INVESTING BOND PROCEEDS

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· Bond proceeds are typically the forgotten assets

The Bonds Have Been Issued ... Now What?

- Congratulations!
 - Months of careful planning are over
 - At last, the bonds have been issued
 - You've locked in a low cost of funds
- Do Not Forget About the Bond Proceeds
 - Probably on your "To Do List"
 - Frequently forgotten or lumped with other money
 - But these are real dollars with important implications for the overall health of the bond issue







 Additional investment earnings will reduce borrowing costs or increase amounts available for additional project costs

Why Bother Worrying About Investments?

Costs

- Interest costs accrue on bonds immediately so...
 - Negative carry (i.e., negative arbitrage) on investments increases financing cost
- Improved investment performance will...
 - Reduce negative carry, and even lower overall borrowing costs

Examples of Typical Funds

- Project Funds
 - Net funding + more earnings = smaller bond issue
 - Gross funding + more earnings = more project funds
- Reserve Funds
 - Earnings will offset debt service costs
 - Higher earnings here can offset costs of negative carry in **Project Funds**
- Debt Service Funds
 - More earnings = less net debt service







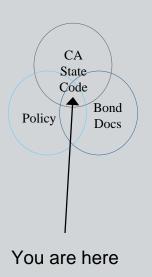
- General principles
 - ✓ Safety
 - ✓ Liquidity
 - ✓ Yield

Formulating an Investment Strategy – **General Principles**

- Public Funds Investing Oath of Responsibility
 - Bond proceeds are actually the public's assets
- Safety
 - Protect your principal by minimizing credit risk
- Liquidity
 - Ensure that funds are available when needed
 - Too long ... market price risk
 - Too short ...reinvestment rate risk
 - Matched to expectations ... just right
- Yield
 - Matching liabilities and assets
 - Floating or fixed rate investment returns
 - Generate consistent risk-adjusted returns
 - Arbitrage rebate requirements may prohibit you from retaining additional earnings from higher yielding investments (i.e., riskier)







Formulating an Investment Strategy – **Starts with Safety**

- "Permitted Investments" as defined by:
 - Sections of California State Code
 - Investment policy
 - Bond documents
- External investment approvals
 - Insurer or other credit enhancer criteria
 - Rating agencies
- Federal tax law compliance
 - Arbitrage rebate and yield restriction requirements







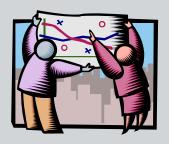
 Start considering investment strategies as soon as the bonds are sold and before they are issued

Formulating an Investment Strategy – Practical Considerations

- When do I start?
 - Once the structure and sizing of the debt is known
 - If you plan on using an investment advisor, do so at the beginning of your debt issuance, not at the end. And it shouldn't cost you anything more
 - Add investment advisor to the "Financing Team"
- Integral part of debt strategy
 - Do you net fund or gross fund?
 - Surety or cash-funded Reserve? Example
- Can't I wait for rates to go higher? That would seem to be a good bet ...
 - Yes....No....Maybe.... Did you say "bet?"







Formulating an Investment Strategy – **Practical Considerations (continued)**

- \$50,000,000 new money financing
- 25 year amortization
- Bond yield = 4.50%
- Construction Fund = 4.20%

	Surety Bond	Reserve Fund
Amount Borrowed	\$150,000	\$5,000,000
Investment Rate	NA	4.90%

• Total debt capacity may determine whether to purchase a surety bond or fund a Reserve Fund





 The objective of an investment strategy for tax-exempt bond proceeds is to earn positive arbitrage without compromising safety or liquidity



Formulating an Investment Strategy – Arbitrage Rebate Requirements

- Goal: Positive arbitrage without compromising safety or liquidity
- Prepare prospective arbitrage rebate models for the various investment alternatives
- If positive arbitrage is attainable even when safety and liquidity concerns have been addressed, then you might as well further enhance safety and liquidity
- Target the expenditure exceptions for rebate payment relief if positive arbitrage will be generated in the project funds





Primary Investment **Vehicles** Liquidity **Funds Fixed** Income Structured Investments

Evaluating Investment Vehicles

- Identify candidate investment vehicles
 - Liquidity Funds
 - Pooled Investments
 - LAIF, money market funds, county pool, operating cash
 - Fixed Income Portfolio
 - Treasuries, Agencies, Medium-term notes
 - Structured Investments
 - Repurchase Agreements, Forward Delivery Agreements, **Investment Agreements**







Typical Instruments

- ✓ Money Markets
- ✓ Sweep Funds
- ✓ Investment Pools

Evaluating Investment Vehicles – Liquidity Funds

- Funds that provide on-demand withdrawals and investments of proceeds, typically at a constant \$1 NAV (or \$1/share)
- "Sweep" funds are money markets that automatically invest (or sweep) any dollars that would otherwise go uninvested
 - Be aware of management and 12b-1 fees
- Money market funds are SEC regulated and have specific maturity limits on assets held; 90 day maximum (or 60 day max for AAA rating)
- Investment pools may have different guidelines and required notice periods, but may offer higher returns as a result

Liquidity Funds	
Safety	Very High / routine rating confirmations
Liquidity	Very High / Anytime / \$1 in, \$1 out
Yield	Variable rate / Can change daily
Fees	Management estimated 10bp to 20bp / sweep function extra (could be additional 30bp or more)
Administrative	Very little to nonexistent





Evaluating Investment Vehicles – Portfolio Management

Typical Instruments

- Treasuries
- Agencies
- Commercial Paper
- **CDs**
- portfolios thereof

- Safety considerations
 - Market price (interest rate risk)
 - Reinvestment rate risk
- Liquidity considerations
 - Fund characteristics
 - Expenditure dates determine liquidity/duration characteristics
 - Matching cash flows reduces risks
- Yield considerations
 - Yields measured from purchase to actual disposition date
 - Careful not to reach; consider liquidity
 - Combining differing maturities reduces risk

Portfolio management is a true discipline. The markets are very transparent, but also very fast.







Evaluating Investment Vehicles – Portfolio Management

Portfolio Management		
Safety	Per issuer policies and guidelines, but typically only highest rated instruments are permitted	
Liquidity	Very; typically only the most liquid securities permitted. Consider duration of fund	
Yield	Fixed purchase yield; average life and duration driven	
Fees	Transparent pricing on individual securities Externally Managed: 10-15bp, plus personalized attention and control over fund characteristics, unlike money market funds Internally Managed: requires training in portfolio design, facility with trading, daily attention, integration of the arbitrage rules	
Administrative	Ranges from minimal to significant, depending on whether externally or internally managed.	







Typical Instruments

- Forward Delivery Agreements
- ✓ Repurchase Agreements
- ✓ Investment Agreements

Evaluating Investment Vehicles – Structured Investments

- Structured Investments are custom tailored to the expected drawdown requirements of a fund
 - Issuer agrees to make draws only for specified purposes (e.g., project costs, debt service)
 - In exchange, providers are willing to make all draws at par value (i.e., assume market price and reinvestment risk)

Structured Investments

- Forward Delivery Agreements (broker/dealers)
 - Not itself an investment, but rather a contract pursuant to which investments will be purchased now and in the future
 - Those investments must be permitted investments
- Repurchase Agreements (banks and broker/dealers)
 - By definition, collateralized. Issuer's trustee holds the collateral
- Investment Agreements (insurers mainly, some foreign banks)
 - Involves a deposit with a 'provider', which can be collateralized at execution or under certain events (e.g. downgrade)
 - Tough initial counterparty credit rating







- By agreeing to certain rules for draws, an issuer can transfer risks associated with fixed income investments to the provider
- The rules are consistent with permitted investments outlined in the bond documents

Evaluating Investment Vehicles – Structured Products

- Project / Acquisition Fund
 - Usually "full flex" to accommodate actual versus projected draw schedule
 - All draws made at par value but providers will want a rule to prevent draws being made simply to invest elsewhere

Reserve Funds

- The issuer agrees to draw only for purposes under the Indenture (e.g., shortfall in funds to pay debt service), and the provider agrees to par value draws
- Removes market price risk associated with a fixed income investment (e.g., Treasury note)
- Cannot make a draw to reinvest in another investment
- Debt Service Funds (e.g. 1/6 and 1/12 deposits)





Evaluating Investment Vehicles – Structured Products

Special Federal Tax Law Considerations

- Purchase at Fair Market Value (issuer's sentiments exactly!)
- · Competitive bid process, best bid wins
- Bids awarded on rate alone, so bids must be uniform (can be easier said than done)
- Rules permit a 'rebate tax deduction' for certain costs (Qualified Administrative Costs).
- However, benefit only if positive arbitrage on deal (realized in the form of a lower rebate payment).

Safety	Per documents and insurer provisions, if applicable. Watch out for subtle variations
Liquidity	Very high, but only for purposes under Indenture (e.g., project, debt service)
Yield	Fixed or variable yield. Level will depend on average life, duration, and size <i>and</i> credit of issuer
Fees	For QAC treatment eligibility purposes, commonly expressed in terms of .20% of amounts to be invested, with upper and lower limits consistent with current regulations. Provider pays fees as costs are reflected in the rate bid
Administrative	Limited to initial design, structuring, and bidding. Post execution, there is minimal administrative burden







Conclusion

• DON'T FORGET ABOUT THE BOND PROCEEDS!

- As with investing any public funds, your objectives are Safety / Liquidity / Yield
- The difference with bond proceeds is that you usually have less flexibility and unique cash flow considerations
- It's GOOD to owe arbitrage rebate (though not too much!)

