POLICY BRIEF

More Ghost Savings: Understanding the fiscal impact of India's direct transfer program — Update

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Since April 1, 2015, India's cooking gas subsidies have been distributed by electronic transfer through the Direct Benefit Transfer for Liquefied Petroleum Gas (LPG) scheme (known as DBTL, or PAHAL[1]). Under this system, which has replaced the direct sale of cooking gas cylinders at subsidized prices, households place an order for LPG with their gas distributor, receive an amount equivalent to the current (variable) subsidy amount via electronic transfer to their bank account, then pay the full unsubsidized price for the cylinder in cash on collection or delivery.

As currently designed, the DBTL scheme does not reform the size or structure of cooking gas subsidies, but changes the mechanism by which they are delivered. DBTL was introduced with the stated aim of improving the operational efficiency of the LPG subsidy system and delivering significant savings in total fiscal expenditure by removing dual pricing (thereby reducing the consumption of subsidized LPG by non-authorized users). Throughout the process of introducing DBTL there has, however, been a notable lack of official clarity regarding the scheme's actual fiscal effects.

While full-year data for FY 2015/16 is not yet available, a recent research note by IISD analyzed the claim that the introduction of the DBTL program resulted in savings of up to Rs. 12,700 crore (USD 1.9 billion) in FY 2014/15, demonstrating (through analysis of existing publicly available data) that the implementation of the scheme actually resulted in a net fiscal outlay in the most recent financial year. Following the publication of this note, the Ministry of Petroleum and Natural Gas (MoPNG) issued a press release stating that the introduction of the DBTL scheme had instead resulted in "savings" of Rs. 14,672 crore (USD 2.2bn) in FY 2014/15. This claim was widely reported, in some cases as fact, and has subsequently been publicly repeated as evidence of the efficacy of DBTL.

The calculations of the maximum "avoided" subsidy expenditure for FY 2014/15 outlined in our previous note are based on an application of the Chief Economic Advisor's (CEA's) own methodology and stated estimates for the reduction in subsidized consumption achieved by introducing DBTL (through all channels, including but not limited to the identification and blocking of irregular connections) to the actual period within which the program was implemented. While the CEA's reported estimates for the impact on final consumption overstated the actual impact of DBTL, did not disaggregate its overall effect into its various components, and were applied to a period in which the program was not in operation, this approach nevertheless represented an attempt to address the actual effect on consumption.

[1] PAHAL is an acronym for "Pratyaksh Hanstantrit Labh," the title given to the modified DBTL scheme introduced by the NDA government from November 2014 onwards.

By accurately applying the consumption-based methodology (and using the CEA's own estimates for the impact on consumption), our previous research note demonstrated that the maximum reduction in subsidy expenditure achievable through the implementation of DBTL in FY 2014/15 was approximately Rs. 143 crore (USD 21 million). It should be noted that this figure represents the maximum theoretical saving achievable on subsidy expenditure in FY 2014/15, through all mechanisms, *before accounting for any costs of implementation*. In the last financial year, the government allocated Rs. 200 crore (USD 30 million) for DBTL implementation costs, and the cost of commission on transfers made in FY 2014/15 amounted to at least Rs. 40 crore (USD 6 million)[2]—both of which represent significant underestimates relative to the actual costs incurred. Therefore the *maximum* net saving according to the government's own figures—without accurately accounting for the costs of implementation, and entirely discounting the Rs. 5,234 crore (USD 781 million) provided in permanent advances (and associated interest costs)—was approximately minus (-) Rs. 97 crore (USD 14 million).

The Ministry's subsequent press release adopts a different approach, disregarding any attempt to assess the program's actual effect on subsidized consumption, and instead uses a proxy indicator (the total number of connections), from which it extrapolates a claimed figure for subsidy savings. The release states that:

> As on 1st April, 2015, there were 18.19 crore (181.9 million) registered LPG Consumers and 14.85 crore (148.5 million) active consumers implying a gap of 3.34 crore (33.4 million) consumers which are duplicate / fake / inactive accounts blocked under PAHAL Scheme and related initiatives. If we take into account the quota of 12 cylinders per consumer and the average LPG subsidy of Rs.336 [sic] per cylinder for the year 2014–15, estimated savings in LPG subsidy due to the blocking of 3.34 crore accounts work out to Rs.14,672 crore (USD 2.2 billion), during that year.[3]

The Ministry's latest figure rests firstly on the claim that the introduction of DBTL blocked a total of 33.4 million LPG connections *for the full financial year*. Given the stated parameters of the program this is, self-evidently, a technical impossibility. As outlined in detail in the previous research note, DBTL was only introduced nationwide in January 2015 (nine months into the financial year), and was only mandatory in a total of 8 per cent of districts for a period of six weeks (from mid-February to end-March 2015). To the extent that DBTL was responsible for the identification and blocking of any irregular connections in FY 2014/15, this effect was therefore *limited to the period in which DBTL was in operation*, which represented a small fraction of the full financial year.

In addition, publicly available information clearly demonstrates that DBTL was not responsible for identifying and blocking 33.4 million connections (or even a significant fraction of this figure) during *any* part of the financial year; instead, the large majority of the connections formally identified and blocked as of March 31, 2015 (and presented as blocked by DBTL in the latest press release) were blocked *prior* to the nationwide introduction of DBTL, and through methods *entirely unrelated* to DBTL or Aadhaar.

[2] On reported payments of Rs. 3,971 crore (USD 593 million) in H2 FY 2014-15, based on the initially stipulated 1 per cent commission fee.

[3] Discounting the obvious arithmetical error in the initial press release, which appears to have been the result of a typographic error regarding the average per-cylinder subsidy figure, and was corrected without comment in a subsequent press release. It should also be noted that alongside the attribution errors outlined, the final savings estimate is further exaggerated by claiming that every "inactive" connection (wrongly) attributed to DBTL would otherwise have consumed the maximum full-year allowance of 12 cylinders per household, despite a) at least 10 million of these connections being recorded as dormant as of April 2012, and therefore *consuming no subsidized LPG at all*; and b) previous press releases by the MoPNG itself stating that 99 per cent of all consumers use less than the maximum cylinder allowance, and explicitly using the *average* consumption figure per active connection (of approximately 7–8 cylinders per household) to estimate subsidy savings from other initiatives.

Despite the difference in methodology, an accurate application of the connection-based approach to estimating the impact of DBTL in FY 2014/15—as outlined below—produces a final figure similar to that calculated through the consumption-based method, reiterating that the introduction of DBTL, far from resulting in substantial savings, likely came at a net cost for the financial year.

Accounting for the Difference Between Registered and Active Connections

As detailed in IISD's March 2014 report on reforms to LPG subsidy policy, the public sector Oil Marketing Companies (OMCs) that supply subsidized LPG have been involved in an extensive process of identifying and blocking irregular connections for several years—an initiative which preceded both DBTL and Aadhaar, and was unrelated to either. By March 2012, the OMCs had already blocked a reported 3.8 million connections—including 2.9 million multiple connections and 0.9 million LPG connections of consumers with Piped Natural Gas PNG connections—as part of an initial connection regularization drive, undertaken within the individual OMC's connection registers, from May 2010 onwards. Deduplication activities were then undertaken across OMC connection lists (a process explained in detail here and here), and by November 2012 the OMCs had reportedly identified a total of 34.6 million (3.46 crore) irregular connections (consisting of 25.3 million "same-address" connections, 1.3 million "same-address, same-name" connections, and 8 million "inactive" connections), and of these blocked a total of 13.3 million (consisting of 4 million "same-address" connections, 1.3 million "same-address, same-name" connections, and 8 million "inactive" connections).

As of November 2012, the OMCs had therefore identified (through a process unconnected to DBTL or Aadhaar) at least 26.6 million potential multiple connections, and of these blocked 5.3 million (a figure which appears to include the 2.9 million multiple connections blocked as of March 2012), with a further 21.3 million potential multiple connections undergoing a process of verification. The total reported number of blocked connections as of November 2012 was therefore at least 14.2 million, including 8 million dormant connections, 5.3 million multiple connections, and 0.9 million PNG connections. In relation to the outstanding potential multiple connections requiring verification, an initial deadline of November 15, 2012 was then set for the submission of customer details to distributors by potential multiple connection holders, and subsequently extended to December 31, 2012. Following this deadline, any remaining potential duplicate connections for which customer information had not been received would be converted to non-subsidized connections.

By May 2013, the government stated that the OMCs had blocked 6.3 million duplicate connections, raising the total number of connections reportedly identified and blocked to at least 15.2 million (almost all of which continued to be recorded by the OMCs within total connection figures). In mid-May 2013, the government then announced that all registered connections at addresses with un-regularized multiple connections would be blocked from receiving any LPG (including non-subsidized cylinders) pending verification from June 1, 2013. It is unclear how many additional connections were blocked at this point (and how many of these remained blocked throughout FY 2014/15); however Ministry figures for registered and active connections suggest that the total number of connections recorded as "inactive" as of November 1, 2014 was approximately 2.3 crore (23 million).[4] In early March 2015, the Ministry then announced that the OMCs had blocked a total of 12.7 million multiple connections—a figure corresponding to roughly half of the 26.6 million potential multiple connections initially identified by list-based deduplication as of November 2012.[5] Publicly available data therefore indicates that the large majority of potentially irregular connections identified and blocked as of

[4] Full calculations available on request. In December 2014, immediately prior to DBTL's nationwide launch, the Ministry stated that there were a total of 15.34 crore (153.4 million) active connections, implying that approximately 2.36 crore (23.6 million) connections were recorded as "inactive" at this point (as the total number of registered connections as of end December 2014 was approximately 17.7 crore (177 million)).

[5] Of these blocked connections, just 173,638 (1.37 per cent) had been formally terminated or surrendered—demonstrating that the OMCs were identifying suspected irregular connections and blocking them from accessing subsidized LPG, but continuing to report them within total registered connections.

end FY 2014/15 had been identified prior to April 1, 2014 (i.e., before the current government was elected), through processes entirely unconnected to DBTL.

Plugging "Leakages": Why Aadhaar is not sudhaar

Applying the connection-based methodology adopted in the Ministry's latest release, and using publicly available information, it is possible to calculate the approximate additionality delivered by DBTL through the identification and blocking of irregular connections in FY 2014/15 (and the maximum associated saving in subsidy expenditure). As detailed above, the large majority of potentially irregular connections identified for regularization were identified through list-based deduplication—a process unrelated to DBTL. The only mechanism for identifying and blocking potentially irregular connections that was specific to the DBTL program (as implemented) was Aadhaar-based deduplication.

Within much media reporting of the DBTL program, there has been a conflation of direct transfer with the controversial Aadhaar program. It is important to emphasize that the direct benefit transfer modality does not require any linkage with Aadhaar in order to function, and that Aadhaar was effectively irrelevant to the operation of the DBTL program, serving mainly to increase the costs of implementation (and therefore reducing any potential fiscal gain from the introduction of direct transfer). The government's own figures have consistently demonstrated that the maximum number of potential duplicates identified in LPG databases through Aadhaar-based deduplication is approximately 1 per cent (or less) of total connections assessed[6]—a figure which may relate to an even smaller percentage of actual consumption.

Data released by the Ministry of Finance indicates that as of April 1, 2015 there were 8.5 crore (85 million) LPG customers linked to Aadhaar—over half of whom had been linked as part of the previous implementation of DBTL by the UPA government in FY 2013/14. Assuming that approximately 3.5 crore (35 million) connections were newly linked to Aadhaar prior to April 1, 2015 due to the PAHAL Scheme, that identification and blocking of potentially irregular connections occurred almost immediately upon registration, and taking into account the staggered nature of connection registration and differential monthly per-cylinder subsidy rates, the maximum *gross* saving in subsidy expenditure (i.e., before accounting for costs) from Aadhaar-based deduplication in FY 2014/15 can therefore be estimated at approximately Rs. 12 to 14 crore (USD 1.8-2.1 million)—less than 0.1 per cent of the government's most recent stated estimate using the connection-based methodology[7] (full calculations available on request).

In comparison, on the basis of approximately 140–145 million registered connections by the middle of FY 2012/13, simple list-based deduplication (as outlined here and here) reportedly identified 18–19 per cent of total connections (and over 20 per cent of total active connections, assuming around 10 million registered connections were inactive) as potentially irregular connections to be regularized or blocked. In other words, list-based deduplication was around *15 to 20 times more effective* in identifying irregular connections than the Aadhaar-based method, while imposing *less than 1 per cent* of the equivalent cost of implementation to both government and beneficiaries (and raising none of the attendant issues regarding fundamental rights).

[6] In its July 22 affidavit to the Supreme Court, the Ministry of Finance stated that of 8.08 crore (80.8 million) IOCL connections assessed, only 8 lakh (800,000) potential duplicates were found. In its report on DBTL, the Dhande Committee had previously stated that "[i]n the 291 districts covered under DBTL, 6.18 lakh (618,000) duplicate connections were identified out of over 40 million LPG consumers who provided their Aadhaar numbers. This de-duplication could lead to an annual saving of Rs.1.931 billion (assuming a 50% duplication rate and annual consumption of 12 cylinders up to the cap)." These figures are additionally corroborated by the reported results of deduplication activities undertaken in Phase 1 districts as part of the initial introduction of DBTL, and district-level data collected as part of IISD's field assessment of the Mysore DBTL pilot program (details available on request).

[7] Note that this figure represents a small fraction of the maximum estimated (gross) impact of DBTL in FY 2014/15 generated using the consumption-based approach (and therefore incorporating all impact channels), reflecting the subsidiary role of deduplication within the overall impact of DBTL on subsidized consumption (which is primarily driven by reductions in distribution-level diversion due to the removal of dual pricing and the disruption of legitimate consumption).

Policy Implications: Non-DBT-based reforms are potentially faster, more equitable, and more cost-effective

As outlined in our previous report on LPG subsidies and subsidy reform, there have been three principal changes to LPG subsidy policy since 2012; the introduction (and subsequent revisions) of the household cylinder cap, the implementation of connection validation and regularization measures to identify and block invalid connections, and changes to the LPG subsidy disbursement mechanism (DBTL/PAHAL). It is the connection regularization program, which in no way required the introduction of either DBTL or Aadhaar, which has overwhelmingly been responsible for the identification and removal of invalid connections and associated consumption. These connections are now being presented as having been identified and blocked due to DBTL and /or Aadhaar in FY 2014–15 (and a massively inflated notional saving calculated on this basis), when in almost all cases they were identified and blocked through processes unrelated to either initiative—in many cases several years prior to their (re)introduction. In addition, both the cylinder cap and connection regularization are simple and cost-effective initiatives to implement, therefore delivering a significant *net* fiscal saving (and, in the case of a cylinder cap, immediately improving the highly regressive distribution of the existing subsidy).

The misrepresentation of the impact of direct transfer, and of the role of the Aadhaar program within it, are extremely damaging to the effective design (and public oversight and accountability) of subsidy reform policy in India.

In the case of LPG, the path to substantive subsidy reform is clear—reinstatement of a realistic per-household cylinder cap, adjustment of the per-cylinder price-to-subsidy ratio, a crash program of access extension to *all* non-connected households, and rapid expansion and formalization of access to smaller cylinders (both subsidized and unsubsidized). In the case of other subsidized products, such as kerosene and food grains, current and previous administration's emphasis on direct transfer has similarly inhibited the introduction of potentially simpler, more equitable and more cost-effective reforms, and come at a substantial opportunity cost both to the poor and to the wider economy. The government's forthcoming budget represents a valuable opportunity to signal the adoption of a more consistently evidence-based approach to subsidy reform. A commitment to the timely and accurate provision of data is a necessary first step.

NOTE: All figures in Indian rupees (INR) or US dollars (USD) ($1 = Rs. 67). One crore = 10 million. One lakh = 100,000.

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