Improving Efficiency of Funds Transfer for Securities Transactions

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Further Reforms

Clearing and settlement mechanism in Indian securities market has witnessed several innovations in the 1990s. These include use of the state-of-art information technology, compression of settlement cycle, dematerialisation and electronic transfer of securities, electronic transfer of funds, securities lending and borrowing, professionalisation of trading members, fine-tuned risk management system, emergence of clearing corporations to assume counterparty risk etc, though many of these are yet to permeate the whole of the market. The market seems to have reached a stage where further gains in settlement efficiency can accrue only from DvP and rolling settlement.

G 30 recommendations relating to securities clearance and settlement systems have been driving best practices in the securities markets all over the world. It recommends that DvP should be employed as the method of settling all securities transactions, where DvP means simultaneous, final and irrevocable exchange of securities and cash on a continuous basis through out the day. This aims to reduce or eliminate the principal risk in securities settlement, that is, the risk that the seller of a security would deliver the securities and not receive payment or that the buyer of a securities would make payment but not receive securities. G 30 also recommends that all markets should adopt a rolling settlement system. Final settlement of all trades should occur no later than T+3. Taking into account recent developments in market and technologies, ISSA recommends five key measures to mitigate major risks in securities settlement systems. These include implementation of real DvP and adoption of a trade date plus one settlement cycle in a form that does not increase operational risks. The CPSS-IOSCO Joint Task Force on Securities Settlement Systems recommends that T+3 be retained as the minimum standard. The markets that have not achieved a T+3 settlement cycle should identify impediments to achieving the same and actively pursue removal of those impediments. The Task Force also recommends that each market should study the feasibility of introducing a cycle shorter than T+3. These recommendations aim at finality of settlement soon after execution of trade. It is important to note here that while the term DvP typically suggests a transaction involving securities vs. funds, the requirement of finality of settlement is equally true for all cash settled transactions like derivatives. It is also important to note here that the requirement of DvP settlement is at the level of direct participants (Clearing Members (CMs)), especially for exchange traded products, and not at the level of clients.

Impediment

An impediment to introduction of these further reforms in India is slow movement of funds, which has not kept pace with the movement of securities. Settlement of trades transacted on stock exchanges requires smooth, preferably instantaneous, movement of securities and funds in accordance with the prescribed schedule of pay-in and pay-out. The regulators and exchanges have been endeavouring to speed up movement of both funds and securities to achieve DvP and rolling settlement. The securities can now move instantaneously from the seller to seller's broker to clearing and settlement agency (CSA), Clearing Corporations/Clearing Houses, to buyer's broker to buyer since all these have accounts with either of the two depositories which are connected to each other and are connected to most of the exchanges. The movement of funds is not so instantaneous because only a few banks having the facility to transfer funds electronically have been empanelled by the CSAs, while CMs and investors have accounts in different banks at different places. Movement of funds from buyer to buyer's broker to

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CSA to seller's broker to seller of securities very often requires clearance through RBI's payment system. Further in a typical settlement cycle, the securities coming in and the securities going out of a depository do not match requiring movement of securities from one depository to another. This has been achieved by interconnectivity between the depositories. Similarly, the funds coming in and the funds going out of a clearing bank do not match requiring movement of funds from one clearing bank to another by using the RBI clearing system. Thus, while CSAs, can move securities electronically on a real time basis with the help of depositories, it can not move funds so expeditiously. This is because the funds move through three layers (CSAs, Clearing Banks and the RBI), while securities move through at best two layers (CSAs and Depositories). Efficiency of inter-bank transfer of funds fails to match that of inter-depository transfer of securities precisely because of this additional layer.

Clearing & Settlement Agencies

A number of agencies are involved in the clearing and settlement of trades. The stock exchanges, brokers, custodians, issuers, custodians, clearing banks and depositories assist the CSAs in clearing and settlement of trades. The CSA has the responsibility of carrying out clearing and settlement of all trades executed on exchanges with the help of these agencies. All trades executed on a stock exchange are cleared and settled by the CSA. In particular, the CSA performs the following functions to ensure smooth, efficient and low risk settlements:

a. clears all trades executed on stock exchanges,

b. determines obligations of CMs to pay-in and receive funds and securities,

c. arranges for pay-in of funds through clearing banks, of demat securities through depositories and of physical securities directly from CMs,

d. processes for shortages in funds and securities paid-in,

e. arranges for pay-out of funds through clearing banks, of demat securities through depositories and of physical securities directly to CMs,

f. guarantees settlement irrespective of default by any CM, and

g. arranges for collection/payment and maintenance/management of margins/collateral/base capital/other funds.

The clearing banks assist the CSA in pay-in and pay-out of funds. The CMs make available required funds in their accounts with the clearing banks by the prescribed pay-in time. Depending on arrangement, either the clearing bank debits the accounts of CMs and credits the account of the CSA or the CSA runs an electronic file to debit CMs' accounts with clearing banks and credit its own account. As per schedule of allocation of funds determined by the CSA, the funds are transferred on the pay-out day by the clearing banks from the account of the CSA to the accounts of CMs or the CSA directly credits their accounts with clearing banks and debits its own account.

The depositories assist the CSA in pay-in and pay-out of securities held in demat form only. The CMs/custodians make available the required securities in their pool accounts with the depository participants (DPs) by the prescribed pay-in day. The depositories run an electronic file to transfer the securities from the pool accounts of CMs/custodians with DPs to DP account of CSA. As per schedule of allocation of securities determined by the CSA, the depositories transfer the securities on the pay-out day from the DP account of the CSA to the DP accounts of members/custodians.

Clearing and Settlement Process

A multilateral netting procedure across regions is adopted to determine the net settlement obligations of CMs. A CM has security-wise net obligation to receive or deliver a security. The obligations are netted for a CM across all securities to determine his funds obligations and he has to either pay or receive funds.

This requires members to bring in their funds/securities to the CSA. The CMs make the securities available in designated accounts with the two depositories (CM pool account in the case of NSDL and designated settlement accounts in the case of CSDL). The depositories move the securities available in the pool accounts to the pool account of the CSA. Likewise CMs with funds obligations make funds available in the designated accounts with clearing banks. The CSAs send electronic instructions to the clearing banks to debit designated CMs' accounts to the extent of payment obligations. The banks process these instructions, debit accounts of CMs and credit accounts of the CSAs. This constitutes pay-in of funds and of securities.

After processing for shortages of funds/securities and arranging for movement of funds from surplus banks to deficit banks through RBI clearing, the CSA sends electronic instructions to the depositories/clearing banks to release pay-out of securities/funds. The depositories and clearing banks debit account of the CSA and credit accounts of CMs. This constitutes pay-out of funds and securities.

Movement of Funds

In a typical settlement cycle, the funds coming in and going out of a clearing bank do not match. In addition, there may be a shortfall in funds in a particular bank to be made good by the CSA out of its own funds (the settlement guarantee function). These require movement of funds from one bank to another by using the RBI clearing system. For example, say funds pay-in is Rs. 100 crore of which Rs. 80 crore come into bank A and Rs. 20 crore into bank B. However, the pay-out is such that Rs. 60 crore is to be paid out in bank A and Rs. 40 crore in bank B. This requires Rs. 20 crore to be moved from bank A to bank B.

Pay-in and pay-out of funds in respect of trades settled under account period are effected on consecutive days. CMs normally deposit high value cheques with clearing banks in the morning of the pay-in day and arrange required balances in their accounts with clearing banks by evening. At the advice of the CSA, the clearing banks debit accounts of CMs and credit the account of the CSA by pay-in amount in the evening. In the morning of the next (pay-out) day, at the advice of the CSA, the clearing banks credit the accounts of CMs and debit the account of the CSA by pay-out amount.

In the example given earlier, bank A is required to effect pay-out by debiting account of the CSA for Rs. 60 crore when it has a balance of Rs. 80 crore. Bank B, however, is required to effect pay-out by debiting account of CSA for Rs. 40 crore when it has a balance of only Rs. 20 crore. As a result, the CSA has a credit balance of Rs. 20 crore with bank A and a debit balance of Rs. 20 crore with bank B. Hence it gets a pay order for Rs. 20 crore issued from bank A in favour of bank B. Bank B gets Rs. 20 crore collected through RBI clearing by the evening. But before collection, it has extended intra-day credit to the CSA to effect pay-out.

Under rolling settlement, pay-in and pay-out of funds take place on the same day. At the advice of the CSA, the clearing banks debit (credit) accounts of CMs and credit (debit) the account of the CSA by pay-in (pay-out) amount by evening. In the example given earlier, bank B effects pay-out by debiting account of the CSA for Rs. 40 crore. This Rs. 40 crore would come from Rs. 20 crore received as pay-in and Rs. 20 crore from the CSA's own funds. Bank A, however, effects pay-out by debiting account of the CSA for Rs. 60 crore when it has a balance of Rs. 80 crore. Hence CSA gets a pay order issued for Rs. 20 crore from bank A in favour of bank B. Bank B gets Rs. 20 crore collected through RBI clearing on the next day. But before collection, the CSA has extended inter-day liquidity to effect same day pay-in and pay-out. This requires the CSA to maintain high levels of deposits effectively adding to processing costs.

Concerns

- Ideally there should be no gap between pay-in and pay-out of funds and securities - these should be exchanged simultaneously to completely do away with the risk. However, in case of trades settled under account period settlement, there is an overnight gap between pay-in and pay-out of funds and securities. The funds and securities received as pay-in lie with the clearing banks and the depositories respectively overnight depriving CMs of liquidity. More importantly, funds and securities remaining with a third party (clearing banks and depositories) pose grave risks to the CSA, which performs settlement guarantee function. In order to help the CSA to effectively manage its risk, it is important to reduce the time gap between pay-in and pay-out. This can be reduced if the inter-bank transfer of funds can be expedited.

- Since volumes under rolling settlement are insignificant today, the CSA is able to provide inter-day liquidity. As all the scrips included in the ALBM/BLESS or MCFS in any stock exchange or in the BSE 200 list, as mandated by SEBI, are traded under the compulsory rolling settlement on all exchanges from July 2, 2001, it would place a fair amount of strain and costs on the CSA as well as on clearing banks and CMs. The volumes under rolling settlement can be sustained by improving efficiency of inter-bank movement of funds.
- The need for efficiency in inter-bank transfer is more in the case of cash settled contracts such as index futures where settlement is on T+1. Besides as the securities market grows more sophisticated, there is increased requirement of collateral and risk management which requires the CSA to make intra-day calls for additional capital, margins etc. all of which require efficient inter-bank transfers.

Inter-Bank transfer

- The easiest way to address these concerns would be to have only one clearing bank, which dispenses the need for any clearing through the RBI. In fact life would have been much easier if the markets had just one exchange, one CSA, one clearing bank and one depository. But this will deny the advantages of competition in bringing down the costs and risks to participants. Further, concentrating all settlements into a single agency exposes the whole system to risk if that single agency experiences a processing or other problem on a given day. In a multiple agency environment, if a single bank / branch, for example, is not able to complete pay-in, the CSA still completes settlement from its own funds.
- A radical, but enduring solution would be to provide for movement of funds related to securities transactions directly between clearing banks without recourse to RBI subject to prudential checks and balances. As inter-depository transfer of securities does not need to be cleared by any regulator/central depository/any other third entity, inter-bank transfer of funds related to securities transactions need not also be cleared through RBI. The movement of funds and securities would be synchronised if funds move among the clearing banks as securities move among the depositories.
- Another alternative is to permit the CSAs to participate in the RBI's clearing system, where the CSAs have current accounts with RBI and themselves issue instructions. In such event, bank A will transfer Rs. 20 crore to the CSA account and the CSA will transfer the same to bank B. The maximum number of instructions is likely to be the number of clearing banks minus one, which can be easily managed. In such a case, a large number (about two dozen) CSAs would be admitted by RBI to the central payment systems. Though such number is not a problem in an electronic environment, for administrative convenience and better risk management, it would be better to evolve appropriate prudential criteria for admission of CSAs to RBI clearing. These could, for example, include: (a) the concerned agency must guarantee settlements, (b) the average settlement volumes must be high enough to justify this facility (say, average weekly funds settlement of Rs. 250 crore and securities settlement of Rs. 500 crore), (c) it must be using multiple clearing banks, and (d) it must offer rolling settlement.
- Still another measure that can facilitate inter-bank transfer of funds may be for RBI to provide for a separate clearing mechanism at the end of day after high value and inter-bank transfers are over. Clearing banks will issue transfer instruction to the extent required by the CSA. This will ensure that on the same day of pay-in, inter-bank transfers as required by CSAs are effected.

Efficiency of inter-bank transfer of funds is key to realise full gains of dematerialisation, ensure success of rolling settlement and enable simultaneous exchange of securities against funds.

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