

Show Me the Cash: Direct Cash Transfer in India

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“Two things seem clear. First, if the objective is to alleviate poverty, we should have a program directed at helping the poor. Second, so far as possible the program should, while operating through the market, not distort the market or impede its functioning. This is a defect of price supports, minimum-wage laws, tariffs and the like.

The arrangement that recommends itself on purely mechanical grounds is a negative income tax. ... The advantages of this arrangement are clear. It is directed specifically at the problem of poverty. It gives help in the form most useful to the individual, namely, cash. It is general and could be substituted for the host of special measures now in effect. It makes explicit the cost borne by society. It operates outside the market. Like any other measures to alleviate poverty, it reduces the incentives of those helped to help themselves, but it does not eliminate that incentive entirely, as a system of supplementing incomes up to some fixed minimum would. An extra dollar earned always means more money available for expenditure.”

--- Milton Friedman in *Capitalism and Freedom*, 1962

India, according to the World Bank, accounts for one third of the poor in the world¹. Delivering benefits to the deserving recipients has been an old and major problem as well as a source of much corruption in India, since decades before former Prime Minister Rajiv Gandhi’s famous observation of only 15% of government outlay actually reaching the poor. India is not unique in this respect; most developing countries have struggled with such distributional issues. In recent years direct cash transfer schemes have become a much experimented vehicle of distribution of benefits in much of the developing world, mostly with encouraging results. India has also embarked upon this path with characteristic hesitation and arguments. Debate and skepticism equally dog the idea and the delivery mechanism, basically a unique ID based transfer system.

¹ World Bank, Poverty Reduction and Equity Department (2013)

This chapter seeks to understand the nature and implications of the Direct Cash Transfer programs being considered and experimented with in India, particularly in light of the experience elsewhere. The chapter is structured in five distinct sections: the issues about direct cash transfers raised in the theoretical literature in the area of public finance; existing subsidy and “kind transfer” schemes; the experience with direct cash transfers around the world; the political and social impact; and finally the first hesitant steps of India in this direction.

Section 1 - Does it Work in Theory?

Milton Friedman would probably go down as one of the earliest, or at any rate, the most famous and persuasive proponents of a cash transfer scheme. The idea and its possible implications for various dimensions of economic policy have been investigated closely by economists over the years. The principal bone of contention has understandably been the comparison of direct cash transfers with in-kind transfers. A forceful argument of Pareto-superiority of cash transfers over in-kind transfers was made in Aaron and von Furstenberg (1971). Analyzing the housing market he showed that equivalent amount of cash transfers to the household will be more efficient in raising the welfare than the subsidy (or subsidizing the house price). However, if the subsidy is given for some particular/fixed quantity it may turn out to be as efficient as the cash transfers. The counter-argument, that one can think of situations where in-kind transfers can Pareto dominate cash transfers was made in Nichols and Zeckhauser (1982), Guesnerie and Roberts (1984) and Blackorby and Donaldson (1988). The broad argument here is that while cash transfers Pareto-superior in a textbook-economy, in-kind transfers can well Pareto dominate cash transfers under a few far from unrealistic constraints. Typically the contexts involve multiple consumer types that are difficult to distinguish between though cases and the presence of positive externalities of in-kind transfers, though cases have been made of superiority of in-kind transfers even with homogenous consumers.²

In the presence of quality differentials, universal public provision of private good can accomplish redistribution of income as well. However whether the scheme would be "part of a properly designed redistributive package" would depend upon "the cost to the government of observing

² Gahvari (1995)

its citizens' incomes". The debate therefore has moved from a right or wrong view to the trade-off between information gathering costs and dead-weight loss from an inefficient policy.³ Gahvari and Mattos (2007) build on this model to develop a "conditional" cash transfer scheme by "linking the provision of the indivisible good to the payment of a lump-sum tax or the receipt of a rebate." The variation in lump-sum taxes helps achieve the first-best redistribution and improves upon the redistribution outcomes.⁴

In the presence of linear tax system, in-kind transfer of private goods can be Pareto improving as the revenue generated can be redistributed to improve the welfare⁵. Guesnerie and Roberts (1984) showed that in the second best economies, benefits arising out of the redistributive action of in-kind transfer programs more than offset the cost. Even in case of non-linear tax system, in-kind transfers can perform well as the program itself becomes less attractive for the high ability or income households compared to low income households.⁶

Kautilya's Arthashastra also mentions about a taxation system where rich were taxed and the amount collected was redistributed among the poor⁷. Under the system of Zakat, Islamic rulers in the Middle age provided income transfers to the poor and disabled from state revenue. In the book "Just give Money to the Poor" author puts the idea of cash transfer as to bypass the governments and NGOs and let the poor decide how they want to spend the money.⁸

Analysis on consumer expenditure data has shown that in-kind transfers are effective way of providing support to the poor. However, the success of the program also depends on accurate targeting as well as recipients valuation of the benefits.⁹ An experiment done on Mexico's Opourtunidades program showed that cash transfers to the poor raises their long term living standards. It was found that out of each peso transferred, a poor on average used 88 cents on consumption of goods and services and rest was invested. By investing, these households were able to increase their consumption by 34% after five years of the program.¹⁰

³ Besley & Coate (1991).

⁴ Besley & Coate (1991).

⁵ Munro (1991,92)

⁶ Cremer- Gahvari (1993)

⁷ Sen & Basu (2006)

⁸ Hanlon et al (2006)

⁹ Daniel T Slesnick (1996)

¹⁰ World Bank Report

Optimal transfer programs face a tradeoff between ‘productive efficiency’ and target efficiency. However, there are cases where equity efficiency trade off will be very low or in some case equity and efficiency might complement each other.¹¹

In almost every nation of the world today, there exist schemes to compensate the costs of the poor through subsidization and free delivery. The aim behind such programs is to ensure that the poor receive exactly what is necessary and important for survival, as well as to ensure basic living standards. Thus, before we can analyze the impact and effects of the CCT, it is important to get an overview of the existing subsidy schemes and “kind-transfer” programs.

Several experiments have been conducted, across the world, to analyze the reactions of the poor towards free and subsidized “necessary” goods. In one such case, the demand for bed nets was tested. Estimates show that the use of bed nets can reduce malaria infections by nearly half¹². However, very few households possess a bed net. Thus, it would seem to make sense to subsidize prices of bed nets so more households would be able to afford them. Experiments were conducted to test the sensitivity of such target goods to price¹³. It was found that the purchase of nets was indeed very sensitive to the price. Almost everybody took a free net home but demand rapidly fell with price rise. The experiment was replicated in different regions with slight variations. When people were given time to go home and collect cash (rather than having to buy on the spot), more people bought at a higher price, but demand still went up by several times when the price was brought down to zero. What was troubling was the fact that the demand for bed nets, though very sensitive to price, is not very sensitive to income. Even though a 15 percent increase in income is far more than the cost of a bed net, people who are 15 percent richer are only 5 percent more likely to buy a net than others.

Further, there have often been debates about the *uses and benefits* of subsidizing the cost of goods or distributing them for free. Economists argue that efforts to target goods to poor populations may prove ineffective, with the poor reselling donated goods to the non-poor who value them more

¹¹ Albert L.; Zeckhauser, Richard J. 1982

¹² Lengeler (2004)

¹³ Dupas, Pascaline (2010)

highly. Or if these subsidies can backfire—that is usage will be low *because* the price is so low. In *The White Man's Burden*¹⁴, William Easterly provides examples of subsidized bed nets being used as wedding veils. Others talk about toilets being used as flowerpots or, more graphically, condoms being used as balloons.

However, experiments conducted in Kenya by TAMTAM (Together Against Malaria) to test for the use of free bed nets, provide contradictory evidence. It was found that 60 to 70 percent of the women who had bought a net were indeed using it. Over time, usage went up to about 90 percent. Furthermore, there was no difference in usage between those who had paid for the nets and those who had not. The same kinds of results have been found in other settings, ruling out the possibility that subsidies are to blame for low usage.

Thus, if these supposed drawbacks do not exist, in a way, transferring kind ensures that the poor get exactly what they need. This, however, brings forth the question about what exactly it is that the poor need. Do governments really have that figured out? While food grains and healthcare are deemed basic necessities, questions loom over the benefits of distributing color televisions¹⁵ or even mobile phones¹⁶, as done by various state governments in India.

Section 3: International Experience-

The CCT program has grown enormously around the globe in past 10-15 years. Till 1997 where the program was implemented only in Brazil, Mexico and Bangladesh, now it has covered Asia, Africa, Central Europe, Latin America and Sub Saharan Africa. Not only the number of countries implementing the program has increased but also the scale of implementation of the existing program.

Mexico's PROGRESA renamed as Oportunidades in 2001, started with approximately 300,000 beneficiary households in 1997, now covers 5 million households. The federal Bolsa Família program of Brazil serves 11 million families which is around a total population of 46 million

¹⁴ Easterly, William (2006)

¹⁵ Elcot, 2010

¹⁶ Infochange Poverty, 2010

people. In Colombia, the program's initial goal was 400,000 households, but it had expanded to cover 1.5 million beneficiary households by 2007.¹⁷

The role of these programs varies from place to place according to the design and the context in which they operate. Most significantly it varies according to the size of the program. In terms of relative coverage, these transfer programs covers 40% of the population in Ecuador, 20% of population in Brazil and Mexico and just 1% of the population in Cambodia. In terms of budget, the costs range from about 0.50 percent of gross domestic product (GDP) in countries like Brazil, Ecuador and Mexico to 0.08 percent of GDP (Chile).

Motive behind the transfer programs are different in different countries. In Chile and Turkey where CCTs are focused more narrowly on extremely poor and socially excluded people, CCTs in Bangladesh and Cambodia have been used to reduce gender disparities in education. In Sub-Saharan Africa the CCT program has been implemented to alleviate HIV/AIDS epidemic.¹⁸

Impact of transfer program in different countries

On Education- in Mexico, the impact of *Oportunidades* in rural areas is significant for children making the transition from primary to secondary school.¹⁹ Positive spillover effects were also observed in case on *Oportunidades*—school enrolment increased for those children also who were not eligible for the transfer. In Nicaragua, the *RPS program* targeting the children of age group 7–13 showed large effects on school enrollment- the increase was by almost 13%.²⁰ In Honduras, the *PRAF* also had a positive effect on school enrollment; although the impact was much smaller— increase was only around 3 percentages²¹.

There are however, certain unexpected consequences as well. A study of conditional cash transfer in the city of Bogotá, Colombia²², found evidence of the tendency to concentrate resources on one child. The program offered parents the option to enter any of their age-eligible children into a

¹⁷ Fiszbein, Schady et al, 2009)

¹⁸ Fiszbein, Schady et al, 2009)

¹⁹ Schultz 2004; Behman, Sengupta and Todd 2005

²⁰ Maluccio and Flores 2005

²¹ Glewwe and Olinto (2004)

²² Barrera- Osorio et. al. (2008)

lottery. Lottery winners would get a monthly transfer as long as the child attended school regularly. It was found that winners were more likely to attend school regularly as well as re-enroll each academic year. However, the fact that in families that entered two or more children and one won, the child who lost the lottery was *less* likely to be enrolled in school than children in families where both lost, was quite disconcerting. It was expected that the increase in family income would help the second child. But, all resources were instead concentrated on only the winner.

Further, in Mexico, grade promotion improved as a result of cash transfers but achievement scores were negatively affected. Such undesirable impacts could be credited to the programme's effect on increasing the number of under-achieving students in school. Since such students have been out of school for a while (or have never attended), they are likely to have greater difficulty in catching up with those who have always been in school²³.

On Adult Labour Supply- CCT might affect the Adult labor supply both through income and price effect. If leisure is a normal good then the income effect associated with the transfers might result in more leisure and less work. And the price effect may make beneficiaries believe that by supplying less labor they will continue to be poor and eligible for the program. The impacts of CCTs on labor force participation vary across countries. Especially when leisure is a normal good, impact of in-kind transfers on labor supply is greater than cash transfers that the labor supply will be higher and also goods will be overprovided in that case.²⁴

The Colombian Familias en Acción and the Mexican Oportunidades have had no impact on adults' labor force participation. Chile Solidario has had a positive and significant effect on labor force participation in rural areas. Studies on Mexico's Oportunidades program to examine the effect on adult labor supply found no disincentive effect. In Cambodia also the adult labor supply was unaffected by the CESSP program²⁵

Critics of Bolsa Família allege that it has a negative impact on labour force participation. However, the evaluation found that the labour market participation rate of treated adults was, in fact, 2.6 % higher than for non-treated adults. This impact was different across genders- the participation rate of beneficiary women was 4.3 percentage points higher²¹

²³ IPC evaluation note (2007)

²⁴ Gahvari (2005)

²⁵ IPC working paper

On Child Labour- CCT programs can reduce the child labor through two channels. First, the very conditional nature of the program requires the enrolment in school and regular attendance. This gives less time to a child to take part in income generating activities. Second is the income effect- households that receive income are less likely to depend on the income of the children and hence child labor reduces. Several CCTs have been successful in reducing child labor.

In Nicaragua, the RPS reduced child work by 3–5 percentage among children aged 7–13 (. Also, the fraction of children who only studied instead of working or working and studying both increased significantly from 59 percent to 84 percent (Maluccio2005). PETI of Brazil which gives stipends directly to the students conditional on participation in school and special training program showed significant reduction in the beneficiaries' probability of working. In Cambodia, the CESSP program, that gives transfers to children in transition from primary to lower-secondary school, reduced work for pay by 11 percentage points.²⁶

However, Familias en Acción program in Columbia had no effect on child work (Attanasio et al. (2006) (although the program does appear to have reduced the amount of time dedicated to domestic chores); and Glewwe and Olinto (2004) find no effects of the PRAF program on child work in Honduras.

On Health, Calorie Intake- Jacoby (2002) showed that the caloric intake of children, who were the part of the program, was 80% higher on school days relative to non school days in Philippines. While comparing, food versus cash in Bangladesh the marginal propensity to consume (MPC) out of wheat transfers in-kind is significantly higher than the MPC out of cash transfers.²⁷

Further, the children of the beneficiaries of PROGRESA, the Mexican cash transfer program, have been found to have significantly lower levels of cortisol than comparable children whose mothers did not benefit from the program.²⁸ Biologically, there is a strong association between poverty and the level of cortisol produced by the body, an indicator of stress. The cortisol levels seem to go down when households receive some help.

²⁶ Filmer and Schady(2009c)

²⁷ Ninno and Dorosh (2003)

²⁸ Banerjee and Duflo (2011)

On Inequality- Cash transfers by redistributing the income, leads to the significant reduction in inequality. An IPC-UNDP working paper shows that there has been 4.7% and 5% reduction in Gini Index for Brazil and Mexico respectively for the year 1997-2004. Both the Bolsa Familia in Brazil and Oportunidades in Mexico have contributed for 21% of reduction in Gini coefficient, while in Chile, the program has contributed to 15% reduction in inequality. As the program was implemented at a smaller scale in Chile as compared to Mexico and Brazil, the impact was also smaller. In Brazil and Mexico, the total share of transfer program was 0.5% of total income whereas in Chile the share was only 0.01% of total income.

It has also been found that the transfer programs face a trade-off between extending coverage and improving efficiency. The program in Mexico has more efficient targeting than that in Brazil but at the price of having fewer poor households covered by the programme. Indeed, it is very difficult to expand a targeted programme while keeping the leakage rate from rising.

Further, a study by Angelucci and Giorgi establish how cash transfers to eligible individuals in Mexico goes on to affect the consumption of ineligible households living in the same village; operating through insurance and credit markets. They claim ineligible households benefit through gifts, reduced savings and increased loans²⁹.

There, however, remains a question on whether cash transfers are the *only* possible solution. A study by Smeeding and Lampman explores the significance of one private alternative to government transfers namely, direct interfamily giving of cash, food, and housing. Fragmentary evidence suggests that such interfamily transfer has decreased in the past few decades as government transfers increased. If current government transfers are conversions of, or substitutes for, interfamily transfers, then it follows that some of the benefits of government transfer “slide” over to “secondary beneficiaries,” i.e. those who would have made the private transfers. Further, it concludes that the effects of government transfers are not much different from those of the private transfers which they replace.³⁰

²⁹ Angelucci and Giorgi (2009)

³⁰ Lampman and Smeeding (1983)

Overview of Major Programs Across The World

i. Brazil's Bolsa Familia Program (BFP)- Largest Conditional Transfer Program in Developing World

The Bolsa Família Program (BFP) created in October 2003, is the merger of four preexisting cash transfer programs in Brazil. The program provides transfers ranging from R\$15 to R\$95 (US\$7-45) per month to poor families. Just after the two months of the launch of the program in Dec 2003, it covered 3.8 million families and then expanded to 11.1 million beneficiary families (46 million people) as of June 2006. The program claims to cover 100% of the poor and 25% of the Brazilian population. The annual household survey (PNAD 2004) result shows that the BFP accounted for a significant reduction in inequality (20-25%) and extreme poverty (16%).³¹

Public Spending on the program- Spending on CCTs has increased from 0.18% of GDP in 2002 (pre-reforms) to 0.36% in 2005. BFP spending in 2005 amounted to R\$6.7 billion (US\$3.2 billion), and the budgeted figure for 2006 is R\$8.3 billion (US\$4 billion, or 0.39% of projected GDP).

Impact of the program-

On Education- Bolsa Família has had a positive impact on school attendance. According to the survey done by IPC, the probability of absence is 3.6 percentage points lower for those children who are enrolled in the programme. Also, their probability of dropping out is 1.6 percentage points lower than that of children in non-treated households.³²

On Child Labour and School Attendance- It has been found that the income transfer programs had no significant effect on child labor but a positive and significant impact on school attendance. These kinds of program increase the chance of a poor child going to school but do not reduce his/her labor activity as they prefer doing both.

On Health- There has been no impact of the program on child immunizations, despite conditionalities attached in obtaining the benefit. According to the report, supply-side impediments could be the reason.

³¹ Fiszbein et al- 2009

³² Soares et al- 2007

On Labour Force- The labor market participation rate of treated adults was 2.6 percentage points higher than for non-treated adults. The participation rate of beneficiary women was 4.3 percentage points higher.

ii. **Overview of Mexico PROGRESA (Anti Poverty)**

PROGRESA began operations in 1997 covering 300,000 households in more than 5,000 communities and represented 46% of federal government's anti poverty budget. In 1999, the PROGRESA's budget was approximately US\$777 million which was equivalent to 0.2 percent of Mexico's gross domestic product (GDP). In 2002, the program covered more than four million families, a 20 percent of the Mexican population. The program's 2002 annual budget was around Mex\$18 billion (US\$1.8 billion)³³ . .

The proportions of first year administrative costs of Mexico's CCT Progresa were 65 percent on targeting, 8 percent on monitoring of conditions, and 8 percent on delivery of transfers. Three years later, 11 percent of administrative costs were spent on targeting, 24 percent on monitoring conditions, and 41 percent on delivery of transfers³⁴ .

On the similar lines an IFPRI report finds that for every 100 pesos allocated to the program, 8.2 pesos were administrative or program costs. That is the administrative expenses are less than 10% of the total cost. The report claims that the administrative cost incurred is smaller relative to the cost incurred in previous programs and other programs in different countries.

Impact of the Program³⁵-

Poverty- Program reduced the number of people with income levels below the poverty level by about 10 percent. The depth of poverty is reduced by 30 percent, and the severity index is reduced by 45 percent. For comparison, an untargeted transfer is found to reduce the depth of poverty by 28 percent and the severity of poverty by 36 percent.

Education- Percentage increase in enrolment in secondary education was reported more than 20% for girls and 10 percent for boys. Effect on enrolment in primary education was very low as more than 95 per cent of children were already enrolled in the rural areas, even before Progresa.

³³ World Bank Policy Research Paper

³⁴ Coady, Perez and Vera llamas 2000

³⁵ Mexico Progresa- Breaking the cycle of poverty

On Labour Supply and Child Labour- Labor-force participation for boys shows reductions as large as 15 to 25 percent relative to the probability of participating prior to the program. For girls also there are significant reductions in child labor. The lower incidence of child work due to the PROGRESA program is found to account for 65 percent (in November 1999) to 82 percent (in November 1998) of the increase in the enrollment of boys in school.

Progresa children aged one to five years had a 12 percent lower incidence of illness than non Progresa children . An increase in 16% in mean growth rate per year was reported for children who received treatment between twelve and thirty-six months of age (Behrman and Hoddinott, (2000)). Progrea also had impact on overall expenditure patterns. Overall median food expenditure were 13 percent higher in Progresa household than the non Progresa. Also, 45% reduction in severity in poverty and 15-25% reduction in labor force participation for boys has been reported.

Section 4 – Social and political impact

Apart from just the possible monetary impact, it is necessary to observe the social, political and long term effects on cash transfer schemes, as well as compare the impact on “unconditional” transfers.

A study on the cash transfers in Kenya³⁶ noted that participant households appeared to have very weak social networks, an indication of their vulnerability. Cash payments appeared to strengthen their social standing and provided households with capital. Additional resources enabled recipients to participate in community events and share food. They could now borrow when in need because they had a capacity to repay. Thus, families seemed to benefit socially, as well.

A study in Mexico³⁷ compared the voting results of the 2000 presidential election in villages that had received the social welfare program PROGRESA. Poor households received cash transfers as long as their children attended school and they visited health-care centers. Houses that received transfers for six months were compared against others that had received it for twenty-one months.

³⁶ Phyllis Ressler (2008)

³⁷ Ana Lorena De La O (2006)

Both the poll turnout and votes in favor of the party that brought PROGRESA were higher in villages which received benefits for longer. Because the households that received the benefits longer could see the impact on health and education on their lives, they responded in higher numbers.

The conditionality in PROGRESA is based on the principle that increased income is not enough and that parents need to be monitored. But do unconditional programs work the same way? A World Bank study found that conditionality does not seem to matter at all³⁸: The researchers offered the families of school-age girls a transfer ranging between \$5 and \$20 USD PPP per month. In one group, the transfer was conditional on enrollment. In another, it wasn't. A third group did not receive a transfer. The effects were large - after a year, dropout was 11 percent in the group that did not receive transfers, and only 6 percent among those who benefited from the transfer. But they were the same for those who received the conditional transfer and for those who got the unconditional one, suggesting that parents did not need to be *forced* to send their children to school, they needed to be helped financially.

Section 5 - DBT in India-

“The payments that were done through a complex, layered byzantine administrative system that were diminished in value by the time they reached their beneficiaries will now be paid directly”
– P. Chidambaram, November 24th 2012

The motive behind the Aadhaar enabled Cash Transfer Scheme (or DBT) in India is to enhance accessibility, uplift standard of living for majority of the poor and eliminate financial exclusion. On the beneficiary side, it claims to reduce dependence on intermediaries ('system'), thereby reducing hassle and corruption and making money available on time, in full amount. On the government side it claims for better targeting thereby removing “duplicates” and ghosts, reducing fiscal bill, bringing transparency and accountability and help in financial inclusion. According to the study conducted by NIPFP, investment on Aadhaar project would yield a return of 52.85% to

³⁸ Braid, McIntosh and Ozler (2009)

the government. The cost of the scheme will double from Rs 2,265 crore in 2012-13 to Rs 4,835 crore by 2020-21, and the benefits will trickle from Rs 425 crore in 2012-13 and to Rs 25,100 crore by 2021. The study also shows that there will be significant reduction in leakages- 8.3% for the PDS, 5% for the MNGRES wage disbursement and 10% of the fertilizer and LPG subsidies.

An internal study conducted by the Prime Minister's Office (PMO) in consultation with various ministries has revealed that, based on the actual money spent by the central government during 2010-2011 under various subsidies totaling Rs. 211,474 crore (approximately \$38 billion), the scheme can result in a net saving of Rs. 33,000 crore (\$6 billion) by way of plugging leakages³⁹.

DBT and Aadhaar-

Varad Pandey, an Officer on Special Duty (OSD) to India's Minister for Rural Development, Mr Jairam Ramesh, explains the close linkages between Aadhaar and direct cash transfers.

To get the benefits under the Direct Benefit Transfer scheme in India, every resident will need to have an Aadhaar number (based on biometrics) that will be linked to their bank. Entitlements and benefits will be transferred directly to beneficiaries through Aadhaar-linked Bank accounts. And ultimately the disbursements will take place at the doorsteps of the beneficiaries through Business Correspondents or BC who will make payments using micro ATMs. It has been claimed that the Aadhaar enabled DBT system will reduce several layers of intermediaries, points of leakage and delays.

The only major cost for the functioning of the DBT would be the process to obtain an Aadhaar number. The Aadhaar number, however, can be used for several other purposes. And as calculated by National Institute of Public Finance and Policy through a cost benefit analysis, the Aadhaar project would yield an internal rate of return in real terms of 52.85 percent to the government.⁴⁰

However, others⁴¹ have questioned the fact that the NIPFP analysis is based on assumptions rather than facts. An estimate of fraud in pension schemes was made by the Society of Social Audit Accountability and Transparency (Department of Rural Development, Government of Andhra Pradesh) for July-October

³⁹ Business India (2012)

⁴⁰ NIPFP 2012

⁴¹ Khera, Reetika (2011)

2012⁴². The report suggests that the total discrepancies in disbursement of pensions are around 2% while the NIPFP report assumes a 7% discrepancy rate.

DBT Process

As explained in the figure below, each citizen is awarded an Aadhar number based on his biometric and demographic information, and stored in a central database. The whole process of DBT includes - Aadhaar enrolment, opening up of Bank account and linking of bank account with the Aadhaar number, digitization and Aadhaar seeding of beneficiary lists, Aadhaar e-KYC services, online authentication and payment to the beneficiaries.

Any area with a population more than 1000 will be served by Business Correspondents. Linking of Aadhaar to the bank account can be done by either BC or bank branches. Those beneficiaries who do not have bank account, instant bank account can be opened by using Aadhaar e-KYC. Aadhaar e-KYC provides data for name, date of birth, gender, address and photograph of the enrolled beneficiary. E-KYC can also be used to avail state government services, banking and insurance services, mobile connection, LPG connections, train travel etc. E-KYC can scale up to lakhs of transaction on daily basis.

⁴² Patnaik, Ila (2012)

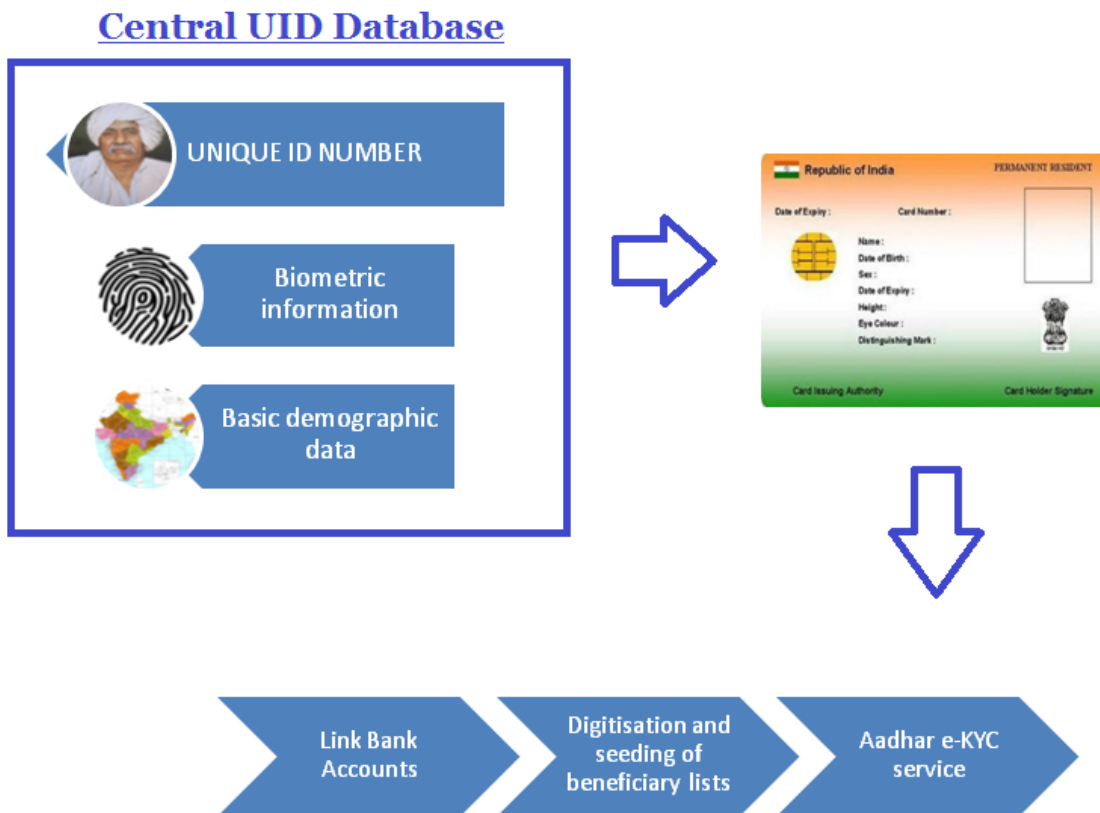


Figure 1 : Aadhar Process

National Payment Corporation of India has deployed Aadhaar Payment Bridge which can handle cores of transaction on a daily basis. Payments by the government, state government, companies or employers will transfer the funds to the sponsored bank or post office and through Aadhaar Payment Bridge those funds will be transferred to the beneficiaries account.

One of the most important components required for smooth operation of Aadhar services is the existence of various interoperable points through which individuals can access their bank accounts – make payments and receive transfers. Though some infrastructure for this is already in place, further growth is required to ensure easy access and no delays. The figure below highlights these possibilities.

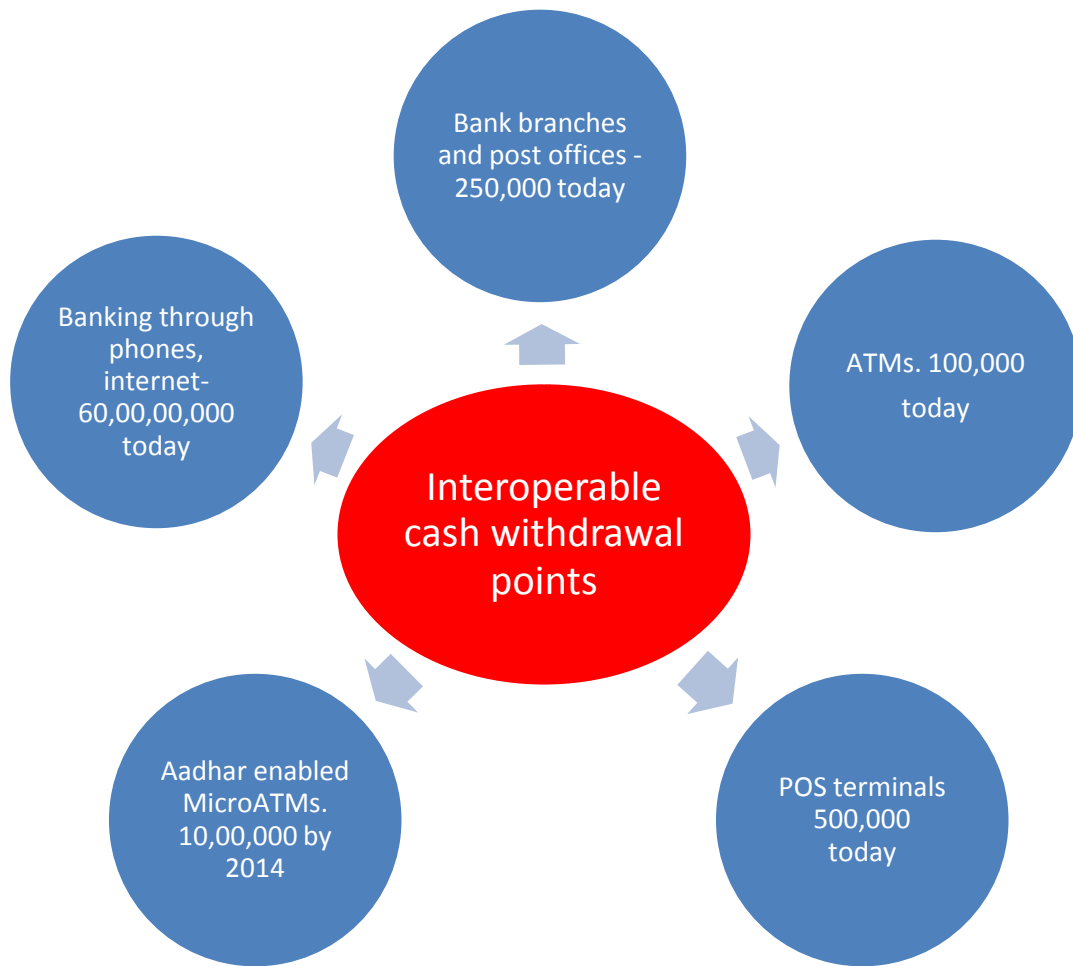


Figure 2: Interoperable cash withdrawal points - A Component of the DBT System

Financial Model for First Phase-

Estimates of one time Aadhaar Seeding and Digitization Cost- With an estimated beneficiary of 25 crore and seeding of 100 crore database across all schemes will cost Rs. 1500 crore. According to the report of Task Force on Aadhaar enabled Payment Infrastructure- annually there will be 413 crore transactions, payment of Rs.2, 93,000 crore and including bank fees, total cost to the government will be Rs.5, 332 crore annually.

DBT in its Second Phase-

Key activities in the second phase will include enrolment and seeding of Aadhaar numbers to the bank account. For that, three CPSUs, - BEL, ECIL and ITIL have been assigned the enrolment

work. For 33 districts in 11 states there are 390 Tahsils. Village wise schedule for enrolment will be prepared in consultation District/Tahsil administrator. DMs / Collectors shall nominate a Nodal Officer for all matters pertaining to DBT⁴³.

DC's will be responsible for managing the complete project, providing infrastructure for enrolment- premise, electricity and security, document management, providing EA code and Station ID to UIDAI and will ensure quality and timely enrolment. UIDAI will be responsible for appointing registrars, organizing operator training and certification and provide fund for enrolment and IEC activities⁴⁴.

DBT through Central Plan Scheme Monitoring System (CPSMS)⁴⁵-

To provide solutions for efficient fund management, CPSMS is a planning commission scheme implemented by the Controller General of Accounts. It is basically a payment platform for Aadhaar based payments. The main functions of CPSMS will be to keep track of all the releases from GoI till last point. It will provide real time bank balances of implementing agencies and facilitate fund management both at micro as well as macro level.

Process- Beneficiaries list along with the amount payable to each beneficiary shall be prepared by Implementing Agency. They shall also upload digitally signed list on CPSMS. E-sanction for the payment to the beneficiaries shall be made at the Program Division level in the ministry. PD shall enter the details of sanction order, amount of sanction and other details. PD shall also digitally cross sign the list prepared by the IAs in CPSMS. After receiving the e-sanction, the DDO shall generate e-bill and submit it to the PAOs. For direct payment through banks, digitally signed Electronic Payment file shall be created by PAO. PAO will approve the DBT files and any extra payment beyond the limit will require two digital signatories.

⁴³ Chandramouli.C 2013

⁴⁴ Planning Commission, 29th April, 2013

⁴⁵ Planning Commission, 29th April, 2013

Prospects and Problems- Indian Discussion

UIDAI claims for providing unique identity to each beneficiary and elimination of ‘bogus cards’. There are three types of bogus cards (a) “ghost” (b) “duplicates” and (c) “misclassified” cards. UID can eliminate only two types of bogus cards- ghosts and duplicates. Inclusion error happening due to misclassification cannot be taken care by UID as the classification of BPL families is based on a census which is conceptually flawed and poorly implemented.⁴⁶ For food subsidy, it has been argued by many that linking of schemes like PDS and NREGA can be very disruptive; instead use of cost effective and cheaper technologies that are already in use in some part of the country will fix the loopholes in less disruptive manner. For instance- Computerization of PDS in Chhattisgarh and Tamil Nadu and SMS based alert system. In Chhattisgarh, grains are delivered in easily identifiable yellow truck and SMS is sent to a few people in the village.⁴⁷

However, there is counter argument that says that cash transfer or food coupons are better alternatives as it gives more options to the consumers, will be easier to include coarse cereals, and milk type products and hence broaden the scope of food subsidy and end illegal diversion. Also it is easier to audit number of food coupons than sacks of grains. For government also, it is more efficient to distribute cash for food rather than incurring a huge cost on procuring, storing and then transporting and distributing and transporting it to the poor⁴⁸.

Moreover, cash transfers may have a significant impact on inflation⁴⁹. With inflationary pressures causing major concerns, Pani mentions how the government needs to be wary of massive cash transfers to voters. Though it seems like only the method of delivering the subsidies has changed, the basic foundations of working of the voter now changes, due to the multiplier effect. Providing an individual with cash means that some money is spent and the rest saved. The money spent becomes the income of another and the process continues and the total effect on the economy is many times the actual amount, depending on the quantity of money spent. Thus, replacing kind by

⁴⁶ Khera, 2011; Dreze and Khera 2010a

⁴⁷ Dreze and Khera 2010b

⁴⁸ Ramaswamy, 2011

⁴⁹ Pani, Narendra (2012)

cash may increase inflationary pressures. This is probably the reason that food and fertilizer have been kept out of the initial shift to cash transfer⁵⁰.

In case of crucial items like food, direct provision protects consumers from inflation and is also broader strategy to ensure domestic supply. Also, poor are more likely to prefer provision in kind than those who are better off. An IFPRI study comparing the impact of cash and in-kind transfer program in Bangladesh finds that only poorest households prefer food as transfer because as income increases, beneficiaries' preference for food declines. Relatively better off beneficiaries prefer only cash. ⁵¹”

A survey in Delhi on slum women showed that majority of slum women do not want cash transfers or smart cards system and prefer a PDS system for food subsidy. ⁵²

Cash transfers cannot and should not replace the public provision of essential goods and services, but rather complement them. In other words, cash transfers can play a positive redistributive role if they are taken as a complement rather than substitute to the public provision of basic services.⁵³ *It is a new system, not a new scheme.* It aims to make the payments under existing government schemes reach people faster and more efficiently. For instance, In Brazil, Health program is successful because all the basic health care services are universal and more than half of the expenditure on health care is public expenditure. But in case of India, it is barely one quarter. In India, public health services hardly exist and in that case transfer schemes like Rashtriya Swasthaya Bima Yojna won't be able to fill the gap. In Brazil and Mexico, Cash Transfers are seen as a compliment and not as a substitute for providing the health, education and other basic service. ⁵⁴

Recently a study was conducted in New Delhi⁵⁵ to analyze the effects of an unconditional cash transfer in place of the regular food subsidy. There were interesting outcomes to this project. Households that were provided cash had the opportunity to invest in non-cereal foods outside the realm of food subsidy. Further, it was noticed that even though the calorie intake in the cereal

⁵⁰ Narendra Pani (2012)

⁵¹ IFPRI Report

⁵² Parsai, Gargi (2011):

⁵³ Ghosh 2011

⁵⁴ Dreze 2011 FE

⁵⁵ Gangopadhyay, Lensik and Yadav (2012)

foods decreased, the consumption on “bad” goods such as alcohols did not increase significantly. Instead household increased consumption of products such as milk and meat. Further, spillover effects were noticed as PDS shops improved their quality of stock, fearing competition from private shops which individuals now had access to. At the end of the test run, only 4% of households that had opted for the cash transfer wanted to leave while almost 22% of the households that had not initially preferred cash transfers, now preferred cash to kind.

Outcome of these kinds of transfer program is more or less country specific. Transfer programs in Latin American countries were successful because even before the implementation of the program, they had highly developed social insurance system with wide coverage. Thus “Targeting” marginalized group was easier as the majority of the population was already covered. However, in case of India majority of population is in need, and also the targeting mechanism are also outdated and not efficient.

A study conducted by Ghatak et. al, to analyze the Bihar government’s bicycle distribution scheme found some interesting results⁵⁶. It is found that almost 97% of the intended beneficiaries received the money for the bicycles and almost 93% of them received the right amount. Further, only 2% of those who received the money did not purchase the bicycle. These show that the project has been performing incredibly well. However, when asked whether the beneficiaries preferred cash or kind, only 45% opted for cash. The reasons behind this were then further analyzed. The major issue was that most households had to put in extra cash themselves to buy the cycle, as the money provided by the government was insufficient. Thus, even though the program was working brilliantly, it wasn’t sufficient to convince the recipients. An important lesson to be learnt from this is the fact that careful analysis needs to be done to ensure that cash transfers are sufficient for the benefit of the recipients.

Kotkasim Pilot Project- A pilot project launched in December 2011, in Kotkasim village in Rajasthan, was a big failure. Under this scheme, beneficiaries were supposed to receive the subsidy

⁵⁶ Ghatak et. al (2013)

amount in cash into their bank accounts and use that to purchase kerosene from the Fair Price Shops at the regular market price.

According to the report of District Supply Officer, Alwar, out of 25,843 ration card holders in Kotkasim, bank accounts were opened only for 13,458 card- holders which was little over 50%. Villagers' post office accounts were rejected as those accounts do not have online services. A continuous decline in the sale of kerosene was noticed after the launch of the project. It was reported that people who did not buy kerosene received subsidy; others those who bought were deprived of subsidy amount for more than six months. Bank branches were also at a distance of 8-15 km from the village.

However, according to supply inspector of Alwar district, the off take of Kerosene was 84 kiloliters a month before the launch of the scheme but after the launch it was barely 100 kiloliters for nine months which led to a savings of worth of Rs.2 Crore.⁵⁷

First Phase launch in East Godavari- East Godavari district has won the 'National Aadhaar Governance Award' for achieving a near total coverage of DBT. Yet, when the project was launched, only 75 per cent of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) workers had been enrolled as on January 6. According to AP Principal Secretary (Rural Development), out of 15, 84,161 registered workers, 3, 96,040 workers were yet to be enrolled... Also, those without the Aadhaar number were denied the benefits even for those schemes which were not covered under DBT, for example MGNREGS wages and access to PDS grain.⁵⁸

The TPDS suffers from both inefficiency and leakage. Planning Commission study (2005) estimates that for every Rs.1 worth of benefits delivered, the Government of India (GoI) spends Rs.3.65. The estimated leakage in Bihar's TPDS for the year 2005 was 75%. (PEO 2005)A pre pilot study conducted by JPAL in Bihar to check whether consumers prefer Cash Transfer or TPDS founds that majority of the participants preferred cash transfer over TPDS. The reason given was the poor functioning of FPS. Survey found that on average FPS shop remains open only for

⁵⁷ Hindu Dec15, 2012

⁵⁸ Hindu, 21st January, 2012

10/days per month in urban areas and 6 days/month in rural areas, whereas Kirana Shops opens almost every day and for more number of hours than FPS. About 80% of the respondents of the survey reported about adulteration of goods at FPS. Also, the degree of price volatility reported at kirana shops (less than 15%) was much less than that at fair price shops.⁵⁹

Status of First Phase Rollout-

The first phase of DBT, launched on 1st January, 2013 covered 43 districts. It was expected to cover another 78 districts from 1st April, 2013 in its second phase. However, because of the slow rollout in the first phase and inadequate process, government postponed the date for second phase rollout to July 1, 2013. It will also include LPG subsidy in 20 districts where consumers will get about Rs. 4,000 per annum in cash and will buy the LPG at market price of Rs. 901.50 per 14.2 kg.⁶⁰

In its very first phase, DBT was supposed to be rolled out in 43 districts in 16 states under 26 selected schemes. The selection of districts was done on the basis of coverage of bank accounts and Aadhaar. However, on 1st Jan, the scheme was rolled only for 7 schemes and covered just 20 out of 43 districts. Out of the rest 23 districts, rollout in 11 districts were postponed till 1st Feb 2013 and the other 12 districts till 1st March, 2013.⁶¹

According to the government estimates, about 1.6 million beneficiaries were supposed to be covered under phase 1. Out of these, 1.3 million have been identified by banks but only 5, 50,000 have reported their Aadhaar number.⁶²

The reason for the slow process is mainly because of linking of bank accounts with the Aadhaar number. 78 per cent of the eligible beneficiaries have bank accounts and nearly 32 per cent of them have also been allotted a unique identity number (UID), but just 4% of 16.6 lakh beneficiary's Aadhaar numbers have been linked to their bank accounts. Over one lakh beneficiary who comes

⁵⁹ JPAl Report

⁶⁰ Business Standard, 29th April

⁶¹ Economic Times, 10th April

⁶² Business Standard, 29th April

under 5 of 26 schemes- 80% of them have bank accounts and 32.2 percent have UID number and bank account but only 2.6% of the, have their Aadhaar number linked with their bank account. ⁶³

In the first phase scheme completed 35 million transactions and transferred only Rs. 45 crore to Aadhaar seeded accounts. Thus, the average transfer for each account was of only Rs. 1,285 since January 1. According to the officials, major problem is faced in seeding the Aadhaar number to bank accounts. ⁶⁴

Latest Numbers- 32 crore Aadhaar cards have been issued out of which only 80 lakhs have been linked to the bank account which is just 2.5%. Tamil Nadu has the lowest number of Aadhaar cards (1.8 crore) in south India. ⁶⁵

⁶³ Economic Times, 10th April

⁶⁴ Business Standard, 29th April, 2013

⁶⁵ Economic Times, 3rd May, 2013

Abbreviations

DBT- direct benefit transfer

CCT- conditional cash transfer

POS – point of sale

UID – unique identity number

DBT – direct benefit transfer

LPG – liquefied petroleum gas

MGNREGS – Mahatma Gandhi National Rural Employment Guarantee Scheme

PDS – Public Distribution System

FPS – Fair Price Shop

TPDS – Targeted Public Distribution System

CPSMS - Central Plan Scheme Monitoring System

PAO – Pay and Accounts Officer

IA – implementing agency

DDO – district development officer

CPSU – central public sector undertaking

BEL – Bharat Electronics Limited

ECIL – Electronics Corporation of India Limited

ITIL– Informational Technology Infrastructure Library.

BC – business correspondent

BFP – bolsa familia program

MPC – marginal propensity to consume

KYC – know your customer

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