Payment Systems Worldwide: a Vision of Safety and Efficiency

World Bank Global Payments Week
October 23, Lisbon, Portugal

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The World Bank
Where do you see yourself in ten years from now?

…and how do you make your dreams come true?
A three-step process to make this vision work in practice

**Step 1**  
“Raising the bar” for systemically important payment and settlement systems

**Step 2**  
Adopting a *strategic approach* to retail payment system/remitances reform

**Step 3**  
Empowering the overseer(s)
Step 1: Reality check

Payment and securities settlement systems worldwide largely support financial system stability

The 2008 financial crisis showed that the domestic (e.g. RTGS systems) and global (e.g. CLS Bank) payment infrastructures were able to withstand the financial storm, and were instrumental in facilitating immediate responses by authorities.

Growing awareness of the need for sound risk management in large-value funds transfer systems has pushed the development of REAL-TIME GROSS SETTLEMENT SYSTEMS, a powerful mechanism for limiting systemic and settlement risk in the interbank settlement process.

Securities settlement systems are increasingly interlinked to funds transfer systems and operate under a DVP ARRANGEMENT. These are crucial for the development of capital markets, and for the timely delivery of collateral for payments and other purposes.
System(s) used for large-value payments
Global Payment Systems Survey 2010
RTGS: Sources of liquidity during the day
Global Payment Systems Survey 2010

- Uncollateralized current account overdrafts
- Collateralized credit (loan or repo)
- Collateralized current account overdrafts
- Lines of credit between banks
- Use of all reserve requirements
- Use of part of reserve requirements
- Opening balances/funds from participants
CSDs: Risk management features
Global Payment Systems Survey 2010

- T+3 or shorter for all trades
- T+3 or shorter for the majority of trades
- The CSD has a real-time interface with RTGS
- Model 1 DVP
- Model 2 DVP
- Model 3 DVP
- No DVP is used

Bar chart showing distribution of responses for various risk management features.
OTC derivatives markets can create systemic risk

- Lack of transparency regarding risk exposures in derivatives markets
- Insufficient/inadequate risk management
  - Central clearing not available for all OTC derivatives
  - CPP management of credit exposures
  - Quality of data stored in trade repositories

OTC segments particularly affected
OTC derivatives transactions not reported to trade repositories
CCPs – Management of credit exposures
Global Payment Systems Survey 2010

- CCP’s default procedures define an event of default
- CCP conducts regular stress tests
- CCP maintains other financial resources
- There is a guarantee fund (contributions of participants)
- CCP marks to market participants’ outstanding contracts at least once a day
- CCP applies margin requirements
“Raising the Bar” for SIPS: the new Principles for FMIs and AM

Issued by the CPSS-IOSCO, the new "principles" are designed to ensure that the infrastructure supporting global financial markets is more robust and thus well placed to withstand financial shocks

The principles replace the three existing sets of international standards set out in the Core principles for systemically important payment systems (CPSS, 2001); the Recommendations for securities settlement systems (CPSS-IOSCO, 2001); and the Recommendations for central counterparties (CPSS-IOSCO, 2004).

The need for a single set of principles lies in the need to ensure consistent risk management amongst infrastructure that more and more are interdependent.

The main objective of this review of existing standards is to incorporate the lessons drawn during the Lehman crisis and in particular “raise the bar” of the existing requirements in some critical areas (for example, credit and liquidity risk management).

The Principles aim at ensuring consistency among requirements to different FMIs while reflecting the “unique” role of certain infrastructure (e.g. CCPs or TRs), i.e. some room for specific requirements for some FMIs only.
Step 2: Reality check

Cashless retail Payment transactions per capita*

*Global Payment Systems Survey 2010
Account Penetration*

*Source: Demirguc-Kunt and Klapper, 2012
Each payment instrument was ranked based on the number of transactions, from “1” or most important to “5” or least important. Chart shows % and # of countries in which each payment instrument is considered “most important”

- Analysis by income clearly shows preference of low income countries for cheques (cheque is the most used payment means in 65% of low income countries, followed by debit cards). The divide with high, um, and low income is also evident (13%, 19%, and 37%)

- Cheque usage is substantial in SSA, SA, and LAC regions

- EU countries show stronger preference than other regions for direct credit/credit transfers (45%-47%) and credit cards (27%-55%).
Infrastructure and access

Interoperability of ATMs/POS terminals by Region

- Overall, slightly more than half of CBs indicated that both ATMs and POS terminals are fully interoperable

- # of CBs indicating full interoperability of ATMs (57%) is higher than for POS (45%). No major changes from 2008

- Higher interoperability in hi countries. No lo country indicated full interoperability for POS

- Highest percentages of low interoperability are concentrated in SSA, EAP and ECA
Infrastructure and access
Interoperability of innovative payment products

- Information was collected on locations where products could be used and ability to use products for transfers to customers of other payment products

- Most of the innovative payment products are closed-loop (108 of the 173) products reported. Only 17% were reported having full-fledged interoperability, while 29% have some degree of interoperability

- Full interoperability is less common in high-income countries, especially ODCs, and somewhat more common in ECA and LAC
A strategic approach to reforming retail payment systems

The World Bank has synthesized the lessons learned in more than a decade of technical assistance programs and research by other international/national agencies into a comprehensive package for the development and reform of the national retail payments system:

- **“Developing a comprehensive national retail payments strategy”** provides public authorities and retail payment market players with guidance on how to develop and implement a comprehensive strategic approach in retail payments reform and modernization initiatives.

- **“Guidelines for conducting an effective retail payments stocktaking”** identifies a methodology for undertaking a detailed stocktaking of a country retail payments landscape.

- **“Legal and regulatory framework for retail payments – issues to consider and practical approaches”** – discusses the development of a normative framework to underpin an efficient retail payments industry.


- New framework soon to be established: Advisory Committee on Corporate Payments (ACCOP)
Why should we care about government payments?

Reality check

Government payment flows cover a wide range of economic sectors/activities. The overall amount of such flows is significant – between 15% and 45% of GDP. Only 25% of low-income countries process cash transfers and social benefits electronically - this has considerable cost implications.

Getting to the virtuous circle

1) The scale of government payments means that improvements in the way government payments are processed can reduce costs and increase efficiency.

2) Massive G2P programs are a gateway to modern payment instruments/financial services for unbanked or under-banked.

3) Government payment reforms have the potential to trigger the development of a robust payments infrastructure, which in turn supports the safe and efficient processing of government payments.

The WB Guidelines

The World Bank “General Guidelines for the Development of Government Payment Programs” address the day-to-day operational challenges and provide recommendations on:

- Ensuring sound, efficient, and transparent management of public financial resources;

- Making government payment programs safe, reliable and cost-effective;

- Accelerating the development of national payments systems and promote financial inclusion.
## Integrating the agenda on International Remittances

| An international remittance is a cross-border, person-to-person payment of relatively low value = retail payment | Leading G8 and now G20 remittance work, instrumental in adoption of remittance targets (5x5 price reduction objective) by both groups |
| Created global standards for efficient remittance markets together with the relevant standard setter (CPSS-WB General Principles for International Remittance Services). Assessment/implementation programs have covered +20 countries |
| Hosting the Secretariat of the Global Remittance Working Group, an international monitoring and coordination body |
| Operating Remittance Prices Worldwide, a global survey and database of remittance prices that is used to monitor G8 and G20 targets; Coordinating/certifying a number of regional/national databases |
| Technical partnerships for remittance initiatives with several IFIs: African Union, IFAD, IDB, FAO, UPU etc. |
| Linking international remittances to the Financial Inclusion Agenda |
Project Greenback: changing financial habits for the better

**Project Greenback.** An innovative project for the promotion of best practices in the remittance market, also including the production of a documentary.
Regional integration of payment and SSS systems

- Linkages among key payment and securities infrastructures contribute to greater efficiency in global payment and investment flows related to enhanced global trade flows, capital market transactions, and even labor mobility.
- The WB G25 Expert Group is working to provide high-level guidance to principal policy-makers and stakeholders in the development of regional or cross-regional linkages or integration of core FMIs.

Objectives of Regional Integration

- Political and economic policy rationale for closer regional ties to:
  - develop domestic, regional, and cross-regional trade and investment.
  - share the costs of developing and operating modern regional FMIs.
  - in some cases, create the foundation for the future establishment of a single regional currency and monetary regime.
  - in other cases, further support the deepening of regional integration of FMIs following the establishment of a single regional currency and monetary regime, with a view to establishing fully integrated regional financial markets.

- Regulatory pressures to enhance systemic risk controls and competition in financial service markets, that may be best achieved through coordinated regional initiatives.
- Market demand for efficient and reliable cross-border payments and for greater access to cross-border markets.
- Supply-side initiatives by FMIs to develop value-added services in emerging and niche global or regional markets.
Step 3: Reality check

The CB does not have clear legislative authority. Nor is secondary legislation (bylaws, circulars, etc.) implemented.

- CB’s role in maintaining public confidence in money
- CB’s responsibility for monetary policy and its MP strong link with payment systems
- CB’s lender of last resort’s function
- CB’s ability to act in emergencies and prompt government support for its actions

- The CB does not disclose publicly its implementation strategies to achieve its objectives
- The CB in exercising its oversight role does not have the ability to carry out this function effectively, especially in terms of human and financial resources
- Insufficient cooperation with other relevant authorities

Why the CB should be primary overseer

Typical implementation issues
Cooperation with other relevant authorities
Global Payment Systems Survey 2010

- There is no significant cooperation
- Cooperation occurs mostly in an informal/ad-hoc basis
- Cooperation is ensured through a formal mechanism, such as a MOU or is required by law
- Cooperation involves mostly regular meetings and exchange of opinions and views
- Cooperation also involves regular information exchanges, prior notice of regulatory action, joint inspection
Central bank empowerment to oversee PSSS
Global Payment Systems Survey 2010

The payment system oversight function been established
There is a specific unit at the CB
The payment system oversight function is segregated from operational tasks

Survey 2010
Survey 2008
Objectives of PS oversight function
Global Payment Systems Survey 2010

- Higher level of competitiveness, consumer protection, etc.
- Safety and efficiency of relevant PS
- CB has set down its objectives in a regulation/policy document
### Competition and cost

**Involvement of the central bank in the pricing and oversight of payment services**

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<thead>
<tr>
<th></th>
<th>No involvement</th>
<th>Limited to collection of information</th>
<th>Limited to voicing opinions</th>
<th>Actively regulate</th>
<th>Other</th>
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<tbody>
<tr>
<td>Central Banks</td>
<td>#   %</td>
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<tr>
<td><strong>Retail Payments</strong></td>
<td>44  35%</td>
<td>32  26%</td>
<td>19  15%</td>
<td>19  15%</td>
<td>11  9%</td>
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<tr>
<td><strong>Large Value Payments</strong></td>
<td>24  19%</td>
<td>18  15%</td>
<td>11  9%</td>
<td>58  47%</td>
<td>11  9%</td>
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<tr>
<td><strong>Remittances</strong></td>
<td>55  44%</td>
<td>29  23%</td>
<td>7   6%</td>
<td>7   6%</td>
<td>5   4%</td>
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So, a lot of work is ahead of us if we want our vision to come true.
Thank you

Payment Systems Development Group
The World Bank

www.worldbank.org/paymentsystems