Big Bang

The Colombo Stock Exchange (CSE) is poised to enter a new era with the introduction of screen
based trading replacing the existing manual system. The ‘Big Bang’ or market jargon for computerised trading will add a new dimension to share trading in Sri Lanka. Interestingly the phrase ‘Big Bang’ was coined after the automation of the London Stock Exchange in 1986 which propelled it into one of the three important financial centres of the world. With the acquisition of the new system known as the Automated Trading System (ATS), the CSE is well positioned among the emerging markets to attract foreign investors, provided good market conditions exist. One of the significant impacts of trade automation will be an increase in volume.
The system is still being tested with brokers familiarising themselves with the new system during the mock sessions held at the trading floor. The system is being installed by Millennium Information Technology (MIT) and has a price tag of Rs 100 million with the CSE and the Securities and Exchange Commission (SEC) sharing the cost equally.
Automation of the CSE was considered during 1994 when the CSE was experiencing buoyant conditions, with stockbrokers unable to execute a good number of their orders due to the manual system getting bottle-necked as a result of the high volume of transactions. The CSE had already automated the clearing and settlements aspect of the market with the setting up of the Central Depository System (CDS) in September 1991. Thus, the inefficiencies in the old manual clearing system were overcome. The introduction of ATS will make the CSE one of the very few Asian markets to have automated the trading as well as the clearing and settlement systems. While most markets have automated trading and then automated the clearing and settlement, the CSE has preferred the reverse approach. This is more practical as a manual settlement system could not have coped with the increased volume of trading that an automated trading system would have generated.

One of the main benefits the ATS gives investors is the provision of real time market information. The ATS has several functions such as real time trend indicators, which show sectors or companies that are experiencing price movements etc. However, the installtation of the ATS has posed several problems for the stockbrokers, who to

date have used independent custom made programs to execute clients' orders and to peruse client information. According to Shalindra Silva, manager communications, Asia Capital Limited, one of the biggest problems with the ATS was that it lacked the facilities to provide client information. As a result the stockbrokers have to develop an intermediate program to integrate their existing office systems with the ATS software provided by the CSE. Silva said the CSE system which is highly advanced would set an industry standard.
From the brokers' point of view the inability to check client information is a rather sensitive issue. Once an order is received to sell a certain stock, the broker will check whether that client actually holds that stock. In the automated system once an order is placed it is impossible to cancel it due to the speed at which the transactions are executed. Further, other useful details such as client credibility and so on are also not provided by the ATS to the stock broking firms. As a result the brokers have to develop intermediate programs.

The computerised trading system is built around a Sun Micro System largely interconnected with an Oracle database. The broker software will work on Windows NT. Silva described this as a totally different environment. The system requires a minimum of 16 MB (mega bytes). A 17-inch monitor has been recommended due to the large volume of data that would be displayed.
Under the ATS, investors place their orders with the brokers. The orders are entered into the ATS trading terminals which are located at the brokers' offices and the Exchange floor. They are transmitted directly and individually to the CSE. The ATS acknowledges the receipt of the order, marks it with a time stamp and checks it for technical correctness. If it is technically correct the processing will continue. If not it is returned with the appropriate comment. As far as matching is concerned orders at the most favourable price i.e, with the lowest selling price or highest buying price are always executed first. If two or more orders are listed in the order book at the same price the oldest order is executed first.
ATS gives investors a number of options when placing an order referred to as 'order qualifiers'. These options help improve gains and reduce risks. The order qualifiers are available on the basis of Price, Time and Volume. The two options available for an investor for a price qualifier are:-

1. Limit Order, where the per- son states the price at which he is offering to trade.
2. Market Order, where the person instructs that he is willing to trade at market price.
   The main advantage of Market Order is that it is given first priority. Such an

order goes to the top of the order queue and executes the transaction. However, this can prove disadvantageous when the order is matched with an unsuitably priced order stored in the ATS database.

Time qualifiers give investors three options, namely:

1. Day order, where the order is valid only for the trading day in which the order is entered. If the order cannot be executed then it will be automatically deleted from the system.
2. Good till day order, where the duration of the order could be decided. The investor has 5 choices ranging from 1 to 5 days. As mentioned above if the order is not matched within the time limit it will expire.
3. Good till cancel order, where the order remains valid for 5 market days. If it cannot be executed in that period it will automatically be dropped. The investor can instruct his broker to re-enter the order. The order can also be cancelled at any time..

Volume qualifiers too have three options:

1. Minimum fill size, where the investor can specify a minimum size of a trade that executes a part of your trade. For instance, if an investor places an order for 100,000 shares of a company and specifies a minimum lot size of 10,000 shares at a given price level, then his trade will not match with that of another who is selling less than 10,000 shares of the stated company. His order instead will be matched with an order for more than 10,000 shares of the specified company. An investor using this option must exercise caution as any trade below the stated minimum fill size will not be matched with his order.
2. ‘Fill or Kill’, where the investor instructs the system to execute the whole order immediately. If it cannot be executed immediately the order expires. Hence, such an order will remain valid for only a few seconds as the system checks the database to match the order. A ‘Fill or Kill’ order at market price is more likely to be executed than an order at limit.
3. Immediate or cancel, which is somewhat similar to a fill or kill order but where partial execution can be made. For instance, if an investor places an order for 100,000 shares of a company and if there are 2 sellers offering 50,000 and 23,000 shares at different prices, then 73,000 shares of the company will be bought and the order will be cancelled.
   The investor can also make modifications to the price, time and volume modifications of a pending order. If the investor modifies his offer he may lose

the priority and go back to the end of the queue. For eg., if the price is reduced the order will lose priority, while the result of increasing the price will be the reverse. Pending orders can be cancelled by the investor at any time.

There are three trading screens to which a broker has access using ATS:

1. Normal lots, here the screen would be used for trading of shares only in multiples of 100.
2. Odd lots, where quantities less than 100 shares are traded. These shares generally trade at a slight discount to the normal lots largely due to the fact that there is a lesser demand for odd quantities of shares in the market.
3. Block trades, where the screen is used for trading of large

blocks of shares and will be used mainly by institutional investors. Trading here is of 2 types:
1) Crossings, a pre-arranged transaction between a buyer and a seller which is reported through the CSE. Only transactions with a minimum value of Rs 10 million but less than 5% of the issued capital of a company may be crossed. Further, only shares of the top 30 companies in terms of market capitalisation may be crossed. They have to take place within the set price margins.
2) All or none parcels, here the parcels of shares comprises more than 5% of the issued capital of a company. The CSE would permit a double sized auction when such parcels are introduced where the price of the original buyer and seller may be bettered. Due to the size of the parcels the normal price limits do not apply.

Many stock brokers have expressed optimism that the introduction of trade automation will benefit the market. The probability of the volume increasing is high with the previously unexecutable transactions now being executable under ATS. Deva Ellepola, DGM sales of Jardine Fleming HNB Securities, told ‘Business Today’ that one of the most important advantages of automation would be the immediate confirmation of transactions. Under the current system confirmation of transactions are usually conveyed several hours after the execution of the transaction. Furthermore, the access to real time information on the part of the brokers will also help them give a better service to clients. He added that the ATS would overcome deficiencies in the current system and eliminate the chance human error. This system will also enable intermediaries to convey market information to users. Rohan Fernando, head of sales at CT Smith Stockbrokers, told ‘Business Today’ that the introduction of automation will result in greater market volatility adding that this

would require more market research. He warned that ‘speculators might get hit. The fact that the system requires brokers to declare the number of shares in their possession will help market activity. Under the current system, brokers are not required to declare the number of shares in their possession. In such a situation a broker holding a large quantity of shares will only reveal a very small amount so as to obtain the best. possible price for his client. This dampens market activity. But the new system gives room for brokers. to increase returns to their clients by giving the brokers option to disclose smaller quantities of shares each time.

Meanwhile, Anura R Wickramasinghe, managing director, Jardine Fleming HNB Securities. told Business Today’ that trade automation can act as a catalyst to increase the domestic retail investor base, because the infrastructure will be in place for any client in any part of Sri Lanka to access the brokers. Automation of the CSE will also benefit the brokers in terms of technology by giving them speed, accuracy and reliability.

With the introduction of the ATS the CSE will also have a sophisticated state-of-the-art electronic surveillance system that would enable it to stop frauds such as insider trading and front running. The inbuilt surveillance system has many functions:

1. Circuit breakers, which automatically halt trading in a share as soon as pre-determined price
   movement or volume movement criteria are breached.
   The surveillance staff of the CSE will then carry out investigations into the trading pattern before recommencing trading.
2. Trading halt, which is a pre-determined decision of the CSE surveillance staff, where trading in a share will be halted until price sensitive information is disseminated into the market. This can come about through announcements of dividends or rights issues or takeover merger bids.
3. Suspension, where the CSE surveillance will occasionally sus pend trading in a share to safeguard investors. For instance, if a company has unduly delayed its reports the CSE will suspend trading in shares of that company.
   The existence of a sophisticated surveillance system will increase investor confidence and result in transparency. The CSE will be equipped to monitor the account of an individual or a group of people and can determine whether there is any indication of frauds being committed.
   While the introduction of automated trading will definitely be an advantage the full potential of the system cannot be realised immediately.

The stockbrokers say that they will maintain their front offices in the CSE for the first two months and then only maintain their back offices. The ATS is currently being tested with brokers participating in
the trial runs conducted at the exchange floor. Industry analysts expect the system to be in place in another months time.