

## **CASHLESS PAYMENT: A BEHAVIOURAL CHANGE TO ECONOMIC GROWTH**

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### **ABSTRACT**

Cashless economies are those that use mostly plastic or digital money and thus minimal cash or money in paper form. The ease of conducting financial transactions is probably the biggest motivator to go digital. The study develops a conceptual framework to understand the working of cashless economy. The paper highlights the various objective of being cashless. It studies the different methods of cashless payment and the essentials for being cashless. The benefits of making a country cashless have also been included. The study also explains the hurdles coming in the way of making an economy cashless. The study examines the effect of adopting cashless payment on economic growth and development of the developing countries. The result put together gives us an important policy direction towards what can enable the country to increase cashless payments.

**Key words:** Cashless, Payment, Economic Growth and Development

## INTRODUCTION

A secured and convenient way of making payments is the cashless transaction. Cashless transactions are way of making payments without the use of physical cash, a gateway to technological advancement in the field of world economy. A cashless payment is a behavioural change in the people where people eliminate usage of money as a medium of exchange for goods and services by allowing electronic transfer payments or non electronic payment via cheques (Tee and Ong, 2016). The trend towards use of non cash transactions began in daily life during the 1990, when electronic banking became popular. By the 2010 digital payment methods were widespread in many countries, with examples including intermediaries such as paypal, digital wallet system operated by companies like Apple, contactless payment by electronic card or smart phone, electronic bill and banking all in widespread use. The electronic payments have led us to believe the cashless society is well within our reach.

Most of the research (Premchand & Choudhry, 2015), suggests that even though cashless payments are growing rapidly across the world, hard currency remains resilient. By adopting electronic payment system an economy leads to a cashless society. A cashless transaction is a secure payment for customers, increases revenue and improves operational efficiency for sellers. However, despite all these benefits associated with e-payment, adequate ICT know-how among users and fear of security breach remain the most concern of individuals, organizations and experts in the field of information system (Khairun & Yasmin, 2010). The adoption of electronic payment system is much less in government and public sector establishments (Hussein, Mohamed, Ahlan, & Mahmud 2010).

## CASHLESS ECONOMY

A cashless economy is defined as a situation where there is very little flow of cash in the society and thus much of the purchases are done by the electronic media. It does not refer to an outright absence of cash transactions in the economic setting but one in which the amount of cash-based transactions is kept to the barest minimum. It is an economic system in which transactions are not done predominantly in exchange for actual cash. It is not also an economic system where goods and services are exchanged for goods and services (the barter system). It is an economic setting in which goods and services are bought and paid for through electronic media. It is defined as “one in which there are assumed to be no transaction frictions that can be reduced through the use of money balances, and that accordingly provide a reason for holding such balances even when they earn rate of return” (Woodford, 2003). Cashless economy does not mean a total elimination of cash as money will continue to be a means of exchange for goods and services in the foreseeable future. It is a financial environment that minimizes the use of physical cash by providing alternative channels for making payments. Valentine Obi, Managing Director/CEO e-Tranzact International Plc, a leading provider of mobile transaction services defines cashless society as one where no one uses cash, all purchases being made by credit cards, charge cards, cheques and direct transfers from one account to another. In other words, it refers to the widespread application of computer technology in the financial system.

A cashless transaction refers to an economic setting whereby goods and services are transacted without cash (Paul and Friday 2012), either through electronic transfer or cheque payment. The effect of cashless payment on an economy can be analysed by the Diffusion of Innovation Theory (DOI). The concept was first introduced by Roger in 1962 where he

explained how innovation is diffused to members of a social system over time (Rogers, 1995). According to DOI, the adoption of a new idea or innovations is caused by interaction between individuals through interpersonal networks. In this context, diffusion is the spread of cashless payment where consumers seek improved and convenient transaction, while businesses seek new profit opportunities. The diffusion of cashless payment will result in the adoption of cashless transactions within the society or community, subject to the types of innovation adopters and innovation-decision process. Since the consequences of diffusion in cashless payment depend on how quickly the society is willing to adopt cashless payment through different stages of innovation processes, the consequences of the adoption of cashless payment differs in different society. Today, the use of electronic payment has continued to increase due to its convenience, safety and swift mode of payment.

Oyewole et al. (2013) exposed that adopting electronic payment will positively affect economic growth and trade. Hasan et al. (2012) examined the fundamental relationship between the adoption of electronic retail payment and overall economic growth across 27 European countries from the period 1995–2009. They discovered that migration to an effective electronic retail payment would stimulate the overall economic growth, consumption, and trade. However, the impact of credit and debit card payment, fund transfers and cheques payment on the economy are relatively low.

Zandi et al. (2013) studied whether the long-term shift to credit and debit cards stimulates economic growth of 56 countries worldwide. They discovered that electronic card payments can increase efficiency and boost consumption of the economy. Moreover, the adoption of electronic transaction is essential for transparency, accountability and reduction of cash related fraud, the fundamental elements of economic growth and development

(Mieseigha & Ogbodo 2013). Electronic payments will replace cheque payments extensively but cash-based payment will persist to a substantial extent (Liao and Handa 2010). Although technological advancement has enabled improvement and innovation in electronic payment system (Oyewole et al. 2013), from the basic ATM card transaction to online credit transfer, direct debit, card payments and cheques, security related issues, non-IT savvy users and phishing emails are some of the shortcomings of the adoption of cashless payments. The loss of money and the compromise of private information weaken the confidence of consumers to make payment electronically. There is no conclusive evidence on how the adoption of cashless payment might affect an economy.

Cashless payment might have a positive impact on economic activities (Hasan et al.2012) but it also provide an opportunity for corruption (Park 2012), caused bankruptcy among youth (Noordin et al. 2012) and reduced policy control of the monetary system (Ezuwor e- Obodoekwe et al. 2014). The study highlights the objectives of being cashless, along with the essentials required by any country for being cashless. This study also examines the various modes of cashless payment namely, credit card, Debit card, electronic money and cheques and their impact on developing economies. The study also mentions about the hurdles which comes in the way of being cashless.

### **OBJECTIVES OF BEING CASHLESS**

The cashless transactions are evolution of cashless economy. It is a first step to buy and sell without physical cash. The study highlights various objective of being cashless which are as follows:

**1. Modernization of Payment System:** To drive development and modernization of payment system electronic payment is first step. An efficient and modern payment system is positively

correlated with economic development, and is a key enabler for economic growth.

2. **Efficient Transaction:** To reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach.

3. **Managing Inflation and Driving Economic Growth:** To improve the effectiveness of monetary policy in managing inflation and driving economic growth. In addition, the cash policy aims to curb some of the negative consequences associated with the high usage of physical cash in the economy.

4. **High cost of Cash:** There is a high cost of cash along the value chain from the banks, to corporations and traders; everyone bears the high costs associated with volume cash handling.

5. **High risk of Using Cash:** Cash encourages robbery and other cash related crimes. It can also lead to financial loss in the case of fire and flooding incidents. It can be reduced by cashless transactions.

6. **Informal Economy:** High cash usage results in a lot of money outside the formal economy, thus limiting the effectiveness of monetary policy in managing inflation and encouraging economic growth.

7. **Inefficiency and Corruption:** High cash usage enables corruption, leakages and money laundering, amongst other cash-related fraudulent activities can be reduced by cashless payments.

## MODES OF CASHLESS PAYMENT

Modes of cashless payment are ways of paying without cash. A cashless method is more transparent as every transaction can be traced easily as it leaves its footprints. Many smart people have adopted new cashless payment options. The alternative means of payment are as follows:

1. **Cheques:** The cheque is one of the oldest modes of cashless payments. In this method you issue a cheque for the specific amount to someone else. The cheque gets deposited in the respective bank. The bank processes a payment through a clearing house. The entire transaction done through cheque gets recorded and there is a proof of payment. However, there are instances where cheque payments get dishonoured due to signature mismatch or insufficient fund. In order to avoid such issue, you can use other cashless payment options (Parekh, 2016).
2. **Demand Drafts:** Another mode of cashless payments is bank drafts. Demand draft never gets defaulted as it is signed by banker, except if they are fraudulent. However, they are less popular because you need to visit a bank in order to deposit cheque and demand draft.
3. **Automated Teller Machine (ATM):** ATM is a combined computer terminal, with cash vault and record-keeping system in one unit, permitting customers to enter the bank's book keeping system with a plastic card containing a Personal Identification Number (PIN). It can also be accessed by punching a special code number into the computer terminal linked to the bank's computerized records. It is cash dispensing machines, deposits, funds transfer between two or more accounts and bill payments. Automated Teller Machines will be used much frequently for making variety of online payments such as utility bills, T.V subscriptions, GSM recharges, etc. Customers are

advised to keep their ATM cards (Debit and Credit) safe and never to divulge their PINs.

4. **NEFT:** It is an online platform where banks exchange value thereby enabling the performance of interbank transfers such as NEFT and NIBSS instant transferring funds between banks for single or multiple beneficiaries for individual. NEFT payments are instant and immediate.

5. **RTGS:** Real Time Gross Settlements is used to transfer sums in favour of a single beneficiary. Online transfer using RTGS is comparatively faster than cheque or DD. Online transfer can be done from anywhere using internet facility.

6. **Mobile Money:** This is a product that enables users to conduct funds transfers, make payments or receive balance enquiries on their mobile phones.

7. **E- transfers:** E – transfer refers to electronic transfers which can be affected via the internet on PCs, laptops and other devices. Bank customers who have subscribed to internet banking can do basic banking transactions via the web.

8. **POS Terminal:** Point of Sale (POS) terminals are deployed to merchant locations where users swipe their electronic cards through them in order to make payment for purchases or services instead of using raw cash. As the POS terminals are online real-time, the customers bank account is debited immediately for value of purchases made or services enjoyed.

9. **Electronic Purses/Wallets:** E-wallets that store card numbers and cash. This is a virtual wallet that can store credit card, debit card and other information. E – Wallets customer and merchant both require a smart phone with active internet connection. The most popular example of E – Wallet is PayPal. E – Wallet is simplest cashless method.

**10. Mobile Wallets:** The next cashless payment method is Mobile Wallet. You do not need a debit card, credit card or internet banking password for making payment using a mobile wallet. Just load money in your wallet via IMPS and use it on the move. You can download mobile wallet app from play store. For example: Paytm, PayUmoney, Oxigen, Lime etc.

**11. Credit Cards:** This is a plastic card for payment for the goods or items delivered. The limitation of this method is an availability of swipe card facilities (POS) at merchant end.

**12. Debit Cards:** These were a new form of value transfer, where the card holder after keying of a PIN, uses a terminal and network to authorize the transfer of value from their account to that of a merchant.

**13. Smart Cards:** A smart card is a plastic card with a computer chip inserted into it and that store and transacts data between users.

**14. Personal Computer Banking (Home Banking):** This term is used for a variety of related methods whereby a payer uses an electronic device in the home or workplace to initiate payment to a payee.

**15. Electronic Cheque:** Electronic cheques are used in the same way as paper cheque – the clearing between payer and payee is based on existing and well known banking settlement system.

**16. Digitized 'E-Cash' Systems:** E-cash payment system takes the form of encoded messages and representing the encrypted equivalent of digitized money.

**17. UPI Apps:** UPI is a mobile payment system which allows you to do various financial transactions on your smart phone. UPI allows you to send or receive money using virtual payment

address without entering bank information. Merchant can enrol with banks to accept payments using UPI. The example of few UPI apps are SBI pay, ICICI pocket, PNB UPI.

### ESSENTIALS FOR BEING CASHLESS

As the world moves towards a cashless environment, the initial awe and confusion have given way to a flurry of concerns. To move towards a cashless economy, the country needs essentials discussed as under:

- **Power:** Power must be improved dramatically to accommodate for smooth operations of financial activities.
- **The State of Infrastructures:** The financial infrastructure of a country is essential for carrying the load of a cashless society. ATMs, point of sales system, mobile banking and other mediums have to dramatically expand to the whole economy before any meaningful effect can be achieved.
- **Availability of Real Data:** Proper and accurate identification of account holders must be maintained and shared when necessary by all financial institutions. The collaboration of government and private agency responsible for collection of identification of individuals for reconciliation of any identification.
- **Investments:** Technology is not cheap and ever changing at a very fast pace. Investments in billions of dollars made in infrastructure, training, marketing, security, maintaining its networks and so on will be on a yearly basis for the years to come and should be a collaboration of efforts by all invested parties.
- **Security:** The security of the proposed and existing systems of payment must be enhanced to protect the users from malware, hackers, fraudsters, viruses and identity theft. As it relates to laws, there are needs to enforce new methods of transactions and a changing culture, the government must

partner and work with the National Assembly to ensure proper legislation is being formulated.

- **Online, Real-time, Every Time:** These alternative means of payment require that the different media used should be online real-time and every time. For those who have experienced downtime in banks, it is totally a frustrating experience. The devices must be online for the transactions to sail through. For POS terminals, it has been announced that dual-sim POS terminals will be used to minimize downtime (Okoye & Ezejiofor, 2013).
- Awareness and literacy among masses: Another very important factor in the successful implementation of a cashless economy is the levels of awareness and literacy, of the populace.
- Security from internet-related crimes: The issue of security is very serious, with country like India, having been described as the hub of internet scam; one can only wonder how the vulnerability of the cashless system to various forms of internet-related crimes will be addressed. The regulatory agencies in the financial sector ensures that service providers adhere to minimum security standards on their web-based platform, the current move by the country towards a cashless economy may end up being a fruitless exercise (Azeez, 2011).

Thus, security concerns on the web, the platform of cashless economy, are massive. India is replete with cases of internet scam and this will only increase as we enter into the e-payment era if the issue of security is not comprehensively addressed. Another facet to the cyber security concerns is the recent spate of cyber attacks worldwide. Can we guarantee a sufficiently sophisticated system as to scale the hurdle of cyber attacks which are capable of derailing the whole cashless system? If the case is so with the more organized economies, it can only be imagined what can take place in an unorganized and vastly lawless economies. Like the saying

goes – “if gold rusts what will happen to iron?” If we must go cashless, cyber security must be guaranteed by government first. There is the need for proactive measures by companies in the country to put up a defensive mechanism against these attacks.

### **HURDLES IN MAKING A COUNTRY CASHLESS**

A cashless economy is one in which all the transactions are done using cards or digital means. The circulation of physical currency is minimal. But there are many hurdles in making a country cashless.

A very important factor in the running of such an economy is the confidence that the people’s money is safe in banks. Also, going cashless is much more convenient. (Sparrow, 2016)

1. First, a large part of the population is still outside the banking net and not in a position to reduce its dependence on cash. According to a 2015 report by PricewaterhouseCoopers, India’s unbanked population was at 233 million. Even for people with access to banking, the ability to use their debit or credit card is limited because there are only about 1.46 million points of sale which accept payments through cards.
2. The absence of the additional layer of security will expose thousands of risk of identity theft. Another weak link is the inadequate redressed mechanism. There is no stringent legal process to deal with this kind or scale of fraud.
3. Most card and cash users fear that they will be charged more if they use cards. Further, non users of credit cards are not aware of the benefits of credit cards.
4. For cashless transaction you will be dependent on your phone for all the transactions on the move, losing it can prove

to be a double problem. This can be more problematic if a person is travelling or in smaller towns or village with lack of banking infrastructure or other payment options.

5. Another drawback is you need to keep your phone constantly charged (Dave, 2016).
6. About 90% of the workforce, that produces nearly half of the output in the country, works in the unorganized sector. It will not be easy for the informal sector to become cashless, and this part of the economy is likely to be affected the most because of the ongoing currency swap.
7. There is a general preference for cash transactions in developing countries like India. Merchants prefer not to keep records in order to avoid paying taxes and buyers find cash payments more convenient.
8. The digital medium may prove a challenge for the tech – unfriendly people, who will need more time to adapt or the availability of other options to conduct transactions.
9. Using cash instead of cards or mobile wallet acts as a natural bulwark for people who find it difficult to control their spending. The overspending, due to easy to spend transactions throw budget into disarray.
10. Growing cyber attacks and frauds, banking is still susceptible cyber laws and a focused approach to developing safer systems.
11. Availability of internet connection and financial literacy is also a serious hurdle in making any economy cashless.

Although cashless transactions have gone up in recent times, a meaningful transition will depend on a number of things such as awareness, technological developments and government

intervention. For instance, mobile wallets have seen notable traction, and it is possible that a large number of Indians will move straight from cash to mobile wallets. A study by Boston Consulting Group and Google in July noted that wallet users have already surpassed the number of mobile banking users and are three times the number of credit card users.

### **BENEFITS OF A CASHLESS ECONOMY**

The ease of conducting financial transactions is probably the biggest motivator to go digital. Cash less payments have several advantages, which were never available through the traditional modes of payment, some of which are; privacy, integrity, compatibility, good transaction efficiency, acceptability, convenience, mobility, low financial risk, anonymity (Keck, 2012). There are many benefits of a cashless discussed as under:

- 1. Ease of Conducting Financial Transactions:** First of all there is an ease of conducting financial transactions, which is probably the biggest motivators to go digital. In cashless payment there is no need to carry wads of cash or even stand in long queues in bank. It will be easy to carry money with you during travelling. It will be especially useful in case of medical emergencies. You can pay easily during working hours also.
- 2. Reduce Risk:** The policy will help fight against corruption/money laundering and reduce the risk of carrying cash, reduced cost, corruption and money laundering.
- 3. Reduced Tax Avoidance:** Thirdly, the cashless economy gets benefit of reduced tax avoidance. The recent waiver of service tax on card transactions also promotes digital transactions. This has been followed by a series of cuts and freebies. People will get discount on digital purchase which will cut their cost. Add to these the cash back offers and discounts offered by

mobile wallet like Paytm, as well as the reward points and loyalty benefits on existing credit and store cards, and it could help improve your cash flow marginally (Dave, 2016).

4. **Reduced Tax:** Taxation with lesser availability of hard cash at homes and more in banks, there is lesser scope of hiding income and evading taxation and when there is more tax payer it ultimately leads to a lesser rate of taxation for the whole country (Sparrow, 2016).
5. **Transparency:** It is not just the easiest way to transact but also brings about a lot more transparency in the financial system, which helps to curb generation of black money.
6. **Reduce prices of real estate:** Further, it will reduce real estate prices because of curb on black money as most of black money is invested in real estate prices which inflates the prices or real estate markets. In India, every year RBI spent lots of money (2 billion, 2015) on just the activity of currency issuance and management. It will also lead to lesser funding for illegal trades and activities including terrorism.
7. **Hygiene:** It will also help in improving hygiene on site eliminating the bacterial spread through handling notes and coins.
8. **Reduced Fear of Theft:** It will lower risk, it is easy to block a credit card or mobile wallet remotely, but it is impossible to get your cash back.
9. **Reduced Red-tapism and Bureaucracy:** With cashless transactions through electronic means the wire transfers are tracked and people are accountable which in turn reduces corruption and improve service time.

- 10. Lesser Interest Rates:** More currency in bank will mean more circulation of money in the economy, leading to greater liquidity and would eventually mean lesser interest rates (Sparrow, 2016)
- 11. Efficiency:** Cash collection made simple as time spent on collecting; counting and sorting cash is eliminated it will lead to efficiency gains. There will be greater efficiency in welfare programmes as money is wired directly into the account of recipients'. Further it reduces transfer/processing fees, increases processing/transaction time, offers multiple payment options and gives immediate notification on all transactions on customers' account.
- 12. Track on Spending:** If all transactions are on record, it will be very easy for people to keep track of their spending.
- 13. Benefits to Banks:** It is also beneficial to the banks and merchants; there are large customer coverage, international products and services, promotion and branding, increase in customer satisfaction and personalized relationship with customers and easier documentation and transaction tracking (Ashike, 2011).
- 14. Benefit to Government:** The government will benefit from the cashless economy in the area of adequate budgeting and taxation, improved regulatory services, improved administrative processes (automation), and reduced cost of currency administration and management (Ashike, 2011). Jimi Agbaje, one of the former governorship candidates on the platform of DPA in Lagos State states that the advantages of a cashless society range from regulating and controlling to securing the financial system of our economy.

## SUGGESTIONS

A cashless economy is not just an effort by the government bodies but a revolution which has to be brought about to make people understand the benefits and finally empower them to transact digitally in their everyday life. From one's salary to their mobile recharge, all remittance if done electronically will lead to a more transparent and accountable society (Sparrow 2016). The government should adopt a different strategy to educate the non-literates about the cashless economy and a framework should be worked out to provide cyber security in country. Power is another key infrastructure which impacts the availability of POS and ATMs. However, as noted above, a material transition to a cashless economy will depend on a number of factors. First, the availability and quality of telecom network will play an important role. Presently, people face difficulties in making electronic payments even in metro cities because of poor network. Second, as one of the biggest beneficiaries of this transition, banks and related service providers will have to constantly invest in technology in order to improve security and ease of transaction. People will only shift when it's easier, certain and safe to make cashless transactions. Third, the government will also need to play its part. It will have to find ways to incentivize cashless transactions and discourage cash payments.

The government will have to create conditions—not necessarily by creating cash shortages—to push cashless transactions to a threshold level after which the network effect will take over. Further, the cashless initiative needs comprehensive planned awareness, especially in more rural areas. Participation by rural and cooperative banks, post offices and other financial institutions to create awareness and education programmes will ultimately pave the way for a cashless economy. Training will be a necessity in urban parts of the country, too. Awareness is all

well and good, but some people will still need help to understand how to install and use digital payment systems. Although it would be impossible for any country to become a cashless economy in the short amount of time since, it is definitely something the country can look forward to.

The transformation of the current payment method to a total cashless one may not be possible in the near future, but continuous innovation in technologically aided payment system will certainly expand the society's accessibility to cashless payment. Although the adoption of one type of cashless payment will affect another type of cashless payment in the short run, the consequences of adopting cashless payment on economic growth can only be significantly observed in the long run. Hence, any policy that promotes cashless payment will not affect the economy immediately. The study suggests the futuristic card should evolve to use biometric ID (finger prints, eye scan etc), it can be extremely difficult to copy, making it a very safe option. The banks should work on two – factor authentication process for online transaction. The measure suggested include encouraging installation of point of sale (POS) machine by rationalising merchant discount rate (MDR) and allowing first five interbank transactions free of cost to promote online money transfer. Further, more ATM should be setup so that people start using plastic money. It is also suggested to withdraw of surcharge or service charge or convenience fee on card and digital payments currently imposed by government.

## **CONCLUSION**

A cashless economy describes an economic state whereby financial transactions are not conducted with money in the form of physical banknotes or coins, but rather through the transfer of digital information between the transaction parties. From the analysis above, the paper discovered that the adoption of the

cashless economy policy can enhance the growth of financial stability in the country. It appears that much has already been done in making the people aware of the cashless economy and that a sizeable proportion of the people are actually awaiting the introduction of the cashless economy. Cashless economy initiative will be of significant benefits to developing economy; hence the cashless system will be helpful in the fight against corruption and money laundering. One most significant contribution of the cashless economy is that it is expected to reduce the risk associated with carrying cash. Since most transactions will now be settled electronically, people will have less need to move around with cash and therefore, loss of cash, theft and armed robbery will drastically reduce. It was also discovered that majority of researcher (Okoye & Ezejiolor, 2013) agreed that the adoption of the cashless economy policy will enhance the growth of financial stability in the country, thereby bringing about business, price and economic stabilization. It will also be effective in solving the problems faced in the financial sector.

The essential elements needed for the adoption and implementation of the cashless economy is not yet available in the adequate quantity. It was also discovered that the adoption of the cashless economy will achieving economic development and stability goals, operating it is a wise strategy for fast-tracking growth in the nations' financial sector. Thus because of the multiplying effect of the benefits many developing economies are adopting the cashless approach and are going digital. This is a mammoth task and requires the infrastructure to be robust and have a reach in the entire consumer base as well as the traders and businessmen. It is up to the governing bodies of the countries to provide a push to banks and telecom companies to improve the mobile and net banking ecosystem so as to provide a seamless end solution to customers as well as traders (Sparrow,

2016). The advantage of going cashless is beyond imagination, not just to the citizens but the country as well.

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