



**E-money issuers: Risks, Rewards and Regulatory Framework**

*Center for Financial Inclusion, Indicus Analytics, New Delhi*

*This is the final policy brief in the series to study the intricacies of expanding financial inclusion*

- While e-money has great potential to revolutionize the reach and efficiency of payment systems in India, it is still at a nascent stage.
- Over the past two years, there has been significant movement in the policy space, expanding the scope of issuance of e-money, under RBI guidelines.

*Executive Summary*

*With technology based solutions seen as key to achieving financial inclusion, the role of e-money becomes important in reaching out to the unbanked masses. While regulatory space in India has been slowing opening up to allow non-banks to act as e-money issuers and prudential norms are in place, regulatory concerns remain regarding the safety of customer funds and the potential impact of e-money on monetary aggregates. The regulator's dilemma, as described by David Porteous, is whether or not to implement measures that may hinder expansion of access to nonusers in the interest of greater protection for those who already have access, and it is for each country to evolve models and practices appropriate to their economy. It is however instructive to absorb lessons from international experiences that exemplify how regulations can evolve to meet the challenges involved in non-bank e-money issuers, all with the aim of bringing about universal financial inclusion.*

**Evolution of e-money in India**

E-money may be broadly defined as "an electronic store of monetary value on a technical device...used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument" (European Central Bank, 1998).

The RBI Working Group on Electronic Money in 2002 classified e-money into two broad categories (a) pre-paid stored value card (sometimes called "electronic purse") and (b) pre-paid software based product that uses computer networks such as internet (sometimes referred to as "digital cash" or "network money"). While initially just banks were allowed to be issuers of multi purpose e-money, since the passage of the Payment and Settlements Act 2007, the RBI has slowly opened up to allow non-banks into this space. The 2009 Guidelines for Prepaid Payment Instruments cover both banks and non-banks, with prepaid instruments defined as smart cards, magnetic stripe cards, internet accounts, internet wallets,

mobile accounts, mobile wallets, paper vouchers and any such instruments which can be used to access the prepaid amount set out. Prepaid payment instruments can be classified in four categories:

- 1. Closed System Payment Instruments:** generally issued by business establishments for use at their respective establishment only. These instruments do not permit cash withdrawal or redemption.
- 2. Semi-Closed System Payment Instruments:** redeemable at a group of clearly identified merchant locations/ establishments which contract specifically with the issuer to accept the payment instrument. These instruments do not permit cash withdrawal or redemption by the holder.
- 3. Semi-open System Payment Instruments:** used for purchase of goods and services at any card accepting merchant locations (Point of sale terminals). These instruments do not permit cash withdrawal or redemption by the holder.
- 4. Open System Payment Instruments:** used for purchase of goods and services and also permit cash withdrawal at ATMs.

The RBI has placed restrictions on eligibility for issuing each instrument - Banks and Non-Bank Finance Companies complying with the eligibility criteria would be permitted to issue all categories of prepaid payment instruments, only banks providing mobile banking transactions are permitted to launch mobile based prepaid payment instruments (mobile wallets & mobile accounts), other entities are permitted to issue only closed system prepaid payment instruments and semi-closed system prepaid payment instruments and Mobile Service Providers are permitted to issue mobile prepaid value, the use of which is restricted to the purchase of only mobile value added digital contents/ services and not for general purchase of other goods and services.



	Semi Closed	Semi Open	Mobile Prepaid
<b>Cash In (Buying)</b>	Yes	Yes	Yes
<b>Cash Out (Encashment)</b>	No	No	No
<b>Usage</b>	Can be used at affiliate merchant outlet's that have a contract with the issuer to accept such instruments.	Can be used at any card accepting merchant locations (Merchants with POS terminals). For eg: Food card issued by	Prepaid talk time issued by mobile operators to its subscribers. Can be used to purchase mobile air time or mobile VAS
<b>Eligibility</b>	Requires Authorization from RBI	Requires Authorization from RBI	No authorization from RBI needed as long as the prepaid instrument is used for purchase of airtime or mobile VAS only
<b>Interest payment</b>	Not Mandated	Not Mandated	Not Mandated
<b>Reloadable</b>	Yes	Yes	Yes
<b>Return of Balance</b>	Yes	Yes	Yes

Since 2009, operational guidelines have been modified regularly, for instance, the maximum value of semi-closed payment instruments was raised from the initial Rs. 5,000 to Rs. 50,000 last May. More recently the RBI has allowed banks to issue pre-paid payment instruments to corporates for onward issuance to their employees. However, the conservative approach of RBI is striking here as this facility is currently available only to those corporates who are listed on any stock exchange in India.

Regulations like these, though well meaning, have dampened the growth of transactions through the e-money route. Consequently, while the regulatory space has been opened up, the actual marketplace has not witnessed significant activity and various pilot projects still remain to be scaled up. Market players and the regulator in India remain wary of the way ahead.

<b>Advantages of e-money</b>
<i>Cost savings from printing and minting of smaller denomination notes and coins</i>
<i>Eliminating cost of handling, storing, transporting and insuring currency</i>
<i>Helps in improving the operational efficiency of the financial sector</i>
<i>Extension of banking to the urban poor and rural communities</i>
<i>Facilitating e-governance initiatives</i>

### Rewards and risks of e-money

For issuers of e-money, the principal motivation arises from revenues to be earned from a) investment of outstanding balances (i.e., float income), b) savings of costs from reduced handling of cash c) incentive of offering fee-based service to consumers and merchants besides the larger security arising from audit trail of transactions and improved management information system. At the same time there are concerns regarding rights and obligations of issuers, merchants, consumers and the regulator, technological security and the clearing and settlement arrangements of different e-money schemes. Some of the risks perceived by RBI with e-money are as follows:

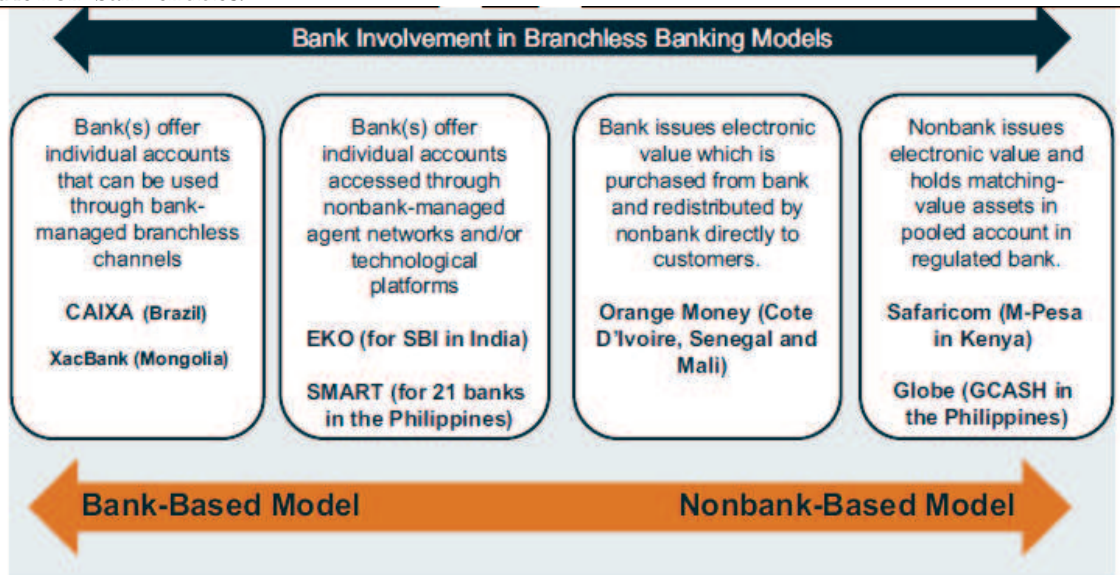
- If residents could use e-money supplied by entities outside the country for domestic transactions, monetary aggregates would lose their predictive power.
- It is expected that the proportion of interest bearing liabilities in monetary aggregates would grow in the event of growing use of e-money which would render them more unstable, and information content of monetary aggregates would also change.
- If e-money is issued on credit, there is a possibility that the issuers may assume a leveraged position.



### International experiences in regulation of non-bank e-money issuers

While Indian regulatory is slowly opening up to bring non-bank e-money issuers in its ambit, the primary responsibility still rests with the banking sector. Unlike a bank-based model, where customers have a direct contractual relationship with a bank (even though a customer may deal only with BCs), in a non-bank-based model, there is no direct contractual relationship with a bank and the customer exchanges cash for electronic value recorded in a virtual account on the non-bank's server. Yet, it is quite evident that in both cases, banks have significant role to play (See Box), all these various models are ultimately connected to the banks, in the sense that money collected from the public must be ultimately intermediated by a bank under the full purview of prudential regulation and supervision.

It is well recognized now the world over that non-banks have a powerful role to play in extending financial access, especially in lower income segments and across regions like West Africa, European Union, and countries like Afghanistan and Philippines, authorities have adopted regulation that enables a leading role for non-banks—while also mitigating the risks traditionally been associated with the non-bank entities.



Source: Tarazi and Breloff, 'Nonbank E-money issuers-Regulatory approaches to protecting customer funds,' CGAP Focus Note 63, July 2010.

Regulations for non-bank e-money issuers vary across countries and generally include provisions for 'fund safeguarding' (maintaining unencumbered liquid assets equal to the amount of issued electronic value), 'fund isolation' (insulating funds underlying issued e-money from institutional risks of claims by issuer creditors), minimum initial capital requirements etc. As Michael Tarazi and Paul Breloff discuss in the CGAP Focus Note 63 (July 2010), some of the international practices targeted at non-bank e-money issuers are as follows:

1. Liquidity requirement - issuers need to maintain liquid assets equivalent to the total value of the customer funds collected (i.e., the total value of electronic value issued and outstanding, also known as the “e-float”) Liquidity requirements exist in Indonesia, Afghanistan, the Philippines, Cambodia, Malaysia, India (in connection with prepaid payment instruments)
2. Restrictions on use –In Malaysia, issuers are expressly prohibited from using such funds for any purpose \ other than “cashing out” against electronic value or executing funds transfers to third parties pursuant to customer request. The Philippines expressly prohibits non-bank issuers from engaging in the extension of credit, effectively ensuring customer funds are not endangered through intermediation by an entity that is not fully prudentially regulated.





3. Diversification of E-Float Fund Holdings: Funds held in prudentially regulated banks are not risk-free, and are covered by deposit insurance. However, even where deposit insurance exists, the value of pooled accounts held by non-bank e-money issuers is typically much larger than deposit insurance coverage limits, leaving the issuer and customers more exposed in the case of bank failure. Afghan regulators sought to minimize the risk of bank failure by requiring that when any e-money issuer's e-float exceeds a specified amount, no more than 25 percent of the cash funds backing such float may be held in a single financial institution. No regulations outside of Afghanistan expressly require such diversification as protection against bank failure, though the trustee of the M-PESA trust account in Kenya independently chose to minimize risk by dividing the cash backing M-PESA's e-float among more than one bank.
4. Fund isolation –In Kenya, M-PESA customers are isolated from creditor claims and other ownership threats by the use of a trust account that is administered by a third-party trustee and held for the benefit of M-PESA customers. Malaysia requires that customer funds be deposited and managed separately from the issuer's working capital funds but while such separate management facilitates supervision of an issuer's compliance with fund safeguarding requirements, it (like in Indonesia and Cambodia) does not isolate customer funds from claims by the issuer's creditors.

### Emerging Challenges for Regulation

Given the rapid pace of change in adopting new models across the world, regulators will soon have to deal with new issues e.g. whether to treat e-money as savings products (rather than as simply funds transfer) and how to level the playing field among different kinds of entities offering similar services.

Currently, e-money is largely limited to making payments. The aim is that other financial services, chiefly savings, would also come under this ambit. The questions that need to be dealt with then are as follows: should e-money issuers be permitted to pay interest on e-money accounts, should the funds backing the e-float be covered by deposit insurance schemes etc. Practices vary across the world, for instance, many developed countries already provide such deposit protection - the United States expressly characterizes the funds underlying stored-value cards as “deposits” covered by deposit insurance as long as such funds are placed in an insured institution.

As new business models emerge and non-bank actors enter the financial services market, regulators should work to create a regulatory scheme that levels the playing field for service providers regardless of legal form. In other words, work towards encouraging, rather than stifling, innovation and competition. Countries such as the Philippines, Nigeria, and Afghanistan attempt to create level playing fields by regulating e-money as a service, pursuant to a single regulation and under a single regulator (as opposed to regulating the different service providers based on legal form). Yet, they do have separate provisions in relevant e-money regulation aimed at addressing the risks presented (such as fund safeguarding) by non-bank participation in the e-money sector.

Finally, it is for each country to evolve the model that it considers most appropriate to the financial and socio-economic environment. At the same time, it is instructive to absorb lessons from global experiences as developing countries are already engaged in charting new territories.

### Conclusion

With non-bank entities now recognized as important partners in the quest for universal financial inclusion, across the world, countries are giving space to non-bank entities as appropriate regulation on capital, liquidity, asset liability management systems and controls adjusted to the local business and regulatory environment help in creating a safe operating environment for stored value to operate as a cash substitute. As Tarazi and Breloff (2010) put it, 'Enabling the entry and leadership of non-banks need not be a threat to the central role of banks in emerging market financial systems. The challenge is to craft policies and regulations that mitigate the risks to customer funds without stifling the dynamism, creativity, and potential of these new actors.' While in India, the regulatory stance with regard to e-money has been changing, albeit cautiously, over the past few years, it is clear that the goal of financial inclusion, where non-banks and banks work together, is in the spotlight, at the forefront for policy makers.