Demonetization in India and it's resultant effect

Somesh Chakraborty

Freelance Writer, Kolkata, West Bengal, India.

At the night of November 8, 2016 at 8 PM honorable prime minister of India Shri Narendra D. Modi announced the demonetization of rupees 500 and Rs. 1000 in order to weed out counterfeit currency and shadow economy of black money sending the common man into a fizzy.The decision shook the country like a tremor. The intensity of the tremor was severe for three months and gradually it subsided. The decision raised a firestorm of controversy among the serious academics of economics. But now the storm is over and the ashes and dust have been settled. The necessary statistical and economic data have become available now to introspect entire decision and it's fall out on the economy as a whole.

Let us look at the controversy. The proponents said, this unprecedented move has a spring up effect which is directly proportional to GDP growth while the critics found it inversely proportional. The critics also argued, some cathartic actions should be taken before such decision of colossal impact while the proponents argued that, the opposition is merely a cavil and also claimed the opponents as mere Luddites who only attack any technological innovation in the economy which ultimately rests into continuation of parallel economy controllers and their crooks.

The scope of this article is to make an insight into the decision and its necessary fall out in Indian economy and vis-a-vis to observe the resultant effect of demonetization of other countries.

Now let us look at the genesis and canvas of the controversy. The whole controversy lies in the monetarist school of economic development versus Keynesian and post Keynesian school of thought of economic growth and development. In direct criticism to Keynesian theory of development and growth the monetary theories are more concerned with supply of money. They believe in the control of money supply in the economy and allow the rest of the market to fix itself. While the Keynesian School believes that a troubled economy in a downward spiral unless something is done to drive consumers to buy more goods and services the downward spiral will zoom into deep depression. Both of this macroeconomic theories influence the law makers to create monetary and fiscal policies.

Keynesian theory simplified: Keynesian theory believes that economy is best controlled by manipulating the demand side of money i.e. manipulating the demand for goods and services. Although, they do not ignore completely the role of money supply in the economy and its effect on GDP, they believe in consumption, government expenditures and net export to change the state of economy. The Neo Keynesian approach expends upon the classical approach. This approach hinges on extension of classical logic such as government intervention and behavior of prices. Both theories are a reaction to depression economics.

Monetary theory simplified: Monetarists are mostly preoccupied with the supplied side of the money. They argue that controlling money supply will have a direct influence on inflation. In the wage of war against inflation with the control of money supply the can affect rate of interest. Pumping more money to the current economy and the effects it will have on business expectation and production of goods and services.

Thus we get a conflicting view on mechanism as to how money supply affects the general economic activities. On the one there are approaches which plays that it is by changing financial conditions particularly the rate of interests, the amount lending and borrowing, the influence of supply side of money can affect economic activities. According to this approach and increase in supply of money the holders will have excess amount of money in their assets portfolio. In the process of maintaining equilibrium these balances will be converted into goods and service directly or through financial intermediaries. This excess supply of money will create a boost in demand for increased goods and services. It will have a stimulation effect on output and a rise in price until the values of output has risen in the proportion to the increase in money supply. The other school in this bracket points out that increasing money supply will affect cost and availability of credit a fall in the interest rate change charged to borrowers may have a promulgating effect on consumption and investment directly or a great easing of financial condition.

The superiority of monetary over Keynesian models has not yet been proved. Monetary factors are not unimportant to the Keynesians because change in supply of money will directly affect the change in interest rate and availability of credit. But the short coming of this approach is that it can't be shown how far these changes of economic variables have a positive impact on expenditure. Intact we need not give the money supply any special importance in the financial mechanism. Simultaneously, it is also obvious that we can't deny the effect of movement of money supply. The most important event for a long time in the realm of economic ideas is the way which the post war form of Keynesian ideas has been challenged by a new school of thought called monetarist led by Milton Friedman of Chicago University. A series of arguments and counter arguments between one book which places major stress on fiscal policies as the primary engine of growth and economic stabilization. On the other there are proponents who stress on quantity of money and therefore monetary policy is the most important primary factor in growth and stability.

Now the main issue is taking into account the boundary of controversy. The first stage is to take extreme position. The Fiscalist take the position that ,"money doesn't matter. "Or in other words only fiscal policy matters as an effective tool of demand management. The second stage identifies the areas where some concessions can be made or allowed in the process of demand management. On the third stage identifies a compromising element - the post Keynesian position that is both the monetarists and fiscal policy matter. The monetarist school believe that the authority has a very short run power to influence output an employment and the gap between high demand and low demand in the long run (leave aside for the sake of simplicity at this point of time the situation of balance of payment).

Now the modern theory of monetarism has also close relation with classical economics in the sense not because it lays stress on the importance of money supply but because it hinges back to classical idea that a market economy is not essentially unstable. In other words the market forces have an invisible hand of stability or the market economy has a natural tendency to move along a trained path of output determined by growth in its productive potential. Certain exogenous factors like war, natural calamities change the movement of economic variables like demand and supply but there of short period and basic stability is broad back by the market forces. The monetarists also believe that any mismanagement in supply of money by the authorities is the cause of economic instability.

But if we juxtapose this theory with the Keynesian theory we will amazingly find that Keynesian argument takes a diametrically opposite stance. What Keynesians say? They say the government should play and active stabilizing role not by varying taxes and expenditure only but also take direct actions which influence both private spending for consumption and investment paving the way for stabilization.

In monetarist approach we find a time lag of uncertain length between changes in money supply and the variable changes including the price level. Friedman also says that, the predictability on demand of certain monetary policy is poor. Hence he prescribed increasing money supply 3% to 5% a year for smooth growth of economy.

Let the controversy continue.

But several major issues have already emerged those are to be clarified if not addressed -those issues important to both school of thought are as follows:

1. The question of whether the changes in the quantum of money or changes in autonomous expenditures are most important in explaining short term changes in the output, income, employment and price level.

2. whether the basic stability of demand function for money is primarily a matter of stability of velocity.

3. Interest elasticity of demand for money.

and finally,

4. The ability of Central Bank to control money supply in a country.

Presidents and law makers of USA have applied multiple economic theories in policies throughout history. Soon after Great Depression of 30's President Herbert failed in his approach to balance the budget focussing primarily on the needs of business i.e demand side of money.He was concerned with increasing demand and lowering unemployment. The policies persued by President Ronald Reagun which is famous as Reagunmics is nothing but monetorist theory and policy prescription. Even similar to the Great Depression happened in 2008 resulting in crash in money market in USA.President Obama and others decided to solve economic problem by bailing out banks and fixing under water mortgages for government owned housing. It appears elements of both theories were used to resolve debt.USA had been following approaches of both monetorist and Keynesian (or a mix). As a Keynesian they press for countercyclical tax and expenditure. As a monetorist they try to influence the actions of Federal Reserves. The Eisenhour administration took a monetorist stance while Kennedy and Johnson was primarily Keynesians. Mixon took the middle of the road. Carter took a

Keynesian policy in increasing public expenditure to remedy unemployment of resources.

Now let us see the impact of Demonetization in other countries as this move is neither unique nor an unprecedented one. This experiment has been carried out in other countries also in the past.

case 1. Ghana : In 1982,Ghana rolled out 500 CEDI currency in order to prevent money laundering and corruption. The decision landed the country in chaos and finally resulted in roll back or reversal of the policy.

case 2.Nigeria : The economy collapsed after Demonetization after 1984.The economic variables didn't move as planned. The military government led by Muhammadu Buhari there introduced multi colored notes to invade the shadow economy of corruption.

case 3 Mynamar : Around 89% of Mynamar currency was demonetized in 1987 to curb black money. But the country witnessed massive protest resulting in several killings.

case 4 Soviet Union : Mekhail Gorbachov in 1999 demonetized higher denomination of Rouble of 50 and 100. The move resulted in reversal of Mekhail's leadership within 8 months of the plan.

case 5 North Korea : The country faced the demonetization of currency in 2010 which led to break down of the economy with people to starve of the basics.

case 6 Zimbabwe : The currency once had 100 trillion dollar notes which was demonetized and was exchanged at the mocking rate of 1 trillion dollar = $ 0.05.

Coming across so far one can reasonably think that this article has a specific purpose and that purpose is to denounce the move. Now I will try to show where the demonetization move was launched and ran successfully.

case 1 European union : The countries which joined the EU began to phase out their currencies and adopted EURO in 2002.In order to switching the Euro the authorities first fixed the exchange rate of varied national currencies into Euro. When the Euro was introduced the varied national currencies were demonetized.

case 2 USA : The highest value denomination in currency is now $ 100.But in decades past Federal Reserve issued $100, $10000 and even $100000 but this bills were recalled in 1969.

case 3 Australia : It was the first county to introduce polymer note to combat the counterfeit ones and they gradually recalled earlier paper notes and after a certain period they demonetized the paper ones.

Lessons we learnt : The countries where the demonetization move had worked in a hassle free manner were predominantly a cashless economy. There was no existence of parallel cash economy but formal (or with little cash) economy persisted. The entire economy was organized and there was no existence of unorganized or informal sector.

Pakistan : Pakistan also demonetized in the meanwhile PKR 5 and PKR 500. But as the information /data is unavailable and there is a truncated democracy which hinders the availability of information.So, I intentionally am omitting their case.

Now the case of India : The decision to demonetize 86% value of Indian currency in circulation has taken the county in aback and was substantially debated by the academics leaving apart populists political stance.

For a government so focused as triumphal messaging and with "3 saal bemisal" celebrations reaching a crescendo new economic numbers released weeks ago make for sobering reading. Finance minister has pointed to the global factors and he argued 7% to 8% growth is normal. Yet the trajectory of the numbers is clear : Indian GDP growth slowed down sharply in January 17th to March 17th to 6.1% down from 7% in the previous quarter and to a 3 years low of 7.1% overall in 2016-17 but the figure is only mirroring impact of demonetization on key sector.

India's GDP growth in 2016-17 came in at 7.1% in line with official estimate (graphics from Raja Ahmed Khan).It mirrored the impact of demonetization in key sectors including construction and financial services.

GDP growth slowed down to 6.1 % in Fiscal fourth quarter from 7 % in the third according to the data released by the government. This slowdown may put pressure on RBI whose monetary policy committee is likely to cut policy rates to balance its inflation- targeting focus with the need to stimulate economic growth

Real gross value added is another measure of economic activity that is arrived at by excluding net indirect taxes from GDP which shows GDP slowed to a growth pace of 5.6% in March quarter.

This growth numbers mirrored the lingering effect in March quarter the government demonetization of high value bank notes with effect from Nov 8, 2016 which triggered a cash crunch and disrupted business activities especially in the unorganized sector .The labor intensive construction sector contracted as a result of cash shortage and financial services grew at anemic single digit pace. There is a strong interdependence between the formal and informal sector. This slow down suggest that it had been intensified by note ban said Aditi Nair, the principal economist of the rating company ICRA "DEMAND AND PURCHASE DURING ACTIVITY SEASON AND A FAVORABLE BASE EFFECT APPEARED TO HAVE COUCHED THE IMPACT OF NOTEBAN ON CONSUMPTION GROWTH ON Q3'17. "

Now compare the growth with other Asian countries. Fiscal fourth quarter growth in the $2.3 trillion Indian economy the 3rd largest in Asia trailed to 6.9% pace at which China grew in January to March putting at risk of losing its status as the world's fastest expanding major economy. India per capita income in real term slowed to a growth pace of 5.7% against 6.8% growth in last year. The construction sector shrunk 3.7% in the March quarter compared with a 3.4% growth in the preceding quarter. One positive sign is the mining sector picked up to grow 6.4% and so did. Public expenditure rising 17%.But the agricultural output growth slowed at 5.2%.

Excluding expenditure public sector core GVA grew 3.8% in the fourth quarter revealing a greater impact of demonetization and suggesting that economic activity will plunge into deep depression without a substantial push in public expenditure.

Growth in gross fixed capital formation which is a proxy for investment demand in economy slowed sharply in FY 17 to 2.4% from 6.5% a year ago.

Now let us have a glance at labor and employment front.

The employment change in April 2017 revised from +2,11,000 to +1,74,000 and change in March revise down from +79000 to +50000 in corporating revision in job growth has averaged 121,000 over the past three month (Jan 17 -Mar 17) compared to an average monthly gain of 1,94,000 over the preceding 12 months period (source: Statistical Bureau of India).

Now look at labor ministry report: the 2016-17 economic survey based on data from labor ministry stated "EMPLOYMENT growth has been sluggish." Based on 'usual principal status according to which those who have spent a major part of labor force -the labor ministry's report on the fifth annual employment and unemployment survey (2015-16) said unemployment was 5%. The figure for 2013-24 was marginally lower at 4.9%.Further the economic survey presented at parliament before presenting budget pointed to a shift in the pattern of employment, from permanent to casual and contract employment. The increasingly temporary nature of work has an adverse effect on the level of wages, stability of employment and employee's social security "it also indicates reference by employers away from regular/formal employment to circumvent labor laws" - it stated. It can easily be extrapolated that the happenings after six months after demonetization left such scar on the face of labor economics in India.

Now we will examine the interdependence or macroeconomic linkage between different sectors in Indian economy.

Four counterfactual scenarios are attempted viz.

(a) One period (stock) 5% reduction in reserved money amounting to monthly Rs.5,000 crores cannot be brought back into circulation after permanent withdrawal of Rs.500 and Rs.1000 notes.

(b) 50% one period increase in deposits with commercial bank Rs. 1,25,000 crores approximate.

(c) scenario a and b together

(d) scenario c with 30% one period increase with direct taxes.

Now since all the data of all the sectors are still pouring in the proposed counterfactual changes are hoped to be somewhat subjective. The impact of all these scenarios is measured in relation to the base simulation for all the endogenous variables-some are relative deviation and others as changes in levels.

The impact vary over time and across variable but they all seem peak for some variables and brought for others will take at least three years and to nearly vanish after 10 years of demonetization the result of scenario (d) are discussed below :

In view of the pivotal role assigned to the reserve money and money supply any changes in this variables will trigger all round effects in the macroeconomy. Also the two other hypothetic changes that increase in deposit in commercial banks and increasing direct tax will initiate further impacts simultaneously. The following immediate effects are likely to take place.

Due to 5% reduction in reserved money broad money supply entry will fall by 17.2% propelled by large money multiplier (4.7).This will cause

WPI(WHOLESALE PRICE INDEX) inflation to fall by 5.9% through a link relationship between WPI and GDP deflator.

Keynesian money market equilibrium will push up interest rate(PLR) by 0.7%. Public sector savings will however decline by 7.1%,gross domestic savings to GDP will fall by 0.3%.Despite a 30% counterfactual increase in direct taxes due to all other independent changes the net increasing in direct taxes will be only by 25% indirect tax will however decrease by 4.4% and government revenue will rise by only 0.4%.Nominal government consumption will rise by 0.3 % and real private consumption will fall by 0.4%.Government current expenditures will rise by 0.1% and gross fiscal deficit will rise by 0.2%.

All these forecast have been reflected in the economic survey presented by government of India before presenting the budget.

Now I will sum up or in other words draw conclusion of my attempt to explore the effect of demonetization :-

Demonetization can be turned as another of all reforms but we have far reaching implication. This is not to dispute that transformative step has brought serious hardship for the citizens. The brightest side of this move is it had dealt a deathblow to the counterfeit currency syndicate operating both inside and outside the country. Counterfeit currency seriously devalues the real worth of Indian currency. The decision to demonetize has sent a spine chilling impact on the intruders who are channelizing the counterfeit notes to fund insurgencies and terrorism. (But the cause and effect of such activities is outside the perview of this article).

Now to sum up what is the total effect of the move? It depends on the relative contribution to the GDP by the informal economy. The informal economy though employ 75% to 80% to the total labor employed in the economy [1] it contributes roughly only 20% to the GDP.As has been shown by literature of informality [2] informal firms are less productive than their formal counterpart. However, there are several factors that would revise the damage upwards compared to the benchmark scenario. One the human impact in terms of reduced consumption, employment and wages will be experienced by a larger section of population. Second some firms in the informal sector that shut down may not actually revive after the money supply with the new currency is restored. Third there is a strong interdependence between informal and formal sector because of a raw material supplier to the formal sector is from informal economy (agriculture produce, textiles and some fast moving consumer goods. It is consumed buy the formal sector. The process is vice versa. Again for shortage of cash the consumer of informal sector cannot by the goods of the formal sector (at least temporarily), the production of formal sector will be jolted which will have a cascading effect on the economy for the shortage in consumption demand. Lastly both formal and informal sector depend on informal credit market to meet their short term expenditure. Typically such lending is primarily cash based and therefore will have adverse impact on the running of formal sector as well. Thus despite mitigating factor contributed by formal sectors the above logic suggest that the Indian economy will be depressed for at least few years as the money supply has restored the economy will not bounce back until all the adjustments, post the surprise decision of Demonetization forced on to consumers and firms pans out. I doubt anything will be change in terms of future flow of the black money as they depend on factors like the complexity of the taxonomy in India and the trust in the ability of the government to provide public goods among others.

Reference

1. Ghani, E, W R Kerr and S D O'Connell (2013): "The Exceptional Persistence of India's Unorganized Sector," *Policy Research Working Paper Series*, No 6454, World Bank.

2. http://faculty.tuck.dartmouth.edu/images/uploads/faculty/rafaellaporta/Informality_for_Paul.pdf (as on 30/05/2019)