

Financing Urban Infrastructure in Small and Medium Towns – Pooled Bonds as an Instrument of Financial Inclusion

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India Urban Conference

Mysore, November 2011

Context

- JNNURM – Outlay Rs.1,20,000 cr.
 - Sanctions (2005-10): Rs.1 lakh cr.
- UIDSSMT – Covers non-mission cities
 - Nearly 1,000 projects worth Rs.20,000 cr approved (upto 2010)
 - Actual investment (releases) Rs.7,000 crore, i.e. just about Rs.1,500 crore / year on average.
- UIDSSMT grants 90-100% of project cost (80:10:10)
- Small & Medium Towns (SMT) - 1600 municipalities and 2100 nagar panchayats
- Investment needs of SMT - 50% of Rs.39.2 lakh crore required for 20 years in the urban sector,
 - i.e. Rs.1,00,000 cr **per year**, or 65 times current investments

Financing ULBs

- Own sources of revenue
 - Property and other taxes
 - User charges / fees for services
 - Politically sensitive
 - Linked to service delivery
- Statutory transfers based on FC recommendation
 - Assured but limited
- Share in certain taxes
 - Dependent on state collection effort
- Grants-in-aid
 - Ad hoc

Debt Financing

- Given our growth in GDP and savings rate, huge potential to tap financial markets
- Municipal debt market in India still nascent [\[See chart\]](#)
 - Rs.1,200 cr mobilized till date (TN, Karnataka, Gujarat)
- US municipal bond market experience [\[See chart\]](#)
 - Driven by environmental legislation (Clean Water Act, 1987 and Safe Drinking Water Act, 1996) and limited federal dollars
 - State Revolving Funds as financial intermediaries
 - Pooled financing for local governments
 - Targeting mutual, pension and insurance funds' need for long term investment and tax-free returns
 - 4th largest debt market after mortgages, Govt securities and corporate bonds
 - 87,500 local govts; created assets over USD 2.4 trillion (till 2006)
- [Tamil Nadu experience](#)

Pooled Bonds

- Risk of a single borrower default causing a bond default is reduced
- Risk spread due to the size and diversification of a pool, even with the inclusion of smaller and less creditworthy borrowers
- This improves creditworthiness of the pool and lowers cost of funds
- The structure provides four key benefits:
 - Each individual borrower has access to the capital market at a much lower interest rate than it would otherwise get if it borrowed on its own.
 - Transaction costs are spread among participants, providing a further efficiency
 - Resources once used to fund grants can instead be used to make subsidized loans, spreading the resources to a larger group of beneficiaries.
 - Bonds used to finance loans can receive higher ratings than those of the underlying borrowers due to pool diversity and program equity.

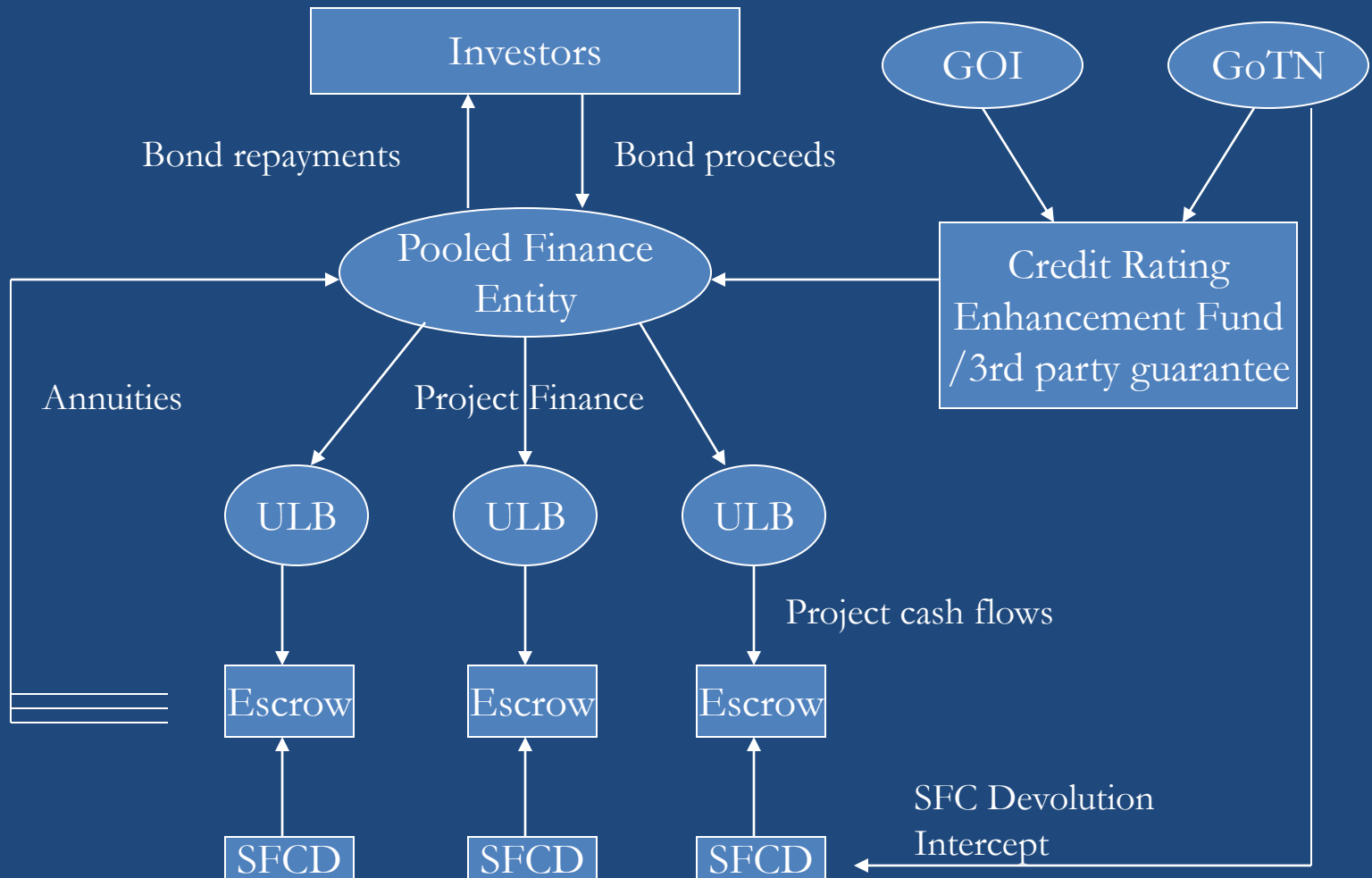
Paradigm Shift

- Debt financing most efficient mode of capital delivery
- With an obligation to repay, ULBs are compelled to
 - judiciously plan, design and execute projects that can maximize revenues
 - minimize O&M costs in a sustained manner throughout the asset life span
- Unbridled grants tend to encourage profligacy
- Present model of grants driving projects provides no incentive to funding agency to monitor outcomes over project lifecycle
- Extant guidelines do provide flexibility to the state nodal agency to pass on JNNURM grants as loans to ULBs
- But no commitment on their part to ensure a rational debt-grant mix according to project viability / ULB's financial status
- Hence most states continue to extend assistance to local bodies of a category on a one-size-fit-all mode

JNNURM – Getting More Bang Out Of The Buck

- Leveraging GOI/State contributions
- Need based grants (VGF) for weak ULBs or poor communities
- Proactively develop municipal bond market
- Engage with all stakeholders, especially investors, based on PFDF experience
- TNUDF / WSPF as SPFE – first (and only?) tax-free pooled bond issue under PFDF

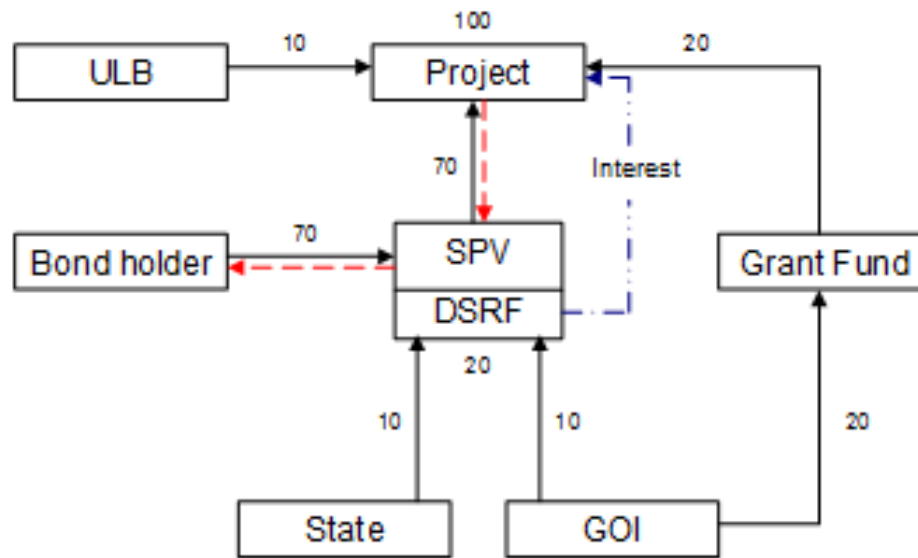
Pooled Finance Funds Flow



Recommendations on PFDF scheme

- Allow taxable bonds with higher CREF
- Remove cap on interest rate
- Priority sector status / recognition as SLR paper for banks
- Treat as social infrastructure lending under Other Approved Securities for insurance companies
- Amendment to section 14 (A) of IT Act
- Capital Gains Pooled Finance Municipal Development Bonds
- Tax exempt interest earned on CREF
- Redefine CREF to address Asset Liability Mismatch (ALM)
- Capital grant for formation and operationalization
- Streamlining approval process

Accessing External Financing – A Possible Approach



Leveraging GOI/State funds for external project financing

Accessing External Financing – The Structure

- States to form State Pooled Finance Entity (SPFE), possibly in the nature of a Trust, in JV with GOI and financial institutions, with GOI/state having majority share in its equity
- The SPFE to be managed by a fund manager (company) that has same partners, but with GOI/State having minority equity stake
- While fund manager needs to be staffed with domain specialists drawn from the market, the CEO may be drawn from the State Govt
- SPFE to be the State Level Nodal Agency (SLNA) under JNNURM
- JNNURM funds (GOI/State) to be used partly as grant and partly as equity / junior debt to raise external debt on a sustainable basis
- Equity to be used as Debt Service Reserve Fund (DSRF), a collateral for the bonds to be issued by SPFE on behalf of a group of ULBs for a pool of bankable projects (including pre-financed ones)
- Size of DSRF to be based on credit rating requirements; interest earning on DSRF to be used as subvention to reduce ULBs' cost of debt

Accessing External Financing – The Structure

- Pooled municipal bonds
 - Taxable or tax-free
 - Coupon rate pegged to market rate
 - Tenor according to investors' appetite
 - Asset – Liability mismatch through SPFE equity
- Credit enhancement measures
 - Escrow mechanism
 - Under-writing of initial bond issues by Govt, or through subscription of junior debt, till market matures
 - Default by a ULB triggers release from DSRF; replenishment from SFC devolution intercept
 - Additional credit enhancement through partial guarantees
 - Once repayments start kicking in, equivalent DSRF gets freed up, leading to further strengthening subsequent bond issues

Challenges For Pooled Financing

- Need for legislative sanction to trigger demand and provide legal basis for revolving funds
- Suitable programme structure
- Implementation toolkits, standardized documents, loan tracking and customer support system
- Capacity building and education of all stakeholders, particularly at State / SMT level for creating a new breed of city managers
- Separate Grant Fund and Project Development Fund to be handled by SPFE

Gaps in Data

- Non availability of reliable and consistent data at ULB level
 - Financial indicators (e.g. tax base, debt, other liabilities)
 - Service delivery
 - Assets and their performance
- Accounting standards
- Credit worthiness / Rating
- Resource mapping, including land
- Master Plan and City Development Plan

PPPs For Financing SMTs

- Limited success due to
 - Absence of clear law / policy on PPP at state level
 - Capacity constraints
 - Unwillingness on the part of ULBs to share risks
 - Tendency to pose complex/risky projects to private sector
- However SPFE can promote PPPs through
 - Advocacy
 - Technical support
 - Financing PPP projects
- In the near future, PPP route may not yield much success at SMT level for creating infrastructure

Sustaining Debt - Unlocking Land Value

- Ability of SMTs to absorb debt extremely limited (estimated at 10%), though opportunities may exist for raising bond funds
- Need to explore land based instruments
 - Betterment levy
 - Based on impact of infra project
 - Guided by land guideline value, capital cost of project and economically feasible maximum tax rate
 - One time and recurring levy
 - Town Planning Scheme
 - Gujarat Model (capitalization of reserved developed land by ULB)
 - Re-zoning / redevelopment to be an integral part of CDP
 - Urban planning to be within ULB's ambit
- Integrating CDPs with Regional Plans that optimize land use for driving economic activity and common infrastructure
 - e.g. regional landfills

In Summary

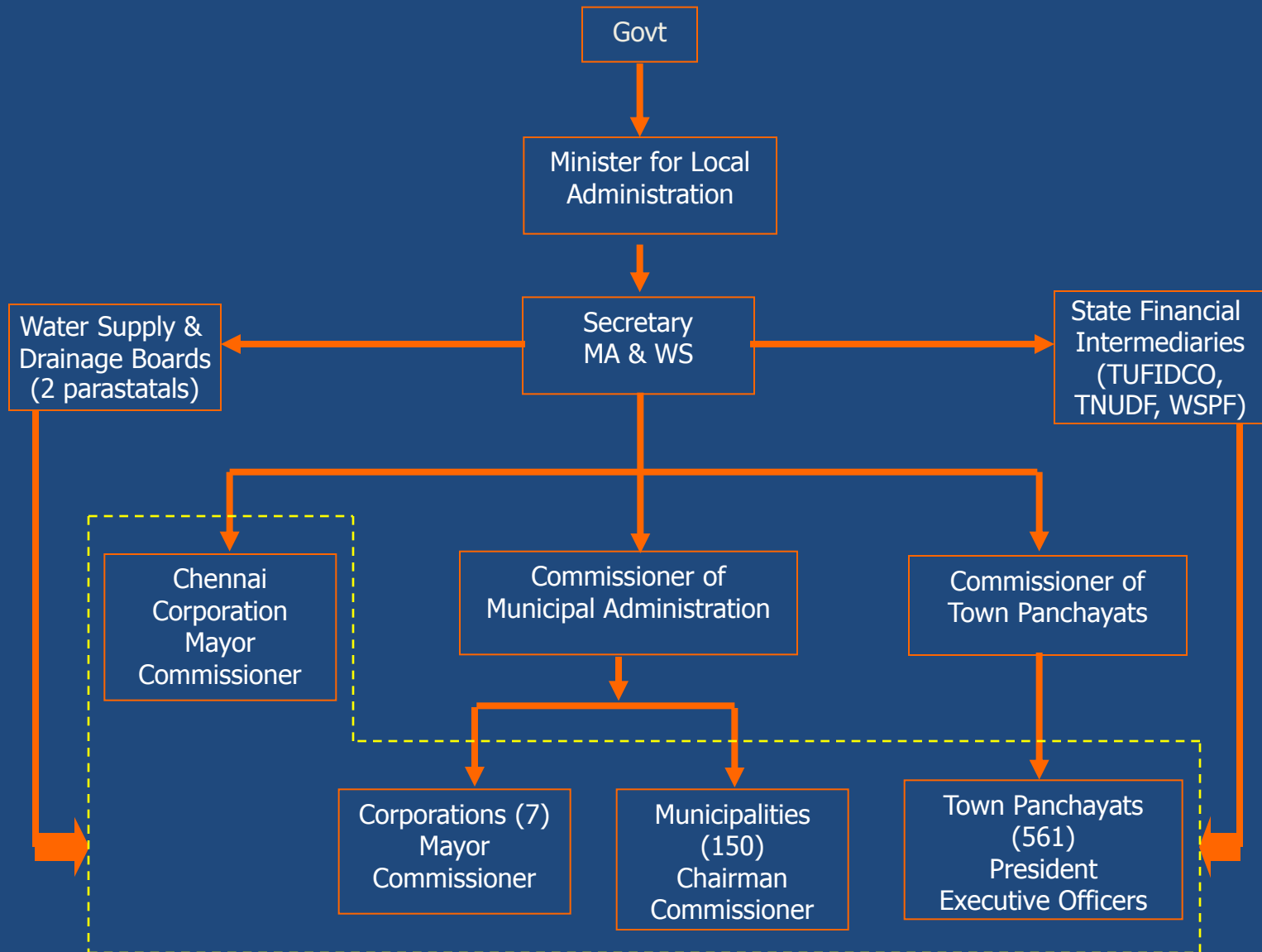
- JNNURM funds may be leveraged to attract debt from the capital market (potential to raise half of the funding requirement of SMTs)
- For sustaining debt of such magnitude, need to unlock value of land and carry out crucial reforms, particularly those relating to property tax and user charges
- Appropriate policy and institutional arrangements need to be put in place, with a clear goal of decentralization of powers and functions to SMTs
- Massive effort at capacity building and technical support for improved governance
- Address data gaps through research
- Development of public private partnerships in infrastructure creation and service delivery

THANK YOU

Pooled Bond Financing in Tamil Nadu

A Case Study

Municipal Administration System in Tamil Nadu



Urban scenario in Tamil Nadu

- Tamil Nadu – The most urbanised state in India
- 44% population resides in urban areas against national average of 28%
- Rate of Urban Growth is 44% in the decade 1991 – 2001 against national average of 31.2%
- 8 Corporations, 150 Municipalities and 561 Town Panchayats (Councils) in TN
- Urban areas contribute >70% of SGDP in TN

Water and Sanitation Pooled Fund (WSPF)

Formation

- WSPF was set up in 2002
- Registered Trust - fully owned by GoTN
- Six Member Board of Trustees prescribes policies & procedures
- Designated as SPFE under PFDF scheme
- Successfully managed two bond issues
- Managed by TNUIFSL, fund managers for TNUDF (flagship fund), a PPP entity

Water and Sanitation Pooled Fund (WSPF)

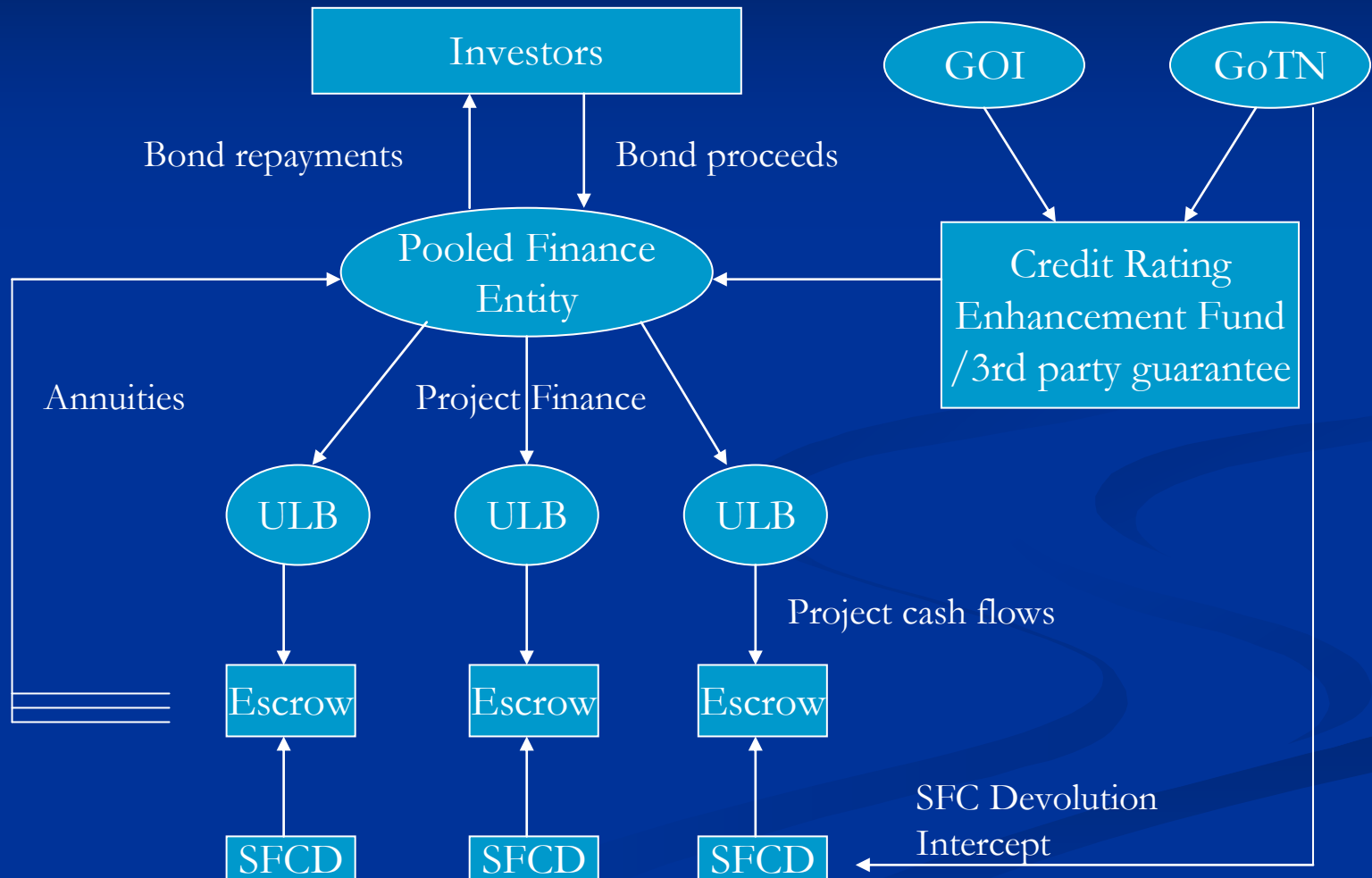
Objectives

- Mobilize cost effective resources from the capital market under pooled finance structure
- To finance urban infrastructure projects with focus on Water and Sanitation Projects
- Viable urban infrastructure projects
- Operate on no profit no loss basis

Pooled Financing

- Pooling of individual project fund requirements of ULBs
- SPV/Financial Intermediary raises debt from capital market on behalf of the pool by issuing bonds
- Bond proceeds used to finance capital assets
- Project revenues to meet debt service and O & M
- SPV responsible for repayment to bond holders
- Rating, Credit enhancements and Guarantees
- Support by State/Central Government

Pooled Finance Funds Flow



WSPF Bond Issue - 2002

- First of its kind in country; refinancing of existing loan @16%
- Fund requirement of 13 ULBs pooled (Issue size Rs. 32 crs) and a pool bond @ 9.2% p.a. for 15 yrs. issued in 2002 (Subscribed Rs.30.41 crs)
- Credit enhancement through
 - Escrow of property tax and other collections
 - Bond Service Fund – Rs.6.90 crs by GoTN
 - USAID guarantee for 50% of the principal amount
 - Interception of State transfers
- Credit rating AA(SO)
- Saving of 6.8% on interest rate to ULBs
- Investors - PF Trust, Gratuity Fund, Banks,
- Promptly serviced all instalments
- Actively traded

Subscribers to the issue

• Karnataka Bank	Rs. 200 mn.
• ICICI Bank	Rs. 100 mn.
• City Union Bank	Rs. 2.5 mn.
• Gujarat Ind Power Co. Ltd	Rs. 1.1 mn.
• Met life Insurance PF	Rs. 0.5 mn.
• Total	Rs.304.1 mn.

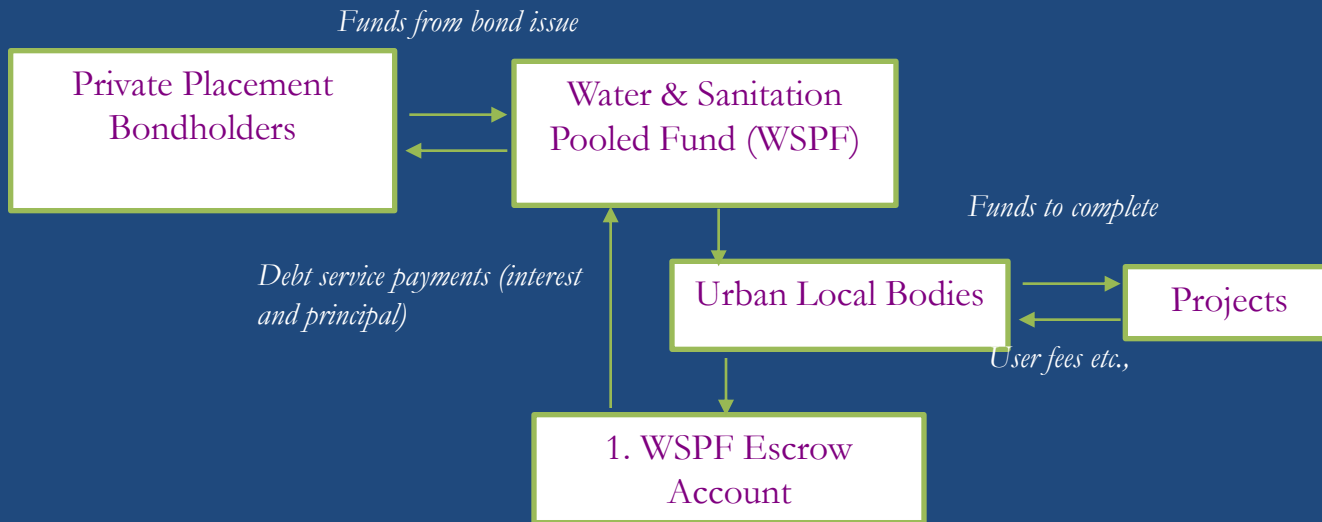
WSPF bonds are traded actively in the secondary market.

As on date, there are 28 bondholders of which 26 bondholders are PF and Gratuity Trusts

Utilization of Bond Amount

Rs in lakhs

	Name of the ULB	Bond Amount	Amount Utilized
1	Tambaram Municipality	109.20	109.20
2	Ambattur Municipality	67.32	67.32
3	Madavaram Municipality	105.75	105.75
4	Rajapalayam Municipality	51.00	51.00
5	Madurai Corporation	608.73	608.73
6	Alandur Municipality	403.00	548.07
7	Pammal Municipality	357.00	200.16
8	Anakaputhur Municipality	178.00	18.39
9	Ullagaram Municipality	281.00	199.62
10	Maduravayal Municipality	138.00	176.06
11	Valasaravakkam Municipality	179.00	377.93
12	Porur SVP	547.00	278.10
13	Meenambakkam SVP	16.00	0.67
	Unutilized		300.00
	Total	3041.00	3041.00



- Funded by ULB project revenues
- Maintained by WSPF by tapping ULB current account revenues and / or intercepting transfer payments

2. Bond Service Fund

- Debt service reserve fund
- Funded and maintained by the state at 1.6 times annual debt service payment

3. Third Party Guarantee

- Triggered when BSF is exhausted for 90 days
- USAID guarantees 50 percent of principal

PFDF Scheme

- Each State / Union Territory expected to designate State Pooled Finance Entity (SPFE)
- Guidelines prescribed by GoI
- Aimed at medium / small towns' capital requirements
- Viable Projects – Pref. to Water & Sanitation
- Issue debt securities without State Guarantee
- Credit rating by a recognized rating agency
- DSCR – at least 1.25 times
- Pooled Finance Development Fund (PFDF) Scheme - by MoUD, GoI

PFDF Scheme

- 95% of total funding to CREF and 5% to PD Grant
- Credit Rating Enhancement Fund (CREF) - 50% of CREF or 10% of the issue size contributed by Gol
- Interest earned on CREF is not tax free
- Analyze various financing options and ensure pooled financing is the most cost effective option
- Project Development Grant (75% by Gol)
- Reforms – Accounting, User charges, Collection efficiency (in line with JNNURM agenda)
- Council resolution of the participating ULBs

Tax Free Pooled Bonds

- Rate of interest : Maximum 8% - tax free
- Ceiling: 50% of the Project cost or Rs. 300 crs whichever is less
- Tenor : Minimum 5 years – lock-in period 3 years
- Reforms : Accrual based accounting system, user charges, e-governance using IT applications (GIS) and collection efficiency (at least 85% - in next 5 years)
- DSCR : At least 1.25 times
- Utilization : At least 50% within 12 months & 85% within 24 months
- May be listed on the Stock Exchange

Issue of Tax-Free Bonds under PFDF Scheme

- First in India under PFDF Scheme
- Pooled the requirements of 7 projects under implementation (Funds already committed under TNUDP-III by TNUDF at 8.5%)
- Total cost of the Projects: Rs. 187.53 crores
- Source of fund - Tax free bonds: Rs. 89.89 crores (about 48% of PC)
- Issue size of the first tranche : Rs.45 crs (about 50% of the bond size)
- Rating AA (SO) by Fitch Ratings
- CREF required: Rs.9.80 crs (about 22% of issue size)
- Tenor of bond: 10 years (as against repayment by ULB in 20 years)
- Deferred loan by TNUDF (Asset liability management)
- Credit Enhancements
 - Escrow, CREF, Interception of State grant

Participating ULBs

Rs. In crs.

Sl. No.	ULB	Project Cost	Tax free bonds	First Tranche
1	Virudhunagar	23.25	8.98	5.00
2	Ambattur	30.91	16.58	8.00
3	Pallavaram	47.21	23.71	12.00
4	Kancheepuram	12.48	3.98	2.00
5	Ramanathapuram	30.00	13.66	7.00
6	Namakkal	18.84	6.15	3.00
7	Salem	24.84	16.84	8.00
	Total	187.53	89.89	45.00

– All projects are under implementation

Credit Rating Enhancement Fund (CREF) and other features

- CREF requirement worked out as Rs.9.80 crs.
- 50% of the CREF or 10% of the project cost, which ever is lower - by GoI (Rs.4.50 crs)
- Balance by GoTN (Rs.5.30 crs)
- Financial tie up of WSPF with TNUDF for Asset-Liability Management
- Coupon rate of 8% or less would reduce cost of borrowing for ULBs, while repayment period (20 years) remains unchanged
- Interest earning on CREF can be used to further reduce interest burden on borrowing ULBs.

Project Development Grant

- Maximum eligible : Rs.175 lakhs
- Proposed to be claimed: Rs.154 lakhs
- GoI Share : Rs.116 lakhs (75%)
- However, this works out as over 25% of CREF, which is way above the 5% allocation for such grants under the scheme
- Rating fees, bond issue expenses, SPFE operational cost to be met from grant

Outcome of the first issue

- Issue size: 45 crores; Bond face value: Rs.10 lakh
- Subscribed: Rs. 6.70 crores
- Tenure 10 years
- Rating: AA (SO)
- Number of subscribers: 4 (of which two HNIs)
- Subscription period: 40 days (27.02.08 to 07.04.08)
- Number of Arrangers : two (including advisors)
- Coupon : 7.25% (competitive bidding)
- Arrangers fee : 0.24%

Time Frame

- PFDF guidelines : October 2006
- WSPF as SPFE : Feb. 2007
- Pooling of projects & Rating : Feb- April 2007
- Tax-free guidelines : June 2007
- Council Resolutions : June – August 2007
- S & MC, proposal to Gol & GoTN : August 2007
- Approval by CBDT : January 2008
- Preparatory to issue : February 2008
 - (Advisors, Arrangers, Bankers, Trustees, BSE etc.)
- Creation of CREF : February 2008
- Subscription period : Feb 27 to April 7
- Allotment of Bonds : 9th April 2008
- Total time for first issue : 18 months

Lessons learned

- Limited market appetite for long term tax-free municipal bonds, especially for tax-exempt entities like PFs and MFs
- WS and UG projects need longer repayment periods; however, market expectations are 5-7 years only
- Target investors – banks, insurance cos., pvt. cos. (Retail?)
- Banks affected by Section 14 A of IT Act, 1961
- Taxable bonds have greater potential
- Any bond issue should address Safety, Liquidity and Returns
- Approval process – Council, GoTN, GoI, CBDT - cumbersome
- Underwriting and GOI directions may be required in the initial issues till market matures
- Timing of issue critical; hence need for faster policy response

Policy Issues

- Banks
 - Priority Sector status for pooled municipal bonds
 - Exemption from Section 14 A of the IT Act, 1961
- Insurance Companies
 - Social Infrastructure Lending
 - Recognize under other approved securities
- Exempted trusts, PF & Pension Funds
 - Taxable bonds be eligible for CREF
 - Higher % of CREF (30-50%)
- Strengthening of SPFE
 - Tax exemption for interest earned on CREF corpus
 - Initial grant for formation & capacity building
- Others
 - Simplify approval process to reduce time line
 - Redefine CREF norms to address ALM (where no counter-guarantee)
 - Formation of National level Fund due to limitations of states in establishing robust SPFEs, despite toolkit having been developed

Policy Issues

- Other variants like ‘waterfall’ structure of proposed Master Financing Indenture under KfW funding of TNUDF:
 - Senior debt (investors) - 55% - at market rate
 - Subordinate debt (GoTN) - 35% - at IDA rate
 - DSRF (GoTN or TNUDF) - 10% - as equity
- Ensure single digit rate of interest for long term loans to ULBs’ capital projects
- JNNURM can contemplate similar structure by funding nodal agencies, who may act as SPFE, rather than funding individual projects
- Factor in PD phase & costs, procurement delays, risks, capacity constraints etc. for revisiting disbursement schedule under PFDF scheme; better leave it to SPFE

Policy Issues

- Leveraging of JNNURM/UIDSSMT funds rather than project grants, in order to enhance resource availability
- Comparative advantages of debt financing
 - Rigorous project development and structuring
 - Incentive to maintain asset for repayment of loan
 - Stake of ULBs
- Pooling to aid weaker ULBs access market capital, rather than using scarce UIDSSMT resources thinly
- Optimum debt-grant mix to ULBs according to project structuring based on projected revenues and ability to sustain repayment (rating of individual ULBs?)
- Special dispensation for “hardship communities”, based on rational income criteria
- Freed up DSRF to go to strengthen next pool

To Summarize

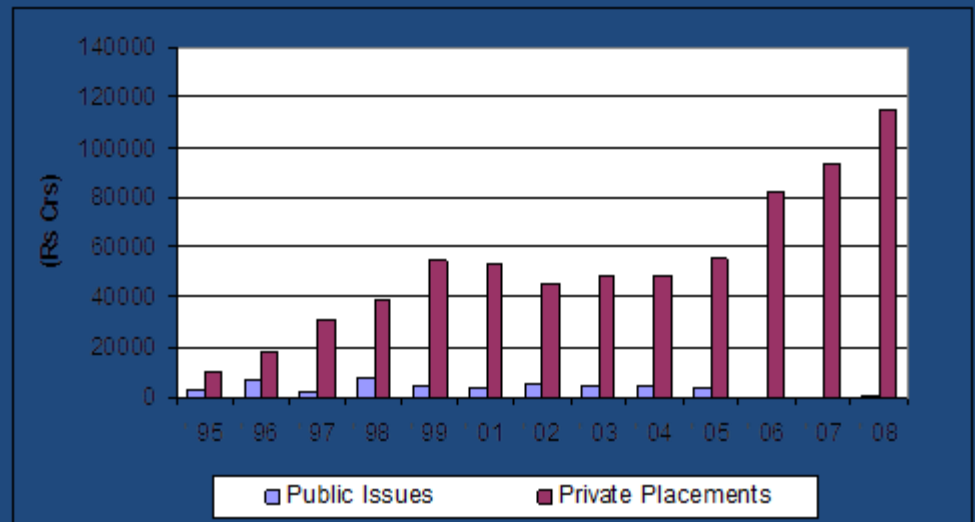
- Need for paradigm shift from grant to debt based financing of urban projects
- Grants should be need based, not one-size-fit-all
- Govt funds should be leveraged
- Market for pooled municipal bonds needs to be developed initially through taxable bonds
- Investors' concerns of safety, liquidity, returns crucial
- Simultaneously ULBs' need for long term low cost capital needs to be recognized
- Initial support of Govt required to kick-start the market for pooled bonds

Immediate Action Points

- Declare subscription to pooled municipal bonds by banks as priority sector lending
- Exempt pooled bonds from s/14A of I.T.Act
- Allow taxable pooled bonds under PFDF scheme
- Remove cap on coupon rate for pooled bonds
- Enhance CREF to max 50 (35+15) % and make its interest income tax exempt, provided it is used to subsidize ULBs through interest subsidy; aim to realize at least AA rating
- Enhance grant for transaction costs to 25% of CREF size
- Establish a National/State PFE with sovereign guarantee, having project development mandate
- Grant autonomy to N/SPFE in the issue of pooled bonds
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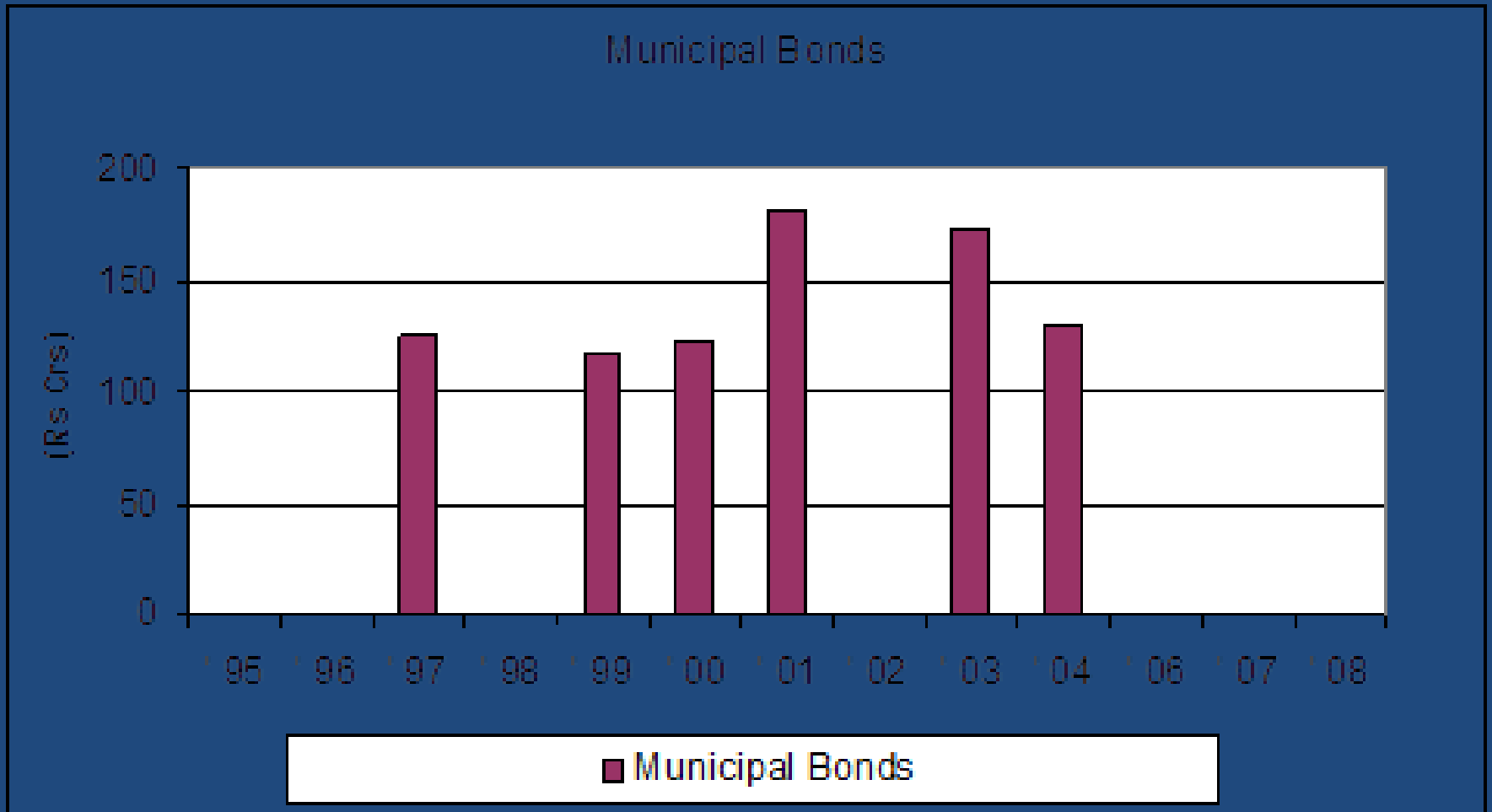
Bond Market In India

- Primary Bond Issue Size: INR 1152 bn (FY08) [deals with tenor and put/call option of 1 year and more]
- Structured finance market grew by 59% to Rs. 587 billion during FY2008 over the previous year
- Issuers : Banks, Financial Institutions, PSUs, Corporates
- Investors : Banks, PFs, Insurance Cos, Port Trusts
- Mode Used : Private Placements
- Tenor :Upto 15 years & Perpetual Bonds for Bank Capital

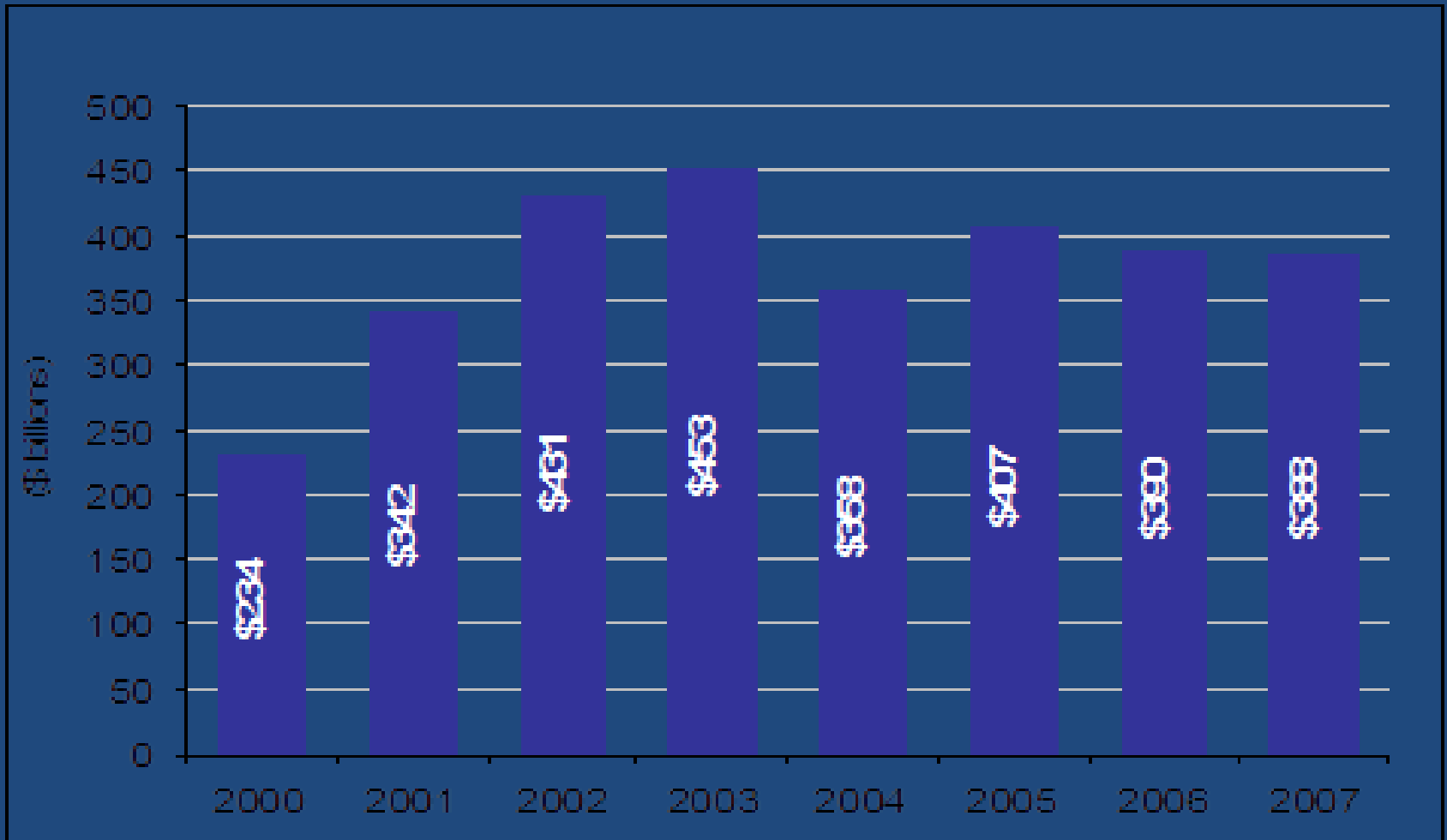


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Issuance of Municipal Bonds in India



Municipal Bond Market in the US



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