CASH AND RETAIL PAYMENT SYSTEMS IN DEVELOPING COUNTRIES, OPPORTUNITIES AND CHALLENGES: THE CASE OF MALAWI

by

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1.0 Introduction

The past decade has witnessed major innovations in payment systems mainly due to advancements in computer technology and deregulation of financial markets. The innovations have brought about the extended use of various retail payment instruments as alternative to cash. Individuals nowadays have a wide range of choices on payment instruments such as credit cards, debit cards, cheques, direct debits, and electronic cash cards and to some extent mobile phones.

Malawi has taken advantage of the revolution in computer technology to modernise her national payment system. To date, Malawi boasts of modern payment, clearing and settlement facilities which include, among others, the real time gross settlement (RTGS) system, Electronic Cheque Clearing House (ECCH), smart card scheme, electronic bidding system for Government securities and central payment and credit ceiling authority systems for Government payments. The ECCH and the smart card scheme provide an alternative payment mechanism to cash in effecting retail payment transactions at point of sale.

2.0 The cash payment system revisited

Just like any central bank, the Reserve Bank of Malawi (RBM) has a statutory obligation of issuing currency in the economy. The authority to issue currency and maintain the cash payment system is enshrined in the Reserve Bank of Malawi Act, 1989. Part VI Section 17 stipulates that the RBM "*shall have the sole right of issuing bank notes and coins throughout Malawi and neither the Government nor any other person shall issue any notes and coins which are likely to pass as legal tender".* The mandate to issue currency encompasses the responsibility for the properties of notes and coin such as denomination, size, security features, quality and quantity. It must however be emphasized that central banks incur expenses when discharging their legal mandate of supplying cash to the economy. The expenses relate to, among others, printing/minting, shipping, safe custody, local distribution and replacement of worn out notes and coins. Data from the RBM show that from 1998 to 2006, currency management expenses ranged from 27% to 35% of the central bank's general and administrative expenses. In terms of RBM's total budget, currency management expenses accounted for 20% to 33% during the same period.[2]

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[2] Calculated from various issues of Reserve Bank of Malawi Published Accounts – It may however be necessary to compare the cost with seigniorage.

While the supply side of the cash payment system incurs financial costs, the demand side, namely the general public, uses notes and coins at zero cost.[3] This feature makes cash the most preferred payment instrument as opposed to account based payment instruments whose usage is associated with transaction or ledger fees. Cash is also preferred because of its immediacy of payment, anonymity of transactions[4] and acceptability across the economy by virtue of being a claim over the central bank, and the confidence people have in cash due to its long historical usage.

There are however a number of factors that negatively affect the supremacy of cash over non-cash payment instruments. These include: time spent in counting and verifying cash, susceptibility to heist or loss, time spent in banking halls to conduct cash transactions and inconveniences in effecting high-value (and also remote) transactions. Shortage of the right mix of lower denominated notes and coins further complicates the provision of change by traders. In Malawi, some traders resorted to giving sweets to their customers as change. Owing to its weight and the value of goods and services it can command, coin also tends to be inconvenient to use even at point of sale. In 2005 for example, it was observed that many traders and some commercial banks in Malawi were refusing to deal in transactions that involve some coin denominations[5].

3.0 The case for cashless payment instruments

The cash payment system in Malawi coexists with the non-cash payment scheme. Although cash is the dominant mode of payment, there are advantages that both the general public and the banking community can realise by adopting electronic based non-cash payment instruments in the retail sector. First and foremost, it must however be acknowledged that the initial investment outlay in setting up a non-cash payment supporting infrastructure is high. Economies of scale can nonetheless be attained if payment system providers share the cost of setting up or maintaining the infrastructure. If resources are pooled, operational costs may be lower than annual maintenance costs experienced by central banks in the cash payment system. The general public, on the other hand, stands to benefit in the form of low risk of loss and reduced transaction fees as more users join a given payment stream.

Second, Malawi, like many developing countries, imports notes and coins. This not only drains foreign reserves but also increases pressure on the central bank's resources each time the local currency depreciates against the currency of the exporting countries. Unless higher denomination notes are introduced, the central bank is also under pressure to release more notes into

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[3] If the interest forgone is not taken into account

[4] Most convenient for criminal activity as opposed to account based payment instruments which show audit trail

[5] According to the Press Release issued by RBM in 'The Nation' and 'The Daily Times' of 17th, 19th and 21st February 2005. Apparently, coins constituted 1% of the share value of currency in circulation in 2005. An investigation into the specific reasons for the rejection of coins at the time is however beyond the scope of this paper.

circulation each time there is a surge in transaction demand for notes and coin due to increased economic activity or inflation. This has a negative impact on the currency management budget.

Third, non-cash payment instruments like smart cards enable the banking industry to mobilise idle cash balances held by the un-banked segment of the economy. Card payment schemes can also help to create savings culture among rural people. The small savings of rural clients can cumulatively become a huge source of funds that could be channelled to the productive sectors of the economy in the form of bank or microfinance loans. Efforts to create the culture of saving should however be complemented with attractive interest rates on deposits or financial instruments like Treasury Bills. Low deposit interest rates tend to discourage people from saving and this may result in high currency holding by the general public. Card payment instruments operating through point of sale (POS) devices eliminate the inconveniences associated with cash. The problem of giving customers sweets as change or traders rejecting coin does not arise under card payment schemes. Exact figures are deducted from customers' bank accounts or pre-loaded cards. Lastly, auditable card schemes enable monetary authorities to estimate the volume and value of transactions conducted in a given period, which may not be the case under the cash system.

4.0 Challenges and proposed policy responses

The electronic based retail payment facilities face a number of challenges especially in developing countries. It is therefore necessary that payment systems authorities formulate appropriate policy responses. This paper identifies six such major challenges.

First, many countries do not have legislation that adequately support innovations in payment systems. In order to mitigate legal risks, some countries have legislation (the National Payment Systems Act)[6] that govern the operations of the national payment system. Countries that do not have a payment systems law resort to the contractual law. Nevertheless, legal risks may still exist unless the agreements have been tested in a court of law to ascertain their legal validity.

Second, the general public has confidence in cash due to its long historical usage. There is therefore need to intensify awareness campaigns so that the relevant stake holders become aware of the availability and advantages of using non-cash payment instruments. This could also be supported by merchants/retailers offering discounts on all card transactions.

Third, a large population of Malawi, like in many developing countries, lives in rural areas[7]. Since bank branches (including auto teller machines and POS devices) are concentrated in urban centres, the transaction cost of accessing financial services by the rural client is very high. This in itself tends to discourage rural people from enjoying banking services. On the other hand, it may not be economically viable for banks in developing countries to set up branches in rural areas.

[6] In the case of Malawi, RTGS and ECCH participants rely on bilateral and multilateral agreements since the NPS Bill has not yet been promulgated

[7] According to the Welfare Monitoring Survey, 2005 p.14, about 87% of the population lives in rural areas while 13% lives in the urban areas

This, among others, could be attributable to security, poor road infrastructure (i.e. making it difficult to collect excess deposits from or replenish cash to remote branches) and lack of electricity. It may therefore be appropriate for the banking industry in developing countries to provide banking services to the rural mass through transformational branchless banking models.[8] This would not only reduce transaction costs borne by the rural clients but also eliminate the cost of setting up and operating a bank branch in rural areas. Implementation of branchless banking should however be supported by cash-back arrangement to cater for situations where card or mobile phone transactions are impractical.

Fourth, lack of electricity in remote areas and unreliable power supply in urban areas adversely affect the operation of card payment schemes. Frequent power outages force banks to invest in alternative power generating equipment, thereby increasing operational costs. The proposed solution would therefore be to expand coverage of power in rural areas and for the utility company to supply uninterruptible power supply. The Malawi Government in particular has taken a positive initiative by embarking on a rural electrification programme. Grocers in rural areas could therefore take advantage of this programme to operate POS devices either on their own or as agents under transformational branchless banking models. The rural electrification initiative by the Malawi Government will therefore play a critical role in fostering wide usage of card based payment schemes in rural areas.

Fifth, cash usage, as observed earlier, does not attract transaction fees as opposed to account based payment instruments. Consequently, cash becomes the most preferred payment medium for low income clients. When levying fees, banks need to strike a balance between cost recovery and the promotion of card schemes.

In order to make the card scheme affordable by many people including the rural poor or low income clients, governments in developing countries should consider duty waivers on the importation of cards and their related supporting gadgets and equipment (e.g. POS devices and switching equipment). The duty waiver will not only make cards affordable by poor people but also enable banks to import more card-related gadgets (e.g. POS devices). The higher the number of POS devices the more the convenience of the card scheme and the lower the transaction costs of accessing the nearest service point.

5.0 Conclusion

Although many people in developing countries rely on cash as a medium of payment, payment systems policy makers should still endeavour to design and implement strategies that promote the use of non-cash payment instruments not only in urban areas but also in rural areas. The banking community and the general public stands to benefit from electronic based payment schemes in the retail sector.

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[8] According to David Porteous, transformational models are the ones in which the financial product linked to the use of the mobile phone is targeted at the un-banked who are largely low-income people. The same concept may be extended to card based payment schemes

Malawi has made progress in transforming the retail payment system through the implementation of the ECCH and the smart card scheme. There is however need to expand the product range to include mobile payments and debit and credit cards.

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