- The Government has actively moved towards a 'plastic economy.' There is a need to roll out digital connectivity and smart phones to the last mile, as also educate users, especially in small towns and villages. Rural areas need to be prioritized in terms of cash availability, since farmers are used to being paid in cash, and penetration of the banking system is low.
- CII suggests that the Government and Reserve Bank of India devise appropriate savings instruments so that households do not maintain savings in cash. Micro financial products that are easily accessible would be the way to go.
- The use of cash in the unorganized sector needs to be reduced by encouraging tiny enterprises to enter the formal market. In addition, the ease of doing business should be facilitated to encourage enterprises to grow, and step into the formal sector.
- There is a need to tackle cash use in specific sectors such as real estate, by reducing stamp duty, and gems and jewelry, by lowering import duty, etc.
- Applicable charges on credit and debit cards need to be studied and reduced to the lowest possible. Customers should not be charged at all, and, if possible, some incentives should be given to them for the use of electronic payments.
- The penetration of smart phones is much lower than that of ordinary mobile phones. Payment methods without smartphones have been developed, but are not yet being widely used. Pilot projects for such payments must be encouraged across the country.

Money Market after Demonetization

The demonetization exercise is a move towards making India a 'less cash' economy, says A.Srija

On 8 November, the Government announced the demonetization of ₹500 and ₹1000 notes with immediate effect, giving little time for hoarders or small-time savers to convert their stock of henceforth illegal tender money into legal tender money. This was followed by subsequent policy announcements from the Reserve Bank of India (RBI) to ease the hardships faced by the citizens.

However, even after 50 days of the announcement, the long queues of people outside ATMs to withdraw their savings continue. Small traders, especially in the informal sector, are facing a tough time with a decline in sales, and small units have shut down, unable to meet their working capital expenditure. Setting aside the hardships faced by the common man, how much black money or unaccounted money was disclosed or turned into white money is yet to be announced.

Prior to the demonetization announcement, under the Income Declaration Scheme 2016, the Government was able to unearth ₹65,250 crores of undisclosed income through 64,275 declarations upto 30 September, 2016. More such undisclosed income would be made public with the Income Tax department identifying 67.54 lakh potential non-filers of income tax, who had conducted high-value transactions in 2014-15 but have not filed their returns.

What are the developments in the money market after demonetization? In India, where almost 50% of the sector is informal, it is but natural that money supply in the form of 'currency with the public' is the most important medium for conducting economic transactions. Out of the money supply, referred to as M1, consisting of currency with the public, and demand deposits and other deposits with the RBI, 'currency with the public' accounted for almost 61% of the total supply, prior to the announcement of demonetization.

As per the Weekly Statistical Supplement of the RBI for the week ending 9 December 2016, the share of 'currency with the public' in the total money supply 'M1' was reduced to 39.1%. In actual terms, between 28 October and 9 December 2016, there was a decline of ₹9204.3 billion rupees, indicating that almost 54% of the currency with the public was absorbed from the economy (see Table 1). The 'currency with the public' saw a year-on-year increase of 17.7% in 2016 as compared to a 11.1%

increase in 2015 as on 28 October 2016. One month after demonetization, the picture changed, with the 'currency with the public' seeing a year-on-year decline of 48% in 2016 (as on 9 December) as compared to a 12.4% increase in 2015.

Similarly, 'demand deposits with banks' as on 28 October, 2016 saw a year-on-year increase of 11.5% as compared to 12.1% in 2015. But as on 9 December 2016, 'demand deposits with the banks' saw a year-on-year increase of 29.4% in 2016, as compared to 13% in 2015. This increase could be due to the illegal tender of ₹500 and ₹1000 notes being deposited back into the bank accounts.

The demonetized notes were allowed for certain transactions, for specified periods. Of these, purchases from consumer cooperatives witnessed a huge rush as people with illegal savings of the banned notes could use them for the purchase of food and other household items. But if a large number of people who had hoarded their savings in cash had expended it on food and other household items, there should have been an increase in the Consumer Price Index (CPI). The latest available CPI data shows that both rural and urban inflation declined in November 2016 as compared to October 2016, meaning that the rush to consumer cooperatives was not large enough to impact consumer expenditure of the economy as a whole.

Bank credit to the commercial sector has seen a decline post demonetization. As on 28 October last year, the year-on-year variation in 'bank credit to commercial sector' at 8.7% was the same as reported in 2015. A month later, on 9 December, it declined to 5.4% as compared to 10.5% in 2015 (Table1).

The increase in 'net foreign exchange assets of the banking sector' has been low in 2016 as compared to 2015. As on 28 October, the year-on-year variation in these assets saw an increase of only 7.4% in 2016 as compared to 19.9% in 2015.

Black money or undeclared income is mostly invested into gold and jewelry, real estate or foreign currency, or is quickly laundered through round tripping. It is largely not held in the form of cash in hand. News reports indicate that gold imports increased by 23% in November 2016 as compared to November 2015, and imports of pearls, precious and semi-precious stones rose to 61% during this period. Some of this increase could be due to the increase in gold and jewelry purchases to convert the illegal tender.

To address the issue of shortage of cash in the economy, the Government promoted the electronic or digital mode of payments to make India a 'less cash' economy. With

Table1: Components of Money Stock and Select Sources of Money Stock

					Rupees in Billion
Item	**Outstanding as on 28 October 2016**	**Variation over Year-on-Year**			
		2015		**2016**	
		Amount	%	Amount	%
Currency with the public	17013.8	1444.7	11.1	2563.9	17.7
Demand deposits with banks	10511.8	1019.9	12.1	1084.7	11.5
Other deposits with Reserve Bank	159.6	73.0	90.5	6.0	3.9
M	27685.2				
Bank credit to commercial sector	79614.6	5894.5	8.7	6346.6	8.7
Net Foreign Exchange Assets of Banking Sector	25993.0	4014.0	19.9	1792.4	7.4
Item	**Outstanding as on 9 December 2016**	**Variation over Year-on-Year**			
		2015		**2016**	
		Amount	%	Amount	%
Currency with the public	7809.5	1663.5	12.4	-7217.3	-48.0
Demand deposits with banks	11973.7	1061.6	13.0	2722.9	29.4
Other deposits with Reserve Bank	154.2	65.5	79.5	6.3	4.2
M	19937.4				
Bank credit to commercial sector	78847.9	7143.7	10.6	4058.8	5.4
Net Foreign Exchange Assets of Banking Sector	26031.4	4081.2	19.9	1403.2	5.7

Source: Extracted from RBI Weekly Statistical Supplement dated 23rd December 2016 and 11th November 2016

Table 2: Payment System Indicators

System	Volume in million					
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**% change**
RTGS	55.04	68.52	81.11	92.78	98.34	43.5
CCIL Operated Systems	1.87	2.26	2.56	3.03	3.12	38.1
Paper Clearing	1341.87	1313.5	1257.31	1196.51	1096.37	-16.5
Retail Electronic Clearing	512.44	694.07	1108.32	1687.44	3141.53	352.6
NEFT	226.11	394.13	661.01	927.55	1252.88	217.9
Immediate Payment Service	0.1	1.23	15.36	78.37	220.81	17852.0
National Automated Clearing House			86.5	340.17	1404.08	
Cards	5731.61	6398.4	7219.13	8423.99	10038.7	56.9
Credit Cards	322.15	399.13	512.03	619.41	791.67	98.3
Usage at ATMs	2.19	2.52	2.96	4.29	6.00	138.1
Usage at POS	319.96	396.61	509.08	615.12	785.67	98.1
Debit Cards	5409.46	5999.2	6707.10	7804.57	9247	54.1
Usage at ATMs	5081.92	5530.2	6088.02	6996.48	8073.39	46.0
Usage at POS	327.54	469.05	619.08	808.09	1173.61	150.2
Prepaid Payment Instruments	30.6	66.94	133.63	314.46	748.02	1017.4
m-wallet		32.7	107.51	255	603.98	1747.0
PPI Cards		33.76	25.60	58.91	143.47	325.0
Paper Vouchers		0.48	0.53	0.55	0.56	16.7
Mobile Banking	25.56	53.30	94.71	171.92	389.49	630.8

Source: RBI Monthly Bulletin, Various Issues, Table No.43: Payment System Indicators.

the introduction of Information Technology to banking operations, banking transactions have undergone a sea-change, from being paper-based to largely paper-less. The goal of the RBI is to adopt a complete digital mode of payment for economic transactions. A look at the progress of payment indicators over the last five years in Table 2 and Table 3 shows the developments in the payment system, both in volume and value terms, over the period 2011-12 to 2015-16.

The initial electronic mode of money transfer was

Table 3: Payment System Indicators

	Value in Rupees Billion						
System	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**% change**	**% change**
RTGS	1079790.59	1026350.05	904968.04	929332.89	1035551.64	14.4	11.4
CCIL Operated Systems	406071.18	501598.49	621569.63	752000.42	807370.42	29.9	7.4
Paper Clearing	99012.14	99982.25	93316.04	85434.14	81860.79	-12.3	-4.2
Retail Electronic Clearing	20575.3	31881.14	47856.29	65365.51	91408.14	91.0	39.8
NEFT	17903.5	29022.42	43785.52	59803.83	83273.11	90.2	39.2
Immediate Payment Service	0.42	4.33	95.81	581.87	1622.26	1593.2	178.8
National Automated Clearing House			214.81	1220.88	3801.83	1669.9	211.4
Cards	15510.77	18637.36	22159.58	25415.27	29397.65	32.7	15.7
Credit Cards	978.73	1243.93	1556.72	1922.63	2437.02	56.5	26.8
Usage at ATMs	12.6	14.42	16.87	23.47	30.41	80.3	29.6
Usage at POS	966.13	1229.51	1539.85	1899.16	2406.62	56.3	26.7
Debit Cards	14532.05	17393.44	20602.86	23492.65	26960.63	30.9	14.8
Usage at ATMs	13997.73	16650.08	19648.35	22279.16	25371.36	29.1	13.9
Usage at POS	534.32	743.36	954.51	1213.49	1589.27	66.5	31.0
Prepaid Payment Instruments	62.01	79.22	81.05	213.42	487.58	501.6	128.5
m-wallet		10.01	29.05	81.84	205.84	608.6	151.5
PPI Cards		49.62	28.36	105.35	253.77	794.8	140.9
Paper Vouchers		19.6	23.63	26.24	27.97	18.4	6.6
Mobile Banking	18.21	59.90	224.18	1035.3	4040.91	1702.5	290.3

Source: RBI Monthly Bulletin, Various Issues, Table No. 43: Payment System Indicators.

introduced through the paper clearing option, which consisted of cheque clearance through the cheque truncation system. Later, electronic transfer of funds was introduced to enable large fund transfers from one bank to multiple clients spread across different banks. The core banking system further facilitated banks in adopting electronic modes of fund transfer.

With the introduction of new modes of digital payments from 2012-13, these payment modes have seen meteoric growth, especially debit card payments, prepaid payment instruments, immediate payment services, mobile banking, etc.

As Table 3 shows, while the volume of transactions through electronic means might be lower as compared to card payments or prepaid payment instruments, in terms of the value of transactions, these vary from ₹80,000 to more than ₹10 lakh billion.

In the emerging mode of digital payments such as card payments and prepaid payment instruments, the volume of transactions may be more, as the transactions are one to one, but the value is less. With incentives and schemes such as the Lucky Grahak Yojana for consumers, and the Digi Dhan Vyapar Yojana for merchants being introduced by the Government to promote digital mode of payments right down to the grassroots level, the volume and value of transactions would increase in the years to come.

To sum up, the demonetization exercise is a move towards making India a 'less cash' economy. At the end of the day, an economy where all major economic transactions take place through the electronic mode is the first step towards arresting the generation of unaccounted money. This, in turn, would lead to a change in the composition of M1, or narrow money supply. The proportion of 'currency in circulation' would see a declining trend and the share of 'demand deposits with banks' would see an increase.

Over time, the inflation in the economy would either be determined equally by the currency in circulation as well as demand deposits with banks, or more by demand deposits with banks as compared to currency in circulation.

A.Srija is from the Indian Economic Service, currently posted as Director, NITI Aayog. The views expressed are personal.