



THOMAS MURRAY

The Importance of Creating Quality Infrastructure



neve

9ª Asamblea General 2007

Bruce Butterill

Mexico City, Mexico

March 1, 2007



External Perceptions

- Morgan Stanley
- CalPERS
- FTSE
- Thomas Murray Capital Market Infrastructure Risk Rating

Best Market Practice and Standards

The Evolving Roles of CSDs

Risk Management vs. Risk Avoidance

Utility vs. Commercial Motivations

Cross Border Linkages

Some final thoughts





External Perceptions

- **Morgan Stanley Capital International (MSCI)**
 - Emerging Markets – Argentina, Brazil, Chile, Colombia, Mexico, Peru, South Africa
- **CalPERS**
- **FTSE**
- **Thomas Murray Capital Market Infrastructure Risk Ratings**





External Perceptions

CAPITAL MARKET INFRASTRUCTURE RISK RATINGS

Colombia



THOMAS MURRAY



Capital Market Infrastructure Risk Ratings

Rating:	A-
Outlook:	Stable

Capital Market Infrastructure Risk Ratings - By Risk Types



Outlook

Asset Commitment Risk	A+	Stable
Liquidity Risk	A-	Positive
Counterparty Risk	BBB	Positive
Financial Risk	A	Stable
Operational Risk	A	Stable
Asset Servicing Risk	A-	Negative

Contact

Thomas Murray
179 Piccadilly

Summary

Thomas Murray has assigned this market a capital market infrastructure risk rating of A-

Colombia's rating is influenced by a combination of some shortfalls within the custody and settlement infrastructure, with a low sovereign credit rating which raises issues of creditworthiness of local banks holding cash deposits or making payments on behalf of clients. The market is dominated by fixed income securities which benefit from total dematerialisation in DCV and are transferred in a fully interdependent real-time DVP environment. Securities eligible for DECEVAL, the CSD for equities and debt, can be immobilised there, but the majority of equities by market value are still safekept with custodians.

Custodians are exposed to significant Counterparty Risk exposure where choosing to deliver on a gross FOP basis to brokers for client-side settlements (cambio de depositante) although inter-broker settlements are on a non-simultaneous DVP basis. Optional DVP for fixed income client-side deliveries mitigates against loss of principal. The exchange largely controls the settlement process for equities by instructing DECEVAL to move securities after it has confirmed movement of funds either on a same day basis through SEBRA, the Central Bank payment system. This constitutes a form of DVP coordination outside of the control of the depository and payment system.

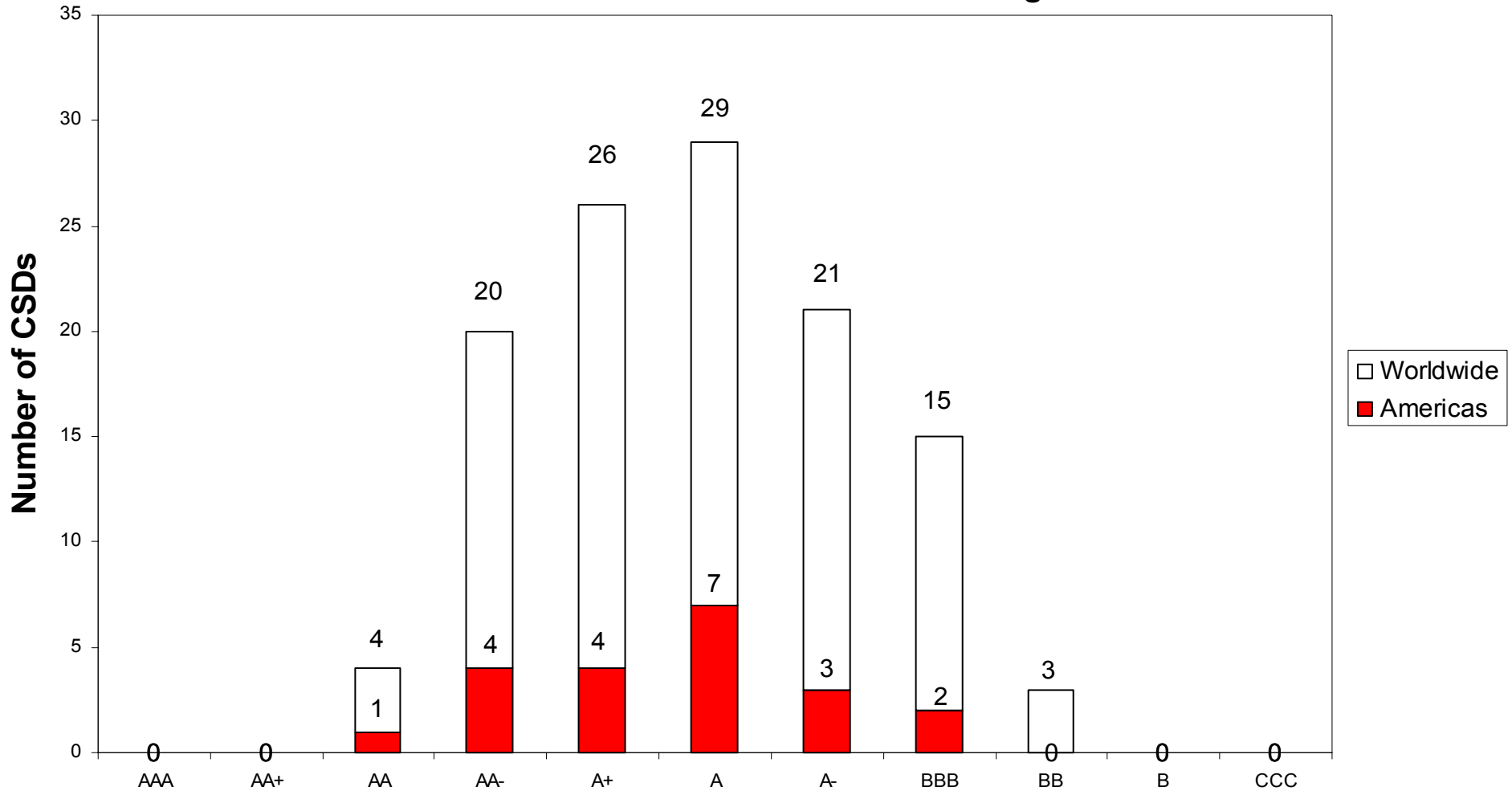
Registration of securities immobilised in DECEVAL is much quicker (24hrs) than the registration of physical securities held at sub-custodians (up to 15 days). Developments are being made towards establishing a stock lending market in the future such as the implementation of a 'Temporary Securities Transfer', which allows for temporary securities transfer of equities and T-Bills for a period of up to 365 days.

The introduction of a 12 month freeze on repatriation of capital has been introduced in December 2004 to combat the devaluation of the Colombian Peso against the US Dollar. This measure will negatively impact the flexibility of foreign investors' investment strategies (e.g. to repatriate capital out of the market) and may deter them from future inward investment into Colombia.





Worldwide Distribution of CSD Ratings





It is absolutely essential that stakeholders are constantly aware of external perceptions of their market and proactively manage both the causes and effects.

Learn what opinion makers expect from Infrastructures in “high quality” markets.

The broad adoption of “Best Market Practices and Standards” is an investment in your market that will yield substantial dividends in the future.





" The word 'standards' does not normally invoke a thrill of anticipation, but in many areas critical to the functioning of our daily lives, they have a fundamental impact. Think of metrification, finding a compatible plug adaptor each time you travel, the English language, railway gauges, container shipments – in a myriad of situations, standards shape our world for easier communication".

Dominic Hobson, editor in chief of Global Custodian





The International Organization of Securities Commissions (IOSCO) www.iosco.org

BIS/IOSCO "Recommendations for Securities Settlement Systems", Report of the Committee on Payment and Settlement Systems and the Technical Committee of IOSCO
November 2001

Recommendations of particular relevance to most emerging markets at this time;

- **Recommendation # 4 – Central Counterparties (CCPs)** The benefits and costs of a CCP should be carefully evaluated. Where such a mechanism is introduced, the CCP should rigorously control the risks it assumes.
- **Recommendation # 5 – Securities Lending** Securities lending and borrowing should be encouraged as a method for expediting the settlement of securities transactions. Barriers that inhibit the practice of lending securities for this purpose should be removed.
- **Recommendation # 13 – Governance:** Governance arrangements for CSDs and CCPs should be designed to fulfill public interest requirements and to promote the objectives of owners and users
- **Recommendation # 16 – Communications Procedures and Standards:** Securities settlement systems should use or accommodate the relevant international procedures and standards in order to facilitate efficient settlement of cross border transactions.
- **Recommendation # 17 – Transparency** CSDs and CCPs should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with use of the CSD or CCP services.





Group of Thirty (G30) www.group30.org

Global Clearing and Settlement : A Plan of Action 2003

- Twenty recommendations, placing considerable emphasis on cross border clearing and settlement.
- The report promotes “best practice” for the most developed markets in the world.
- There is considerable overlap with the IOSCO recommendations, however the material should certainly be heeded by any market contemplating infrastructure or process changes.

Association of National Numbering Agencies (ANNA) www.anna-web.com

- International securities identification numbering system (ISIN).
- Recognized as the ISO standard for securities numbering ISO 6166.
- It is important to adopt standard numbering practices in order to increase STP and aid market accessibility.





The Association of Global Custodians and SEC 17F7 www.theagc.com

- The Association of Global Custodians is an informal group of 10 global custodian banks that are major providers of securities custody and trade settlement services to institutional investors worldwide.
- Established in 1997, the Association primarily seeks to address regulatory and market structure issues that are of common interest to global custody banks.
- The AGC gathers information on behalf of its members in an effort to comply with the requirements of SEC rule 17F7.
- The AGC is not a standards setting body as such, but its members have the ability to disqualify a CSD as an eligible custody location based upon a failure of the CSD to respond to its questionnaire or a determination that the CSD presents an unacceptable level of risk.

Society for Worldwide Interbank Financial Telecommunication (SWIFT) www.swift.com

- SWIFT acts as the secretariat for ISO for securities messaging.
- ISO/SWIFT messaging standards should be referenced prior to the adoption of and messaging standards for domestic or cross border activity.





A Selection of Additional Sources

International Securities Association for Institutional Trade Communication- International Operations Association www.isitc.org

- The mission of ISITC-IOA is to support global securities operations, to promote Straight Through Processing throughout the industry, to recommend and endorse operating standards that will reduce risk and increase efficiency.

The Giovannini Group ec.europa.eu/economy_finance/giovannini_en.htm

- The Giovannini Group is a group of financial-market participants, which advises the European Commission on financial market issues.
- In its 2003 report, the Group, as advisor to the European Commission, published a report identifying 15 barriers to efficient EU cross-border clearing and settlement.

FIX Protocol Organization www.fixprotocol.org

- Their goal is to improve the global trading process by defining, managing, and promoting an open protocol for real-time, electronic communication between industry participants, while complementing industry standards.





Some Implications for Emerging Markets

Generally need a greater adoption of STP supportive practices

The lack of the ability of the various infrastructure systems to interface effectively often necessitates a great deal of manual intervention e.g. re-keying of trade information. The result that can be expected is higher than acceptable input error rates, capacity constraints, inefficiency.

Increased automation and standardization of issue, event and issuer information used by CSDs, Regulators. Exchange and Participants.

Dematerialization/Immobilization should be a priority

Do not perpetuate antiquated practices simply to preserve the function of historical service providers in the market.

Adoption of ISO standard numbering i.e. ISIN

The use of disparate or non-compliant numbering systems;

- Makes it more difficult for systems to communicate.
- Creates an added complexity for investors (International and domestic).

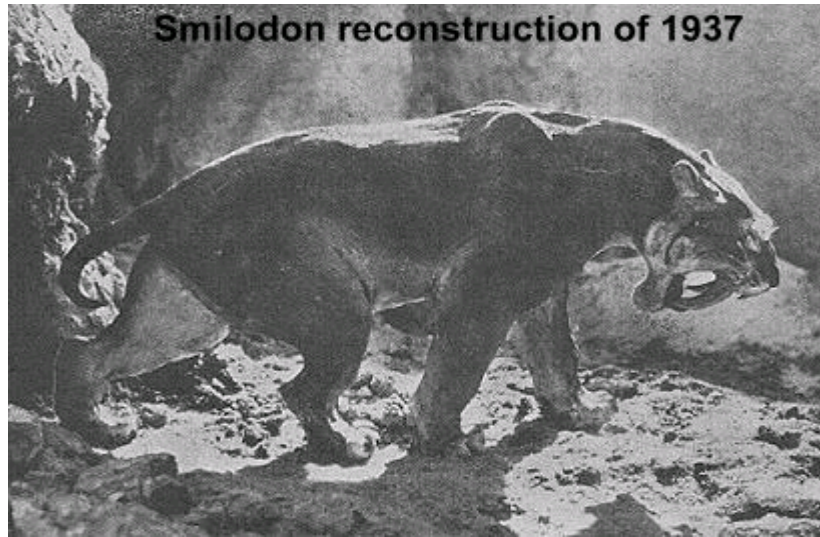
Rationalization of functions performed by the various infrastructure providers

This will help ensure that you adopt a strategy that will serve your market well in the long term.

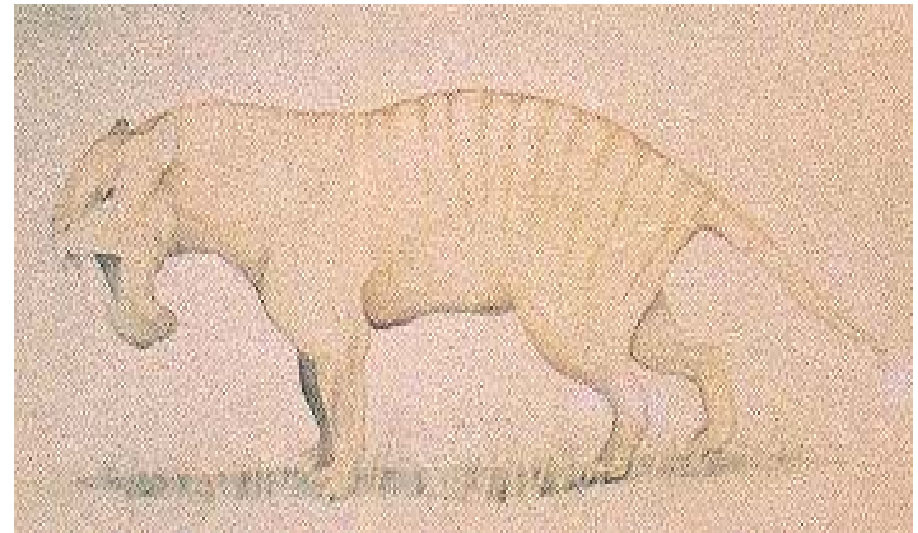




Best Market Practice Convergent evolution



Smilodon: European sabre tooth tiger



Thylacosmilus: South American Sabre tooth marsupial

Convergent evolution describes the process whereby organisms not closely related independently acquire similar characteristics while evolving in separate and sometimes varying ecosystems





Traditional Roles

The Provision of domestic custody and support services for equity and debt issues.

Offering settlement services to regulated domestic financial intermediaries.

Processing income distributions in support of issues on deposit .

|





Evolving Roles of CSDs

With increasing frequency CSDs are providing **Clearing and Trade Matching** services to their markets.

Reference Database Management on a centralized basis to eliminate redundancy in systems and data maintenance requirements.

Some CSDs are providing a range of **Outsourcing** services including back office services, corporate actions processing as well as systems management and operations.

CSDs are providing an expanded range of **Information Services** including; corporate events, proxy services, reference data and even pricing information.

A number of CSDs around the world are providing **Securities Lending** services ranging from lending securities as principle, to matching up borrowers and lenders, to the provision of transaction and loan management services.

With dematerialization and high rates of immobilization at CSDs the provision of **Registry Services** by CSDs are becoming more common.





Evolving Roles of CSDs

A great number of CSDs provide **International Links** to other markets, providing services that extend from basic custody facilities to DVP settlement services.

Increasingly CSDs are moving to provide expanded **Corporate Actions Processing** for their markets, thus allowing their participants to capitalize on economy of scale opportunities and focus on more commercially oriented activities.

Responsibility for **Securities Numbering** has increasingly come under the purview of CSDs. A significant number of the recognized national numbering agencies are now CSDs. Among the

CSDs are now providing **Mutual Fund Services** including account maintenance and transaction processing.

N.B. The pursuit of new business opportunities must be carefully evaluated relative to the potential impact on the overall risk profile desired for the CSD.





Risk Management vs. Risk Avoidance

Risk Management or Risk Avoidance: CSDs can choose one of these two paths.

The path of Risk Avoidance will greatly limit the value that a CSD can deliver to its market participants.

There is value in the management of risk.

- Custody of ineligible securities.
- Asset Servicing.
- Information services.
- Expanded corporate actions servicing.
- Provision of back office services.
- Collateral management.





Utility vs. Commercial Motivations

Pursuing commercial activities can have the effect of causing staff to think more innovatively about the core business.

Increasingly CSDs are augmenting their core businesses and revenue sources with new “non-traditional” revenue streams.

Examples:

- Courier services.
- Ownership record keeping for other real property.
- Consulting services.
- Outsourcing.

In 2005, CDS in Canada (a not for profit CSD) realized in excess of 33% of its total revenue (in excess of CAD 33 Million) from non-core/non-traditional (clearing, settlement and depository) activities.





CSDs are almost universally moving into the business of providing international settlement and custody links.

Motivations

To provide added value to participants.

Generate new sources of revenue.

Support for stock exchange inter-listing or foreign securities listing.

Issues

Perceived or real competition with owners/participants and other market providers.

International standards, communications, processing schedules, currency conversion, pricing and many more operating considerations.

Obtaining critical mass and a growth strategy.

Challenges in linking “transparent” and “non-transparent” markets

Risk management. (operational, financial, legal)





Some final thoughts ...

The quality of the CSD in the market can have a very positive impact on how the market is perceived from a safety and soundness point of view, but infrastructure is most effectively developed in conjunction with an overall plan for the market.

Adopt international standards and best practices where ever possible and resist the urge to develop “proprietary standards” for your markets.

Look for opportunities to diversify the operations of the CSD to spread costs and reduce unit prices, but do so in the context of an overall risk management plan. This is particularly important for infrastructures in small markets.

Remain open to the prospect of sharing infrastructure investments across markets. The vast majority of a CSD's costs are fixed ...volume growth is key to reducing unit costs.





THOMAS MURRAY

For further information;

www.thomasmurray.com

bbutterill@thomasmurray.com