in many countries. These organizations were created separately and offer different services, however, we can agree to consider them similar in the field of cross-border services. Before 2000 all these institutions successfully coped with securities safekeeping and settlement, rendering high quality services.

8. Anyway, we are beginning to realize that current models are too costly and not efficient. In Europe the problem has reached its critical level. A single currency, activity of the European Commission, efforts of European Central Bank in developing Target-2, a single European payment system, gave rise to the T2S project with the idea of creating a single European

securities settlement system. Euroclear and Clearstream, if merge or cooperate, could become the ECSD - The European Central Depository instead of T2S, but contradictory interests hindered the opportunity. Euroclear made a series of successful takeovers of European CSDs, which could be considered as an attempt to set up a Euroclear-based ECSD, although evidently Euroclear was not able to cover all Europe. Thus, launching T2S, European Central Bank has created "European Settlement Cluster."¹ The project was made possible by a single currency and Target-2 as well as by authority and nearly unlimited resources of European Central Bank. A thorough analysis of T2S lies far beyond the scope of this paper. We can only state that although it had certain advantages, the project never seemed really good and was frequently subjected to harsh criticism from members of settlement infrastructure. The project turned out expensive and took a long time to implement. Nevertheless, the criticism was ignored, and in 2015 first stage of T2S began operations, much later than it had been declared. At the same time an alternative settlement system, Link^{UP}Markets, was being developed to challenge T2S. It seemed more functional than T2S but lacked administrative and financial resources, so it was unable to stand the competition. So whether you like T2S or not, we have to admit that by 2018 European Central Bank managed to create a settlement securities cluster in Europe. We can add that this process was accompanied by developing a unified European system regulating central depositories - CSDR.

9. Other regions have not yet created systems similar to T2S until now and the author of this paper knows nothing about such projects. The USA market is quite big as it is and so far DTCC is happy with its close connection with Canada and does not aspire for cross-country expansion no matter how many opportunities it has. We should pay attention to some CSDs (for example, Polish KDPW) which are characterized by a wide correspondent network. Still they cannot be treated as full-size settlement and safekeeping clusters. MILA in Latin America connecting CSDs in Mexico, Columbia, Peru and Chile resembles in some ways a settlement and safekeeping cluster, though clearly the connection of the depositories does not go further than bilateral correspondent accounts.

10. This paper considers setting up Asian settlement depository cluster and shortlists its suggested features. We shall call this project ASSI - Asian Securities Settlement Initiative.

ASSI

11. For the purposes of ASSI we ignore actual Asian geographic borders and when we say Asia we also mean Turkey, Russia, the CIS and the Pacific countries.

12. Many countries in the region have fast developing economics and financial markets, their growth rate is much higher than that of first world countries. Setting up a settlement and safekeeping cluster seems an essential task in the nearest few years and after having been successfully implemented is going to become an important driver of growth in Asian financial markets.

13. Unlike those in Europe, countries in the Asia differ a lot in the level of development and in political structure. They do not possess a single currency, a common financial regulator, generally accepted regulations for operation of the markets or their elements, a regional central bank. The differences between the countries in the region do not let us hope that such institutions are going to appear in the nearest future. Evidently, it hinders development of cross-country infrastructure. The method used for setting up T2S, when ECB pushed its way, is impossible. Nevertheless, efficient infrastructure is of common interest, making financial

¹ One reason for creating T2S was tariffs of Euroclear and Clearstream which were much higher than corresponding DTCC's tariffs. Another reason was complexity of European cross-border transactions

markets cooperate better, so there is a hope that the main countries in the region are going to unite for the purpose of its creation. An element of such infrastructure can be represented by ASD - Asian Settlement Depository, founded by the main countries in Asia with the support of their central banks and governments, Asian Infrastructure Investment Bank (AIIB) and Asian Development Bank (ADB).

14. Beginning from the mid-2000 materials have been published to discuss the initiative for creating an Asian system of bond settlement and clearing (AsiaSettle or AsiaClear), which could perform the same functions for Asiabonds as Euroclear and Clearstream with Eurobonds. However, nothing apart from discussions actually happened.

15. ASD shall be an international organization with a special status such as EBRD, ADB or AIIB. ASD has the rights for safekeeping, settlement and clearing operations and for a restricted set of money transactions in the ASD founding countries. These rights shall be set by ASD's Articles, approved by founding countries (founding organizations) and maintained by all countries (organizations) which enter ASD later.

16. The core function of ASD is efficient cross-border securities settlement for ASD countries. ASD would also solve "the third time zone problem" adding Asian time zone to the two dominating "financial time zones", European and American. Besides, ASD can aid proper international access to a variety of Asian securities, much wider than the variety provided by ICSDs and global custodians.

17. Apart from its core function ASD is also able to:

- Act as central depository for Asia Bonds IPOs;
- Execute forex operations;
- Contribute to development of national clearing and settlement systems as well as to harmonization of national legislations;
- Participate in CSDs' software developments;
- Outsource safekeeping and settlement services to CSDs.

18. ASD shall be inspired by CSDs of the main countries in the region and regional associations of CSDs - ACG and AECSD with the help of a worldwide CSDs' association - WFC. ASD cannot be actually started without consent and support of regional governments and central (national) banks. Membership of ICSDs - Euroclear and Clearstream is essential, also AIIB and/or ADB have to participate.

19. Here is the list of the countries in the region, which have to participate for ASSI's success:

- Australia
- China
- Hong Kong
- India
- Japan
- Kazakhstan
- Pakistan
- Russia
- Singapore
- South Korea
- Turkey

20. And this is the list of countries, which participation would be fruitful :

- Indonesia
- Iran
- Israel
- Malaysia
- New Zealand
- Saudi Arabia
- Taiwan
- Thailand
- The UAE
- Ukraine
- Vietnam

21. Despite comprising highly dissimilar countries our lists are not just dreams. Common financial interests and fashion are capable of uniting even most unfriendly countries. With the support of worldwide organizations and several leading states in the region the ASD initiative can and will become attractive enough.

22. Admittance fee for ASD membership cannot be low. ASD founders and direct members are elite infrastructural organizations in the region, and members will have to pay. This approach will capitalize ASD and ensure its reliability, proving also for its start-up development. ASD membership shall be of premium value. Candidate members are to answer requirements concerning reliability, range and quality of services, risk management and position in world ratings.

23. ASD membership shall have two levels. The CSDs which are not ready for direct ASD membership financially or structurally shall have an opportunity to become indirect members, sponsored by one of direct members. This model may give start to formation of local clusters.

24. ASD is a multipolar company. It shall not be dominated by a single CSD, all members have their say. Mostly decisions and made by consensus of opinion. In case it turns out impossible a reasonable variant should be found and only as a last resort the majority could force their opinion on the minority.

25. ASD's head office and operations and maintenance center should be situated in one of member countries. The host country should not be one of potential ASD leaders. A lot of conditions influence the final decision about the actual location. At present Hong Kong, Kazakhstan and Singapore look best for the purpose.

26. ASD's main objective is not gaining profits but providing necessary infrastructure services. Nonetheless, ASD should get enough income to firstly ensure development and high level of maintenance and operations, secondly to pay out a reasonable (though not high) interest on investment made by members.

27. ASD's main clients are CSDs and ICSDs. Regional central banks might also open accounts. Participation of global custodians and central banks from other regions shall be discussed at further development stages. ASD and T2S have to have a way of cooperation worked out.

28. An important and difficult task is realization of ASD management system, which should answer the requirements of all members and treat their interests equally.

ASD - Main Features

29. Core transactions in ASD - FOP and DVP transfers to/from depo accounts in ASD. Stage Stage 1 implies DVP-1. As demand for such settlement arises, DVP-2 and DVP-3 become practical in the scope of general development of clearing facilities.

30. ASD shall offer IPO, safekeeping and transactions infrastructure for AsiaBonds - Asian alternative to Eurobonds.

31. Later ASD shall gradually broaden its range of transactions to the level of standard ICSDs: repurchase, crediting, collateral management and so forth.

32. ASD shall possess omnibus correspondent accounts in all member CSDs. All member CSDs shall possess omnibus correspondent accounts in ASD. A retail model of safekeeping may be offered to the members. ASD's recording structure should combine wholesale and retail models, giving its members an option of selecting a safekeeping system which is best for them.

33. At Stage 1 ASD provides access to markets in other regions via its accounts with ICSDs.

34. Two options shall be considered when choosing ASD's database system: centralized database vs DLT. The traditional variant of centralized database has a number of advantages: smoothly running procedures, speed, low cost of transactions, reliability. At the same time DLT (Distributed Ledger Technology) with blocks spread among main ASD members represents a better policy, as every member stores their own full copy of ASD's database and is able to control all ASD's operations. This means equality and full control of all processing to all ASD's members. The model looks handsome, uptodate and trendy. All technological, structural and political variables shall contribute to the final solution of ASD database architecture.

35. A combined system is possible in ASD, when some of the members form a DLT block, and the others deal with ASD in a traditional way, operating a correspondent account with ASD/ They do not make their own copy of full operations database.

36. ASD executes DVP in the currencies of all main ASD members and in two world-spread currencies - US dollar and Euro. Further stages may widen the range of accounting currencies to such popular currencies as British pound, Swiss franc, Canadian dollar. For the purpose of effective DVP settlement it is reasonable to open foreign accounts in corresponding CSDs, in case they have the right to operate money accounts and/or in central (national) banks of member countries. However, if the abovementioned schemes turn impossible, other methods of operating foreign currency accounts can be considered.

37. The main language for the purpose of ASD operations is English. ASD also has a complete documentation package, user interface and reports in the languages of every member. ASD members hold the responsibility for translating all relevant texts into their languages and carry the corresponding expenses.

38. Most ASD operations shall be based on STP to ensure reliability, efficiency and low costs. Common sense, however, prompts a flexible approach which enables manual operations if necessary. This applies to new services to an even larger extent.

39. ASD shall operate 24/7.

40. ASD shall perform standard set of transactions and use standard public interactive interface. Every deponent will be able to access standard ASD interface via STP, enabling necessary operations and relevant message processing in their system. Such interface can be compared to a "standard connector", which provides access to anyone in possession of matching "plugs and sockets".

41. It is practical to consider implementing a range of technical options of Link^{UP}Markets for the purpose of setting up ASD architecture. In particular, standard connectors shall be invented to ensure fast start of interaction between new clients and ASD. Such connectors translate clients' messages to ASD records and ASD records to messages accepted by clients' systems.

42. From the very beginning ASD performs a standard set of corporate actions in the markets of its core members. The set includes payment, conversion, repurchase, split, consolidation and so forth. A complete basic set of options shall cover main requirements of clients and answer for most common corporate actions.

43. From the very beginning ASD performs a standard set of operations in the national markets. Such operations shall cover core debit and credit services for ASD accounts in CSDs and ICSDs. As it grows ASD shall provide access to a wider range of services, transmitting them to clients. The same stands for corporate actions beyond the standard list. One of ASD's objectives is offering access to national trading systems and settlement of their transactions via ASD's accounts. For instance, this includes access to IPO in member ASD countries. However, we should keep in mind that this process shall be followed by harmonization of markets with the purpose of reducing the number of national peculiarities. It should be also remembered that transmitting all options of national markets cannot be done fast and shall be implemented gradually.

44. Modern technical and software architecture, wisely combining own local resources with world cloud services are going to ensure ASD's reliability and effectiveness. Proper arrangements in this province hold responsibility for the overall success of the project. ASD should communicate their customers via ISO 20022 messaging system. ASD should also have its own communication system, alternative to SWIFT.

45. ASD shall have the rights to distribute international identification codes such as ISIN, CFI, LEI and so forth. ASD performs clearing but does not operate as CCP. Setting up the project of ACCP - Asian Central Counterparty shall be considered. May be both projects should develop simultaneously and in cooperation, as they are to be affiliated to the global APTS - Asian Post Trade System project. However, corresponding national structures may perform the function of CCP for different markets.

46. The ASD has to consider and successfully implement all contemporary requirements of KYC, taxation, anti-laundering measures, listing and disclosing owners and so forth. ASD shall follow common international regulations without losing its technological efficiency.

47. ASD shall operate all types of securities which circulate in the region: shares, bonds, rights, units and so forth. Due consideration should be given to the option when later ASD is going to function as a depository in respect to derivative financial instruments and also as a repository.

48. We should also study the possibility of settlement for ASD operations in cryptocurrencies. A positive solution of this issue looks probable in case general attitude of financial society to cryptocurrencies improves and in case this is found economically practical. Anyway, this is not a Stage 1 objective, even if it makes sense to draw public attention to the issue.

49. However difficult it is vital to ensure that ASD shall be a user friendly organization in spite of obstacles due to its special position. Customer care should from the very beginning be subject of utmost attention, controlled by the management and ASD members.

50. At present it is hardly possible to estimate how long and how much it is going to take to launch ASD. Both values depend on real features of the final version. Anyway we can safely

assume that the project is not going to require dramatic technological innovations. Hard effective work can make it implemented within 2.5-3 years in spite of political and structural difficulties in case the key members give their consent and all relevant decisions are taken. Implementation of ASSI and setting up ASD shall provide a new level for Asian financial infrastructure. Should the general idea be agreed upon by several leading Asian CSDs, ASD start up could take place in 2019. Step one being a workgroup with the objective of having the ASD-project prepared by the end of 2019.