

## An analysis of monetary effects of demonetisation 2016 in India

Roy Scaria

Assistant Professor of Economics, Department of Economics, T. M Jacob Memorial Government College, Manimalakunnu, Koothattukulam, Kerala, India

### Abstract

GDP growth rate in India has been declining after the sudden demonetisation of high denomination rupee notes on November 8, 2017, which accounted for about 86 per cent of total currency in circulation. The debate is still going on whether the note ban has lingered into the economy and reflected in the growth rate. The changing portfolio of money supply has varying effects on the formal and informal sector of the economy. Official sources argued that, as the money supply grows steadily during post demonetisation period, the impact of currency squeeze has been transient on output and income. However, in an economy with about 78 per cent of consumer transactions takes place in currency terms and about 45 per cent of Gross Value Added is in the informal sector and a large section of the population still remains illiterate, cash deficiency and resulting uncertainty produced undesired effects. Note ban first vaulted the incomes of people in the informal sector and this impaired their economic activity in subsequent months. These effects turned into a demand deflation and hard hit production in the manufactured sector. This paper examines how did the monetary mechanism subsequent to demonetisation intensified downward growth momentum in India?

**Keywords:** GDP growth rate, demonetisation, monetary mechanism, digital economy

### 1. Introduction

Statistics on India's dismal growth performance for the first quarter ending June 2017 come out. Gross Domestic Product (GDP) grew 5.7 per cent, showing furthering deceleration after the cumulative slowdown during last five consecutive quarters. This stands at the lowest comparing last twelve preceding quarters. The sliding rate, that has been getting fastened quarter by quarter, creates panic among economic agents which, in turn, makes the dreary view of economy and it stands against recovery. The economy is an integrated whole; interrelated and interdependent on many counts. Dislocation of activity in any one or more sectors is fast spreading, though with a time lag of adjustment, to other sectors. Economists, experts and politicians are not unanimous about reasons underlying the increasingly murky pace. Many believe, though not officially admitted, the demonetisation drive that abruptly fell lingered into the economy. The immediate response of Dr Man Mohan Singh who had been for long officiated as RBI Governor, Finance Minister and Prime Minister comes true that the move would decelerate growth about 2 per cent. Mr. Rajiv Kumar, Vice Chairman of NITI Aayog, however, remarked, as "we expect a good monsoon" during this year and with "complete remonetisation" by the last quarter of 2016-17 ending March, GDP is unlikely to dip significantly. Therefore, he rejected the critique that present growth scenario is related to demonetisation. He blamed for "active destocking" of inventories by firms in anticipation of GST, the terms and conditions of which were in pipeline. Now, by the end of the first quarter 2017, when the GST regulations are clear and firms have started restocking, the GDP growth rate would rebound to around 7 to 7.5 per cent in subsequent quarters.

However, there is sufficient ground for the apprehension that the economy has been locked into another recessionary path just after recovering the global slowdown.

### 2. Objectives

- To analyse post demonetisation GDP growth rate in India.
- To examine whether liquidity is a binding constraint on GDP growth rate.
- To analyse the varying monetary effect of demonetization on formal and informal sectors.

### 3. Demonetisation; Nov 8, 2016

On November 8, 2016 the people of India went bed hearing the 'breaking news' that Government of India (GOI) had withdrawn the highest denomination Mahatma Gandhi series 500 and 1000 rupee notes which amounted to roughly more than 86 per cent of total currency circulation in the economy. People had to deposit the banned notes in their accounts up to December 31<sup>st</sup> 2016, but with stringent withdrawal restrictions.

### 4. The Theory behind a Monetised Economy

Man invented various types of money for avoiding inconveniences of barter exchange and as a means of storing value. The evolution of money from "cattle and precious stones" through the present day paper currency and "plastic cards" to the digital currency did commendable contributions in satisfying man's thirst for convenience. In fact, money is just like the oil that lubricates the fast internal functioning of an engine so that it discharges the power of movement to wheels. Leakage of about 86 per cent of the oil without filling it afresh slows down the engine functioning and eventually it

may break down. This might call for a major engine repair. In an economy like India's where 78 per cent of all consumers' exchange <sup>[1]</sup> (Watal Committee, 2016), and about 50 per cent of overall exchange in the economy especially in the unorganized sector <sup>[2]</sup> (Sen, 2016) is in cash, 'convenient money' has practical significance. Not only that the unorganized sector has been responsible for about 45 per cent of Gross Value Added and 82 per cent of aggregate employment. Any administrative reform like demonetisation and GST must safeguard this 'convenience' of the larger section.

### 5. Growth Projection and Expectations

Owing to the uncertainty emerged from note ban, Economic Survey 2016-17 projected that the growth rate would be ranging from 6.75 percentage points to 7.25 percentage points after adjusting for a marginal reduction in nominal GDP growth rate ranging from 0.25 per cent to 1 percentage points against the baseline of 11.25 per cent and real GDP 0.25 percentage points to 0.5 percentage points against the baseline of about 7 per cent. It further projected that the economy would grow at 7.1 per cent during the first quarter, 2017-18. However, critics viewed that, low investment in the unorganized sector, currency shortage and low levels of employment produces a lesser GDP compared to the preceding periods.

The current sliding of growth rate is mainly accounted for low activity in industry which grew at 1.6 per cent compared to around 3.6 per cent in the last quarter ending March 2017 and 7.4 per cent in the last year, 2016-17 <sup>[3]</sup>. The manufacturing sector, the output of which mostly demanded from informal sector registered the worst momentum, just 1.2 per cent compared to 5.3 per cent in the last quarter and 10.7 per cent in the first quarter of 2016-17. The mining also dipped by 0.7 per cent compared to 6.4 per cent in the previous quarter.

Adversity of reduced growth rate is so severe on the economy that, in value terms, each 1 per cent dip is estimated to be worth Rs.1.54 lakh crores. Incomes of the poor people have declined to that much extent leading to further fall in demand, the propensity to consume times the reduced income. Unless checked, the demand deflation would have a cumulative effect. The tax policy and reforms surfacing in India aiming to strengthen the revenue base of the economy are not conducive for a recovery and it may finally end up in lower amount of tax revenue in future.

The Economic Survey 2016-17 is seemed to have employed the neo classical quantity model<sup>4</sup> of exchange to elaborate negligible impact of demonetization on aggregate demand. It has been pointed out that though immediate post demonetization period witnessed significant reduction in

inflation rates, it picked up in the last quarter, 2016-17. Inflation, however, is a demand and supply problem; its upward pace cannot be regarded as an indicator of the robust demand position. Prices may soar due to supply shocks as well, anticipating unfavourable future demand. The model (classical version) is presumed to have full capacity output being produced and it is unlikely to dip in the long run. Money is passive in that it leaves the output and employment intact. This assumption is not plausible in India because the economy is already running with an underemployed equilibrium.

Now the Indian economy has the potential to grow at 8 to 10 per cent per annum. Taking the mean of potential growth range at 9 per cent, the current growth rate of 5.7 per cent indicates that the economy underutilizes about 33.3 per cent of its productive capacity. The investment statistics, which reflects future growth rates, released recently are also not encouraging. Though, Gross Fixed Capital Formation (GFCF) picked up to 29.8 per cent of GDP, the highest in last four quarters, it still remains lower compared to 31 per cent in the first quarter of 2016-17. On a quarter to quarter basis, the growth rate of GFCF is very low as 1.16 per cent compared to 7.39 per cent in the first quarter of 2016-17.

### 6. The Monetary Mechanism of Note Ban

It was estimated that between October 28, 2016 and Jan 6, 2017, total currency squeezed from circulation, in absolute terms, was amounted to Rs. 8800 billion, which in turn, led to the surge of bank deposits amounted to Rs.6270 billion. Though with a very slow pace, remonetisation had begun on November 9, 2016. The period between end – December 2016 and early March 2017, fresh currency amounted to Rs. 2,600 billion which accounts for about 41.5 per cent of the banned Specified Bank Notes (SBN) was circulated.

The Finance Ministry claimed <sup>[4]</sup> (Economic survey 16-17 page 14, 15) that after demonetisation the economy was not suffering much from liquidity crunch. The argument follows that the growth rate of Aggregate Monetary Resources (AMR) M<sub>3</sub> has been more or less stable in subsequent months (table 1). The liquidity position is estimated based on the absolute volume of currency in circulation as a proportion to the total transaction demand. The relative figures of effective currency circulation are meaningful for effective liquidity management rather than indicative of the absolute quantum of liquidity. The denominator, total transaction demand stands squeezed in the unorganized sector at large. The ministry further claimed that the shortfall was narrowing rapidly. At end-December 2016, effective currency would be about 65 per cent of total estimated demand, and would likely to rise around 86 per cent by end-February 2017.

**Table 1:** Money supply Growth Rates (y-o-y growth in per cent)

	Money supply indicators	April-Oct	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17
1	M <sub>3</sub>	6.4	10.4	8.5	6.6	6.5	6.4
2	Currency in Circulation (CIC)	6.9	17.2	-23.6	-39.9	-37.8	-28.2
3	Bank credit to commercial sector	1.8	8.4	6.2	4.9	4.7	4.5

**Source:** Macroeconomic Impact of Demonetisation - A Preliminary Assessment. RBI. March 10, 2017

RBI has published data on major assets and liabilities of commercial banks between October 28, 2016 and Feb. 17,

2017 (table-2). During this period, as re-monetisation progress, incremental deposits with banks declined moderately

to Rs.5549 billion which has been deployed as bank credit Rs. 1008 billion and investment in securities Rs. 4,560 billion. The incremental credit deposit ratio was too low as 18.2 per cent. This, on the other hand, means that 81.8 per cent of the increased deposits have flown into investment as securities such as (1) reverse repos and (2) cash management bills issued under the Market Stabilisation Scheme (MSS).

**Table 2:** Changes in Major Assets and Liabilities of SCBs – October 28, 2016 to February 17, 2017 (Rs. billion).

Liabilities		Assets			
1	Aggregate deposits	5,549	1	Bank Credit	1,008
2	Borrowings	-56	2	Investment in Securities	4,560
			3	Net other assets	-75
	Total	5,493		Total	5,493

**Source:** Macroeconomic Impact of Demonetisation - A Preliminary Assessment. RBI. March 10, 2017

### 6.1 Liquidity Management of RBI

The RBI had to absorb excess liquidity which arrived at banks through sudden deposits of Specified Bank Notes (SBNs) and its gradual replacement with new currency. RBI adopted varying strategies in different phases to retain the liquidity position so that the economy neither caught in a price inflation nor deflation.

1. During Nov 10 to Nov 25, 2016, RBI used variable and fixed reverse repo rate auctions of varying tenors ranging from overnight to 91 days to absorb excess liquidity and on Nov 25, 2016 it amounted to Rs. 5242 billion.
2. On Nov 26 RBI declared the requirement for 100 per cent incremental CRR on increased net demand and time liabilities of banks. By Dec 9, 2016, excess liquidity to the extent of 4000 billion was absorbed.
3. During Dec 10, 2016 to Jan 13, 2017, liquidity conditions were managed through a mix of reverse repos and issuance of Cash Management Bills (CMBs). Government of India raised the limit of issuing CMBs from 300 billion to 6000 billion which helped RBI to fast absorb the excess liquidity. The liquidity absorbed stood at Rs. 7,956 billion.
4. Since Jan 13, the excess liquidity originated from maturing CMBs has been managed by increasingly resorting to reverse repo.

### 6.2 Lending and Term Deposit Rates

The upsurge in bank deposits was instrumental in falling marginal cost of lending. The banking system had moderately cut down Marginal Cost of Fund based lending rates (MCLR) and term deposit rates of various tenors (table-3).

**Table 3:** Reduction in lending and deposit rates during post demonetisation period (bps)

Bank groups	MCLR (Median)	Term deposit rates (median)		
		Up to 1 year	1 to 3 years	All tenors
Public Sector Banks	85	26	35	28
Private sector Banks	65	50	48	50
Foreign Banks	40	08	34	06
Scheduled Commercial Banks	70	31	40	38

**Source:** Macroeconomic Impact of Demonetisation - A Preliminary Assessment. RBI. March 10, 2017

### 6.3 Money Market Rates

During the post demonetisation period, money market rates such as WACR, CBLO rate and market repo rate have been softened (table 4) except when RBI declared the requirement for 100 per cent incremental CRR on Nov 26, which caused upward move of the WACR above the market repo rate.

**Table 4:** Money Market Rates

Segment	Nov 8, 2016	Post Demonetisation period		March 7, 2017
		Lowest	Highest	
WACR	6.22	5.9	6.52	5.93
CBLO rate	6.26	4.59	6.45	5.72
Market repo rate	6.23	5.28	6.41	5.55
RBI report				

### 6.4 The Analysis of Monetary Mechanism

However, serious questions remain. Whether re-monetization has reached to the tune of pre- November 8, 2016 levels? Recent press release of RBI claims that about 99 per cent of the high denomination notes circulated were returned. People are forced to use online banking, mobile banking and other online applications for money transfer, an excellent dream to be fulfilled in any advanced economy. Official sources suggest that the economy would adjust to a new monetary

equilibrium with less cash and it would fulfill the dream of 'cash -lite' or 'less-cash economy'. The people of India will get connected in the 'wired era', and included in the digital economy at large. Though the Aggregate Monetary Resources measured as M<sub>3</sub> remained more or less stable, the currency component of money supply is seemed to have declined sharply (Table 1). The pace of M<sub>3</sub> reflects tremendous growth of bank deposits after demonetisation (table 2). With withdrawal restrictions, the existing money supply with an unusual proportion of deposit component was futile to generate effective demand.

Another significant question is whether digital transactions have increased so as to outweigh the adverse effects of the decelerated growth of currency component in money supply. The catastrophic effects of demonetisation will be muted if both mechanisms for payments, digital mode and money means were perfect substitutes. The Central Government has initiated a variety of steps to launch apps like BHIM for smart phones and Feature Phones, Adhar Merchant Pay system using biometric technology, and incentives such as fee reduction like MDR for Unified Payment Interface (UPI), tariff reductions for Point of Sale devices (POS) and so on. These have been in addition to the existing use of debit and credit cards. Digital transactions through these mechanisms with incentives have increased remarkably during post

demonetisation period up to January 2017 and with re-monetisation progress, the growth rate of digital transactions have been subdued<sup>[5]</sup> (RBI Report and Economic Survey). In a developing country like India many people are less expert in operating smart phones, feature phones, computers and other internet oriented payment/transaction devices. Internet connectivity is another serious hurdle. People have to seek service of experts, travel kilometers, pay service charges, internet charges and incur even capital expenditure for purchasing a phone to get digital transactions effected. The average indirect cost of digital transactions still remains high as number of transactions might not be many per year. A sudden move of the rural uneducated population to a payment system with most part is digitalized will definitely impair their daily work schedule for earning income. In India, it is hardly can expect that digital mode of transactions would become a perfect substitute for currency in near future.

### 6.5 The Twin Impact of Demonetisation

Demonetisation is seemed to have varying monetary effects, a cheap money effect and a tight money effect respectively on the formal and informal sectors of the economy. The informal sector which has been predominantly depending on currency notes for their transactions faced the effect of a tight monetary situation whereas the formal sector which has been making use of bank deposits for most transactions was cushioned with an eased monetary effect resulting from lower lending rates. Policy implication of this process is vital that the affluent class of business and manufacturers were gained, at the cost of the poor, marginalized and sub marginalised groups in the informal sector. It is to be further argued that tremendous increase of bank deposits eased major lending and deposit rates (table 3) which would be having a cooling and cushioning effect over the hardships of currency squeeze in the formal sector was not much effective. The manufacturing sector grew only 1.2 per cent, in the quarter ending June 2017 which stands at very low compared to growth rates in previous quarters. Even the organized sector could not benefit the sliding cost for funds in augmenting investments and production which mostly respond to demand and profitability expectations.

There is no reason to believe that business expectations have been buoyant since November 8, 2016. Vital link exists between the two sectors, formal and informal, through the demand for goods and services. A large chunk of manufactured products are demanded by workers, agricultural labourers, petty business and agents of factor services whose incomes were put into vaults for at least three months. The raging uncertainty and paucity for cash impaired their activity which further reduced the purchase potential. The blocked incomes and distorted economic activity in the informal sector, though with a lapse of time, permeated into the formal sector as low demand. The business expectations on profitability eroded considerably.

### 7. Conclusion

Politicians and economists who have been raising voice for demonetisation argue that the slow pace started even before demonetisation. The malady is quite obvious; the government intensified downward momentum by implementing policies

without due pre-preparation and necessary arrangements. The present growth scenario which reflects a dismal view of the Indian economy is incomparable to the recession that raged in India since 2008 as a result of global recession. Owing to the relative better performance of the Indian economy amidst other leading economies, the impact of global recession was very small.

Though the government purpose for demonetisation seems shining on a political point of view, it hard hit the unorganised/informal sector of the economy where the common man mostly engages. The poor and marginalised and even lower middleclass are bothered about the short term rather than long term growth prospects. The saving investment gap decelerated growth in the short term, the softened interest rate became futile and the economy caught in demand deflation. The economy will take some time to correct itself and achieve pre-demonetisation momentum. The drive would be glittering, if the liquidity position was kept at sufficient levels without eroding public confidence in government institutions and currency. However, the dream of the government moving to a safe position by collecting more tax revenue would be 'transient', if it fails to maintain accelerated pace of GDP growth. Even for tax collections and redistribution, a bigger pie is always better than otherwise.

### 8. References

1. Government of India. Committee on Digital Payments, Ministry of Finance. 2016.
2. Sen, Pronab. Demonetisation is a hollow move, Op-ed: Mint. 2016.
3. The Hindu dated. 2017.
4. Government of India. Ministry of Finance. Economic Survey of India. 2016-17.
5. RBI, Macroeconomic Impact of Demonetisation - A Preliminary Assessment. 2017.