

Demonetization: Impact on the Economy

Mr. Somesh Kumar¹, Mr. Maukul kumar², Mr. Chetan kumar², Er. Trimurti Narayan Pandey³,
Er. Amit Choudhary⁴,

¹PG Scholar, Department of Civil Engineering, Bhagwant University, Ajmer Rajasthan., India

²PG Scholar, Department of Civil Engineering, Bhagwant University, Ajmer Rajasthan., India

³PG Scholar, Department of Civil Engineering, Bhagwant University, Ajmer Rajasthan., India

⁴Assistant Professor, Department of Civil Engineering, Bhagwant University, Ajmer Rajasthan., India

⁵Assistant Professor, Department of Civil Engineering, Bhagwant University, Ajmer Rajasthan., India

ABSTRACT

The argument posited in favor of demonetization is that the cash that would be extinguished would be “black money” and hence, should be rightfully extinguished to set right the perverse incentive structure in the economy. While the facts are not available to anybody, it would be foolhardy to argue that this is the only possibility. Therefore, it is imperative to evaluate the short run and medium-term impacts that such a shock is expected to have on the economy. Further, the impact of such a move would vary depending on the extent to which the government decides to demonetize. This paper elucidates the impact of such a move on the availability of credit, spending, level of activity and government finances.

Keywords: *economy, black money, Finance, Demonetization.*

1. Introduction

The government has implemented a major change in the economic environment by demonetizing the high value currency notes – of Rs 500 and Rs 1000 denomination. These ceased to be legal tender from the midnight of 8th of November 2016. People have been given up to December 30, 2016 to exchange the notes held by them. The proposal by the government involves the elimination of these existing notes from circulation and a gradual replacement with a new set of notes. In the short term, it is intended that the cash in circulation would be substantially squeezed since there are limits placed on the amount that individuals can withdraw. In the months to come, this squeeze may be relaxed somewhat. The reasons offered for demonetization are two-fold: one, to control counterfeit notes that could be contributing to terrorism, in other words a national security concern and second, to undermine or eliminate the “black economy”.

There are potentially two ways in which the pre-demonetization money supply will stand altered in the new regime: one, there would be agents in the economy who are holding cash which they cannot explain and hence they cannot deposit in the banking system. This part of the currency will be extinguished since it would not be replaced in any manner. Second, the government might choose to replace only a part of the currency which was in circulation as cash. In the other words, the rest would be available only as electronic money. This could be a mechanism used to force a transition to cashless medium of exchange. The empirical extent of these two components will be unraveled only over the next six months. These two would have different effects on the economy in the short term and in the

medium term, as will be explored below. To understand the effects of these dimensions, it is important to first understand what is it that cash does in the economy? There are broadly four kinds of transactions in the economy: accounted transactions, unaccounted transactions, those that belong to the informal sector and illegal transactions. The first two categories relate to whether transactions and the corresponding incomes are reported for tax purposes or not. The third category would consist largely of agents who earn incomes below the exemption threshold and therefore do not have any tax liabilities. Finally, there would be demand for cash for illegal purposes like bribes in elections, spending over sanctioned limits, dealings in crime and corruption. If one takes a snapshot of the location of cash at any given point of time, it is difficult to predict what the breakup of the cash according to these categories would be, but it would be safe to say that each of these components would be represented in that snapshot.

Turning to the effects of demonetization, the first major and sustained effect of demonetization would follow from the extent to which the currency is extinguished and what this currency was being used for. It is being assumed that all currency which will potentially be extinguished would be currency being used as a store of value in the first and second category of transactions in the table above. If this assumption is correct, then the impact of extinguishing this currency would be limited. On the other hand, if the currency is used for any of the other transactions in the economy, either as a store of value or more importantly, as a medium of exchange, then the impact on the economy and the agents in the economy could be substantial. If, for instance, the extinguished cash was used as a medium of exchange in financing unaccounted income generation or income in the informal sector, demonetization would result in these activities closing down and a corresponding reduction in the incomes and employment associated with these activities. The spillover effect would be felt by the organized sector as well since the consumption from the incomes generated would extend to the formal sector as well. The next question to ask would be: would these activities/agents choose to come within the folds of the formal sector as a result of the changed economic environment or would they remain outside or worsen the activities and would be extinguished along with the losses generated from the cash that was extinguished.

The second change as discussed above, from demonetization would arise if only a part of the currency deposited in the banks is returned to circulation as cash. This change, if it is executed, would dramatically change the economic environment in the country by forcing agents to move from using cash as a medium of exchange to using cash substitutes. This appears to be a real possibility given that the Finance Minister as well as the Governor of the Reserve Bank of India have repeatedly emphasized that agents should be moving to the use of cashless medium where there are no problems in comparison to the cash based medium. For instance, The Hindu reported that "Reserve Bank of India (RBI) has urged citizens to switch to alternative modes of payments such as pre-paid cards, credit and debit cards, mobile banking, and Internet banking."² In a press conference on November 12, the Union Finance Minister too said that "Those in businesses should start using digital payment gateways, cards and banking system. Life will become simpler in the new financial system that is the only viable option. The effect of this change too would be felt differently across the different segments of the economy – agents operating within the formal sector and agents who are familiar with the modern technology would be placed on different footing compared to other agents who need to make the transition.

In what follows, an attempt is made to present a discussion of the likely effects classified into very short term as in the next two months, the short term as in a six months to a year and the rest as medium term. Within these, an attempt is made to distinguish between the effects if there is full demonetization to the extent of deposits made in banks and a scenario of partial demonetization.

2. Short-term and medium-term impacts

Very short-term impact

The demonetization, by removing 86 per cent of the currency in circulation, has resulted in a very severe contraction in money supply in the economy. This contraction, by wiping out cash balances in the economy, will eliminate a

number of transactions for a while, since there is no or not enough of a medium of exchange available. Since income and consumption are intrinsically related to transactions in the economy, the above would mean a severe contraction in income and consumption in the economy. This effect would be more severe on individuals who earn incomes in cash and spend it in cash. To a lesser extent it would also affect individuals who earn incomes in non-cash forms but need to withdraw in cash for consumption purposes, since a number of sectors in the economy still work predominantly with cash.

In terms of the sectors in the economy, the sectors to be adversely affected are all those sectors where demand is usually backed by cash, especially those not within the organized retailing. For instance, transport services, kirana, fruits and vegetables and all other perishables, would face compression in demand which is backed by purchasing power. This in turn can have two effects: while it is expected that supply exceeds demand, there would be a fall in prices, however, if supply too gets curtailed for want of a medium of exchange, prices might, in fact, rise. Thus, while generally people seem to expect prices to fall, it is quite possible that prices would instead rise.

Alternatively, to keep the flows going, people might take recourse to credit - both the retailers and other agents in the economy might make supplies on credit in the hope that when the liquidity status is corrected, the payments can be realized. In these cases, the price of commodities might rise instead of falling. In other words, the impact of an incremental reduction in money supply where the demand and the supply chain remain unaffected would be different from a case where there is a drastic reduction in money supply and outputs might adjust rather than the adjustment being in prices. In other words, the expectation that inflation would decline might be belied.

A further impact would be a compression of the demand for non-essentials by all the agents in the economy in the face of uncertainty in the availability of cash. The demand from segments which have access to digital medium of exchange would remain unaffected, but that from the rest of the economy would get compressed. This would transmit the effect to the rest of the sectors in the economy as well.

Another sector where one expects to see effects in the very short run is the real estate space. With contraction in demand from one set of agents – say agents who have earned unaccounted incomes and placed them within the real estate space – either prices within this segment would fall or transactions would cease to happen. While of itself, this would be considered a positive development and evidence of a correction in the unaccounted incomes, it could lead to a compression in investments in the construction sector which can have adverse income and employment consequences for the economy.

There are likely to be two spin-offs from this change – one, there would be some increase in tax collections in the short term, and second; various IOUs could emerge as currency substitutes. To the extent people attempt to get rid of unaccounted cash balances through purchase of goods and services and/or payment of property taxes, one should witness a spurt in tax collections in indirect taxes as well as property tax in the month after demonetization which would disappear thereafter. There is evidence already that property tax collections in some cities are higher than last year. Similarly, in the case of currency substitutes, at MCD tax collection centers at the border, people are being given IOUs in lieu of the balance they were entitled to, which would be valid for six months.

Short-term effect with complete replacement:

The short-term effect on the economy would depend on the speed with which and the extent to which the cash is replaced by the authorities. If the entire cash is replaced within a short duration of time, the effects beyond the very short term of 1-2 months might be little. But a few sectors are likely to be seriously affected. To give an example from two sectors which are supposed to have large employment effect on the economy, we can talk about agriculture, automobiles and construction.

This is the sowing season for the Rabi crop in some parts of the country and the harvesting season for the Kharif crop. Most of the purchases and sales in this segment of the economy are carried out through cash. With the

elimination of cash from the economy, sale of kharif crop would be difficult unless the crop is sold on the promise of payment in future. Given the limited bargaining power of the farmer, the price they can realize for the crop can be adversely affected. On the other hand, in the sowing activity, people would not get access to the inputs required since most of the inputs are now purchased from the market unless they seek access to credit from the supplier. In other words, with demonetization, there would be a significant strengthening of the informal sector credit market in the rural economy. Further, if there are agents who do not get access to credit from the informal sector agents, their sowing activity and hence their incomes in the next season would be adversely affected. Thus, in spite of a good monsoon in large parts of the country, the farmer might not get the benefits.

The second sector which could be adversely affected would be the construction sector. The sector, it is often argued, works with a significant amount of cash. Payments to workers as well as a variety of purchases might be carried out in cash. So, on the supply side, this sector can be adversely affected. On the other hand, on the demand side, the demand for houses and buildings would appear as a demand for non-essentials and might be pushed on to the back burner until the economic situation normalizes. Thus, to the extent there are agents in the economy whose demand was backed by savings from unaccounted incomes held in the form of cash which got extinguished on demonetization, there would be a compression of demand.

Short-term effect with incomplete replacement:

If, on the other hand, the authorities choose to replace only a fraction of the total cash that was surrendered by the people to the banking sector, then one would witness some other changes/effects in the economy. For transactions to be restored to the pre-change level, a number of agents who are using cash as a medium of exchange have to move to using digital versions of money as the medium of exchange. While this change is gradually happening in the economy, if it is forced by making cash inaccessible, the compression in demand as well as in income generation in the economy would continue for a longer period until people get familiar with the functioning and use of these media.

Medium-term effects:

In the medium term, the effects would be related to the extent to which the currency is not replaced within the economy. If the entire currency is replaced, there would not be any major effects on the economy. However, it is to be expected that the entire currency would not be replaced – to the extent currency is extinguished and to the extent some of the currency remains as bank deposits, there would be some impact on the economy. The first effect would be a compression of the economy to the extent the extinguished currency was working as a medium of exchange. The currency that is placed in the banks but not withdrawn, it is argued, would generate an expansion in deposits in the economy. In the discussions on demonetization, there is a consistent reference to the resultant increase in credit creation in the economy. Like Finance Minister Arun Jaitley says, “Bank deposits will increase and they will have more capacity to support the economy.”⁴ The total cumulative credit that can potentially be generated is defined in terms of the reserve ratio. Total credit potential = incremental deposit generated*(1/reserve ratio)

In India, the cash reserve ratio is 4 per cent while there is a statutory liquidity ratio of 22 percent. In determining the credit creation, it is important to take into account only the CRR and the additional credit creation can be 25 times the amount of money deposited in the banks as a result of the proposed demonetization. This amount however, will be generated only if there exists an equivalent demand for credit in the economy.

Clearly, the additional deposits appear to be capable of stimulating a significant increase in the potential credit that can be created in the economy. All these changes imply some transitions for the consumers and the banking system and can have some serious implications for consumer behavior and the macro-economy which are discussed below.

3. Conclusions

The demonetization undertaken by the government is a large shock to the economy. The impact of the shock in the medium term is a function of how much of the currency will be replaced at the end of the replacement process and the extent to which currency in circulation is extinguished. While it has been argued that the cash that would be extinguished would be “black money” and hence, should be rightfully extinguished to set right the perverse incentive structure in the economy, this argument is based on impressions rather than on facts. While the facts are not available to anybody, it would be foolhardy to argue that this is the only possibility. As argued above, it is possible that these cash balances were used as a medium of exchange. In other words, while the cash was mediating in legitimate economic activity, if this currency is extinguished there would be a contraction of economic activity in the economy and that is a cost that needs to be factored in while assessing the impact of the demonetization on the economy and its agents.

It is likely that there would be a spurt in the banking deposits. While interpreting the phenomenon, however, one has to keep in mind that a large part of their deposits were earlier used for transactional purposes. For example, if a small trader deposits 2 lakh Rupees in the Jan Dhan account since the currency in which he held these balances in for transactional purposes has been scrapped, it would be incorrect to interpret this as success of the program in bringing in people who were hiding black money. Nor can they be interpreted as additional balances that the banking sector can lend out on the same basis as earlier deposits, since the deposits now would remain in accounts for much shorter periods that deposits based on savings would be.

References

- [1] PTI. (2016, Nov. 9). Demonetization will benefit economy in long run: Jaitley. The Hindu Business Line. Retrieved from <http://www.thehindubusinessline.com/economy/demonetisation-to-increase-ecosize-enhance-revenue-base-says-jaitley/article9324312.ece>
- [2] PTI. (2016, Nov. 12). Hyderabad civic body collects Rs 65 crore of property tax. The Indian Express. Retrieved from <http://indianexpress.com/article/india/india-news-india/demonetisation-hyderabadcivic-body-collects-rs-65-crore-of-property-tax-4372156/>
- [3] Prelec, Drazen, and Duncan Simester. "Always leave home without it: A further investigation of the creditcard effect on willingness to pay." *Marketing letters*. 12.1 (2001): 5-12.
- [4] Prelec, D., and G. Lowenstein. (1998). "The Red and the Black: Mental Accounting of Savings and Debt." *Marketing Science*. 17:4–28.
- [5] Raghurir, P., Srivastava, J., (2008). Monopoly money: The effect of payment coupling and form on spending behavior. *Journal of Experimental Psychology-Applied*, 14(3), 213- 225.
- [6] Special correspondent. (2016, Nov. 13). As ATMs run out of cash, RBI ‘encourages’ public to go digital. The Hindu. Retrieved from <http://www.thehindu.com/business/Economy/rbi-urges-public-to-adoptdigital-as-atms-run-dry/article9339020.ece>
- [7] Soetevent, A.R. (2011). Payment choice, image motivation and contributions to charity: evidence from a field experiment. *American Economic Journal: Economic Policy*. 3, 180–205.
- [8] Soman, D. (2001). Effects of payment mechanism on spending behavior: The role of rehearsal and immediacy of payment. *Journal of Consumer Research*, 27(4): 460-474. <http://dx.doi.org/10.1086/319621>.
- [9] The effect of payment transparency on consumption: Quasi-experiments from the field. *Marketing Letters*. 14(3), 173-183.
- [10] The SME Banking Knowledge Guide, IFC advisory services access to finance, 2010 available at Tokunaga, Howard (1993). The use and abuse of consumer credit: application of psychological theory and research. *Journal of Economic Psychology*, 14, 285-316.