For discussion today

1. Overview of debt instruments
2. Revenue streams = ability to pay
3. Pledges, liens, hypothecation, etc.
4. Credit enhancements
5. Structuring debt service
6. Borrowing wisely
1. Overview of debt instruments

1. Loans
2. Municipal bonds
3. Lease financing
4. PPPs
Terminology and issues

**Loans**

1. Borrower
2. Lender
3. Maturities must match
4. Small-scale borrowers don’t have a choice

**Bonds**

1. Issuer
2. Bondholder
3. Liquid secondary market brings in more investors
4. For large scale borrowers
Loans

“BANK”

CAPITAL

CITY

LOAN AGREEMENT
DBSA – Johannesburg loan example

• 2015/16 Capital Expenditure Programme
• ZAR 2,5 billion
• 20 year term
Municipal bonds

INVESTORS → CAPITAL → MUNICIPAL BONDS → CITY
Intermediaries: bond banks, MDFs, cooperatives, etc.
2. Revenue = ability to pay

• **Principle:**
  - any revenue stream or asset works
    ◦ Grants and transfers from central government

• **Practice**
  - revenue streams municipality can control work best
    ◦ Taxes
    ◦ Fees and charges
    ◦ Capital revenue
3. Pledges, liens, security interests, hypothecation

1. Legal frameworks vary:
   - General law re how debt can be secured
   - Law re security a municipality can give
   - Law re lender’s remedies against municipality

2. Core principle:
   - Less risk → cheaper borrowing
   - High risk → no lending, or expensive borrowing
Specific types of instruments

- “General obligation” bonds
- Revenue bonds
  - TIF bonds
- Green bonds
- Retail bonds
4. Credit enhancements

- Guarantees, insurance, letters of credit
- Reserve funds
- Sinking funds
- Covenants
- Other
5. Debt service

- Size matters
  - How much total?
  - How much each period?

- Shape matters
The United States of America

THREE PER CENT
LOAN OF 1898.

1898
1918

The United States of America
are indebted unto the bearer in the sum of

TWENTY DOLLARS

This bond is issued under authority of an Act of Congress entitled "An Act to provide ways and means to meet war expenditures approved June thirteenth eighteen hundred and ninety-eight, and is redeemable at the pleasure of the United States after the first day of August, 1918, and payable August 1, 1918 in coin, with interest at the rate of three per centum per annum, payable quarterly in coin, on the first day of November, February, May and August in each year. The principal and interest are exempt from all taxes or duties of the United States as well as from taxation in any form by, or under, State, municipal, or local authority.

Entered under Act of June 13, 1898

Washington, D.C., August 1, 1898.

J.W. Livis
Register of the Treasury
Bullet at end of term
Loan of R 100 000 000 with 10% interest
Level principal and interest payments over 10 years
Loan of R 100 000 000 with 10% interest
Level principal payments over 10 years
Loan of R 100 000 000 with 10% interest
Which do you prefer, why?

Bullet  Level principal  Level payments
More on structure – a real example

Stacked obligations at level amortization

- R 0
- R 50,000,000
- R 100,000,000
- R 150,000,000
- R 200,000,000
- R 250,000,000
- R 300,000,000
- R 350,000,000

Years: 2015 to 2031

- Bank 1
- Bank 2
- Bank 3
- Bank 4
Adding another loan

New loan
R800 000 000
@ 10.5% interest

Additional loan at level amortization

- New potential loan level
- Bank 4
- Bank 3
- Bank 2
- Bank 1
A new loan of R800 000 000 @ 10.5% interest

Custom debt structure

Same amount, term and interest rate
Which do you prefer, why?

New loan level

New loan custom
Borrowing wisely

- Knowledge is power
- Lenders have knowledge advantage
- Municipalities must be smart