A Study on Demonetization of Currency and Its Impact on Banking Sector

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Abstract
Demonetisation is a situation where the Central Bank of the country (Reserve Bank in India) withdraws the old currency notes of certain denomination as an official mode of payment. On 8 November 2016, the Government of India announced the demonetisation of all ₹500 and ₹1000 banknotes of the Mahatma Gandhi Series. The government claimed that the action would curtail the shadow economy and crack down on the use of illicit and counterfeit cash to fund illegal activity and terrorism. The sudden nature of the announcement and the prolonged cash shortages in the weeks that followed created significant disruption throughout the economy, threatening economic output. The excess deposits accrued to the banking system due to demonetisation range between Rs 2.8-4.3 trillion. "Excess deposit growth in the banking system during the demonetisation period (i.e., November 11, 2016 to December 30, 2016) works out to 4.7 percentage points. If the period up to mid-February 2017 is taken into account to allow for some surge to taper off, excess deposit growth is in the range of 3.3-4.2 percentage points. The liquidity boost resulting from the demonetisation announcement on November 8, 2016 has stayed with the banking sector a year after the event, helping banks reduce their high-cost deposits and boosting their current account and savings account (CASA) ratio. In this research paper researcher has tried to analyse the impact of demonetisation on Indian banking industry.

Keywords: Demonetisation, Current Account, Saving Account, Deposits, Economy

Classification-JEL: E 42, E 52, G 21

1. INTRODUCTION
Demonetization is the act of stripping a currency unit of its status as legal tender. It occurs whenever there is a change of national currency. The current form or forms of money is pulled from circulation and retired, often to be replaced with new notes or coins. There are multiple reasons why nations demonetize their local unit of currency. Some reasons include to combat inflation, to combat corruption, and to discourage a cash system. The process of demonetization involves either introducing new notes or coins of the same currency or completely replacing the old currency with new currency.

A study by the National Investigation Agency and the Indian Statistical Institute, in 2016, estimated that fake Indian currency notes...
in circulation have a face value of Rs. 400 crore. This is an incidence of fake currency of 0.022%. The scale of counterfeiting of the Indian rupee is not out of line with what is seen in other countries, and the procedures adopted worldwide to address this include investigative actions against counterfeiters, phased replacement of old series of notes with new notes that have better security features, etc. Demonetisation is generally not seen as a tool for dealing with counterfeiting. We must also not forget that the counterfeiters will now get to work on the new 500/2000 rupee notes, while India will likely never do a demonetisation again.

The analysis presented in the Finance Ministry's White Paper on Black Money, 2012, shows (on page 47) that, on an average, the amount of cash seized during raids by income tax authorities is 4.88 percent of total undisclosed income admitted in those cases. This data is from more than 23 thousand warrants executed. Even if this decision inflicted a 100% loss upon holders of unaccounted cash, this would imply a loss of 4.88% of their total unaccounted wealth, which is not much of a shock for those with such wealth. If, as is more likely, the demonetisation has imposed a 40% loss upon holders of unaccounted wealth (who suffer a 40% discount when laundering the money), this implies a loss of about 2% of unaccounted wealth.

2. INDIA'S HISTORY WITH DEMONETISATION: FROM 1946 TO 2016

The first currency ban

In 1946, the currency note of Rs 1,000 and Rs 10,000 were removed from circulation. The ban really did not have much impact, as the currency of such higher denomination was not accessible to the common people. However, both the notes were reintroduced in 1954 with an additional introduction of Rs 5,000 currency. Rs 500 and Rs 1000 notes were introduce in 1934 and after four years in 1938, Rs 10,000 notes were introduce.

The second currency ban

That came in 1978; the then Prime Minister of India Morarji Desai announced the currency ban taking Rs 1000, Rs 5000 and Rs 10,000 out of circulation. The sole aim of the ban was to curb black money generation in the country.

3. LITERATURE REVIEW

Alvares, Cliford (2009), In their reports, “The problem regarding fake currency in India. “It is said that the country's battle against fake currency is not getting easier and many fakes go un detected. It is also stated that counterfeiters hit her to hadrest ricted printing facilities which made it easier to discover fakes.

Ashish Das, and Rakhi Agarwal (2010), In their article, Cashless Payment System in India- A Road map”Cash as a mode of payment is an expensive proposition for the Government. The country needs to move away from cash-based towards a cashless (electronic) payment system. This will help reduce currency management cost, track transactions, check tax avoidance/fraud etc., enhance financial inclusion and integrate the parallel economy with main stream.

Jain, P.M. (2006), In the article “E-payments and e-banking” opined that e-payments will be able to check black “An Analysis of Growth Pattern of Cashless Transaction System. Taking fullest advantage of technology, quick payments and remittances will ensure optimal use of available funds for banks, financial institutions, business houses and common citizen of India. He also pointed out the need for-payments and modes of e-payments and communication networks.

4. RESEARCH METHODOLOGY

This paper is based on secondary data collected from various sources like journals, magazines, websites, newspapers, economic survey and annual reports of rbi. etc.
Objective

- To study the role of demonetization in the banking sector.
- To make a comparative study of cash deposits with banks in fy 2015-16 and 2016-17.
- To make a comparative study of total cash deposits in different types of accounts.

Hypothesis

1. H₀: Demonitisation does not have any impact on total cash deposits with banks.
   H₁: Demonitisation have impact on total cash deposits with banks.

2. H₀: Demonitisation does not have any impact on deposits with specific bank accounts
   H₁: Demonitisation have impact on deposits with specific bank accounts

5. DATA ANALYSIS

   On November 8, 2016, currency notes of denominations of 1000 and 500 (specified bank notes or SBNs), valued at 15.4 trillion and constituting 86.9 per cent of the value of total notes in circulation were demonetised. The consequent decline in currency in circulation was mirrored in a surge in bank deposits. Between October 28, 2016 to January 6, 2017, notes in circulation declined by about 8.8 trillion, which in turn, was largely reflected in an increase of about 4 percentage points in the share of Current Account and Saving Account (CASA) deposits (low cost deposits) in aggregate deposits of the banking system (Charts 1 and 2). Demonetisation also led to a significant increase in financial intermediation with 48 per cent increase in deposits in Pradhan Mantri Jan-Dhan Yojana (PMJDY) accounts, with addition of 18 million accounts post-demonetisation (November 9 to January 25, 2017). The latest data indicate that 38.2 million new accounts were opened until July 26, 2017 since demonetisation (Chart 3).
6. ESTIMATES OF EXCESS DEPOSITS

This study attempts to analyse deposit 'behaviour' with a view to estimating 'excess' deposit growth due to demonetisation. First, employing certain assumptions, a time series model is adopted to assess the 'normal' rate of growth in bank deposits during the demonetisation period and then 'excess' growth is derived juxtaposing it with actual growth. Second, seven categories of special accounts constituting about 30 per cent of bank deposits are evaluated against the growth recorded during previous years. Such accounts are selected given the lack of significant activity in these accounts during normal times and indications of unusual cash deposits. The resulting estimates are presented below.

7. ESTIMATES BASED ON AGGREGATE BANKING STATISTICS

The benchmark nominal rate of deposit growth is assumed under alternate scenarios to be (i) the deposit growth in the corresponding period of 2015-16 and (ii) the average growth recorded during the corresponding periods of the previous two years (i.e., 2014-15 and 2015-16).

TESTING OF HYPOTHESIS I

Scenario 1: Normal deposit growth proxied by the observed rate in 2015-16

Table 1.
Estimated Impact of Demonetisation on SCBs' Aggregate Deposits

<table>
<thead>
<tr>
<th>Period</th>
<th>Deposit growth</th>
<th>Scenario I</th>
<th>Scenario II</th>
<th>Scenario III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4.2</td>
<td>4.0</td>
<td>4.7</td>
</tr>
<tr>
<td>November 11, 2016 to December 30,</td>
<td>Excess growth in percentage points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>3,829</td>
<td>3,608</td>
<td>4,309</td>
<td></td>
</tr>
<tr>
<td>November 11, 2016 to February 17,</td>
<td>Excess growth in % billion</td>
<td>3.5</td>
<td>3.3</td>
<td>4.2</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excess growth in percentage points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,233</td>
<td>2,991</td>
<td>3,848</td>
<td></td>
</tr>
<tr>
<td>November 11, 2016 to March 31, 2017</td>
<td>Excess growth in percentage points</td>
<td>3.3</td>
<td>3.0</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excess growth in % Billion</td>
<td>3,088</td>
<td>2,754</td>
<td>3,472</td>
</tr>
</tbody>
</table>

Source: www.rbi.org

Note: Due to fortnightly reporting system, data have been taken from the fortnight ending November 11, 2016 to capture the impact of demonetisation.

From Table 1 it is find out that Aggregate deposits grew by 14.5 per cent (y-o-y) during the period November 11 to December 30, 2016, as against 10.3 per cent during the corresponding period of 2015, indicating a 4.2 percentage point excess deposit growth due to demonetisation. In nominal terms, excess deposits work out to ₹ 3.8 trillion.

Assessment for the period November 11, 2016 to February 17, 2017 reveals that average fortnightly bank deposit growth was 13.9 per cent, 3.5 percentage points in excess of the assumed normal growth of 10.4 per cent during the corresponding period of 2015-16. With a view to factoring in some temporal tapering of deposits, if the period up to end-March 2017 is considered, the actual deposit growth of 13.4 per cent exceeds the estimated growth of 10.1 per cent by 3.3 percentage points.

Scenario 2: Normal deposit growth proxied by average of 2014-15 and 2015-16

The average fortnightly y-o-y growth in bank deposits during November 11-December 30 of 2014-15 and 2015-16 was 10.6 per cent,
while the average deposit growth for the same period of 2016-17 was 14.5 per cent. Under this scenario, excess deposit growth due to demonetisation is estimated at 4.0 percentage points. On the same basis, deposit growth for the period November 11 to February 17, 2017 was 3.3 percentage points in excess of the deposit growth of 10.7 per cent based on average of the same period of previous two years. If the period up to end-March 2017 is considered, the excess deposit growth works out to 3.0 percentage points above the average deposit growth of 10.4 per cent.

**TESTING OF HYPOTHESIS II**

Estimation of Excess Deposits based on Specific Bank Accounts

Before the discontinuation of over-the-counter exchange facility at bank branches on November 25, 2016, about ₹ 370 billion of SBNs were tendered. A significant amount of SBNs flowed into the following special types of accounts: Basic Saving Bank Deposit Account (BSBDA); PMJDY Accounts; Kisan Credit Card (KCC); dormant or inoperative accounts; co-operative banks’ accounts with SCBs; bullion trader/jewellers’ accounts; and loan accounts. The amount of unusual cash deposits has been estimated below using data on these accounts and the following estimation methods.

**Scenario 1: Month over month increase without adjusting for seasonality**

**Table 2.**

<table>
<thead>
<tr>
<th>Type of account</th>
<th>9-Sep to 30-Oct 2016 (52 Banks)</th>
<th>9-Nov to 30-Dec 2016 (52 Banks)</th>
<th>Increase in cash deposits due to demonetisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBDA</td>
<td>67.0</td>
<td>264.1</td>
<td>197.0</td>
</tr>
<tr>
<td>PMJDY</td>
<td>66.7</td>
<td>664.8</td>
<td>598.1</td>
</tr>
<tr>
<td>KCC</td>
<td>142.2</td>
<td>129.8</td>
<td>-12.3</td>
</tr>
<tr>
<td>Dormant accounts</td>
<td>28.3</td>
<td>242.2</td>
<td>213.9</td>
</tr>
<tr>
<td>Co-operative banks’ accounts with SCBs</td>
<td>201.9</td>
<td>787.8</td>
<td>585.9</td>
</tr>
<tr>
<td>Bullion traders’ accounts</td>
<td>94.9</td>
<td>110.6</td>
<td>15.7</td>
</tr>
<tr>
<td>Loan accounts</td>
<td>2,100.5</td>
<td>2,158.9</td>
<td>58.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,701.5</strong></td>
<td><strong>4,358.1</strong></td>
<td><strong>1,656.6</strong></td>
</tr>
</tbody>
</table>

Source: www.rbi.org

From table 2 it can be infer that estimated cash deposits in these seven types of accounts during November-December 2016 with 52 banks were ₹ 4,358 billion. Cash deposits in these accounts during September-October 2016 were ₹ 2,701 billion. Thus, the variation of ₹ 1,657 billion can be assumed to be the increase in cash deposits under these accounts due to demonetisation in the absence of any noticeable activity in such accounts during normal times.

**Scenario 2: Based on y-o-y growth of aggregate cash deposits**
Table 3.
Net Deposits in all Types of Bank Accounts
(₹ billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net deposits in all types of accounts of SCBS during Nov-Dec (50 days)</th>
<th>% y-o-y growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,835.4</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1,732.0</td>
<td>−5.6</td>
</tr>
<tr>
<td>2012</td>
<td>374.7</td>
<td>−78.4</td>
</tr>
<tr>
<td>2013</td>
<td>553.1</td>
<td>47.6</td>
</tr>
<tr>
<td>2014</td>
<td>370.1</td>
<td>−33.1</td>
</tr>
<tr>
<td>2015</td>
<td>457.5</td>
<td>23.6</td>
</tr>
</tbody>
</table>

Source: www.rbi.org

Note: Net deposit is the difference between deposit and withdrawal.

From table 3 it can be infer that the estimated cash deposits in seven types of accounts with 52 banks were ₹4,358 billion during November-December 2016 and ₹3,065 billion during November-December 2015. Average y-o-y growth of net deposits (deposit minus withdrawal) of all types of accounts of SCBs during November-December for last 5 years was (-) 9.2 per cent. The estimated trend of cash deposits in these accounts during November-December 2016 is ₹2,783 billion. Thus, excess cash deposit during November-December 2016 works out to ₹1,575 billion.

8. FAVOURABLE IMPACT OF DEMONETISATION ON BANKS

- Demonetisation has resulted in a rise in deposit growth at a time when banks have reduced interest rates on term deposits. Deposits rose 13.9% or ₹12.7 lakh crore to ₹105 lakh crore against a 10% rise last year.
- Banks have gained deposits substantially after demonetisation which they can invest for improving their profitability.
- Banks in India are burdened with NPA. The cash coming into the system will reflect favourably on their balance sheet. There non-performing advances have also come down.
- Basel III norms would be easier to achieve. Besides as banks will reduce their cash holdings due to more digital interface it will add to their long term profitability and cash loss for various reasons like theft, dacoity and misappropriation will be avoided.
- The monetary shock can be, and will be, quickly overcome by the use of monetary policy instruments to restore liquidity.
- This decision will expedite the process of making India a "cashless economy", with benefits that will make short-term costs worthwhile.
- The surplus liquidity in the banking system, created by demonetisation, will lower borrowing costs and increase the access to credit. This will boost economic activity with multiplier effects.

9. NEGATIVE IMPACT OF DEMONETISATION ON BANKS

The negative impacts are because of regulation, costs of demonetisation, loss of opportunity and short-term damage to economy.

1. The 100% cash reserve requirement (CRR) on incremental deposits meant that banks did not earn any interest on ₹3 lakh crore of deposits for nearly a fortnight.
2. The waiver of ATM charges would result in banks losing ₹20 in every transaction.
3. The waiver of merchant discount rate on cards would result in banks losing 1% in every card transaction.
4. All ATMs need to be recalibrated for issue of new denomination notes like ₹2000 and ₹500 it will add substantially to their operational expenses. It will reduce their income during the next quarter.
5. As people are not very much versatile with digital operations, they may face various operational risks like cyber fraud.
6. While deposits grew, credit growth didn’t pick up as it remained muted at around 5% with total outstanding bank credit standing at ₹ 74 lakh crore. As a result, banks were forced to park surplus funds in government bonds which helped lower yields which, in turn, has helped the government raise cheaper funds.

7. Banks use third parties like cash logistics companies for cash transportation. Moving out ₹ 15 lakh crore of currency notes and moving in ₹ 7 lakh crore plus from currency chests would have cost several thousand crore.

8. During November and December bank work was largely centered on accepting and exchanging specified bank notes. As a result other activities like lending during busy season is affected which will reduce their earnings for the next quarter and profitability.

9. Some SME businesses have seen their sales drop 50–80% and could default in their instalments. They wont immediately be classified as NPAs because of some relaxations, but if the delay persists bank NPAs might worsen.

10. Uncertainty has resulted in drop in spending on high value items from credit cards. These are the transactions which are converted into EMIs and banks earn from them

10. CONCLUSION

Excess deposit growth in the banking system during the demonetisation period (i.e., November 11, 2016 to December 30, 2016) works out to 4.0-4.7 percentage points. If the period up to mid-February 2017 is taken into account to allow for some surge to taper-off, excess deposit growth is in the range of 3.3-4.2 percentage points. Considering some more temporal tapering of deposits, the exercise taken up to end-March 2017 reveals that excess deposit growth would be in the range of 3.0-3.8 percentage points. In nominal terms, excess deposits accrued to the banking system due to demonetisation are estimated in the range of ₹ 2.8-4.3 trillion. The unusual cash deposit in specific accounts, which are usually less active, is estimated to be in the range of ₹ 1.6-1.7 trillion. Overall, there appears to have been a significant increase in bank deposits due to demonetisation, which if sustained, could have favourable impact on financial savings and their channelization to capital markets. Demonetization creates the major effect on currency. Now-a-days it is very difficult to maintain the banking transaction. Through the demonetization the currency appreciate and faces the many hurdle to maintain financial activity. Demonetization of old currency notes surely has had some positive impact like reducing the cash flow to terror organizations, dismantling of counterfeit currency infrastructure, better income tax and indirect taxation, boost to digital economy.

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