The 2012 Overture:
An Overview of Municipal Bonds

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CDIAC
CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

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Why Do Municipalities Issue Bonds?

- State and local governments issue municipal bonds to pay for relatively large infrastructure projects
- Municipal bonds are a common and popular tool, with over $433 billion of U.S. municipal bonds issued in 2010, $295 billion in 2011
- Key Question: Should an issuer use Pay-As-You-Go funds or issue bonds to pay for a new infrastructure project?
  - Can an issuer afford to pay 100% of a project upfront and:
    - Maintain healthy reserves
    - Effectively manage rate/tax increases
  - Would an issuer need/prefer to finance multiple projects instead of just one project at the same time and with the same amount of revenues?
  - "Intergenerational equity" – if an issuer wants all the people that benefit from the project over time to pay for it, it would issue bonds
- Long-term bonds should not be used to finance operations or maintenance (though occasionally are)

Municipal Bonds Have a Long and Noble History in the U.S.

- Financed many iconic governmental projects in California and across the country

Bay Bridge

K-12 Schools

CA State Water Project

California State University

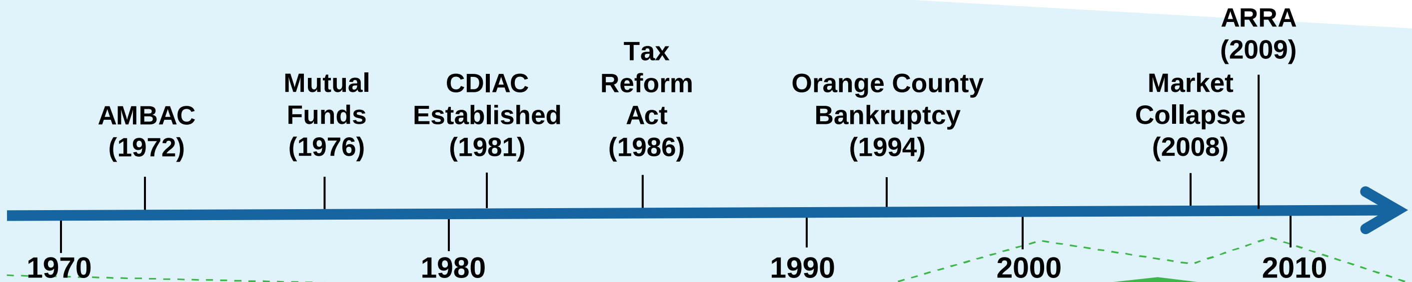
San Francisco International Airport

What are Municipal Bonds?

- Municipal governments that issue bonds receive a cash payment at the time of issuance in exchange for a promise to repay investors principal plus interest over time
  - Bonds to finance long-term municipal infrastructure projects are typically repaid over 20-40 years
- Rather than getting a loan from one institution (e.g. a commercial bank), municipal bonds are sold in the public capital markets to many investors
  - Large loan is broken up into pieces as small as $5,000
  - Issue is divided into different maturities and interest rates (i.e. 1-30 year maturities) to appeal to various investor types
  - Accessing the capital markets generally results in getting the lowest cost of capital for projects of size
- Municipal bonds are a type of security- “Stocks & Bonds”
  - Industry is “self-regulated” by the MSRB (Municipal Securities Rulemaking Board), subject to SEC review and approval of rules
  - Federal Dodd-Frank reforms of 2010 are changing the rules and roles of municipal market participants

History of the Market

- Municipal debt predates corporate debt by centuries
  - First U.S. municipal bond was issued in 1812 for the Erie Canal
  - Explosion of railroad debt, followed by the panic of 1873 and subsequent defaults, gave rise to a number of surviving institutions: e.g., state legal debt limits, bond counsel and rating agencies
- Tax Laws, Product Innovations and Technology Change Muniland
  - Bond Insurance: insurance penetration reached 57% in 2005, fell to 6% by 2011
  - Computers (First PC created in 1975, but not widely available in offices for ten years)
  - The 1980's saw the creation of variable rate bonds (to manage soaring interest rates) and federal tax law revisions (to manage perceived abuses)



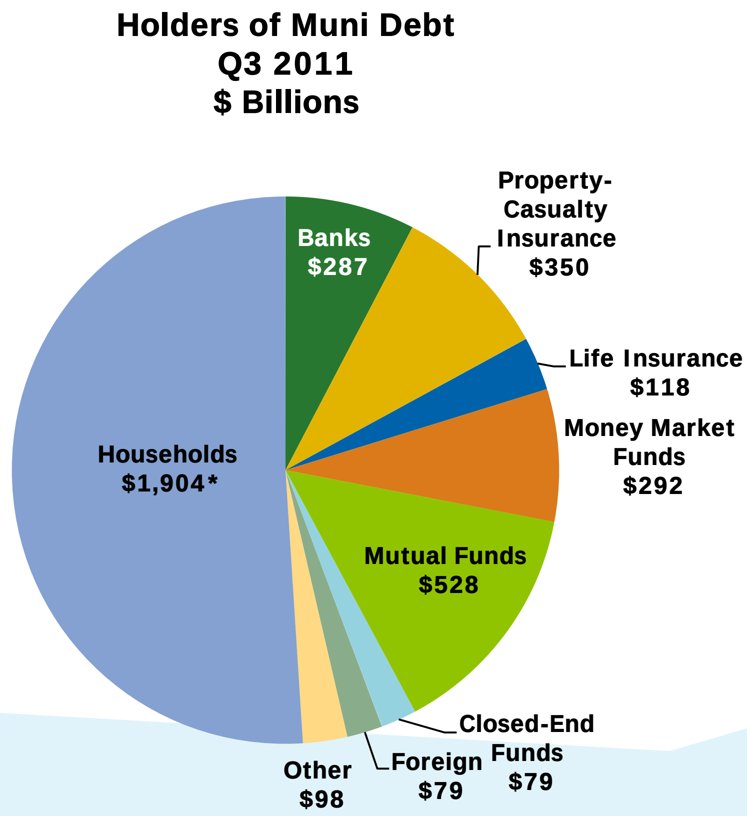
How are Bonds Issued?

- Finance team works together to create a marketable and credit-worthy financing structure
- Legal documentation outlines the (limited) rights of the bondholders and the mechanics for repayment; provides disclosure information on the credit to potential investors
- Issuer offers its bonds to investors through investment banks (broker-dealers)

  - Broker-dealers manage the sales process
  - Make an offer to the issuer to buy the bonds at certain prices on a maturity-by-maturity basis based on investor demand
  - If less than 100% of bonds are sold, broker-dealers typically underwrite a portion of the bonds
- Other key players include financial advisors, bond and disclosure counsel, trustees, and rating agencies

Who Buys Municipal Bonds

- Know thy lenders
  - Most bonds are purchased by "professional buyers"
    - Mutual funds
    - Professional money managers
    - Trusts
    - Insurance companies
  - Individual investors
    - Direct retail ("mom and pop")
    - Professional retail (Separately Managed Accounts or "SMAs")
    - Indirect retail (mutual funds)



*Includes households, domestic hedge funds, private equity funds, and personal trusts
Source: Federal Reserve "Flow of Funds"

What is Special about Municipal Bonds?

- Interest on most municipal bonds is tax-exempt at the Federal and State level
  - Tax-exempt investors accept lower rates than available on taxable investments to achieve the same after-tax return
  - Tax-exempt interest is more valuable to individuals in higher tax brackets
  - Tax-exempt interest rates are also lower in states with high income tax rates, all else being equal
  - Typically, tax-exempt bonds carry lower interest rates than taxable bonds of similar credit quality
- As an alternative, in 2009, under the American Reinvestment and Recovery Act ("ARRA"), Build America Bonds ("BABs") were authorized
  - Provided municipal bond issuers a 35% interest rate subsidy on taxable bonds
  - Broadened investor base for muni bonds to include taxable investors
  - Over $181 billion issued since program inception before it expired on 12/31/2010
- Bond counsel opines at closing that all conditions have been met to qualify for tax-exemption or as BABs

Can the State or a Local Government Just Issue Bonds if it Feels Like It?

- NO, there are state constitutional debt limits in all states
- Unless an issuer meets an exception to the State Constitutional debt limitation, it must get voter approval to issue bonds

Government Level	State of California Voter Approval Requirement
State	50% - General Fund secured
Local	55% - Property Tax secured – School Districts 2/3rd's - Property Tax secured – Other

- Three major exceptions to the State's debt limitations have been recognized by California Courts and are commonly used

Lease
- Strong case law
- Debt service payments subject to "beneficial use & occupancy"
- Debt service is subject to abatement if no "beneficial use & occupancy"

Special Fund
- Revenue bond debt service supported by revenues related to the project(s) financed
- Case law allows for other "special fund" obligations

Obligation Imposed by Law
- Involuntary obligation, such as one imposed by a legal judgment
- Examples: Judgment Obligation Bonds, Pension Obligation Bonds & Teeter Financings

What Resources are Used to Repay Bonds?

	Source of Repayment	Type of Bond
Dedicated Taxes	Unlimited ad valorem property tax Voter-approved additional sales tax Parcel tax Property tax increment	General Obligation Bonds (GOs) Dedicated tax revenue bonds Mello-Roos bonds Redevelopment tax allocation bonds
General Fund Obligations	Annually appropriated lease payments Required pension contributions General fund payments	Lease revenue bonds Pension obligation bonds State-level GOs
Special Fund Bonds	Water and other utility fees Special benefit assessments	Enterprise revenue bonds Assessment bonds
Non-Governmental Activities	Loan repayments from non-profit corporations like hospitals and universities Loan repayments from “exempt” business	501(c)3 revenue bonds Private Activity bonds

Bonds and Other Bond-like Securities Contain Promises (Covenants) Made to Bond Buyers (Lenders)

- Promise to repay principal and interest
- Promise to take actions necessary to repay the bonds; for example:
  - Levy a property tax for local government general obligation bonds
  - Budget and appropriate lease payments for lease revenue bonds or COPs
  - Set rates to pay operating costs, debt service, and usually a margin of safety for revenue bonds
- Promise to maintain tax-exemption (if tax-exempt)
  - Promise to use proceeds on non-private activities
  - Expectations regarding expenditure within three years
  - Rebate of arbitrage (any profit on investment of proceeds)
- Other promises to protect investors may include
  - Maintenance of system
  - Limitations on additional debt
  - Maintain insurance on assets
  - Annual audits
  - Continuing disclosure

How are Bond Proceeds Used?

- New Money
  - Capital projects
  - Costs of bond issuance
  - Debt service reserve fund equal to up to one-year's debt service
  - Pre-funded or "capitalized" interest
- Refundings
  - Tax-exempt municipal bonds are usually callable; i.e., can be redeemed by an issuer prior to maturity (often after ten years)
  - Call option may increase initial interest rates
  - Refunding bonds are usually issued at lower rates to generate cash-flow and present-value savings
  - Non-economic refundings done less frequently to change the covenants in the legal documents or to restructure debt service
- Working Capital
  - Tax and Revenue Anticipation Notes are for annual cash-flow borrowings
  - Long-term working capital (deficit borrowings)
  - Tricky tax laws govern what can be issued as tax-exempt bonds
- Interim Finance
  - Bond anticipation notes or commercial paper are sold in anticipation of bond issue

Summary

- U.S. municipal bond market is large and well-established
- Municipal bonds are a useful and cost-effective method to raise capital for infrastructure projects
- As with any debt, it is important to make sure that both the debt service as well as the operating costs are affordable
- Hire a strong team of qualified financial professionals to assist you in developing a credit-worthy and cost-effective structure
- The role of the public finance staff:
  - Ask questions
  - Understand the tradeoffs between costs, risks and opportunities so you, your management and your governing board can make informed decisions
  - Ask even more questions: as the issuer, there are no stupid questions

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