*Principles of Financial Market Infrastructure & Innovations in Retail Payment Systems: Some Perspectives**

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It is a pleasure to be here in New Delhi to inaugurate this International Seminar on Principles of Financial Market Infrastructure (PFMI) and Innovations in Retail Payment Systems in the midst of the guest speakers and distinguished participants from around the world. The spring season in New Delhi is very pleasant and its beauty is all pervasive. I am sure the participants will enjoy the beauty of New Delhi and there would be a lot of takeaways from the seminar. I understand that after completion of the seminar the participants will have an opportunity to see the splendour of Taj Mahal, a world heritage monument, known for its grandeur and magnificence. It touches the hearts of millions of tourists every year to remind them the power of love. Like Taj Mahal, the Payment Systems with its many innovations have charmed billions of population across the globe through its products, services, efficiency and convenience. It has assumed such a criticality that it has become necessary to regulate it with utmost care and diligence as any slippage could lead to instability in the financial sector. The payment systems of the country touches millions every day through different delivery channels, instruments and institutions. In India too, we have created such a mega Payment System infrastructure that is expected to cater to 1.2 billion people. As you all are aware, the development of Payment Systems in a country, both Large Value and Retail, depends upon its banking and financial structure and vision of regulators to modulate the developments. However, while framing policies for orderly development of the Payment Systems, regulators do face newer challenges every day.

Challenges in Large Value Payment Systems

2. Recent crisis has once again emphasised the need for an efficient and secure financial structure. Large-Value Payment Systems that contribute significantly to financial stability is one of the critical components. Various initiatives of the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organisation of Securities Commissions (IOSCO) have been the offshoots of the increasing risk and uncertainty in the financial markets, particularly visible during the recent financial crisis. Financial Market Infrastructures (FMIs) have stood the test of time by settling obligations whenever they were due and provided market participants enormous confidence to transact business without the risk of defaults and failures during periods of uncertainty and volatility. Nevertheless, the need for sound risk management and governance with focus on areas like liquidity and credit risks has been realised by all the stakeholders and this has acted as the driving force behind the initiatives to review the existing standards as a part of crisis proofing exercise. Principles for Financial Market Infrastructure (PFMI) are part of such initiatives. PFMI is meant for the Financial Market Infrastructure (FMIs) like Systemically Important Payment Systems (SIPS), Central Securities Depositories (CSDs), Securities Settlement Systems (SSSs), Central Counter Parties (CCPs) and Trade Repositories (TRs) (newly included) which facilitate the recording, checking and settlement of financial transactions. The CPSS and IOSCO have published new PFMI replacing their previous principles and standards *viz.,* (i) Core Principles for Systemically Important Payment Systems (CPSIPS) (2001), (ii) Recommendations for Securities Settlement Systems (RSSS) (2001) and (iii) Recommendations for Central Counterparties (RCCP) (2004).

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3. These 24 principles (PFMI/2011) which have come in place of the existing standards include new features like (i) default handling of clearing participants; (ii) addressing of operational risk; (iii) principles on segregation and portability; (iv) tired participation and (v) handling of business risk. The new principles in essence reflect the learnings from the recent financial crisis. Alongwith these principles five responsibilities have been assigned to the regulators. They are :

i. FMIs should be subject to appropriate regulation, supervision and oversight by the central bank, market regulator or other relevant authority;

ii. These authorities should have the powers and resources to carry out their responsibilities in regulating, supervising and overseeing FMIs;

iii. Authorities should clearly define and disclose their regulations, supervisory & oversight policies with respect to FMIs;

iv. Authorities should adopt the relevant internationally accepted principles for FMIs and apply them consistently; and

v. Authorities should cooperate with each other, both domestically and internationally in promoting the safety and efficiency of FMIs.

As we observe, the focus of the new principles alongwith the above responsibilities is to improve efficiency and safety by limiting systemic risk and enhancing transparency and stability in the financial system

Assessment Methodology and Disclosure Framework under PFMI

4. CPSS and IOSCO have also published the assessment methodology for the PFMIs and the disclosure framework for FMIs. The objective of the assessment methodology is to provide a framework for assessing an FMI's observance of each of the 24 principles and the relevant authorities' observance of each of the five responsibilities. The assessment methodology is, therefore, a tool to promote the implementation and ongoing observance of the principles and responsibilities and to help ensure objectivity and comparability across all relevant jurisdictions. The assessment methodology is primarily intended for external assessors at the international level and in particular, international financial institutions, such as, the World Bank and International Monetary Fund {*e.g.*, assessment under Financial Stability Assessment Programme (FSAP)}. It also provides a baseline for national authorities to assess FMIs under their oversight/supervision. National authorities should use the assessment methodology in its current format or develop an equally effective methodology for their national oversight/supervision processes.

5. The disclosure framework requires an FMI to publicly disclose sufficient information to participants and prospective participants so that they can understand the design and operations of the system, their rights and obligations, cost and risks from participating in the system. Information that should be publicly disclosed extends beyond all relevant rules and key procedures and includes other explanatory material to help promote a better understanding of operations of the FMI and their impact on participants and the market it serves. The disclosure framework thus aims at enhancing the transparency in operations & risk management systems and, in the process, facilitate comparison across FMIs in different jurisdictions.

6. Implementing 24 principles and five responsibilities in their true spirit is a challenge before the FMIs and the regulators in terms of enabling legal provisions, availability of infrastructure, management of risks, cost for putting in place default handling mechanism and effective system of oversight of FMIs. All these responsibilities require resources, both financial and human, in the central banks, FMIs and other regulators. This Seminar is part of the initiatives of the Reserve Bank for capacity building in this critical area.

Challenges in Retail Payment Systems

7. The Retail Payment Systems today is dominated by continuous innovations aided by breakthroughs in technology. It has brought immense benefits in terms of new products and delivery channels and at the same time, they have engendered concerns for the regulators across the globe. Such innovations in the retail payment landscape have thrown challenges to regulators in the following key areas:

i. Increased use of technologies like internet and mobile phones have resulted in innovative yet complex products and processes;

ii. The lines of demarcation between products are getting blurred as multiple access channels and devices are being increasingly used interchangeably (*e.g.*, both mobile banking and internet payments through smart phones);

iii. The entry of non-bank players into payment space has increased responsibilities of the regulators for continuous monitoring of their activities as they may pose threat to the payment systems in terms of cost and assurance to the consumers;

iv. The pricing related issue of payment services offered by non-banks has become a major concern;

v. The security issues often threaten the confidence of users of the technology dominated retail payment system products;

vi. In the context of efforts being made for financial inclusion, trade-off between expanding the reach of financial services to unbanked and the sustainability of the business model has become a challenge;

vii. Although, the recent financial crisis did not show any strong evidence of correlation between payment systems and financial stability, going forward payment systems, both large value and retail could be the source of instability when the financial transactions moves largely to electronic mode that gives rise to several operational & financial risks; and

viii. As often innovations are technology driven and developments in retail payment system have been rapid, the expertise and competence of staff of central banks and others engaged in regulation and oversight has become a major issue that needs to be addressed effectively.

8. These challenges, therefore, need innovative solutions. However, taking the capacity of the regulators to encourage or inhibit the innovations, it is important to create policy environment that meets the expectation of the consumers for a safe and sound payment systems and encourages participants of the payment system to sustain their business interest.

Reference of PFMI for the Retail payment Systems: 7'S Framework

9. It is appropriate to ask the question whether and how the 24 new Principles for Financial Market Infrastructure would be relevant for the Retail Payment Systems. Although at the current juncture Retail Payment System may not threaten the financial stability, the segment requires greater monitoring and oversight to keep the public confidence in the system. Any breach of trust will prove disastrous for the payment systems leading to macroeconomic concerns, particularly in emerging countries like India where several initiatives have been taken or are on the anvil to further financial inclusion by leveraging developments in retail payment system. One could possibly suggest a 'PFMI Light' framework that could strike a balance between the need for a safe and sound retail payment system & the requirements of accessible and affordable financial services for the unbanked/under-banked population. Here I would like to briefly flag the following seven issues in the form of what could be called as 7'S Framework. The components of the 7' S Framework are: **S**tructure, **S**afety, **S**uitability, **S**tandards, **S**ettlements, **S**ustainability and **S**trategy.

Structure

10. The Retail Payment System plays an important role in the economy although the total amount of settlement is less than that of Large Value Payment System. The retail payment differs from Large Value Payments as it has to be accessible and affordable by a common man. There is a need to create payment system infrastructure that provide users the experience of the cash payment or near-cash payments to wean them away from cash usage. This would require a lot of investment in Research & Developments and understanding the need of the stakeholders to design the Retail Payment Systems. The trust in the Retail Payment System would increase once the Retail Payment Service providers are authorised by the regulators having legal backing to lay down rules and regulations (Principle 1 of the PFMI). Governance plays a key role in setting up credible and robust retail payment systems that supports stability of the broader financial system and works in public interest (Principle 2 of the PFMI). Like many countries, the Payment & Settlement Systems Act, 2007 provides statutory power to the Reserve Bank of India to regulate and supervise the payment system entities. This has helped the Reserve Bank to promote an orderly payment system structure in the country.

Safety

11. Safety and soundness of the Retail Payment Systems is of prime importance. Safety boosts confidence in the system. One of the basic principles of safety is identifying the risks and responsibilities of various stakeholders and managing it effectively (Principle 3 of the PFMI). Risks like credit (Principle 4 of the PFMI), collateral (Principle 5 of the PFMI), margin (Principle 6), liquidity (Principle 7), operational (Principle 17) and business risks (Principle 15 of the PFMI) remain as major challenges before the system participants and system operators of the Retail Payment Systems. As a regulator, we are required to create a framework that enables all the stakeholders to design and provide Retail Payment Systems so as to address these risks, particularly in the context of introduction of newer technologies and complex products. The continuous assessment of various risks should be carried out using on-line/off-line methods and market intelligence to avoid any serious setback to the payment systems. The soundness of Retail Payment System remains the critical element of the regulatory framework and supervisory policies of central banks and regulators. It is the responsibility of the regulators to ensure that the policies are aligned with the country's economy and its emerging needs without sacrificing the sound principles of safe payment system. Another aspect of safety would be the availability of robust Business Continuity Plan (BCP) and Disaster Recovery (DR) framework so that critical payment systems remain robust and are able to handle disruptions in efficient manner.

Suitability

12. Although the urge for replicating the successful payment systems of other countries in one's own country is very high, it is necessary to customise the processes and products as per the suitability to the country keeping in view particularly the socio-economic and cultural distinctiveness and the regulatory and institutional aspects Regulators need to assess effectiveness of different payment products in their jurisdictions by the authorised entities to ensure that they suit the needs of the common people, the complexities are understood by them and they have inbuilt provision for consumer protection (Principles 21 and 23 of the PFMI). There should be an institutional mechanism to assess and certify the retail payment products that matches minimum laid down norms by the regulators. Regulators also need to keep a check on proliferation of products and systems which are difficult to monitor. The suitability may be assessed from the point of view of the SMART principles, *i.e.*, **S**implicity, **M**anageability, **A**cceptability, **R**isk controls and **T**ransparency.

Standards

13. It is very important to create standards and principles that create a level playing field for the system participants, system providers and consumers.

Standards like PFMI, Basel III and ISO help in creating best practices that act as benchmarks for the players and the industry. Standards also reduce discretionary powers leading to fewer disputes and chances of favouritism. While setting standards, we need to be sensitive to the practicality of their implementation. Setting higher standards that are not achievable by the stake holders will remain on paper. Further, standards need to be flexible to cater changing needs and should not act as barriers for the entry of new payment system players. Standards should take into account cost of compliance as that is ultimately passed on to consumers. One example is policy of regulators on default handling and guarantee mechanism (Principle 13 of the PFMI) applicable for retail payment systems that has cost implications for system participants. It is, therefore, necessary to take a practical view on such cases to prescribe the rules that are implementable and cost-effective taking into account the risks involved in retail payment systems. Further, there should be standard setting bodies that can continuously benchmark the products, systems and services for continuous improvements. Regulators need to play an active role in encouraging entities to put in place various standards and leveraging them for business growth and risk management. There is also strong case for uniform security standards across the jurisdictions for minimising frauds in electronic banking. A case in point is frauds relating to misuse of international credit cards due to the absence of the requirement of second factor authentication for all the Card Not Present (CNP) transactions.

Settlements

14. As the retail payment being dominated by the deferred net settlement processes, there is a need for a guaranteed retail payment & settlement systems that will give comfort and assurance to all the stakeholders. In describing the settlement characteristics of net settlement systems, the concept of certainty of settlement is sometimes used. This concept refers to the certainty that the system will be able to effect final settlement when the netting cycle and the associated settlement procedures have been completed. Certainty of settlement relates to a multilateral netting system's ability to ensure the timely completion of daily settlements in the event of inability to settle by a participant with the largest single net debit position or failure of more than one participant. The PFMI also emphasises on settlement risk. Principle 8 of the PFMI which talks about settlement finality addresses the fundamental issue of the finality of transactions processed by an FMI. This principle is equally applicable for the Retail Payment Systems as also Principle 9 of the PFMI which encourages settlements using central bank money and where a commercial bank is used for settlement there has to be strict control credit and liquidity risks.

Sustainability

15. The sustainability depends a lot on efficiency and effectiveness (Principles 21 & 22 of the PFMI) of the system that meets the goals and objectives laid down by the payment system participants. Efficiency can be measured on three parameters, *i.e.*, Cost, Time and Assurance. Cost effective does not necessarily mean providing services at lower cost to consumers; it has to be cost effective for the system and the service providers too. It has always been a debate who should set the price, *i.e.*, regulators or market. Although it sounds good to leave the cost aspect to markets, it is not always true, particularly in developing countries with high rate of financial illiteracy and where payment systems are still evolving. In the Indian context, it is the regulator that often takes various initiatives to develop the payment systems and sometime even the products. Hence, they, at times, put a cap on the price of services to ensure that consumers use the payment services offered through various delivery channels to the maximum extent. For example recently in India the Reserve Bank has reduced merchant discount rate for use of debit cards to promote card based transactions which have not taken off in a big way although the number of cards issued is significant. Regulators have also to ensure that service providers, particularly non-banks, remain

healthy and robust so that they can deepen the payment system infrastructure. Consumers expect access to the payment systems that provides timely services to them (Principle 18 of the PFMI). Therefore, a balance has to be achieved between timely service and fees charged by the service provider. Technologies and shared infrastructure are to be encouraged to minimise cost and ensure timely services due to economy of scale. The third factor of efficiency is assurance. All the stakeholders should have assurance in using the retail payments system. The retail payment system should have inbuilt capability to protect consumers' interest, particularly in the electronic payment environment. The endeavors should be towards designing fraud proof systems and reliable compensation mechanisms that will boost confidence of all the stakeholders.

Strategy

16. Regulators of retail payment systems should put in place a short, medium and a long term strategy with a transparent manner (Principles 23 & 24 of the PFMI). It helps all the stake holders to prepare themselves in advance without any surprise. The Reserve Bank of India, for example, has to come out with a strategy paper in the form of Payment Systems Vision Document for 2012-15 describing all its plans for the next three years. A major focus area of the Vision Document is Retail Payments. The thrust of the vision is to proactively encourage electronic payment systems for ushering in a less-cash society in India and ensure payment and settlement systems in the country are safe, efficient, interoperable, authorised, accessible, inclusive and compliant with international standards. Reserve Bank of India had consulted all stake holders before finalising the Vision Document so that they are on board during the critical phase of implementation. I am happy to share with you that such a strategy has enabled us to take many initiatives alongwith all the stakeholders. The strategy should include sensitising all stakeholders like bank staff, system providers, service providers and consumers on the risk and responsibilities of using the payment services. Mediums like TV, social media, newspaper, outreach programmes and town hall meetings are best way to achieve the objectives. The school and college students particularly need to be sensitised through their curriculum or through familiarisation programmes as they are the future users of the retail payment systems. Pensioners, housewives and unbanked people are vulnerable groups who need to be treated on a special footing in usage of retail payment products. Reserve Bank of India has, for instance, started an initiative called e-BAAT (Electronic Banking Awareness And Training) for creating awareness on use of different retail electronic payment products for different target groups.

Conclusion

17. To conclude, let me reiterate that implementation of the new PFMI is going to be a big challenge before all of us. There is a need to assess the relevance of PFMIs for the Retail Payment Systems which are characterised by expanding volumes arising out of Person to Person (P 2 P), Government of Person (G 2 P) and e-commerce transactions, continuous innovations and increasing complexities, particularly in the context of technology driven products and processes. Possibly a 'PFMI Light' approach for the Retail Payment Systems could be appropriate keeping in view the need for a safe, efficient and robust retail payment systems that would serve the cause of accessible, appropriate and affordable financial services for the consumers, particularly those who have remained financially excluded. I am sure this two day seminar would further enrich our understanding of the Principles of Financial Market Infrastructure and the innovations emerging in the retail payment system space through the presentations of eminent experts and lively interactions among the participants. I am confident the views/suggestions that would emerge from this seminar would in some way help all the stakeholders to promote safe and sound payment systems in our respective jurisdictions. I wish all the participants a pleasant stay in India and wish the seminar all success.

Thank you all for patient hearing.