# The Western Hemisphere Payments & Securities Clearance and Settlement Forum

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## Main Trends in Latin America and the Caribbean



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## **Book: From Assessments to Reforms**



## **TO BE PUBLISHED BY THE END OF 2005**

**Chapter I:** The Changing Landscape

Chapter II: Mayor trends in Payment Systems
Chapter III: Major Trends In Securities Settlement

Systems

**Chapter IV: Assessment Tools** 

**Chapter V:** Payments Systems Assessment Findings in

LAC

**Chapter VI:** Securities Settlement Systems

**Assessment Findings in LAC** 

**Chapter VII: Transparency, Oversight and Cooperation** 

in LAC

**Chapter VIII: Implementing Payments and Securities** 

**Settlement Systems Reforms** 

**Chapter IX: Concluding Remarks** 

## **Content**



- A. Assessments and Methodologies
- B. Main Findings and Observations in Payment Systems (PS)
- C. Main Findings and Observations in Securities Settlement Systems (SSS)
- D. Main Findings and Observations in Oversight and Cooperation
- **E. From Assessments to Reforms**

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**ASSESSMENTS** 

Country	Date
Country	
Argentina	July 1999
Bolivia	October 2004
Brazil	November 2000
Chile	December 1999
Colombia	February 2001
Costa Rica	June 2001
Dominican Republic	January 2002
Ecuador	August 2002
El Salvador	February 2000
Guatemala	February 2004
Honduras	October 2002
Jamaica	June 2002
Mexico	March 2001
Netherlands Antilles	December 2002
Nicaragua	December 2003
OECS	April 2000
Panama	January 2005
Paraguay	April 2004
Peru	June 1999
The Bahamas	May 2001
Trinidad and Tobago	February 2000
Uruguay	May 2005
Venezuela	November 2002



## A. Methodologies



- 1 WHI Working Papers 1 to 5
- **2 CPSS Core Principles**
- 3 IMF-WB FSAP Guidance Note
- 4 CPSS-IOSCO Recommendations and Assessment Methodology for SSS and CCPs
- 5 Other

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## **B.** Main Findings in PS



- **B.1 Legal Framework (payments and securities)**
- **B.2 Interbank Exchange and Settlement Circuits**
- **B.3 Retail Settlement Systems**
- **B.4 Government Payments**
- **B.5 Foreign Exchange and Cross-Border Settlement Mechanims**
- **B.6 Interbank Money Market**

## **B.1 LEGAL FRAMEWORK**



#### **MAIN FINDINGS**

- No regulation developing the oversight function
- Lack of provisions regarding the concepts of acceptance, irrevocability or settlement finality
- No explicit legal recognition of the multilateral netting arrangements
- Most countries have laws for electronic documents and signatures. However, need to be developed in regulations
- No public or private body responsible for the resolution of potential conflicts arising from the operation of the systems
- Although Securities Markets Laws (SMLs) normally include the legal basis for immobilization and dematerialization, in some cases, SMLs only apply to private securities
- In general, protection of customer's assets under custodians arrangements are not clearly established
- "Repo" defined, but implications of this operation when used to guarantee the operations are unclear

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## **B.1 LEGAL FRAMEWORK**



### **MAIN FINDINGS**

- Laws clear in terms of the segregation of accounts regarding the securities depository, but this is not the case in terms of the custody of securities or funds by the custodians
- Legal basis for securities lending does not exist in many cases or no detailed regulations have been developed

### **OBSERVATIONS**

- Country authorities need to review the legal framework with particular attention to the irrevocability of final settlement, adequate protection of the systems against the effects of bankruptcy procedures, the improvement of the legal basis for custody arrangements, the legal definition of a "repo" operation, the legal recognition of multilateral netting arrangements, the legal definition of immobilization and dematerialization of securities, specially for public securities, legal definition and the regulation of oversight powers of the central bank. Due to the variety and extreme importance of these legal aspects some countries should consider if the level of legal changes required could justify a payments system law
- Need for plans to educate the judicial system on the specific legal needs of the financial sector

## **B.2 INTERBANK EXCHANGES AND SETTLEMENT CIRCUITS**



#### **MAIN FINDINGS**

- Large value and systemically important payment systems do not fully observe several of the CPSS Core Principles for SIPS
- Recognizing these weaknesses many countries have initiated a reform to launch RTGS systems and reduce the use of cheques for large value settlement

#### **OBSERVATIONS**

- These efforts should be carried out as part of the overall strategy to reform the National Payments System, of which large systems represent the backbone
- Incentives (e.g., pricing policy) are required for a quick transition of the large value payments from the cheque system to the RTGS
- The smooth functioning of an RTGS system requires the availability of sufficient reserves and an efficient distribution of liquidity among intermediaries during the operational hours of the day

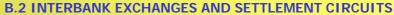
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### **B.2 INTERBANK EXCHANGES AND SETTLEMENT CIRCUITS**



## **Issues in the design of new RTGS systems**

- Management tools to handle liquidity risks
  - complete and timely information on incoming and outgoing payments
  - > queuing mechanisms and optimization mechanisms
  - > setting up efficient throughput mechanisms and adequate interconnections among the systems
  - > creating routines for channeling government payments early in the operating day
  - > allowing a flexible use of reserve requirements
  - providing intraday liquidity through intraday repos with application of haircuts
- Implementation of a robust and efficient communications network between system participants, which should reduce and eventually eliminate the use of manual procedures
- Implementation and enforcement of strict security measures both for physical and electronic access to the system





## Issues in the design of new RTGS systems

- Implementation of contingency plans and disaster recovery mechanisms, including the setting-up of a secondary site
- Implementation of measures for business continuity and resilience
- Introduction of elements to increase efficiency and practicality such as full integration of available systems, convenient operating hours (to be strictly enforced when agreed with system participants), and reduction of manual procedures
- Pricing policies should be consistent with the overall objectives. Some form of cost recovery should be evaluated vis-à-vis all other externalities that stem from a robust and efficient payment system (i.e. cost reduction)
- Access criteria (including exit and exclusion) should be defined clearly and tiered arrangements eventually favored to allow the reduction of manual procedures
- Users Groups (i.e. groups of system participants to discuss system development issues) should be introduced

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## **B.3 RETAIL SETTLEMENT SYSTEMS**



#### **MAIN FINDINGS**

- In many cases, the implementation of applications to process retail electronic credit and debit instruments has complemented overall reforms
- The introduction of new means of payments (electronic transfers, direct debits, etc.) has a potential for cost reduction but it is occurring slowly in many countries
- In some countries, retail circuits are characterized by very low interoperability (e.g. ATMs and EFTPOS) resulting in a very inefficient use of the current infrastructure

#### **OBSERVATIONS**

- Central banks should actively support the full deployment of efficient applications to process electronic retail payment instruments
- Central banks should also coordinate all efforts underway in order to achieve systems that encompasses all banks and other major participants to avoid duplications and misuse of infrastructure and ensure that it operates on a full scale

## **B.3 RETAIL SETTLEMENT SYSTEMS**



#### **OBSERVATIONS**

- · Role of the central bank
  - o take the leadership to achieve the necessary agreements among banks and other participants
  - o coordinate efforts underway to achieve a system that encompasses all major participants and avoid duplications and misuse of infrastructure
  - o review the legal and regulatory framework to identify barriers to improvements in efficiency and/or safety and cooperate with relevant public and private entities
  - o monitor whether competitive market conditions and behaviors are in place and take appropriate actions to foster such conditions
  - o support the development of effective standards and infrastructure arrangements

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## **B.4 GOVERNMENT PAYMENTS**



#### **MAIN FINDINGS**

- Government payments are not usually integrated in reform efforts, at least in the initial stages
- Government payments are a major source of liquidity for the banking system

#### **OBSERVATIONS**

- It is recommended that central banks and other relevant government agencies foster coordination and communication to ensure that collection and disbursements of the public sector institutions that are major players in the payments system be processed electronically and timely through an appropriate system, such as an ACH for retail electronic payment instruments
- Government payments should be coordinated effectively to facilitate the smooth functioning of the RTGS system

## **B.4 FOREX AND CROSS-BORDER**



#### **MAIN FINDINGS**

- · FX transactions not always settle on a PvP basis
- A large share of remittances are channeled through nonregulated specialized institutions, for which there are no standards for aspects such as transparency of fees and other charges or the timing of accreditation of funds to end beneficiaries

#### **OBSERVATIONS**

- Central banks should analyze the possibility of introducing measures to mitigate the risks when PvP is not possible
- Those central banks that allow holding operational reserve accounts in foreign currency need to ensure that wholesale FX trades are settled on a PvP basis
- Central Banks and Banking Supervisors should be able to use their regulatory and supervisory powers to introduce appropriate measures to mitigate risks. Attention should also be given to correspondent arrangements
- The regulatory perspective for remittances should be widened from the traditional areas of balance of payments and money laundering to include payment system issues, such as efficiency, transparency and risks

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## **B.4 INTERBANK MONEY MARKET**



#### **MAIN FINDINGS**

- An efficient mechanism for trading and settling these transactions will allow to improve the liquidity management in the system and, thus, will introduce lower interest rates that will be in the benefit of broker-dealers
- A smooth functioning of the money market is also of key interest for the functioning of large value payment systems. Especially the delivery of collateral to the central bank in order to receive intraday or overnight credit is crucial in a developed financial market

### **OBSERVATIONS**

 Two key elements for the development of interbank money markets are a special purpose system for large-value payments to provide secure electronic inter-bank transfers with immediate settlement interconnected to an electronic book entry securities system to register and record changes in ownership of securities

## C. Main Findings in SSS



- C.1 Legal issues (similar to payments)
- C.2 Clearing and settlement processes
- C.3 Settlement risk
- C.4 Operational risk
- C.5 Custody risk
- C.6 Regulatory and oversight issues
- C.7 CSDs organizational arrangements
- C.8 Cross-border settlement

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## **C.2 C&S PROCESSES**



#### **MAIN FINDINGS**

- There is a significant degree of manual handling in the confirmation process increasing the probability of errors and, thus, settlement failures
- Some systems have close links between trading and settlement such as blocking of transactions previous to matching
- Standardized settlement cycles are not clearly fixed and identified for all the trades executed
- Some stock exchanges play a crucial role in money markets and have difficulties to accommodate different settlement needs
- Some SSSs allow for extensions of the settlement cycle should a failure occur.
- · Absence of appropriate risk management tools

## **C.2 C&S PROCESSES**



#### **MAIN FINDINGS**

- Automatic securities lending and borrowing facilities are not available in many markets mainly due to the low level of activity
- Still many communication networks do not follow international standards

#### **OBSERVATIONS**

In sum, improved clearing and settlement processes in SSSs are necessary in order to reduce market fragmentation, increase standardization of settlement cycles, accommodate different settlement needs, operate with shorter settlement cycles, avoid extension of settlement cycles due to inadequate risk management tools, improve markets' liquidity through automatic securities lending and introduce international communication standards.

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## C.3 SETTLEMENT RISK



#### **MAIN FINDINGS**

- A modern securities market needs to have a securities depository and fungible securities. All physical securities kept in custody by participants of the securities depositories should be immobilized or dematerialized
- Additional efforts are necessary in order to achieve full dematerialization and immobilization of securities. Lack of securities standardization is an important obstacle, mainly in the case of public securities
- Some systems still do not settle on a DvP basis. Due to the time differences between the clearing of the cash leg and that of the securities leg, principal risk could occur if a participant goes bankrupt in this period
- In many cases, there is an absence of risk management tools used to cover settlement failures
- Relating to the funds side, the common use of cheques on the settlement process implies that the principle of "same day funds" is not being fulfilled

## **C.3 SETTLEMENT RISK**



## **MAIN FINDINGS**

- Normally non-bank clearing members and broker-dealers do not have access to central bank money imposing a liquidity constraint for their operations
- When settlement of funds is made at the accounts of a private settlement bank (not very common), the lack of a specific supervision of this settlement function does not allow for a clear understanding of the risks involved. In addition, lack of coordination between regulators on this aspect increases concerns
- Plans for the development of new securities depositories in the Region are not always realistic in terms of timing and are driven by a specific technological solution, not by a strategy agreed by all stakeholders
- Sometimes public authorities are not taking a leadership role
  in the development of settlement arrangements for the
  securities markets. As a consequence, private institutions
  are advancing through particular solutions that are not
  integrated in a comprehensive payments and securities
  settlement reform

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## C.3 SETTLEMENT RISK



## **MAIN FINDINGS**

Some markets are exposed to concentration risk in settlement activity

### **OBSERVATIONS**

• The settlement of securities and funds should be linked to achieve settlement on a DVP basis in order to eliminate principal risk. The main improvements needed are: achievement of full dematerialization and immobilization of securities, establishment and completion of DvP procedures, upgrade of current risk management tools, mitigation of credit and liquidity risk in the cash leg settlement (including elimination of cheques as a cash leg settlement asset), better access to liquidity for SSSs participants and comprehensive strategic approach for the reform of SSSs versus technology-driven and exclusively operational reform projects.

## C.4 OPERATIONAL RISK



#### **MAIN FINDINGS**

- The physical handling of securities is still commonly used in many SSSs
- Straight Through Processing (STP) is not the rule in SSSs in the Region
- In many cases, back-up facilities are missing or in the process of being implemented

#### **OBSERVATIONS**

- In general, there is room for important efficiency gains in the SSSs infrastructure. In particular, physical handling of securities should be eliminated to increase the safety and efficiency of SSSs. In addition, there is room for improvement in the clearing and settlement process. Various plans for back-up sites and disaster recovery facilities should be accelerated or established when nonexistent
- External audits of the systems should be undertaken, especially when systems have been developed in-house. The latter is especially important when the supervisory framework for operational issues is weak

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## C.5 CUSTODY RISK



#### **MAIN FINDINGS**

- In general, protection of customer's assets under custodians arrangements are not clearly established
- There is still a need for additional legal developments in order to guarantee the protection of customer assets

#### **OBSERVATIONS**

 Country authorities should make sure that the segregation of accounts for securities and funds under custody have a clear legal basis under all circumstances. They must also ensure that all customer assets are appropriately accounted for as beneficial owners in the depository or in the custodian's omnibus accounts. Specifically, they must ensure that customer assets are protected against the insolvency of custodians, whatever the nature of the custodian. This issue should be explored under the consideration of the overall legal framework for payments and securities settlement systems

## C.6 REGULATORY AND OVERSIGHT



#### **MAIN FINDINGS**

- Most countries do not count with any regulatory or oversight role of any regulatory agency over securities settlement other than the SRO role of the Stock Exchange
- In general, the capacity of securities regulators regarding securities settlement should be strengthened
- The oversight empowerment for securities settlement systems is missing in some cases
- The oversight of a SSS and their participants is normally divided between several regulators (central bank, securities regulator, pension funds regulator, etc.) that should cooperate in the oversight of the securities settlement systems

#### **OBSERVATIONS**

 Securities settlement oversight should be institutionally strengthened devoting adequate resources and establishing an effective cooperative framework with other regulators, SROs and the private sector

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#### C.7 CSDs ORGANIZATIONAL ARRANGEMENTS



#### **MAIN FINDINGS**

- In general governance arrangements are adequate, but in some cases it is not clear whether they prevent potential conflict of interests
- Some legal and governance arrangements introduce monopolistic situations that impede the adequate development of some markets (e.g., the money market).
- Unsolved conflicts of interest are the main reason for the underdevelopment of basic SSS infrastructures such as depositories

#### **OBSERVATIONS**

 A strong, capitalized, autonomous and independent securities depository, with reliable and flexible systems to expedite settlement of transactions and accessory rights, is crucial for the development of the securities markets. When important conflicts of interest emerge, the authorities should take the lead in their resolution avoiding any standstill situation that could prevent the development of basic pieces of SSS infrastructure

## **C.8 CROSS-BORDER SETTLEMENT**



#### **MAIN FINDINGS**

· Some securities depositories operate cross-border links

#### **OBSERVATIONS**

 Authorities should analyze in detail the risks associated to these links as settlement of cross-border transactions typically involves more risk than settlement of domestic transactions. Particular attention should be devoted to the multiple jurisdiction profile of these transactions, especially from the legal and operational perspective. At the international level, the main improvement in this area is related to the international law governing the cross-border pledge of securities as collateral. Some depositories have been participating in the Hague Convention efforts in order to build a consensual internationally accepted principle

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# **D. Main Findings in Oversight and Cooperation**



- D.1 Oversight
- **D.2 Cooperation**

## **D.1 OVERSIGHT**



#### **MAIN FINDINGS**

 In many countries the law gives some authority to the central bank over the payments system. However, the oversight function has not been fully developed in many central banks

#### **OBSERVATIONS**

- In the context of establishing the oversight function, central banks should disclose publicly its objectives along with its implementation strategies
- With regard to policy objectives, sometimes is suggested that central banks broaden the scope beyond the objectives of efficiency and reliability to a wider set of issues including the promotion of competition and the protection of consumer interests
- Central banks, in exercising their oversight role, should have the ability to carry out this function effectively
- Central banks should move towards compliance of all SIPS in the countries with international standards
- In performing the oversight function central banks should ensure transparency of policies and efficient conditions for payment services offered

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## **D.2 COOPERATION**



#### **MAIN FINDINGS**

- · Cooperation among regulators is lacking in most countries
- No formal cooperative arrangements with all stakeholders for the payments system as a whole exist in several countries
- Cooperation at the interbank level has not always been satisfactory

## **OBSERVATIONS**

- Cooperation among regulators is an essential component of the oversight function
- It is sometimes recommended that the central bank establish a formal National Payment System Council. The new body to be formed should include representatives from all major stakeholders with an interest in payments and securities clearance and settlement systems
- Binding interbank agreements are equally important to enhance cooperation within the banking sector

## **E. From Assessments to Reforms**



- 1 External and Self-Assessments based on International Standards
- 2 Vision
- **3 Sensitization Process**
- **4 Implementation Plan**
- 5 Development of the legal framework, systems and oversight function
- 6 Actual Implementation (with a good dose of hard work and good luck....)