DEMONETISATION: Macroeconomic Implications for Indian Economy

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DEMONETISATION
Macroeconomic Implications for Indian Economy

Santosh Kumar Das[*] *and Pradyuman Shankar Rawat*[**]

*[**Abstract**: The present paper attempts to explore the macroeconomic implications of the "demonetisation" exercise announced on November 8, 2016, for the Indian economy on three board parameters of growth, distributional consequences, and the challenges it brought in for the Banking Sector. Concomitantly, an attempt has been made to evaluate the extent to which the stated objectives behind this exercise are justified. We found that it is beyond dispute as far as the immediate impact on growth is concerned. Given the size of the informal economy, contraction in output during this fiscal was inevitable. However, at this stage it is too early to predict anything about the future course of output growth. Other than the growth challenge, the demonetisation exercise throws a far more important challenge bearing distributional consequences. The new interest rate regime that emerged during the post-demonetisation period is likely to benefit some while leaving a large chunk of population worse off. Finally, the banks find it very difficult to manage the liquidity surge in the system. With an increase in deposit growth and a decline in credit growth, it would be difficult for banks to manage their liabilities. The evaluation of its stated objectives suggests that it does not justify such a mammoth exercise, which is cost-intensive and bears serious adversarial economic consequences.]*

***Keyword**: Demonetisation, Economic Growth, Indian economy, Banking Sector*

I. Introduction

On November 8, 2016, the Government of India announced the demonetisation of Rs500 and Rs1,000 notes[1]. The Reserve Bank of India (RBI) in its Notification dated November 8, 2016, was very specific that 'the incident of fake Indian currency notes in higher

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[1] Pursuant to Gazette Notification No. 2652 dated November 08, 2016, issued by Government of India, all banks (Public Sector Banks/Private Sector banks/Foreign Banks/Regional Rural Banks/Urban Co-operative Banks/State Co-operative banks) were notified that Banknotes (currency) of Rs 500 and Rs 1000 denominations of the existing series issued by the RBI shall cease to be legal tender with effect from November 09, 2016, to the extent specified in the Notification.

denomination has increased. The fake notes are used for antinational and illegal activities. Higher denomination notes have been misused in the form of counterfeit currencies and for hoarding black money. India remains a cash-based economy hence the circulation of Fake Indian Currency Notes continues to be a menace. In order to contain the rising incidence of fake notes and black money, the scheme to withdraw has been introduced.'[2]

There cannot be any denial of the adverse impact of black economy or money and counterfeit notes on the economy. Any exercise that guarantees eradication of black economy or money is certainly helpful for the economy. However, the question remains: Will the demonetisation exercise be able to eradicate black money as claimed in the RBI and Government of India Gazette notifications? [See footnotes 1 and 2]. Previously, on two occasions, demonetisation of high-value notes (over Rs 100) on January 12, 1946 and January 16, 1978 was done, citing elimination of black money as the prime objective of the exercise (Lahiri, 2016). It is to be seen to what extent the counterfeit notes pose a threat to the economy and does it call for such action.

To understand the effects of demonetisation exercise, it becomes necessary to discern the role of cash in a developing economy like India. Typically, there are four types of financial transactions that take place in an economy—accounted transaction, unaccounted transaction, transaction belonging to the informal sector, and illegal transaction (NIPFP, 2016). The first two categories of transactions concern reporting to tax authorities for tax purposes. While the accounted transactions are reported for tax purposes, the unaccounted transactions are not. The transactions in the informal sector involve individuals or agents whose income falls below the exemption threshold, and therefore, do not have any tax liability. This sector largely lives on cash; it is because in this sector income is earned in cash and spent in cash (NIPFP, 2016). The last, i.e. illegal transactions, involves financing or paying for illegal activities.

With about 86 per cent of the currency (in value term) in circulation ceasing to exist, and given the importance of cash in a developing economy like India, the economic consequences of the demonetisation announcement of November 2016 will be manifold. This will have implications for the economy both in the short run, which is immediate in nature, and in the long run in terms of its impact on consumption, investment, production and employment generation, etc. Changes in all of the above macroeconomic

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[2] The Gazette notification, *inter alia*, states that (1) "it has been found that fake currency notes of the specific banknotes have been largely in circulation and it has been found to be difficult to easily identify genuine banknotes from the fake ones and that the use of fake currency notes is causing adverse effect to economy of the country; (2) It has been found that high denomination banknotes are used for storage of unaccounted wealth as has been evident from the large cash recoveries made by law enforcement agencies; (3) It has been found that fake currency is being used for financing subversive activities such as drug trafficking and terrorism, causing damage to the economy and security of the country."

indicators will be reflected in the growth outlook of the Indian economy, both in the short-term and long-term. While the advocates of the demonetisation exercise acknowledge that in the short run it may result in slowing down of the economy in the quarter following the announcement, the recovery, however, will be quick and in the long term it beneficial, too, as it will boost the country's economic growth. On the other side, those who are critical of the above-mentioned exercise argue that the disruption caused due to it is likely to constrict economic activities for a longer time period. The demonetisation exercise is also likely to throw tough challenges bearing distributional consequences due to the emergence of a new interest rate regime, with a sharp decline in the deposit rates. From the side of the banking system, it will be very challenging for the banks to manage the surged liquidity in the system in the form of deposits which in any way is a liability on the banking system as a whole.

The paper attempts to provide an overview of the dimensions of the demonetisation exercise announced on November 8, 2016, and explores the extent to which the exercise is justified in terms of its stated objectives. Concomitantly, it will also attempt to explore the macroeconomic implications of the Demonetisation exercise in India. The macroeconomic implications have been examined on the parameters of economic growth, distributional challenges and impact on the banking sector in India. Section I provides a background and lays down the objectives. The dimensions of the demonetisation exercise have been presented in section II. Section III provides an overview of the size of the black economy in India and its cash component, and to what extent the demonetisation exercise is effective in curbing black economy or money. Section IV discusses the effectiveness of the demonetisation exercise in addressing the issue of counterfeit notes in India. The macroeconomic implications of the demonetisation exercise have been discussed in Section V. It includes the impact of the exercise—in terms of its effectiveness—on the growth dynamics of the Indian economy, distributional consequences and challenges for the banking sector. Section VI provides the concluding remark.

II. Dimensions of Demonetisation

With the demonetisation of Rs500 and Rs1,000 denomination notes, in effect more than 86 per cent of currency in circulation in value term has ceased to be legal tender (*Table 1*). As of March 2016, notes of Rs500 and Rs1,000 denominations constituted 47.8 per cent and 38.6 per cent, respectively, of the total currency notes in circulation. At the end of March 2016, the value of banknotes in circulation was Rs16,415 billion, showing an increase of 14.88 per cent as against 11.4 per cent in the year 2014–15. While the value of money in circulation has consistently increased in size, it can be observed that the share of high denominated currencies has grown over time. The growth of volume of currency in circulation in value term signifies the importance of cash in an economy like India. The demonetisation of high-value notes has resulted in a cash shortage, impacting various spheres of economic activities.

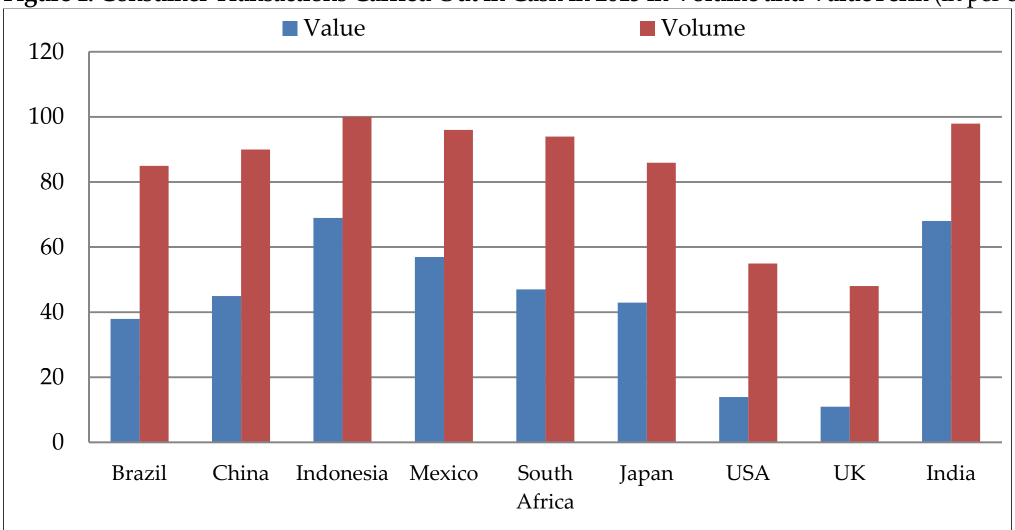
The importance of cash in high-value denominations is beyond dispute, given the fact that India is largely a cash-driven economy (*Figure 1*). The number of consumer transactions carried out in cash is significantly high in India as compared to several other developing and developed countries. About 98 per cent of transactions in terms of volume and about 68 per cent in terms of value are carried out in cash. The demand for cash is also quite evident from the fact that the RBI has always supplied lesser volume of high denomination currencies *vis-à-vis* demand.

Table 1: Cash in Circulation

Denomination	*Volume*						*Value*					
	In Million Pieces			*% Share in Total*			*In* Rs *Billion*			*% Share in Total*		
	2013–14	*2014–15*	*2015–16*	*2013–14*	*2014–15*	*2015–16*	*2013–14*	*2014–15*	*2015–16*	*2013–14*	*2014–15*	*2015–16*
2 & 5	11698	11672	11626	15.13	13.97	12.89	46	46	45	0.36	0.32	0.27
10	26648	30304	32015	34.46	36.26	35.48	266	303	320	2.07	2.12	1.95
20	4285	4350	4924	5.54	5.20	5.46	86	87	98	0.67	0.61	0.60
50	3448	3487	3890	4.46	4.17	4.31	172	174	195	1.34	1.22	1.19
100	14765	15026	15778	19.09	17.98	17.49	1476	1503	1578	11.51	10.52	9.61
500	11405	13128	15707	14.75	15.71	17.41	5702	6564	7854	44.45	45.94	47.85
1000	5081	5612	6326	6.57	6.71	7.01	5081	5612	6326	39.61	39.27	38.54
Total	77330	83579	90226	100	100	100	12829	14289	16415	100	100	100

Source: Calculations based on data from Annual Report 2016 of the RBI.

Figure 1: Consumer Transactions Carried Out in Cash in 2015 in Volume and ValueTerm (in per cent)



Source: Economic Survey, 2016–17.

Going by the trend of demand for and supply of Banknotes, supply has always failed to meet the demand. As per the RBI, the total Currency Notes in Circulation (both denominations of Rs500 and Rs1,000) as in March 2016 amounted to 22,104 million and the average supply of currency in these denominations in the last three years has been only 5183 million pieces (*Table 2*). The fact remains that the average supply of currency of all denominations in the last three years has been 21922 million pieces. The preparation to replenish the gap is one of the reasons for the comparatively low supply of currency in response to the demand that has arisen on account of demonetisation. As a result, it became difficult for the banks to manage cash so as to meet the demand of the general public. And *prima-facie* in terms of currency volume, the Rs500 and Rs1,000 notes were required to be replaced with the new currency notes on an emergency basis, which seemed to be a difficult task.

Table 2: High Denomination Currency Indent and Supply During 2015–16 *(Volume in Million & Value in* Rs *Billion)*

Denomination	*Currency in Circulation*		*Currency Indent &Supply*				*Average of Currency Indent and Supply in Last 3 years*			
	Volume	*Value*	*Volume Demand*	*Volume Supply*	*Value Demand*	*Value Supply*	*Volume Demand*	*Volume Supply*	*Value Demand*	*Value Supply*
500	15707	7854	5600	4291	2800	2146	5280	4234	2640	2117
1000	6326	6326	1900	977	1900	977	1459	949	1459	949

Source: Calculations based on RBI data.

III. Black Economy and Demonetisation

Several estimates conducted by different agencies and researchers confirm that the size of the black economy in India is growing. According to a report prepared by the National Institute of Public Finance and Policy (NIPFP) for the Ministry of Finance in December 2013, India's black economy constitutes about 75 per cent of its Gross Domestic Product or GDP (Ghandy, 2016). India's black economy has grown in size from 4.5 per cent of GDP as estimated by Kaldor in 1956 to as significant as 75 per cent of GDP as suggested in the NIPFP report. There have been several estimates of the size of the black economy in India, which includes estimates by Wanchoo Committee in 1970, Chopra in 1982, NIPFP in 1985, Basu in 1995, and Kumar in 1999 (*Table 3*).

Recent estimates of the size of black economy have been provided by NIPFP (Ghandy, 2016) and Kumar (2016). Recent estimates by Kumar (2016) suggest that in 2012, the black economy constituted more than 62 per cent of the GDP (*Table 4*). While the size of the black economy is alarming as it constitutes more than three-fifths of the GDP, the rate of growth of black economy also poses a serious concern. Between 1996 and 2012, black GDP grew at an average rate of 18 per cent per annum.

Table 3: Estimates of Black Economy in India (Using Fiscal Approach)

Year	*Black Economy / GDP*	*Estimated By*
1956	4.5	Kaldor (1956)
1970	7	Wanchoo Commiittee (1970)
1976–77	10.2	Chopra (1982)
1980–81 to 1983	18 to 21	NIPFP (1985)
1980–81	15	Basu (1995)
1990–91	35	Kumar (1999)
1995–96	40	Kumar (1999)

Source: Kumar (2016).

Table 4: Size and Growth of the Black Economy: 1996 to 2012

Year	*Size of Black Economy (%)*	*Black GDP Market Price (Rs Crore)*	*Growth of Black GDP (%)*
1996	32.05	1419277	
1997	34.62	1572394	19.66
1998	36.7	1803378	21.57
1999	40.07	2023130	22.49
2000	41.59	2177413	11.72
2001	42.69	2355845	11.05
2002	45.24	2536327	14.1
2003	44	2841503	8.96
2004	46.56	3242209	20.73
2005	46.79	3693369	14.48
2006	47.72	4294706	18.6
2007	48.86	4987090	18.89
2008	53.87	5630063	24.48
2009	53.74	6477827	14.78
2010	55.72	7784115	24.59
2011	58.45	9009722	21.41
2012	62.02	10113281	19.1

Source: Kumar (2016).

In terms of value, in 2012 the black economy was pegged at Rs101 lakh crore and as per the NIPFP report estimate, the 75 per cent figure translated intonearlyRs120 lakh crore (Ghandy, 2016). While the size of black economy in value terms is huge by any estimate, post demonetisation—a move that attempted to cease the legal tender of Rs500 and

Rs1,000 denominations—it is Rs14.2 lakh crore in value terms, which seems to be too small (see *Table 1*). A comparison between the size of the black economy and its cash component suggests that the cash component of black economy has been very low. The Finance Ministry's 'White Paper on Black Money' (2012) suggests that the component of cash to the "total undisclosed income admitted" was found in the range of 3.7 per cent to 7.4 per cent (*Table 5*). The SIT (Special Investigation Team) set up by the Government of India in 2014 estimated that currency to the order of 13 per cent of the GDP was in circulation. The fact remains that for the purpose of usage, unaccounted money is preferably invested in real estate and gold within the country. Given the estimated size of black economy in the country, black money in the form of cash/currency note constitutes only a fraction of the currency in circulation. In 2011–12, the volume of total undisclosed income admitted stood at Rs9,289 crore, which is quite insignificant in comparison to Rs101 lakh crore, the size of the black economy in India for the same year. Therefore, effectively, the major chunk of black money has been stored in the form of gold, real estate, financial investment and clash held abroad (as discussed in Ghandy, 2016).

As per the Global Financial Integrity Report 2015, India ranks fourth in the illicit financial outflow category with cumulative outflow of US$510.29 billion after US$1392.28 of China, US$1049.77 of Russia, and US$528.44 of Mexico. Between 2004 and 2013, the illicit financial flow from India averaged at US$51028 million (*Figure 2*). The cumulative outflow of US$510.28 billion between 2004 and 2013 would be equivalent to Rs 3.46 lakh crore[3] in Indian currency. The money is illegally transferred to offshore tax heavens to avoid taxes. One of the important factors responsible for acceleration in outflow of money from domestic economy is the initiation of financial liberalisation and deregulation measures in the country.

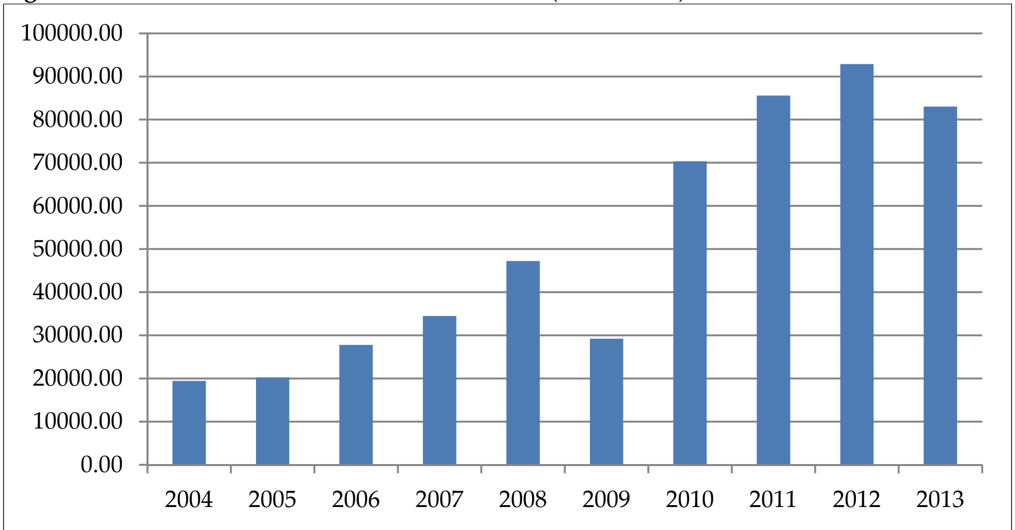
Table 5: Cash Component of Seized Asset Value and Undisclosed Income

Year	*Cash Component in Total Assets Seized (Rs Cr)*	*Value of Total Seized Assets (Rs Cr)*	*Total Undisclosed Income Admitted (Rs Cr)*	*Percentage of Cash to Total Undisclosed Income*
2006–07	187.48	364.64	3612.89	5.19
2007–08	206.35	427.82	4160.58	4.96
2008–09	339.86	550.23	4613.06	7.37
2009–10	300.97	963.5	8101.35	3.72
2010–11	440.28	774.98	10649.16	4.13
2011–12	499.91	905.61	9289.43	5.38

Source: 'White Paper on Black Money,' Ministry of Finance, Government of India, May2012

[3] Assuming 1US$ is equivalent to Rs 68.

Figure 2: Illicit Financial Flow from India: 2004 to 13 (US$ Million)



Source: Global Financial Integrity Report, 2015.

IV. Counterfeit Currency and Demonetisation

There is no definite way to measure the volume of counterfeit currency notes in circulation. A study conducted by the Indian Statistical Institute, Kolkata, for the National Investigation Agency in 2015 suggests that the counterfeit currency seized between 2012 and 2015 amounted to nearly Rs 147 crore, which amounts to Rs37 crore per year (Ghandy, 2016). As per the RBI figures, the 932926 pieces of counterfeit currencies were detected during the financial year 2015–16, which is less than 0.1 per cent of the total currency notes in circulation (RBI, 2016). In terms of value, the total volume of counterfeit notes detected during 2015–16 was Rs29.7 crore, which is 0.002 per cent of the total value of currency in circulation (*Table 6*). It is true that bulk of the counterfeit notes detected in terms of value and number of pieces happen to be currency notes of high denomination, Rs500 and Rs1,000. During 2015–16, 261695 pieces of counterfeit note of denomination Rs500 and 143099 pieces of counterfeit note of denomination Rs1,000 were detected by the banking system. In terms of value, the above-noted counterfeit notes amounted to Rs13.09 crores in denomination of Rs500 and Rs14.31 cores of counterfeit note in denomination of Rs1,000. However, as noted earlier, the volume of the detected counterfeit notes is minuscule relative to the volume of currency in circulation.

A similar view with respect to the dimensions of counterfeit notes emerges even if we go beyond a particular year by examining the movement of counterfeit notes for any time period. As shown in the table below, the average of the time period 2007–08 to 2010–11 with 56.74 billion pieces Notes in Circulation, it is about 6.9 pieces counterfeit notes per million Notes in Circulation floated (*Table 7*). However, it may not be the correct estimate as we do not have a fair idea of the actual incidence of fake notes that remained floating and undetected in the system. As per the report, the flow of recovery as well as seizure of counterfeits is directly observable, whereas the stock of counterfeits cannot be measured directly. The fact remains that benefit, in both qualitative and quantitative terms, is to be measured while citing the counterfeit currency note as one of the reasons for "demonetisation," as the volume of detected counterfeit notes and studies conducted to estimate the size of counterfeit notes tend to suggest that it constitutes a minuscule portion of the total currency in circulation.

Table 6: Counterfeit Currency Detected during 2015–16

Denomination	*Counterfeit Notes*	*Notes in Circulation (million)*	*Counterfeit (%)*	*Counterfeit Value (Rs)*	*Total Currency Value in Circulation (RsCrore)*
2,5	2	11626	0	7	4069.1
10	134	32015	0	1340	32015
20	96	4924	0	1920	9848
50	6453	3890	0.0000017	322650	19450
100	221447	15778	0.000014	2.21 crore	157780
500	261695	15707	0.0000167	13.09 crore	785350
1000	143099	6326	0.0000226	14.31 crore	632600

Note: Assuming number of Rs2 and Rs5 notes to be equal.
Source: Calculations based on data from Annual Report 2016 of the RBI.

Table 7: Counterfeit Notes: 2007-16 (y.o.y. growth in percentage given in parentheses)

Items	*2007–08*	*2008–09*	*2009–10*	*2011–12*	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*Average*
1. Notes in circulations (million pieces)	44225	48963	56549	64577	69382	77,330	83,579	90,266	66858.88
	(-11)	(-10.7)	(-15.5)	(-14.2)	(-7.4)	(11.46)	(8)	(8)	(-3.91)
2. Notes in circulations of higher denomination (Rs100 and above million pieces)	20131	21788	23509	25957	27844	31251	33766	37811	27757.13
	(-2)	(-8.2)	(-7.9)	(-10.4)	(-7.2)	(12.24)	(8.05)	(11.98)	(-0.43)
3. Counterfeit note detected (no. of pieces)	195811	398111	401476	435607	521155	488,273	594,446	632,926	458475.63
	(-86.9)	(103.3)	(-0.8)	(-8.5)	(-19.6)	(-6.31)	(21.74)	(6.47)	(-24.65)
4. Counterfeit note per million (3)/(1)	4.4	8.1	7.1	6.7	7.51	6.31	7.11	7.01	6.78
5. Counterfeit vis a via per million of higher denomination notes (3)/(2)	9.7	18.3	17.1	16.8	18.2	15.62	17.60	16.74	16.26

Source: Calculations based on data from Annual Report of the RBI, various years.

V. Demonetisation and Its Macroeconomic Implications

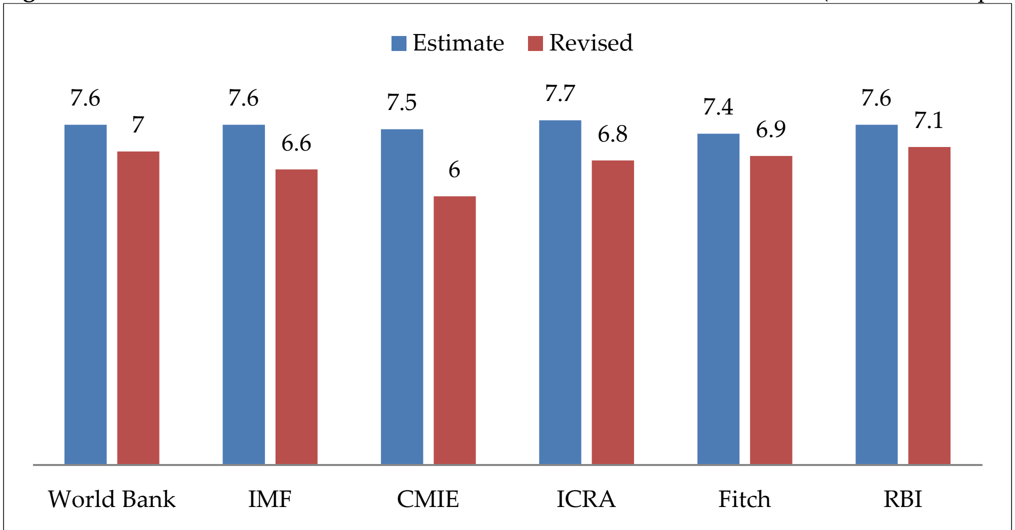
The macroeconomic implication of the demonetisation exercise announced on November 8, 2016, can be manifold. In terms of value, with about 86 per cent of the currency in circulation ceasing to exist, and given the fact that India is largely a cash-driven economy with a sizeable informal sector, the above move is bound to throw macroeconomic challenges in different forms. In this section, three major macroeconomic challenges which originate from the above exercise have been discussed. These are:(i) its implication for economic growth through its impact on major growth drivers, (ii) distributional implications due to the emergence of a new interest rate regime, and (iii) challenges for the banking sector in terms of managing surge in liquidity due to deposit growth, which is a liability on the banking system.

V(i). Implication for Growth

Due to demonetisation there will be disruptions in economic activities, both short-term and long-term. Largely, economic consequences in the short run can be divided into two parts – (i) disruptions in the day-to-day activities of the people and (ii) shock leading to contractions in consumption, trading and household income which has growth implications (Rajkumar and Shetty, 2016). In its recently announced Monetary Policy statement, the RBI stated that in the short-run the economy will face a slowdown as the demonetisation move has affected the major sectors of the economy and it is difficult to measure the long-term growth implication at present owing to uncertainties caused thereby (Kumar, 2017). In the long run, due to overcapacity, firms may cut down investment and employment, which may result in a decline in demand. As such the impact of this disruption shall also be felt in the decline in economic growth. It is estimated that the contribution of unorganised sector activity in GDP will be to the extent of 45 per cent where transactions are mainly conducted in cash. It is therefore likely that this sector will be the most affected by demonetisation.

Post demonetisation, the World Bank has lowered the country's growth estimates for this fiscal to 7 per cent from its earlier estimate of 7.6 per cent made in June last year (*Figure 3*). As per the *Global Economic Prospects* report, released by the World Bank, 'growth in India is estimated to reach 7 per cent in financial year 2016–17…reflecting a modest downgrade in India's expansion.' The American rating agency Fitch has also downgraded the country's growth outlook to 6.9 per cent for 2016–17 from an earlier estimate of 7.4 per cent, citing the short term disruption caused by demonetisation. The International Monetary Fund (IMF) also reduced the growth forecast to 6.6 per cent for the current financial year ending March 2017 due to cash shortage. The agency also reduced the growth figures for the financial year 2017–18 to 7.2 per cent, from its earlier forecast of 7.6 per cent for the same year. As per the Central Statistics Office (CSO) estimate, the impact of cash shortage on growth will vary between 0.7 and 1.3 per cent, depending on the duration of cash shortage (Lahiri, 2016).

Figure 3: Revised Growth Estimates for India for 2016–17 Post Demonetisation (GDP Growth in per cent)



Source: Economic Survey, 2016–17; International Monetary Fund: World Economic Outlook, 2017; World Bank: Global Economic Prospects, 2016.

In view of declining growth estimates as projected by several international and national agencies, it becomes imperative to study the implication of the demonetisation exercise for economic growth in India. This can be done by exploring how the demonetisation exercise is likely to impact the major growth drivers of the economy. The exploration of the effects of demonetisation on the growth drivers will help us understand the growth dynamics of the Indian economy for the post-demonetisation period.

Demonetisation and Growth Drivers

The growth implications of the demonetisation exercise can be analysed in terms of its effect on the major drivers of economic growth. From the demand side analysis of aggregate demand, broadly there are three major drivers of growth. These are: (i) consumption expenditure – both government and private, (ii) capital formation, which is investment, and (iii) the contribution of net exports, value of exports minus imports. It is to be analysed as to what demonetisation implies for the major drivers of economic growth.

The components of GDP suggest that in recent years, growth has been sustained to a large extent by both the government and private consumption (*Table 8*). There has been a decline in the growth rate of investment in the economy. During the financial year 2016–17, GFCF recorded a negative growth rate of -0.2 per cent. In a scenario of negative growth of investment, economic growth has been sustained by high consumption growth. It is quite evident from the quarterly figures as presented in the table below (*Table 9*). The quarterly growth figures of major growth drivers suggest that investment growth has been sluggish beginning Quarter 1 of the financial year 2015–16. Since then, on four occasions, including last two quarters, the investment growth has been negative.

On the other side, the growth in government consumption has been quite high during the last two quarters.

Table 8: Growth Rate of GDP and its Components (in per cent, constant prices)

Component	*2012–13*	*2013–14*	*2014–15*	*2015–16*	*2016–17*
Government final consumption	0.5	0.4	12.8	2.2	23.8
Private final consumption	5.3	6.8	6.2	7.4	6.5
Gross fixed capital formation	4.9	3.4	4.9	3.9	-0.2
Change in stocks	-3.8	-18.6	20.3	5.5	5.2
Valuables	2.6	-42.2	15.4	0.3	-33.5
Exports of goods and services	6.7	7.8	1.7	-5.2	2.2
Imports of goods and services	6	-8.2	0.8	-2.8	-3.8
GDP	5.6	6.6	7.2	7.6	7.1

Source: Economic Survey, 2016–17.

Table 9: Growth of Drivers of Gross Domestic Product: Quarterly (at market prices, Base year 2011–12, constant prices)

Year/Quarter	*PFCE*	*GFCE*	*GFCF*
2011–12Q2	-9.26	25.95	-1.07
2011–12Q3	12.55	-14.30	-1.03
2011–12Q4	1.23	30.09	7.00
2012–13Q1	-4.94	-19.79	-5.93
2012–13Q2	2.30	24.51	2.44
2012–13Q3	10.13	-33.93	2.86
2012–13Q4	-2.76	41.73	13.43
2013–14Q1	-2.55	0.71	-12.57
2013–14Q2	0.13	3.50	5.48
2013–14Q3	13.16	-29.63	0.32
2013–14Q4	-1.93	17.72	5.41
2014–15Q1	-2.62	27.16	-2.92
2014–15Q2	1.08	9.59	-0.44
2014–15Q3	5.19	-18.81	1.81
2014–15Q4	2.93	-14.53	7.07
2015–16Q1	-2.28	31.23	-1.30
2015–16Q2	0.47	13.41	1.96
2015–16Q3	7.07	-19.00	-6.08
2015–16Q4	3.00	-14.64	3.78
2016–17Q1	-3.68	51.56	-2.50
2016–17Q2	1.25	9.98	-0.65

Note: PFCE – Private Final Consumption Expenditure, GFCE – Government Final Consumption Expenditure, and GFCF – Gross Fixed Capital Formation.

Source: Calculations based on RBI data.

The declining investment growth manifests from the fact that in recent past, the number of investment proposals through different routes has declined (*Table 10*). In terms of volume of proposed investment, we can see that in recent years there is little interest among investors. The total number of investment proposals filed in 2011 stood at 3900, amounting to Rs15,39,728 crore. It declined to Rs3,11,031crore in 2015 and Rs4,14,086 crore in 2016.

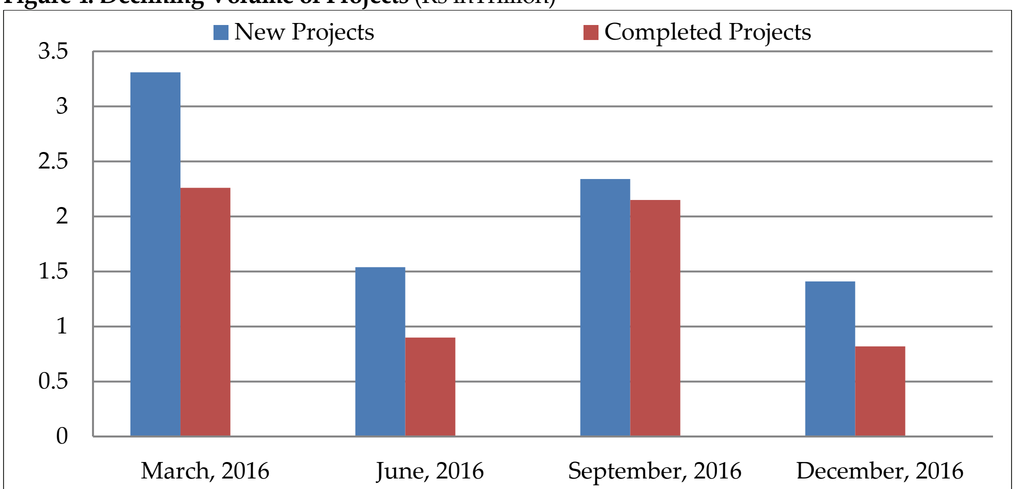
Table 10: Declining Investment Proposals

Year	*Investment Proposals-Number*			*Proposed Investment (Rs Crore)*		
	IEMs	*DILs*	*Total*	*IEMs*	*DILs*	*Total*
2011	3868	32	3900	1537710	2018	1539728
2012	2826	2	2828	567830	38	567868
2013	2365	22	2387	529828	258	530086
2014	1801	42	1843	404339	688	405027
2015	1909	89	1998	307357	3674	311031
2016	2256	27	2283	410422	3664	414086

Source: DIPP: SIA Statistics, 2017.

In view of the sluggish investment growth, which can be seen in the form of declining number of investment proposals and the volume of proposed investment, the demonetisation exercise carried out towards end of the year 2016 is likely to have adverse impact on the overall investment processes. It can be further established from the declining volume of investment in new projects (*Figure 4*). Also, the volume of completed projects has also declined in comparison to previous quarters.

Figure 4: Declining Volume of Projects (Rs inTrillion)



Source: CMIE: CapeEX Database.

The effect of demonetisation exercise becomes more critical when considering the fact that there has been deterioration in the overall Business Expectation Index (BEI), which suggests that there has been a decline in business sentiments. The RBI's 76thRound of India's Industrial Outlook Survey conducted during October–December 2016 indicates that there has been a decline in the overall business sentiment for Quarter 4 of the financial year 2016–17 (*Table 11*). The BEI is a composite index constructed by taking into account several parameters that constitute the "business sentiment." It can be seen that during Quarter 3, the overall business sentiment, assessed over previous quarter, is found to be weak. Similarly, the demonetisation effect on business expectation for Quarter 4, assessed in Quarter 3, is found to be subsiding. The survey is based on the responses of the manufacturers.

Table 11: Business Expectation Index (Net Responses in per cent Comparison over Previous Quarter)

Parameters	*Assessment Period*		*Expectation Period*	
	Q2:2016–17	*Q3: 2016–17*	*Q3:2016–17*	*Q4:2016–17*
Production	10.8	10.8	28.9	27.8
Order Books	9	7.1	24.7	20.9
Pending Orders	13.7	13.7	6.2	10.3
Capacity Utilisation	3.6	2.3	17.2	16.4
Exports	-0.8	4.4	11.2	12.1
Imports	7	6.2	8.7	8.4
Employment	6.8	3.8	9.1	5.2
Financial Situation	16.4	11.9	27.1	24.6
Availability of Finance (from internal accruals)	12.5	9.9	20.2	17.4
Cost of Finance	-7.9	-3.2	-7.5	-0.3
Cost of Raw Material	-39.6	-38.2	-32	-34.3
Selling Price	2	0.7	6.8	5.9
Profit Margin	-12.9	-13	0.1	-2.8
Overall Business Situation	17.4	13	31.3	27.9
Salary	32.8	26.1	24.7	21.7
Business Expectation Index	102.7	101.1	112.9	111.1

Source: RBI: Industrial Outlook Survey, 76thRound, January 2017.

Very similar to the way in which the demonetisation exercise seems to have impacted the investment process in the economy, it can also have adversarial effect on consumers, and thereby on the overall growth prospects. As discussed in the previous section, given that transactions in India are largely cash-driven and a significant size of the economy falls under the informal sector that lives on cash, the demonetisation exercise will not only result in lower consumption growth because of unavailability of cash, but also consumers, in general, are likely to spend less due to the uncertain economic scenario that has emanated from the demonetisation exercise. This is evident from RBI's Consumer Confidence Survey conducted in December 2016. The Survey is nothing but an assessment of households' perception of general economic conditions, employment scenario, and the price situation. It also surveys consumers' assessment of their own income and spending given the general economic conditions. The Survey states that the current situation index has declined from 108.7 in November 2016 to 102 in December 2016 (*Table 12*). Except price situation, all other major components of the index suggest that there has been deterioration in the economic condition, income and spending, and employment situation.

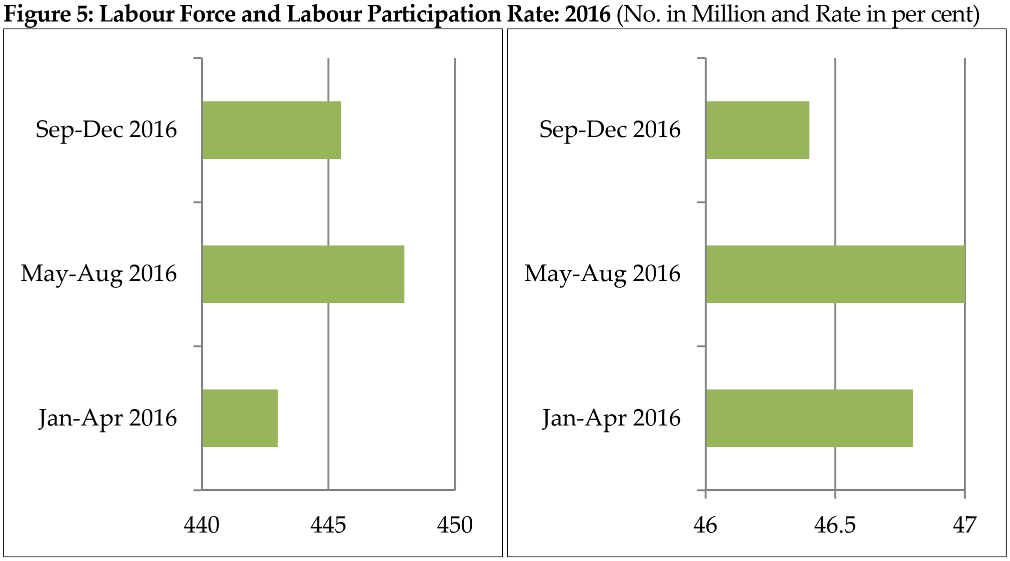
The sharp decline in Consumer Confidence Index, including employment scenario, is further established by the fact that both labour force and labour participation rates shrank during the demonetisation period (*Figure 5*). The labour force, which stood at 448 million between May and August 2016, declined to 445.5 million between September and December 2016. Similarly, labour participation rate, too, declined from 47 per cent between May and August 2016 to 46.4 per cent between September and December 2016.

Table 12: Consumer Confidence Index as per RBI's Consumer Confidence Survey December 2016

Main Variables	*Current Perception Compared with 1 Year ago*		*One year ahead Expectations Compared with Current Scenario*	
	November 2016	*December 2016*	*November 2016*	*December 2016*
Economic Condition	25.6	15.4	44.8	49.2
Income	20.1	1.3	47.7	43.1
Spending	70	67.9	74.8	72.4
Employment	6.2	-8.3	37.9	38.7
Price Level	-78.6	-66.2	-77.7	-55
Consumer Confidence Index	108.7	102	125.5	129.7

Source: RBI: Consumer Confidence Survey, December 2016.

Figure 5: Labour Force and Labour Participation Rate: 2016 (No. in Million and Rate in per cent)



Source: Labour Bureau.

The decline in labour force and labour participation rate while likely to dampen the overall demand of the economy due to declining purchasing power, it will, on the other side, contribute adversely in terms of consumer sentiment. Therefore, it is likely to have an adversarial impact on the expansion of output.

As discussed in the previous section, India's export performance has been impressive in terms of growth in recent years except during 2014–15 and 2015–16. However, the value of imports always outweighs the value of exports. This results in negative net export value. As shown in the table below, while the values of both exports and imports have increased over quarters, the gap between exports and imports has narrowed down (*Table 13*). But still the value of net exports continues to be negative. Given the fact that there is not much demand in the global economy, and India as an economy has not been so successful in terms of the contribution of external sector to output growth, the demonetisation exercise is likely to impact export activities, especially those of the informal sector.

Table 13: State of Net Export: Quarter Wise (Value in RsBillion, at market prices, Base year 2011–12, constant prices)

Year/Quarter	*Export*	*Import*	*Net Export*
2011–12Q1	5051.5	6412.14	-1360.64
2011–12Q2	5070.3	6406.26	-1335.96
2011–12Q3	5546.14	7155.98	-1609.84
2011–12Q4	5771.37	7181.16	-1409.79
2012–13Q1	5409	6888.21	-1479.21
2012–13Q2	6276.76	7098.53	-821.77
2012–13Q3	5367.22	7493.71	-2126.49
2012–13Q4	5832.83	7303.39	-1470.56
2013–14Q1	5561.95	6660.14	-1098.19
2013–14Q2	6192.43	6513.35	-320.92
2013–14Q3	6239.27	6456.34	-217.07
2013–14Q4	6672.67	6803.86	-131.19
2014–15Q1	6208.69	6617	-408.31
2014–15Q2	6258.75	6812.3	-553.55
2014–15Q3	6364.68	6822.81	-458.13
2014–15Q4	6251.91	6391.79	-139.88
2015–16Q1	5853.24	6455.77	-602.53
2015–16Q2	5992.64	6774.65	-782.01
2015–16Q3	5796.84	6387.6	-590.76
2015–16Q4	6134.71	6289.91	-155.2
2016–17Q1	6040.52	6079.53	-39.01
2016–17Q2	6011.93	6164.98	-153.05

Source: Calculations based on RBI data.

V(ii). Interest Rate Scenario: Distributional Aspects of Demonetisation

Considering the available statistics on Currency (bank) Notes demonetised and deposited with the banks and new currency in place of demonetised currency printed and released for circulation (remonetisation of currency), a substantial gap still exists. As a result, there will be a definite fall in the interest rate due to high liquidity in the banking system. The RBI's Monetary Policy Committee, in its meeting held on December 6 and 7, 2016, decided to keep the policy repo rate under the Liquidity Adjustment Facility unchanged at 6.25 per cent. On June 14, 2014, there was a cut in rate (repo rate) to the extent of 1.75 per cent. However, the interest rate cut is unlikely to boost private investment as industries will have excess capacity. Given the persistent slowdown in the global economy, it is unlikely that global demand will drive domestic production and employment (Rajkumar and Shetty, 2016).

The changes in interest rate for both lending and deposit bear far reaching distributional consequences, along with implications for growth as discussed above. While lending rate has fallen following the demonetisation move and is expected to fall further, the interest rate on deposits has also come down substantially (*Table 14*). The policy repo rate, a proxy for lending rate, declined from 7.25 per cent on July 17, 2015 to 6.25 per cent on October 4, 2016, and continues to remain at 6.25 per cent as of February 2017. The average term deposit rate (more than one year) declined from 8.25 per cent on July 17, 2015 to 6.9 per cent on November 18, 2016; 6.8 per cent on November 25, 2016 and 6.75 per cent on December 30, 2016. The declining interest rate is likely to impact different sets of people differently. As we know that there is no one-to-one correspondence between borrowers and depositors, the borrowers may turn to the greatest beneficiary of this move. As bank credit tends to concentrate in the metropolitan areas, people who live in rural, semi-urban and urban areas save relatively more (borrow less) and are the net losers as their deposits now earn lesser interest and it is less likely that would borrow from banks (*Figure 6*).

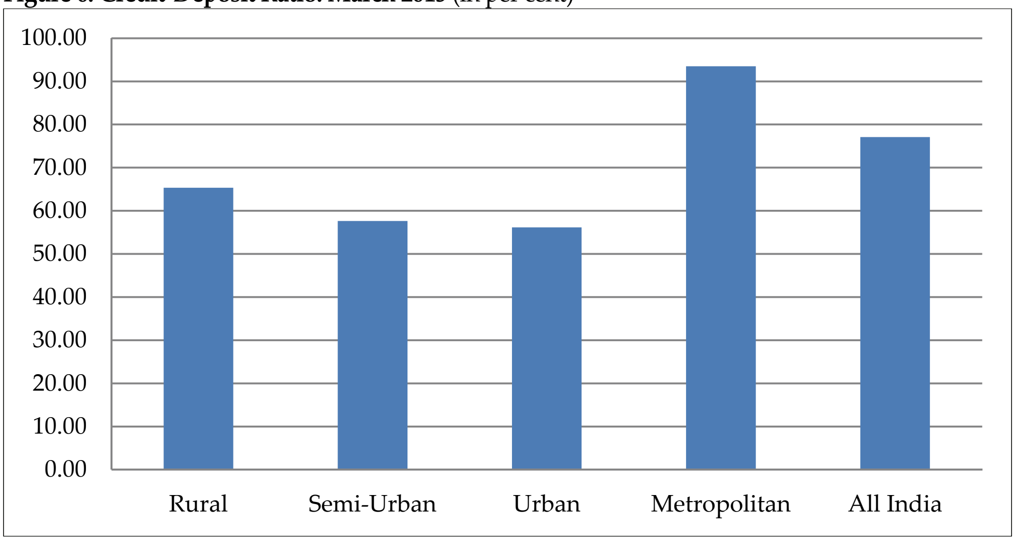
Table 14: Movement of Repo Rate, MCLR & Term Deposit Rate (in per cent)

Weekend	*Policy Repo Rate*	*Average Term Deposit Rate >1 Year*	*MCLR*
Feb. 17, 2017	6.25	6.75	7.75
Jan. 6, 2017	6.25	6.75	7.75
Dec. 30, 2016	6.25	6.75	8.65
Nov. 25, 2016	6.25	6.8	8.65
Nov. 18, 2016	6.25	6.9	8.65
Nov. 11, 2016	6.25	6.9	8.65
Oct. 28, 2016	6.25	6.9	8.8
Oct. 21, 2016	6.25	7.15	8.8
Oct. 7, 2016	6.25	7.15	8.8
Sep. 30, 2016	6.5	7.15	8.85
Aug. 5, 2016	6.5	7.25	8.85

Weekend	*Policy Repo Rate*	*Average Term Deposit Rate >1 Year*	*MCLR*
Jul. 29, 2016	6.5	7.25	8.9
May 6, 2016	6.5	7.25	8.9
Apr. 29, 2016	6.5	7.25	8.95
Apr. 8, 2016	6.5	7.25	8.95
Apr. 1, 2016	6.75	7.25	8.95
Mar. 25, 2016	6.75	7.45	-
Oct. 9, 2015	6.75	7.45	-
Oct. 2, 2015	6.75	7.62	-
Sep. 25, 2015	7.25	7.62	-
Aug. 28, 2015	7.25	7.62	-
Aug. 21, 2015	7.25	7.75	-
Aug. 14, 2015	7.25	7.9	-
Aug. 7, 2015	7.25	8	-
Jul. 31, 2015	7.25	8	-
Jul. 24, 2015	7.25	8.12	-
Jul. 17, 2015	7.25	8.25	-

Source: Calculations based on RBI data.

Figure 6: Credit-Deposit Ratio: March 2015 (in per cent)



Source: Calculations based on RBI data.

V(iii). Implication for Banking Sector

Cash Shortage, Remonetisation and Money Multiplier

The immediate outcome of the demonetisation of the Rs500 and Rs1,000 denomination notes is cash shortage in the economy as it takes away more than 86 per cent of the total currency in circulation. As more than half of the households in India do not have a bank account and more than 60 per cent of the economy is informal in nature, the importance of cash cannot be so easily dismissed as the informal economy largely runs on it (Ghandy, 2016). This is evident from the fact that the cash to GDP ratio in India is 12 per cent against the world average of 4 per cent and about 78 per cent of transactions in India are in cash as against an average of 20–15 per cent in advanced industrialised economies (Ghandy, 2016). Therefore, given the importance of cash in daily transactions, its shortage is likely to have implications for demand and growth. Though there are various talks on and references to a paperless economy, the conversion of cash-based transactions into electronic modes of payment such as debit/credit cards, mobile wallets, and internet banking will require “some” reasonable time not only for initiating and stabilising the system, but also to build trust amongst users. As such in an interwoven economy, an adverse impact of demonetisation on the organised sector also cannot be ruled out completely.

The importance of cash is also evident from the indent of currency for the year 2016–17. The RBI places indents for banknotes with printing presses on the basis of an economic model factoring in, *inter alia*, real GDP growth prospects, rate of inflation and demonetisation-wise disposal rate of soiled notes. For the financial year 2016–17, the indent for total volume of banknotes was 24550 million pieces, of which 2200 and 5725 million pieces of banknotes were in denominations ofRs1,000 and Rs500 respectively (*Table 15*).

Table 15: Indent and Supply of Currency Notes: 2013 to 17 (Million Pieces)

Denomination	*2013–14*		*2014–15*		*2015–16*		*2016–17*
	Indent	*Supply*	*Indent*	*Supply*	*Indent*	*Supply*	*Indent*
5	0	0	0	0	0	0	0
10	12164	9467	6000	9417	4000	5857	3000
20	1203	935	4000	1086	5000	3252	6000
50	994	1174	2100	1615	2050	1908	2125
100	5187	5131	5200	5464	5350	4910	5500
500	4839	3393	5400	5018	5600	4291	5725
1000	975	818	1500	1052	1900	977	2200
Total	25362	20918	24200	23652	23900	21195	24550

Source: Calculations based on data from Annual Report 2016 of the RBI.

As per the RBI, post demonetisation, Rs9.2 trillion new notes have been injected into the economy in form of Rs500 and Rs2,000 currency notes. The fact remains that unless there is an alternate arrangement for bridging the gap of money transactions, it will be difficult to avoid further contraction in economic growth. Large variation in supply of Reserve Money in the form of currency in circulation has adversely affected the supply of M3, i.e.

broad money in the market. Whereas deposits with the banks have increased significantly both in the form of demand and time deposits—27.1 and 13.6 per cent year-on-year against the normal precedence, the percentage of currency with public has come down by -47.8 per cent (*Table 16*).

Table 16: Composition of Money Supply (Rs in Billion)

Item	*Outstanding as on*		*Variation over*							
			Financial year so far				*Year-on-year*			
			2015–16		*2016–17*		*Dec. 25, 2015*		*Dec. 23, 2016*	
	2016 Mar.31	*2016 Dec.31*	*Amt*	*%*	*Amt*	*%*	*Amt*	*%*	*Amt*	*%*
M3	116176.2	120449.5	7543.5	7.2	4273.3	3.7	10936.8	10.7	7404.3	6.5
Currency with public	15972.5	7829.1	1135.7	8.2	-8143.4	-51	1732.9	13.1	-7168.3	-47.8
Demand deposit with banks	9898.3	12001.7	524.6	5.9	2103.3	21.2	901.2	10.6	2560.8	27.1
Time deposits with Banks	90150.8	100466	5885.7	7.1	10315.3	11.4	8240.7	10.3	12002.7	13.6
“Other” Deposits with Reserve Bank	154.5	152.6	-2.5	-1.7	-1.9	-1.2	62.1	76.3	9.2	6.4

Source: Calculations based on RBI data.

The shortage of currency that has impacted money supply in the economy which, in turn, has impacted the velocity of money in circulation has resulted in a contraction in economic transactions of the country. The contraction in transactions will result in contraction in lending which, in turn, will impact production and income generation adversely (Kumar, 2017). Though a large amount of demonetised currency has been deposited with banks, to propel economic growth, money needs to keep circulating at a certain pace. In the unorganised sector (particularly in MSME and Agriculture sectors that continue to be largely unorganised),a large percentage of transactions are primarily done in cash. As such, the value of the multiplier in the economy has largely decreased because of the demonetisation exercise. As a result, the velocity of money circulation has declined. If the output of unorganised sector is estimated at around 45 per cent, demonetisation will not only have an adverse impact on its growth trajectory, but also its impact will have ramifications for the organised sector.

Notwithstanding the spending power of consumers in the country, demonetisation per se may not have an immediate impact, yet with the fall in the value of multiplier in the economy, public spending has fallen sharply. As a result, the demand for consumer goods may also come down in the short term. The fall in cash-based transactions shall necessitate alternate modes of payment which may take some time to fill in/take over. In order to curve any further contraction in the economy, consumer demand has to improve, for which loan delivery to entrepreneurs will have to be encouraged and above all for alternate modes of transaction, trust will have to be built among users.

State of Credit Delivery

Due to demonetisation, banks were primarily engaged in receiving these banknotes from public and returning them back to the RBI. Furthermore, banks were not able to lend money to the market for various reasons, including the voluminous job of demonetisation. The businesses of the banks are mainly revolving around deposit growth and investment (*Table 17*).

Table 17: State of Commercial Banking Operation(Rs in Billion)

Last Reporting Friday(in case of March)/ Last Friday	*23-Dec-16 (P)*	*11-Nov-16 (P)*	*30-Sep-16*	*18-Mar-16*	*20-Mar-15*
1) Liabilities to the Banking System	2357.09	2326.04	2337.29	2250.26	1561.54
2.1) Aggregate deposits (2+3)	105162.37	101148.03	100936.47	93272.90	85332.85
2.1.1) Demand deposits	10859.66	9675.36	10427.84	8889.96	7940.29
2.1.2) Time deposits	94302.58	91472.69	90508.62	84382.94	77392.56
2.3) Other Demand and Time Liabilities	5060.46	4751.44	4581.50	5040.40	4572.00
3) Borrowings from RBI	126.45	477.30	343.67	2324.67	1582.02
4.1) Cash in Hand	1413.41	2473.68	619.50	574.38	533.55
4.2) Balances with Reserve Bank	4311.56	4130.30	4124.26	3874.42	3730.74
5) Assets with the Banking System	2895.63	2802.56	2606.77	2603.99	2217.70
6) Investments in Government and other approved securities	36092.53	28981.91	28568.30	26255.09	24918.25
6.1) Investments in Government securities	36061.98	28961.65	28553.98	26239.33	24897.51
6.2) Investments in other approved securities	30.55	20.26	14.33	15.76	20.74
7) Bank credit	73480.58	73532.77	74948.68	72496.15	65364.20
7.1) Food credit	1050.64	870.92	854.62	1052.53	944.18
7.2) Non-food Credit	72429.94	72661.85	74094.06	71443.62	64420.02

Source: Calculations based on RBI data.

It is to be noted that the credit growth of all SCBs was not only improving, but also it was better than the corresponding period of immediate preceding year. Against 12.10 per cent of growth as on September 30, 2016, and 10.91 per cent on March 18, 2016, it declined to 7.51 per cent as on November 11, 2016 and dipped further down to 5.15 per cent as on December 23, 2016, which is considered to be lowest in last several years (*Table 18*). Demonetisation may not be the only reason for the comparatively low credit growth—as the credit off-take during the current year has otherwise been slow except for growth under certain sub-segments of Retail lending; low credit growth in segments other than Retail may also be adversely affecting the growth momentum of the country.

Table 18: Credit Growth of Scheduled Commercial Banks (Rs inBillion)

Last Reporting Friday (in case of March)/ Last Friday	*23-Dec-16 (P)*	*25-Dec-15*	*11-Nov-16 (P)*	*27-Nov-15*	*30-Sep-16*	*18-Sep-15*	*18-Mar-16*	*20-Mar-15*
Bank credit	73480.58	69882.49	73532.77	68391.54	74948.68	66858.92	72496.15	65364.20
Y.O.Y growth	*5.15%*	*10.60%**	*7.51%*	*9.33%**	*12.10%*	*9.28%**	*10.91*	*9.05%**
Food credit	1050.64	1110.05	870.92	1089.26	854.62	1027.39	1052.53	944.18
Non-food Credit	72429.94	68772.44	72661.85	67302.28	74094.06	65831.53	71443.62	64420.02

* Corresponding figures have been taken as on 26-Dec-14, 28-Nov-14, 19-Sep-14 & 21-Mar-14.
Source: Calculations based on RBI data.

Given that the various segments viz. Agriculture & Allied Activities, Industry, Personal Loan and Priority Sector (where the percentage of unorganised enterprises/entities is comparatively more) are already struggling due to the steady decline in credit flows, demonetisation will have all the more cascading effect on the creation of new avenues in the coming quarters (*Table 19*). Post demonetisation, there has already been an overall decline in the growth of bank credit as compared to the pre-demonetisation era. All major sectors of the economy are exhibiting a downward trend in credit growth in the post-demonetisation period.

Table 19: Deployment of Gross Bank Credit by Major Sectors (Rs inBillion)

Sector	*Outstanding as on* (Rs in *Billion)*					*In per cent*			
	Dec-26-14	*Mar-20-15*	*Dec-25-15*	*Mar-18-16*	*Dec-23-16*	*Dec-25-15 / Dec-26-14*	*Dec-23-16 / Dec-25-15*	*Dec-25-15/ Mar-20-15*	*Dec-23-16/ Mar-18-16*
Gross Bank Credit	58935	61023	64335	66500	66458	9.2	3.3	5.4	-0.1
Agriculture & Allied Activities	7473	7659	8424	8829	9113	12.7	8.2	10	3.2
Industry (Micro & Small, Medium and Large)	25687	26576	26952	27307	25791	4.9	-4.3	1.4	-5.6
Micro & Small	*3650*	*3800*	*3741*	*3715*	*3436*	*2.5*	*-8.2*	*-1.6*	*-7.5*
Medium	*1246*	*1245*	*1151*	*1148*	*1060*	*-7.6*	*-7.9*	*-7.6*	*-7.6*
Large	*20791*	*21531*	*22060*	*22444*	*21295*	*6.1*	*-3.5*	*2.5*	*-5.1*
Services	13489	14131	14582	15411	15794	8.1	8.3	3.2	2.5
Personal Loans	11221	11663	13293	13922	15092	18.5	13.5	14	8.4
Priority Sector	19434	20103	21564	22259	22443	11	4.1	7.3	0.8

Source: Calculations based on RBI data.

Managing Liability

The decline in credit growth and the spur in deposit growth will put banks under tremendous pressure with respect to how to manage the accumulated liquidity which is nothing but liability on the banking system. It is evident from the fact that post demonetisation, the Credit-Deposit ratio of SCBs has declined from 74.24 per cent as on October 28, 2016 to 69.87 per cent on December 23, 2016 (*Table 20*). On the other side, the pressure to manage the accumulated liability in the form of deposits has resulted in a higher Investment-Deposit ratio. The Investment-Deposit ratio has increased from 29 per cent as on October 28, 2016 to 34.32 per cent on December 23, 2016.

Table 20: Credit-Deposit and Investment Deposit Ratio: Scheduled Commercial Bank (in per cent)

Week Ended	*Credit-Deposit Ratio*	*Investment-Deposit Ratio*
Feb. 3, 2017	70.81	32.90
Jan. 20, 2017	70.68	34.14
Jan. 6, 2017	70.04	34.35
Dec. 23, 2016	69.87	34.32
Dec. 9, 2016	69.29	30.97
Nov. 25, 2016	69.33	30.84
Nov. 11, 2016	72.70	28.65
Oct. 28, 2016	74.24	29.00
Oct. 14, 2016	73.89	28.98
Sep. 30, 2016	74.19	28.25
Sep. 16, 2016	74.66	29.00
Sep. 2, 2016	74.31	29.21
Aug. 19, 2016	74.80	29.03
Aug. 5, 2016	74.76	29.32
Jul. 22, 2016	75.13	29.02
Jul. 8, 2016	75.40	28.91
Jun. 24, 2016	75.62	28.76
Jun. 10, 2016	75.77	28.81
May 27, 2016	75.83	28.69
May 13, 2016	76.01	28.43
Apr. 29, 2016	75.81	28.25
Apr. 15, 2016	76.05	28.71
Apr. 1, 2016	77.46	26.70

Source: Reserve Bank of India.

VI. Conclusion

The paper has attempted to explore three broad objectives concerning the "demonetisation" exercise. These are the dimensions of the demonetisation exercise announced on November 8, 2016, to what extent the exercise is justified in terms of its stated objectives, and, its macroeconomic implication for the Indian economy in terms of growth, distributional consequences and challenges for the banking system. We find that the stated objective behind the demonetisation exercise is not so convincing as it will have limited impact on black money and the volume of detected counterfeit notes are too small to be an objective behind such a painstaking and cost-intensive exercise. Black economy or money thrived in India despite the demonetisation exercise of 1978. From the growth perspective we find that the growth outlook does not seem to be in consonance with the stated objective. The slowdown as indicated in various segments of the economy for the current and coming financial year is definitely worrisome. As the world economy is going through a difficult time, the slowdown of Indian economy in terms of growth raises serious questions on the whole exercise of demonetisation of November 2016. Declining investment growth, dampened business sentiments, lesser volume of new investments in the form of new projects and reduced consumer confidence in the economy is likely to impact economic growth adversely. However, it is too early to conclude that contraction in GDP in the subsequent time period as projected is due to demonetisation alone. It may eventually become one of the contributing factors for the slowing down of the economy in the short and medium terms. However, it bears greater implication from the point of distribution. It tends to create a new interest rate regime that eventually benefits few by making a sizable population worse off. There has been a decline in both the lending and the deposit rates. With declining deposits rates, savers are the ultimate losers as there is no one-to-one correspondence between borrowers and savers. As credit tends to concentrate in metropolitan areas, savers located in rural areas and small towns are likely to lose as they borrow less. Finally, the demonetisation exercise brings huge challenges for banks as their liability goes up due to surge in the volume of deposits. Quality of lending will be a challenging task for the banks as they rush to meet their lending target. In view of reduced credit demand in the post demonetisation period, banks will find it difficult to manage the accumulated deposit which is a liability for them as interest is to be paid against the deposits.

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