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IMTFI Special PERSPECTIVES Series: Demonetization in India (Jan-Feb 2017)

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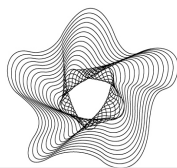
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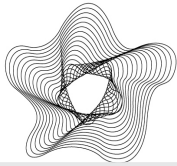
IMTFI Special PERSPECTIVES Series Demonetization in India (Jan-Feb 2017)

In IMTFI's PERSPECTIVES blog series, IMTFI fellows take on the recent demonetization move in India through 7 posts on the IMTFI Blog from January-February 2017. This synthesis serves as a collation of the 7 blogposts.

The series aims to foster an open dialogue on issues around money, technology and financial inclusion for the world's poor. Individual contributions reflect contributors' own reflections on recent events - based on their research and areas of expertise. The topic of demonetization will conclude with a curated commentary by IMTFI on key themes, important questions, and what we can learn from these contributions for digital financial inclusion going forward.



A popular whatsapp image that started circulating soon after the demonetisation announcement. Photo credit: Janaki Srinivasan



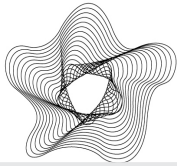
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Special PERSPECTIVES Series on Demonetization in India

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Tuesday, January 24, 2017

Demonetization and its Discontents

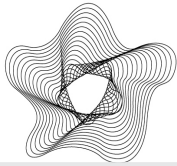
By IMTFI Fellow Janaki Srinivasan, International Institute of Information Technology Bangalore (IIITB)



Figure 1: A popular whatsapp image that started circulating soon after the demonetisation announcement

Demonetization. A term most people in India had never encountered before November 8 last year, today dominates newspaper headlines, electronic media discussions and everyday conversations in the marketplace alike. (There are even short forms for it! My favourite? Demon!). Several aspects of demonetization have been extensively analyzed, including the legality of its adoption and declaration, and the repercussions of this move for the [credibility of the Indian central bank](#), besides its short and long-term implications for the everyday transactions of various sectors (especially the [‘informal’](#) and [digital payments companies](#)) and the overall economy.

IMTFI researchers will recognize from their own work across the globe the importance of several of these dimensions in shaping people's monetary and spending practices (Indeed, in our own research, my co-PI [Elisa Oreglia](#) emphasizes the link between abrupt shifts in monetary policies, including demonetization without convertibility, in Myanmar and people's lack of faith in banks and in currency as well as the practice of saving in gold prevalent in the country). One aspect that several of our research projects have gone on to highlight is the diversity of such practices. What I want to talk about here is the disconnect between this diversity on the ground, on the one hand, and the universalizing terms and concepts we are seeing employed to present the



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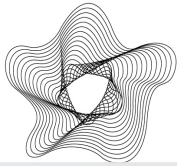
vision and rhetoric of demonetization in India, on the other. I am especially concerned with the implications of this disconnect for financial inclusion (and exclusion).



Figure 2. Photo credit: Janaki Srinivasan

Take the idea of ‘black money’, for example, whose elimination was among the first [rationales](#) offered for the demonetization move in India. As economists and policy analysts have now been [pointing out](#), ‘black money’ is many things. If corruption is the ultimate target, cash might well be the wrong place to look for ‘black’ wealth, which is more likely to be in the form of real estate or gold, and in circulation rather than stashed at home. Moreover, in its passage from personal stashes to the bank, ‘black’ wealth is often converted to white with the help of brokers of various kinds, thereby challenging the association between demonetization and the elimination of illegally obtained cash. Meanwhile, if ‘black money’ includes all unrecorded transactions (transactions in cash without a bill, money that is not in bank accounts etc.), this quite often encompasses cash that is legally earned but that individuals may wish to keep hidden for a variety of reasons unconnected to corruption. IMTFI researchers and many others working on the practices involved in monetary transactions have pointed to the many ways in which people choose to keep their cash at home because they may not trust banks, or because they may wish to save money away from the eyes of their family or community members (see here for [Tara Nair’s discussion](#) from our Nov 11, 2016 [financial inclusion workshop](#) on the repercussions of demonetization on women’s small savings in cash). Given the variety of reasons that motivate people to record transactions or to keep them hidden, it is safe to say that a policy conflating all these motivations and types of holdings into a single category of ‘black money,’ and attempting to wipe ‘it’ out, will cause deep distress to large sections of the population.

Another rationale for demonetization that came a few days after the official announcement was the need to move towards cashlessness. Like ‘black money,’ ‘cashless’ is a baggy term. People did in fact go cashless in the aftermath of the demonetization – but perhaps in ways that the policy makers had not quite imagined! There were stories of people [going back to a barter system](#) in some regions. Several neighborhood shops – and a snack



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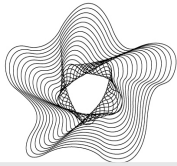
shop at the place I work – started creating credit registers for their customers, agreeing to be paid once normalcy returned. But, of course, neither of these approached the desirable state of cashlessness that was being advocated. One of the perceived benefits of going cashless was the lower transaction costs of using digital money compared to paper currency. However, in light of the demonetization, we have been seeing how several kinds of transaction costs are encountered in going cashless using digital money too.

Again, this is (especially) not news to IMTFI researchers: questions of literacy, digital literacy, the cost of devices that can handle digital money transactions, regulation limits on such transactions etc. are all reasons that make cashlessness costly for many potential users (in addition to the many hurdles currently being faced because of the transition and inadequate physical infrastructure). These costs vary drastically by the point of transaction and volumes. We have been reading that small scale businesses and street vendors, for example, that are customer facing, have few personnel, and operate on low value transactions are struggling to deal with the time and monetary costs of operating through a PoS machine or an app such as Paytm for every customer (especially since they often have to deal with several such customers at the same time).



Figure 3. Paytm deals appear on my mobile everyday now

Finally, I want to point out the binary of cash and digital that has become prominent post demonetization: you are either for cashlessness or a supporter of cash. Cash is messy, costly, and for those who don't know any better. This binary thinking, I argue, takes away the flexibility that I once thought digital platforms offered me. Prior to demonetization, the growth of digital money was very slow in India despite the presence of payment platforms for some time. In fact, in my IMTFI research, I was hard pressed to find vendors or users of digital money in the Kerala fishing town I was studying back in May 2016. Within the often tough circumstances of people's lives, the decision to use cash over digital payment platforms indicated some limited amount of choice that people exercised in the context of their economic transactions. Whether because they didn't have access to mobile devices, or because they were uncomfortable using the interface or were not literate, or indeed because they liked the feel of physical currency in their hands, people continued using hard cash. Even for those of us



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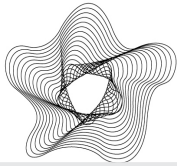
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without such constraints, there was a choice to use digital platforms or cash as the situation warranted – I would go so far as to say that flexibility was part of the value that digital platforms offered!



*Figure 4. ATM queues at a market in south Bangalore 3 days after the announcement
Photo credit: Janaki Srinivasan*

The use of digital money could have been incentivized in many ways which would have involved dealing with the range of issues that people had with digital money that I outlined above. But making it impossible to get one's hands on physical cash was not one most people would have advocated. Today, the use of digital payment platforms has [grown tremendously](#) post demonetization in the face of the limited availability of currency notes, especially change (the demonetization introduced a higher denomination Rs. 2000 note after discontinuing the Rs.1000 note, besides introducing new Rs.500 notes to replace the old Rs.500 notes). But, the adoption of digital payment platforms today is out of compulsion rather than a choice for many (though it is being called a [sacrifice for the nation](#) rather than compulsion). It is critical that we examine who is compelled to use digital platforms and who can choose to do so.



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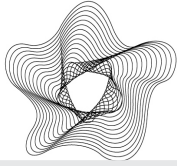
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Figure 5. Notice at a popular chain restaurant in south Bangalore letting customers know that Rs.500 and Rs.1000 will not be accepted. Photo Credit: Janaki Srinivasan.

Design 101 tells that an analysis of user needs should form the core of designing a product (whether in technology or policy). Yet, time and again, we have seen that the design of technologies (and of policies) starts by identifying a problem and solutions that are assumed to be desirable (cashlessness), and a vision that is neutral and unproblematic on the surface (who could be against eliminating 'black money' and 'corruption?'), without consulting with its diverse potential users. While we have made headway in identifying the diverse practices on the ground that inhabit every monolithic category or concept on paper, it is perhaps time to explore in parallel how 'desirable' solutions get constructed in the first place and on whose interests and experiences of desirability these are based.



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Figure 6. "No cash": Where there's no queue outside an ATM, we have learned that there's typically no cash <http://www.newslocker.com/en-in/news/business/qenset-sales-down-20-25-post-demonetisation-kirloskar/view/>

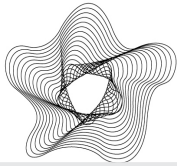
You can read more about Janaki Srinivasan's research [here](#) and [here](#).

For further reading:

Dhingra, Swati and Amartya Menon (2016) "[Demonetisation is not the way to tackle corruption](#)" LSE South Asia Blog, November 30, 2016.

Masiero, Silvia (2016) "[Demonetisation and information poverty: Insights from slum areas in Bangalore and Mumbai](#)" LSE South Asia Blog, December 5, 2016.

Original blogpost: <https://blog.imtfi.uci.edu/2017/01/special-perspectives-series-on-india.html>



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Special PERSPECTIVES Series on Demonetization in India

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Thursday, January 26, 2017

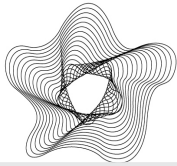
The Recent Indian Demonetisation and Cash Exclusion

By IMTFI Fellow Debashis Acharya, School of Economics, University of Hyderabad

In the early hours of November 9, 2016 as the acting finance officer of the University of Hyderabad, I got a call from a faculty colleague on the possible ways to disburse payments to a group of conference participants. The difficulty arose since INR 500 and INR 1000 notes (bills) had ceased to be legal tender following an announcement by the Prime Minister Mr. Narendra Modi. I quickly updated myself by reading the Times of India and also by speaking to the bank manager on campus. The banks had been directed to exchange old notes against new ones and set withdrawal limits (these are set from time to time). On the first day, the bankers seemed ready and confident to handle the demand for note exchanges and withdrawals. I confirmed this by calling up a banker friend handling a branch in a suburban area. To quote him, "We have received Rs1 crore worth cash of smaller denominations last evening. Though the whole move has come as a surprise we will be able to meet the cash demand." As days passed, the ATMS dried up and I could see long queues outside the branches of different banks and ATMs.



Figure 7. Source: [The Hindu Business Line](#) (Nov 13, 2016)



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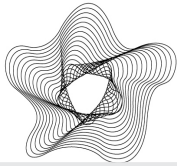
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As I casually surveyed these queues, I tried not to restrict my analysis to the macro implications of demonetisation like my fellow economists. Some economists in India termed Mr. Modi's idea of tracking down black money through this demonetisation move as a meaningless exercise and some opined that the exercise might be partially effective. The media started highlighting possible ways of laundering black money following this demonetisation announcement. As an IMTFI fellow working on cashless payment modes and prepaid cards, I started thinking more on our behavior in general and that of the rural folks in particular. The financial inclusion efforts in India have been working to ensure that everyone has a bank account and a debit card to begin with. Experiments on technology-enabled financial services and payment modes like mobile phones, wallets, prepaid cards are at different stages. How can one best describe the current situation? In my view, it is probably a transitory cash exclusion rather than financial exclusion due to demonetisation.

Irrespective of income levels, everyone depends on cash to some extent or the other. The non-cash payment technology has penetrated each and every corner of the country with reasonable awareness of mobiles, wallets, and cards. Despite the printing press working probably 24 hours to supply cash to regional vaults, there seems to be a fear of shortage among people. This fear is certainly not cutting across society equally with urban lower and middle classes among the most impacted. This has led to hoarding of cash, i.e. of new notes as well as old notes of lower denomination, which has for a while been adding to the cash crunch. As reported by the [Financial Express](#) on Nov 14, 2016, "to mitigate their hardship the Reserve Bank of India has already sent new currency notes to banks and ATMs in Jharkhand's Bokaro by helicopters." The report also quoted the Economic Affairs Secretary Shaktikanta Das, who said, "...it was decided to activate all channels for dispensing cash. With regard to rural areas, he said that the cash holding limit for 1.2 lakh banking correspondents (BCs) has been increased to Rs 50,000 and banks have been given flexibility to increase this limit on a case by case basis. It has been also decided to provide cash multiple times to the BCs so that the rural population is served. Besides, the supply of cash to 1.3 lakh branch post offices would be enhanced so that the public can get banknotes."

However, the long queues seen in bank branches and ATMs in the first two weeks post demonetization may not be entirely due to the day-to-day transaction demand for cash. It's rather a precautionary motive to hoard extra cash to avoid this transitory uncertainty. Such hoarding behavior may differ from one region to the other. I visited a relatively poorer state of India, Odisha, during Nov 9-10 and again during Nov20-24. I didn't see any panicking crowd before ATMs and branches. The situation seemed to be quite normal. I did some intercept interviews on my way there with cab drivers and street vendors. I learned that the prices in some sectors, especially perishables including say fish, might have come down but that the whole move has been taken very positively by the public as a surgical strike on black money. The rest is all adjustment cost and a passing phase.

The perceived cash crisis has paved ways for mobile based payment apps, wallets, etc. to earn quick wins by offering discounts and luring customers to use these apps for making payments. The Modi government has declared several standard operating procedures to encourage digital payments such as reducing transaction fees for digital payments in general and waiving such fees for specific transactions. Digital/Mobile money seems to be taking off with operators like PayTM, Freecharge, and Mobikwik gaining higher market share and confidence of people, especially in urban areas. A policy-induced move towards digital payments has turned into a crisis-



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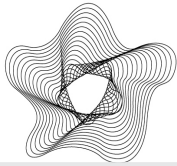
induced move in today's digital India. So far, digital payments and remittances including mobile money, wallets, use of POS machines etc., have been promotional in nature as providers including government, banks, and the financial sector have worked to attract people to the benefits of these modes. This is policy induced. People adopt these modes when they are convinced of the benefits they derive from them. The perceived and actual benefits include lower transaction costs, safety, utility in making payments, and liquidity, to name the major ones. The uptake has largely depended on these factors from supply and demand sides. But since demonetization began, a sort of crisis for some, everyone is now compelled to resort to these digital modes as far as possible. In the process, then, new segments of the population are now also learning the benefits of these digital payment solutions. For instance, an Indian television advertisement shows a son pleasing his father by making utility payments from his mobile within seconds. Now, the father is inquisitive about this payment mode and follows all the advertisements in television, newspapers, and the radio. All providers have come up with their apps/solutions to attract customers. In my view, this is a crisis-induced move towards making India digitally and financially inclusive.

As I read the national daily today I am reminded of my pre-paid card project on insurance payments in Varanasi. In Hyderabad, the city where I live, the State Bank of Hyderabad in the city ordered about 3 lakh pre-paid cards to distribute to both customers and non-customers (reports [Times of India on Dec 12, 2016](#)). Luxury spending has been reduced and people have started using the cards for very small transactions such as purchasing groceries, daily essentials and fuel. These cards would work like mobile recharge for amounts of INR 50/- and below. The customers can add funds either by directly paying to banks or by adding funds online.



Figure 8. Figure 8. Source: Mint E-paper Dec 29, 2016

I also recall my research in rural Varanasi, my field site for the IMTFI project. At the time of the study, respondents were in many cases skeptical about new crisp banknotes but fine with the old well-worn or soiled



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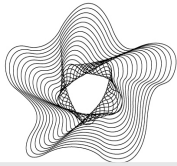
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notes dispensed by the ATMs because they felt these notes were trustworthy (not counterfeit). They were proud to have possessed a debit card or a pre-paid card to receive their payments and to store liquidity for a while. This was to avoid theft of cash at home or some relative requesting to borrow some cash. It was also partly to earn a little interest on such cash parked at a bank. I remember a respondent showing me a loan pass book of a different micro finance company, where some cash was ploughed back with loan repayments for some interest in return. It's all about price and non-price convenience that these respondents derive by parting with cash but not entirely with liquidity. The interest rate being the price of money or the opportunity cost of holding cash, respondents derived price convenience by earning a little interest. The non-price convenience refers to the absence of theft, of the need to lend a family member some cash, of the burden of hiding cash in a tiny spice container in the kitchen.

How might my respondents feel now? They may not understand the big word, "demonetisation." They may face a shortage of cash for their daily needs. Because they always preferred soiled currencies of denominations below INR 1000, I guess they will doubt more the new flashy notes of INR 2000 and INR 500 denominations dispensed either at ATMs or over the bank counters. But it's also true that even the educated mass used to suspect the genuineness of INR 1000 notes since before demonetization these were found to be fake on a number of occasions. Rural respondents at my field site may face a temporary slowdown in their small/petty business - a kind of local deflation, I would say. Prices of the goods they sell may plummet for a few weeks until they get currency at hand and start believing that these new currency notes are genuine.

A step forward in access to and availability of expanded digital payment infrastructures might help rural folks. They should be able to receive and make payments using either a pre-paid card or a mobile. All may not have bank accounts. The provider of cards or mobile based solutions should be able to handle both types of rural folks i.e., with or without bank accounts. At best, my respondents may likely be indifferent to this demonetisation given their beliefs that new high denomination currency notes may not be genuine and their largely low volume of daily cash transactions. I am sure they will be better off going beyond cash, as envisioned by Prime Minister Modi. I will have to visit my field again to learn more from my motivated respondents, the clients of Utkarsh Micro finance limited, which is in transition to a small finance bank.



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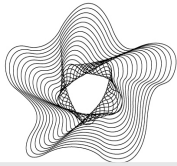
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Figure 9. A short queue in an ATM in Lingampally, Hyderabad on Jan 4, 2017. Photo credit: Debashis Acharya

In this first weekend of January I am happy to see the shorter queues before the ATMs and bank branches in Hyderabad. The long pending demand for INR 500 notes has been met now. The recalibrated ATMs have been dispensing INR500 notes for the last two days. The ATM withdrawal limits are now revised to INR 4500 per day. This is going to curb the hoarding of cash and the hoarding of small denomination notes (the “chillar” in local language). But the digital inertia may turn into a big leap towards a cashless Indian economy. The print and electronic media are out with advertisements to this effect on a daily basis.

To sum up, this move by Mr. Modi, though originally aimed at curbing black money and increasing tax collections, has now become a crisis-led digital-financial inclusion drive. This has acted as a positive shock and game changer in instilling confidence among the lower strata to go digital. However, the success and sustainability of this move depends on the supporting infrastructure, both technological and financial. Needless to emphasize that the financial service providers in this digital payment segment have turned this cash crisis into an opportunity to scale up their technology-led payment services and products. But the occasional reporting on frauds and cyber-attacks in the media has the potential to discourage people from using digital modes of payment, including internet banking. The net result will depend on how the financial system faces these challenges. I will have to wait for numbers about uptake of digital payment services and on incidents of fraud to



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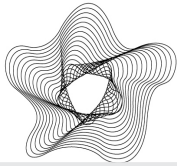
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have further evidence, aspects of which I will address in an upcoming post on model cashless villages around Hyderabad, similar to the subject of my IMTFI study in Varanasi, Uttar Pradesh.

Read more about Debashis Acharya's IMTFI research [here](#)

Original blogpost: https://blog.imtfi.uci.edu/2017/01/special-perspectives-series-on_26.html



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Special PERSPECTIVES Series on Demonetization in India

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Monday, January 30, 2017

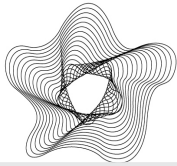
The Dangerous Liaisons between Demonetization and the Indian Informal Economy (Part 1)

By IMTFI Fellows Isabelle Guérin (IRD-Cessma), Santosh Kumar and G Venkatasubramanian (French Institute of Pondicherry)



Figure 10. Queue in front of ATM in Chennai, January 2016. Photo credit: Santosh Kumar

It is now clear that a major objective of last November's demonetization initiative was to promote a cashless economy in a bid to formalize the economy, a large part of which escapes any form of taxation. This argument was very clearly made by Prime Minister Narendra Modi's in his official speech of December 25¹. He claimed that bancarisation² and digitizing payments would primarily benefit the poor, since it would end "labor exploitation" and give the poor better access to various benefits such as health insurance. Many reasonable doubts can be raised regarding such claims, starting with technical barriers to implementation (inadequate payment infrastructure, poor connectivity and access to power, etc.). Our field observations over the past



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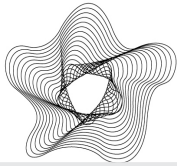
decade in various parts of North and Coastal Tamil Nadu help shed light on another cause for doubt: widespread distrust of banking and digital transactions (although there are distinctions between the two). Our ongoing fieldwork, which has focused on how ordinary villagers have been handling demonetization over the past two months, widely confirms this. The first part of this blog post discusses resistance to bancarisation. The second part questions the links between digitization and formalization.

Many villagers engage in resistance to bancarisation, with good reasons. In the wake of various measures and governmental schemes over the last decade, the bancarisation of Indian citizens has made significant progress but remains largely incomplete. In our field area, almost all households have a bank account but many don't use them, or only do so to channel their welfare benefits (which is the reason for the mass opening of bank accounts). Villagers are distrustful of bankers - who are unwelcoming to the mass of illiterate clients - and rely on other means to save. [Gold purchases](#), [informal loans and reciprocal gifts](#) (mostly through ceremonial exchanges) continue to be the most popular way to save and protect against the knocks of daily life. As State social protection is almost non-existent, family and friend support networks for times of need continue to be the most important protection and means to plan for the future. Any monetary surplus is injected into this network through gifts or loans. Freezing wealth in a bank account makes little sense, barring the willingness to cut oneself off from one's social surroundings. Demonetization, and banks' inability to provide cash³ has further heightened mistrust. Apparently the few people who have a cash surplus are still unwilling to entrust it to banks (which in turn worsens bank liquidity shortages).



Figure 11. Queue in front of ATM in Chennai, January 2016. Photo credit: Santosh Kumar.

Conversely, interpersonal relationship networks have partially helped to mitigate the drawbacks of demonetization. Since November 8, in our areas of fieldwork, some sectors such as the construction industry have been paralyzed. But many economic transactions have been continued on the basis of mutual trust and credit through deferred payments of wages and consumer good purchases. Shopkeepers were already used to selling on credit, which is a major source of client loyalty. Most have considerably extended repayment periods,



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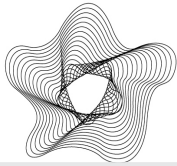
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and in turn enjoy credit facilities from their wholesalers. We encountered households who hadn't paid their shopkeeper for the past two months. Various arrangements have been made for wages, often combining payment in kind (for instance rice for landowners, free meals for restaurants) and delayed payments. Workers have little choice, but some view delayed payment as “forced savings.” Some financial circuits have stopped. For instance, door-to-door moneylenders have stopped collecting repayments and are waiting before disbursing new loans. The same goes for many microfinance organisations. Some have been offering cashless loans (wire transfer) but with little success so far. Women (the main clients) are afraid they won't get their cash. And we indeed came across instances of banks (who are themselves running out of cash) refusing to disburse microcredit loans and giving priority to savers. Chit funds (local ROSCAs⁴) have been at a halt for a while and are slowly starting up again. At the same time, the lucky ones who are managing to get cash are regularly⁵ lending it to others.

Ceremonial transactions, which make up a large share of households' expenses, particularly marriages at this time of the year, have also involved various informal arrangements. Some events have been cancelled, often with serious consequences for the reputation of the family. Events that have gone ahead have often been scaled down (for instance, having the wedding at home instead of renting a hall) but multiple chains of debt have allowed the event to take place. Instead of bringing the traditional cash – gifts represent a major source of funding – guests simply give a pledge document to be honored once cash becomes available. Others promise to give more at the next ceremony. Social relations are truly being put to the test. Merchants or service providers, be it for catering, jewelry, saris, music, photography, or film, are agreeing to be paid later if they are able to afford it. Ceremonial organizers are borrowing from financial companies and negotiating for direct wire transfers to merchants and providers (and will themselves pay back later in cash).

When the old notes were still in circulation, debt was increasing simply because people with a cash surplus were desperately trying to get rid of their old notes and lending to anyone interested. This led to a significant drop in interest rates (by half in the places we visited). Credit markets remain highly segmented, however. In places where borrowers desperately need cash, interest rates have shot up (see below). It is also worth noting that beyond a few service providers such as hospitals⁶, which were authorized to accept old denominations until mid-December, many other traders have continued to do so illegally, such as jewelers, currency exchange offices, alcohol retailers, etc., most often for a commission (up to 20% in the cases we came across).



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Figure 12. Queue in front of ATM in Chennai, January 2016. Photo credit: Santosh Kumar.

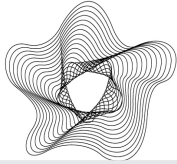
As usual, these kinds of informal arrangements also have a dark side. Intermediaries have sprouted up, offering high-cost services to queue at ATMs, deposit cash at bank branches, exchange the 2000 INR notes nobody wants, or simply to advance cash. Intermediaries are often to be found at pesticide shops, petrol stations, pharmacies, hospitals, and taxation departments. We also came across unscrupulous employers offering large advance payments to their workers in old denominations. Some accepted them, and have been struggling to get rid of these invalid banknotes. When the advance is for seasonal work that will start later in the year, some workers have cleverly accepted but with the deliberate intention of not turning up, arguing that the money they received has no value, and even though they have been able to use part of it. Some have refused for ethical reasons: they don't want to be complicit in the whitening of black money. The strength of the rural poor's political awareness and commitment to the fight against corruption is astonishing. It is striking how much ordinary people have been affected by the demonetization and at the same time have support for it. But once citizens realize that it is merely an illusion⁷, the disappointment is likely to be bitter.

In short, far from fighting it, demonetization has mostly caused a boom in the informal economy. What will happen in the future is of course a key question that we discuss in the second part of this blog post.

Read more about Isabelle Gu erin, Santosh Kumar and G Venkatasubramanian IMTFI research [here](#)

Notes

1. <http://www.narendramodi.in/pm-modi-s-mann-ki-baat-25th-december-2016-533606>
2. Bancarisation refers here to efforts to include the unbanked in formal banking circuits and improve access to financial services.



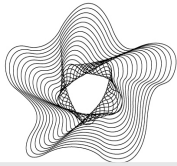
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3. In urban areas in Tamil Nadu it seems that bank activities are slowly returning to normal. In rural areas, banks are still facing very serious liquidity shortages. As of early January, it is still common to see several hundred people queuing in front of a branch, from 8 in the morning and without any guarantee of getting cash.
4. ROSCAS are rotating savings and credit associations.
5. This is the case for civil servants, who are usually paid by cheque or wire transfer. In the wake of several public demonstrations, public administrations have organised cash payments for their staff.
6. Petrol stations, highway tollgates and government cooperative stores have also been authorised to do so.
7. Much black income is invested through gold and real estate. Fighting its cash component – which is less than 3% of the total black income according to certain estimates – would fail to eradicate the core of the problem, namely the generation of black income. See for instance <http://www.caravanmagazine.in/vantage/demonetisation-arun-kumar-economist-black-money>.

Original blogpost: https://blog.imtfi.uci.edu/2017/01/special-perspectives-series-on_30.html



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In IMTFI's PERSPECTIVES blog series, IMTFI fellows take on the recent demonetization move in India through 7 posts on the IMTFI Blog from January-February 2017. This series aims to foster an open dialogue on issues around money, technology and financial inclusion for the world's poor. Individual contributions reflect contributors' own reflections on recent events - based on their research and areas of expertise. The topic of demonetization will conclude with a curated commentary by IMTFI on key themes, important questions, and what we can learn from these contributions for digital financial inclusion going forward. Click on the titles to view the individual posts on the IMTFI Blog.

Wednesday, February 1, 2017

The Dangerous Liaisons between Demonetization and the Indian Informal Economy (Part 2)

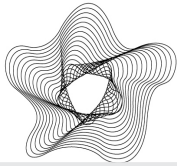
By IMTFI Fellows Isabelle Guérin (IRD-Cessma), Santosh Kumar and G Venkatasubramanian (French Institute of Pondicherry)

The first part of this blog post argues that so far, demonetization has mostly caused a boom in the informal economy, especially informal debt. One could argue that the boom in informal debt is only temporary and that digitization will gradually bring about formalization. Here too, we have grounds for doubt. The link between digitization and formalization raises some crucial questions:



Figure 13. January 2016. (a) A group of women complaining to a clerk officer that their labour welfare benefits

Firstly, what is meant by 'formalization'? Is it a matter of accountability and traceability or is it a matter of social protection? Both are of course interrelated: accountability allows for taxation, which in turns gives the financial means for social protection. The wage payment transparency that digitization offers might well encourage employers to declare their laborers and gradually offer them protection (more than 90% of Indian laborers do not have any social protection). But as the history of European welfare states has illustrated, transparency is



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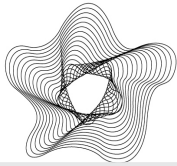
neither a necessary, nor a sufficient condition for this. The priority should be to define and implement labor laws. However efficient it may be, digitizing wages is no substitute for labour regulation. Ethnographies of labor have repeatedly highlighted the multiple strategies and tactics employers use to control laborers and cut wages, from the use of kinship and caste networks to making subtle alliances with local authorities and political parties. It is difficult to see how digitization could stop this¹. Some exploitative labor relations may evolve however, for instance those based on wage advance, which are a rule in various forms of seasonal activities. This year it seems that most employers haven't been able to provide advances, and yet workers have accepted to start working. Will this be only temporary or can it start new forms of relations?



Figure 14. January 2016. (b) A group of women complaining to a clerk officer that their labour welfare benefits

The second question, which is related to the above, concerns social protection itself. Demonetization aims to formalize the economy without any extra effort on providing protections. At present the informal economy gives a form of social protection, however flawed. As we argue above, many people are embedded into complicated webs of rights and obligations that ensure their daily survival through the constant circulation of cash, goods and services. In our 2010 survey in Villipuram and Cudallore districts in Tamil Nadu, we found that almost 90% of debt arrangements (most of which were informal) also included additional services such as access to information, employment, government resources, health services or simply financial help. Eliminating such arrangements without offering alternative protection would be a crime, as we have argued elsewhere². The failure of microfinance to substitute informal lending, something which has been fought for over than a century, illustrates this.

Thirdly, we need to consider the consequences of the rise in e-payments. Many citizens don't use their bank accounts for deposits, as it goes against a vision of wealth as something that should constantly circulate. E-payments may have a more promising future, but here too there are questions to raise:



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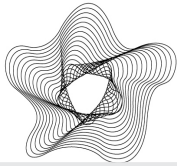


Figure 15. January 2016. (c) A group of women complaining to a clerk officer that their labour welfare benefits

a) Pricing is the first issue. Who will pay for these transactions and how much will this all cost? As in many other contexts, due to high levels of household debt, the Indian laboring classes are already crushed by financial costs. Increasing monetary grabs to raise the profits of financial providers would be really unfair, although in fact this is already happening³. It is urgent to analyze the true costs of digital payments in depth. This would involve taking both direct and indirect costs fully into account (for instance, traders may increase their selling prices to cope with the cost of digital payments). This would also involve a prospective mid-term analysis, as costs are likely to be low at first to attract customers, and then rise. It would be extremely helpful to make international comparisons, in order to get a reliable picture of fintech business models.

b) Household budget management is another issue. When monthly wage payments deposited into bank accounts became mainstream in Europe, the adverse effects on budget management were multiple, though widely underestimated. People have complicated and subtle methods of balancing expenses and resources, often through moral and physical earmarking, especially when they can't read or write⁴. Juggling debt also helps to manage budgets⁵. People combine various financial tools to support ongoing borrowing, repayment and re-borrowing (one borrows from one place to repay elsewhere). People alternate between debtor and creditor roles. Even the poorest people are also likely to be creditors. Juggling debt can help to substitute cheap debts for expensive ones, and help to manage different repayment time scales set by lenders. Social motivation also counts. Juggling practices often reflect conscious strategies to multiply or diversify social relationships, and strengthen or weaken the burden of dependency ties. The subtle and complex trade-offs involved lead to a plethora of complementary and often incommensurable, non-substitutable financial practices. How are these subtle and complicated methods of management going to evolve with digitization?

c) Privacy is another important matter. There is of course the tricky issue of personal data. How public and private stakeholders are going to use it is a key question. Markets of the poor South are major emerging markets and one can easily figure out the outstanding importance of collecting big data on markets which are yet to be built. Privacy at the local/community/household level is another factor. We have already raised the issue of complex webs of financial circuits. Many of these are hidden, especially within households, where men and women often have their own networks. Indian women are rarely allowed to manage and control their own budgets. In order to maintain micro-spaces of freedom or simply to be able to make ends meet, they often



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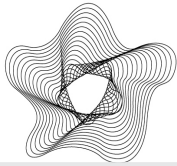
deploy various strategies to bypass male and in-laws' control. This can involve hiding some purchases and lying about prices, storing small amounts of cash in various hidden places in the home or with a neighbor, buying small pieces of gold, investing in saving groups with neighbors or relatives, etc. The same goes for men, who are often pulled between their obligations to their wives and children, versus their parents and sisters. It is unusual for accounts to be kept, be it listing income and expenses, or keeping bills. But this is not just due to illiteracy or the prevalence of oral culture, as is often thought. Opacity may serve the clear purpose of allowing women and men to maintain their own financial circuits, and to steer between conflicting obligations. Demonetization has brought these hidden circuits to light – a wife having to reveal the 5000 INR under the mattress for her daughter's education, a husband indebted to a neighbor for the marriage of his niece and so on. This has resulted in much tension and conflict. Well beyond these tensions, which are likely to be temporary, the prospect of digital – and therefore traceable – payments is an important cause for concern. It implies transparency and the possibility to track every expense and transfer. Far beyond taxation issues, which many ordinary villagers worry little about for the moment, how will privacy within households be maintained, especially for women for whom individual freedom is a daily struggle?

Read more about Isabelle Guérin, Santosh Kumar and G Venkatasubramanian's IMTFI Research [here](#)

Notes

1. See for instance Harriss-White B. (2003), *India Working, Essays on Society and Economy*, Cambridge University Press, Cambridge. Guérin I., Kumar S., Venkatasubramanian G. (2015) Debt bondage and the tricks of capital, *Economic and Political Weekly*, June 27, Vol. L n°26-27, 11-18. Picherit D. (2012) 'When manual labourers go back to their village: Labour migration and protection in rural South India', *Global Labour Journal* 3 (1): 143-62. Pattenden J. (2016). *Labour, state and society in rural India: a class-relational approach*, Manchester: Manchester University Press.
2. See Guérin I. Kumar S. (2016) The uneasy relationship between market and freedom. Is microcredit a source of empowerment or domination for women? *Journal of Development Studies*, Early view DOI: 10.1080/00220388.2016.1205735
3. Twelve days after the 8th of November, Paytm, one of the first Indian provider of e-wallets, announced daily sale revenue of de 1,2 INR billion (see <http://www.epw.in/journal/2016/51/postscript/demonetised-delinked.html>). According to the international consultancy firm BCG, in 2010, the annual Indian markets for digital transactions will be 35000 INR billions. On the basis of a profit of 1% of the transactions, expected income represent 350 INR billions (<http://indianexpress.com/article/blogs/demonetisation-implementation-cash-crunch-digital-payments-cashless-transactions-4435312/>).
4. See the seminal work of Viviana Zelizer on this. Zelizer V. (1994) *The social meaning of money*, New-York: Basic Books.
5. See Guérin I. Morvant-Roux S. Villarreal M. (eds) (2013) *Microfinance, debt and Over-indebtedness. Juggling with money*, London: Routledge

Original blogpost: <https://blog.imtfi.uci.edu/2017/02/special-perspectives-series-on.html>



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Special PERSPECTIVES Series on Demonetization in India

In IMTFI's PERSPECTIVES blog series, IMTFI fellows take on the recent demonetization move in India through 7 posts on the IMTFI Blog from January-February 2017. This series aims to foster an open dialogue on issues around money, technology and financial inclusion for the world's poor. Individual contributions reflect contributors' own reflections on recent events - based on their research and areas of expertise. The topic of demonetization will conclude with a curated commentary by IMTFI on key themes, important questions, and what we can learn from these contributions for digital financial inclusion going forward. Click on the titles to view the individual posts on the IMTFI Blog.

Monday, February 13, 2017

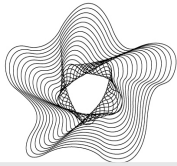
The Recent Indian Demonetization and Cash Exclusion (Part 2)

By Debashis Acharya, V V Subbarao, and T K Venkatachalapathy, School of Economics, University of Hyderabad



Mr. A Kalyan Kumar and Mr. A Nagesh "Bank Mitras" of Allahabad Bank, demonstrating the use of D180 MPOS terminal and Evolute Impress biometric reader for cashless transactions in the village. (Photo by V V Subbarao)

It's been two weeks since I (Debashis) summarized the recent demonetization move as a crisis-led financial inclusion drive in the [first part of this blog](#). Since then, we (myself with V V Subbarao, and T K Venkatachalapathy) have been following the trends in uptake of digital payments at the national level and the efforts of the local government, i.e. Government of Telangana. The Government of Telangana has been working on furthering this national effort towards a more cashless economy. The experiment has begun in more than twenty villages and these villages have been declared to be [cashless villages](#).¹ The [report](#) of the committee on digital payments – chaired by a former finance secretary, the Government. of India, and the present principal advisor to NITI Aayog, Government of India – is now in the public domain.² Before we discuss one of these cashless villages around Hyderabad, let us look at the trends in digital payments before and after demonetization. Though, it's too short a period to assess the impact per se, the trends in such payments can



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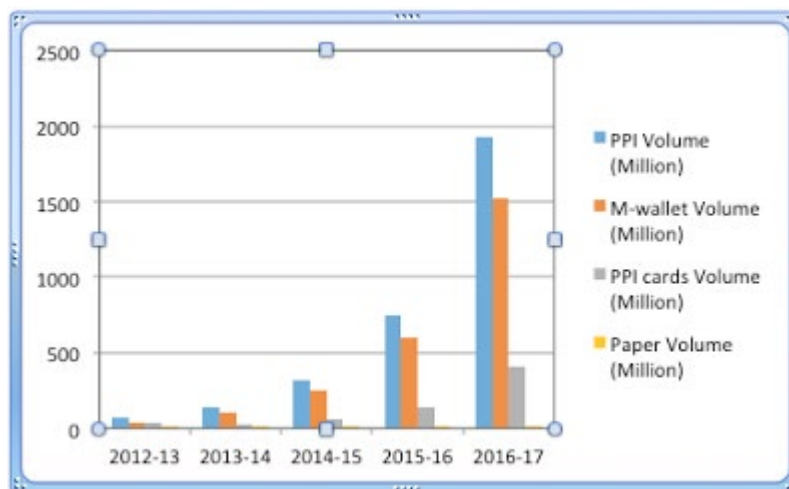
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provide some insights.

The recent data on digital payments published by the Reserve Bank of India (RBI) indicate sharp growth in pre-paid instruments (PPIs) as alternative to cash payments. The PPIs as compiled by the RBI include m-Wallet, PPI cards, and paper vouchers. Payment by m-Wallet is the highest over the financial years 2012-13 to 2016-17, followed by PPI cards and paper vouchers, both in terms of volume of transactions and value of transactions. The figures 1 and 2 plot these trends in PPI based on uptake in digital payments. It's worth looking at the daily transactions data on PPIs published by the RBI to judge the incidence and possible impact in the future to go cashless. The data on PPIs have been made available, effective from 2010. Data on other digital/electronic payments are available from 2004-05. The apex bank has even been alert to daily transactions through digital modes, effective from Jan 1, 2017.

The objective of generating and compiling such data, as well as keeping it in the public domain, reflects the vision and policy expectations of the current regime and the apex bank. The Government of India has just approved [a grand digital literacy program](#) – named Pradhan Mantri Digital Sakshrta Abhiyan(PMDISHA) – for six crore rural households on Feb 9, 2017 (reports Business Standard).³ Figure 3 shows an increasing trend in the daily value of PPI transactions. Here, one sees an increasing trend, even though cash has increasingly been made available on a daily basis over the last two months. In addition to these modes, one could transfer money from one's account in any bank to another account in any bank through Aadhar Enabled Payment System (AEPS) or PIN PAD using ATM PIN. For instance, AEPS transactions are done using Evolute-Impress biometric machines and the PIN PAD transactions are done using D180 mPOS machines in villages near Hyderabad. We don't have disaggregated data on such transactions at the moment.

Figure-1 Uptake of Digital Payments by Pre Paid Instruments (Volume of Transactions)



Based on data from the Database on Indian Economy, Reserve Bank of India, 2017.

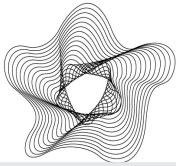
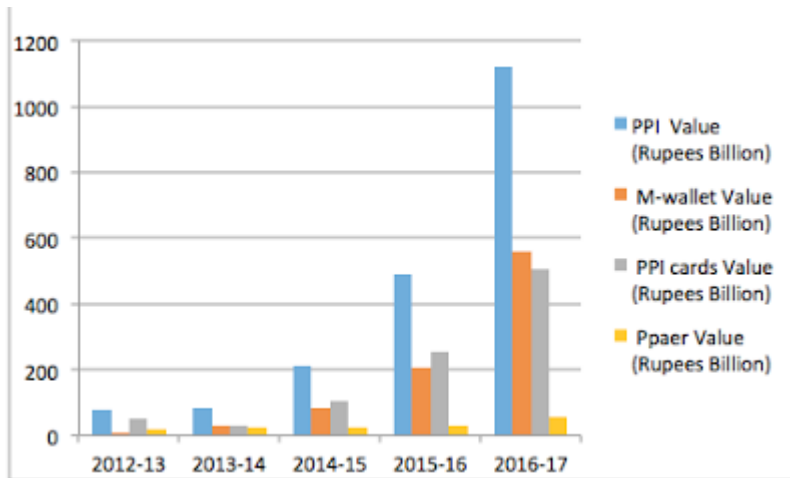
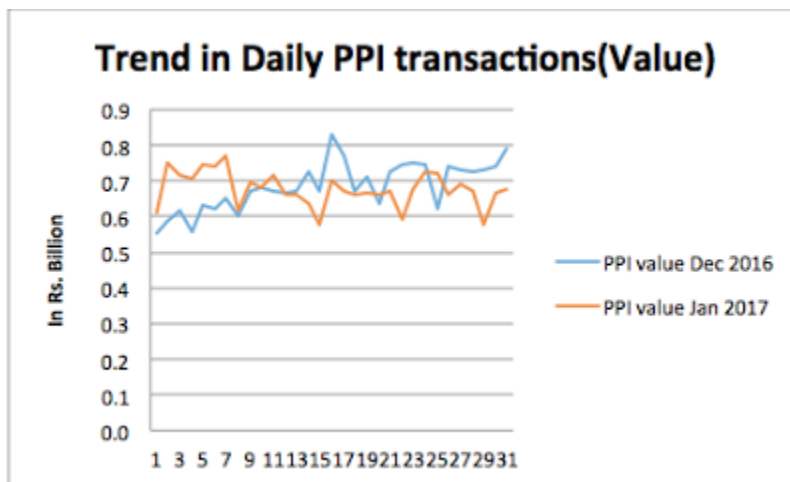


Figure-2 Uptake of Digital Payments by Pre Paid Instruments (Value of Transactions)

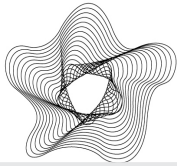


Based on data from the Database on Indian Economy, Reserve Bank of India, 2017.

Figure3: Trend in Daily value of PPI transactions in Dec 2016 and Jan 2017



Let us now turn to some local stories around Hyderabad on cashless village experiments by the local government bodies. [As reported by a national daily, the Hindustan Times](#),⁴ the first village to go cashless has



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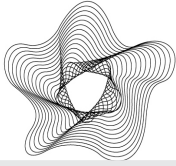
been Ibrahimpur, 125 kilometers from Hyderabad. Andhra Bank, a public sector bank, has ensured that all villagers have bank accounts and debit cards. The report also notes that some women in the village said they are happier than before with their debit cards since they don't have the fear of parting with cash for their husband's buying of alcohol.



The first grocery store in Kasala, as we enter the cashless village.
(Photo by V V Subbarao)

To supplement the macro figures reported above and to learn more on the above said cashless village experiments, we just visited Kasala, a village in the district of Sangareddy, about 60 kilometers from Hyderabad, to study the ongoing cashless experiment. The district administration has declared this village a cashless village. The office of the Collector of this district has had discussions with the Village head and people to promote cashless transactions. As we entered the village the first Grocery store we encountered displayed in the form of a pamphlet an appeal to the villagers to adopt cashless modes of payment, i.e. through mobile wallet, paytm, and bank account.

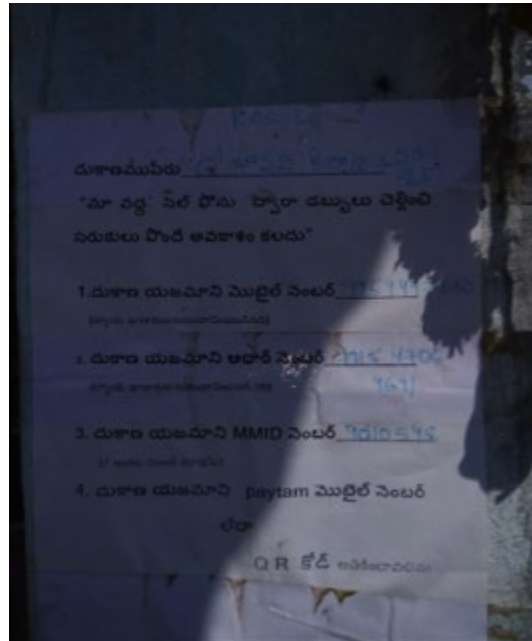
This grocer had to manage his payments to the wholesaler by visiting the bank branch, or through the "Bank Mitra" (representative) of the village, to procure grocery for his retail outlet in the village. He transferred money to the wholesaler's account from his account since cash was not available. Before demonetization he preferred cash transactions to the transfers mentioned above. Similarly, the villagers transferred funds to the grocer's account through Bank Mitras and bought their grocery by producing charge slips given by the Bank Mitras. This was due to lack of cash at hand and for small transactions starting at Rs.200/-. Bank Mitras have been working as business correspondent agents even before demonetization to facilitate financial literacy and awareness on banking, including transactions such as deposits, remittances and withdrawals, etc. They have



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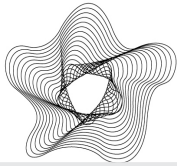
worked in a variety of ways to bridge the distance between the village and a brick and mortar bank branch. *Their importance seems to have only increased after demonetization.* However, mobile-based transactions have been very few to date, according to the grocer.



Pamphlet to adopt cashless payments
(Photo by V V Subbarao)

We had an opportunity to interact with the Bank Mitras of Kasala and two other villages nearby. To quote Mr. A Kalayan Kumar, “Bank Mitra” of Allahabad Bank serving Kasala, “The total transactions, post demonetization until Dec 31, 2016, amounted to Rs. 49 lakhs for about 1047 transactions. The transactions per head has been approximately Rs. 4680/-. Before demonetization the transactions used to be Rs.300-400/- per month, amounting to Rs.2 lakhs.” At present, the cost of two of these machines – i.e. a laptop and the Evolute Impress biometric reader – are borne by the Bank. But the Bank Mitra pays about Rs.5000/- for the PIN PAD i.e. D180mPOS, which is used to swipe ATM-Debit cards. An increase in cashless transactions shall prove to be lucrative for the Bank Mitras, given the fact that cashless transactions have increased after this digital push. In villages, Bank Mitras never made a living on the banking activities alone. They used to engage in other economic activities for their livelihood. This could be due to different reasons. Bank Mitras usually get a fixed monthly remuneration and the rest of their earning is commission-based, i.e. a fraction of the transactions they carry out. The commission differs from bank to bank. *Hence, Bank Mitras may see a bigger volume of transactions if this digital push is sustained in the days to come and their earnings from commission may increase.*

There was some skepticism on the part of the Public Distribution System (PDS) agents, other businessmen, and farmers we interviewed in Kasala. According to Mr. Kalyan and Mr. Nagesh (Bank Mitras), out of 3000 households in the village about 40% preferred cash to cashless transactions, post demonetization, even in spite



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of the promotional efforts of the local government to go cashless. The PDS agents and businessmen, including grocers, were concerned about the fixed and variable costs of PoS machines needed for cashless transactions. To quote another grocer:

“It’s difficult to invest Rs.10,000/- for one PoS machine on my part and pay a monthly rent of Rs800/-. Why can’t the government bear this cost for at least two grocers in this village? This will instill confidence among us and the users too. We won’t mind paying for this once we realize the benefits.”

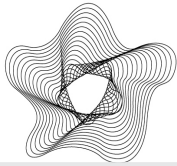
The PDS agent expressed his concern in a similar tone. But the farmers had a tough time paying wages to the laborers due to the daily withdrawal limits. Even though most of them had bank accounts, laborers did not know how to use the ATM card. Although there is no fear on the part of the grocers, small businessmen, farmers, and PDS agents to go cashless and adopt digital payments, *the fixed and variable costs of PoS machines seem to be an impediment for sustaining this digital drive in the long run.*

As we returned from Kasala, we saw an announcement by the National Bank for Agriculture and Rural Development (NABARD) in favor of some stakeholders, i.e. the PDS agents. [The Indian express on February 6 reported:](#)

“In a major push for cashless transactions, PoS machines for credit/debit cards, as well as Aadhaar-based transactions, will be installed at all PDS shops and fertilizer depots over the next few months. In an interview to PTI, Finance Secretary Ashok Lavasa said over 1.7 lakh PoS machines have already been installed at public distribution system (PDS) shops and more will be done in the next few months. ... NABARD has committed to supporting banks through the Financial Inclusion Fund for deployment of up to two PoS devices per village, to cover one lakh villages of tier 5 and 6 areas.”⁶

The PDS shops have been transacting in cash to date. This announcement is aimed at digitizing a particular segment - i.e. PDS shops and the fertilizer depots - providing free PoS machines as an incentive to induce uptake of digital payments.

The crisis of cash exclusion seems to be turning into an opportunity for businesses, households, and also for the government. Here, business refers to those engaged in the digital payment business who are taking advantage of this digital push. The households partly benefit since they don’t have to keep all the cash with them at a given point of time, thereby avoiding involuntary lending of the extra cash or the risk of theft. The government benefits from transparency in the transfer of benefits.



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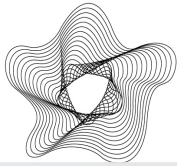
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With "Bank Mitras," Farmers, and a PDS agent in Kasla village, Sangareddy District, Telangana. (Photo by V V Subbarao)

What is the future of cashless payments in India? Is this digital inclusion sustainable? The [report of the committee on digital payments](#) submitted to the Finance Minister⁷ cites the high cost of cash as one of the key factors for going digital. To quote the report, "India's dependency on cash imposes an estimated cost of approximately INR 21,000 Crores on account of various aspects of currency operations, including the cost of printing new currency, costs of currency chest, costs of maintaining supply to ATM networks, and interest accrued. Transitioning to digital payments for government payments alone could save Rs. 100,000 crores annually with the cost of transition estimated at Rs.60, 000 to Rs.70,000 crores." *However, it is difficult to predict anything clearly either from our macro figures or our brief study of Kasala. For instance, the modalities of a cashless village and the underlying incentives to go cashless seem to be ambiguous in our study of Kasala.* There have been two meetings held by district administration with the households and village head in Kasala. The PoS machines have not reached either the grocers or the PDS agents. There is no clarity on the sharing of costs of the machines and the rentals of the machines. Further, the cost discussed in the report of the committee on digital payments may be limited in its scope. *The variety of payment options have suddenly gone up in the post demonetization phase. Therefore, the costs associated with different payment options may be different.*

The government seems to be transitioning to payments based on Aadhar issued by the Unique Identification Authority of India and the BHIM app simply to reduce costs. These options interfere with the existing big players like VISA and MASTER Card. *A point worth noting is that of investment in security innovation.* These two big players invest a lot on security and continuously innovate on security features to avoid frauds. How feasible is it for the Government of India to invest in security innovation? *Without security and coming to an understanding with these big players, it may be difficult for the Government to sustain this move.* I am also reminded of my pre-paid card project and issue of preference for soiled notes by villagers here. Technology needs to be trusted by people in terms of its immediate and long term benefits. A sudden surge in payment options may confuse potential users too.



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Let us sum up our discussion of the macro figures mentioned above on digital payment uptake and our field observations in Kasala. The sustainability of digital payments, from the supply side, will largely depend on savings in terms of cost to the economy. However, not clear at this stage are the cost calculations associated with a broad spectrum of payment options. *The voices from our field clearly indicate the need for clarity on cost savings for different stakeholders.* For instance, the grocer wants to understand clearly the model of cost sharing and the benefits to be derived. The Bank Mitras are of the opinion that financial literacy drives led by outsiders such as NGOs work better in improving uptake of digital payments. *Finally, sustainability may well depend on customized digital payment modes winning the trust of users.* This is especially important when the overall infrastructure is not geared up to provide seamless service of a particular digital payment (such as mobile wallets that are not functioning due to poor networks) and PoS machines failing due to link failures. We will need to allow some time to see how these challenges are addressed in the near future - and how diverse stakeholders respond.

For part one of this post, see [here](#)

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1 <http://telanganatoday.news/20-villages-sangareddy-declared-cashless>

2 Report of the committee on Digital Payments, Ministry of Finance, Govt. of India, December, 2016
http://www.finmin.nic.in/reports/watal_report271216.pdf

3 http://www.business-standard.com/article/news-ani/cabinet-approves-pradhan-mantri-gramin-digital-saksharta-abhiyan-117020900131_1.html

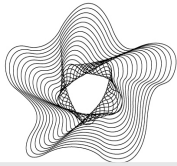
4 <http://www.hindustantimes.com/india-news/telangana-s-ibrahimpur-becomes-first-cashless-village-in-south-india/story-N3sWpxDR1sxdg3uRttqlrJ.html>

5 Bank Mitra is a representative of the bank. He is available in the village with a laptop, D180 mPOS, and Evolute Impress biometric reader to facilitate digital payments. In this village the Bank mitra serves about 3000 villagers.

6 <http://indianexpress.com/article/india/card-aadhaar-enabled-payments-at-all-pds-fertiliser-depots-soon-4510416/>

7 Report of the committee on Digital Payments, Ministry of Finance, Govt. of India, December, 2016
http://www.finmin.nic.in/reports/watal_report271216.pdf

Original blogpost: https://blog.imtfi.uci.edu/2017/02/special-perspectives-series-on_13.html



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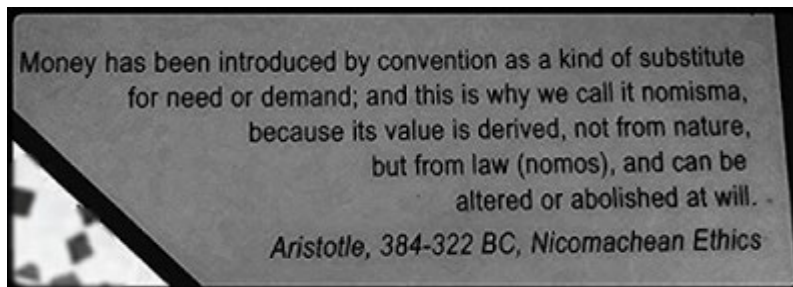
Special PERSPECTIVES Series on Demonetization in India

In IMTFI's PERSPECTIVES blog series, IMTFI fellows take on the recent demonetization move in India through 7 posts on the IMTFI Blog from January-February 2017. This series aims to foster an open dialogue on issues around money, technology and financial inclusion for the world's poor. Individual contributions reflect contributors' own reflections on recent events - based on their research and areas of expertise. The topic of demonetization will conclude with a curated commentary by IMTFI on key themes, important questions, and what we can learn from these contributions for digital financial inclusion going forward. Click on the titles to view the individual posts on the IMTFI Blog.

Tuesday, February 7, 2017

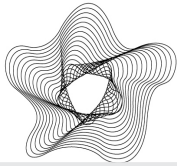
Before Money isn't Money Anymore....

By IMTFI Fellow Vivian Dzokoto, Virginia Commonwealth University



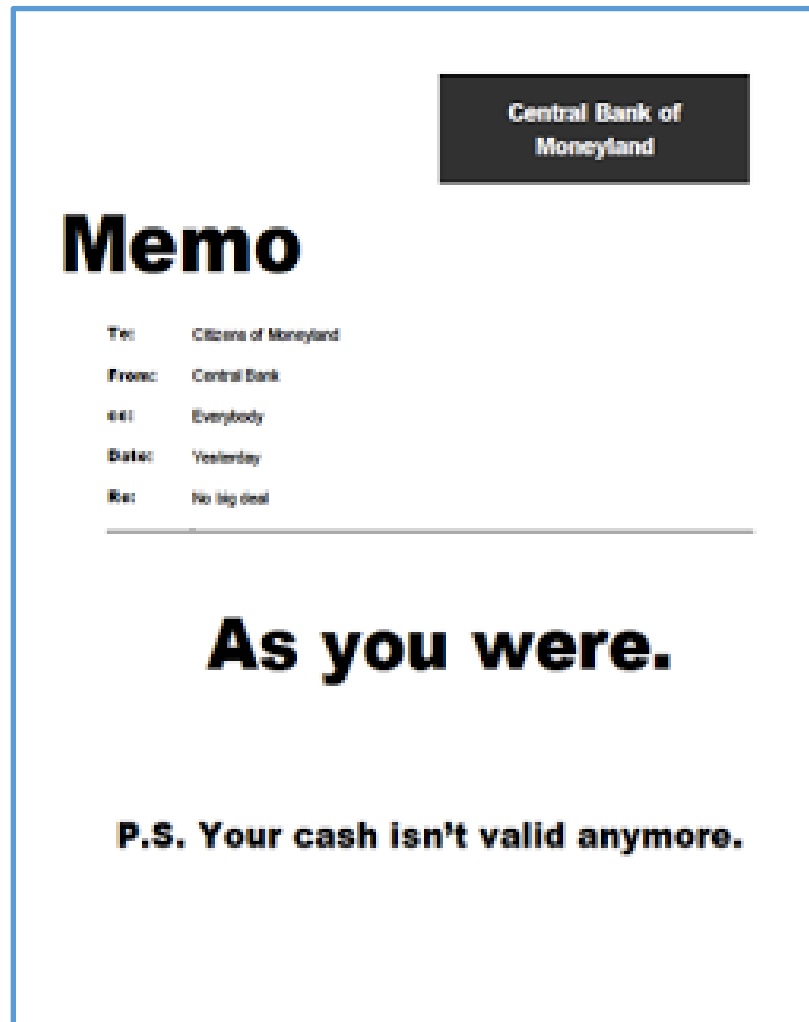
Demonetization of currency notes - as the recent one in India - is a reminder about what money really is: material that does not possess inherent value unless society or in this case, an issuing authority decrees that it does. The case of the Reserve Bank of India's demonetization of 500 and 1,000 rupee notes late last year also reminds us that "money-ness" can be revoked as easily as it can be accredited. While India's recent change in its moneyscape has been a focus of many critics, it is important to recognize that:

- (i)** India is not the first country to demonetize its national currency (in part or as a whole and as a matter of fact, this isn't India's first demonetization exercise)
- (ii)** India will most likely not be the last country to demonetize its currency (either in part or as a whole), and
- (iii)** The world needs to learn from India's case, just as India should have factored in lessons from the demonetizations of yore.



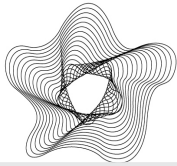
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It is of course easy to be a critic after things go wrong. Hindsight is 20/20, after all. The fact is: being in charge is not an easy task. Tough decisions have to be made. The question to ask at this point is how tough do such decisions have to be, and what needs to be taken into consideration when tough decisions are made? In the case of demonetization exercises, the myriad factors often taken into consideration include the state of inflation, counterfeiting, taxes, the black market, political symbolism, the denominations of the existing notes, people operating outside the formal banking sector, and the efficiency of cash handling systems. Are these important? Absolutely. Should these be taken into consideration? Absolutely. Is this list exhaustive? **Absolutely not.**

One thing is often missing from deliberations, especially in cases of demonetization exercises that fail or experience a significant number of hiccups. **The user.** In particular, the everyday interactions of the everyday person with the material that is money, the ecosystems that have developed around the different objects that are used as money, the convertibility of one form of money into another, and the degree of equivalence of



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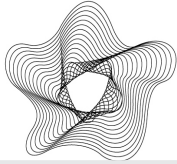
function in cases where conversion is in fact possible. How do disruptions (actual and potential) to the moneyscape affect the lives of the everyday user? How do people learn about, understand, use, and build practices around new iterations of money? Simply put, prior to demonetization, redenomination, or alternatively tinkering with a material's "money-ness," **issuers of money have got to understand the world of the user better.**



"The Way of the Dinosaur" by Mark
Wagner

Photo Credit [Mark Wagner](#)

Money in the form of cash is many things. To the issuers, it's legal tender. For many, it's a political statement. To a baby, it's one of the numerous things you're not supposed to put into your mouth. To the R&B artist, [it's the stuff "rain" is made of](#). To the drug addict, it's Never mind. For techies, it's an exasperating dinosaur that should have been extinct by now. But it sure looks like cash is here (that is, in many countries) to stay for a while. That means we (students of money, and agencies that deal with the issuing, processing, storage, and securing of money) have to fully understand its various and evolving roles, pathways, practices, and the like in the societies that it serves. And what tinkering with a financial ecosystem does to the user. And what redundancies can be worked into the system as structural changes to the monetary systems are planned. And not just understanding such information: acknowledging it, and factoring such knowledge into public policies and into the logistical planning of national exercises that impact money-ness. Who knows, some of this information might also be relevant to future forms of money.



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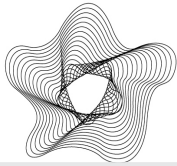
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Over the years, ignoring such information has resulted in negative consequences for the user. In the past, previously wealthy and suddenly penniless owners of huts filled with suddenly worthless cowrie shells in colonial Africa (Saul, 2004) could be seen wringing their hands and contemplating their purpose in life. In India, we have seen [long lines, daily activities disrupted because of logistical mishaps, and sadly, lives lost](#). What negative consequences are there going to be in the future? The answer lies in what we know, and how we use the knowledge that we know. **Money is, after all, meant to be used by people.** Before going a-tinkering with it, it's vital to understand how the people interact with it – and do so in its various complexities and forms.

Read more about Vivian Dzokoto's IMTFI research in Ghana and Zambia [here](#) and [here](#)

Original blogpost: https://blog.imtfi.uci.edu/2017/02/special-perspectives-series-on_7.html



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Special PERSPECTIVES Series on Demonetization in India

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Wednesday, February 22, 2017

Insights, Challenges, and Ways Forward

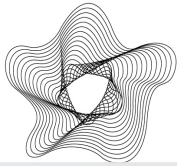
By Ursula Dalinghaus (UC Irvine), Nima Lamu Yolmo (UC Irvine), and Janaki Srinivasan, International Institute of Information Technology Bangalore (IIITB)



Demonetized ₹500 and ₹1000 notes

Source: [Frontera News](#)

On November 8, 2016, India demonetized two major banknotes in circulation. According to the Reserve Bank of India (RBI) figures, the denominated notes [accounted for 86% of the value](#) of currency in circulation. Importantly, the 500 and 1000 demonetized notes have been replaced by new denominations of 500 and 2000. All of this took place before ATMs were even configured for the new notes! The most visible effects of demonetization were the long queues and cases of numerous casualties and deaths in front of ATMs and banks. With the issuance of the new notes of 500 and 2000, demonetization (“[notebandi](#)”) has largely taken the form of replacement, aimed at targeting counterfeiters.



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While some see the demonetization move as part of the quest for transitioning to a more digitized payment system, the timing and procedures for the replacement did not take into account factors related to basic infrastructure, coverage, digital financial literacy, and knowledge about the ways in which payments function within formal and informal sectors, social networks and relationships, and barriers related to caste, gender, and literacy, among others.

What lessons does this exercise hold for research on digital financial inclusion in India going forward?

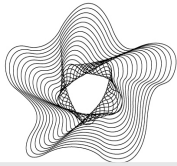
In our Special PERSPECTIVES blog series on Demonetization in India, we asked IMTFI fellows to provide some preliminary reflections on these issues. In this post, we wrap up our series, highlighting key themes and questions raised by our contributors.

Series Overview

As Vivian Dzokoto ([Before Money isn't Money Anymore...](#)) reminds us, India's demonetization exercise is neither the first nor the last exercise in changing money's material form. Monetary authorities guarantee what will count as money and its value, but they can also alter or even revoke it. Money objects are tied up with social relations, [cultural repertoires of use](#), and a larger ecosystem of [monetary practices](#). **A change in money must take the user into account.** Failure to do so results in loss of trust and social disruption. **These outcomes can negatively impact the goal of financial inclusion** and undermine the credibility and longevity of payment infrastructures.

**A change in money must always take
the user into account.**

Janaki Srinivasan ([Demonetization and its Discontents](#)) creates a roadmap for identifying gaps between user experiences on the ground and the categories and visions driving the demonetization experiment in India. **Policy efforts to advance the project of greater digital inclusion are not necessarily helped by suggesting one is either for or against cash.** Instead, the [promise of digital platforms](#) is their flexibility in providing choice among payment options. The user must be at the center of product [design](#). For example, **categorizing all unreported cash as "black money" risks putting into one policy basket** the multiple (and legally valid) contexts that lead people to keep money hidden and store value in cash form. In particular, a large section of women, including many belonging to the middle class, have had good reasons [to hide their small savings](#) in rice bins and cosmetic jars, away from husbands and other family members. This cash is more than money – it is "women's agency,



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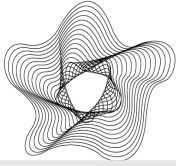
built through years of under consumption and self-exploiting sacrifices” ([Tara Nair, IMTFI financial inclusion workshop, 2016, Bangalore](#)). Demonetization has suddenly compelled women to reveal to men their secret cash stashes, bringing women’s savings practices to the attention of their husbands - with potentially negative consequences for women’s autonomy. Like Dzokoto, Srinivasan reminds us that one should be careful of “desirable solutions” that bypass the user.

User-Centered design is essential. Be careful of “desirable solutions” that bypass the user.

Debashis Acharya ([The Recent Indian Demonetisation and Cash Exclusion, Part **one** and **two**](#)) gives a first-hand account of the demonetization move as it unfolded. He recognizes that this “policy-induced cash exclusion” has been experienced by particular segments of Indian society as a crisis. But he also suggests it is a positive shock - by being compelled to use digital alternatives, people may encounter positive dimensions of these tools. **Success and sustainability will depend on the supporting infrastructure – technological and financial.** In a follow-up post, Acharya and his colleagues Subbarao, and Venkatachalapathy test these propositions. They review data-supported trends in uptake and recount a visit to a village participating in a cashless village experiment near Hyderabad. Acharya and his team find that village bank representatives’ (“Mitras”) role as intermediaries has become even more important. For grocers, new challenges have erupted with regard to PoS (Point of Sale) devices. **How will cost-incentives be structured? Who will/should share the costs? How will the infrastructure be built out?** User-centered answers to these questions will be essential to sustaining this digital drive, long-term.

Success and sustainability will depend on the supporting infrastructure – technological and financial.

Isabelle Guérin, Santosh Kumar, and G Venkatasubramanian ([The Dangerous Liaisons between Demonetization and the Indian Informal Economy \(Part **one** and **two**\)](#)) also raise critical questions about the impact of digitization on informal economic practices. In North India and Coastal Tamil Nadu, these have provided a primary safety net for the poor. In part one, they discuss widespread distrust of banking and digital transactions. Demonetization has impacted financial circuits and strained social relationships in these communities. **The move**



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– as an instrument of formalization – raises new questions about who will benefit. Far from fighting the informal economy, demonetization is strengthening it. In part two, they outline some crucial questions: **What measures can be taken to ensure social protections, fair pricing, and privacy for the poor?** Like Srinivasan (and Nair, see above), Guérin and co-authors underscore how cash has been instrumental for women in creating "micro-spaces of freedom" in the household, but also for men, who have their own social networks. How will the move to digital payment forms take these existing strategies into account? Will it facilitate greater financial inclusion?

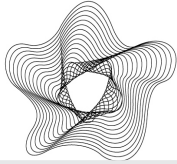
A move to digital money must include social protections, fair pricing, and privacy measures for the poor.

Disruption. Inclusion. Ways forward...

To conclude, **we call attention to some productive dissonances in how contributors approach the implications of this demonetization policy move.** Srinivasan is critical of the compulsory nature of this demonetization policy and emphasizes the importance of preserving choice in payment forms. Guérin and co-authors point to the significant technical barriers to implementation of digital finance, which, combined with widespread distrust of formal banking, have the potential for severely disrupting the informal, cash-based networks of social security and exchange upon which the poor greatly rely. In contrast, Acharya folds demonetization into a broader move toward cashlessness and streamlining of payment forms, to the possible exclusion of cash at some point in the future. Pre-paid card projects and other digital experiments are introducing people to the benefits (including security) of e-payment forms, while [the need to establish trust](#) in these new technologies remains an ongoing challenge.

These "different takes" on the demonetization move remind us of the politics of payment infrastructures, most visible at times of disruption and change ([Rea et al, 2016](#)). Dzokoto's [recent work](#) on currency change in Zambia, where *both* currency redenomination and the introduction of mobile money were taking place at the same time, shows that a technical change in money always has political implications for policy makers, providers, and for users. For research going forward, it is therefore important - particularly in the wake of this major policy and technological shift - **to attend to the interplay of specific payment forms in everyday social practices** as a variety of social actors and institutions in India come to terms with these changes.

Insofar as demonetization, as a state policy, has been proclaimed as a move toward greater financial inclusion, there is a need to attend to the crucial question of **what do we mean by "inclusion"?** By definition, 'inclusion'



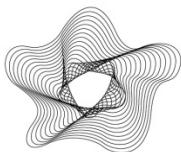
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means the involvement of more components and participants. **What practices and networks of financial transactions are people being “included into” or “excluded from” by such policy shifts remains a vital question.** Have we identified criteria that will help us understand **whether a policy or technological intervention is financially ‘inclusive’ or ‘exclusive’?** These are questions worth considering every time we encounter a disruptive innovation.

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