

EMERGING MARKETS INVESTOR

CSDs – the risk reducers

CSDs are improving the efficiency of Asia's securities markets and reducing risk. But investors should not underestimate their complexity, as London-based consultants Thomas Murray explain

Central Securities Depositories (CSDs) are rapidly emerging as an integral part of the Asian securities market. The creation of local CSDs by the Asian domestic markets has done much to improve the efficiencies and reduce the risks of investment by creating local CSDs.

Despite the undoubted progress, there is no such thing as a typical CSD, and the investment community should not underestimate the complexities of the subject. This diversity of CSDs is apparent in their varying functionality, in their different ownership and membership profiles; in the different types and level of

guarantee provided to users; and in terms of whether or not their usage is compulsory. Additionally, some governments are keen to promote their local CSDs with little regard to the overall cost this will add to securities market participants.

These differing characteristics create some very real asset safety and operational concerns. Global investors who cannot expect their custodial banks to take full responsibility for the safety and performance of CSDs must consider the risks of using CSDs as part of their primary analysis of global investment.

A key impetus for developing CSDs came from the Group of Thirty ('G30') report on Clearance and Settlement Systems in the World's Securities Markets, published in 1989. The report highlighted the diversity and uneven quality of local settlement systems around the world. It described the risks and costs created by the inefficiencies in domestic settlement markets.

The G30 report made nine recommendations designed to improve quality and standardise the working practices of local clearance and settlement systems. The third recommendation specifically related to CSDs, and proposed that "...each country should have an effective and fully developed central securities depository, organised and managed to encourage the broadest possible industry participation (directly and indirectly)."

The rest of this article provides a background to the development of CSDs in Asia and draws on the research conducted by Thomas Murray into their structures and operations. The statistics shown are based on the actual number of responses (ie, sample) received to specific questions from the Asian depositories.

Since the publication of the Group of Thirty report, the number of CSD organisations around the world has grown from 32 to 91. By the end of the century, there should be at least another 21 operational CSDs. In Asia (excluding Australia, Japan and New Zealand) the

number has grown from 6 to 15. In many markets a CSD covers at least two of the following instrument types: equities, fixed income and money market instruments.

Are CSDs compulsory?

The decision to use a local CSD will invariably be determined by local market practice. If the use of a CSD is optional then very careful consideration must be given to the benefits/shortfalls of use. Where use is compulsory due consideration must be given to the best means of accessing the CSD.

Of the existing operational depositories which exist in Asia, 69% are compulsory to use and 31% optional. Countries where depositories are optional for equities include India, Korea and Taiwan.

Investor access to the CSDs

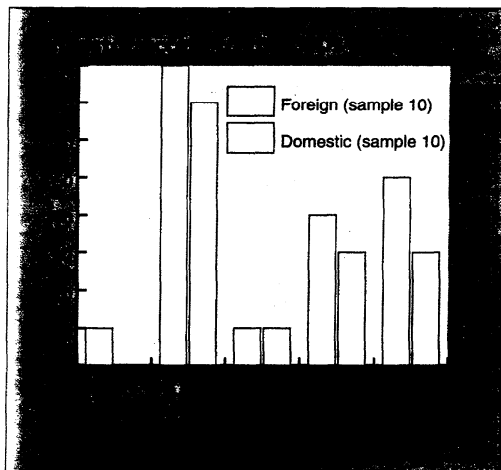
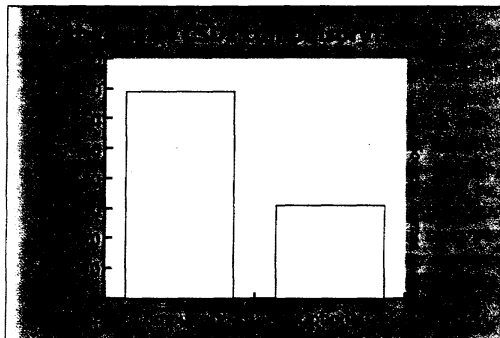
The most common form of access is via a local custodian bank (80% domestic, 70% foreign). Selecting the most appropriate method of access may be influenced by the functionality contained within a local CSD. Even if local membership rules permit direct investor access it may well not be cost effective and could also be beneficial to access the CSD via a local agent who is already a participant.

Eligible participants

Banks and brokers/brokerage firms represent the main eligible participants of CSDs. Overall, 100% of CSDs allow domestic brokers/brokerage firms as participants, with 69% allowing access to foreign brokers/brokerage firms. Participation in CSDs by domestic and foreign banks represents 92% and 69% respectively. Domestic private investors are allowed as eligible participants by 31% of CSDs, and the same percentage of foreign private investors are allowed.

Dematerialisation

Only one Asian CSD has eliminated the need for physical documents to represent the ownership of securities, securi-



ties and ownership records existing only as data (dematerialisation).

Immobilised certificates, where physical securities are deposited and retained in a CSD so that transactions may be effected by book-entry rather than physical movement, are found in 67% of CSDs. A further 21% currently hold securities in a mix of immobilised and dematerialised form.

Processing cycles

End of day processing is the most common processing cycle adopted by CSDs (80%) with 10% claiming to operate on a Real-Time Gross Settlement (RTGS) basis. 20% of CSDs operate multiple intraday processing cycles, 10% a single intraday cycle and 20% operate overnight.

Currently a number of CSDs and national payment systems are in the process of, or are considering, evolving to real-time processing.

Cross-border services

Only one Asian CSD claims to provide cross-border securities deposit and settlement services. Where CSDs are planning to establish direct or indirect participant linkages with other local market CSDs this is nearly exclusively being done on a geographical proximity basis.

Proprietary systems

All the operational Asian CSDs have developed a proprietary communication and reporting systems for participants. Of these, an average of 91% of the eligible participants are connected to the proprietary system.

Updating trade information

Fifty-five per cent of proprietary systems provide trade information updated on a real-time basis, where changes are made to the existing system as they are entered at the terminal and the changes are reflected when other users make queries. The opposite to real time is where the information is updated on a batch basis, and a large number of database changes are held for execution at a pre-determined time, usually at the end of day. 45% of CSDs provide trade information updated on an overnight batch basis.

Risk management

The following data summarises the risk management programmes currently in effect amongst Asian CSDs.

Insurance: 44% of CSDs have insurance to cover the loss or theft of securities held in safe custody, and damage from fire.

Compensation fund: 63% of CSDs have a compensation fund to cover losses which might take place during the business operation.

Participants eligibility: 88% of CSDs evaluate and monitor the financial status, secu-

Asian markets with CSDs for equities, fixed income and money market instruments

Country	Equities	Fixed income	Money markets
Bangladesh	No	No	No
China, Shanghai	Yes	Yes	No
China, Shenzhen	Yes	No	No
Hong Kong	Yes	Yes	Yes
India	Yes	Planned	Planned
Indonesia	Yes	Planned	Planned
Korea	Yes	Yes	Planned
Malaysia	Yes	Yes	Yes
Pakistan	Planned	Planned	Planned
Philippines	Yes	Planned	Planned
Singapore	Yes	No	No
Sri Lanka	Yes	Yes	No
Taiwan	Yes	Yes	No
Thailand	Yes	Yes	No
Vietnam	No	No	No

Source: Thomas Murray

rities and transactions of new and existing participants.

Internal controls: 90% of CSDs keep records of the conveyance, location and number of securities that are deposited or withdrawn, to reconcile problems that may occur during service processing.

Vaults: 70% of CSDs have vaults. The majority of vaults are secured by closed circuit television (CCTV) and are guarded full time.

Off-site back-up: 80% of CSDs have office back-up facility for its EDP centre(s). 100% have back-up power generators and 100% UPS (uninterruptible power supply).

Anti-forgery: Overall, 89% of CSDs have implemented anti-forgery measures, with 11% implementing optical card readers, 22% image scanners and 89% storing information about lost, stolen and counterfeit securities.

Disaster recovery: 100% of CSDs have disaster recovery plans, including computer back-up and locations, support and recovery systems. Many of the plans ensure that every single component in the system (gateway, system, communication method) are replicated and operational.

Legal safety measures: 75% of CSDs are legally required to compensate for the loss of missing deposited securities. In most cases the depository is responsible for the replacement and direct additional cost which its clients have incurred due to the loss.

Audits: In addition to the many CSDs that have an internal auditing department, 100% use external audits to carry out at least an annual audit. 60% allow third par-

ties to audit their internal controls and procedures. In most cases third party audits are restricted to local market regulatory and supervisory bodies. ■

