India Market Strategy

Aadhaar – from promise to delivery

Equity Strategy

India

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Aadhaar achieving critical scale; is 2014 the tipping point for tangible benefits?

Aadhaar (India's unique identity programme) is now achieving critical scale, thus moving from being another of India's promising potential "reforms" to being a real one with significant benefits. Half of India's population has enrolled and 100% coverage is possible in 2-3 years. We believe that tangible benefits (in terms of its enabling meaningful financial inclusion and savings from lower leakages from the government's benefits transfer system should start becoming visible in 2014. The key bottleneck to realising benefits, apart from not having a bank account in the first place, is lethargy in linking bank accounts to Aadhaar. This is now being addressed, in our view.

Financial inclusion – multiplier benefits; eKYC and supportive RBI key catalyst

Financial inclusion can have huge productivity impact in an under-banked market like India's, with its large informal economy - possibly more than 1% of GDP. It can enable sharply higher rural penetration, in a profitable manner. The Reserve Bank of India's (RBI) support in terms of regulatory intervention remains the key for driving financial inclusion. The RBI has been playing a proactive role, with the new Governor making this a top priority. Electronic Know Your Customer (eKYC) is a good example - online authentication can be used in place of current KYC documents to open a bank account, making the process simpler, with lower customer acquisition costs.

Fiscal benefits huge, but over the long term; LPG a key catalyst

Social welfare spending in India is high at 10-12% of GDP for the central government and state governments, and has inherently high leakages due to inefficient and arguably corrupt distribution machinery, which has led to intended users not receiving the benefits. The government has rolled out plans to use Aadhaar as basis for direct transfer of benefits (DBT) to the intended beneficiaries' bank accounts. This can help plug leakages in the form of fakes/duplicates and generate huge fiscal savings for the government. Savings in different scenarios could be from 0.2-1.2% of GDP, depending on the schemes targeted (some need political choice) and whether states participate. Liquefied petroleum gas (LPG) as the first key DBT item could accelerate the linking of bank accounts to Aadhaar. Its successful rollout, also in terms of substantial savings for the government, could be the catalyst in realising benefits more broadly. This could include in areas such as kerosene, fertilizer, and maybe even food.

Sector and stock implications

Beneficiaries of current leakages are arguably the middle-/high-income classes. Plugging these leakages through DBT may thus adversely impact discretionary consumption and we remain Underweight on that. Direct beneficiaries of DBT could be fertilizer companies, such as Coromandel, and government oil companies, through lower losses/shares of subsidy incurred by them. GAIL may be the biggest beneficiary as it bears subsidy on kerosene and LPG. Financial inclusion beneficiaries would likely be private banks – HDFC Bank, ICICI Bank, IndusInd are our preferred stocks. Political risk – noise may increase if BJP wins, but rollback seems very unlikely. Aadhaar already has critical scale and any known opposition is not to the concept of Aadhaar.

Contents

Aadhaar – from promise to delivery

Aadhaar is not the typical reform measure one hears about from prescribing macro experts. It is more of a micro programme, but one that could have immense macro implications for India's growth potential. The Aadhaar programme has been well documented and investors understand it. A lot of the benefits are intuitive and obvious, especially so in a developing country like India.

What is worth highlighting to investors, though, is that Aadhaar is now achieving critical scale (almost half the population is already covered) and is thus clearly moving from being just another of India's promising potential "reforms" to being a real one on the verge of delivering significant and tangible benefits. Our recent meetings with various stakeholders bear this out too.

In this note we highlight the benefits of Aadhaar and attempt to quantify some of these, both in terms of impact and timelines.

Platform with network power - productivity impact huge

Aadhaar is a unique identification number given to Indian residents, and captures the biometrics of the individual (fingerprints and eye scan). Thus it weeds out duplicate identities, fakes and "ghosts", as one person can have only one Aadhaar and an Aadhaar number can belong to only one person. The Unique Identification Authority of India (UIDAI), with Nandan Nilekani as its chairman, is an organisation under the Planning Commission of India.

Aadhaar enables the creation of a huge platform with the tremendous power of a ubiquitous network. Enabling financial inclusion can have a major positive impact in an underpenetrated market in terms of banking. Improving the delivery of social welfare schemes is another obvious positive, which cannot be over-emphasised given the current huge fiscal deficits and inefficient distribution. The impact on productivity will likely thus be huge. We discuss this in detail in the sections below.

Opportunities for the application of Aadhaar

- Aadhaar-enabled ATMs can aid access to banking
- Aadhaar-enabled payment systems can aid banking penetration
- Aadhaar-enabled mobile connections
- Pension payments
- Scholarships and other social welfare schemes
- Use in fair price shops for the public distribution system (PDS) – there are over 0.5m Fair Price Shops (FPS) and about 20 transactions per shop per day would imply 10m transactions per day
- National Rural Employment Guarantee Act (ICT) workers can be paid using Aadhaar
- E-governance
- E-commerce

Already achieved critical scale

Almost 600m people (half of India's population) have enrolled in the Aadhaar programme, and c.500m Aadhaar cards have been issued. The current run-rate of Aadhaar enrolments is more than a million per day (scalable to 2m a day). India's entire population could thus be possibly covered in the next 2-3 years. Eleven states and Union Territories have Aadhaar saturation levels of 75% or above, with several of them — Andhra Pradesh, Himachal Pradesh, Tripura, Delhi and Chandigarh — at levels above 90%.

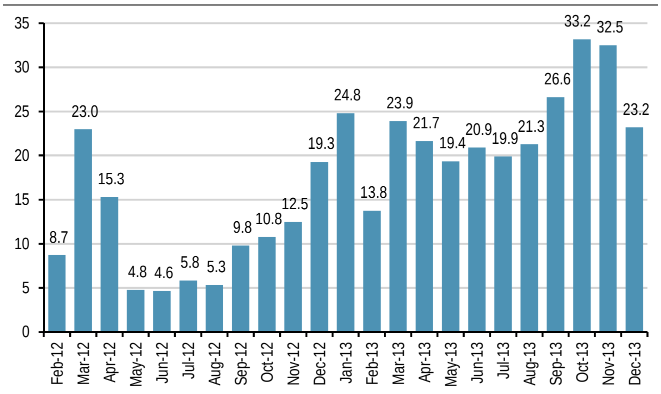
Some 25,000 stations are live for Aadhaar enrolment. About 15,000 micro ATMs have been opened, which will help deepen and widen financial inclusion. About 40m people have already linked their bank accounts with Aadhaar. More than 150 banks currently participate in the Aadhaar Payment Bridge platform.

Direct Benefits Transfer (DBT) has been rolled out by nine ministries in 28 schemes across 121 districts under phases 1 & 2, and DBT for Liquefied Petroleum Gas (DBTL) in 95 districts – India has 640 districts, as per its Census 2011. As of December 2013, more than Rs15bn had been transferred over the Aadhaar Payment Bridge (APB) in more than 28m transactions under DBT and DBTL. Some 15-17m cash transfers have been done with the help of Aadhaar. A total of over 14.9m authentications by 3.79m unique number holders have already been carried out, with accuracy levels exceeding 92%.

Under the NREGA scheme, 70-80m Aadhaar enrolments have taken place.

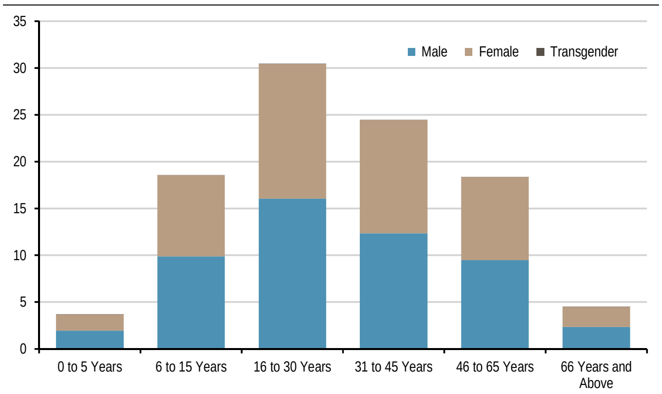
Usage of Aadhaar numbers has helped prevent duplicates and fakes, resulting in substantial savings, even in the initial implementation phase.

Figure 1: Monthly Aadhaar enrolment (update)



Source: UIDAI

Figure 2: Aadhaar enrolment by age and gender



Source: UIDAI

Is 2014 a tipping point in terms of benefits?

Given that almost half the population is already covered by Aadhaar, we believe that tangible benefits (in terms of its enabling meaningful financial inclusion and savings from lower leakages from the government's benefits transfer system) should start becoming visible in 2014.

The biggest bottleneck to realising these benefits, apart from not having a bank account in the first place, remains lethargy in linking bank accounts to Aadhaar (see details in section below).

Two drivers could change this in 2014, in our view.

(1) Subsidies on LPG cylinders are now clearly on the path of being given only through cash transfers to beneficiaries' bank accounts. This will compel lazy beneficiaries to ensure their bank accounts are linked to Aadhaar. An annual subsidy of Rs5,000-7,000 or US$80-110 may arguably be worth the effort of spending a couple of minutes online.

(2) The other big driver could be eKYC. A potential customer can open a bank account with just his Aadhaar number. This suffices for KYC requirements, which has been a big constraint for banking penetration given the large informal economy in India.

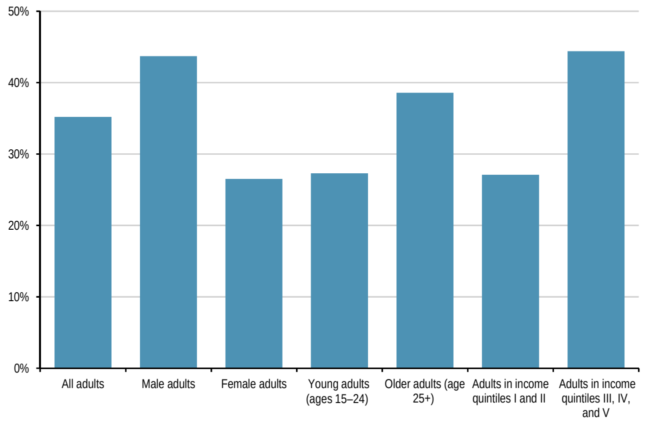
For more on these, see the sections below.

Financial inclusion – multiplier benefits

Underpenetrated banking market with unique challenges

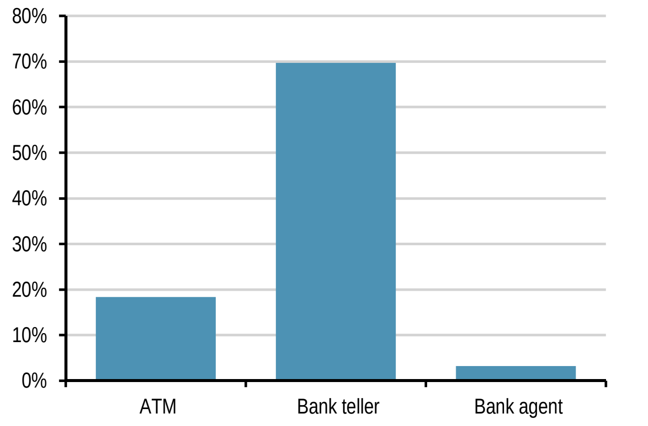
As per World Bank data, in 2011, only 35% of adults in India had an account at a formal institution (44% males, 27% females). Only 27% of those in the lower income quintiles (who are the primary intended beneficiaries) had an account. Also, there are only about 39,500 offices of commercial banks in India's 600,000 villages.

Figure 3: Account at a formal financial institution



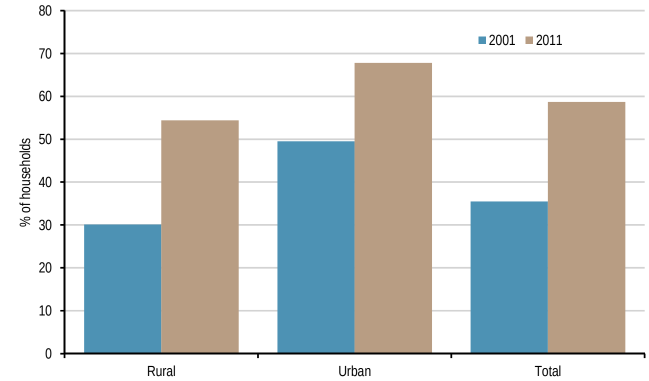
Source: World Bank, UBS

Figure 4: Main mode of withdrawal



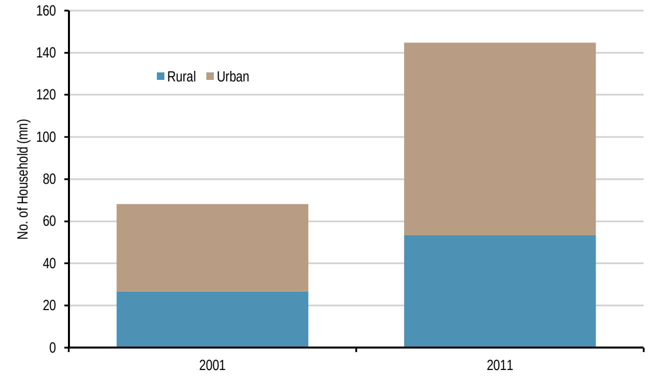
Source: World Bank, UBS

Figure 5: Population with access to banking



Source: GoI

Figure 6: Households with access to banking



Source: GoI

Though the actual number is unknown, some estimates suggest that in India there are, at best, only 200-250m bank accounts in terms of unique individuals, in a population of more than 1.2bn. Of course, the actual total number of accounts is much more, given that most of the banked population have multiple accounts.

Figure 7: Deposits of scheduled commercial banks, according to type of deposit, by population origin

Population	Current		Savings		Term		Total	
group	No. of A/Cs ('000)	Amount (Rs m)	No. of A/Cs ('000)	Amount (Rs m)	No. of A/Cs ('000)	Amount (Rs m)	No. of A/Cs ('000)	Amount (Rs m)
Rural	7,674	285,611	241,395	2,860,021	34,003	2,586,227	283,072	5,731,859
Semi-Urban	8,199	644,174	196,503	3,710,776	35,249	4,070,497	239,951	8,425,447
Urban	9,131	1,263,597	130,025	4,004,903	41,470	7,457,421	180,626	12,725,921
Metropolitan	11,269	4,329,879	134,817	5,483,696	53,465	24,085,632	199,551	33,899,207
All India	36,272	6,523,261	702,741	16,059,396	164,187	38,199,777	903,200	60,782,433

Note: March 2012.
Source: RBI

Another problem is that India is still at a very low level of financial literacy. Not many of the intended beneficiaries are adept at handling ATMs (they are uncomfortable with securing a card and are definitely so with coping with the PIN code), or use them or agents currently as a preferred mode of withdrawal – the bank teller is the main mode for 70% of the population. In this context, the proposal of using micro ATMs or Business/Banking Correspondents (BC) on a widespread scale can be challenging.

How can Aadhaar drive financial inclusion? eKYC and supportive RBI key drivers

Low-cost access to make banking viable in remote locations

Despite the introduction of BCs and technological advancements, banks still face problems in providing their services to remote locations. (BCs are persons employed by the bank, or through an external agency, who provide door-to-door banking services – such as savings, deposits and remittances – to the unbanked population in remote areas where regular branch-based banking services do not exist, through simple handheld POS devices.)

Given the low revenue potential from these customers, the proposition is mostly a loss-making one. One of the UIDAI's objectives is to facilitate the delivery of financial services to enable financial inclusion, and the issuing of Aadhaar numbers along with the provision of online authentication can help the banks overcome this problem. The implementation and generation of identities based on Aadhaar provides an opportunity for financial service providers to leverage on the platform and reach a large set of the population at a lower cost.

Currently, rural areas are unbanked or have very low banking penetration. With very few existing accounts in these areas, there is limited service delivery, making it difficult for new accounts to be opened. With Aadhaar enrolments taking place at a rapid pace, bank accounts could be opened on a large scale.

Enable account opening

The Aadhaar enrolment form does provide the option of opening a bank account (or linking an existing account) with the Aadhaar identity. If this option is chosen, the UIDAI can provide the bank with the customer's details and consent, thereby assisting the opening of a bank account at very low effort on the part of the bank.

Supportive RBI…

RBI's support in terms of regulatory intervention, as in the case of eKYC and ATMs, remains key for driving financial inclusion.

The RBI has been driving financial inclusion through its first three-year financial inclusion plan (FIP) (April 2010 - March 2013), during which a lot of progress was made: 1. Banking outlets in villages increased to nearly 268,000 from 67,694; 2. around 7,400 rural branches were opened; 3. around 109m Basic Savings Bank Deposit Accounts were added, and these now total 182m; 4. about 9.48m farm sector households and 2.24m non-farm sector households were provided with small entrepreneurial credit; and 5. around 490m transactions were carried out in ICT-based accounts through BCs. However, despite reasonable progress in the penetration of banking services and the opening of basic bank accounts, the number of transactions through ICT-based BC outlets is still low. To continue the process of ensuring access to banking services to the excluded, the three-year FIP for the period 2013-16 is now being drawn up.

The RBI has played a proactive role in the rollout of the DBT scheme too. State-Level Bankers' Committee (SLBC) Convenor Banks were advised to co-ordinate with government functionaries to implement Aadhaar-enabled payments. Banks have to expedite the opening of bank accounts and the seeding of accounts with Aadhaar numbers. The status of the rollout of Aadhaar-enabled payments is a regular agenda item for discussion in SLBC meetings as part of Financial Inclusion/Electronic Benefit Transfer (EBT) implementation.

The RBI is also supportive of the Aadhaar Enabled Payment Systems (AEPS) architecture designed by UIDAI along with NPCI as a platform that banks can use to expand their financial inclusion initiatives.

…and a supportive new RBI Governor - Raghuram Rajan

RBI governor Raghuram Rajan has indicated that financial inclusion will be a key priority in 2014 and has urged banks to be innovative when reaching out to under-served customers. He has set out financial inclusion as one of the five pillars of the central bank's policies

The RBI in September appointed a Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households under the Chairmanship of Nachiket Mor, Member on the Central Board of Directors, RBI. The objectives of the committee are to frame a detailed vision for financial inclusion and financial deepening in India.

eKYC – simple process and much lower cost

At a very basic level, since the UIDAI will capture any resident's demographic and biometric data under Aadhaar, this can be used in place of currently required KYC documents to open a bank account for residents. This will practically eliminate the customer acquisition cost associated with account opening. This can be in the form of eKYC, where the customer need not provide any physical documents, because a simple online authentication from UIDAI will be sufficient. Apart from reducing the cost (possibly by three quarters), it will make the process simpler and expedite it.

Discussions are on between the UIDAI, RBI and Ministry of Finance, and some banks, such as Axis Bank (in 1,000 branches), have started accepting Aadhaar as a KYC document.

ATMs

All new ATMs are required to be Aadhaar-enabled, i.e., they need to have the facility to read biometric information. Requirements like these from the RBI can also go a long way in enabling Aadhaar as a driver for financial inclusion.

Aadhaar-enabled payment system

The Aadhaar-enabled payment bridge can be used to disburse benefits payments using the UID 'Aadhaar' number. It can support various schemes like NREGA, Pensions, scholarships, and so on, to make financial transactions for beneficiaries using the Aadhaar number. The basic premise is that one BC Customer Service Point will have the ability to service customers of many banks based on the unique biometric identification data stored in the Aadhaar database. The AEPS platform is expected to empower bank customers to use Aadhaars as their identity to access their respective Aadhaar-enabled bank accounts and perform basic banking transactions. These include balance enquiry, cash withdrawal and deposit, and transfer of funds (remittances) through the BC, using micro ATMs, apart from the receipt of electronic benefit transfer by crediting of their bank accounts. A number of banks (such as Axis Bank, ICICI Bank, PNB, SBI and Union Bank) are live on AEPS, while a number of them are in the on-boarding process.

Financial inclusion – the benefits

More than 1% of GDP

According to research conducted by Prof. D. Humphrey of Florida State University and others, a shift from cash to electronic payments can result in cost savings of 1-2% of a country's GDP. We believe the benefits are more obvious in a country like India with a large informal economy (some estimates put it at nearly half of the reported economy). The productivity benefits can be enhanced as it may also facilitate better and cheaper credit availability.

Multiple uses

Apart from eKYC, Aadhaar can be used as an identification document by RBI, SEBI and IRDA ultimately. These can help in instant, paperless transactions.

Aadhaar-linked credit history

With the information about financial transactions being stored online via Aadhaar, an individual's credit history can be accessed by lending institutions and this can facilitate the increase of credit, especially rural credit where credit history is otherwise difficult to ascertain.

Aadhaar as an address

Using Aadhaar as address money can be transferred from person to person and hence used for remittances. Again this can be meaningful for a country like India with a large migrant population.

Aadhaar-enabled DBT – fiscal control

Please also refer to our note, "The politics of cash…and the economics", dated 15 January 2013.

Social spending in India is high at 10-12% of GDP for the central government and state governments. It has inherently high leakages due to inefficient and arguably corrupt distribution machinery. This has led to intended recipients not receiving the benefits – the former Prime Minister of India, Rajiv Gandhi, once stated that only 20% of the intended benefits reached the intended beneficiary. Any scheme that can help to correct this is obviously politically powerful in a democracy in which 50% of households earn less than US$1,650 a year.

The government has already rolled out plans to use Aadhaar as the basis for the direct transfer of cash/benefits to the intended beneficiaries' bank accounts, through proper biometric identification. This can aid in two broad ways:

- The first phase covers those schemes in which benefits—such as pensions/scholarships, etc.—are, anyway, transferred directly to the beneficiaries. Leakages in the form of fakes and duplicates can be plugged easily.
- The scheme can be extended at a later stage to cover even those forms of distribution that are currently in kind (say cheap or free food), and thereafter transfer may be in the form of 'direct cash'.

Just to pop any over-enthusiastic bubbles floating around, be aware that Aadhaar-enabled DBT cannot ensure perfect targeting. Aadhaar itself captures only identity and not any demographic data. Thus it cannot solve the problem of identifying the needy perfectly. It has to rely on existing databases that state governments have on the list of beneficiaries. This is even more so given poor disclosure of income levels (in India, less than 10% of the population have Income-Tax PAN cards, and even within that group only one-third of them file tax returns).

Targeting per se also needs pre-requisite political backing, without which DBT itself does not achieve its full potential. A good example is the fertilizer subsidy (0.8% of GDP) where targeting it only for the poor farmers is a political call – even today agri-income has zero income tax, even for rich farmers.

Quantifying the fiscal benefits

Quantifying the potential benefits of DCT is difficult given that estimates of existing leakage are at best patchy. We attempt the same after meeting various functionaries in the government as well as policy think-tanks, such as the National Institute of Public Finance and Policy (NIPFP).

Current subsidy/welfare schemes in India – 10-12% of GDP

A large part of the subsidy comes from the central government, but the state governments also provide additional subsidies on certain goods, in addition to a number of welfare programs. The implementation of even the centrally funded subsidy schemes is, however, in large part carried out by the states.

The following table gives a breakdown of the amount spent on various subsidies and schemes by the different ministries of the central government. The total amount spend on these schemes is more than Rs4trn a year. If we include the state governments' expenditures on social welfare, the total amount is much larger, at Rs10trn.

Figure 8: Expenditure on various subsidies and social welfare schemes by the central government

Rs bn	FY13 spending	% of GDP
Total spending on subsidies and welfare	4,105.9	4.1%
Of which subsidies:	2,570.7	2.6%
Food subsidy	968.6	1.0%
Petroleum subsidy	950.0	0.9%
Fertilizer subsidy	659.7	0.7%
Pensions	408.7	0.4%
MGNREGA	315.7	0.3%
Education - Sarva Shiksha Abhiyan and Mid-day meals	293.9	0.3%
Employment - National Employment Guarantee Fund	154.1	0.2%
Health - National Rural Health Mission	150.9	0.2%
Housing - Indira Awas Yojana	81.2	0.1%
Interest subsidies	74.2	0.1%
Others	48.9	0.0%

Source: Budget documents

Figure 9: Social expenditure by the central and state governments

Rs bn	Central govt.	State govt.	Total	Central govt. % of GDP	State govt. % of GDP
Social services (revenue expenditure)	1,878	5,137	7,014	1.9%	5.1%
Education, sports, art and culture	633	2,605	3,238	0.6%	2.6%
Medical & public health	119	541	660	0.1%	0.5%
Social security & welfare	172	575	746	0.2%	0.6%
Others - housing, employment, welfare and development	954	1,416	2,370	1.0%	1.4%
Pension and other retirement benefits	638	1,404	2,042	0.6%	1.4%
Total	2,516	6,541	9,057	2.5%	6.5%

Note: Social expenditure by central government shown above does not include subsidies, FY13 revised.
Source: CEIC, UBS

We look at potential savings from different perspectives/areas.

Plugging leakage and duplication

The most obvious benefits are in the form of plugging leakages and duplication, which can be anywhere between 10% and 40% of the value of the transfers. These are especially present in the Public Distribution System (PDS) for food/ kerosene and also LPG, pensions, scholarships and school grants, and so on. The table below provides the potential benefits, i.e., savings to the government, of plugging leakages, using estimates by the NIPFP.

These leakages appear conservative to us and our discussion with both NIPFP and government functionaries confirm the likelihood of the same. This would arguably be the easier part of the savings to achieve though.

Figure 10: Savings generated using leakage assumptions by NIPFP

Scheme	Details	Leakages assumption (% of value of transfer/subsidy)	Current spending (Rs bn)	Savings (Rs bn)
MNREGS		7.0%	293.9	20.6
PDS	Leakages in food grains	12.5%	595	74.4
	Leakages in kerosene	8.3%	176.5	14.7
Fertilizer Subsidy		7.0%	659.7	46.2
LPG Subsidy		10.0%	237.3	23.7
Education	(teacher salaries, mid-day meals, etc.)	10.0%	248.9	24.9
Other Schemes	(pensions, scholarships, housing, etc.)	7.0-10.0%	264.9	21.0
Total			**2476.3**	**225.5**
% of GDP				**0.2%**

Source: NIPFP, budget documents, UBS

PDS mis-reporting

Apart from leakages, currently there can be misreporting of end-stocks in the PDS – at the Fair Price Shop (FPS) level, any stocks left over at the end of the month go unreported, i.e., the ending stock is always reported as nil, which is because there is no proper maintenance of records of offtake by intended beneficiaries. This can be potentially stopped by using Aadhaar and could generate savings as high as 10% of total spending. NSS analysis shows that in 2004-05 the implied PDS leakage could have been as high as 46% for food.

Figure 11: PDS implied leakage—offtake vs. consumption

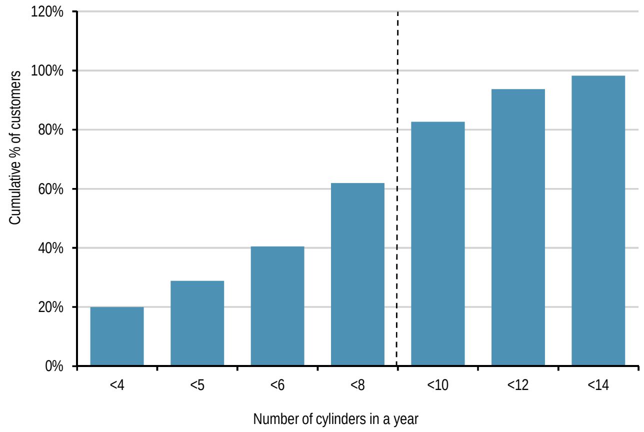
	1993–94	1999–2000	2004–05
(a) NSS PDS consumption (m tons)			
Rice	7.20	9.30	9.98
Wheat	3.44	2.99	3.55
Total	10.64	12.29	13.53
(b) PDS offtake (m tons)			
Rice	8.84	11.35	16.62
Wheat	5.86	5.76	13.02
Total	14.70	17.11	29.65
Ratio of (a) to (b)			
Rice	0.81	0.82	0.60
Wheat	0.59	0.52	0.27
Total	0.72	0.72	0.46

Source: NSS - Planning Commission XIth five-year plan report, UBS

Kerosene/LPG – dual-pricing driving pilferage

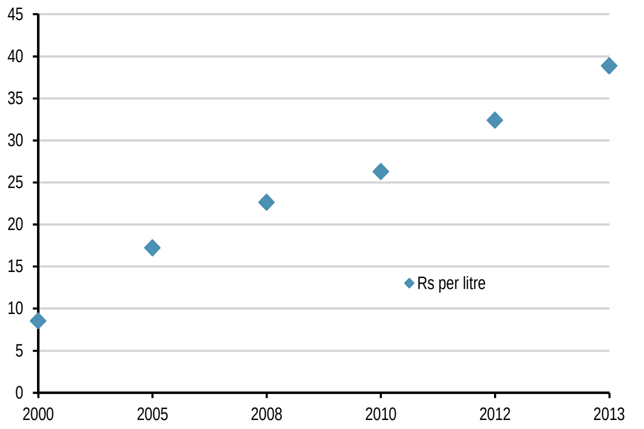
Also, for kerosene, given that there is dual pricing, a large proportion of kerosene is diverted away from intended beneficiaries (i.e., towards those who are not eligible for the subsidised kerosene) or away from its intended use (i.e., used for purposes like adulterating diesel, which costs more). Estimates by the NCAER in 2005 suggest a diversion of 39% - which could be higher now given that price differentials between kerosene and diesel have increased (current difference between diesel and kerosene prices, Delhi, is about Rs39 per litre vs. Rs17 in 2005).

Figure 12: LPG - cap on subsidised consumption



Source: Task force report on Direct Transfer of Subsidies, UBS

Figure 13: Difference between diesel and kerosene prices



Source: Bloomberg, UBS

However, given that LPG leakages (since LPG for commercial use is not subsidised, there is diversion of subsidised LPG from household towards commercial use) will be largely addressed by the cap of nine cylinders per year, we have maintained conservative assumptions for LPG leakage plugging based on Aadhaar-enabled DBT.

Savings higher than NIPFP estimates arguably

A pilot in Maharashtra discovered that 20% of the students registered in the schools of a particular district were fake (i.e., did not in fact really exist) – if this can be generalised at the country level, leakage in the education sector can also be higher than assumed above.

Using higher leakage assumptions, which are also supported by our discussions with authorities and economists, in the following table, shows that potential savings could be even higher.

Figure 14: Savings generated using leakage assumptions higher than NIPFP

Scheme	Details	Leakage assumption (% of value of transfer/subsidy)	Current spending (Rs bn)	Savings (Rs bn)
MNREGS		10.0%	293.9	29.4
PDS	Leakages in food grains	20.0%	595.0	119.0
	Leakages in kerosene	40.0%	176.5	70.6
Fertilizer subsidy		7.0%	659.7	46.2
LPG subsidy		10.0%	237.3	23.7
Education	(teacher salaries, mid-day meals, etc.)	20.0%	248.9	49.8
Other schemes	(pensions, scholarships, housing, etc.)	15.0-20.0%	264.9	43.8
Total			2,476.3	382.5
% of GDP				0.4%

Source: NIPFP, budget documents, UBS

Other areas need political backing – fertilizers, for example

There are some areas where the leakages may not be so high currently, such as fertilizers, but the spending can be reduced through targeting. For example, the government may decide not to provide subsidised fertilizers to farmers with larger land holdings – this is completely a political call, and may be a difficult one to make, given that there is no income tax levied on the agriculture sector as of now, even on rich farmers.

Alternatively, some economists also suggest that the amount of subsidy should be directly transferred to the users and the rate be progressive reduced in proportion to usage (amount or nature)/size of land, such that poor farmers receive the entire subsidy amount and rich ones receive only a portion. This could generate savings of as much as Rs150-200bn.

Figure 15: Savings through plugging leakages and potential targeting

Size group (Hectares)	% used by group of total fertilizer usage	Amount of subsidy (Rs bn) 659.7	Plugging leakage only (Leakage assumption 7%)	Excluding large farmers	Plugging leakage and targeting Excluding medium & large farmers
Marginal (Below 1.0)	28.3%	186.7	13.1	13.1	13.1
Small (1.0-1.99)	23.0%	151.6	10.6	10.6	10.6
Semi-Medium (2.0-3.99)	23.3%	153.6	10.8	10.8	10.8
Medium (4.0-9.99)	19.1%	126.3	8.8	8.8	126.3
Large (10 and above)	6.3%	41.4	2.9	41.4	41.4
Savings			**46.2**	**84.7**	**202.2**
Savings (% of subsidy)			**7.0%**	**12.8%**	**30.6%**

Source: India Fertilizer Scenario 2010 – Dept. of Fertilizers, UBS

States – this is where the big delta could be

The bigger savings, in our view, can come if state governments start implementing DBT. This is given their social spending is much more than that of the central government (including all subsidies and other welfare schemes) – expenditure to the tune of Rs6,500bn (including Rs1,400bn for pensions). Part of the total amount is for the regular running of social schemes rather than an outright social spending – hence it might not be affected by Aadhaar-enabled DCT. We try to incorporate this in our estimation, reflected in a lower leakage percentage assumption.

Figure 16: Potential savings by state governments

State spending on social schemes, incl. pensions (Rs bn)	6,541
Savings - 5%	327
Savings - 10%	654
Savings - 15%	981

Note: Part of the total amount is for the regular running of social schemes rather than an outright social spending – hence 5-10% savings are more likely.
Source: CMIE, UBS

Fiscal impact – could be significant, but only in the long term…

The impact on fiscal deficits could be significant in Scenario 3 where states also roll out the scheme. This may happen in totality only over the long term, possibly only over more than five years. The impact on fiscal deficits in the interim (over the next 1-2 years) is more likely to be closer to that envisaged in Scenario 1.

Figure 17: Potential fiscal saving scenarios

Scenario	Fiscal saving (Rs bn)	Fiscal saving (% of GDP)
Scenario I – NIPFP leakage assumptions	225	0.2%
Scenario II – Higher leakage assumptions + fertilizer targeting	538	0.5%
Scenario II – Higher leakage assumptions + fertilizer targeting + States saving	1,193	1.2%

Source: UBS estimates

Figure 18: Potential fiscal saving scenarios – central and state governments

	Centre saving		State saving	
	Rs bn	% of deficit	Rs bn	% of deficit
Scenario I – NIPFP leakage assumptions	225	4.3%		
Scenario II – Higher leakage assumptions + fertilizer targeting	538	10.3%		
Scenario II – Higher leakage assumptions + fertilizer targeting + States saving	1193	22.9%	654	30.4%

Source: UBS estimates

Efficiency benefits from market price mechanism

Where the benefits are in the form subsidised products/services, this can help by ensuring such products move at market prices, leading to a more efficient distribution setup as well as ensuring it does not distort market dynamics. The intended "subsidy/benefit" can be transferred directly to the intended recipient, again using Aadhaar identity.

LPG a proof case as well as a catalyst for other schemes

DBTL (DBT for LPG)

According to the Ministry of Petroleum and Natural Gas, the DBTL scheme will cover 291 districts of the country by January 2014, covering a total of 92.2m LPG consumers. As per the approved expansion, the DBTL scheme had been expanded to 184 districts covering 65.7m LPG consumers as of 10 December 2013.

Figure 19: Current LPG prices (Rs) (Delhi)

Subsidised domestic LPG	Non-subsidised domestic LPG
414	1241

Source: PIB, UBS

Figure 20: Status of DBTL

Phase	Timeline	Number of Districts
I	Already launched	19
II	Already launched	34
III	Launched on 1.10.13	43
IV	Launched on 1.11.13	39
V	Launched on 1.12.13	48
VI	Launched on 1.1.14	103
Total		286

Source: Ministry of Petroleum, UBS

LPG is the biggest form of direct transfers and may result in a minimum of 20% savings (i.e., up to Rs100bn). LPG may be the tool through which UIDAI is accelerating Aadhaar enrolment and bank account linking, as Aadhaar is being sought by LPG companies to transfer subsidy benefits to customers' accounts. The LPG experience can be a proof of successfully converting product subsidies into person subsidies. It also gives confidence that the same concept can be applied to kerosene, fertilizer, and maybe even food.

DBTK (DBT for Kerosene)

Media reports suggest that the scheme would be rolled out in the next two-three months. The first phase covers three states: Maharashtra, Rajasthan and Goa. The scheme would be launched in Alwar, Ajmer and Udaipur in Rajasthan, in Nandurbar, Wardha and Amravati in Maharashtra, and in north Goa. Kerosene now carries a subsidy of Rs37 per litre and the Centre is expected to run up a subsidy bill of approximately Rs300bn this fiscal year for subsidizing kerosene.

Social welfare, pensions and scholarships

Some governments, such as Delhi, have made Aadhaar mandatory if citizens wish to avail themselves of government services like registering marriages or wills. The government of Maharashtra requires the unique identity number to disburse employee salaries. In Kerala some schools have mandated it for admissions.

Political risk, post elections?

Given that general elections are due by May 2014 and that they may result in a change of government, the Aadhaar roll-out may face a political risk. If the new government is not supportive of the idea of Aadhaar, it may decide to drop the plan, which would mean a waste of the effort that has taken place to date.

Critical scale, so rollback unlikely

However, our discussion with stakeholders suggests that though a new government might tweak the concept or give it a different name, it is unlikely that it would do away with something that is benefiting (or will benefit in the future) so many people. The project has already reached critical scale and hence rollback is unlikely in our view.

BJP's known opposition is on citizenship

Moreover, BJP is not opposed to the concept of Aadhaar as such. Its known opposition is on the issue of citizenship. BJP is of the view that Aadhaar numbers should be given only to Indian citizens, and not to all residents, as residents could include illegal immigrants.

BJP was the original proponent of identity cards

In fact, BJP was the original proponent of a national identity card. In its election manifesto for the general election of 2009 it included a proposal for a "Multipurpose National Identity Card" with a unique Citizen Identification Number for every Indian citizen in three years, to replace all other identification systems. The idea of a national identity card had been considered by them long before this even, originally by L.K. Advani, a senior leader of BJP.

Legal risk

Aadhaar has not yet obtained legal status, i.e., the Centre's proposal to make Aadhaar mandatory has been questioned by the Supreme Court. The Supreme Court is of the view that people should not be deprived of being able to avail themselves of social benefits if they lack the card. The government is maintaining that it will give people enough time to enrol after the announcement for a particular scheme. Formal legislative backing (already proposed) can take care of such legal reservations.

Implication for markets, sectors and stocks

DBT – market impact positive fiscally, negative discretionary consumption, positive government oil companies/fertilizers

While the impact of DBT may not be immediate, we advise investors not to ignore the potential impact on sectors and to track the progress of the same as it could start getting priced in much earlier.

Beneficiaries of leakage will lose out affecting consumption

The current beneficiaries of the leakage from the subsidy and welfare schemes are likely to be those that fall in the middle-/lower-middle income group. Hence, on plugging these leakages, there will be decline in income for this category of households to the extent of the savings for the government, which will impact their consumption.

Figure 21: Income distribution by income class and size of income pool

Classification		Income class	Number of households	Income pool range	Approx. income pool
UBS	NCAER	(Rs '000 pa)	'000	Rs bn pa	Rs bn pa
Poor	Deprived	<90	114,394	<10,295	5,148
Middle	Aspirers	90-200	75,304	6,777-15,060	10,919
	Seekers	200-500	22,268	4,453-11,134	7,794
Upper Middle & Rich	Strivers	500-1,000	6,173	3,086-6,173	4,630
	Near Rich	1,000-2,000	2,373	2,373-4,746	3,560
	Clear Rich	2,000-5,000	1,037	2,074-5,185	3,630
	Sheer Rich	5,000-10,000	255	1,275-2,550	1,913
	Super Rich	>10,000	141	>1,410	1,410

Note: As of 2009-10; average household is 4-5 people.
Source: NCAER, UBS

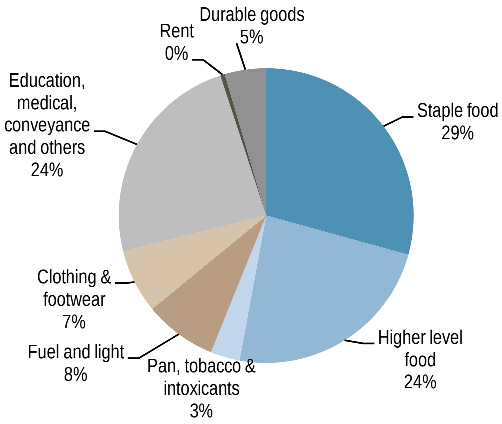
Additionally, if there is some redistribution of income from this group to the lower income group (i.e., the government decides to maintain its fiscal spending by using the savings generated for increased benefits for the poor), the income of the people at the bottom of the pyramid may increase.

It is important to note that the consumption patterns of these two groups are different. While the majority of spending of the poorest is on food and basic necessities, for the middle class there is some form of discretionary consumption and spending on durables such as low-ticket appliances, lower-end cars, etc.

This can potentially adversely impact demand for consumer discretionary items like autos (cars and, in a limited way, two-wheelers), jewellery, white goods, premium-end consumer staples. If the government redeploys savings towards expanded spending on schemes for the poor, it can support demand for basic food and clothing as well as mass-market consumer staples/discretionary products. The latter can be inflationary too.

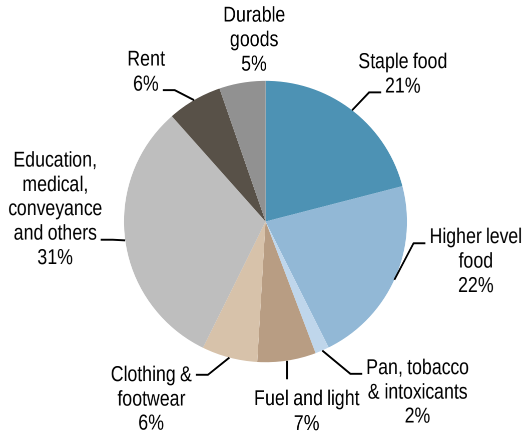
The extent of the demand shift will depend on the pace and success of the rollout as well as which areas it ends up covering.

Figure 22: Breakdown of expenditure – rural (total monthly per-capita expenditure Rs1,431)



Source: NSS, UBS

Figure 23: Breakdown of expenditure – urban (total monthly per-capita expenditure Rs2,629)



Source: NSS, UBS

It may be insignificant in Scenario 1 but it becomes very significant in Scenario 3.

Figure 24: Potential redistributive impact of Aadhaar

	Income class (Rs '000 pa)	Number of households '000	Approx. pool Rs bn pa	Changed income pool if savings generated reduce income for middle class only			Changed income pool if govt. reallocates savings from middle class to poor		
				Scenario I	Scenario II	Scenario III	Scenario I	Scenario II	Scenario III
Poor	<90	114,394	5,148	5,148	5,148	5,148	5,351	5,663	6,224
Impact				-	-	-	+3.9%	+10.0%	+20.9%
Middle	90-500	97,572	18,713	18,510	18,198	17,636	18,510	18,198	17,636
Impact				-1.1%	-2.8%	-5.8%	-1.1%	-2.8%	-5.8%

Note: As of 2009-10; average household is 4-5 people.
Source: NCAER, UBS

Potentially positive for fertilizers and government oil companies: GAIL & Coromandel

If DBT is fully rolled out for fertilizers, with maybe even politically-backed targeting, it could lead to lower subsidy levels in the fertilizer chain. This would be a positive for fertilizer companies, especially complex fertilizer (deregulated but still subsidised) companies, such as Coromandel, as it would remove investor worries about overhang from the potential for government intervention.

DBT could also be positive for Government oil companies as it would reduce the losses / share of subsidy incurred by them. If the offtake of the subsidised products decreases due to correct identification and plugging of leakages, the loss / subsidy amount would come down. However, we would like to point out that DBT is first being implemented for LPG, followed by kerosene, but will not be applicable for diesel – and a large part of the current losses are related to diesel. Almost 60% of the petroleum subsidy is towards diesel, and the rest is almost equally divided between kerosene and LPG.

GAIL may be the biggest beneficiary in this group - given that as per current policy GAIL bears subsidy on kerosene and LPG (these being cooking fuels).

Banking – private banks, maybe new licensees

Please also refer to our note, "India Banking & Finance Sector – Changing landscape: who gains, who loses?" dated 21 November 2013, by Vishal Goyal.

Given the low banking penetration in India (50% loan-to-GDP ratio; only 35% of the population has access to banking) we think there is a case for new entrants. While this may slightly increase operating costs for incumbent private banks, we do not expect a material impact due to their superior technology and already high service levels.

If the low-cost model of BC-based banking (and possibly Aadhaar-enabled) becomes viable and cost effective, private banks could exploit this opportunity. The current reason for their low presence is the prohibitively high operating costs, such as the cost of opening and maintaining rural branches, making it unprofitable as a business idea. Even government banks (including SBI) could benefit if they get their execution and technology right.

Banks are already expanding coverage to remote villages through a hub-and-spoke model by setting up ultra-small bank branches with a network of customer service points (CSPs) and banking correspondents (BCs). BCs operate simple ICT tools like handheld POS devices to provide basic banking services to customers.

However, we are not saying that technology will make a bricks & mortar network irrelevant. Though customers are migrating to alternative banking channels (e.g., the internet and mobile phone apps) as reflected by the channels' higher share of the transaction mix over the past five years, we do not expect alternative channels to pose a threat to existing banks, as we believe bricks & mortar branches are essential for customer acquisition and complex transactions.

The government agency business of tax collection and payments to employees/beneficiaries has been largely restricted to government banks. We believe private banks will gain a share of this business as the RBI has now opened it up to private banks, especially with the role out of Aadhaar-enabled DBT.

Banks have a presence in the G2P (government-to-person payments for subsidies) payment system mainly for potential future business opportunities with the government and not for revenue opportunities from payee accounts. The challenge is that payments simply pass through the account, without additional transactions or steady account balances. As the banks do not hold the float long enough, there is no revenue generation. A shift from in-kind subsidies of fertilizer and fuel to direct cash transfers could add significant volume to the pool of G2P payments and create a steady flow of money into these accounts. This would likely create a strong basis for a positive business case based on account activity.

eKYC will reduce processing time for banks and lessen the amount of paperwork required. Banks plan to roll out eKYC to all branches initially and later to BCs.

Our most preferred names on this theme would be HDFC Bank, ICICI Bank and Indusind Bank.

Appendix

Figure 25: Aadhaar enrolment form

AADHAAR ENROLMENT / CORRECTION FORM

Aadhaar Enrolment is free and voluntary. Correction within 96 hours of enrolment is also free. No charges are applicable for Form and Aadhaar Enrolment. In case of Correction provide your EID, Name and only that field which needs Correction.

In case of Correction provide your EID No here: | | | | | | | | | | | | | | | dd | mm | yyyy | hh: mm: ss |

Please follow the instructions overleaf while filling up the form. Use capital letters only.

1	Pre-Enrolment ID :	2	NPR Receipt/TIN Number :
3	Full Name:		
4	Gender: Male ( ) Female ( ) Transgender ( )	5	Age: Yrs OR Date of Birth: DD | MM | YYYY Declared ☐ Verified ☐
6	Address: C/o ( ) D/o ( ) S/o ( ) W/o ( ) H/o ( ) NAME		
	House No/ Bldg./Apt.		Street/Road/Lane
	Landmark		Area/locality/sector
	Village/Town/City		Post Office
	District	Sub-District	State
	E Mail	Mobile No	PIN CODE
7	Details of : Father ( ) Mother ( ) Guardian ( ) Husband ( ) Wife ( ) *For children below 5 years Father/Mother/Guardian's details are mandatory. Adults can opt to not specify this information, if they cannot/do not want to disclose.*		
	Name		
	EID/ Aadhaar No.: dd | mm | yyyy | hh: mm: ss		
8	I have no objection to the UIDAI sharing information provided by me to the UIDAI with agencies engaged in delivery of welfare services.		YES ( ) NO ( )
9	Select One of the Below (OPTIONAL) (This data cannot be Corrected after Enrolment) ☐ I want the UIDAI to facilitate opening of a new Bank/Post Office Account linked to my Aadhaar Number and have no objection to sharing my information for this purpose ☐ I have no objection to linking my present bank account provided here to my Aadhaar number State Bank Name/Branch IFSC Code Account No.		
	Verification Type : Document Based ( ) Introducer Based ( ) Head of Family ( ) Select only one of the above. Select Introducer or Head of Family only if you do not possess any documentary proof of identity and/or address. Introducer and Head of Family details are not required in case of Document based Verification.		
10	For Document Based (Write Names of the documents produced. Refer back side of this form for list of valid documents)		
	a. POI		b. POA
	c. DOB (Mandatory in case of Verified Date of Birth)		d. POR
11	For Introducer Based – Introducer's Aadhaar No.		For HoF Based - Details of : Father ( ) Mother ( ) Guardian ( ) Husband ( ) Wife ( ) HoF's EId/Aadhaar No.: dd | mm | yyyy | hh: mm: ss
	I hereby confirm the identity and address of ______________ as being true, correct and accurate. Introducer/HoF's Name: Signature of Introducer/HOF		

Consent

I confirm that information (including biometrics) provided by me to the UIDAI and the information contained herein is my own and is true, correct and accurate.

Applicant's signature/Thumbprint

Verifier's Stamp and Signature:
(Verifier must put his/her Name, if stamp is not available)

To be filled by the Enrolment Agency only : Date & time of Enrolment: ______________

Source: UIDAI

Aadhaar is a unique identification number

Aadhaar is a unique identification number given to Indian residents, and captures the biometrics of the individual (fingerprints and eye scan) – and hence weeds out duplicate identities, fakes and ghosts – as one person can have only one Aadhaar and an Aadhaar number can belong to only one person. The Unique Identification Authority of India (UIDAI) is an organisation, headed by Nandan Nilekani as Chairman, under the Planning Commission of India. The Unique Identification project was initially conceived by the Planning Commission as an initiative that would provide identification for each resident across the country and would be used primarily as the basis for efficient delivery of welfare services. It would also act as a tool for effective monitoring of various programmes and schemes of the Government. The UIDAI is responsible for generating a unique identity for half the population of India, with the issuance of biometric linked Aadhaar card (the other half will be covered by the National Population Register (NPR) under the Census Authorities). The NPR states are lagging behind. The NPR model is different, where it is up to the NPR authorities to approach residents for enrolment (unlike the UIDAI, to which residents can be enrolled on demand).

Aadhaar enabled DBT pilot projects experience – potentially huge benefits, but big challenges too

Maharashtra – savings in education huge

In Maharashtra, in an inspection carried out in 2011, Aadhaar was used to identify fake students in schools in the district of Nanded. It was discovered that there were 0.14m fake students and that the government had spent Rs1.2bn extra on the grants to these schools in one district alone. If extended to the entire state, the use of Aadhaar and biometrics can save the government Rs20bn a year. Now the Aadhaar number has been made compulsory for students and teachers for schools to get grants for the academic year 2013-14.

Taking inspiration from the success in Maharashtra, the government may make Aadhaar compulsory for Sarva Shiksha Abhiyan, which enables 6- to 14-year olds to have free education (the scheme costs the central and state governments about Rs250bn each) students to eliminate fake students.

Andhra Pradesh – savings in PDS through eliminating fakes

In the districts of East Godavari and Hyderabad, in a pilot project, ration shops began distributing essential commodities to beneficiaries using fingerprints (scanned by a point-of-sale [PoS] device) to match them with Aadhaar numbers. This has helped get rid of duplicates and fake beneficiaries, and leakages wherein the targeted beneficiaries were not getting their allocation of subsidised commodities – and has resulted in savings of at least 10-12% (with some accounts suggesting 20% in urban and 30% in rural areas), which could imply savings of more than Rs25bn when extended to the rest of the state.

Rajasthan – kerosene offtake fell as adulteration arbitrage vanished

In the Alwar district in Rajasthan, direct cash transfer in lieu of subsidised kerosene has been carried out as a pilot, based on Aadhaar. Since kerosene now travels through the system at the market price, which is the price now paid by the beneficiary (who receives the subsidy amount through a 'cash transfer' instead, in his bank account), there is no incentive for diverting this kerosene towards alternate uses (such as adulterating diesel). Kerosene consumption is reported to have gone down by 80% as a result leading to huge savings on the kerosene subsidy. However, there have been accounts of delays in receiving the subsidy and some instances of failure of biometric identification due to technical faults.

Figure 26: Impact of direct transfer of kerosene subsidy in Alwar, Rajasthan

Month	SKO allotted (KL)	SKO lifted (KL)	SKO sold (KL)	SKO saving	Rate line (Rs)	No of A/Cs
Oct-11	84	84	80	4	15.25	Nil
Nov-11	84	84	82	2	15.25	Nil
Dec-11	84	36	18	66	44.5	
Jan-12	84	36	23	61	44.5	
Feb 12	78	0	13	65	44.5	

Source: GoI, UBS

Statement of Risk

We believe the risks to our long-term estimates (for example, for corporate earnings) and macroeconomic variables (such as GDP growth rates and inflation) arise from any economic slowdown, weakening currency, global economic events, and government policy changes.

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UBS 12-Month Rating	Definition	Coverage[1]	IB Services[2]
Buy	FSR is > 6% above the MRA.	44%	36%
Neutral	FSR is between -6% and 6% of the MRA.	45%	35%
Sell	FSR is > 6% below the MRA.	11%	23%
UBS Short-Term Rating	**Definition**	**Coverage[3]**	**IB Services[4]**
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 31 December 2013.
1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.
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KEY DEFINITIONS: Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

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UBS Securities India Private Ltd: Gautam Chhaochharia; Sanjena Dadawala.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Coromandel International	CORF.BO	Buy	N/A	Rs228.75	06 Jan 2014
GAIL (India) Ltd.	GAIL.BO	Buy	N/A	Rs335.85	06 Jan 2014
HDFC Bank[16]	HDBK.BO	Buy	N/A	Rs662.00	06 Jan 2014
ICICI Bank[16]	ICBK.BO	Buy	N/A	Rs1,040.70	06 Jan 2014
IndusInd Bank[5]	INBK.BO	Buy	N/A	Rs413.30	06 Jan 2014

Source: UBS. All prices as of local market close.
Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

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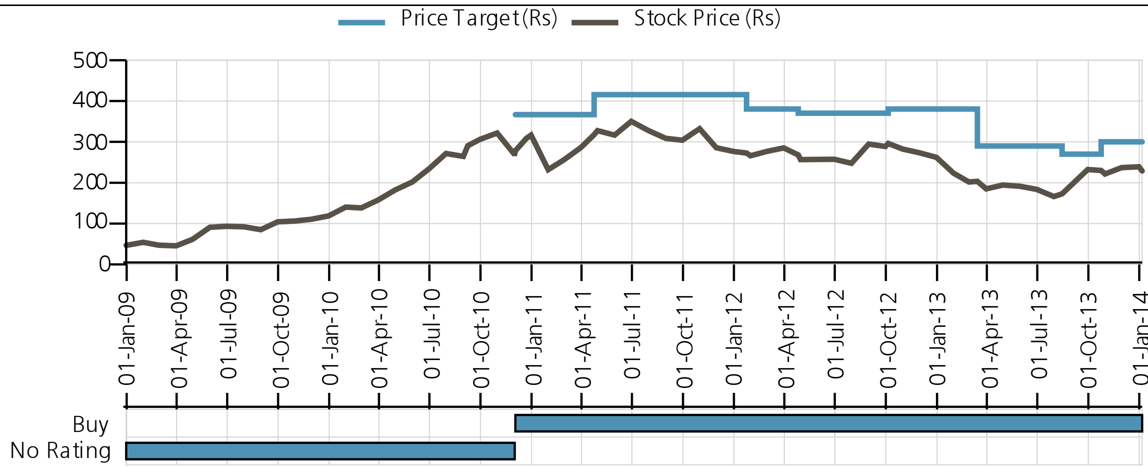
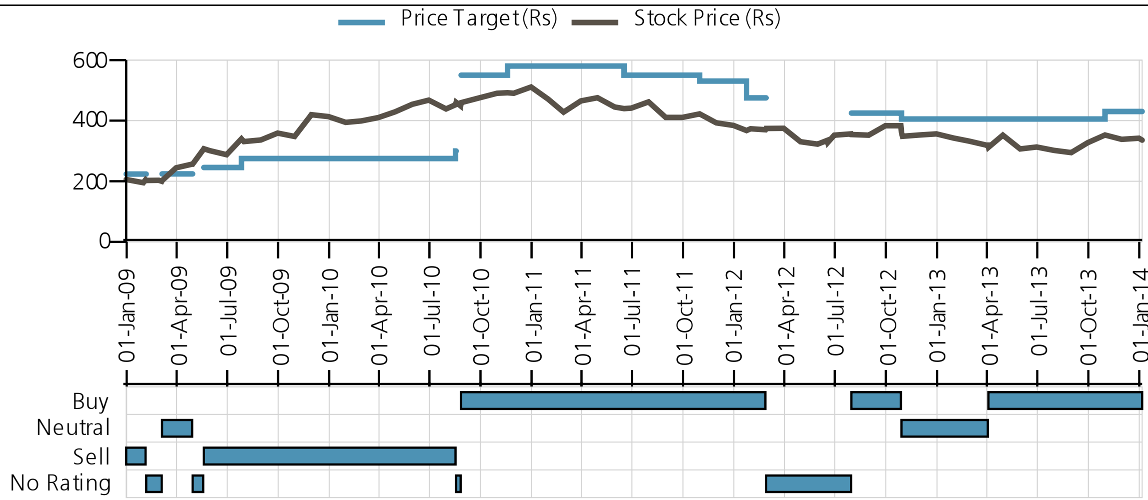
Coromandel International (Rs)



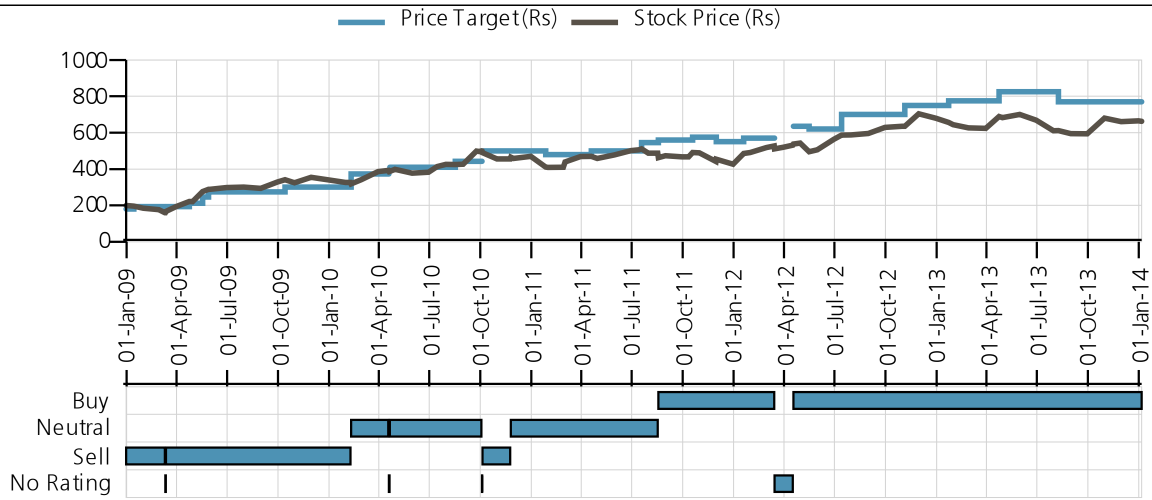
Source: UBS; as of 06 Jan 2014

GAIL (India) Ltd. (Rs)



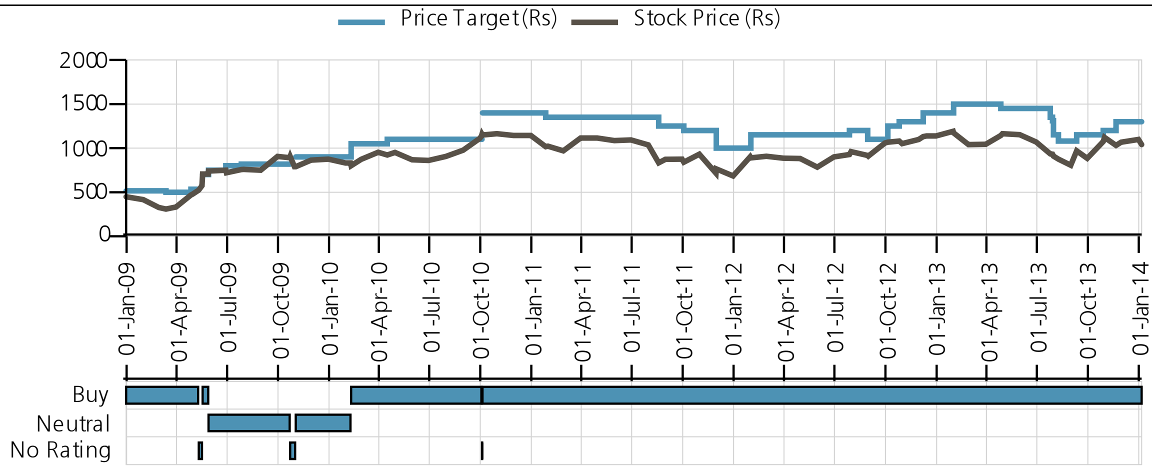
Source: UBS; as of 06 Jan 2014

HDFC Bank (Rs)



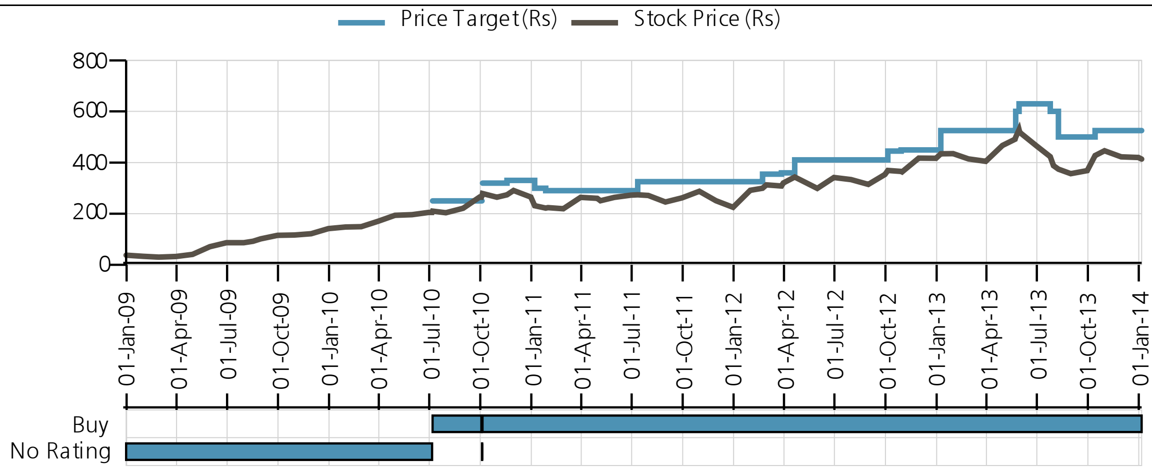
Source: UBS; as of 06 Jan 2014

ICICI Bank (Rs)



Source: UBS; as of 06 Jan 2014

IndusInd Bank (Rs)



Source: UBS; as of 06 Jan 2014

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