

Use of Plastic Money in Zimbabwe, Threats and Opportunities for Rural Communities

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Abstract

Since the Zimbabwean economy adopted the US dollar as a major currency in 2009, rural communities have remained marginalized in terms of access to financial products and services. The research study evaluates the use and adoption of plastic money by rural communities in Zimbabwe. A descriptive research design was adopted to assess the use of plastic money by rural financially active citizens in Masvingo Province. Data was collected from a sample of 300 respondents using a self-administered questionnaire and analyzed using selected econometric computer packages. The research study established that the majority of rural communities in Zimbabwe had no access to plastic money facilities and therefore transacted mainly using cash and mobile money. This was largely due to lack of plastic money facilities among rural service providers, lack of adequate knowledge on importance of plastic money, low income levels and lack of confidence in the overall financial system. It was concluded that very few financial institutions served the rural market, and those that, did relied on agent banking. In addition, the majority of retail operators are importers who only accept cash as a means of settlement. It was recommended that banks should market their products and services to rural markets through awareness campaigns on the benefits to be drawn from adoption and use of plastic money. The central bank through its monitoring and supervisory function should continue to assess the extent to which banks and other financial institutions are serving the needs of rural communities. Point of Sale (POS) transaction costs should be reduced further to allow low income earners to transact even in smaller amounts without feeling the pinch, otherwise the goals of the National Financial Inclusion Strategy will be unachievable by 2020.

Keywords: Plastic Money, Financial Inclusion, Rural Community, Cash, Mobile Money

1. Introduction

Financial innovation has altered the way individuals and companies transact, posing challenges and opportunities for banks and bank regulators. Customers, who are viewed as the recipients of bank products and services have various transaction mechanisms to choose from, some being more acceptable and convenient than others. Technological advancement in the banking sector the world over, ushered in a new system where most banks issued

customers with bank cards (ATM cards, debit cards, credit cards just to mention a few) which would be used for buying goods and services.

The Reserve Bank of Zimbabwe (RBZ) looks forward to promote of electronic means of payment and plastic money in Zimbabwe. Thus every participating financial Institution should promote the use of plastic money through the introduction of more e-channels, more point of sale devices, increasing the interoperability of systems and sharing of service delivery infrastructure for the convenience of the transacting public, RBZ (2013a).

In response to this liquidity constraint, the Reserve Bank adopted a number of policy measures to ameliorate the cash challenges including importing cash, the promotion of the usage of plastic money and the use of other currencies within the multi-currency basket and cash withdrawal limits, RBZ (2016a). Other objectives which the central bank looks forward to achieve include promotion of cashless payment systems that include the use of plastic money through point of sale (POS) machines, on-line banking, transfers and other electronic banking systems.

In 2016, Zimbabwe adopted the National Financial Inclusion Strategy 2016-2020, which aims to bring financial products and services to individuals and entities who were not part of the formal banking system voluntarily or involuntarily. According to the Reserve Bank of Zimbabwe, (RBZ), (2016c) the economy has been experiencing cash shortages, evidenced by the long queues at some banks, as well as limited cash availability on many Automated Teller Machines (ATMs); one of the reasons being low levels of use of plastic money and the real time gross settlement (RTGS) platforms.

In addition RBZ (2016c) noted that Electronic Funds Transfer Point of Sale (EFTPOS) as at 30 September 2015 over 16,000 point of sale (POS) machines countrywide were located in retail shops and banking halls as well as some holiday resorts. However, the devices are duplicated or clustered in few shops. The POS density, at 300 machines per one million inhabitants was, however, far below the world's average of 1,300 machines per one million people. Furthermore, the bulk of the POS devices are concentrated in urban areas against a background where 70% of the Zimbabwean population lives in the farms and rural areas.

From the above sentiments echoed by the central bank, it can be argued that the majority of the Zimbabwean population lives in rural settlements and most of them do not have access to financial products and services as compared to their urban counterparts. This paper evaluated the challenges which the rural communities face in the adoption and use of plastic money as an alternative to cash. Zimbabwe has been hit by liquidity challenges since 2015 and therefore needs to embrace use of plastic money to the danger of a full-fledged liquidity crunch. It is generally known that Zimbabwe is predominantly a cash economy. However, given the current liquidity challenges the economy is facing due to shortage of the United States Dollar as the major currency, the rural market cannot continue to rely on cash transactions and therefore has to move with the winds of change and adopt plastic money as an alternative.

2. Problem Statement

Ideally, in a well-functioning economy citizens should have equal access to financial products and services regardless of settlement patterns and income levels. However, financial institutions in Zimbabwe have failed to financially include the rural market through provision of plastic money services thereby making it difficult for people to effectively and transact. This has left the majority of rural transactions being settled primarily in cash. Using cash for day to day transactions becomes a hindrance especially when a country is faced with severe

liquidity challenges like what is currently obtaining in Zimbabwe. Therefore, banks through their unit-size transformation function, should see it fit to carry out financial inclusion exercises since the rural market can contribute towards development of the banking sector and the economy at large.

3. Research Objectives

The research study aimed to:

- i. Analyze the threats imposed on the rural communities due to use and adoption of plastic money in Zimbabwe.
- ii. The forms of payment preferred by rural communities in Zimbabwe.
- iii. Evaluate the possible benefits which plastic money can bring to rural communities in Zimbabwe.
- iv. Suggest possible solutions to challenges in the adoption and use of plastic money in Zimbabwe.

4. Review of Related Literature

According to Patil (2014), plastic money refers to the credit cards or the debit cards that we use to make purchases. The banks' services are not just confined to their particular branch customers only. The generic term "plastic money" predominantly refers to the plastic bank cards that are issued to account holders for their everyday use, in place of hard cash (bank notes or coins) or cheques. In Zimbabwe, we generally call these plastic cards "ATM cards" because of their predominant use for making withdrawals at Automated Teller Machines (ATMs).

Mavinaman (2013) suggested that plastic money generally a credit or debit card with a magnetic strip

many people carry in their wallets or purses is the result of complex banking process. Holders of a valid card have the authorization to purchase goods and services up to a predetermined amount, called a credit limit. With technology therefore, the whole concept of a bank takes on a new dimension, in that the modern bank can be represented by a telephone in a customer's home, a plastic magnetic stripe card (credit or debit cards), ATMs, or the internet (Jayamaha, 2008; Prendergast & Marr, 1994). Using an electronic funds transfer (EFT) terminal installed at the point of sale (POS), a customer swipes a credit, debit, or ATM card and enters a personal identification number (PIN) to authorize the transfer of funds, Shambare (2013).

The parties involved in the use plastic money include customers or cardholders, card issuing banks merchants and bank card associations, Patil (2014). A cardholder is the authorized person holding the card and can use it for purchase of goods and services. A card issuing bank is the bank or financial institution which issues the card to its eligible customers. Merchants are entities which sell goods and services to the cardholder and duly agree to accept use of the card in settling transactions. Bank card associations include Visa, MasterCard, and American Express just to mention a few.

Customer is now treated as customer of banks as a whole, which means that he is now capable of enjoying facilities such as anywhere, anytime banking (Kamesam, 2003). This concept has enabled the bankers to establish long term connection with their customers. Thus, banks are now reengineering the way in which their services can be reached to their customers by bringing in flexibility in their "distribution channels" (De Sarkaret. al. 2001). Thus, plastic cards are such payment tool which gives a customer an opportunity of non-cash payment of goods

and services and are designed to facilitate small value retail payments by offering a substitute for bank notes and coins and thus to complement traditional payment instruments. Plastic cards are one of those types of innovations through which the customers can make use of banking services just by owning the card issued by bank and that too without restricting himself in the official banking hours. Plastic money has both costs and benefits to the respective stakeholders in the system. Dealing in a cash economy also imposes other hidden costs, besides the high risk of loss, in the intervening period before that cash finds its way back into the bank. Plastic money offers a safe, convenient and low-cost way to transact on a day-to-day basis. Individual factors such as knowledge, consumer resources such as money, information, processing capabilities and lifestyle have an impact on the adoption of plastic money (Sathye, 1999; Polatoglu and Ekin, 2002).

Gerrard and Cunningham (2003) identified that consumers who were more financially innovative had a higher probability of adopting plastic money than less financially innovative consumers. Filotto et al (1997), showed that the adoption rates of ATM were higher among younger users. Stavins (2001) identified that married consumers were more likely to use plastic money than unmarried people. Although, Sathye (1999) identified that the costs associated with plastic money such as cost of electronic banking activities had a negative effect on adoption of plastic money, Polatoglu and Ekin (2002) identified that users of plastic money were significantly satisfied with the cost saving factor of electronic banking. When faced with a decision whether to adopt or reject a new technology-related product, the literature acknowledges that potential adopters deal with a complex set of emotions, some of which act as psychological barriers and others as enablers to adoption (Berger, 2009). Parasuraman and Colby (2001) illustrate that consumers harbour both favourable and unfavourable beliefs about a technology, with the dominant feeling determining adoption or rejection decisions.

According to Shambare (2013), increased usage of technologies is strongly correlated with technology readiness. In other words, the more technological ready consumers are the more likely they will use a technology more frequently and regularly. In addition, high levels of technological readiness indicate that consumers are more likely to use a different mix of technologies. Plastic notes are similar to paper but the only difference is that they are made of plastic and are more secured. But in travelling and shopping people used to carry huge cash which was insecure and also increased the crime rate. Hence cards were introduced in the world to resolve the issue of carrying huge cash. These cards are known as plastic money, Bindu (2016). According to Sultana and Hasan (2016), technology has drastically changed all the sectors including the financial sector, and the transactions in the banking system have also undergone a remarkable change. The traditional concept of payment through cash is replaced by the credit cards or the debit cards called 'plastic money' that people are using to draw money or to make purchases. Furthermore, Giannakoudi, 1999) postulated that use of plastic money has many advantages over traditional banking delivery channels which include an increased customer base, cost savings, mass customization, and product innovation and offering of services regardless of geographic area and time.

Manivannan (2013) in his research suggested that plastic money usage of was measured a luxury and has become needed. These plastic money and electronic payments were used by only higher

income groups. This facility extended not only to customers in urban areas or cities, but also to

customers residing in rural area. However, today, with development of banking and trading

activity,

the fixed income group or salaried classes are also using the plastic money and electronic payment systems..

Sharma (2012) thrown light on the number of frauds increased considerably in the usage of plastic cards. As in case of plastic card frauds, the most affected parties are the merchants of goods and services as they have to bear the full liability for losses due to frauds, the banks also bears some cost especially the indirect cost whereas the cardholders are least affected because of limited consumer liability and concluded that all these losses can be dealt with by making the prudent use of the new technology and taking the respective counter measures.

5. Data and Methodology

In carrying out the study, a descriptive research design was adopted. A descriptive survey design is a scientific investigation that is used to study large and small population through selecting and studying large samples chosen from the largest population in order to discover the relative incidents or distribution of variables on a specific topic, Kirlinger and Pedhazur (1973). A sample of 300 respondents from Masvingo rural was selected using convenience sampling technique. Convenience sampling is a type of non-probability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study, Dörnyei, (2007).The research study used convenience sampling for this study for various reasons. Firstly, Masvingo rural was viewed as the most accessible rural settlement for the researchers and the target sample was composed of respondents from various income groups that is farmers, civil servants and those who are self-employed. Secondly, Masvingo rural benefits from major government projects such as Mushandike Irrigation Scheme and the Tokwe Mkorsi Dam, as such, the flow of money in this society is better as compared to other rural communities with less economic activity. Thus, the descriptive survey design together with convenience sampling could be justified for this research study. A questionnaire was used as a data collection instrument because questionnaires are extremely flexible and could be used to gather information from a large or small number of people (Moore, 1987). Morris and Wood (1991) regarded questionnaire as the most widely used technique for collecting primary data. The questionnaire was distributed to all the various groups of respondents such farmers, civil servants, retail operators and students from selected districts in Masvingo rural. The Data collected was analyzed using IMB SPSS 23.

6. Findings and Discussions

Demographic factors such as age, occupation, qualifications and income levels among rural people were found to have an influence on the decisions which people make on adoption and use of plastic money. Various payment methods, challenges and perceived benefits of using plastic money were also discussed and how these are influenced by demographic factors.

Table 1:
Descriptive Statistics

	N		Mean	Median	Mode	Std. Deviation	Minimum	Maximum
	Valid	Missing						
Gender	300	0	1.7067	2.0000	2.00	.45605	1.00	2.00
Age	300	0	3.6833	4.0000	5.00	1.32245	1.00	5.00
What is your highest qualification?	300	0	3.7500	4.0000	5.00	1.31654	1.00	5.00
Please state your occupation.	300	0	2.4800	3.0000	1.00	1.31988	1.00	5.00
How much do you earn per month?	300	0	2.4100	2.0000	1.00	1.30931	1.00	4.00
Which payment method do you frequently use?	300	0	2.0133	2.0000	1.00	1.06314	1.00	4.00
Do you have a bank card or POS Machine?	300	0	2.7567	3.0000	3.00	.58760	1.00	3.00
What do you think are benefits of plastic money?	300	0	3.9467	4.0000	4.00	1.45288	1.00	6.00
State any challenges of using plastic money.	300	0	2.5833	2.0000	2.00	1.52889	1.00	5.00
Are you willing to use plastic money?	300	0	1.9067	2.0000	2.00	.62658	1.00	3.00

Based on table 1 above and the questionnaire used, the majority of respondents were female with a mode of 2. In addition, the rural population has more people above 40 years as shown by a mode of 5. On the other hand, rural residence are lagging behind in terms of academic qualifications since the preferred answer was 'none' as shown by a mode of 5. In terms of occupation, many people are still practicing farming. In addition, it is sad to note that the majority of the respondents earn less than USD50.00 per month as shown by a mode of 1. In spite of earning less than USD50.00 per month, many people still prefer to use cash for their transactions. Furthermore, the research established there are few individuals with bank cards and POS Machines (mode of 3). Anywhere anytime access was the most preferred response on the perceived benefits of using plastic money with a mode of 4. The greatest challenge which respondents noted was shortage or lack of POS machines for those with cards to transact, (mode of 2). Finally, the majority of the respondents were not willing to use plastic money as exemplified by a mode of 2.

To deeply understand the meaning of the data presented in table 1 above, cross tabulations were also used and discussed below. Cross tabulations allow the comparison of two or more factors at once and a researcher can pick an association among variables

6.1 Results on availability of plastic money facilities

Table 2 below shows the age of the respondents and the plastic money facilities in rural areas.

Table 2:

Age and Possession of bank card or POS Machine

% within Do you have a bank card or POS Machine?

		<i>Do you have a bank card or POS Machine?</i>			Total
		<i>Card</i>	<i>POS Machine</i>	<i>None</i>	
Age	<i>18-25</i>	8.3%	8.0%	8.8%	8.7%
	<i>26-30</i>	12.5%	8.0%	13.9%	13.3%
	<i>31-35</i>	16.7%	28.0%	14.7%	16.0%
	<i>36-40</i>	20.8%	28.0%	25.1%	25.0%
	<i>>40</i>	41.7%	28.0%	37.5%	37.0%
Total		100.0%	100.0%	100.0%	100.0%

From table 2 above, it can be observed that 37.0% of the respondents were above 40 years while 25%, 16%, 13.3% and 8.7% were in the ranges 36-40, 31-35, 26-30 and 18-25 respectively. This distribution could be attributed to the fact that most youth are (those between 18 and 25) are now attending tertiary education while the old form the greater percentage of the rural populace. This is supported by the fact that 41.7% of individuals with bank cards are above the age of 40, while 8.3% was between 18 and 25 years. In addition, 37.5% of those above 40 years do not have a bank card or POS machine. This group thus need an intervention strategy. This is distribution suggests that that the majority of rural people have passed the wealth accumulation phase and some of the old still need to embrace new technologies. In addition, the majority of those with POS machines (28%) are 31 years and above and they represent the most economically active age group in the rural society.

6.2 Results on frequently used and preferred method of payment

The table below shows the frequently used payment method and plastic money facilities.

Table 3:

Payment method and bank card or POS Machine availability

% within Do you have a bank card or POS Machine?

		<i>Do you have a bank card or POS Machine?</i>			Total
		<i>Card</i>	<i>POS Machine</i>	<i>None</i>	
Which payment method do you frequently use?	<i>Cash</i>	45.8%	48.0%	47.4%	47.3%
	<i>Plastic Money</i>	20.8%	20.0%	10.8%	12.3%
	<i>Mobile Money</i>	29.2%	32.0%	32.3%	32.0%
	<i>EFT</i>	4.2%		9.6%	8.3%
Total		100.0%	100.0%	100.0%	100.0%

Table 3 above shows that 47.3%, 32.0%, 12.3%, and 8.3% of the respondents prefer to use cash, mobile money, plastic money and electronic funds transfer (EFT) respectively. For those who prefer to use cash, 45.8% and 48.0% have bank cards and POS machines. From this, it can be argued that even those who have the plastic money facilities still prefer to use cash in their day to day transactions. Only 20.8% and 20.0% of respondents with cards and POS Machines respectively prefer the use of plastic money as a means of paying for goods and services. On the other hand, the research established that besides relying heavily on cash, rural communities are also using mobile money for buying goods and services. Card holders contribute 29.2%, those with POS machines 32.0% while those without card or POS machine have a 32.3% input towards mobile money transactions. Due to unavailability of banks, and inability to perform internet banking by rural people, electronic funds transfers are rarely used in rural transactions.

6.3 Results on perceived challenges of using plastic money

Table 4 above shows the perceived challenges of using plastic money and the income levels of rural communities in Zimbabwe.

Table 4:

Challenges of using plastic money and individual monthly earnings

% within How much do you earn per month?

		<i>How much do you earn per month?</i>				Total
		<i><\$50</i>	<i>\$51-\$100</i>	<i>\$101-\$200</i>	<i>>\$200</i>	
Are there any perceived challenges of using plastic money?	<i>High Transaction Costs</i>	23.1%	32.6%	26.5%	37.9%	30.0%
	<i>No POS Machines</i>	35.9%	23.9%	47.1%	31.1%	33.7%
	<i>Risk of Fraud</i>	8.5%	4.3%	2.9%	6.8%	6.7%
	<i>Stifles Lending/Borrowing</i>	6.0%	13.0%	8.8%	5.8%	7.3%
	<i>No Trust in Banks</i>	26.5%	26.1%	14.7%	18.4%	22.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

From table 4 above, 33.7% and 30.0% of the respondents suggested that lack of POS machines and high transaction costs are the major challenges associated with use of plastic money respectively. In addition, 22.3% do not have trust in banks. This could be due to the fact that some citizens lost their savings to failed banks and thus do not have confidence in the whole financial sector. Risk of fraud and stifled borrowing and lending got 6.7% and 7.3% respectively. For those who earn less than \$50 per month, 35.9% mentioned that there are no POS machines, 23.1% suggested that high transaction costs while 26.5% shouted lack of trust in banks as the main challenges of using plastic money in rural areas. Generally the majority of respondents in all the income groups seem to echo the same sentiments that high transaction costs, unavailability of POS machines and lack of trust are the main hindrances in the use and acceptance of plastic money.

6.4 Results on perceived benefits of using plastic money

Table 5 below shows the results on perceived benefits of using plastic money and the academic qualifications of the respondents.

Table 5:
Benefits of using plastic money and respondent’s highest qualification
% within What is your highest qualification?

	<i>What is your highest qualification?</i>					Total
	<i>O - Level</i>	<i>A-Level</i>	<i>Diploma</i>	<i>Degree</i>	<i>None</i>	
<i>What do you think are benefits of plastic money?</i> Risk Reduction	3.7%	14.3%	10.3%	6.0%	7.8%	8.0%
Safety & Convenience	7.4%	11.4%	12.8%	10.7%	8.7%	10.0%
Alleviate Cash Shortages	3.7%	11.4%	12.8%	11.9%	5.2%	8.7%
Anytime Anywhere Access	59.3%	42.9%	43.6%	47.6%	47.0%	47.3%
Encourages Savings	11.1%	5.7%	2.6%	3.6%	4.3%	4.7%
Not Sure	14.8%	14.3%	17.9%	20.2%	27.0%	21.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The research study assumed that an individual’s highest qualification could influence his or her perceived advantages to be derived from use of plastic money. From Table 5 above, 47.3% suggested that plastic money gives someone anytime anywhere access while only 4.7% were of the opinion that the system encourages savings. In addition, 8.0%, 10.0% and 8.7% suggested that risk reduction, safety and convenience, cash shortage alleviation could be the main benefits of using plastic money respectively. However, 21.3% were not sure whether plastic money had any advantages given the current economic challenges Zimbabwe is going through. For those who coined anytime anywhere access as the main benefit of using plastic money, 59.3% had ordinary level, 42.9% had advanced level, 43.6% had diplomas, and 47.6% held degrees and 47% had none. Therefore, one can deduce that, regardless of academic

qualifications, some people in rural communities know the advantages of plastic money though they still don't believe that plastic money could be a suitable substitute for hard cash. In spite of one's highest qualification, the respondent do not believe that use of plastic money is a saving mechanisms. Instead, they feel that one can lose whatever he worked for to the banks in the form of bank charges and maintenance fees.

6.5 Results on willingness to adopt and use plastic money

Table 6 below shows results on willingness to adopt and use plastic money and how these can be influenced by an individual's occupation.

Table 6:

Occupation and willingness to use plastic money
% within Are you willing to use plastic money?

	<i>Are you willing to use plastic money?</i>			<i>Total</i>
	<i>Yes</i>	<i>No</i>	<i>Indifferent</i>	
<i>Please state your occupation.</i>				
<i>Farmer</i>	41.9%	33.3%	23.9%	34.0%
<i>Cross border</i>	12.2%	15.0%	17.4%	14.7%
<i>Retail Operator</i>	32.4%	25.6%	45.7%	30.3%
<i>Civil Servant</i>	8.1%	13.9%	6.5%	11.3%
<i>Other</i>	5.4%	12.2%	6.5%	9.7%
Total	100.0%	100.0%	100.0%	100.0%

Occupation and willingness to use plastic money were the other factors considered in this study. Table 6 above shows that the majority of the rural people are farmers (34%) while the rest fall in the cross border, retail operator, civil servants and other categories. Of interest to note is the fact that 41.9% of the farmers are willing to use plastic money, 33.3% are not willing while 23.9% are indifferent. This could be attributed to the fact that farmers want to be paid early each time they deliver their produce to suppliers and don't want to be caught in the cash crisis. Since cross borders heavily use cash for their transactions, accepting plastic money has been noted as a challenge as shown by 15% who said no while 12.2% and 17.4% were not willing and indifferent respectively. Most of the civil servants who participated in the study suggested that they were uncomfortable with use of plastic money with 13.9% suggesting a no. Maybe they are finding it a challenge to use their bank cards in rural areas as a result of society related constraints.

7. Conclusions and Recommendations

Based on the findings presented above, it was concluded that rural communities in Zimbabwe still prefer to use cash as the main means of settling transactions even those with bank cards and POS machines. People preferred cash, followed by mobile money, plastic money while EFT came last. The most economically active group, (those above 31 years) have bank cards and this can be used as a spring board in the provision of POS machines to these less financially excluded individuals. Most farmers are willing to accept and use plastic money. Maybe they are left with no option but to accept it as they anticipate to deliver their farm produce to agro processing firms during the March to June 2017 harvesting season. In addition, it was concluded that the greatest challenges in the acceptance and use of plastic money were high transaction costs, shortage of POS facilities and general lack of confidence

in the whole banking sector. On the other hand, the communities cited ‘anytime anywhere access’ as the major benefit to be derived from full-fledged use of plastic money in rural areas. For plastic money to be accepted in the rural areas, there is need for empowerment programmes to allow rural people to be more financially active. If people earn more money in a month, they are likely to accept plastic money as the means of payment. The study recommends that the central bank through its monitoring and supervisory function should continue to assess the extent to which banks and other financial institutions are serving the needs of rural communities. Furthermore, the study recommends a separate ‘*plastic money model*’ characterized by very low or no transaction costs, an increase in facilities and a stronger awareness campaign to be delivered to the low income earners in the Zimbabwean rural societies. By so doing, the government alleviates the cash shortages and taps the untapped potential of the majority of citizens living rural areas.

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