

What Do We Know about Remonetisation?

Analysis of Available Data till April 2017

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An analysis of publicly available data suggests that 98.8% of demonetised currency was returned to the Reserve Bank of India by 13 January 2017. The data suggests a sharp slowdown in the remonetisation process in mid-December 2016, which reached only 80% of what was demonetised by the end of April. Clearly, remonetisation has been far too slow, and its consequences on the informal economy, though invisible to official data, are a matter of serious economic, political and social concern.

The public has been curious to know how much of the high denomination currency notes that were demonetised on 8 November 2016 were subsequently returned to the banks. Officials and the ministers of the government have shifted the onus of providing answers to the Reserve Bank of India (RBI) governor. They argue that the RBI is the agency in charge of collecting the demonetised currency and issuing new currency.

The RBI governor has maintained a silence on the subject and it is said that the counting of the returned old notes is still going on. In December 2016, it was also said that there could be double counting and that has to be taken into account, implying that the matter would take time. It was also said that since the return of notes by certain specified categories was allowed till 31 March 2017, the full count could not be given at that time. Now it is several months after that date, but the data is yet to be released. In this article, we have calculated how much of the old currency has come back and what is the extent of remonetisation. These calculations are based on the data on RBI's website, RBI releases, and from the answer given to a question raised in the Rajya Sabha on 7 February 2017.

Our analysis reveals that by 13 January, 98.8% of the old notes were back. It is also shown that by end of April, remonetisation was to the extent of 79.66% of the currency in circulation on 8 November 2016. Analysis also shows that the pace of remonetisation considerably slackened after 19 December, possibly because of shortage of paper, ink, note-printing capacity constraints, and the printing of lower denomination notes.

Data-related Issues

The amount of old notes deposited up to 10 December was mentioned in an answer to a Rajya Sabha question. It said

that 80.57% of the old notes had been deposited in banks by the public. Data is also available up to 13 January about how much of the new currency notes were issued. This was 43.91% of the amount of demonetised currency—a large shortfall from the amount required by the economy.

These figures are important for two reasons that have been repeatedly spelt out and discussed by analysts. First, the government had argued that demonetisation would help extinguish black money. The amount of the currency that does not come back into the banks would represent the extent of the success of demonetisation. It was mistakenly believed that cash means black money and a lot of cash would not come back since people who hold black money would not dare to expose themselves by depositing their black hoards in the banks. Initially, reports were received of people burning their currency or old notes being found floating in the river. Clearly with most of the money having come back these were stray incidents.

The Income Tax (IT) department has issued notices to 18 lakh entities to explain their deposits in the banks after 8 November. In the budget speech, the finance minister stated,

Deposits of more than ₹80 lakh were made in 1.48 lakh accounts with average deposit size of ₹3.31 crore ... deposits between ₹2 lakh and ₹80 lakh were made in about 1.09 crore accounts with an average deposit size of ₹5.03 lakh.

These two figures add up to about ₹10 lakh crore. In July 2016, the Central Board of Direct Taxes (CBDT) chairperson during the Income Declaration Scheme (IDS), 2016 had announced that the IT department had information on 90 lakh high-value transactions since 2009 and it was going to use this information to catch black income generators.

None of this has yielded the desired results with little black income revealed either in the IDS 2016 (₹65,000 crore) or the IDS announced during demonetisation (₹5,000 crore declared).

Second, remonetisation is crucial for the unorganised sector which depends largely on cash for carrying out its transactions. The cash shortage following the sudden demonetisation led to a huge impact on the transactions in this sector

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which employs 93% of the workforce. A rapid remonetisation of the economy was crucial for this sector. These people who suffered the most did not even generate black incomes since most of their incomes are below the taxable limit. This is not to say that some in this sector do not generate black incomes but their proportion in the total is small.

Valid Currency with the Public

The RBI releases data on the various monetary aggregates every 15 days. These pertain to different ways in which money is used in the economy. The most crucial of these for the unorganised sectors is the currency with the public. This is not the same as the total currency issued by the RBI (called M_0) or the currency in circulation. A part of the currency issued is with the banks and the RBI itself and hence is not available to the public.

So, how much currency has been with the public during the demonetisation period? The RBI data in Table 1 (Column E) suggests that it did not drop much. It declined from a high of ₹17.98 lakh crore on 8 November to a low of ₹9.52 lakh crore on 19 December, that is, 52.97% of the peak value. So, currency shortage at the peak was only 47.03%—not too drastic. But can this be correct?

When the Prime Minister announced demonetisation, he said high denomination notes would be worthless paper from the next day. So, even though the public held currency, 86% of it became worthless (except for use allowed for certain very limited purposes). So, this 86% has to be taken out of the data on currency in circulation with the public.

What was available to the public was the small currency and the coins and as per data in Table 1, it was about ₹2.54 lakh crore. Thus, on 9 November, the currency in circulation was only 14% of what it was the day before. Data in Table 1 (Column E) shows that the RBI was still counting the currency in circulation on 9 November as 100% of the amount on 8 November. This is incorrect since 86% had been extinguished by order.

Subsequently, the RBI figures of currency with the public are based on the definition that only the notes returned to the RBI are extinguished and the new notes it was issuing were added to the circulation. It was working on the formula:

Currency in circulation = Currency available to public on 8 November 2016—the old notes returned to RBI + the small denomination notes and coins + new notes RBI had issued to the public = Old notes

still with the public + the small denomination notes and coins with the public + the new notes issued.

Since 86% of the old currency had become worthless paper, our alternative formulation is that this should be removed and only the valid currency should be counted. So, it should be:

Currency in circulation = Valid currency in circulation = Small denomination currency available to public on 8 November 2016 + the new notes RBI had issued to the public.

In making the calculations using the above formula, a methodological point needs to be noted. The dates for which the RBI releases gave the data on notes returned and new notes issued did not coincide with the dates on which the data for money supply is released once every 15 days; so interpolation was used to calculate the currency in circulation on the dates for which the press releases gave the data on demonetisation and remonetisation.

The gap between the RBI's series and our alternative series comprises the old notes still with the public. Subtracting that from the total of the old demonetised currency on 8 November, we get the extent of the old notes returned to the RBI (Figure 2, p 20). This matches the data on

Table 1: Currency in Circulation: Extent of Remonetisation and Demonetisation, November 2016–April 2017

Date	Small Denomination Old Notes	New Currency Issued	Coins	Total Valid Currency as per Our Calculations (A+B+C)	Currency in Circulation as per RBI (E)	Old High Denomination Notes Still in Circulation (E–D)	Amount Deposited in Banks as per RBI/Reports (G)	Amount Returned to RBI as per Our Calculations (H)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
8 November 2016	2,301.50		235.10	17,977.00	17,977.00			
9 November 2016	2,301.50	0.00	235.10	2,536.60	17,977.00	15,440.50		0.00
18 November 2016	2,301.50	1,363.22	235.10	3,899.82	14,272.26	10,372.44	5,115.65	5,068.06
27 November 2016	2,301.50	2,505.65	241.80	5,048.95	11,502.88	6,453.93	8,110.33	8,986.57
7 December 2016	2,301.50	4,276.84	241.80	6,820.14	10,027.44	3,207.30	11,550.00	12,233.20
10 December 2016	2,301.50	4,610.00	241.80	7,153.30	9,786.10	2,632.80	12,440.00	12,807.70
19 December 2016	2,301.50	5,926.13	246.10	8,473.73	9,523.10	1,049.37		14,391.13
13 January 2017	2,301.50	6,780.00	246.10	9,327.60	9,508.03	180.43		15,260.07
20 January 2017					9,874.84			
27 January 2017					10,167.20			
3 February 2017					10,491.25			
10 February 2017					10,972.65			
17 February 2017					11,314.06			
24 February 2017					11,644.80			
3 March 2017					11,984.12			
10 March 2017					12,461.50			
17 March 2017					12,806.00			
24 March 2017					13,130.72			
31 March 2017					13,352.66			
7 April 2017					13,616.56			
14 April 2017					13,897.03			
21 April 2017					14,174.79			
28 April 2017					14,320.37			

Source: (1) RBI Database on Indian Economy. (2) RBI Press Releases (21 November, 28 November, 8 December, 21 December). (3) Rajya Sabha Question and Answers (for New Currency figure for 13 January and amount deposited for 10 December) (Unstarred Question-547, 7 February 2017). (4) Statement by Deputy Governor R Gandhi post-policy media interaction (for amount deposited till 7 December).

Figure 1: Currency in Circulation (Total Currency and Valid Currency)

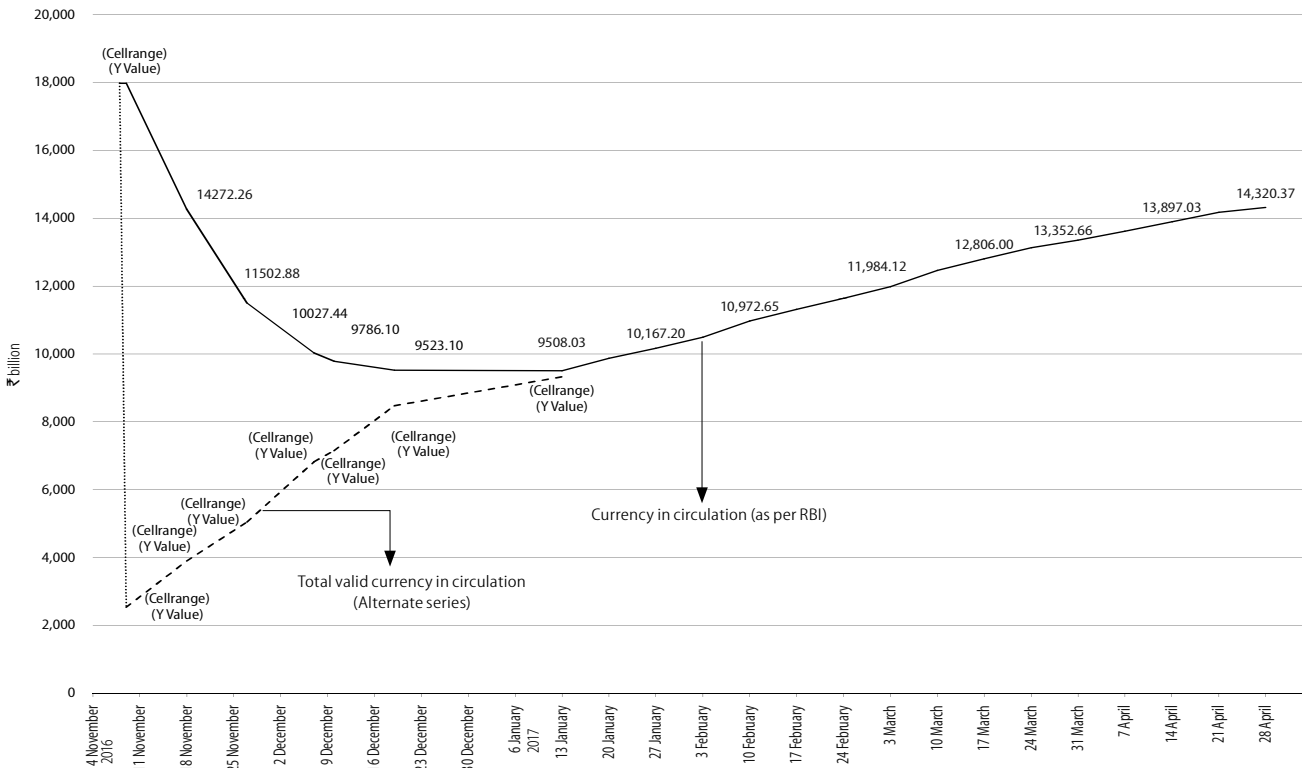
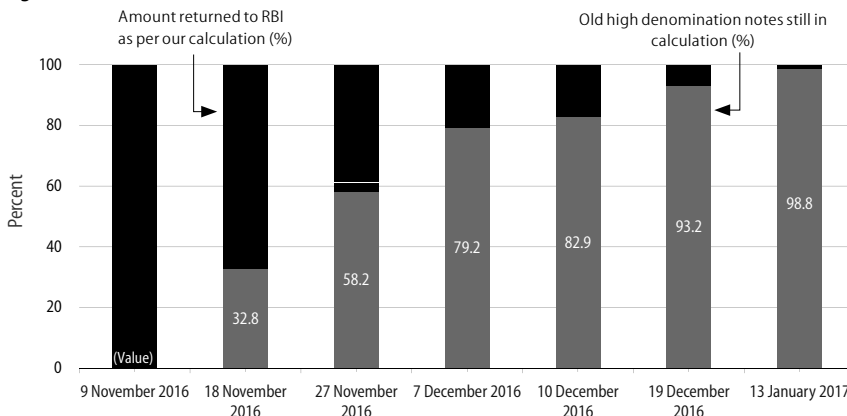


Figure 2: How Much of the Old Notes Are Back?



Source: Data in Columns H and F in Table 1.

the amount of old notes returned to the RBI (as mentioned in the RBI releases) up to 10 December. After that date the RBI stopped releasing data on these variables. Since our calculations (Column H, Table 1) more or less match the data released by RBI (Column G, Table 1), our method of calculation stands validated. The following conclusions emerge from the analysis carried out:

(i) By 13 January, only about ₹18,000 crore of the old currency was still in circulation. This meant that 98.8% of the demonetised currency had returned to the RBI. Most of the remaining amount may

also have been returned by 31 March, the last date for certain categories of currency holders to return old notes.

(ii) The data on the amount of new notes issued was (mentioned in various press releases) available up to 13 January. We have used this data to construct the series of valid notes up to 13 January. Since the return of old notes was mostly stopped after 31 December our series for valid currency connects with the RBI's series after 13 January (Figure 1).

(iii) The series for valid notes gives the extent of remonetisation of the economy. It reached 44% by 13 January and 80%

by end of April. Further, Figure 1 shows that the slope of the line for valid notes dips sharply after 19 December indicating a sharp slowdown in remonetisation.

Conclusions

The RBI's definition of currency (in circulation) with the public, post demonetisation is incorrect. It should have used the figure of valid notes as given in this article. Since 98.8% of the demonetised currency was back with the RBI by 13 January it can be concluded that most of the "black money" had also been deposited in the banks. It also implies that the government's expectation regarding checking the black economy was belied. Finally, remonetisation should be counted in terms of the valid currency and this process (as expected) has been rather slow and that has hurt the unorganised sector.

The impact on the unorganised sector does not show in the official data on the growth rate of the economy. This is because the methodology used by the government's statistical organisation to measure the contribution of the unorganised sector to gross domestic product (GDP) is not valid when a big shock, like,

