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Municipal Reinvestment Contracts

by Victor Modugno

During 1999, municipal bond outstandings crossed the $1.5 trillion mark.[1] Of this, about 60% are revenue bonds, with the balance being general obligation (GO) bonds. GO bonds are backed by the tax revenue of the state or municipality, and their credit rating is based on the credit of the issuer. Revenue bonds can only look to revenue from the project they are financing. The credit ratings are based upon the structure of the program, and so they are called structured financings. Whereas proceeds from GO bonds usually go into the issuer's cash management (e.g., to pay off short-term debt or invested in short term accounts), revenue bond proceeds are held in trust for the bondholders to secure repayment. Guaranteed Investment Contracts (GICs), also called Investment Agreements, are used for investment of these trust funds.

While higher interest rates led to a drop in refundings in 1999, new money bond issues have remained level at about $150 billion per year over the past few years. A combination of low interest rates and a strong economy have led to a high level of municipal projects. GICs are typically purchased for new money issues, not for refinancings. New money revenue bonds, which might purchase GICs, have been running at about $90 billion per year.

Of this $90 billion, about $50 billion requires collateral in the form of government bonds. Tri-party repo GICs can be used for this purpose. Under this arrangement, collateral is transferred to a third party trustee. The level of over collateral and the frequency of mark-to-market will be a function of the securities (treasuries or agencies), and the rating of the GIC provider. Repo-GICs are used by government bond dealers to finance inventory as an alternate to bank loans. Of the remaining $40 billion where unsecured contracts can be used, about half require AAA/Aaa ratings, which would eliminate most life insurers.

A Historical Perspective

The growth in structured financing in the late 1970s, following the "tax-payer revolt" exemplified by Prop 13 in California, laid the groundwork for the muni-GIC market. The tax reform act of 1986 attempted to curb some of the abuses in the tax-exempt market by limiting issuance for private activity and requiring rebate of interest arbitrage on tax-exempt reinvestment. This created a new taxable municipal bond market that Executive Life and Drexel exploited by issuing $3 billion of these bonds in 1986, after Executive Life received a triple A rating from S&P. Under this program, all of the bond issue was placed in an Executive Life GIC. Because of Executive Life's junk bond investments, the crediting rate on the GIC was higher than the cost of funds of the bond issue, allowing the municipality to earn arbitrage, as well as cover Drexel's underwriting fees.

The Executive Life program brought muni-GICs to the attention of the life insurance industry. Funding agreement legislation was passed in New York and California and other states in the late 1980s. Funding agreements are a series of payments not contingent upon mortality or morbidity, and some states took the position that GICs could only be issued to groups covering individuals where annuities would be purchased. A statute was needed to permit life insurers to issue such contracts for municipal reinvestment.

The failure of Executive Life and the attempted repudiation of the muni-GIC contracts by the insurance commissioner contributed to a negative image of life insurers as GIC issuers. While the courts ultimately ruled in favor of the muni-GIC holders, the credit requirements for life insurers are frequently stricter than other providers.

Common Funds That Use GICs

Unlike the Executive Life GICs, the tax-exempt reinvestment market provides funds for valuable public projects, such as schools, fire stations and equipment, low-income housing, sewer systems, and waste disposal.

Some of the more common funds that use GICs, including risks and other issues, are listed below.

Debt Service Reserve (DSR) Funds

Typically 10% of the proceeds of the bond issue are placed into a reserve fund that can be drawn in the event the issuer cannot make an interest payment. Usually there is a provision to allow replenishment within 12 months. The reserve fund runs for the same period as the bond issue, typically 30 years, callable after 10 years. Since the bond issue would be called if interest rates are low, this is an ideal liability — a fixed rate contract that is called when interest rates go down. It can be perfectly matched with a callable bond.

An off-balance-sheet version of this contract is called a treasury put. Here the issuer buys a 30-year Treasury and a synthetic funding agreement to cover book value on draws. The risk is that the muni-bond issuer will default in a high interest environment, resulting in a loss when funds are paid out at book value.

Municipal bonds generally cover necessities such as sewer systems and do not have the same default rates as corporates. A study of defaults of unrated muni-debt during the 1980s showed a default rate of less than .2% per year.[2] The only historic period of high level of defaults was the 1930s, when interest rates were low.

Discount DSRs, where a payment is made upfront reflecting the lower crediting rate on the DSR, have more risk since the discount would be made up in a default and require more careful underwriting of the bond issue.

As with all muni-GICs, DSRs require downgrade provisions. While the economic risk can be mitigated by using novation or assignment remedy (where a replacement contract is purchased from a qualified provider upon downgrade), some states are requiring type C reserves, which could result in deficiency reserves on these contracts with 30-year final maturity.

Float Funds
These are funds that accumulate monthly payments and then pay out principal and interest semi-annually. They go to zero at least once per year. Like DSRs, they run for the term of the bond. By writing contracts with different payment dates, average balances can be invested long, or swaps can be used to immunized cash-flows. An off-balance-sheet version of this contract is called Debt Service Deposit Agreement.

Construction
Funds are held until disbursed to pay for construction. Typically there is a 2-to-3 year final maturity with a 9- to 12-month average life. A draw schedule is developed as part of an engineering study. The GIC may allow schedule draws only. However most are full-flex or "no sooner, no greater" where the funds can be drawn as needed for construction. Since the engineering study doesn't allow for problems like bad weather, draws are almost always later than scheduled and are not interest sensitive.

Capitalized Interest (Cap-I)
Funds to make the first 3 years' interest payments are set aside to make payments until the project starts to generate revenues.

Tax Revenue Anticipation Notes (TRANS)
These are issued by school districts to provide for cash management. They are typically issued for one year. A small amount is withdrawn and then repaid prior to maturity. This is one exception where the issuer can keep interest arbitrage earned on the spread between the GIC and the bond. These are obligations of the school district, so even insured deals may allow AA GIC providers.

Housing
These funds provide mortgages to low-income homebuyers. After a 3-year origination period, mortgages are packaged into Ginnie Mae securities and sold to investors. These funds are somewhat interest sensitive, since loan originations may decline as interest rates fall (or accelerate if they rise). However, since these are subsidized and may be the only source of loans for low-income buyers, they are not as interest sensitive as regular mortgage loans.

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Differences in Funds

About 90% of the funds are short term, generally being dispensed within one year to provide for the underlying purpose of the bond issue, with the balance held in reserve funds for the term of the bond, typically 30 years, subject to early call. This is different from stable value, 401(k) GICs, which are issued for 3-5 year terms. Other differences include:

- **Downgrade Provisions**
  These provisions have been required since the failure of Executive Life caused losses to bondholders. They provide an out if the GIC provider is downgraded below a certain level. A put provision, where the book value is paid out, novation or assignment provision where a replacement contract is purchased from a qualified provider, and posting collateral are the most common remedies for downgrade.

- **Enforceability Opinions**
  Every contract in this market must be accompanied by a legal opinion that states the contract is enforceable and the issuer is authorized to issue it.

- **Signed Contract Required before Transfer of Funds**
  The issuer typically has a few days between commitment and funding to issue a signed contract.

- **Less Price Sensitive**
  Interest arbitrage, over certain amounts, is rebated to the IRS for most muni-bond issues. The highest rate does not necessarily win.

- **Different Players**
  Bond counsel, financial advisors, bond underwriters, and brokers are involved in the GIC purchase. The rating agencies and bond insurers establish the requirements for the GIC issuers. The municipalities are usually passive entities in this process. These fee-based advisors are focused on avoiding problems, not on getting the best rate. Competitors include

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securities firms, subsidiaries of bond insurers and foreign banks.

- **Bond Insurance**
  This has increased from 25% to 50% of new issues between 1990 and 2000. Bond insurers require AAA/Aaa ratings from insurers in this market.

- **Inefficient Market**
  There are over 50,000 municipal bond issuers. Bond insurers and underwriters who exercise control over the GIC placement have subsidiaries that compete in the muni-GIC market. Yield restrictions and lack of profit motive also limit competition. Frequently one institutional buyer (a tax-exempt mutual fund) will buy all or a large portion of the bond issue and can specify or object to the GIC provider.

For life insurers who do venture into this market, there is lower cost of funds and different, non-correlated risks compared to 401(k) or capital market GICs. There are A/L synergies in adding these liabilities to other liabilities of typical life insurer and the capital model is favorable, resulting in high shareholder value-added from this business.

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Footnotes

1) Most of the data for this article was taken from the *Bond Buyer*.

2) "Municipal Bond Defaults, the 1980s: A Decade in Review," J.J. Kenny Co., Inc. 1993.

The Investment Actuary Symposium

Investment Actuary Symposium in November

The Society of Actuaries Finance Practice Area is pleased to announce its first Investment Actuary Symposium on November 13-14 in Boston. With the growing importance of the position of Investment Actuary, this is an opportune time to hold such a symposium. The symposium will focus on issues and matters impacting the work of the actuaries working in the finance, investment, and asset-liability management related areas.

Highlights will include:

- General sessions focusing on the economic and market outlook
- Break-out sessions covering hot topics of the moment, including:
  - performance measurement
  - liquidity
  - option pricing
  - how to develop an investment strategy

The symposium will be 1.5 days long: November 13 (full-day) and November 14 (half-day). Tentative planning is being done for a special "piggy-back" seminar on Unified Valuation System (UVS), beginning in the afternoon of November 14, going into November 15. So, mark your calendars now, and we look forward to seeing you at what promises to be a very exciting symposium!