

MACROECONOMIC IMPACTS OF DEMONETISATION

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Abstract : *Demonetisation is a policy tool which is used with great precaution because in different circumstances it produces different results. A demonetization holds huge potential benefits in the medium to long term, given scale of operation, it is expected to cause transient disruption in economic activity. The analysis in many papers suggests that demonetization has impacted on various macroeconomic variables in varying degrees. But this study examines the impact of demonetization on three macroeconomic variables- GDP growth rate, Inflation rate and Policy interest rate. The study has observed that there is two way causal relationship between demonetization and inflation. It is further observed that demonetization has short term effect on GDP growth rate while in the long run there is no such impact observed. But in the case of Inflation rate and policy interest rate, it is observed that there is medium term impact of demonetization on inflation rate and policy interest rate. So India may also face such circumstances like other countries. This study examines the India's action of demonetization in international retrospects and compare the results with selected countries, who have opted demonetization.*

Keywords: Random demonetization, Systematic demonetization, GDP growth rate, Policy interest rate, Inflation rate.

I. INTRODUCTION

On November 8, 2016, one of the most unprecedented steps in international economic scenario took place in India after 1978, that is demonetization in higher denomination of two legal tenders. It is unprecedented in the sense that if it is observed through the overview of historical background of demonetisation in selected countries, it comes to know that this had been occurred whenever the demonetizing countries were facing the adverse circumstances such as hyperinflation, terrorism, political upheavals, or other extreme circumstances, but India's demonetization is *de novo case* as it combined secrecy and suddenness amidst normal economic and political conditions. But India's action is not so unprecedented in its own economic history because there were two previous instances of demonetization, in 1946 and 1978. These were experiences on which basis India has demonetized thrice. This became a policy tool nowadays throughout the world. But the entire world was looking towards India because of circumstances in which India exercised this policy tool. As the history of world economy tells us that this tool was firstly used to curb the black marketing and hyperinflation but they did not get success except curbing hyperinflation. So, from that time, it was thinking that demonetization is the most effective tool in case of curbing inflation. Now the action taken by India on exercising it, this changed the perception of the countries regarding the use of demonetization. Now the economies are giving more importance to systematic demonetization as compared to random demonetization. The main reason behind this is that random demonetization brings abrupt changes in economic activity of an economy and sometimes it becomes a cause of losing public confidence. The same thing also realized by Indian economy except losing of public confidence but partially it defrayed people from holding the cash in huge amount with themselves. Here in this paper we are concerned to analyse the impact of demonetisation on macroeconomic variables. For the further discussion let us have a glimpse of history demonetization in Indian economy. The table-1 and 2 provide the circumstances that led to demonetization of higher denomination in India and the overview of history of demonetization in higher denomination in India since 1946 to 2016 respectively.

Table 1:- Circumstances leading to demonetization & Statutory backing

Date	Circumstances before demonetization	Statutory backing
Jan 12, 1946	In history of RBI Vol I -1935-51 quoted, " Soon after the war ,while government were giving attention to ways and means of averting the expected slump, thought was given to check black market operations and tax evasions, which were known to have occurred on a considerable scale.Following the action in several foreign countries, including France, Belgium and U.K. , the Government of India decided on demonetization of high denomination notes in January 1946."	Two ordinances- 1-Bank notes (declaration of holdings) ordinance 1946-required to furnish their holdings of 100,500,1000 &10000 as at the close of business on previous day to the RBI by 3 p.m. on same day. 2-High denomination bank notes(demonetisation) ordinance 1946.
Jan 16, 1978	A Times of India Report published on January 17, 1978 said,"A press note issued tonight said that the ordinance had been promulgated because there was reasons to think that high denomination notes were facilitating the illegal transfer of money for financing transactions which are harmful to the national economy or which are illegal purposes.....There has been a feeling that a considerable amount of of black money has gone to finance hoarding and speculation.The demonetization of high denomination notes will hit black money."While according to the History of RBI Vol III (1967-81)," The Wanchoo committee on Black Money had recommended demonetization many years ago.This suggestion was not acted upon, particularly because the very publicity given to the recommendation resulted in black money operation getting rid of high currency notes.But when Janta party came into power , the then PM of India Morarji Desai recognized it and implemented it."	High denomination bank notes(demonetization) ordinance 1978- demonetized bank notes of the denomination of Rs 1000 , 5000 & 10000
Nov 8, 2016	The circumstances were not like as in 1946 and 1978.It was the time when India was transforming from agricultural oriented economy to the service oriented economy.Several measures had been taken by the government and there was a need to formalize , digitize and financialise the economy.In addition to it, most of the estimates on black money had been given by several economists and officials and there were too many papers and articles were published on the Benami transaction , Benami property and fictitious gold purchases etc..Under both - Political as well as economical- pressure the government demonetized higher denomination of Rs 500 and 1000 notes.	The specified bank notes(cessation of liabilities) ordinance 2016- The SBNs ordinance cease to be liabilities of RBI under section 34 of the RBI act and cease to have the guarantee of the central government (Rs 500 & 1000 notes)

Table 2: Overview of history of demonetization in India

Date	Governor of RBI	Government	Objectives	demonetised Higher denominations notes	% of demonetised higher denomination to the money stock	Amount of demonetised higher denomination backed to the RBI	No. of days for exchange(excluding grace period)
Jan 12 , 1946	Chintaman Deshmukh	British Rule (governor general of india – Archibald Wavell) and Winston Churchill – PM of Britain	To stop - unaccounted money -tax evasions	Rs 500 , , 1000 & 10000 notes	80 %	Rs 134.9 crore out of 143.97 crore.(93.7%) Only Rs 9.07 crore were not exchanged by end of 1947	10 days

Jan 16, 1978	I.G. Patel	Janta party PM -Morarji Desai	To combat - Black money - counterfeiting	Rs 1000, 5000(introduced in 1954 with the re-introduction of 1000 & 10000) & 10000 Notes	86.6%	Rs 2.1 thousand crore out of 2.8 thousand crore.(75%) Only Rs 0.70 thousand crore were not exchanged.*	3 days
Nov 8, 2016	Urjit Patel	BJP PM - Narendra Das Modi	Aimed at addressing Corruption, black money, counterfeit currency, terror funding	Rs 500 & 1000 notes	86%	Rs 15.28 lakh crore out of 15.44 lakh crore(98.96%)by the end of june-2017	50 days

Sources: History of RBI Vol I (1935-1951) pg-706-720 ; History of RBI Vol III(1967-81) pg-450-465

Sources: History of RBI Vol I (1935-1951) pg-706 ;History of RBI Vol III (1967-81)pg-450 ;RBI annual report 2016-17 ;

*Indian economy(development and planning) pg-560 by Dr. Badri Vishal Tripathi

Demonetisation may be regarded as the act of stripping a currency unit of its status as legal tender. It occurs whenever there is a change of national currency. The current form or forms of money is pulled from circulation and retired, often to be replaced with new notes or coins. Or Demonetisation refers to an economic policy where a certain currency unit ceases to be recognized or used as a form of legal tender. In economic survey report 2016-17 it defined as “ Analytically, demonetization can be seen as comprising the following-

- A money supply contraction but only of one type of money - cash.
- A tax on unaccounted private wealth maintained in the form of cash –black money and
- A tax on saving outside the formal financial system.”

From above , it clears that demonetization is a policy change. Since a policy change may be of two types

1- Random 2- Systematic. Thus demonetization can also be regarded as random demonetization and systematic demonetization. In random demonetization it possesses the following characteristics-

- Sudden demonetization
- No expectation about the action

While on the other hand, in systematic demonetization it include the following

- Pre-announced demonetization
- Gradually demonetization or step manner demonetization
- Time to form expectation about the action

Though there are major instances of demonetization across the world but for the purpose of the study the countries have been shortlisted to make intensive comparison. The table-3 and 4 depicts the major instances of random and systematic demonetization respectively.

Table-3:- Major instances of Random demonetization

Country	Year	Objectives
Ghana	March ,1979	Excess liquidity and inflation
Myanmar	Nov.1985 & Sept. 1987	Need to fight black money
Brazil	1990 1993	To fight hyperinflation " " " "
Soviet Union Russia	1991 & 1993	Fight organized crime and address money overhang; Need to complete exchange of old notes and control inflation
North Korea	2009	To crack down black currency market and fight inflation
Venezuela	2016	To fight inflation

Sources: Economic Survey Report 2016-17 pg- 53-79

Table 4:- Major instances of systematic demonetization

Country	Year	Objectives
Australia	1988 & 2015	Prevent counterfeiting
Singapore	2014	To mitigate higher money laundering risks associated with large value cash transactions
Canada	2011	Improve public confidence in currency; deter counterfeiting
Denmark	2012	Fight counterfeiting threats
Sweden	2013-2016	Decisions were part of preparations for the replacement of the banknote and series which was scheduled begin in 2015
Pakistan	June 2015	Fight corruption ;black money;terrorism

Sources: Economic Survey Report 2016-17 pg- 53-79

This is a great policy debate between New Keynesian and New classical economists which is still going on, that is which one is better-Random or systematic change ?, but the study will escape from this policy debate between two schools. The study will analyse only impact of demonetization on selected variables of selected countries including India and then it will have a comparative analysis of effective results.

Impact of demonetization can be understood theoretically like as-

Demonetisation is -

- 1- An aggregate demand shock because it reduces the supply of money and private wealth.
- 2- An aggregate supply shock to the extent that cash is an input to production .(for example agriculture)
- 3- An uncertainty shock for investors and consumers.

Theoretically, it can also be shown with the help of Quantity Theory of Money (QTM) which states that $MV = PY$ where M-money supply ,V-velocity(the rate at which money turns over) ,P- price level ,Y-real GDP

Now, if M decreases, V increases , either or the Nominal GDP decreases(a negative impact on both price and real activity).

II. Review of Literature

- 1- RBI(2017) in its paper “Macroeconomic impact of demonetization –a preliminary assessment” finds there is short term impact of demonetization on GDP growth rate on the basis of monthly data. Further, it made no prediction about the impact of demonetization on Inflation rate. Finally the paper has observed that there is negative relationship between demonetization and policy interest rate in the context of India.
- 2- RBI in its book History of RBI vol I,II ,III provides the historical background of demonetization in 1946 and 1978 respectively.
- 3- Rakshit(2018) in his article, “Some Analytics of Demonetisation” demonstrated the impact of demonetisation which examines only the short term effect qualitatively.

III. Objective of the study

- 1- To overview the history of demonetization in higher denomination in india since 1946 to 2016.
- 2- To compare the India’s demonetization with selected demonetizing countries in terms of GDP growth rate , inflation rate , and policy interest rate.
- 3- To compare the results of random demonetization with systematic demonetization.
- 4- To find the implication of demonetization.

IV. Relevance of the study

Demonetisation which have been occurred in most of the countries keeping in view different objectives like as – to curb the hyperinflation , black money, counterfeiting , corruption and the use of higher denominations for terrorist activities. Some demonetization were of random nature while some were of systematic nature.(see table no. 3 & 4). Most of the studies have been made on demonetization in different perspective .The present paper focuses on the findings relationships between demonetization and GDP growth rate, Inflation rate and Policy interest rate. This study seeks to answer which one is better ? so there is a need to compare the results obtained after demonetization (sudden and pre-announced) on the basis of trend analysis of selected variables .And on the basis of effective results obtained from analysis , an appropriate policy recommendations could be made. Is demonetization appropriate tool for curbing the black money or not? Is there any efficacy of demonetization on hyperinflation?

V. Research methodology

1- Research design

Entire study is based on causal comparative research model. “The causal comparative design of research seeks to establish causal relationship by comparing the circumstances associated with observed effects and by noting the factors present in those instances which are given effect occurs or does not occurs”. C.V. Good ,A.S. Barr ,D.E. Scates in “methodology of educational research”

2- Data collection

The study is based secondary data collected from RBI reports, World bank reports and Economic survey reports and official sites of concerned countries. For every country the study include five years annual data on GDP growth rate, inflation rate and policy interest rate.

3- Tools of analysis

The study is based on the use of graphs and trend analysis. On the basis of trend analysis, the hypothesis have been rejected and accepted.

VI. Formulation of hypothesis

Ho₁ :- There is positive relationship between demonetization and GDP growth rate.

Ho₂ :- There is positive relationship between demonetization and policy interest rate.

Ho₃ :- There is positive relationship between demonetization and inflation rate.

VII. Analysis of data

The analysis contains the study of relationship between demonetization and their impact on GDP growth rate, inflation rate and policy interest rate regarding selected countries i.e. India, Pakistan, Australia, Sweden, Brazil, Ghana, Myanmar.

1- India- Jan 1978 and Nov 2016

Figure -1 (1978)

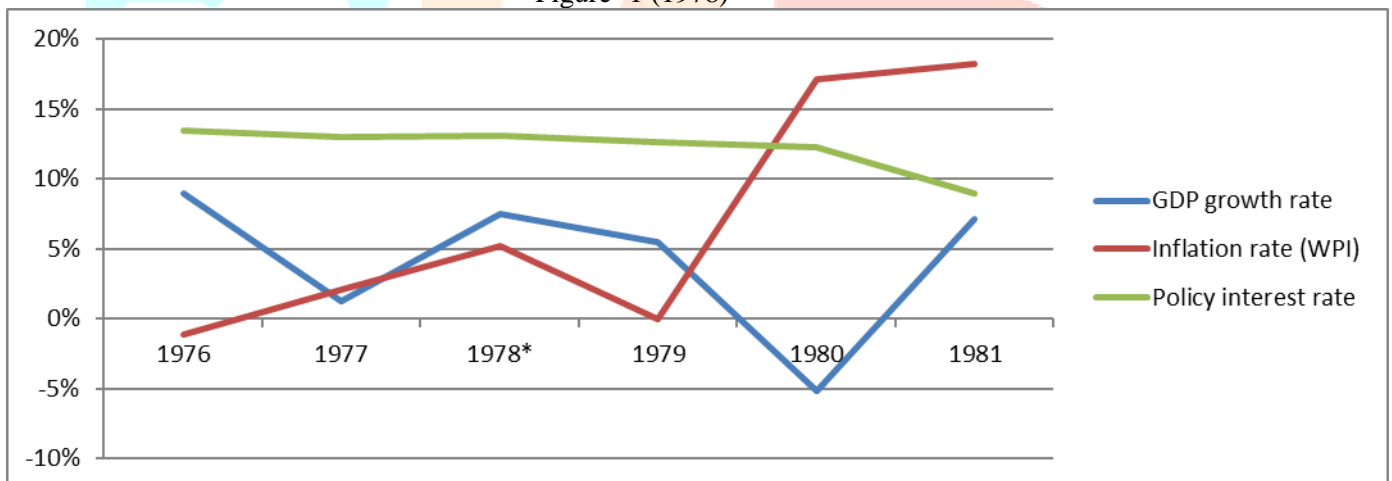


Figure 1 shows the trend in GDP growth rate, inflation rate and policy interest rate. It shows that GDP growth rate, inflation rate and policy interest rate which were 1.25%, 2.10% and 13.0% in 1976-77 and it rose to 7.47%, 5.2% and 13.05% in 1977-78 respectively. It connotes that there was no realization of impact of demonetization in the same FY but the data suggests that in next FY (1978-79), there was much reduction in GDP growth rate, inflation rate and policy interest rate. In 1978-79, the GDP growth rate, inflation rate and policy interest rate reduced to 5.50%, 0.1% and 12.60% as compared to 1977-78 respectively. It suggests that if demonetization is done in the last quarter of FY, there would be no realization of impact on selected variable for the same FY, but it would be realized in the next FY. If there would no stimulus action taken to boost the economy, the impact of demonetization would exist also for the subsequent years. For example, in the FY 1979-80 GDP growth rate reduced to -5.20%, but in FY 1980-81, the economy recovered and approached to 7.17%, while inflation rate rose to 17.1% and 18.2% in 1979-80 and 1980-81, it put pressure on the RBI to cut the policy interest rate so the policy interest rate further reduced to 12.25% and 9.0% in 1979-80 and 1980-81 respectively. This also concludes that the government alone cannot remove the impact of demonetization, it also needs a helping hand from RBI.

Figure1.2-

(2016)

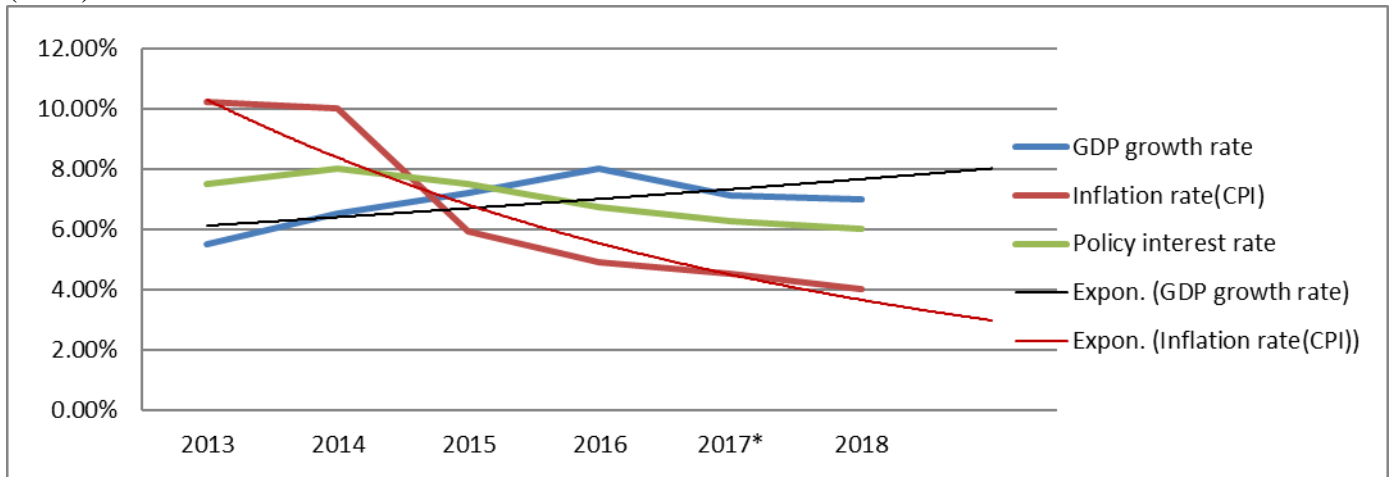


Figure 1.2 shows that in 2015-16, GDP growth rate , Inflation rate and Policy interest rate were 8% ,4.9% and 6.75 % and the GDP growth, Inflation rate and policy interest rate reduced to 7.10%,4.5% and 6.25% in 2016-17 respectively. It shows that there is realization of impact of demonetization in the same FY, but in the case of 1978, it was not found. The study observed that the demonetization of 2016 fell in the period of Q3 of FY 2016-17. There would be possibility to avoid the impact of demonetization before the government. The Q1 of FY 2017-18 estimate issued by CSO states that the GDP growth rate is 5.7% for the first quarter while the Inflation rate is 4%. And according the second Bi monthly monetary policy report 2017-18 states that the Policy interest rate is 6%. The reduction in policy interest rate is the indicator of increase in investment demand for money while on the other hand ,decreasing inflation rate is affecting the expectation of the producers.

The trend line of GDP growth rate indicates that GDP growth will increase in the FY 2018-19 and it will reach near to 8% a while on the other hand the trend line of Inflation rate suggests that it will further decrease in the FY2018-19. This is a good indication for our economy. This also indicates that the short effect of demonetization on GDP growth rate has been over. But the question how short was it? As this study suggests that it was of the period of 6 month. Declining the inflation rate is considerable because neither too high inflation nor too low inflation is good for any economy. Somewhere the demonetization has affected the aggregate demand in our economy and the effect did not wash away. It persists today and continuously affecting our economy. So this is the time to think a bit deep about our action and future conduct of this policy. Either we want random or systematic. In my opinion the systematic is better than random.

2- Ghana-March 1979

Figure 2 (1979)

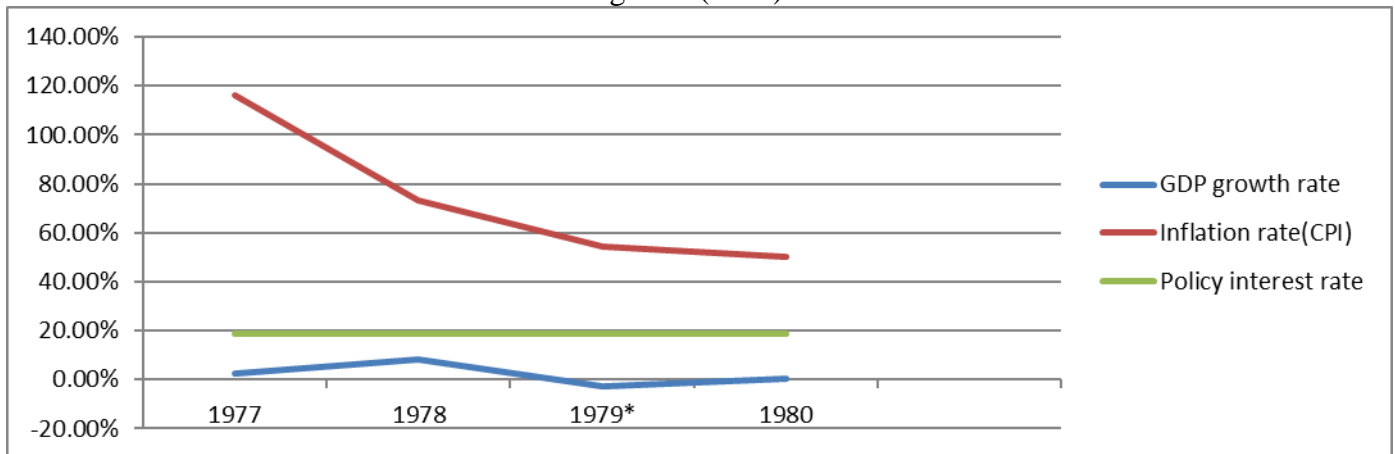


Figure 2 shows that in 1978 the GDP growth rate and inflation rate were 8.48% and 73.09% which reduced to -2.51% and 54.44% in 1979 respectively leaving the policy interest rate unchanged at 19%. This might be

accepted as an exceptional case. The noticeable point here is to see the inflation rate curve which is continuously falling after 1979. This shows the impact of demonetization on inflation rate.

3- Myanmar- Nov. 1985 & Sep. 1987

Figure 3(1985 & 87)

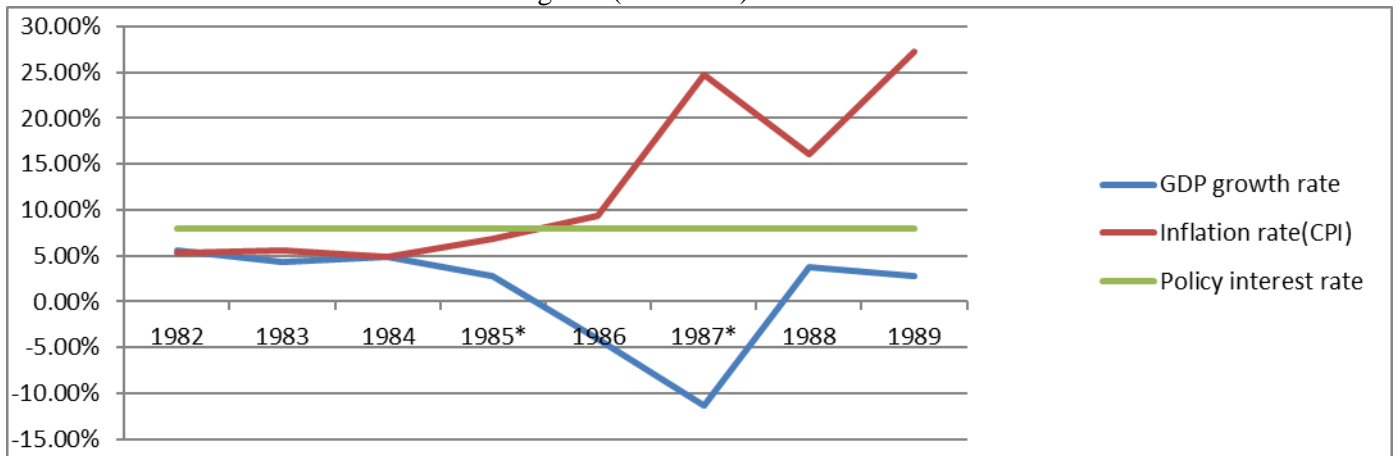


Figure 3 shows that GDP growth rate had fallen down by much amount. Myanmar could not survive just after demonetization because it demonetized two times without much time lag. Inflation rate rose by much amounts continuously. This may be due shortage of cash in the economy. The policy interest rate was unchanged and stuck at 8%. This was a new phenomenon which the study found. From the graph it can be easily observed after demonetization in 1987, Myanmar experienced an abrupt increase in inflation rate while GDP growth had increased there. And policy interest rate was constant.

4- Australia(2015)

Figure 4(2015)

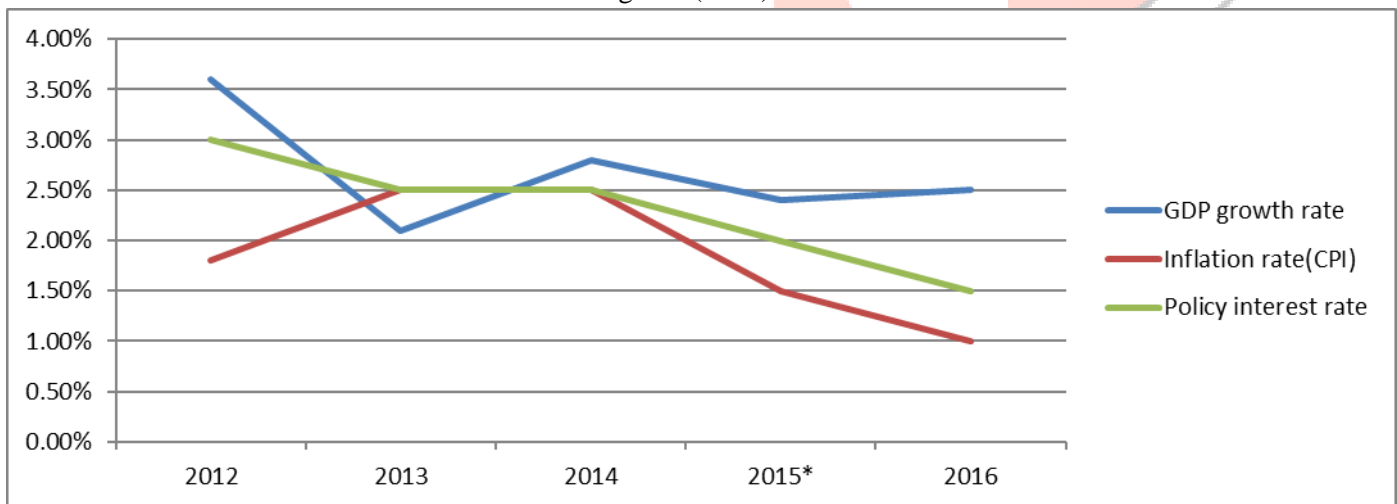


Figure 5 shows that GDP growth rate which was 2.8% in 2014 reduced to 2.4% in 2015, Inflation rate which was 2.5% reduced to 1.5% and policy interest rate which was 2.5% also reduced to 2.0%. After 2015 there is upward trend in GDP growth rate i.e. in 2016 it is 2.5% while there are downward trend in both inflation rate as well as policy interest rate. This is the same trend as we found in case of India also. Rising GDP growth rate shows a good indication of recovery from the impact of demonetization. Due to different in Financial Year (January to December) from India (April to March), we could get the data to compare for the last year.

5- Sweden (Dec.2013-June2018)

Figure 5

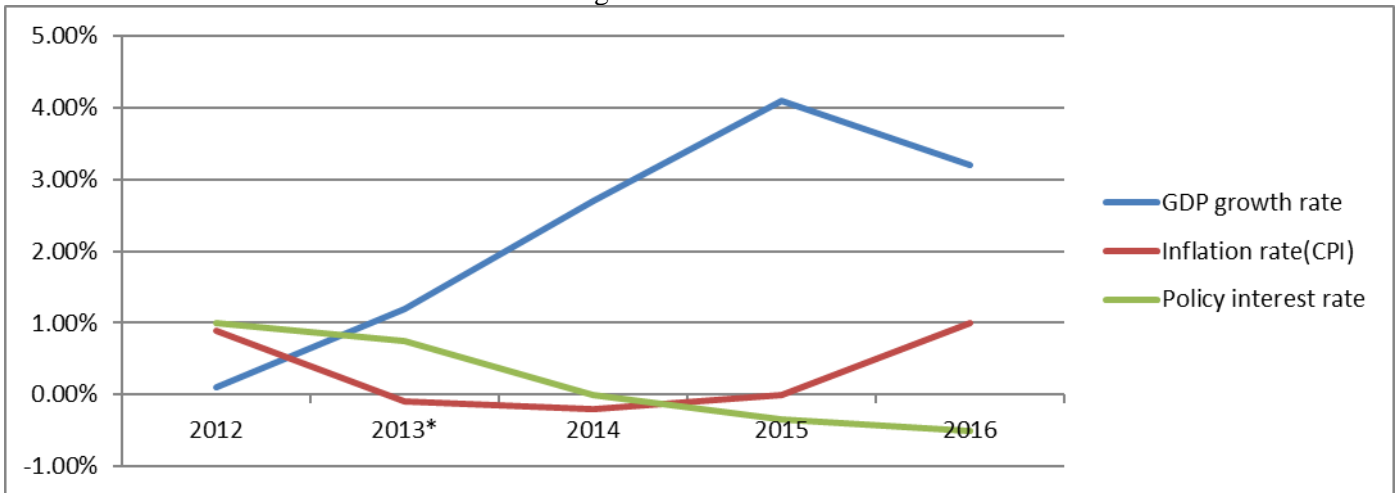


Figure 5 shows the inverse trend in the case of GDP growth rate only. It means that the GDP growth rate rose to 1.2% from 0.1% as compared to 2012 whereas it should be reduced. The same trend as in the case of India, Ghana, Australia found for the inflation rate and policy interest rate. There is downward trend in inflation rate and policy interest rate. Sweden achieved success in avoiding the impact of demonetization on the GDP growth rate but it could not avoid the impact on the Inflation rate and policy interest rate. Here the study has also observed that the negativity of policy interest rate. This is the lowest value of policy interest rate in the selected demonetizing countries.

6- Pakistan – June 2015

Figure 7

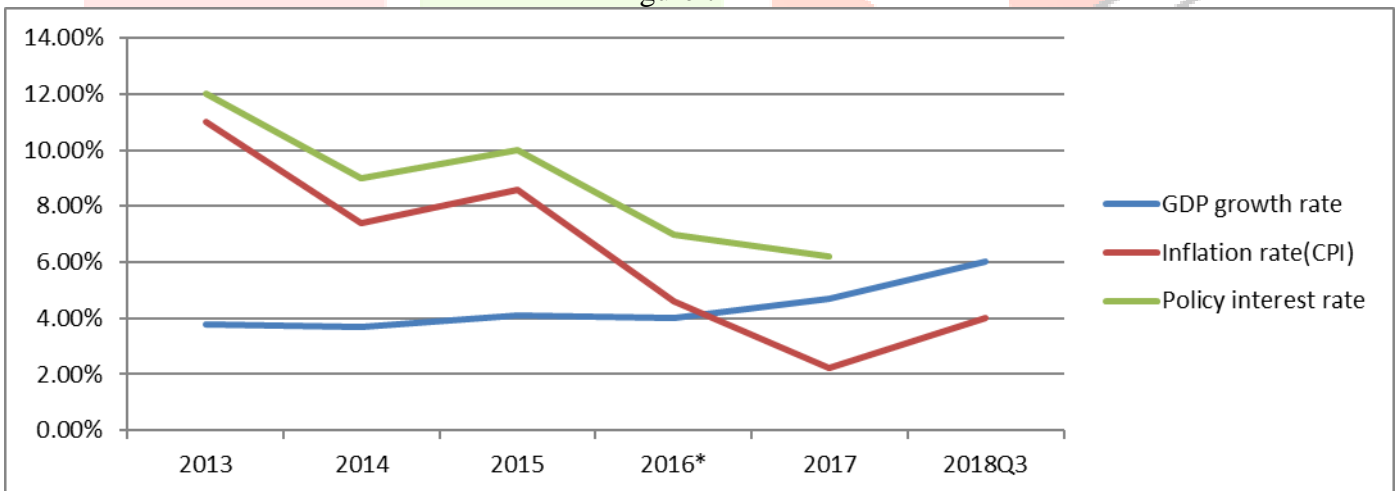


Figure 7 shows the GDP growth had fallen by 0.10% from 4.10% , inflation rate and policy interest rate had also fallen by 4% and 3% from 8.60% and 10% respectively. There is no much reduction in GDP growth rate as compared to 2015 and the economy revived soon i.e. in 2017 the GDP growth rate became 4.7% .

VIII. Findings, Discussion and Policy recommendation

Findings

The major findings of the study are as under:-

- 1- In 4 out of 6 demonetising countries the GDP growth rate fall post demonetization. It impact endure for a longer period if there is no corrective action taken. For example in 1978 when India demonetized GDP growth rate fell as compared to 1977-78 and later on in 1979-80, it became negative. Not only in India these situations were observed but also in Ghana and Myanmar. In Australia(2015), India(2016) and Pakistan(2015) also faced the GDP growth rate fell down also but it

did not become negative. Thus it may be hypothesized that There is negative relationship between demonetization and GDP growth rate. This leads to rejection of first null hypothesis and acceptance of alternative hypothesis.

- 2- It is also observed that the demonetizing countries had recovered soon from the impact of demonetization. i.e. on an average it is one year. So demonetisation has short term effect in the form of negative shocks on the GDP growth rate. Since it is a shock which may endure for one month, two month and so on. The durability of shock would negatively depend upon the corrective action measures.
- 3- In 4 out of 6 demonetising countries, it is observed that the policy interest rate reduces post demonetization. So it may hypothesized that There is negative relationship between demonetization and policy interest rate. This leads to rejection of null hypothesis and acceptance of alternative hypothesis.
- 4- The data on inflation rate of demonetizing countries shows that the inflation rate has fallen in all 6 countries post demonetization. So it may be hypothesized that there is negative relationship between demonetization and inflation rate. As further the study observed that in Indian circumstances demonetization is the cause and its shocking impact on inflation rate is the effect. But in other countries like Ghana(1979) ,Brazil(1990 &1993) ,North korea(2009) ,Venezuela(2016), Inflation is the treated as cause and demonetization is shocking effect. Therefore, at global level causal relationship might be bidirectional, not unidirectional, and therefore global shocks impact must be measured in terms of simultaneous equation perspective with econometric tool limitation while in case of India ,this shocks might be measured in terms of one way causal relationship with econometric tool limitation. one thing is to be noted that at a time demonetization may be cause and inflation rate may be effect.
- 5- On the basis of trend analysis ,this prediction could be made that india would also face upward trend in GDP growth rate and downward trend in Inflation rate and policy interest rate for the going FY 2017-18.
- 6- The study has observed that demonetization is an economic policy tool which should be used with great precaution. First of all ,one should be very clear in its use. In the study , it was observed that those countries who had demonetized keeping in view to control the inflation –i.e. Brazil and Ghana – they got success in this field. On the basis of this , it can be easily concluded that demonetization is an appropriate tool for controlling hyperinflation or inflation. It was further observed that declining GDP growth rate in first instances of demonetization it is due to effect of shortage of cash ,job losses, etc. So far as India's demonetization in higher denomination is concerned, India has also realized the short term effect of demonetization on GDP growth rate. And Inflation rate is more under control than earlier and one of the better indicator of revival of GDP growth rate is the reduction in the policy interest rate which compelled us to believe the enhancement of employment ,output etc. That is why most of the economists have opined, "Demonetisation has been a radical ,unprecedented step with short term costs and long term benefits." But the public debate on Demonetisation has raised three sets of questions. First, broader aspects of management ,as reflected in the design and implementation of initiative. Second, its economic impact in the short run and medium run. And, third , its implications for the broader vision underlying the future conduct of economic policy. If India's demonetization is compared with those countries who had been demonetized in systematic manner ,it is observed that there is no difference in terms of impact of demonetization on GDP growth rate ,inflation rate and policy interest rate. India could also adopt the systematic way of demonetization. Since india's objectives of demonetization were fourfold i.e. addressing corruption , black money, counterfeit currency and terror funding. One thing should be remembered that demonetization is not a panacea. Like as GDP growth rate ,demonetization has short term effect on corruption and terror funding. Some official news are this that there is reduction in the terrorist activities in sensitives areas. As it was stated that the demonetization would hit the black money ,it seems to be fruitless effort. As in 2012 ,the Central Board of Direct Taxes had recommended against demonetization ,saying in a report that demonetization may not be a solution for tackling black money or economy, which is largely held in the form of Benami properties ,bullion and jewellery. According to data from income tax probes ,black money holders kept only 6%

or less of their wealth as cash, suggesting that targeting this cash would not be a successful strategy.¹ While another statement given by the former Governor of RBI about the demonetization of 1978 in his book *Glimpses of Indian Economic policy: an insider view*, I.G. Patel, "Most people who have black money and who are involved in such operations rarely keep their ill-gotten gains in cash. They will have converted much of it into assets or even into white money. Only a small percentage of the total amount of what might have initially been black money is likely to exist in cash."² Thus these views also strengthened the aforesaid observation of the study.

- 7- From the table 2, it has observed that India had failed thrice times in curbing the black money by using random demonetization in higher denomination. In case of India, demonetization alone is an inappropriate tool for curbing the black money but demonetization may be considered as complementary tool for curbing black money.

Policy recommendations

Now on the basis of above data analysis and discussion some policy recommendation could be made for the further use of demonetization in context of India:-

- 1- Random demonetization may be replaced by systematic demonetization in India. Along with the systematic demonetization, the government requires a complementary tool for curbing the black money.
- 2- But so far as the question about the efficacy of demonetization in achieving specific target, it is necessary to consider upon the nature of demonetisation. A list of such matching is given below:

Table 6:-Hypothetical projection on the implication of demonetisation

Target	Nature of Demonetisation	Examples	
		Random	Systematic
Hyperinflation/Inflation	Random/systematic	Ghana(1979) Brazil(1990 &1993) Russia(1993) North korea(2009) Venezuela(2016)	Zimbabwe(2015)
Black money	Systematic	Myanmar(1985 &1987) North korea(2009)	Pakistan(2015)
Counterfeiting	Systematic		Australia(1988&2015) Canada(2011) Denmark(2012)
Terror funding	Random	India(2016)	Pakistan(2015)
Corruption	Systematic	India(2016)	Pakistan(2015)

The effective results of demonetization in India and Pakistan would help us to predict about the efficacy of Random and Systematic demonetization because of both having demonetized with same objective. So now like as the Cricket Match the study would also depend on the final result of demonetization in India and Pakistan to predict about the efficacy:-

Random demonetization	Systematic demonetization
India(2016)	Pakistan(2015)
Aims at addressing <ul style="list-style-type: none"> • Corruption • Counterfeiting • Black money • Terror funding 	Aims at addressing <ul style="list-style-type: none"> • Corruption • - • Black money • Terror funding

- 3- There is a need of surgical strike on Benami properties, bullion, jewellery etc. If the government want to generate the effective results, the government should bring legal changes in the Benami properties, bullion and jewellery statutes etc. For this the government can initiate to link aadhar with the property registration and make online record of property ownership. This action would definitely lead to reduction in tax evasion and prices of physical assets.

¹ Measures to tackle black money in India and abroad- [www.dor.gov.in/sites/upload_files/revenue/files/measures to tackle black money.pdf](http://www.dor.gov.in/sites/upload_files/revenue/files/measures_to_tackle_black_money.pdf)

² History of RBI vol III (1967-81)pg-451

IX. Concluding remarks

It is a matter of coincidence and chance that the two instances of demonetization in independent India give the following remarkable facts:-

Ruling party	year	Hon'ble Prime Minister of India	Governor of RBI
Non-congress government	1978	Morarji Desai-(Gujarat)	I.G.Patel
Non-congress government	2016	Narendra Das Modi-(Gujarat)	Urjit Patel

This may be due to chance factor but it is not easily negligible in the political and economic history of India.

X. Limitations of the study

- 1- This paper examines only the impact of demonetization on GDP growth rate, Inflation rate and Policy interest rate selected countries and India.
- 2- This paper examines the impact of demonetization in selected demonetizing countries as an example for predicting the trend in GDP growth rate, inflation rate and policy interest rate and establishing the relationship among demonetization and GDP growth rate, inflation rate and policy interest rate.

XI. Scope for Further Research

- 1- Comparative responsiveness of random and systematic demonetization towards the GDP growth rate, Inflation rate and Policy interest rate.
- 2- Impact of demonetization on other macroeconomic variables.
- 3- Efficacy of demonetization in achieving formalization and digitisation of Indian financial system.
- 4- Nature of relationship between demonetization and tax compliance & demonetization and digital transactions.

XII. Acknowledgment

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Table of Figures

India (1978 & 2016)

(in percent)

Year	GDP growth rate (constant prices)	Inflation rate (CPI)	Policy interest rate
1975-76	9.00	-1.10	13.5
1976-77	1.25	2.10	13.0
1977-78	7.47	5.2	13.05
1978-79	5.50	0.0	12.60
1979-80	-5.20	17.1	12.25
1980-81	7.17	18.2	9.0
2012-13	5.50	10.2	7.5
2013-14	6.50	10.0	8.0
2014-15	7.20	5.9*	7.5
2015-16	8.00	4.9	6.75
2016-17	7.10	4.5	6.25
2017-18 Q1	5.70	4.0	6.0

*due to combining CPI-IW and CPI-AW in 2014.

Source: Economic survey report and Handbook of statistics on Indian economy 2016

Ghana(1979)

1977	2.27	116.45	19
1978	8.48	73.09	19
1979	-2.51	54.44	19
1980	0.47	50.07	19

Myanmar(1985 &1987)

1982	5.6	5.3	8
1983	4.39	5.65	8
1984	4.93	4.85	8
1985	2.85	6.81	8
1986	-4.01	9.33	8
1987	-11.35	24.76	8
1988	3.7	16.04	8
1989	2.82	27.2	8

Australia(2015)

2012	3.6	1.8	3.0
2013	2.1	2.5	2.5
2014	2.8	2.5	2.5
2015	2.4	1.5	2.0
2016	2.5	1.0	1.5

Pakistan(2015)

2012	3.8	11.0	12.00
2013	3.7	7.4	9.0
2014	4.1	8.6	10.0
2015	4.0	4.6	7.0
2016	4.7	2.2	6.2
2017Q1	5.28	3.4	---

Sweden(2013)

2012	0.1	0.9	1.0
2013	1.2	-0.1	0.75
2014	2.7	-0.2	0.0
2015	4.1	0.0	-0.35
2016	3.2	1.0	-0.50

Source: world Bank,IMF

