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Market Borrowing by Small and Medium Urban Local Bodies using a Pooled Fund Mechanism

Two pooled funds were structured in India as pilots – Tamil Nadu Water and Sanitation Pooled fund (TNWSPF) in 2002 and Karnataka Water and Sanitation Pooled Fund (KWSPF) in 2005 – to enable small and medium urban local bodies (ULBs) access the capital market for their debt requirements. Later in 2006, the Ministry of Urban Development (MoUD) introduced a scheme called Pooled Finance Development Fund (PFDF) with the objective of scaling up the TNWSPF and KWSPF pilots to facilitate market borrowing by small and medium ULBs across the country. However, not a single pooled fund has been structured since these two pooled funds. With the basis of analysis as TNWSPF and KWSPF, this note examines the main constraints that have held back the development of pooled fund as an option for raising market finances for ULBs. The note also suggests a way forward for improving the PFDF scheme of MoUD.

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Over the years, some large municipalities in India have issued bonds to raise resources. However, small and medium ULBs face difficulties in raising resources from the market due to small issue size which makes the cost of issuance almost prohibitive.

The pooled finance structure, which has been used extensively in the US and European countries, supports borrowings of small and medium ULBs by pooling their resource requirements together. A typical mechanism in the US is that a pooled fund entity, which is an intermediary, borrows from the market with some credit enhancement, and uses the proceeds to purchase debt obligations of ULBs. These bonds are rated instruments and the rating depends on the diversification of pooled debt obligations and credit enhancement.

Demand side mechanisms complement the financing mechanisms in the US. These include preparation of Intended Use Plans (IUP), requiring ULBs to prepare a borrowing program based on their investment needs and repayment capacity, as well as securing public consent. There are clear guidelines on user charges and interest subsidies for hardship communities. Moreover, the fiscal transfers from state to ULBs are rule-based allowing rating agencies to estimate future cash flows with some degree of predictability.

The Two Pooled Funds in India

In India, although the demand side mechanisms are non-existent, similar pooled fund mechanisms were tried as two pilots. TNWSPF borrowed Rs 30.2 million by issuing taxable 9.2% coupon, non-convertible redeemable, 15 years bonds with put/call option after 10 years in December 2002. KWSPF raised Rs 1 billion from the market by issuing tax-free 5.95% coupon, 15 years bonds in July 2005 with a 3 year moratorium on principal repayment (with no put/call option).

The funds raised by TNWSPF were meant for refinancing high cost fixed rate, 16% interest, 30 year tenor loans for water and sanitation projects of 13 ULBs. These projects had either been completed or were in advanced stages of completion.

The funds raised by KWSPF on behalf of 8 ULBs on the periphery of Bangalore were meant to part finance the water supply component of a greenfield project, Greater Bangalore Water Supply and Sanitation project (GBWASP). The project is being implemented by Bangalore Water Supply and Sanitation Board (BWSSB), a state parastatal responsible for providing supply and sanitation services in Greater Bangalore at a project cost of Rs 5.36 billion. The financing mix for the project is market borrowings by KWSPF (19%), mega city loans from GoI (28%), grants (20%) and a one-time beneficiary capital contribution (BCC) collected at the time of approval of building plans (33%).

Pooled Fund Structure:

The structure of TNWSPF and KWSPF is presented in Figure 1. These funds are placed under the management of state pooled fund entities (SPFE). The SPFEs (Tamil Nadu Urban Development Fund and Karnataka Urban Infrastructure Development Finance Company) are intermediaries that provide technical assistance to ULBs in identifying projects for the pool, undertake bond issuance related formalities and service the bonds.

These pooled funds have an elaborate credit enhancement/ structured payment mechanism as determined by the rating agency for a rating of AA, implying "high" credit quality.

1. Escrow of Revenues of ULBs: Each ULB will establish a no lien escrow on its current account through which its tax collections and other revenues including state finance commission devolution (SFCD) are routed. Each month ULBs would transfer 1/10th of their annual debt service requirement (DSR) to this account, which has precedence over other commitments of ULBs.

2. State Finance Commission Devolution Intercept: Any shortfall in the monthly payments would be met from the SFCD to respective ULBs.

3. Bond Service Fund (BSF): In case the intercept of SFCD is not sufficient or delayed, SPFE will ask BSF trustee (an appointed bank) to transfer the shortfall to the Water Project Account.

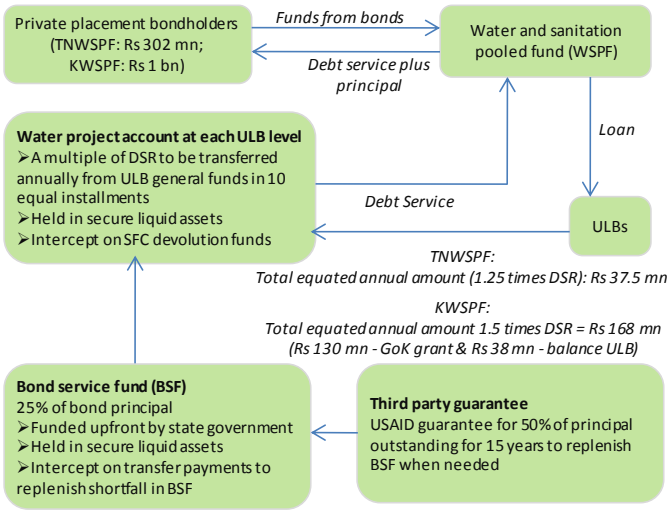
4. USAID Guarantee and Restoration of BSF: USAID guarantee of 50 percent of the bond's principal would replenish the BSF, if needed. The cost of USAID's guarantee was 0.75% of the ceiling amount as Origination Fee and a one-time Utilization Fee equivalent to 3% of the ceiling amount.

Why TNWSPF worked better than KWSPF?

a) Financial strength of pooled ULBs

In relation to the DSR, ULBs pooled for TNWSPF were better positioned than those for KWSPF (Table 1). In Karnataka, the revenue surplus of pooled ULBs reduced by 59% after 2002-03 as two

Figure 1: TNWSPF and KWSPF Pooled Fund Structure



sources of revenue - water development cess and development charge - were taken away and the additional duty on transfer of properties was reduced. Earlier, the revenue surpluses as a share of revenue receipts for ULBs in Karnataka were better than for ULBs in Tamil Nadu, but the ratio worsened substantially due to these changes (Table 1, column 6). As a result, the revenue surpluses of pooled ULBs in Karnataka were insufficient to service the debt. Therefore as part of the credit enhancement mechanism, an additional commitment was made by GoK to provision for Rs 130 million grant in the state budget annually.

In Tamil Nadu, on the other hand, ULBs already had experience of debt servicing and the bond proceeds were refinancing high interest loans by lower cost loans.

Table 1: Financial Summary of Pooled ULBs (%)*

TNWSPF**	Surplus/ Revenue	Debt Service/ Surplus	KWSPF	Surplus/ Revenue	Adj Surplus†/ Adj Revenue	Debt Service/ Adj Surplus***
Ambattur	48	5	Yalahanka	40	1	¤
Madhavaram	31	26	Byatarayanapur	83	26	103
Tambaram	18	50	K R Puram	73	50	318
Rajapalayam	32	66	Mahadevpura	89	72	114
Madurai	5	63	Bommanahalli	86	40	¤
Alandur	38	40	RR Nagar	82	78	¤
Porur	45	25	Kengeri	27	0	¤
Valsarvakkam	58	7	Dasarahalli	37	0	¤
Maduravoyal	52	22				

***Note**: * Tamil Nadu – Average of 2000-02; Karnataka – 2002-03*
*** Four urban areas have not been included because their accounts were not available.*
**** To make the debt servicing/ revenue surplus comparable for TNWSPF and KWSPF, this ratio for KWSPF has been taken for year 2006-07, the year when principal repayment starts (after 3 years of moratorium). In case of TNWSPF repayment (principal + interest) starts in year 1 (2002-03). Adjusted revenue surplus for pooled ULBs in KWSPF in 2006-07 are projected from the base 2002-03 on the assumptions that in general revenues will grow at 10% and expenditure by 12%.(assumptions made at the time of structuring of the project).*
¤ These ULBs have no surplus. † After adjusting for revenue loss.

Ultimately, though the objective of KWSPF to finance a water supply project covering 8 ULBs was well founded, the debt component became quite large, well beyond the means of ULBs' debt servicing capabilities. The loss of revenue sources weakened their financial position. In hindsight, the role of BCC in financing the project was underestimated which caused heavy reliance on debt. As of March 2010 as against estimated Rs 1.75 billion BCC, a contribution of Rs 3.32 billion has been raised.

b) How appropriate was the pricing of bonds?
TNWSPF bonds were better priced for investors than KWSPF. Even adjusting for tax-free status, KWSPF bonds had hardly any spread over GSec while TNWSPF bonds had a spread of almost 3% (Table 2).

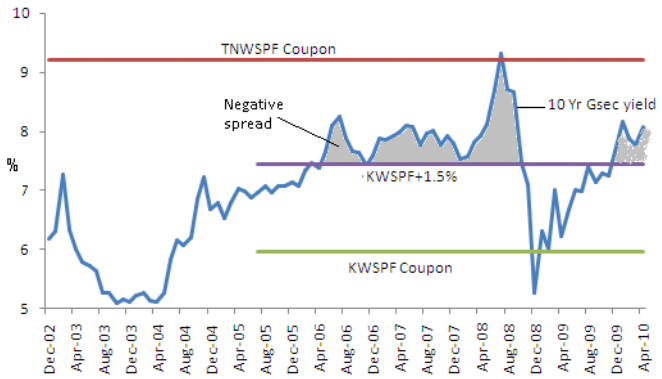
Fine pricing of KWSPF bonds suggests that pricing was out of place with market realities and was seemingly done to reduce debt servicing obligations for ULBs.

Table 2: Pooled Bond Interest Spread Over G-Sec (%)

	10 yr	15 yr
TNWSPF – Jan 2003	2.9	2.73
KWSPF (adjusted for tax-free status) – July 2005	0.47	0.07

c) *Were the bonds attractive to secondary investors?*
The initial investors in TNWSPF were 3 banks (2 of them subscribed Rs 300 million out of Rs 302 million issue) and two private provident funds (PFs). The issue has been listed and the original two big banks have exited and have been replaced by 25 PFs. In case of KWSPF, out of 12 investors 8 are banks, 2 insurance companies and a corporate entity. None of them have exited. This suggests that KWSPF bonds are not attractive to investors in the secondary market. Coupon on KWSPF has maintained a negative spread over 10 year GSec yield for most of the period (Figure 2).

Figure 2: Comparison of Bond Coupon with 10 year GSec Yield



d) Testing of the Intercept
The repayment to bondholders of TNWSPF and KWSPF has been as per schedule. In case of TNWSPF, ULBs have made transfers to the escrow account, though not strictly as per the prescribed mechanism due to the seasonality in their own revenues. There have also been occurrences when ULBs have fallen short of their required contributions to the escrow, in which case the intercept on SFCD has been used.

In the case of KWSPF, bond proceeds were not utilized for 3 years due to slow progress in construction and since BWSSB took over the project in 2009, the debt servicing by ULBs remained untested.

Issues
In summary, from the ULBs' perspective, municipal bonds seem to have worked better for refinancing loans than for financing greenfield projects. Though the bonds issued by two pooled funds were fully subscribed, investors viewed them cautiously due to a number of factors:

- *Creditworthiness of ULBs* was suspect for investors despite an elaborate credit enhancement mechanism because it was untested. Investors were apprehensive about enforceability of the intercept on SFCD.
- *Interest rates* were perceived inadequate to cover risks. MoUD has since issued guidelines, which caps the interest rate at 8% on tax-free municipal bonds, thereby making pricing less flexible. Tax-free status is not attractive to long term investors like PFs as these are tax-free entities.
- *Liquidity:* Long tenor and illiquid bond market is a deterrent to banks whose liabilities are shorter. Holding the instrument to maturity was unattractive.

- *Regulatory norms* permit investments by insurance companies in securities that are rated A+ or above. The practice, however, is that these investors choose instruments that are a couple of notches above the regulatory norms to provide a cushion for rating downgrades, making AA rated municipal bonds unattractive.

Pooled Finance Development Fund (PFDF) Scheme of MoUD

In 2006, MoUD set up a PFDF scheme with a corpus of Rs 4 billion as a credit rating enhancement fund (CREF). Of this corpus, 5% is to be utilized as project development assistance and the rest is to provide a third tier of security (similar to BSF in the pilots) in case the first two tiers – escrowing of ULBs' resources and any internal arrangements between a state and SPFE including state interception – are insufficient to meet repayment obligations. The extent of CREF contribution to credit enhancement is the lower of 10% of bond amount or 50% of BSF as determined by the rating agency. Bonds issued under PFDF scheme are eligible for tax-free status subject to approval by Central Board of Direct Taxes (CBDT). The contribution of MoUD to CREF is one time and upfront, with no further recourse to MoUD. After bond maturity, the CREF funds would remain with the SPFE for leveraging other infrastructure projects.

However, to date no state other than Karnataka and Tamil Nadu has operationalized SPFEs. TNWSPF is the only one which has been approved central assistance of Rs.566 million towards BSF and project development cost.

The scheme has not taken off for a number of reasons:

- Grants from JNNURM (a reform-linked, grant based scheme of MoUD launched in 2005 to fund urban infrastructure projects of ULBs in 63 cities) have crowded out demand for market debt.
- Expected increase in the weighted average cost of capital of ULBs due to market debt compared to traditional government grant-based financing has deterred ULBs from participating in the pooled fund.
- Rigid escrow account mechanism requiring ULBs to transfer annual DSR as monthly installments adds to their borrowing cost.
- Complicated and lengthy approval process, too little credit enhancement support and delays in obtaining tax-free status for bonds.
- Other constraints such as interest rate cap, long tenor, illiquid market for bonds reduce attractiveness to investors.
- Delays in operationalizing SPFEs in most states.
- Imbalance between responsibilities entrusted to the ULBs and power delegated, multiplicity of institutions in providing urban services makes private equity and debt financing difficult.
- Lack of a process guidance framework for ULBs such as an Intended Use Plan.

Proposed Framework for Pooled Fund

While market based financing for ULBs will take time to develop, pooled financing can begin to play a role for technically capable ULBs that have revenue surpluses. Even for such ULBs, revenue surpluses are not sufficient to meet investment requirements and hence grants should be leveraged efficiently. Accordingly 'grant based' schemes (JNNURM) should be integrated with market debt.

Experience from the pilots suggests that in the nascent stages of pooled fund development, the framework could have following features:

- Bonds to refinance loans of ULBs. For new projects, bonds could refinance loans after project cash flows have stabilized and ULBs have established two years of debt repayment track record.
- Interest rates on bonds should be aligned to the debt instruments of similar ratings. The tax-free status, though it gives ULBs benefit of a lower rate, could be done away with since it is not useful to some long-term investors.
- To incentivize ULBs to participate in the scheme, interest earned on BSF could be utilized to subsidize interest on loans to ULBs.
- The state governments should not change any rules that affect the cash flows of the ULBs without bond holder approval.
- Put/call option after 5 years should be built into the bond structure to attract short term investors like banks.

For ULBs that have debt servicing capacity, JNNURM could be modified to provide a combination of grant and construction debt finance. In addition, MoUD's CREF should be linked to JNNURM with modifications (Figure 3).

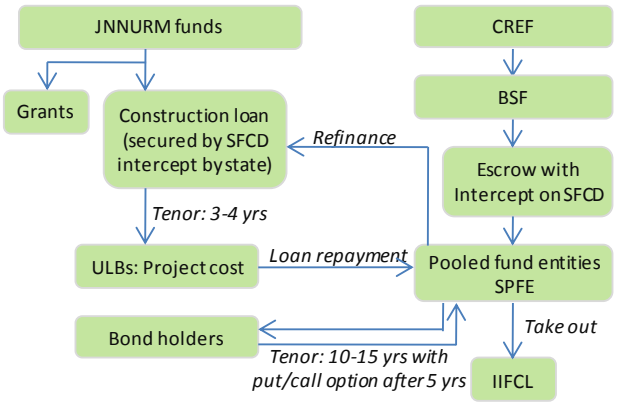
Construction finance of 3-4 years should be provided from JNNURM to ULBs, secured by state government guarantee to intercept SFCD to ULBs. Thereafter, during the first two years of operation, ULBs would repay this JNNURM loan. ULBs can approach a pooled fund entity to refinance their loan by issuing bonds. Two years of debt servicing track record would establish ULBs' creditworthiness.

The following credit enhancement mechanism is recommended:

1. Escrow account: where ULBs would contribute necessary annual DSR. Any shortfall will be met by an intercept on SFCD.
2. BSF would transfer payments to the escrow in case of a shortfall. The size of the BSF from CREF could be 50% of the bond amount (against 10% in current PFDF scheme).

SPFEs would issue bonds of 10-15 years tenor with put/call option after 5 years. Bondholders would exercise put option if the market interest rate is higher than the coupon rate. Rising interest rate is detrimental to ULBs as they neither have the capacity to take interest rate risk nor capacity to repay bondholders in case put option is exercised. Initially, government may need to step in. A takeout financier like IIFCL could provide finance to the extent redemption on bond is sought.

Figure 3: Proposed Framework Integrating PFDF in JNNURM



Conclusion

Though market debt will increase the overall cost of financing urban infrastructure for ULBs, the proposed framework has the following advantages:

- It allows leveraging of government grants and own revenue surpluses of ULBs.
- ULBs should make use of BCC as a mechanism of financing. In effect, BCC could be viewed as PV of the foregone user charges which are politically difficult to raise. In Karnataka, the BCC was simple, easy to enforce and became a major source of financing since the area was newly developing.
- It assigns project risks to entities that are best placed to assume them and addresses issues related to illiquidity of bonds.
- FIIs should be attracted to invest in pooled funds given that they have global experience in investing in similar funds.
- In the whole process government has to play a greater credit enhancement role.

Infrastructure Development – Turning Points

3G & BWA Auctions

The 3G spectrum auctions finally began on 9th April, 2010. Due to limited number of spectrum slots and high demand, especially in the metros of Delhi and Mumbai, the government has garnered Rs. 67,719 crore from 3G auctions alone as against the combined target of Rs 35,000 crore from both 3G and Broadband Wireless Access (BWA). Due to aggressive bidding and declining profit margins, operators were seen largely focusing on the circles where they have a strong footprint and no single operator acquired a pan-India license.

The auctions for BWA were equally aggressive and the final pan-India license bid was Rs. 12,848 crore against a base price of Rs. 1,750 crore. Reliance Industries Limited (RIL) acquired a 95% stake in Infotel Broadband Services Private Limited, the only entity to win a pan-India BWA license. RIL has stated that they intend to usher in a broadband revolution in India, which currently has less than 0.75% penetration as compared to over 52% penetration in voice services. Initially it plans to offer WiMax services and later on shift to Long Term Evolution technology.

One impact of such high spectrum prices is that the balance sheets of most major private sector operators are likely to be under a lot of stress as the leverage which was about 0.80 times during three years FY07-09, is likely to rise to about 2 times in FY 2010-11.

New TRAI Recommendations

At a time when the industry is grappling with cut throat competition, the Telecom Regulatory Authority of India (TRAI) on 11th May, 2010, released a new set of recommendations to The Department of Telecommunications on Spectrum Management and Licensing Framework. Although these could garner a huge sum of money for the government if accepted, they would clearly send wrong signals to investors as it implies change in the rules of the game midway. Some of the key recommendations include:

- One-time spectrum fee for 2G spectrum assigned in the 1800 MHz band beyond committed spectrum (spectrum that a licensee is entitled to receive bundled with the license i.e. 6.2 MHz for GSM and 5 MHz for CDMA) to be paid for at current prices (price discovered through the 3G auction). For GSM, this charge would be levied at current price up to 8 MHz and 1.3 times the current price above 8 MHz. Charges for spectrum in the 900 MHz band would be levied at 1.5 times that in the 1800 MHz band.
- No more Unified Access Service license linked with spectrum should be awarded and use of subscriber linked criteria be done away with for assignment of spectrum.
- Differential spectrum usage charges @ 0.5% of adjusted gross revenues (AGR) for every MHz up to the committed spectrum and at 1% for every MHz above that, subject to an upper limit of 10% for GSM and 7% for CDMA.
- Introduction of license fee for tower companies and internet service providers @ 4% of AGR from FY11, rising to 6% by FY13. For telecom service providers, license fee to be brought down progressively to 6% by 2014 (currently at 10% for metros and category-A areas, 8% for category-B areas and 6% for category-C areas).

The above recommendations would clearly change the business economics of the sector. The existing large players will be affected the most as they have more spectrum. Being asked to pay for it at current 3G prices will hurt them. Clearly, the government would need to selectively adopt the TRAI recommendations on spectrum pricing keeping in mind that several licenses will come for renewal beginning 2014.

Developments related to Natural Gas & their Implications

The Supreme Court (SC) has issued its verdict on the row between Reliance Industries (RIL) and Reliance Natural Resources (RNRL) over the allocation and pricing of KG Basin gas in favour of RIL. In doing so, it has upheld that the ownership of natural resources such as gas lies with the Government of India (GoI) which can regulate their price and allocation. Following this verdict, the GoI has revised the price of gas sold by state-owned enterprises such as ONGC and OIL from USD 1.79/mmbtu to USD 4.2/mmbtu, determined by the Empowered Group of Ministers (EGoM) for the gas produced from RIL's KG D6 field.

These developments have several implications. The first and immediate one is the impact on sectors that use natural gas as a fuel. Quick computations indicate that the increase in price of gas sold by state-owned enterprises may increase gas based power tariffs by as much as 85 paise/unit. The tariffs for different end user segments such as domestic consumption and transportation under city gas distribution would also see an increase. The second one is the impact on the pending RIL-NTPC case involving supply of 12 mmscmd gas at RIL's bid price of USD 2.34/mmbtu. In case, NTPC too has to pay the EGoM determined gas price, the price of its power could increase by as much as 60 paise/unit. The final and more important one is the long term impact that this verdict may have on private sector investments in the gas sector. The increased interest so far demonstrated by the private sector in the upstream segment of gas sector could be attributed to market determined pricing. But with price being controlled by the GoI, it remains to be seen if this interest would persist.

At the same time, in the absence of a well functioning market in the gas sector, the government does need to step in to regulate prices. However, given that the government is also the owner of some entities active in the upstream segment and there could be conflict of interest, it should consider vesting the Petroleum and Natural Gas Regulatory Board with the power to determine tariffs for the downstream segment or create yet another independent regulatory authority to address the issue of pricing.

Policy Group – News & Events

- Presentation on **'The Bundling Scheme under the National Solar Mission'** at the Infraline Round Table on 'National Solar Mission' on April 7, 2010. Our presentation covered concerns related to the implementation of the Scheme and aspects that could impact the financing of solar power projects.
- Along with members of IDFC's Energy Advisory Board, we presented IDFC's views on **Standard Bid Documents (SBD) for procurement of power by power distribution utilities**, under the Case -1 route (where neither location nor fuel of the power plant are specified by these utilities) at a conference organized by Power Finance Corporation Ltd on May 5, 2010. In this forum we proposed revisions in SBD to widen the scope of private sector participation and facilitate discovery of more competitive power procurement tariff.

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