SPECIAL ARTICLE

Less-Cash Economy: India vis-a vis the World

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...the Indian government has taken the right step to move towards a 'low-cash economy'. However, experiences of other countries show that a "less-cash economy" needs infrastructure and supporting regulations. To move towards a "less-cash economy" government, financial institutes and businesses have to work together

In June 2016, the Reserve Bank of India (RBI) released a report titled Payment and Settlement Systems in India: Vision 2018 that envisioned making India into a 'less-cash' economy by building one of the best payment and settlement systems. The aim is to encourage greater use of electronic payments by all sections of the society which will enable the large informal sector to enter into the formal economy, increase the tax base, reduce black money and cash funding for terrorism and election. The Prime Minister has reiterated that India should move towards a 'less-cash' society as a stepping stone towards becoming a cashless society.[1] A number of countries including Sweden, Kenya and Brazil have successfully moved towards a "less-cash" economy. Their experience shows that "less-cash" economy needs supporting regulations ensuring security of online transaction, robust infrastructure and customer centricity.[2]

India *vis-a-vis* Other Countries

Comparing India with some of the other countries shows that the currency in circulation in India is higher than many developing and developed countries. In 2015, the share of cash in circulation[3] in the economy as a percentage of the gross domestic product (GDP) of India was 12.3 per cent compared to 3.8 per cent in Brazil, 5.6 per cent in South Korea and 1.7 per cent in Sweden (see Figure 1).[4]

Further, in 2016, more than 68 per cent of the transactions in India were settled in cash[5], one of the highest in the world after Indonesia and Russia. Other developing countries such as Thailand, Brazil and China have much lower usage of cash for settling payments, as compared to India. The use of credit cards in India has also been much lower compared to many developed and developing countries.

Sweden has one of the lowest cash intensities in the world. A majority of the payments in the country are settled through electronic means, including payments for bus tickets and charities. Retailers are legally entitled to refuse coins and notes.[6] Swedes use debit cards three times more than average Europeans.[7] Incidentally, Sweden declared certain currency notes (20, 50 and 1000 Krona) invalid this year and has already announced that by July, 2017, certain other denominations will also become invalid.

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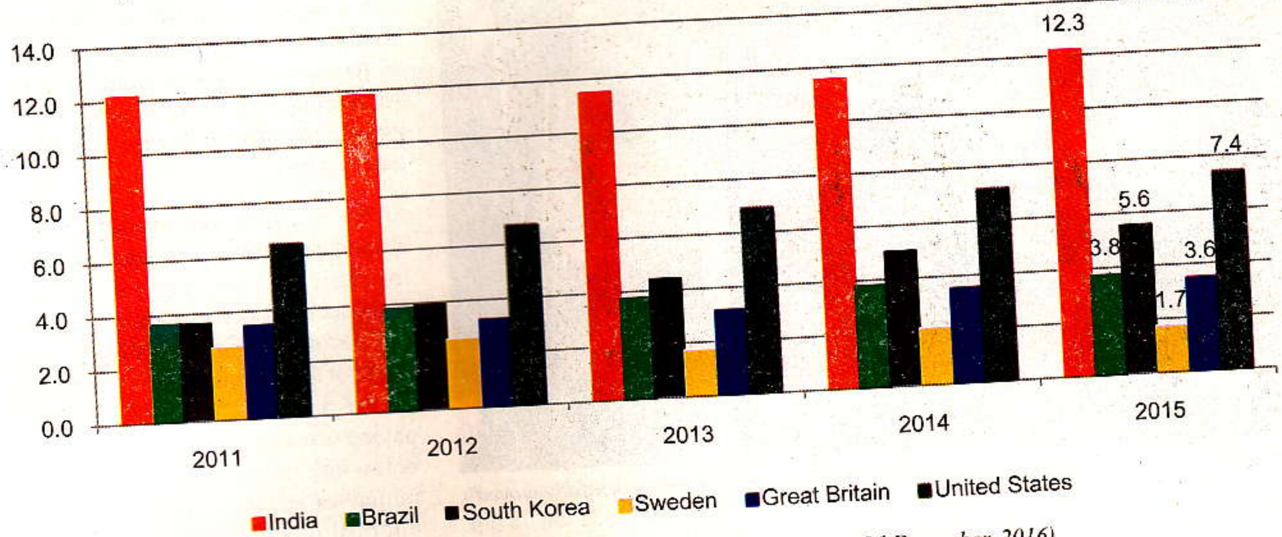
Figure 1: Cash in Circulation as a Percentage of GDP for Selected Countries 2011-2015



Source: Author's calculation from http://www.bis.org/cpmi/publ/d155.pdf (accessed on 26 December, 2016)

Among developing countries Kenya has taken measures for online payments for government services such as council parking, construction permits, land rates, renewal of driving licences and passport fees to reduce fraud and ensure better collection.[8] According to the World Bank's Global Findex Report, 58 per cent of the adult population in Kenya had active mobile money accounts in 2014, the highest rate in the world.[9] The Central Bank of Kenya reported 31 million mobile money subscribers backed by close to 144,000 agents in 2015. Kenya is an example where mobile technology and the increase in smart phone ownership have played key roles in improving online payments despite low credit card usage and internet penetration.[10]

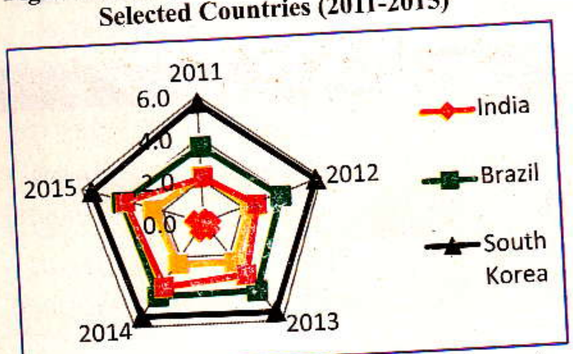
Available Infrastructure

Apart from acceptability of electronic means of payment, it is important that these payment instruments penetrate into the society. In India, for instance, in 2015, only half of the Indian population had a card.[11] Compared to this, in Sweden, the average number of cards per person was 2.5, in South Korea it was 5.5, in Brazil 4.1 and in China 4.

South Korea, which has one of the highest penetrations of cards among the comparative countries, is a fast mover into the cashless payment system. It introduced a preferential value added tax treatment for consumers who pay through card, thereby encouraging the use of plastic money.[12] In India, bank charges are deducted in case of card payments – thereby making it more lucrative for consumers to pay by cash.

Further, compared to the large size of the Indian population, India has one of the lowest numbers of point of sale terminals (or PoS which help in processing cashless transactions through the use of debit or credit card at the point of sale), per million inhabitants in the country compared to other developing countries including Brazil and China (see Table 1).

Figure 2: Number of Cards[13] per Inhabitant for Selected Countries (2011-2015)



Source: Author's calculation from http://www.bis.org/cpmi/publ/d155.pdf (accessed on 26 December, 2016)

There are several other modes of settling payments that have taken-off in other less-cash countries, which include electronic money terminals and mobile-money payment systems. In India, the available infrastructure for these modes is limited. With a population of 1.2 billion people, India has a wireless phone subscriber base of over a billion people as of 30 June, 2016.[14] Yet, only 0.05 per cent of the total non-cash transactions are made through electronic money terminals that can be accessed through mobile phones.[15] One of the reasons for this is that smart phone ownership and internet penetration is low in India compared to other countries. In India, only 17 per cent of adults had smart phones in 2016 compared to 88 per cent in South Korea and 26 per cent in Kenya.[16] Further, 26 per cent of individuals were using the internet in India in 2015 as compared to

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59.08 per cent in Brazil, 50 per cent in China and around 90 per cent in South Korea and Sweden.[17] Similarly, the fixed-broadband subscription per 100 inhabitants is only 1.34 for India as compared to 36.07 in Sweden and 40.25 in Korea.[18]

Thus, the present level infrastructure, particularly the technological infrastructure in India needs to be upgraded at a fast pace to support the 'less-cash' initiative of the Indian government. Along with that there is need to ensure security of online transaction through the right policies.

Global Experiences and Way Forward

If countries such as Kenya and Nairobi can successfully move towards a "less cash economy", India can also move towards such an economy by increasing the use of technology-based innovative payment products.[19] In this regard, mobile payment wallets and mobile applications that support online transfer of funds are a key alternative. This is particularly useful for small business or non-corporate players who do not accept cards or have point of sale terminals installed for accepting payments. In Sweden for instance, most street vendors and small businesses have adopted payment application and PoS card reader developed by a company called iZettle[20], which has led to a positive impact on the sales made by these businesses. Similarly in Kenya, which is one of the biggest users of mobile money in Africa, M-Pesa is used for paying fees and bills and even receiving salaries.[21] In India, there is a need to encourage and support the use of payment gateways such as Paytm, CCAvenue and PayU, among others, especially for inducing cashless transactions.

Some of the key areas that need immediate attention are cash payment for retail and wholesale transactions, payment to workers in informal sector and payment to agriculture labourers. Much of these payments in the informal sector are done by cash to avoid paying taxes or for paying the workers below the minimum wages. Several initiatives are underway to bring the informal sector into the formal sector and encourage cashless transactions. In August 2016, the National Payments Corporation of India (NPCI) launched Unified Payment Interface, which allowed the users to transfer funds across two bank accounts using a mobile application. It also allows the users to make payments to different merchants without using card details and other codes and passwords. The Government passed an ordinance in December 2016, which brings an amendment to Section 6 of the Payment of Wages Act. This amendment is to provide for crediting the wages in the bank account of the employees or payment through cheque – thereby making the transaction cashless.[22] It is worth mentioning that Sweden too started moving towards a cashless country with the use of digital transfer for payment of wages in the 1960s.

The village of Ibrahimpur in the state of Telangana has become completely cashless by having bank accounts, using payment gateways and credit cards. Other villages too can replicate this success story. In some cases, banks have taken the initiative to digitalise a certain area. For instance, a village in Gujarat – Akodara – has been digitalised by an Indian private sector bank in 2015. The bank has invested in infrastructure such as wireless Internet and payment terminals that have provided the villagers access to modern banking facilities.[23]

Table 1: Number of Point of Sale (PoS) Terminals Located in Selected Countries per Million Inhabitants in 2011-2015.

Country	2011	2012	2013	2014	2015
Brazil	17,811	20,561	22,146	24,837	25,241
China	3,592	5,270	7,814	11,650	16,602
India	550	695	865	889	1,080
Sweden	22,167	20,837	20,380	20,304	18,660
United Kingdom	21,499	25,732	25,800	26,346	30,078

Source: Compiled by authors from Table 11b of the Comparative Tables for Committee on Payments and Marketing Infrastructure Countries, BIS accessible at http://www.bis.org/cpmi/publ/d155.htm (accessed on 27 December, 2016)

Other initiatives that are now being taken in India include the use of electronic payment methods in availing public transportation services such as the metro train. Certain stations of the Delhi Metro will go cashless from the 2017.

Moving forward towards a less-cash economy the government should ensure:

Neutrality of mode of payments: Payments through cards or digital methods should not be costlier for the payer as compared to use of cash payments. Often banks deduct bank charges or fees for processing an online payment or electronic transfer. This discourages the use of online payment methods as opposed to the use of cash, which is free from additional charges.

Security of information: Electronic methods for making payment ensure that all transactions and customer information is recorded. There is a threat to privacy. In Sweden for instance, while bank robberies have reduced tremendously after digitalisation of payment systems, there has been an increase in online payment frauds.[24] Thus, maintaining data security and privacy of information is important. The RBI is already undertaking review of policies related to pre-paid payment instruments such as smart cards. There should be a strong system for ensuring mitigation of risks and a fast track grievance redressal mechanism.

Setting-up a robust physical and technological infrastructure: Mode of payment is determined by the availability, acceptability and access to different payment terminals. As mentioned, in India, the present infrastructure to handle cashless transactions is insufficient. The government needs to install infrastructure and the capacity to operate the infrastructure to ensure that cashless transactions take place in the country. This includes access to smart phones, internet and broadband connectivity, among other things. A majority of the cashless payment systems are technology-dependent as internet connectivity is a pre-requisite for enabling their use.

Lower taxes: It is important that taxes on information technology devices such as smart phones and tablets are reduced. This will enable people to make payments digitally. As per the goods and service tax (GST) structure released by the Ministry of Finance, electronic items are likely to attract 28 per cent GST.[25] This is very high. Smart phones have to be made affordable. India also has one of the highest corporate taxes in the world. In 2016, India had a corporate tax rate of 30 per cent for domestic companies and 40 per cent for foreign companies, along with additional charges. In Sweden it was 22 per cent and in China it was 25 per cent for both domestic and foreign companies.[26] Higher taxes encourage tax evasion.

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Robust e-commerce policy: The country must have a strong e-commerce regulation which ensures consumer protection for cashless payments.

To conclude, the Indian government has taken the right step to move towards a 'low-cash economy'. However, experiences of other countries show that a "less-cash economy" needs infrastructure and supporting regulations. To move towards a "less-cash economy" government, financial institutes and businesses have to work together. Further, the country should have a lower and simplified tax structure and the Union Budget of 2017-18 will be a key instrument to take the government policies related to "less-cash economy" forward.

Readings

1. Prime Minister's address to the nation through the monthly radio programme, 'mann ki baat' broadcasted on 26-27th November, 2016, accessible at http://pmonradio.nic.in/# (accessed on 23 December, 2016). The English translation of the broadcast is accessible at http://www.narendramodi.in/mann-ki-baat (accessed on 23 December, 2016)
2. For details see https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/VISION20181A8972F5582F4B2B8B46C5B669CE396A.PDF (accessed on 21 December, 2016)
3. This includes the notes and coins in circulation outside banks. The figure excludes notes and coin kept in vaults at central banks or at banks but includes holdings by non-residents. It also excludes commemorative coins that are not used for payments.
4. For details see http://www.bis.org/cpmi/publ/d155.pdf (accessed on 26 December, 2016)
5. See http://www.business-standard.com/article/economy-policy/infographic-68-of-transactions-in-india-are-cash-based-116111400495_1.html (accessed on 26 December, 2016)
6. For details see https://www.theguardian.com/business/2016/jun/04/sweden-cashless-society-cards-phone-apps-leading-europe (accessed on 27 December, 2016)
7. http://www.thelocal.se/20160229/why-sweden-is-winning-the-race-to-become-the-first-cashless-society (accessed on 27 December, 2016)
8. http://www.standardmedia.co.ke/article/2000150788/ government-to-implement-digital-strategy-for-cashless-services (accessed on 27 December, 2016)

9. For details see the World Bank's The Global Findex Database, 2014 accessible at http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255.pdf#page=3 (accessed on 2 January, 2017)
10. http://nextbillion.net/digital-government-4-keys-to-kenyas- success-with-electronic-government-payments/ (accessed on 30 December 2016)
11. These include all cards – cards with cash function, debit card, credit card and cards with e-money function.
12. These include all cards – cards with cash function, debit card, credit card and cards with e-money function.
13. See http://www.totalpayments.org/2013/07/08/top-5-cash-less-countries/ (accessed on 27 December, 2016)
14. See http://www.trai.gov.in/WriteReadData/WhatsNew/Documents/Indicator_Reports_April_June_01_12_2016.pdf (accessed on 27 December, 2016).
15. Calculated from BIS Country tables accessible at http://www.bis.org/cpmi/publ/d155.htm (accessed on 27 December, 2016)
16. http://www.livemint.com/Consumer/yT14OgtSC7dyywWSynWOKN/Only-17-Indians-own-smartphones-survey.html (accessed on 2 January, 2017)
17. Extracted from International Telecommunication Union (ITU) Statistics accessible at http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx (accessed on 2 January, 2017)
18. Extracted from International Telecommunication Union (ITU) Statistics accessible at http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx (accessed on 2 January, 2017)
19. For details see https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/VISION20181A8972F5582F4-B2B8B46C5B669CE396A.PDF (accessed on 21 December, 2016)
20. For details see https://www.izettle.com/about and https://www.theguardian.com/business/2016/jun/04/sweden-cash-less-society-cards-phone-apps-leading-europe (accessed on 27 December, 2016)
21. M-Pesa is a mobile phone-based money transfer, financing and micro-financing service launched by Vodafone.
22. http://www.livemint.com/Politics/J46fZ71Ap-kXgN2c5TZmNYP/Cabinet-nod-for-ordinance-seeking-cashless-transactions-unde.html (accessed on 23 December, 2016); at present, the Ordinance is only liable to government employees.
23. For details see http://www.thehindu.com/opinion/op-ed/at-akodara-indias-first-digital-village/article7418012.ece (accessed on 27 December, 2016)
24. See https://www.theguardian.com/business/2016/jun/04/sweden-cashless-society-cards-phone-apps-leading-europe (accessed on 28 December, 2016)
25. For details see http://www.news18.com/news/tech/gst-rate-what-happens-to-smartphones-and-will-make-in-india-make-sense-1308200.html (accessed on 2 January, 2017)
26. For details see https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-corporate-tax-rates.pdf (accessed on 2 January, 2017) ❑

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