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'Be the Bank of Choice for a Transforming India'

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EXPANSION IN CURRENCY IN CIRCULATION (CIC) IS NOT A SIN QUA NON FOR PICK UP IN ECONOMIC ACTIVITY (AKA INFORMAL SECTOR!)

Our current estimates suggest that CIC at Rs 20.4 trillion is still short of trend CIC by at least Rs 1.5 lakh crore. Thus, any argument of cash coming back aggressively into the system and financing informal activities is not entirely correct.

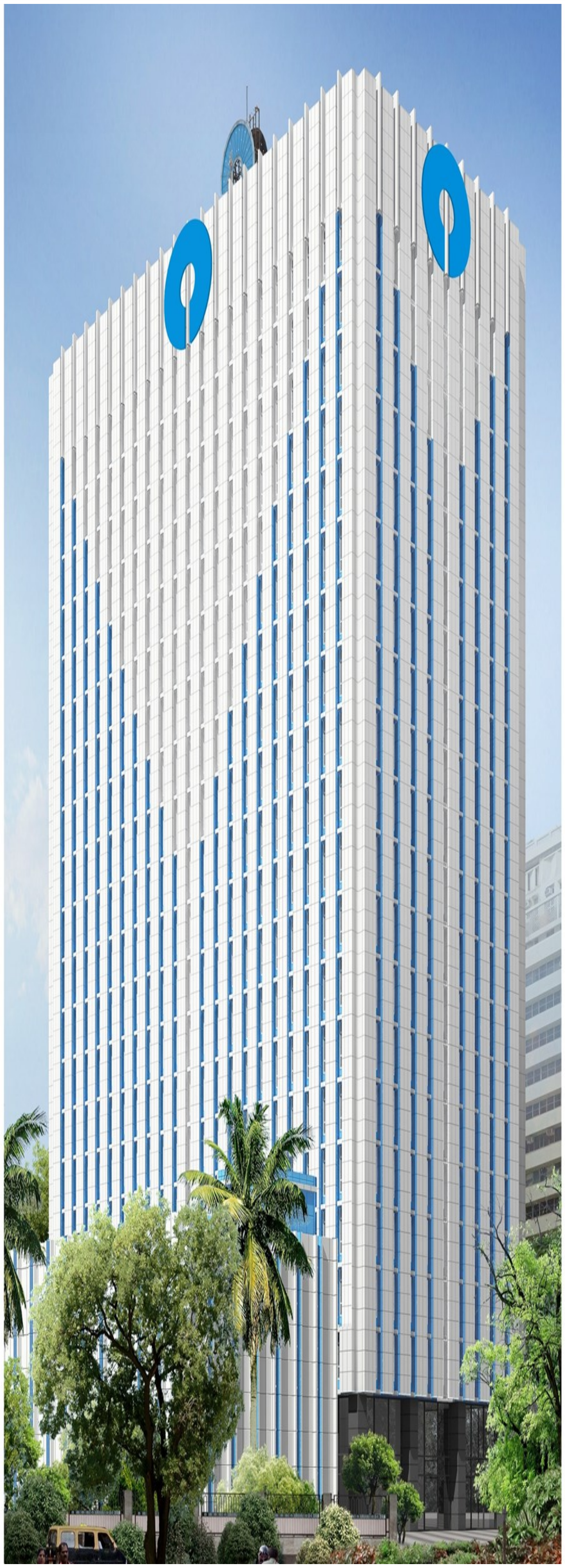
We rather believe that we are currently in a state of paradox as even though CIC has expanded, income velocity of money has shown a sharp plunge. In principle, the declining velocity indicates that money is not getting adequately circulated in the economy.

Interestingly, though the state-wise income velocity is hard to determine, yet our internal estimates suggest that in the more advanced and larger States like Maharashtra, UP, Karnataka etc, the income velocity is far less than the national average. In other States like Chhattisgarh, MP, AP and J & K, the velocity is much higher that the national average. This is intriguing! But, a lower income velocity of money in larger and developed states indicates economic activity is indeed slowing down.

A declining income velocity of money thus suggests that a pick up in economic activity remains elusive. Rural economy still remains depressed, with latest inflation numbers (specifically the crash in WPI and CPI as usual) suggesting any meaningful pickup in food and even manufacturing inflation is still at a distance! Bank credit has now declined for 3 consecutive fortnights as are the leading indicators!

We thus believe using CIC as a leading indicator of heightened economic activity, specifically the narrative of large cash usage in informal economy is erroneous!

To understand this, we need to better understand the process of remonetization. This is the efficiency of transaction under the new currency structure. In FY18 the pace of circulating 200 denomination notes has increased manifold, as has been the case with notes of smaller denomination. This may have altered the demand for smaller denomination notes in a larger way to possibly substitute for the currency of larger denominations (Rs 2000 rupee notes are not getting printed as per RBI). Alternatively, this means to sustain a transaction of same amount now, volume of currency notes goes up and by default the value of CIC also goes up as more and more small notes are printed to at least ensure we are not reneging on economic activity.



CURRENCY IN CIRCULATION (CIC) STILL RS 1.5 TRILLION LOWER THAN TREND ESTIMATES

- The RBI places indent for banknotes with printing presses on the basis of an econometric model factoring in inter alia, real GDP growth prospects, rate of inflation and denomination-wise disposal rate of soiled notes. The demonetization exercise threw things off gear. We estimate the Banknotes in circulation based on GDP (MP) growth rate, to see how much the level of banknotes in circulation would have been by now had demonetization not taken place. Our estimates peg the expected amount of banknotes in circulation by Mar'19 at Rs 22.45 trillion, if there was no demonetization (**11.9% of GDP).** However, the Banknotes in circulation till 18 Jan'19 was Rs 20.4 trillion and based on trend estimates could potentially reach around Rs 20.9 trillion by March'19 **(11.1% of GDP). Alternatively, this translates into at least Rs1.5 trillion lower CIC estimates compared to trend.**
- **Given that current CIC is short by at least Rs 1.5 trillion from trend CIC** any argument of cash coming back aggressively into the system and financing informal activities is not entirely correct. We rather believe that we are currently in a state of paradox as even though CIC has expanded, income velocity of money has shown a sharp plunge, implying possibly currency of higher denomination/Rs 2000 is not getting adequately circulated in the economy. **Thus, we are in a state of paradox as higher CIC cannot be taken as a proxy of economic activity as is being claimed!**

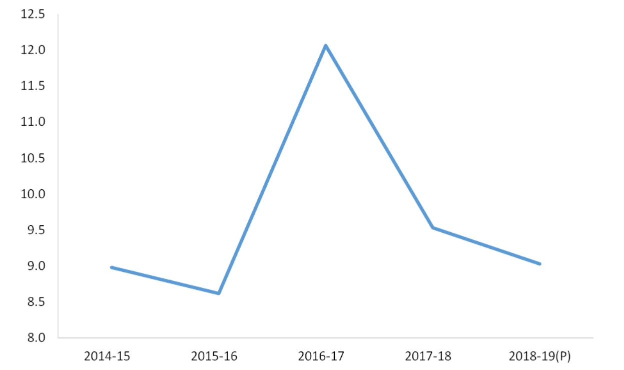
Currency Shortage Estimate			
	GDP MP Growth Rate(%)	Banknotes in circulation (Rs Billion)	Banknotes in circulation (E) (Rs Billion)
Mar-16	10.5	16,415.58	
Mar-17	11.5	13,101.81	18311.41
Mar-18	11.3	18,036.96	20376.63
Mar-19 *	10.2	20,392.60	22457.48

Source: SBI Research, *Actual figures in 2019 are avaialble till 18 Jan 2019

% Share of different denominations in Total Banknotes in Circulation		
	Small Denomination Notes	High Denomination Notes
Mar-16	13.6	86.4
Mar-17	26.6	73.4
Mar-18	19.4	80.6
18 Jan'19 (E)	21.8	78.2

Source: SBI Research

Chart 1: Income Velocity of Money (based on CIC)



Source: SBI Research

INCOME VELOCITY OF MONEY IS DECLINING

- The income velocity after showing a spike in the demonetization period (FY17 velocity:12.1) has again gone back to its normal level of around 9.5 in FY18 and is estimated to come down further to 9.0 in FY19. The decline in velocity means that increasing currency with public has failed to cause proportional increase in nominal gross domestic product (GDP).
- A declining income velocity of money clearly suggests that a pick up in economic activity remains elusive. Rural economy still remains depressed, with latest inflation numbers suggesting any meaningful pickup in food inflation is still at a distance!

State-wise Distribution of Income Velocity*	
Below National Average	Assam, Mizoram, Nagaland, Bihar, Tripura, Maharashtra, Himachal Pradesh, Delhi, West Bengal, Goa, Puducherry, Jharkhand, Meghalaya, Karnataka, Uttar Pradesh, Punjab, Odisha, Haryana
National Average	
Above National Average	Kerala, Uttarakhand, Sikkim, Telangana, Rajasthan, Arunachal Pradesh, Tamil Nadu, Gujarat, Manipur, Madhya Pradesh, Andhra Pradesh, Chhattisgarh, Jammu & Kashmir

Source: SBI Research * States Income Velocity = GDP/(DD+TD with Banks)

- In principle, the declining velocity indicates that money is not getting adequately circulated in the economy. Though the State-wise income velocity is hard to determine, yet our internal estimates suggest that in the more advanced and larger States like Maharashtra, UP, Karnataka etc, the income velocity is far less than the national average. In other States like Chattishgarh, MP, AP and J & K, the velocity is much higher that the national average. This is intriguing!

REASONS WHY HIGHER CIC IS NOT PUSHING ECONOMIC ACTIVITY

- We believe there has been a dramatic change in demand for cash more than two years after re-monetization. This is when money supply has been restored to full level and has expanded in line with transaction demand of the economy. This begs attention and a deeper analysis.
- To understand this one has to search for other measures of re-monetization. The notion of re-monetization can as well be framed in another way. This alternate definition can be efficiency of transaction under the new currency structure. In FY17 when re-monetization was achieved, there was no 200 rupee denomination. However in FY18 the pace of circulating 200 denomination has increased manifold, as has been the case with notes of smaller denomination. This may have altered the demand for smaller denomination notes in a larger way to possibly substitute for the currency of larger denominations (Rs 2000 rupee notes are not getting printed as per RBI). Alternatively, this means to sustain a transaction of same amount now, more currency notes are required / volume of currency notes goes up and thus by default the value of CIC also goes up as more and more small notes are printed to at least ensure we are not reneging on economic activity. **This paradox is often missed out by many leading to erroneous conclusions of using CIC as a leading indicator of heightened economic activity, specifically the narrative of large cash usage in informal economy!**

LEADING INDICATORS

- We also corroborate the argument of a slowdown as leading indicators indicate that there is a slowdown in the past 3-4 months (Cars/CVs/TWs sales, Exports/Imports growth, etc.) despite the fact that currency in circulation has increased significantly. **This again suggests that increase in CIC is not an indicator of increase in economic activity.**

Leading Indicators (% YoY Growth)

	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19
Passenger Car Sales	-0.4	-1.0	-5.6	0.4	-0.9	-2.0	-2.6
Commercial Vehicle Sales	29.8	29.3	23.0	22.9	2.7	-10.5	-0.2
Two Wheelers Sales	10.7	5.1	5.7	17.9	6.3	0.1	-4.2
Airports Passenger Traffic	18.6	14.3	15.6	11.3	9.8	10.8	-
Foreign Tourist Arrivals	3.5	9.1	-0.1	1.7	1.4	2.0	
Airports Cargo Traffic	10.6	7.2	4.1	14.2	3.0	4.1	
Number of Cellular Subscribers	6.4	8.2	8.4	6.7	4.5	4.1	
Diesel Consumption	4.9	4.2	-0.8	6.8	-4.8	3.5	
IIP	6.5	4.8	4.5	8.4	0.3	2.4	
Exports	15.7	19.3	-2.2	17.9	0.6	0.3	
Imports	28.0	25.5	10.6	17.6	4.3	-2.4	
Freight Traffic	4.1	5.2	3.7	9.6	5.1	3.3	
Foreign Exchange Earnings ($)	7.5	9.7	-2.3	-9.3	-9.7	-8.7	
Revenue Expenditure	20.5	25.7	25.3	8.5	-13.7	18.4	

Source: SBI Research

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ABOUT US

The Economic Research Department (ERD) in SBI Corporate Centre is the successor to the Economic and Statistical Research Department (E&SRD). The latter came into being in 1956, immediately after the State Bank of India was formed, with the objective of "tendering technical advice to the management on economic and financial problems in which the Bank has interest and which required expert analysis".

After the first reorganization of the Bank, when specialized departments like Management Science, Management Information Systems, Planning and Market Segment Departments took over the statistical work of E&SRD, the Department was renamed as ERD.

However, with the ERD team now taking on multidimensional functionalities in the area of risk management , corporate analytics, strategy and so on, who knows, the time may have come to rename it again!

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