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# DEMONETIZATION: MOVING TOWARDS A CASH LITE ECONOMY

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**ABSTRACT**

Demonetization has been one of the major and most important changes for India in post Modi era. The drastic move has affected life of each and every Indian in one way or another and that is why we felt the need of analyzing this change in terms of the implementation needs of the move, the effect of the move and the current need of the move. The same has been covered in sections given below

## 1. INTRODUCTION

The government has implemented a major change in the economic environment by demonetizing the high value currency notes – of Rs 500 and Rs 1000 denomination. These ceased to be legal tender from the midnight of 8th of November 2016. People had been given upto December 30, 2016 to exchange the notes held by them. The proposal by the government involves the elimination of these existing notes from circulation and a gradual replacement with a new set of notes. In the short term, it is intended that the cash in circulation would be substantially squeezed since there are limits placed on the amount that individuals can withdraw. The reasons offered for demonetisation are two-fold: one, to control counterfeit notes that could be contributing to terrorism, in other words a national security concern and second, to undermine or eliminate the "black economy".

There are potentially two ways in which the pre-demonetisation money supply will stand altered in the new regime: one, there would be agents in the economy who are holding cash which they cannot explain and hence they cannot deposit in the banking system. This part of the currency will be extinguished since it would not be replaced in any manner. Second, the government might choose to replace only a part of the currency which was in circulation as cash. In the other words, the rest would be available only as electronic money. This could be a mechanism used to force a transition to cashless medium of exchange. The empirical extent of these two components will be unraveled only in the coming few months. These two would have different effects on the economy in the short term and in the medium term.

## 2. UNDERSTANDING CASH IN INDIAN CONTEXT

To understand the effects of these dimensions, it is important to first understand what is it that cash does in the economy? There are broadly four kinds of transactions in the economy: accounted transactions, unaccounted transactions, those that belong to the informal sector and illegal transactions. The first two categories relate to whether transactions and the corresponding incomes are reported for tax purposes or not. The third category would consist largely of agents who earn incomes below the exemption threshold and therefore do not have any tax liabilities. The uses that cash is put to for these various segments of the economy can be summarized in the form of Table 1. Finally, there would be demand for cash for illegal purposes like bribes in elections, spending over sanctioned limits, dealings in crime and corruption. If one takes a snapshot of the location of cash at any given point of time, it is difficult to predict what the breakup of the cash according to these categories would be, but it would be safe to say that each of these components would be represented in that snapshot.

*Table 1. Demand for cash by various agents in the economy*

| | Unaccounted transactions | Illegal transactions | Informal sector transactions | Accounted transactions |
|---|---|---|---|---|

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| Description | Legitimate transactions, but tax not paid (unaccounted invoices) | Transactions for corruption, crime etc | Income below exemption threshold and therefore no tax liabilities | Legitimate transactions with tax payment |
|---|---|---|---|---|
| **Medium of exchange** | Majorly cash | Cash only | Majorly cash | Cash, cheque, electronic payments |

As evident from the table above, cash is the major medium of exchange for all the buckets of transactions in India. This exhibits that India's economy is relatively cash dependent. This fact is further strengthened through the following data points:

- India's currency to GDP ratio has evolved in two broad phases. It declined fairly steadily for the first decade and a half after independence, falling from about 12% in 1952-53 to about 9% in 1967-68. Thereafter, the ratio appears to have responded to the growth of the economy. It began its upward trend in the late 1970s when growth increased and then accelerated further during the growth boom of the 2000s. This ratio declined during the period of high inflation in the late 2000s and early 2010s but it rebounded after 2014-15 to 12% when inflation declined again. [2]

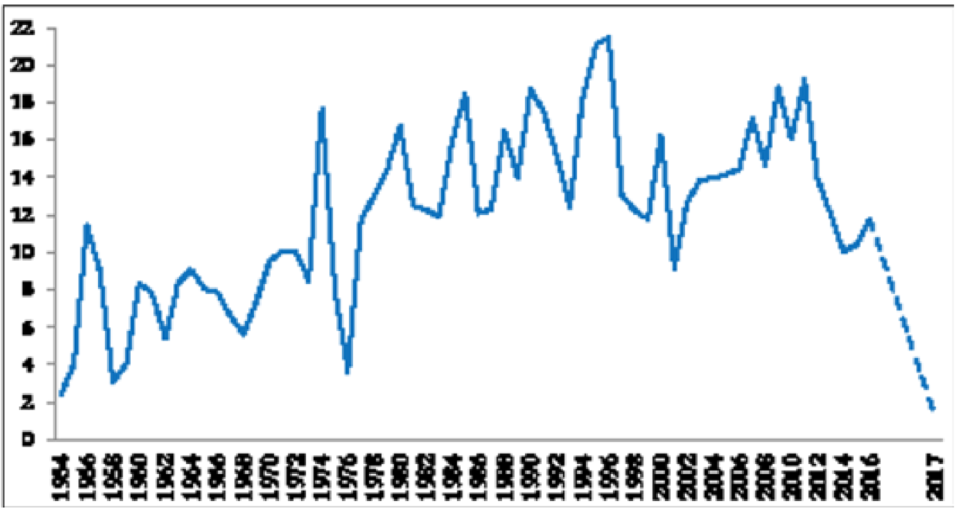

***Figure 1. Growth in average currency with public***

- The currency in circulation as a proportion of GDP in India is the highest among emerging economies.

***Table 2. Cash to GDP ratio in BRICS nations [3]***

| Country | Cash to GDP % |
|---|---|
| Brazil | 3% |
| Russia | 9% |
| India | 10.6% |
| China | 9.1% |
| South Africa | 2.5% |

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- It is also important to note the fact that the number of high denomination notes (INR 500 and INR 1000) relative to GDP has also increased in line with the rising living standards (Figure 2). It is usually the case that high value notes are associated with corruption because they are easier to store and carry, compared to smaller denominations or other stores of value such as gold, real estate etc [4]

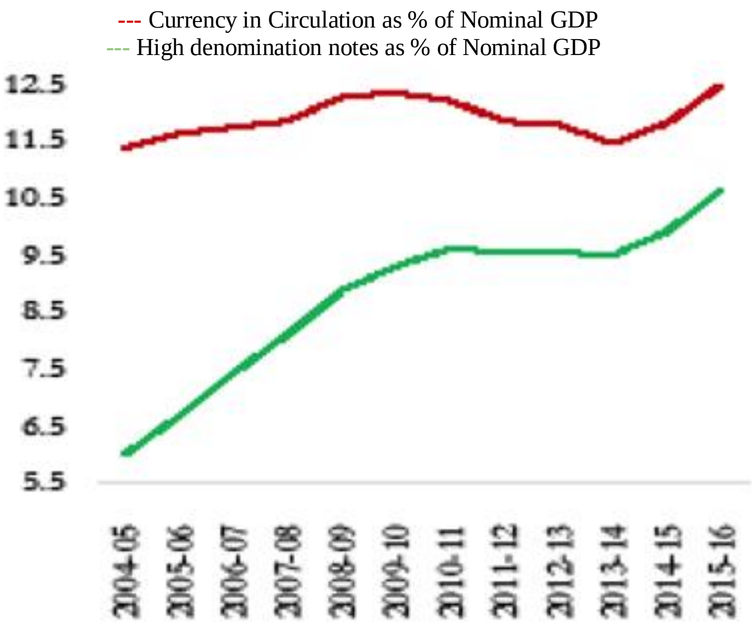
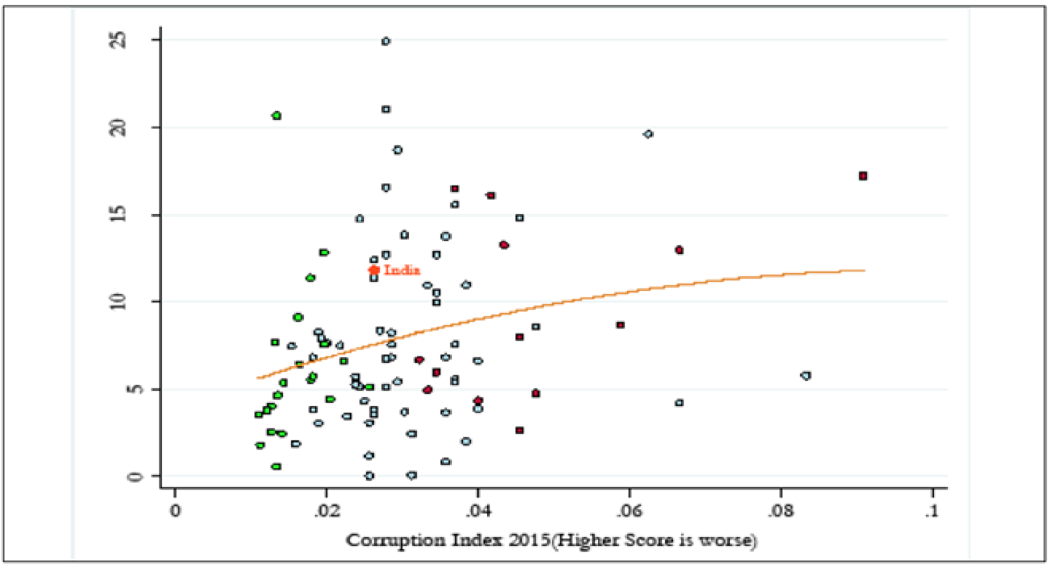



*Figure 2. High denomination notes and currency in circulation*

## 3. HIGH DENOMINATION NOTES AND CORRUPTION

The data above seems to suggest that some of the cash holdings were not being used for legitimate transactions, but perhaps for other activities such as corruption. This presumption is especially strong because across the globe there is a link between cash and nefarious activities: the higher the amount of cash in circulation, the greater the amount of corruption, as measured by Transparency International (Figure 3).




*Source:* Transparency International, World Development Indicators

*Figure 3. Cash to GDP Ratio and Corruption*

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In this sense, attempts to reduce the cash in economy could have important long-term benefits in terms of reducing levels of corruption. Yet India is 'off the line', meaning that its cash in circulation is relatively high for its level of corruption. This suggests two possibilities. Perhaps India's level of corruption (or other related pathologies) is much worse than the index shows, so the orange dot should really be placed on the right. Or cash is being used for other, presumably legitimate purposes.

## 4. QUANTIFYING USE OF HIGH DENOMINATIONS FOR LEGITIMATE TRANSACTIONS

The most conclusive evidence on the extent to which Rs.500 and Rs.1000 notes are used for transactions comes from data on "soil rates", that is the rate at which notes are considered to be too damaged to use and have been returned to the central bank. RBI data shows that in India low denomination notes have a soil rate of 33% per year. In contrast, the soil rate for the Rs.500 note is 22% and the Rs.1000 note is just 11%. One way to estimate black money is to assume that all these notes should soil at the same rate, if they were really being used for transactions. This would yield an estimate of money that is not being used for transaction as **Rs.7.3 lakh crores.** But this assumption would be extreme since the lower soil rates for the high denomination notes could arise if they are used in the same way, but just less frequently because there are fewer high value transactions. There is a way, albeit not perfect, to differentiate between these two hypotheses, by comparing Indian data to soil rates in other countries. In principle, if a rupee denomination note and a foreign denomination note fulfill a similar transaction function, then their soil rates should be similar (all else equal). If the Indian soil rate is instead lower, this suggests that a fraction of the notes are not being used for transactions but rather for storing black money.

Using relative soil rates for the US $50 and $20 notes and applying them to comparable Indian high denomination notes, yields an estimate of the amount not used for transactions, and hence potentially black of about **Rs.3 lakh crores.** This is substantial as it represents about 2% of the GDP.

## 5. MOVING TOWARDS A CASH-LITE ECONOMY

One of the essential objective of demonetisation is to create a cash-lite economy, as this is a key to channeling more saving channeled through the formal financial system and improving tax compliance. Though there are other objectives of demonetisation, the scope of this research document has been limited to study the modus operandi of a digitalised economy.

Digitalisation can broadly impact three sections of society: the poor, who are largely outside the digital economy; the less affluent, who are becoming part of the digital economy having acquired Jan Dhan accounts and RuPay cards; and the affluent, who are fully digitally integrated via credit cards. One simple measure that illustrates the size of these three categories is cell phone ownership. There are approximately 350 million people without cell phones (the digitally excluded); 350 million with regular "feature" phones, and 250 million with smartphones. In the wake of the demonetisation, the government has taken a number of steps to facilitate and incentivize the move to a digital economy. These include:

a. Launch of the BHIM (Bharat Interface For Money) app for smartphones. This is based on the new Unified Payments Interface (UPI) which has created interoperability of digital transactions.
b. Launch of BHIM USSD 2.0, a product that allows the 350 million feature phone users to take advantage of the UPI.
c. Launch of Aadhaar Merchant Pay, aimed at the 350 million who do not have phones. This enables anyone with just an Aadhaar number and a bank account to make a merchant payment using his biometric identification. Aadhar Merchant Pay will soon be integrated into BHIM and the necessary POS devices will soon be rolled out.
d. Reductions in fees (Merchant Discount Rate) paid on digital transactions and transactions that use the UPI. There have also been relaxations of limits on the use of payment wallets. Tax benefits have also been provided for to incentivize digital transactions.
e. Encouraging the adoption of POS devices beyond the current 1.5 million, through tariff reductions. [1]

## 6. HOW HAS THE DIGITAL ECONOMY FARED SO FAR?

Digital payments through the Unified Payments Interface (UPI), the mobile-based national payment system, is continuously surging even after the end of demonetisation-induced cash shortage. UPI-based transactions have jumped almost by 20% to Rs 2,000 crore in March, up from Rs 1,660 crore in January. This data shows success of government's agenda of ending black money through digital payments and penetration of formal finance in the hinterland of the country.

While 90% of transactions on UPI are coming from peer to peer modes of payments and remittances, the share of merchant transactions is expected to go up sharply after the full scale rollout of BharatQR — a common QR code developed by all major card payment companies to enable digital payments without card swiping machines — and UPI@PoS — or, point-of-sale machines configured to enable payment through UPI interface without swiping cards.

***Table 3. Digital Economy so far***

| Month | Transaction (Value) | Transaction (Volume) |
|---|---|---|
| March | Rs. 1970 Crores | 49 lakhs |
| February | Rs. 1900 Crores | 42 lakhs |
| January | Rs. 1660 Crores | 42 lakhs |
| **No. of Banks live on UPI**: 44 | | |
| **No. of Transactions on BHIM:** 80,000 per day | | |
| **Average value of transactions:** Rs.4,000 | | |

The digital payment surge since demonetisation is, however, not helping mobile wallets or prepaid instruments. RBI data shows that mobile wallets have not been able to pick up in the merchant payment space, with less than Rs 1,800 crore worth of transactions reported in March, down from Rs 2,100 crore in January. According to RBI data, the average wallet transaction is worth less than Rs 250 while average UPI transaction amount is around Rs 4,000.

## 7. CONCLUSION

The government has taken a step in the right direction by bringing in demonetisation in an economy plagued by corruption and counterfeit currency. Initial indicators point that the step has caused good impact on the economical system. Shifting to a cash lite economy will help increase transparency and accountability manifolds. However, the success of digitalization will depend considerably on the inter-operability of the payments system. The Unified Payments Interface (UPI) created by the NPCI is the technology platform that will be the basis for ensuring interoperability. But to ensure this, individual banks should facilitate not thwart inter-operability. If the government policies are implemented effectively, the long term effects of demonetisation and digitisation are bound to improve the financial system of the country, making it more transparent and accountable. [6].

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