



Central Securities Depository

by

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CENTRAL SECURITIES DEPOSITORY

Introduction

Clearance and Settlement is one of the core operational processes that underlies a securities market and determines the efficiency and effectiveness of the market at the same time reducing risks and costs.

Years ago, trading, clearing and settlement were separate distinct functions. As the market advanced and in keeping abreast of technology, exchanges became automated and the need to segregate these functions declined. CSDs have now revolutionized the mode of doing business on the stock exchange and today technology is making a significant contribution to capital markets by driving the development of book-entry systems for custody, clearance and settlement of securities through a computerized production line called a Central Securities Depository.

The technology too has come a long way since the early 70's when automated trading systems included, at most, the clearing function, depending on the type of system and the methodology.

In a few cases in North America, clearing is still independent of Exchange trading and remains a segregated pre-automation function. NASDAQ is a good example of this. At Nasdaq, Traders and Dealers use the telephone to formalise the transaction. Both sides enter the data into the ACT System. The acronym for (ACT) is Automated Confirmation Trade.

It is the ACT which does the matching and in turn reports the matched transaction to the National Clearing Corp. (NCC).

Why does Barbados need a CSD?

Our current volumes and activity do not justify the capital outlay but the investment is critical to the attraction of foreign investment to the market.

Secondly, in keeping with the requirements for the Harmonization of Caribbean Stock Exchanges, it is required that the legal framework for capital market operation must move away from the

traditional concept of clearance and settlement and adequately support the operations of upgraded CSDs in all of the five exchanges taking part in the project.

To this end, there are four fundamental principles which are globally recognized as providing a regulatory framework for the efficiency and efficacy of clearance and settlement in securities markets. In order to gain recognition in international circles, these principles must therefore be recognized:

- a. The first principle states that “interests in securities held through a financial intermediary should be defined by legislation or otherwise interpreted as a type of interest in a pro-rata portion of the pool of securities interests in securities held by the intermediary with whom the interest holder has a direct contractual relationship evidenced solely by the interest holder’s account with the intermediary, and not as a traceable property right in individual securities or mere contractual claim.”
- b. “The pool of securities or interests in securities held by a financial intermediary to satisfy the interest of its interest holders should be protected against claims of the intermediary’s general creditors, either by defining the interest as a type of property or co-property right, or by amending existing insolvency laws for financial intermediaries to give explicit effect to this policy.”
- c. “Conflicts of laws and rules should be interpreted or modernized to reflect the development of the system for holding, transferring and pledging interests in securities by book-entry to accounts with financial intermediaries, so that the selection of the law governing the characterization, transfer and pledge of interest in securities represented or effected by book-entry to accounts with a financial intermediary is determined by agreement among relevant parties or, in the absence of such agreement, by reference to where the office of the financial intermediary maintaining such accounts is located or otherwise by reference to the intermediary’s jurisdiction.”
- d. “Procedures for creating and enforcing a pledge of interests in securities credited to accounts with intermediaries should be simplified.”

Lastly, in 1989, G-30 recommended that each domestic market should establish a CSD to hold securities but observing two fundamental objectives. Namely, the reduction of cash and gains in

efficiencies. Since then, most markets have established some form of CSD where securities are either immobilized or dematerialized.

1. What therefore is a CSD?

Simplified, it is a computerized system which records the movement of units of shares and the payment thereof. The facility holds certificates in safekeeping as well as it maintains accounts for its participants.

It could also be said that a CSD is a “bank” for securities. In effect, it provides not only safe custody but it also ensures that documents do not physically move. The process of keeping the certificates in one place is immobilization. What immobilization does, is that it cuts costs in terms of handling charges.

In order for an executed trade to be settled, exchanges of ownership of physical securities and money must take place. The clearance process therefore consists of the movement of certificates, and the settlement process is the movement of money.

In our current manual setup, on settlement day, the procedure involves sellers who bring certificates to the Exchange and buyers who bring money. The selling broker delivers stock certificates to the buying broker and receives payment from that buying broker in exchange for the stock certificates.

The implementation of a CSD will perform both these tasks. A simple book-entry system will keep track of the shares in the various accounts. A CSD will also assist with Public Offerings when shares are issued. If this is done the issue will be cleaner and more efficient. For example, Company A will issue shares in jumbo form (one to ten certificates probably allocated as to one certificate for institutional investors, another for individuals and so on) to its Transfer Agent, the Transfer Agent’s Account will be credited with the total issue. As the shares are sold and allocated they are debited to the accounts of the shareholders. When all the shares are allocated the transfer agent’s account will be zero.

When the shares are traded, the shareholders' accounts will be debited and credited accordingly. Statements will be sent to shareholders initially to confirm the amount of their allocation and thereafter ONLY when there is activity on the accounts.

This of course seems like a very simplified process and indeed that is what it will be.

What are the Main Activities of a CSD?

These include:

- Safekeeping of physical securities
- maintenance and operation of computerized book entry securities and a cash payment system linked either to a central bank or other cash clearing systems
- provision of cash accounts and cash transmission services for participants
- transfer of securities on a 'delivery versus payment' basis
- income collection and distribution
- processing of corporate actions events
- acting as nominee for CSD eligible securities
- Facilitation cross-border operations by maintaining links with CSDs in other markets.

There are three (3) major OBJECTIVES OF A CSD

- Reduce risk
- Improve efficiency
- Reduce costs

HOW ARE THESE OBJECTIVES MET?

There are several ways to meet these objectives

- **Immobilisation/dematerialisation and book-entry transfer.**

In the same way that a bank statement reflects the balance of cash held without the need for having actual notes and coins, securities can be recorded and transferred electronically. The records are known as book entries and the transfers known as 'Book Entry Transfers' (BET's). Establishment of a CSD will move away from the traditional form of holding a physical certificate to book entry. In order to do

so, the old certificates must be taken out of circulation by one of two methods -

- (1) Immobilisation - i.e. certificates remain in existence but are archived
- (2) Dematerialisation - the Certificates are destroyed.

Either one of these methods will:

- Eliminate the need to print, deliver and safeguard certificates
- Allow book-entry transfer of securities and are both
- Prerequisite for delivery vs payment

Both methods also achieve the same end result of book entry transferable securities.

It is very important at this time to explain the concept of Clearance and Settlement if I you are to understand Rolling Settlement. Certain procedures are undertaken immediately after a trade has been executed. These will include - confirmation and trade comparison - matching trade instructions, cash funding and foreign exchange (i.e. ensuring that sufficient cash is available). Stock position, i.e. ensuring that there are sufficient securities available especially in countries where short selling is encouraged. The activity for all those little checks mentioned is known as the settlement process.

Settlement is therefore the delivery of an asset (in this case securities) in exchange for an equivalent value in cash. The two movements should occur simultaneously and irrevocably - "delivery vs payment (DVP). The Central Clearance System will determine each counter party's securities liability on settlement date. The system will also process the movement of cash and securities between counter parties.

There are different stages of the clearance and settlement process that enable efficient processing of securities and it is necessary that the CSD can facilitate or allow for all of these.

- (a) clearance
- (b) fixed and rolling settlement
- (c) book-entry transfer via CSD's and physical delivery
- (d) settlement failure procedures
- (e) post settlement reports. It is also important that participants be aware of the significance of the post-settlement environment. Here, the procedures

ensure that counter parties hold the securities that they are supposed to (and in the place where they are recorded as being held).

■ **Fixed and Rolling Settlement:**

Trades settle in one of two ways

(a) Fixed Settlement which refers to those trades which have been executed over a number of days (dealing period) but settle on a specified date; or on a specified day and settled immediately.

A good example of fixed settlement in our market is the put-throughs.

(b) Rolling Settlement which is the method with which we should be interested in, refers to the trades for which settlement takes place daily or within a fixed number of days after trade execution. In our case T+5. Rolling settlement smooths out the period “Peaks and troughs” associated with fixed settlement conventions and reduce the likelihood and the potential size of a funds settlement default.

With the CSD shorter settlement cycles will be obtained maybe ours will be reduced to the latest G30 standard of T+3. (I believe that Jamaica moved to the T+3 on June 2 when their CSD went live.

- **The main advantage in having a Shorter settlement cycle will be the reduction of risk.** The financial loss resulting from a default is equal to the difference in price between the original trade and the liquidation trade which could either result in a profit or a loss for the shareholder. When there are profits the profiting shareholder is happy but we can never please both sides in a transaction there is always a sacrifice.
- A shorter settlement cycle reduces this potential price variation and therefore the risk. This also says something for the efficiency of the transaction.
- **Delivery vs payment:** This is the same as the trade for trade method as well as the most straight forward method where individual cheques are issued for each transaction. There is no form of netting. Each trade requires a separate movement of cash and securities. What we are saying is that individual cheques are passed at the same time that the certificates are delivered. There is one drawback here, that is, that it could be difficult for a single participant to settle a number of purchases and sales in the same security for

settlement on the same day, especially in highly illiquid or high-volume markets where short selling is allowed. **Delivery vs payment** is the ultimate objective of having a CSD and can best be achieved by having the Central Bank acting as clearing bank especially in our environment where a clearing system is already in place for the commercial banks.

- **Settlement guarantee:** This is mainly to minimize risk which must be identified and if possible prevented. Guarantees are issued in the form of bank guarantees, lines of credit, trading limits etc. The important thing to note is that a CSD helps to reduce and manage risk it does not and cannot completely eliminate it. For this reason the CSD must put a contingency plan in place to cover any potential losses or set up, as a last resort, a guarantee fund, in accordance with the G-30 Standard, if preventative methods have failed. It would be necessary to make it mandatory for participants to subscribe to the guarantee fund.

Settlement Failure Procedures

Trades which are unmatched or do not have associated delivery instructions will not settle on time. Depending on the nature of and the reasons for the fail, one party might seek compensation by charging penalty interest from the defaulting or offending counter party. In our market we have never had a failed trade. In the one instance where the certificate appeared to be lost in the mail, the selling broker was asked to do a “buy-in” whereby he was asked to find an alternative seller in the market and purchase the equivalent shares at market so that he could clear and settle. If that transaction had materialized and involved additional costs, that broker would have been made to absorb same. Fortunately the certificate showed up before the alternative arrangement was enforced.

Post Settlement Reports

As the securities industry becomes increasingly computerized and less paper-intensive, the processing of securities-related activities becomes no more than processing of information. If the information is complete and readily accessible, then users can selectively extract those parts that provide sufficient time to enable decisions to be made.

The following selection of reports is by no means exhaustive, yet it gives an indication of the types that are typically required.

- trades executed over a period of time
- trades alleged against any particular counter party
- trades for which details are matched and awaiting settlement
- trades for which details are unmatched
- settled trades
- failed trades and reasons for failure
- list and valuation of securities held in any or all of the following categories, nominee, currency, type, by individuals, etc
- some reports also call for disclosure of all the information related to brokers over a given period.

What are the Main Activities of a CSD?

These include:

- Safekeeping of physical securities: Safekeeping or custody in general terms is the provision of a service whereby clients' assets, be they share certificates of entitlement or other documents of title are safeguarded. The custodian's main function in this respect is to
 - i. Ensure that the assets are held in a secure manner
 - ii. Ensure that the assets are not released from custody without proper authorization and
 - iii. Ensure that any benefits due to the client are received in a timely and accurate fashion.

Custody is really not just the provision of a safekeeping service, but it is a group of services which range from the settlement of trade transactions through to proxy voting and cash management.

With the expected increased volume of cross-border investment activities, which I presume would also involve emerging countries, the provision of custodial services will become increasingly important for the stability and efficiency of the market.

There are various types of custody:

- ❖ Domestic custody - Investors who trade in the domestic market will make arrangements to hold

the securities in the vault of the custodian (in our case the custodian will be the Central Bank) who is the expert in this area.

Similarly, investors who trade in Jamaica and Trinidad may choose to use a domestic custodian directly in those individual countries. Investors who are more widely cross-bordered say in Europe and North America, can appoint a custodian in each region to manage the individual country relationships or a custodian who operates a network of sub-custodians to perform on his behalf. This is known as Global Custody.

- maintenance and operation of computerized book entry securities and a cash payment system linked either to a central bank or other cash clearing systems- There are two main aspects of technology (computerization) to be considered in operating a computerized book-entry market:
 - ✦ Operational technology (Computerization) which addresses the global custodians' systems and hardware; and
 - ✦ client technology (telecommunications) which considers the linkages between the client and the global custodian

I mentioned these in passing but do not plan on getting into detail concerning these more complicated forms of communication at this time because it will be a while before we are ready for any global activity.

- provision of cash accounts and cash transmission services for participants (no need to get into any finer details here as yet)
- transfer of securities on a 'delivery versus payment' basis (already explained)
- income collection and distribution
- processing of corporate actions events
- acting as nominee for CSD eligible securities
- Facilitation cross-border operations by maintaining links with CSDs in other markets.

What System should be used? Buy or develop?

- No need to reinvent the wheel

- Off-the-shelf solutions available that can be customized
- Buying gives access to expertise beyond system
- Buying leads to faster implementation.

What expertise is needed?

- Legal
- Risk management
- Operations
- Systems

Legal Aspects

At present, the instruments which we use to regulate our market are inadequate to properly regulate the market in its current form not to mention the introduction of a CSD environment. As well, the CSD should be governed by its own set of by-laws, operational rules, policies and procedures which should be approved by the Board of Directors.

It has therefore been necessary to review the current legislation with a view to strengthening it and adding new legislation

- The Securities Exchange Act, Cap 318A - Here is what the Nasdaq consultants said about this Act in the feasibility report. "The Barbados securities law was enacted for the specific purpose of creating an exchange to deal in securities in Barbados and to enable it to operate by itself or with others, a company - the securities marketing company- to deal in securities until such time as the market in Barbados is mature enough to support itself.

While the Exchange has been given what appears to be substantial "self regulatory authority, and its by-laws and rules are designed to effectively discharge that authority, it is difficult to characterize it as a self regulatory organization since the government has a significant and direct voice in the operation of the exchange."

The following issues were also noted by local counsel, subcontracted by the Nasdaq Consultants in reviewing the External Regulatory Framework: "We confirm that there is

no specific regulatory framework in Barbados. The CSD admittedly does not fit easily within the established regulatory regime for financial institutions. The functions of a CSD suggest a certain kinship with both trust companies (regulated under Part III of the Financial Intermediaries Regulatory Act, (FIRA).

..... There are no qualification criteria established in the legislation for any of the brokers, dealers or investment advisors; the Securities Exchange Act only restricts acting in such capacity to members of the Exchange. The Membership criteria established in the by-laws of the SEB are very limited and do little to ensure the validity of the system." (See section 2 of D10 report from consultants).

New legislation is coming which inter alia would facilitate the establishment of third party oversight to regulate SROs such as the SEB and CSD. The Trinidad Securities Legislation 1995 is the recommended model.

- **The Companies Act, Cap 308** - is being strengthened in some areas to facilitate a more transparent market and enhanced investor protection. For instance, the prospectus requirements will be amended to cover shareholder preemptive rights, a better definition of an insider is recommended, more frequent corporate reporting and more detailed disclosure requirements are requested etc
- **The By-laws and Rules of the Exchange** - a complete review is being carried out by SEB and Legal counsel to eliminate current weaknesses and clarify some ambiguities
- **CSD Rules** - The operation of an efficient and transparent CSD environment requires, CSD By-laws for at least a Supervisory and Audit Committee, and an Advisory Committee.
Membership rules are necessary for the Admission and disqualification of members, sanctions for non-compliance, eligibility of securities, operation of Members' accounts, reporting, debits and credits to securities accounts, record-entry transactions, payment, guarantee fund, security interest of the CSD, liability, audits, security confidentiality.

CSD procedures are required for the Clearing and Settlement process, trade cash settlement, trade cash settlement failure, trade security settlement, trade security settlement failure, emergency procedures, audit procedures, CSD operational procedures- internal, members operating procedures, issuer procedures etc.

CSD rules and procedures as well as the following agreements are already being work on with Legal Counsel, using the Jamaica drafts as our model.

- Participant agreement -
- Settlement bank agreement
- Clearing bank agreement
- Others

Operational Aspects

- Procedures for participants and staff
- Integration with:
 - trading procedures/systems
 - brokers
 - custodians
 - registries
- On site visits
- Users group

Risk Management

- Risk must be:
 - identified
 - prevented (bank guarantees, trading limits, etc)
- Risk cannot be completely eliminated
 - need for a contingency plan (guarantee fund).

Putting the team together

- The General Manager

- must be full time
- proven project manager
- good communicator
- recognized expertise in local securities market
- ideally, recruited among senior exchange employees.

It is imperative that the General Manager has a strong understudy. The fact that the current General Manager, is the only one with all the knowledge relative to the implementation of this project makes it very high risk.

The size of the SEB's current staff complement restricts the level of control. Whatever the size of the market there are some fundamental bases which must be covered. For example, there must be at least two trained IT persons, and two audit personnel. The audit function and the daily checking of the securities must never be done by the same people.

The Final Business Plan for CSD prepared by the NASDAQ consultants recommends a complement of seven employees.

The internal business plan suggests that the general administration of the CSD be incorporated in the SEB requiring only four additional Members of staff including a Deputy General Manager.

User acceptance: the critical success factor

- A CSD will radically change the lives of clients, brokers, custodians and registrars. These are the users or participants of the CSD services.

Users fall into three categories:

- e. Institutional investors such as insurance companies, pension funds, large corporate investors etc. All of these people manage their investments directly or indirectly through an investment manager.
- f. Direct market participants are banks, market makers and brokers and dealers who deal for their own account.
- g. Investment managers deal for their institutional or private clients.

Some Services offered to Participants by the CSD

1. Dividend and interest payments- also script dividends whereby the shareholder either receives cash or the equivalent value in shares.
2. Stock Changes - Rights issues, open offers, takeovers, scheme offers, capitalizations , offer for sale, placements, conversion
3. Securities lending - to facilitate short selling
4. Reconciliation of share holdings
5. Voting
6. Portfolio Valuation
7. Capital repayments - part repayments of issued capital by a company
8. Administration of withholding tax

The success of the CSD will depend on the acceptance of the system by the market practitioners. One way of measuring the success is through use of the services provided by the facility. It is therefore important to get the potential participants on our side early.

- Get them on side early - How?
- Consultation, communication and training are vital

Conclusion

To the SEB and the market, a key outcome of the CSD will be the efficiencies which it will offer to cross border trading among the five participating countries as its capabilities will also eventually make possible the integration of Caribbean and international capital markets.

Notes

THE GROUP OF THIRTY (G30)

This is a private sector group concerned with the workings of the international financial system. To address the problems, G30 formed a committee of members from the banking and broking industries plus the Stock Exchanges and clearing organizations. The objective was to create an impetus for change and in 1989 they published a list of nine recommendations in their report "Clearance and Settlement Systems in the World's Securities Markets."