



BANK FOR INTERNATIONAL SETTLEMENTS

# Overview of Payment System Oversight

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\* Views expressed are those of the author and not necessarily the views of the BIS



- What is oversight
- The need for oversight
- Central bank responsibilities
- Oversight vs banking supervision
- Oversight objectives
- Oversight standards
- Oversight tools and activities
- Institutional framework for effective oversight function



# What is oversight?

- "Oversight of payment and settlement systems is a central bank function whereby: the objectives of safety and efficiency are promoted by monitoring existing and planned systems, assessing them against these objectives and, where necessary, inducing change"

*Central Bank oversight of payment and settlement systems,  
CPSS, May 2005*

- The focus is on systems

## Overseeing payment systems aims to ensuring that :

- Payment system infrastructures operate smoothly and efficiently for all participants and users
- The risk of a systemic shock transmission is minimised and controlled
- Users have confidence in money and its use
- Payment systems (both wholesale and retail) meet the payment needs of a growing economy and follow technological developments
- Payment systems are aligned with international standards

# The need for oversight

- Growing importance of payment systems (huge amounts processed through payment, FX and securities settlement systems driven by technological development and liberalisation of markets)
- PS failure could trigger systemic risk or loss of confidence in money
- Oversight is needed to mitigate market failure
  - Negative externalities that cause systemic risk
  - Network effects/coordination problems
  - Monopoly

## However:

- Moral hazard
- Financial costs
- Regulatory misjudgement

# The importance of payment and settlement systems

## **Promote economic development**

- Payment systems reduce the costs of exchanging goods and services in a market economy, and is indispensable for the functioning of the money and capital markets

## **Support financial stability**

- Payment systems: (i) reduce systemic and settlement risks through RTGS technology, PvP (eg forex), and DvP (eg securities); (ii) act as firewall to prevent contagion of losses (systemic risk); (iii) facilitate proper liquidity management

## **Foster financial inclusion**

- Payment systems provide for an entry point and a platform for broader financial services. Effective and contestable payment markets enhance the quality and cost-efficiency of all types of payments, including migrant remittances

# Oversight is generally recognised as a core responsibility of central banks

- Growing public policy concern with financial stability
- Central bank responsibilities to maintain confidence in money and support financial stability
- Concept of oversight has become more distinct and formal in past 15 years
- CBs have sought to pursue public policy safety and efficiency objectives by overseeing system operators and providers of payment services
- Oversight function has been formalised

# Oversight is one of the many central bank roles in payment systems

- Operator – typically central banks operate RTGS system; often also retail payment systems and SSS / CSDs for government securities
- Settlement agent – provides settlement accounts
- Regulator – issues regulations and licenses PSPs
- Facilitator/catalyst – promotes, supports and coordinates efforts of the private sector (banks and non-bank PSPs)
- Overseer

# Oversight vs banking supervision

## Supervision

- Supervision of financial institutions individually to ensure their financial soundness.
- Supervised institutions are usually participants in payment systems

## Oversight

- Focus on the safety, efficiency and reliability of a system as a whole, as opposed to the stability or efficiency of individual participants or the financial markets that the systems serve
- Takes into account interdependencies
- Regulations and system rules are binding individual participant behaviour

# Main Objectives of Oversight

- Ensure the safety of the systems:
  - Containment of financial and non-financial risks
  - Reliability, security, continuity of operation, resilience
- Contribute to financial stability
- Maintain public confidence in the currency
- Contribute to the smooth implementation of the monetary policy
- Ensure systems' efficiency – an efficient payment system:
  - meets the needs of the economy and economic agents
  - reduces the cost of exchanging goods, services, and assets; and might reduce liquidity needs of participants
  - provides its users with speedy, affordable and easy to access services

## Other Objectives of Oversight

- Promote competition and ensure level playing field
- Meet users' expectations of payment service quality
- Ensure consumer protection: protection of user rights – safeguard of user funds, data integrity and privacy, information disclosure and transparency
- Ensure security against fraud, money laundering, etc
- Promote financial inclusion

# Scope of Oversight

## Systemically important FMIs

- Large-value PS
- Systemically important retail PS (ACH in some countries)
- SSSs, CSDs, CCPs, TRs

## Other payment systems

- Retail payment systems (ACH, card switch)
- Cross-border payments (international remittances)
- Correspondent banking arrangements (eg FX settlement)

## PSPs

- Non-banks
- Critical infrastructure providers (eg SWIFT)

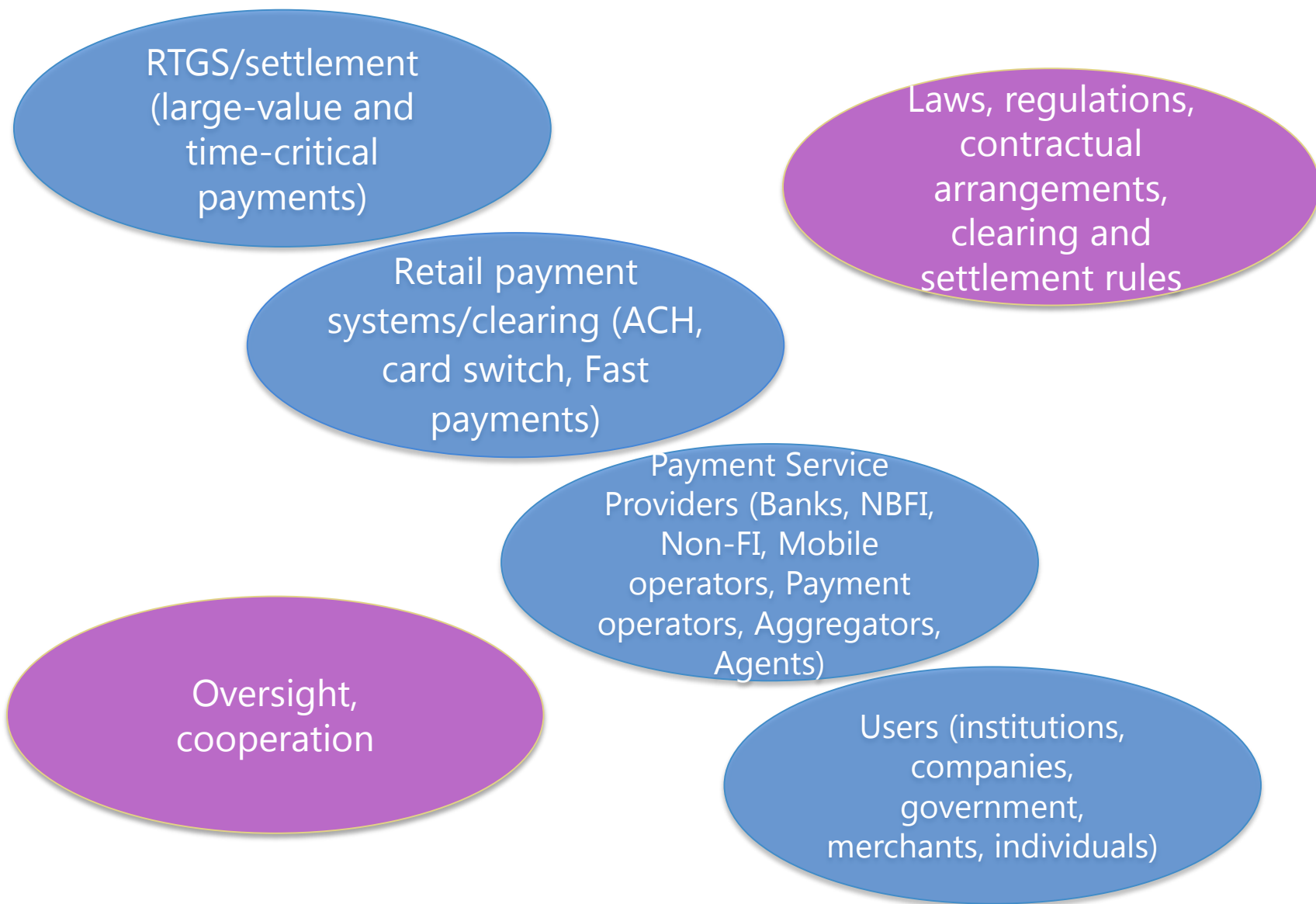
## Payment Instruments

- Electronic credit transfers, direct debits
- Payment cards, cheques
- E-money

# Broadening the scope of Oversight

- From a “system” in a narrow sense to oversight of the complex set of payment infrastructures and participants, clearing and settlement arrangements, payment instruments and payment services. Often refers to oversight of the National Payment System
- New critical infrastructures and networks
- New and complex links between systems
- Innovative instruments, channels and schemes
- New providers of payment services (banks/non-banks/non-bank financial institutions, third-party providers of payment related services)
- Post trading infrastructure for securities transactions
- Evolving responsibilities of central banks regarding payment and settlement systems

# National Payment System



## E-money instruments

Pre-paid cards: a stored value card where the value is recorded in a chip on the card

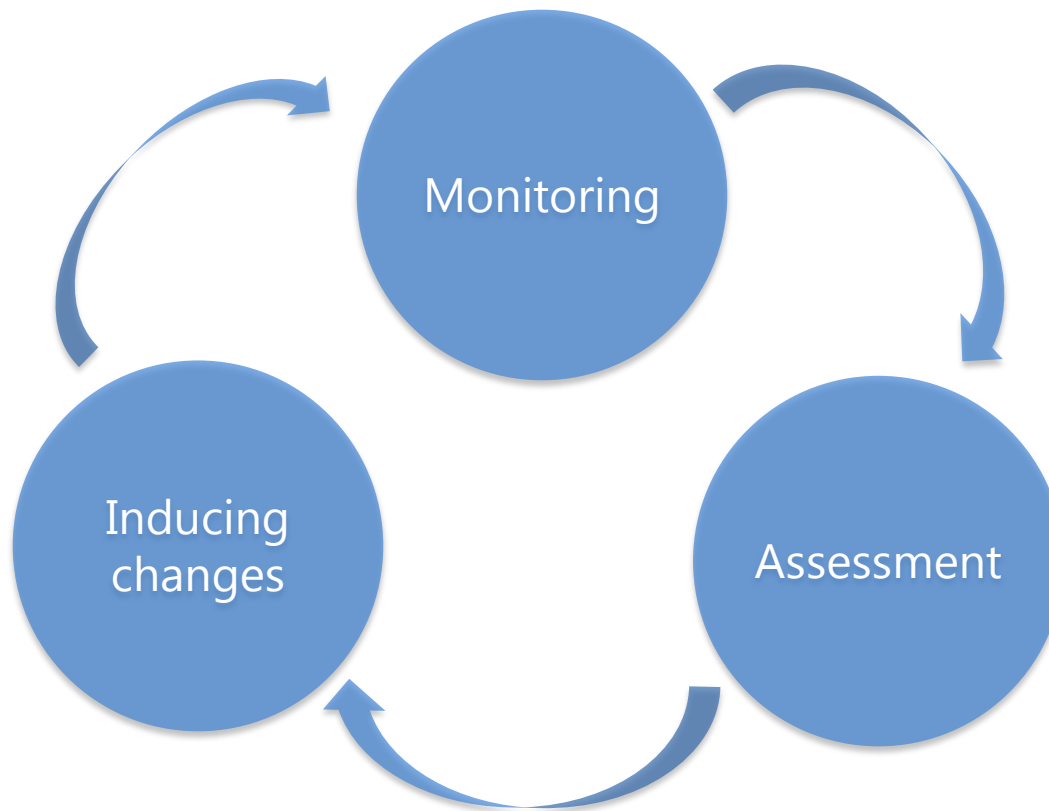
Internet money: the record of funds is stored on a central computer system (example: PayPal)

Mobile money: the record of funds is stored on the mobile phone or a central computer system (example: mPesa, Easypaisa)

Different from Payment channels:

- Internet banking and mobile banking: computer or a phone is used only to access a traditional bank account

## Oversight activities



# Monitoring

- Collecting Information on:
  - System rules, services, organisation, governance, risk management
  - System participants: credit exposures, liquidity usage, indirect participants
  - Statistics on performance and incidents
- Sources of information: system operator (reporting requirements, off-site and on-site inspection), PSP, participants, auditors, public
- Automation of statistics collection and database
- Power to obtain information and to conduct on-site inspections
- Monitoring of developments; research and analysis

# Assessment

- Define scope and tools for oversight assessments
- Define criteria for designation of a system
- Define applicable standards for designated systems and instruments
- Define assessment schedule (regularity) and schedule for inspections
- Regular assessments; after any material changes in system rules and organisation; after major incidents
- Analyses of risks and efficiency: assess whether system rules and arrangements meet relevant policies and standards
- Require self-assessment by the system operator

# International Standards and Good Practices

| Area                                                         | Document                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Systemically Important Payment and Settlement Systems</b> | CPPS-IOSCO Principles for Financial Market Infrastructures (PFMIs), 2012<br>CPSS-IOSCO Assessment Methodology and Disclosure Framework, 2012<br>CPMI-IOSCO: Recovery of Financial Market Infrastructures, 2014<br>CPMI-IOSCO: Principles for FMIs: Assessment Methodology for the Oversight Expectations Applicable to Critical Service Providers, 2014 |
| <b>FX settlement risk</b>                                    | CPSS: Settlement risk in FX transactions + Progress Reports (1998 and 2008)                                                                                                                                                                                                                                                                             |
| <b>Securities settlement systems</b>                         | CPPS-IOSCO Principles for Financial Market Infrastructures (FMIs), 2012<br>CPSS-IOSCO Assessment Methodology and Disclosure Framework, 2012<br>CPMI-IOSCO: Recovery of Financial Market Infrastructures, 2014                                                                                                                                           |
| <b>Payment system oversight</b>                              | CPSS: Central Bank Oversight of Payment and Settlement Systems, 2005<br>CPPS-IOSCO Principles for Financial Market Infrastructures (PFMIs): Responsibilities of Authorities<br>CPSS-IOSCO Assessment Methodology and Disclosure Framework, 2012<br>World Bank Oversight Handbook                                                                        |
| <b>Retail Payments</b>                                       | CPSS: Policy Issues for Central Banks in Retail Payments<br>World Bank Developing a Comprehensive National Retail Payments Strategy (2012)<br>World Bank General Guidelines for the Development of Government Payment Programs (2012)<br>CPMI-WB report on Payment Aspects of Financial Inclusion (PAFI report), 2016                                   |
| <b>International Remittances</b>                             | CPSS-WB General Principles for International Remittance Services, 2007                                                                                                                                                                                                                                                                                  |
| <b>Other issues</b>                                          | CPSS: General Guidance for National Payment System Development, 2006<br>CPMI: Digital currencies, 2015<br>CPMI-IOSCO: Guidance on Cyber Resilience in FMIs, 2016                                                                                                                                                                                        |

# Inducing change

- Moral suasion
- Issuing orders, recommendations, regulations
- Issuing public statements (for example, for cryptocurrencies)
- Participation in the systems (settlement agent, participant, liquidity provider, member of the Board)
- Imposing sanctions/penalties to operators, PSPs, issuers of payment instruments, suspension and revocation of a license

# Powers to induce change

- Trend to have clear statutory power to induce change in systems and arrangements
- Statutory powers include:
  - Granting a licence/permission to operate a system, issue payment instruments or provide payment services
  - Approval of rules and procedures, including approval of any changes
  - Temporary suspension and revocation of licence/permission
- Enforcement powers, sanctions

## Other oversight activities

- Preparing internal analytical reports for the Board
- Public reports (Annual oversight report) and statistics
- Crisis management: disruptions in payment systems or external events, which could have systemic implications (systemic risk)
  - Role of the oversight function in prevention and minimizing effects (costs) of crisis events
  - Timely communication and exchange of information between overseer and overseen systems
  - Regular testing of crisis management procedures with systems and other authorities
  - Post-incident phase: analyses, assessment, inducing changes

# Standards for effective oversight

- Role of the G10 central banks in advancing policies (the 'Lamfalussy Report')
- CPSS report on Central Bank Oversight of Payment and Settlement Systems, 2005
- CPSS-IOSCO Principles for Financial Market Infrastructures (PFMIs), 2012: Responsibilities of Authorities
- CPSS-IOSCO Assessment Methodology and Disclosure Framework, 2012: Responsibilities of Authorities
- Involvement of IMF and WB)

# Organisation of the oversight function

## Organisational separation

- Separation of oversight function from the operation of systems and
- Clear reporting lines to avoid potential conflict of interest

## Internal Cooperation and Coordination

- Internal documentation
- Exchange of expertise and information with other central bank departments (legal, IT, market operations, internal audit, ...)

## Human resources

- Staff with appropriate skills and expertise is key
- Clear responsibilities
- Legal/IT skills: centralised or spread across departments?
- on-going training: domestic and international experience

## Cooperation with other regulators

- Banking supervisors
- Securities market regulators

# General Principles for Effective Oversight, CPSS 2005

A. Central banks should set out publicly their oversight policies, including the policy requirements or standards for systems and the criteria for determining which systems these apply to

B. Central banks should adopt, where relevant, internationally recognised standards for payment and settlement systems

C. Central banks should have the powers and capacity to carry out their oversight responsibilities effectively

D. Oversight standards should be applied consistently to comparable payment and settlement systems, including systems operated by the central bank

E. Central banks, in promoting the safety and efficiency of payment and settlement systems, should cooperate with other relevant central banks and authorities

# Principles for International Cooperative Oversight, CPSS 2005

1. Each central bank that has identified the actual or proposed operation of a cross-border or multicurrency payment or settlement system should inform other central banks that may have an interest in the prudent design and management of the system
2. Cross-border and multicurrency payment and settlement systems should be subject to oversight by a central bank which accepts primary responsibility for such oversight, and there should be a presumption that the central bank where the system is located will have this primary responsibility
3. In its oversight of a system, the authority with primary responsibility should periodically assess the design and operation of the system as a whole. In doing so it should consult with other relevant authorities
4. The determination of the adequacy of a system's settlement and failure-to-settle procedures in a currency should be the joint responsibility of the central bank of issue and the authority with primary responsibility for oversight of the system
5. In the absence of confidence in the soundness of the design or management of any crossborder or multicurrency payment or settlement system, a central bank should, if necessary, discourage use of the system or the provision of services to the system, for example by identifying these activities as unsafe and unsound practices

## PFMIs: Responsibilities for Authorities

|                                                                                                  |                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Responsibility A:<br/>Regulation, supervision,<br/>and oversight of FMIs</b>                  | FMIs should be subject to appropriate and effective regulation, supervision, and oversight by a central bank, market regulator, or other relevant authority                                              |
| <b>Responsibility B:<br/>Regulatory, supervisory,<br/>and oversight powers and<br/>resources</b> | Central banks, market regulators, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating, supervising, and overseeing FMIs    |
| <b>Responsibility C:<br/>Disclosure of policies with<br/>respect to FMIs</b>                     | Central banks, market regulators, and other relevant authorities should clearly define and disclose their regulatory, supervisory, and oversight policies with respect to FMIs                           |
| <b>Responsibility D:<br/>Application of the<br/>principles for FMIs</b>                          | Central banks, market regulators, and other relevant authorities should adopt the CPSS-IOSCO Principles for financial market infrastructures and apply them consistently                                 |
| <b>Responsibility E:<br/>Cooperation with other<br/>authorities</b>                              | Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs |

# What is new in PFMI's responsibilities for overseers

- For the first time, all aspects relevant for all types of authorities and all types of FMIs are comprehensively covered in a single document
- Formal commitment by authorities to adopt and apply the PFMI's
- Commitment to consistent application of PFMI's (need for implementation monitoring)
- Commitment towards equal treatment of central-bank FMIs and private-sector FMIs
- Guidance on choice of framework for regulation, supervision, and oversight (legislation, statutory framework versus less formal arrangements)

## What is new in PFMI's responsibilities for overseers (cont.)

- Greater emphasis on the need for public disclosure of policies and the importance of consultations to this end
- Authorities are explicitly expected to promote both safety and efficiency of FMIs
- Much greater emphasis and detail on cooperation, while recognising the need for some flexibility
- Specific reference to the role of the central bank of issue

# Oversight of Retail Payments

- Policy objectives: efficiency of payment systems; maintaining public confidence in money
- Broad scope: retail payment systems, payment instruments, innovative payment instruments (e-money), payment channels, international remittance services
- New types of providers of payment services (payment services typically not regulated): non-banks, telecom operators, third-party processors, agents
- Technological developments (eg internet) pose new challenges: legal, cross-border, KYC, etc

# Cooperative arrangements for oversight

- At domestic and international level
- Need for effective and flexible cooperation, under any circumstances: (i) in normal times, (ii) in crisis situation, (iii) for recovery and resolution
- Variety of forms of cooperation to be tailored to the specific case and circumstances (Memorandum of Understanding (MoU) with securities regulators, banking supervisors)
- Co-operative arrangements in no way prejudice an authority's legal or statutory powers
- Cooperation not to dilute responsibilities: at least one authority should assess periodically the FMIs against the PFMIs

# Thank you

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