

## DEMONETISATION: A STEP FOR REVITALIZING INDIAN ECONOMY

Ganesh Kawadia<sup>1</sup> & Neha Gupta<sup>2</sup>

Demonetisation is a monetary process in which the old unit of currency is substituted with newer ones whereas the process of exchanging of old currency with new unit of currency can be termed as Remonetization. Recently, Indian government has scrapped high value notes of Rs. 500 and Rs. 1000 in order to weed out black money in the economy and for checking counterfeit currency to crackdown terrorist and naxalite funding. This paper is planned to assess the impact of demonetisation on digitalization and over macro-economic variables viz. price stability, tax collection, and trade balance, By measuring monthly percentage change, it can be evidently concluded that in post demonetisation period, both-fiscal and monetary variables of the economy have improved. As far as fiscal sector is concerned, net tax revenue to GDP in third quarter increased, thereby fiscal deficit and revenue deficit also shrunk. On the monetary side, the value of rupee appreciated in those days and inflation as well experienced reduction in its pace. Rate of interest went lower down and in consequence of it credit demand for real estate, consumer durable and for trade mounted. The most favorable effect of demonetisation is that economy is taking step towards digitalization and cashless economy.

**Keywords :** *Demonetisation, Counterfeit Currency, Cashless Economy, Digitalization, Black Money.*

### Introduction

Demonetisation refers to an economic policy through which legal tender of certain currency units is declared invalid from specified date. More specifically, demonetized currency units withdrawn from circulation and new one comes into circulation. During the implementation of demonetisation, declared illegal currency units are deposited with the bank within specified span and replaced by units that have legal tender. This process of replacement of illegal currency to legal currency can be termed as Remonetisation. In this policy, government can print new notes of same denomination or can completely phased out certain denomination currency units and introduce new one in that place or can be used combo of both. Recently, Indian government has adopted both forms of demonetisation in which it scrapped high value notes of Rs. 500 and introduced new version of same denomination while removed Rs. 1000 completely and launched new pink colour note of Rs. 2000

---

<sup>1</sup> Professor & Head, School of Economics, Devi Ahilya University, Indore. E-mail: ganesh.kawadia@gmail.com

<sup>2</sup> JRF- UGC (New Delhi), School of Economics, Devi Ahilya University, Indore. Email: nehu.jainy1993@gail.com

denomination in the economy. Estimates of NIPFP reported that ceased currency units of Rs. 500 and Rs.1000 accounting approximately 86.4 per cent of total money supply on 8<sup>th</sup> November, 2016 (Patnaik, 2016). The reasons behind this step of demonetizing such a huge amount of currency from circulation is to mop up black money from the market and secondly for eliminating counterfeit currency and dodgy funds that have been used by terrorists and naxalites. It has been posited that, a lot of black money circulates in the economy, and most of it is unaccounted for because the sources of income are not known to the government. It could be money generated through illegal trade or unauthorized funding. To clean up this money out of circulation, the government usually demonetize so that the money holders are forced to deposit the cash with the banks or lose their wealth. On the ground of economics, existence of shadow economy is one of the factors that holds the distributive justice of the economic growth. The RBI data showed that as of March 2016, around 6 lakh currency notes were counterfeit—known as an FICN (Fake Indian Currency Note). As a proportion of NIC (Notes in Circulation), the 1,000 rupee and 500 rupee notes were the highest. Nullifying these FICNs was also part of the demonetisation move (Ashworth, 2016). The money is required to store the current value for future use. The govt. through demonetisation wishes to transfer this stored value portion from cash to bankers. This will make the banking system more effective.

Nevertheless, the demonetisation has not happened first time in the world, many countries before it tried this plan with different measures and objectives to restructure their economy. Even Indian economy has experienced demonetisation for the third time. The first was on the 12<sup>th</sup> of January 1946 – period of pre-independence, second on 16<sup>th</sup> of January 1978 with the same notion of curbing counterfeit currency and black money, and the third was on 8<sup>th</sup> of November 2016. Though, the case of European Monetary Union is also paraphrased as a move of demonetisation when all nations have decided to adopt Euro as their currency. However, the old currencies were allowed to convert into Euros for a period of time in order to ensure a smooth transition. In the same way, countries like Zimbabwe, Fiji, Singapore, Nigeria, Myanmar, Soviet Union and Philippines had opted currency demonetisation to curb black money and fight against inflation and to some extent the move was successful but the number of failure stories is bigger. The move of demonetisation thus has mixed results of success and un-success in the history.

In case of India, doing away the 86 per cent of currency notes from circulation created suddenly the shortage of cash in the system, and thus hit the economy in short term. It exerted the demand side

of the economy adversely, especially as the demand rest on daily transactions like foods, groceries. Owing to reduction in demand, inflation went down. In effect of it, GDP and economic growth of the economy have showed down turn. However, the fall in economic activities could not last more than two quarters. As availability of cash becomes ease and smooth, everything gets set off even in better way. In connection to it, Subramanian (2017), said in his interview *“there’s going to be a temporary dip in growth, which we have quantified. But we will be back on the path we were on, which is 6.75-7.5% next year. So, I think we can get back to pre-demonetisation levels”*. The same can be seen in reality.

Looking to positive side of it, rate of interest got lower down due to floods of cash in banking system which led high credit creation capacity of banks and demand for credit too. Thus, the higher level of investments is bound to stimulate the economy on high trajectory of growth. Conversely, it has been observed that demonetisation has sharply reduced the cash in the economy because the old notes were no more legal tender for most purposes. The public was allowed to deposit the old notes in the banks up to a certain date that widen the public’s deposits with the banks. So, high powered money (M0) sharply contracted and the deposits with the banks increased slowly which has increased the credit expansion capacity of the banks. But the banks at that time were too busy with the return of the currency and the issuing of new currency so that they have had no time to lend the money they had collected. The banks thus were flooded with excess money during that period. Finally, the money that has come in is only temporary since the public is likely to draw it back for the purposes for which it held the currency (Kumar, 2017).

In addition to it, Subramanian (2017) rightly wrote in chapter of economic survey, that demonetisation raises three questions in our forefront. First, design and implementation, second, cost and benefits and third, about broader economic policy reform. In connection to it, NIPFP argues that only 6 percent out of 40 percent of black money are held in form of currency. That is to say, demonetisation hit merely the 6 percent of black money. But the survey reported that, for first we have to wait and see. Even if it could trap this black money it will only be a small portion of parallel economy. It thus seems that the demonetisation is not the right tool to solve the issue of the black economy. We need strong law and order enforcement mechanism to tackle the problem of black economy. On cost and benefits, there is going to be a short-term cost, which is real and significant. There’s going to be an effect on GDP, which has potential to create these long-term benefits. The third can be clearly seen as Digitization, black money, more compliance;

more accounting for income disclosure and of course, a lot depends on the follow-up actions. This is true for most policy actions. Overwhelmingly, it can be said that the hardship has stayed for short period, in a longer term it seems to be good for Indian economy. More explicitly, in the long term, the economy will accrue benefits from the reduction of black money as it will lead to higher tax collection, better business environment, less corruption and more transparency.

Lastly, it has been witnessed that, economy is taking step towards digitalization and cashless economy - the most favorable outcome of demonetisation. Amidst the move of demonetisation and bank note chaos, the online transaction has emerged as an alternative option. But there was a dilemma, whether India was ready to go cashless or not? Because the usage of credit and debit card and online mode of payment was not so frequent and even in rural India people don't have access to formal banking system. However, during the demonetisation period there was a force to adopt e-transactions and now it seems possible for India to make the country digital. The study is thus an attempt to study the effect of demonetisation on the different aspects of the economy.

### **Objectives**

- To assess the fluctuation in money supply and its turnover impact on price stability.
- To measure the change in rate of interest and its turnover impact on credit demand.
- To know the oscillations in trade Balance due to demonetisation.
- To determine the change in tax collection after demonetisation.
- To study the impact of demonetisation on pace of cashless economy.

### **Research Methodology**

This paper is completely based on secondary data. Datasets extracted from the website of Reserve Bank of India that lasts from October 2016 to March 2017- the period of pre and post demonetisation. This study predominantly focuses on effect of demonetisation on crucial macro-economic variables in Indian economy. In the wake of it, economy is being inclined towards cashless and fastens speed up digitalization in India as figures and statistics tells. In order to evaluate the same, different modes of electronic payment have been taken into consideration viz. NEFT(National Electronic Funds Transfer), Mobile Banking, Debit-Credit card and POS (Point of Sales), UPI (Unified Payment Interface),CTS (Cheju Truncation

System), IMPS (Immediate Payment Service) and PPI (Prepaid Payment Instrument).

In connection to it, effect on value of rupee in both circumstances domestically as well as internationally have been determined, for inflation components of CPI and WPI has chosen and by taking rupee value against US dollar international price instability has been gauged. Further, pursuing the same analysis densely, turnover impact of aforesaid inflation and depreciation or appreciation of rupee value on trade has been calculated to recognize the impact of demonetisation at international level. In an economy all of the macro-economic variables are interweaved, so the impact on one leads on other variable too. In the case of demonetisation cash supplied in banking net, due to excess of cash rate of interest tend to be lower down and thereby credit demand goes up. In order to assess this phenomenon, movements in components of money supply and its turnover impact on credit deployment in different sectors namely exports, trade, consumer durables, commercial real estate, housing and personal loans are taken into consideration.

In all above-noted parameters, change has been derived by using percent change, calculated by  $\left[ \frac{X_c - X_b}{X_b} \right] * 100$ , where  $X_{ct}$  is a value of current month, and  $X_{box}$  is a value of previous month.

## Findings and Discussion

### I. Demonetisation and Banking Sector

The lobby of economists has posited that demonetisation effect on the change in money supply should be seen after a lag because changes do not take place immediately in an economy, it takes time to set off. However, in this work change in components of money supply has presumptively been assessed to know the instantaneous effects whether that is causing distress or creating enhancement in economic activities.

The following table 1 depicts the value and change in components of money supply during post demonetisation period. The table 1 shows that the currency with public declined sharply by 46 percent and cash with banking system has increased steeply with 265 percent in month of November. On the flip side demand deposits and time deposits upturned only by 14.93 and 4.70 percent respectively. This shows that people have used demonization mainly to convert their old notes into new notes and there were sealing limits within which conversion of notes could take place. Then, cash with banks has increased. M1 declined at decreasing rate from October to

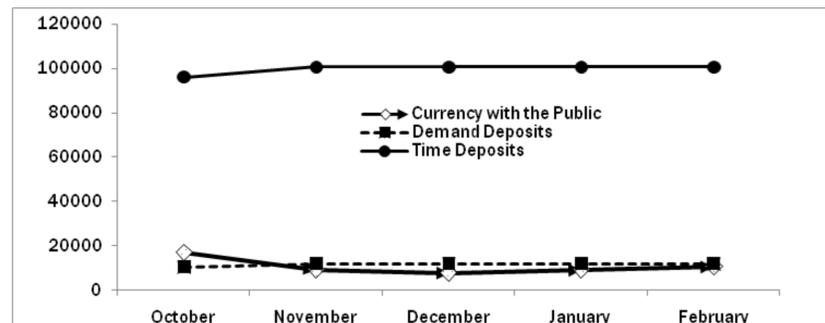
December, afterwards it got increased but not with level so as it could reach the previous level of October, barely due to the bedlam of cash in market after demonetisation.

**Table-1. Components of Money Supply and Monthly Change (Values in rupee billion)**

Month	Currency in Circulation	Cash with Banks	Currency with the Public	Demand Deposits	Time Deposits	M1	M3
October	17775.3	753.2	17022.1	10405.3	96062.0	27587.0	123649.1
November	11884.1	2755.4	9128.7	11958.5	100573.2	21238.1	121811.4
	<b>(-33.14)</b>	<b>(265.80)</b>	<b>(-46.37)</b>	<b>(14.93)</b>	<b>(4.70)</b>	<b>(-23.01)</b>	<b>(-1.49)</b>
December	9432.0	1588.9	7843.1	12008.9	100501.9	20004.6	120506.5
	<b>(-20.63)</b>	<b>(-42.33)</b>	<b>(-14.08)</b>	<b>(0.42)</b>	<b>(-0.07)</b>	<b>(-5.81)</b>	<b>(-1.07)</b>
January	9876.7	748.0	9128.7	11778.0	100500.8	21062.1	121562.9
	<b>(4.71)</b>	<b>(-52.92)</b>	<b>(16.39)</b>	<b>(-1.92)</b>	<b>(0.00)</b>	<b>(5.29)</b>	<b>(0.88)</b>
February	11314.0	678.7	10635.2	11798.7	100492.5	22590.3	123082.8
	<b>(14.55)</b>	<b>(-9.26)</b>	<b>(16.50)</b>	<b>(0.18)</b>	<b>(-0.01)</b>	<b>(7.26)</b>	<b>(1.25)</b>

(Values in bracket show monthly change in percentage, calculated by authors.)

**Chart 1: Components of Money Stock**



On the other hand, the cash with banks in the month of November augmented by 265 percent and then decreased by 42 percent in December due to re-monetization. Despite the fact that, the Currency with public after December grew gradually but still it has not reached the level of pre demonetisation period and got fixed on almost 60 percent of its peak value. It is thus clear that economy is now using more electronic mode of payment and taking move towards cashless economy. In the same way, table 1 illustrates that the percentage change in time deposits is moderate and not so immense relatively, thereby negligible changes occurred in  $M_3$ . The same is shown by chart 1 wherein movements of  $M_3$  after the month November is somewhat static but in month of March it has risen by 1.25 percent and arrived on the previous level of October, 2016.

To this point, it can be inferred that due to invalidity of high denomination currency notes certain part of currency with public must have gone in banking sector; mostly in the form of demand deposit and least in the form of time deposits. Now banks thus are flooded with excess cash which forced them to reduce the rate of interest in order to find out different avenues to generate demand for credit creation. This is very virtuous sign for the development of banking sector.

## II. Demonetisation and Deployment of Credit

The very welcoming macroeconomic effect of demonetisation is that it brought interest rate lower due to the flood of cash deposits which likely stimulates economy again in better and transparent ambience after the game changer move of demonetisation. It is firmly believed on the ground of economics that falling rate of interest increases the demand for credit. The following table 2 reveals the data regarding credit deployment in crucial sectors and its percentage changes. The table shows that sinking interest rates has enlarged the demand for credit considerably only except from export credit that has been falling down after demonetisation, though the pace of reduction is somewhat moderate after December, but it has not taken upturn even in the month of March. Demonetisation might not be the only reason but it could be seen that during and after demonetisation, export sector credit reduced. At the same time, credit for trade increased the most, followed by personal loans and credit card outstanding. Demand for commercial real estate and consumer durables also being perked up.

**Table-2. Deployment of Credit and its Variation (Values in rupee billion)**

	Export Credit	Trade	Commercial Real Estate	Personal	Housing Loans	Consumer Durables	Credit Card Outstanding
	734.01	3925.36	1786.90	15041.16	8112.81	195.99	462.84
Nov-16	453.88	3728.42	1762.46	15031.23	8153.44	195.62	463.45
	<b>-38.16</b>	<b>-5.02</b>	<b>-1.37</b>	<b>-0.07</b>	<b>0.50</b>	<b>-0.19</b>	<b>0.13</b>
Dec-16	457.82	3785.34	1778.39	15091.92	8197.25	194.37	471.39
	<b>0.87</b>	<b>1.53</b>	<b>0.90</b>	<b>0.40</b>	<b>0.54</b>	<b>-0.64</b>	<b>1.71</b>
Jan-17	456.17	3868.43	1782.49	15235.84	8216.17	198.52	497.55
	<b>-0.36</b>	<b>2.20</b>	<b>0.23</b>	<b>0.95</b>	<b>0.23</b>	<b>2.14</b>	<b>5.55</b>
Feb-17	435.11	3943.25	1781.44	15402.66	8201.51	201.99	493.40
	<b>-4.62</b>	<b>1.93</b>	<b>-0.06</b>	<b>1.09</b>	<b>-0.18</b>	<b>1.75</b>	<b>-0.83</b>
Mar-17	424.95	4279.79	1855.80	16241.88	8601.03	208.04	521.32
	<b>-2.34</b>	<b>8.53</b>	<b>4.17</b>	<b>5.45</b>	<b>4.87</b>	<b>2.99</b>	<b>5.66</b>

(Bold Values show monthly change in percentage, calculated by authors.)

In depth insight of above data implies that, excess money of demand deposits got pierced in trade by around 9 percent and boosted up the personal loans and housing requirement by around 5 percent from October to March 2017. On the flip side, increasing trend of credit card outstanding indicates that in fierce effect of cash-crunch, payments were paid more by using credit cards, affirming the optimistic situation to be a virtual economy.

### III. Demonetisation and Price Stability

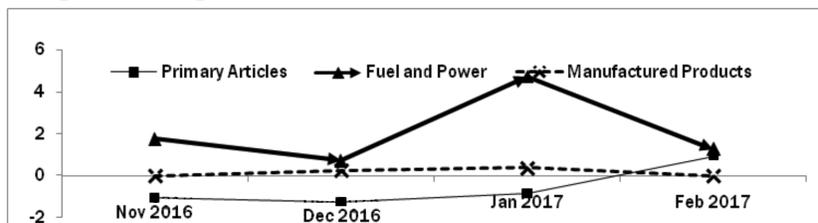
Of course, the sudden note banned of higher denomination has impacted the money supply and thus led disequilibria in economy. Owing to 86.4 percent of the value of currency notes in circulation which went out and re-monetization process was slower comparatively. In effect of it, demand plunged and thus inflation was likely to fall downward.

**Table-3. Monthly Change in Inflation Index (Values in Percentage)**

	WPI	Primary Articles	Fuel and Power	Manufactured Products	Rural CPI	Urban CPI	CPI (IW)
November 30,	-0.05	-1.06	1.76	0.00	-0.15	-0.08	-0.36
December 31,	-0.11	-1.26	0.73	0.25	-0.60	-0.70	-0.72
January 31,	0.71	-0.85	4.74	0.38	-0.30	0.16	-0.36
February 28,	0.49	0.94	1.29	0.00	0.15	0.31	0.00

Here, the table 3 reveals the data regarding changes in inflation index and their components during the post demonetisation period. Except manufactured products and fuel and power staple, other all components were moved downward, while the degree of descending in primary articles was substantially high. These variations of monthly changes are also plotted on graphical plane 2.

**Graph 2: Components of WPI**



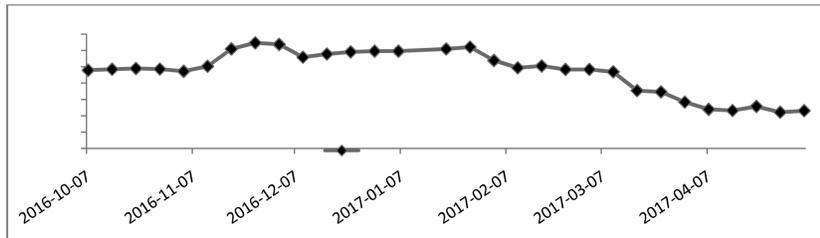
Due to the currency crunch the changes in primary articles were negative i.e. inflation shrunk in those days. Primary articles include food products so there is high fluctuation in it and consequently in overall WPI just because of vegetables and other

perishable goods prices suffered the most. Similarly, the movements and jerk in rural CPI and Industrial Worker CPI was almost identical, while urban CPI jumped quickly in the month of January and thereafter moderately increased. Overall, it can be clearly seen that just after the demonetisation period both inflation indices - CPI and WPI – have plunged.

**Movement in Exchange Rate**

There is no way in economic ground where fluctuation in money supply may not have any effect on exchange rate value. The below graph 3 shows, value of rupee against dollar remained same during November 2016 and then gradually increased. But during the month of February 2017 rupee recovered its worth and appreciated.

**Graph 3: Weekly Oscillation in Rupee Value**

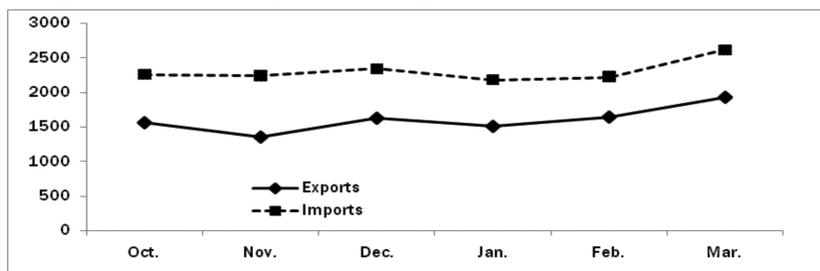


Inclusively, it can be inferred that after demonetisation value of rupee has become stronger by 3.7 percent against rupee dollar from 66.7 (Oct. 2016) to 64.3 (May 2017).

**IV. Demonetisation and External Sector**

As mentioned in the above section that value of rupee appreciated during post demonetisation period so it also affected the exports and imports. Following chart shows the monthly trend of export and import during the post demonetisation period. Imports are steadily increasing while exports in November 2016 unexpectedly fell down and then gradually moved up.

**Graph 4: Indian Exports & Imports(2016-17)**



Owing to fall in exports the trade deficit has mounted just after the month of demonetisation in which non-oil trade created wide difference between export and import. In the month of February 2017 trade deficit dropped due to somewhat diminution in import of non-oil staple. Moreover, till March the deficit datum value seems to have leveled off as same as in October - the period of pre demonetisation. Though, the gap between exports and imports has become same thereby value of trade deficit has again come to same point where it was.

## V. Demonetisation and Fiscal Sector

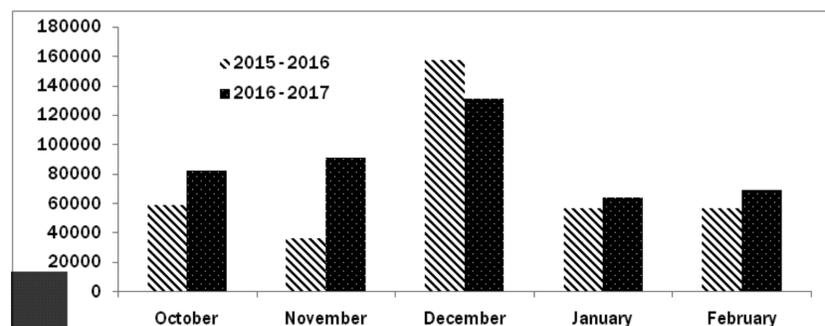
The demonetisation was planned to weed out the black money which also got surge in tax compliances, the same has been seen in Indian economy that tax collection has increased during this year. The table 4 shows the Tax Revenue for last year 2015-16 and current year 2016-17 to compare the exact increase in tax collection.

**Table-4. Tax Revenue (Net)**

(Rs. in Core)

Months	2016 - 2017		2015 - 2016	
	Monthly	Year to date	Monthly	Year to date
October	81860	530015	59067	428803
November	91157	621172	36061	464864
December	130944	752116	157383	622247
January	64238	816354	56645	678892
February	68918	885272	56886	735778
March (Prov.)			208780	944558

**Graph 5: Tax Revenue (Net)**



From above table and graph it is evidently seen that the tax revenue has increased in 2016-17 as compared to 2015-16 excluding the month of December. If these revenues are taken as tax to GDP ratio, it depicts enhancement of 2 percent in third quarter. Mishra

and Prasad (2017) have also observed that at the end of 2015-16, India had only 55.9 million individual taxpayers but during 2016-17, number of people who filed tax returns surged by 9.5 million

## VI. Demonetisation and Digitalization

Amidst the move of demonetisation, the online transaction has emerged as an alternative option. But there was a dilemma, whether India was ready to go cashless or not? Because the usage of credit and debit cards and online mode of payments were not so frequent here as even in rural India people don't have access to formal banking system. However, in the period of demonetisation, bank notes chaos forced the people to adopt e-transactions. The following table illustrates the monthly changes in transactions through online modes of payment after the effect of demonetisation.

**Table-5. Monthly Change in usage of Modes of Electronic Payment (Values in Percentage)**

Month	NEFT	CTS	IMPS	UPI	POS	PPI	Mobile Banking	Total
Dec	30.99	25.70	32.98	673.55	48.21	60.94	9.72	10.69
Jan	-1.58	-2.84	13.74	136.89	-7.85	-1.23	-11.66	-6.77
Feb	-4.20	-9.44	-1.84	14.66	-18.65	-10.74	-10.50	-4.55
Mar	49.79	34.52	17.10	25.73	6.33	14.62	38.88	61.55

The above table depicts that the UPI sharply increased from November to December 2016; with six hundred seventy three percent changes thereafter it moved upward accounting to 136 percent change. While PPI at first enlarged by around 61 percent but during January and February 2017 it has taken slight downfall.

As table 5 illustrates, the transaction changes in Mobile Banking; by using Debit & Credit cards, at point of sale (POS) and by IMPS (Immediate payment service) from November 2016 to March 2017. The reason informed by Finance Minister has been that as many as 12.54 lakh POS terminals were added during the period of January 2017 to March 2017 to boost digital transaction in the economy. It can be seen that the transaction through Mobile Banking and D& C cards increased rapidly with 48 and 9 percent respectively in first month of demonetisation due to hardship of cash. While after December 2016 the transactions somewhat decreased but the overall transactions increased in last six months. It thus can be inferred that not willingly but fiercely denizen have adopted the mode of e transaction. In consequence thereof, not directly but in sideways demonetisation is proved as a move towards the digitalization and cashless economy.

## Conclusion

From our foregoing analysis, it can be evidently said that the move of demonetisation has emerged as a good economic tool for Indian economy in terms of overall change in the macro variables. The value of rupee appreciated in those days and inflation also experienced reduction in its pace. Rate of interest was lower down and in consequence, credit demand for real estate, consumer durable, and for trade has been mounted.

We have also observed that, in post demonetisation period the net tax revenue increased, thereby fiscal deficit and revenue deficit has shrunk. However, Regional Pacific Outlook reported this phenomenon in different manner that higher tax collection might be because of large amounts in bank deposits after demonetisation were inspected by tax authorities, as a result of income verification, tax revenue base has improved. More specifically it can be stated that higher tax collection may also be due to the penalties paid by declaring their unaccounted money to banks under Voluntarily Disclosure Scheme.

Apart from this, the most favorable effect of demonetisation is that economy is taking step towards digitalization and cashless economy. But the matter of concern is -lacking access to bank and deficient internet facilities, especially in rural India. Henceforth, Indian Govt. should facilitate proper infrastructure and amenities so as dream of having digitalized economy could be achieved.

## REFERENCES

- Ashworth, D. (2016). Aftershock: Impact of demonetisation on India and investments. *Market Realist*. Retrieved from <http://marketrealist.com/2016/11/impact-demonetisation-indias-inflation/>
- Handbook of Indian Economy. *RBI Statistics*. Retrieved from <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications>
- India's Trade. *Commerce.gov.in*. Merchandise trade SDDS retrieved from [http://commerce.gov.in/writereaddata/UploadedFile/MOC\\_636252005609843917\\_SDDS\\_Data\\_Jan\\_2017.pdf](http://commerce.gov.in/writereaddata/UploadedFile/MOC_636252005609843917_SDDS_Data_Jan_2017.pdf)
- Kumar, A. (2017). Economic consequences of demonetisation money supply an economic structure. *Economic and Political Weekly*, LII(1).
- Monthly Accounting Information. *Controller General of Accounts Ministry of Finance, Govt. of India*. Retrieved from <http://cga.nic.in/MonthlyReport/Published/12/2016-2017.aspx>
- Mishra, A. R., & Prasad, G. C. (2017, May 12). Demonetisation effect: 9.1 million new taxpayers. *Livemint*. Retrieved from <http://www.livemint.com/Politics/WRTgYztM2cSiT0deLmMWjN/Demonetisation-effect-91-million-new-taxpayers.html>

- Palanisamy, S., & Sabariga, E. (2017). Demonetisation - A comparative study with special reference to India. *Research gate*. Retrieved from <https://www.researchgate.net/publication/312128645>
- Patnaik, I. (2016). Impact of demonetisation. *NIPFPB logpost*. Retrieved from <http://www.nipfp.org.in/blog/2016/11/14/impact-demonetisation/>
- Regional Economic Outlook: Asia and Pacific.(2017, May). *International Monetary Fund*. Retrieved from <https://www.imf.org/en/Publications/REO/APAC/Issues/2017/04/28/areo0517>
- Sikarwar, D.(2017, February 7). Demonetisation signals an important regime shift: Arvind Subramanian. *Economic Times*. Retrieved from <http://economictimes.indiatimes.com/opinion/interviews/demonetisation-signals-an-important-regime-shift-arvind-subramanian/articleshow/56901535.cms>
- Subramanian, A. (2017, February 1). Demonetisation signals an important regime shift. *The Economic Times*. Retrieved from <http://economictimes.indiatimes.com/opinion/interviews/demonetisation-signals-an-important-regime-shift-arvind-subramanian/articleshow/56901535.cms>