Payment System: Issues and Challenges*

G. Padmanabhan

Mr. V. P. Iswardas, Managing Director & CEO, Catholic Syrian Bank (CSB), Mr. Nandakumar, President, Thrissur Management Association, Mr. Anantharaman and Mr. Bobby Jose, Board members present here, other office bearers of the Thrissur Management Association, ladies and gentlemen. I deem it a privilege to be invited to speak on this important day in the Bank's history. It is a matter of pride to each one of you that the Bank which had a modest beginning in November, 1920, is completing a commendable 91 years of service and achievement.

I have very fond memories of CSB, as this was the one of the private banks which had a presence in Thiruvananthapuram, which is my home town, as I was growing up. I must say the Bank has grown from strength to strength, imbibing the enterprising spirit inherited from its founding fathers, adapting admirably to the far-reaching social, political and economic changes that have been happening around us. Today it has a client base of more than 15 lakh customers. It established its first contact point with the Reserve Bank in the year 1969, when it got the status of a Scheduled Bank, under the RBI Act. In 1972, it came out of its traditional bastion and opened its first branch in Chembur, Mumbai. The Bank entered the field of international banking in 1975. Currently, I am told the bank has 364 branches spread across 16 states. Of the 364 branches, 242 are in Kerala and of this nearly 80 per cent are in rural and semi urban areas. I am also informed that with the intention of making the right proposition to the right customer at the right time and tailor-made banking products have been designed to cater to the specific banking needs of various sections of the society like Students, Women, Senior Citizens, Farmers, *etc.* A bank which has customer focus, has to continuously endeavour to retain customer confidence in its capabilities and deliveries.

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When I was extended the invitation, I was told that it is customary for the speaker to talk about any financial sector issue of topical interest. I thought it fit to flag certain current and emerging issues in payment systems. It is important to appreciate that it is the effective functioning of robust payment systems that reduced the severity of the impact of the economic crisis and the shocks. I, therefore, wish to raise a few questions that straddle across the various dimensions of the payment systems and offer comments which more than providing answers would hopefully lead to a greater debate among stakeholders.

1. Why so much Ado about an 'Efficient Payment System'? Are Indian Payment Systems Efficient?

The importance of payment and settlement systems could be gauged from the IMF publication 'Central Banking Lessons from the Crisis' (May 27, 2010) which states that:

'The crisis would have been much more severe had central banks not taken efforts to introduce robust payment and settlement systems, including for foreign exchange, over the two decades ahead of the crisis. The systemic impact of failure of a financial institution depends critically on the robustness of the infrastructure underpinning those markets in which it is active. Central banks, which in many cases are engaged in oversight of these systems, should play an important role in this regard, in co-operation with securities regulators and supervisors of individual institutions'.

The central bank interest in payment systems arises on account of critical roles played by an efficient payment system with respect to (i) financial stability; (ii) economic efficiency; (iii) monetary policy transmission; and (iv) fiscal policy implementation.

Financial Stability: Generally, any strains in the financial system are likely to be first reflected in the payments system, with settlements being affected due to liquidity issues faced by one or more of the participants. Due to the interconnected nature of payment systems, such disturbances have the potential to transmit themselves to other financial institutions as well, leading to issues of financial stability.

Let me illustrate this by drawing your attention to the fact that in some countries, the payments system turnover to GDP ratio is more than 100. The significance of this number is that it means that the turnover in the payment system over a period of three days is equal to the GDP (of that particular nation). Therefore, any disturbance in the orderly functioning of the payments and settlement system could disrupt the smooth functioning of the economy, the markets, the financial market infrastructure and the participants themselves.

As flagged earlier, the recent financial crisis demonstrated the importance of payment and settlement systems. The smooth and efficient functioning of the payment and settlement infrastructure enabled the market participants to fulfil their settlement obligations on time, even in the face of the Bear Sterns and Lehman Brothers Holding Inc. (Lehman) episodes, widespread counter-party credit concerns in the latter part of 2008, and the generally strained financial markets over the past two years.

Economic Efficiency: The speed at which transfer of value is effected between economic entities has assumed greater significance over the years as economies grow and the level of economic activity increases leading to the payments system processing and settling a large volume and value of payments. An efficient payment system results in an increased velocity of circulation of money as a result of faster transfer of funds between economic entities. This, in turn, has a positive impact on economic growth as shown by economic theories. Studies by economists indicate that an economy can save 1-3 per cent of its GDP in terms of both private and social costs if it is able to increase the velocity of circulation of money by completely switching to electronic payments. An efficient payments system also reduces the cost of transactions and is crucial for the orderly functioning of inter-bank, money, capital and security markets.

Monetary Policy Transmission: Another significant reason for the importance of payment systems is the role they play in efficiently transmitting monetary policy signals to the markets and economy as a whole. The monetary policy actions of the central bank influence either the quantity of money, (*i.e.,* money supply) or the price of money (*i.e.,* interest rates at the short-end of the curve). Both these measures require a reliable large-value payment system with same-day (preferably real-time as is the norm) settlement. The effectiveness of any monetary policy measure depends to a large extent on the efficacy and soundness of the large-value payment system. Besides, a well-functioning payment system facilitates effective implementation of monetary policy by supporting accurate and precise measurement of liquidity positions of banks and monetary aggregates.

Fiscal Policy Implementation: Developments in payment systems have a bearing on implementation of fiscal policy. The speed and turnover of government cash inflows and outflows are directly impacted by the efficiency of payments systems. Payment system also plays a critical role in lending and borrowing activities of Government.

Now let me turn to the the obvious question, how does our payments system fare in terms of efficiency? Let me start with the Reserve Bank's stated goals towards payments systems which are laid down in the Vision document for payments system 2009-12. These are to ensure that all the payment and settlement systems operating in the country are 'safe, secure, sound, efficient, accessible and authorised'. Efficiency of payment systems is also determined by other factors such as technology adoption, innovation, market structure, and competitive conditions.

The Reserve Bank has taken a number of initiatives to put in place an efficient payment and settlement infrastructure in the country covering both the retail and large-value payments. In the retail arena, the Reserve Bank's pioneering efforts were the implementation of MICR technology (leading to reduction in the cheque clearing cycles to a T+1), implementation of electronic payment systems such as Electronics Fund Transfer (ECS) (which has morphed into local ECS, RECS and NECS) and National Electronics Fund Transfer (NEFT). Speed clearing and Express Cheque Clearing system (ECCS), initiatives at clearing houses have further enhanced the efficiency of the cheque clearing operations in the country. The implementation of Cheque Truncation System (CTS) is a continuation of this effort. CTS has now been implemented in New Delhi and Chennai. Grid-based CTS, when rolled out completely, will centralise the entire cheque clearing in the country in 4-6 grids.

Focus on retail electronic payments has been an ongoing endeavour of the Reserve Bank since the mid-90s. In order to provide near-to-real-time funds transfer facility to retail customers, as also to cater to the stock market timings, 11 batch settlements have been provided under NEFT. The NEFT system operates from 9.00 a.m. to 7.00 p.m. providing hourly settlements on weekdays and 5 settlements on Saturday. These measures have further improved the efficiency of the system. It is one of its kind in the world which provides a positive acknowledgement to the originator regarding credit to the beneficiary customer account. The Real Time Gross Settlement (RTGS) introduced in 2004 now handles around 2 lakh transactions per day. All critical and wholesale financial market settlements now take place in RTGS.

Realising the growing importance of card payments in the country, Reserve Bank has been engaged in enhancing the safety and security of card transactions. After securing all card-not-present transactions through implementation of an additional factor of authentication, the focus is now towards securing card-present transactions. A definite timeframe and roadmap for securing all card-present transaction through technology upgrade, infrastructure upgrade, implementation of EVM (chip and pin cards), *etc.,* has been mandated.

Other important measures relating to efficiency include: (i) the creation of National Financial Switch which have made the ATM network into a national infrastructure, enhancing customer convenience and reach; and (ii) enabling straight-through-processing in electronic payments, credit is now afforded based only on the account number of the beneficiary which has significantly improved the efficiency in operations.

Efficiency, when measured as a technical measure of production, *viz.*, the number of payments that can be processed in an hour holds up very well in the Indian context as evidenced by the increase in volumes of transactions being processed in various payment systems. The efficiency has also increased on account of the banks implementing the core banking solution. This is evident in the case of all payments systems *viz.*, the paper-based (MICR and CTS) system; the retail electronic payment products (NEFT, variants of ECS) and the large-value payments system – RTGS.

2. Should we be Mandating Upper Limits for Paper-based Transactions?

We have already mandated such threshold limits by stipulating that with effect from August 1, 2008 payments above ₹10 lakh by all the Reserve Bank regulated entities in the the Reserve Bank regulated markets have to be routed through electronic payment systems only (vide our circular DPSS No. 2096/ 04.04.007/2007-2008 dated June 20, 2008).

Another area where we have already implemented such a threshold, *albeit* indirectly, was the closure of inter-bank clearing as well as high value clearing which essentially catered to cheque payments above ₹1 lakh. This incentivised the use of electronic modes (RTGS/ NEFT) which were faster and safer, as opposed to the normal cheque clearing process, which takes a relatively longer time.

Present Position of Paper-based Instruments

Based on the data of cheques processed in the four metro cities, out of an average of around 235 lakh cheques processed each month, 8.6 per cent are of the value of ₹1.00 lakh and above. Cheques of over ₹10 lakh in value accounted for 5.9 per cent.

International Scenario

South Africa: The maximum value payable per cheque is currently set at R5000000- (Five million Rand/ ₹3.05Crore). In instances where cheques for higher values are issued, that will be cleared manually between the banks and the beneficiary's accounts, will only be credited on completion of this process.

Canada: Canada has introduced a $25 million ceiling for cheques, bank drafts and other paper-based items to be processed through Canada's clearing system, effective February 3, 2003. The objective of their initiative is to ensure certainty of settlement which enhances the safety and stability of the Canadian payments system, and reduces risks for businesses and other organisations involved in large-value transactions.

Nigeria: Central Bank of Nigeria has set a maximum limit on cheque payment at N10 million with effect from January 1, 2010. Any payment value exceeding N10 million should be made through the e-payment mode such as the Central Bank Inter-Bank Funds Transfer System (CIFTS, *i.e.,* RTGS) and Nigeria Inter-Bank Settlement System Electronic Fund Transfer (NEFT) from that date. The maximum limit serves as a risk reduction measure in the clearing and settlement arrangement in line with international best practice. To support this initiative, deposit money banks are implored to properly educate their customers on the implementation procedure.

Kenya: The limit set for value capping is Kshs 1 million, US$ 35,000, EUR 30,000 and GBP 15,000 and above that will NOT be processed through the Nairobi Automated Clearing House from October 1, 2009. Customers can still write cheques above the limit but his/her bank will take them through a process called collection meaning that payment rests with the paying bank, subject to a maximum period of 21 working days.

Tanzania: With effect from March 1, 2009, cheques with value of above TZS 10 million are not to be accepted for processing in the clearing houses. Payments exceeding the limit shall be processed through the Tanzania Interbank Settlement System (TISS). However, exception was made in the case of Government cheques.

Namibia: Any cheque payment made in excess of N$500,000 are not to be accepted by banking institutions after June 10, 2010.

Will we ever be able to Completely Switch Over to an Electronic Payment Regime?

Doing away with Cash: It would be utopian to assume that we can achieve a cashless India unless we have a well-established infrastructure for acceptance of alternative means of making payments which is accessible, safe and easily operable by each citizen. It is also necessary to remember that in India only 55 per cent of the population has bank accounts and it is hard to imagine a cashless society with the exclusion of a vast population from the formal financial system. Even if we achieve total financial inclusion, we also have to recognise that habits die hard.

At the same time, we are aware of the costs involved in the management of currency and the menace of fake notes, which makes it imperative to take measures to move towards electronic modes of payment at a decent pace. In the last decade and more, the Reserve Bank has introduced various products like the NEFT, ECS, *etc.* which enable secure and cost-effective means of making payments. CBS in banks has enhanced the use of these products which are being increasingly used today. But financial inclusion is key to have a major reduction in the use of cash in our society.

Can Usage of Cheques be Contained?

The electronic products referred to above do offer a very good and efficient alternative to cheques. But use of cheques continues to be predominant in the payment systems even today. Some probable reasons are.

Comfort Factor: Cheques as a mode of payment has been in vogue for a very long time and customers, even the illiterate population, derive a reasonable level of comfort in this arrangement. The same level of comfort is not experienced by a vast majority of bank customers in the electronic mode. As an illustration, it is easy to draw and hand over a cheque to a person as compared to visiting the bank branch to initiate a NEFT transaction. Not everyone has the facility or ability to initiate a money transfer transactions through net banking.

Cheques offer a means to make post-dated payments which is of significance to the parties in certain transactions. Though ECS/NECS are effectively payment instructions to be executed at a future date, these products are intended for repetitive payments. Presently, the electronic payments in the country, do not provide the facility of post-dated payment – there could be exceptions though in the form of standing instructions. Perhaps it is time to consider the feasibility of developing an e-cheque system.

Cost Factor: A major factor which may go against the principle of empowering the customer (to move away from cash) would be the charges (*ad-valorem*) which are applicable for electronic payments, whereas cheque payments normally do not entail any charges for the customers. Introduction of charges for cheque-based transactions on the lines for electronic payments may be an alternative but difficult to justify.

Efficiency of the Payment System may not always be a Factor: While electronic mode of payment is efficient, how many of us really care whether a credit, at least the relatively smaller amounts, reaches us in one hour or one day? Even when we receive a cheque payment, not all of us are particular in depositing the same with the bank.

Is it the right time to reduce the threshold for cheques? How should this be implemented?

Today, payments in excess of ₹10.00 lakh by the Reserve Bank regulated entities are expected to be made only through electronic mode. As banking is well-developed in the metro cities, we need to consider restricting use of cheques of the value of ₹1.00 lakh in the local clearing at these centres. However, this measure has to be applied uniformly to all participants, including Government departments.

3. Are Payments Systems operated by Non-bank entities a Necessary reality for Achieving Financial Inclusion in India?

What is Financial Inclusion?

In our view Financial Inclusion (FI) is the process of ensuring access to appropriate financial products and services needed by all sections of the society, in general, and vulnerable groups such as weaker sections and low income groups, in particular, at an affordable cost in a fair and transparent manner by regulated mainstream institutional players.

Seen in the above context, non-bank entities may not be able to offer a range of financial products. In particular, they cannot offer basic banking services, which are important from the point of view of financial inclusion. However, non-banks have the potential to play an important role in the FI process in India though not necessarily as payments system operators but as participants in the system.

Why has India opted for a bank-led model for mobile payments?

It is incorrect to say that non-banks have not been allowed entry into the mobile payments space in India. The 17 non-banks authorised to issue prepaid payment instruments include a mobile phone company, an Mobile Service Providers (MSP) and a few others who issue semi-closed prepaid mobile wallets. The Reserve Bank has opted for a bank-led model of mobile banking. This was a conscious decision taken by the RBI and endorsed by a high-level Inter-Ministerial Group constituted by the Government of India last year. The MSP-led model is perhaps working fine in Kenya and Philippines. We also understand that this model is being adopted in certain other countries like Maldives. However, each country has its own needs, concerns and constraints and India's decision to opt for an exclusive bank-led model of mobile banking is based on the following:

1. The mobile banking services provided by Telcos in Kenya, South Africa, Philippines are e-money products. The e-money rules of these countries permit, cash withdrawal/deposit and funds transfer from e-money products and these are not treated as deposit products. No interest is payable on the amounts held in these accounts. The equivalent in India would be the 'open system prepaid payment instruments', which is akin to acceptance of demand deposit, and non-banks are not permitted to accept deposits for maturity less than one year.
2. M-PESA in Kenya provides remittance services The success of the system can be attributed to the absence of competition. The presence of a single dominant operator and the absence of a cost-effective remittance channel have facilitated the fast adoption of this product in Kenya. However, the situation in India is different with the presence of nearly 8-10 key players in this space with the competition playing a key role. Facilitating a model like M-PESA in India would require the setting up of a clearing and settlement arrangement for such non-bank operators. Such clearing and

settlement arrangements could have systemic implications.

3. Certain customer service issues (*viz.* non-availability of funds at the paying outlet, non-delivery/delayed delivery of messages) are associated with the MSP models. Any model of mobile banking in India should *ab initio* address customer service and customer protection issues to enhance the confidence level of customers and ensure sustained credibility of the model.

4. Last but not the least, money laundering is a matter of concern in India. Person-to-person remittance is a high risk activity from the point of view of money laundering, and the safety and security of the transactions. The customer identification processes followed in case of prepaid customers are lax as the MSPs consider this as low risk from their financial stand-point. Given the large number of such cards being issued and the number of outlets through which they are issued, it is difficult to contain the risk of anonymity in a MSP-led model unless the system is strengthened effectively. Although this process has commenced, it has some distance to go to be deemed as robust.

5. As regards the problems of the migrant population, we have recently permitted domestic money transfer with the requirement of a bank account at only one end. This is expected to meet the remittance requirements of the migrant population in a significant way.

Does it mean that banks can do without the support of the mobile companies in their efforts towards financial inclusion?

As mentioned in the beginning, non-bank entities, particularly the MSPs have an important role in the FI process. With an extensive network of retail outlets even in remote places where there is no bank branch, Mobile Operators can partner with banks to facilitate the reach of mobile banking across the country. However, their role is primarily of a service provider facilitating quick transmission of messages across their net work while that of the banks is to provide banking services to the people. The roles of banks and the mobile operators are to that extent well delineated and the participants should recognise the same. The Reserve Bank has issued revised guidelines enabling banks to engage the services of profit-making companies as business correspondents for promoting financial inclusion in a big way. We believe that the telcos would take this opportunity to work with the banks as business correspondents for ensuring that mobile banking reaches the last mile in view of its spread and usage. In fact, a few major MSPs have already initiated tie-ups with banks which should give a fillip both to mobile banking and the measures towards financial inclusion. A healthy partnership between banks and MSPs will certainly augur well for the FI process. Let me also state that we have no issues with non-banks joining the Interbank Mobile Payment Service (IMPS) as a member and it is a call which the National Payment Corporation of India (NPCI) has to take. However, we would like to examine the model once finalised to satisfy ourselves that there are no regulatory concerns.

4. Are technology-driven payment systems more risky?

Any payment system is bound to have risks associated with the process and it is necessary that such risks are anticipated, identified and suitably addressed to ensure that the system is secure. Electronic payment systems are no exception though the risk perception, the sources of risks and the impact of exposure could be relatively high.

Won't the average customer who is not tech-savvy be deterred from doing electronic banking in the light of the above threats, which only grow in variety in times to come?

A person need not be tech-savvy, in its true sense, to do his payment transactions in the electronic mode. In fact, in the Sheikhpura district of Bihar, a good number of self-employed women are using mobile banking, thanks to the initiatives of an NGO. The electronic mode of payment offers a very secure, convenient and speedy means of doing payment transactions. He needs to take minimum precautions like not sharing his personal information, particularly his account details and password, with anyone, changing his password periodically, checking the status of his accounts regularly, heeding any online alerts from his bank *etc.*

Who is accountable in case of a security breach in an electronic payment environment?

This would depend on the place and mode of the breach. For example, when a customer uses an ATM or a PoS terminal, he assumes that he undertakes the transaction in a secure manner. If a skimming device has been planted at the ATM which results in the card data being stolen and misused later, the bank or service provider which manages the ATM or the PoS terminal should accept the responsibility and make good the losses. The onus of proving the customer's liability in such cases should squarely rest on the bank/service provider.

In case of online/phone banking transactions, the possibilities of fraud arise generally on account of lapses on the part of the customer in exposing his system to the risks mentioned earlier which may result in theft of his identity, account details, *etc.*

How has the Reserve Bank of India sought to address the risks faced by customers using electronic payments?

For online credit/debit card transactions, which are essentially card-not-present transactions, the Reserve Bank had mandated a second factor authentication based on information not present on the cards with effect from August, 2009. This measure enhanced the confidence of customers as evidenced by the spurt in online transactions in the recent past. The second factor of authentication has been mandated for Interactive Voice Response (IVR) transactions from February 2011 and for the residual transactions (Mail Order Telephone Order transactions, hotel bookings, *etc.*) with effect from May 2012.

The Reserve Bank has also mandated issue of online alerts to customers for all card transactions irrespective of the value of the transaction or the channel used. This measure will at least help a customer to remedial action to prevent further misuse of his card.

Let me now turn to my last question.

5. Where do I wish to see the Indian payment system five years hence?

Let me start with the milestones we have set in the payment systems vision document (2009-2012). The list includes:

(i) Implementing a new and feature-rich RTGS system

(ii) A domestic card scheme for the country

(iii) Redesigning ECS to function as a true Automated Clearing House (ACH) for bulk transactions.

We are on track to achieving the milestones. What next?

First, we need to ensure the transition from cash-dominant economy to predominantly non-cash dominant economy. Further, non-cash transactions should be predominantly in electronic mode.

Second, payments systems need to reach out to unbanked population. Payments system should achieve a certain degree of ubiquity, in the sense that access to payments systems should be simple, easy, convenient, cost-effective for the *'aam admi'.*

Third, Indian payments systems need to continuously innovate products, channels and business models. Technology should facilitate the convergence of payment products.

Fourth, recent surveys worldwide indicate mobile and Near Field Communication (NFC) are the future payment trends. Given the huge potential for both mobile and NFC as the future payment products, we should see the adoption and integration of these into our payments systems.

Fifth, our payments systems should be able to provide a low-cost solution to bring government payments, e-commerce, *etc,* into its fold.

Sixth, safety and security of payment systems instil public confidence. Our payments systems should meet the emerging challenge of frauds and be the trend setter for security.

I once again felicitate the CSB Ltd on this momentous day.