CDIAC Pre-conference at the BOND BUYER

Understanding Costs and Incentives in Municipal Bond Pricing

Presented by:

Chris Mier, CFA
Managing Director, Analytical Services

September 25, 2013

Loop Capital Markets

What are the two biggest myths in Public Finance?

Banker: "I am here to help you!"

Issuer: "I am glad you are here!"

The process of securing funds in the municipal bond market is:

- **Complex**
- **Confusing**
- **Conflict-ridden (potentially)**
- **Chock-full of difficult decisions**

The issuer may feel bewildered and wondering how to get the most accurate information from the team of professionals that they have assembled.

Today's Session

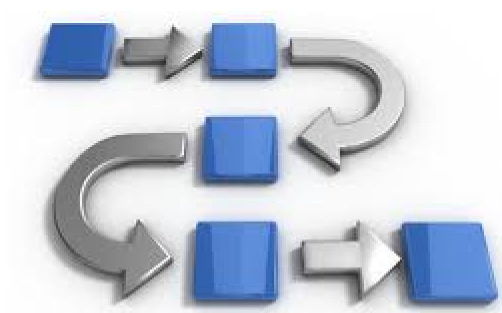
- **Today we will try to illuminate various aspects of this complex process so that you will feel as comfortable as possible about the decisions you will have to make.**
- **We will cover:**
  - The issuing chronology
  - The various roles hired professionals have
  - Bringing a deal to market
  - Incentives of the participants
- **Special Topics**
  - Bond pricing violations (Morgan Stanley case)

Negotiated or Competitive?

Conditions for a Competitive Sale	Conditions for a Negotiated Sale
The issuer has significant public borrowing experience with a positive reputation in the financial debt markets	The issuer has limited public borrowing experience and no reputation in the financial debt markets
There is an active secondary market for the issuer's securities	The issue has a non-enhanced credit rating of below A and can obtain a credit enhancement prior to the sale
The debt structure is backed by the issuer's full-faith-and-credit or a strong, historically performing revenue source backs the debt structure	The revenue stream backing the debt is weak, uncertain, or has no history
The issue is not viewed by the market as carrying complex or innovative features or requires explanation as to the bonds' security	The issue is too large to be easily absorbed by the market or too small to attract investors without a concerted sales effort
Interest rates are stable, market demand is strong, and the financial debt market is able to absorb a reasonable amount of buying or selling at reasonable price changes	The issue is viewed by the market as carrying complex or innovative features or requiring explanation as to the bonds' soundness
Policy considerations can be reasonably addressed through specifications of the Notice of Sale. An example of a policy consideration would be a disadvantaged business enterprise (DBE) and regional firm participation that relate to syndicate membership and bond allocations	Last minute changes in disclosure are likely due to legal or legislative issues
	Policy considerations, such as disadvantaged business enterprise (DBE) participation and regional firm participation that relate to syndicate membership and bond allocations, or targeting specific investors

Getting the lowest cost financing—it starts with the team

- **In order to get the lowest financing cost possible, issuers should establish a process that leads to the selection of the best professional team possible, and that meets their needs for the transparency.**

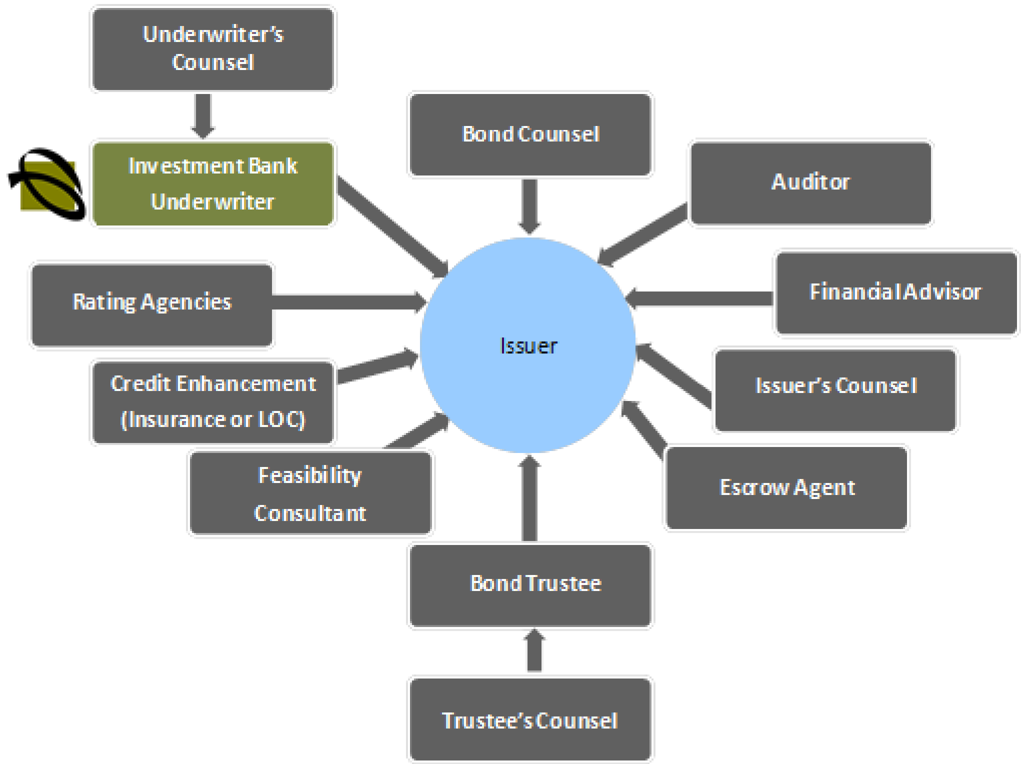


Advisors or Other Consultants

- **Issuers often hire advisors to assist them with a range of services, including the process of issuing municipal securities.**
- **Factors to consider when assessing what services issuers need:**
  - Staff resources
  - Advisor expertise
  - Number, size and frequency of planned bond issues
  - Complexity of transaction
- **Financial advisors may assist in the development of a financing plan, underwriter evaluation and selection, rating agency presentation, preparation of offering documents, evaluating pricing**
- **Possible ways to compensate advisors for their services:**
  - Fixed fees
  - Hourly fees
  - Contingent fees
  - Retainer agreement
  - Fees based upon the amount of a transaction

Selecting the Finance Team and Preparing for the Financing

- **One of the first steps in the underwriting process is selecting the team. Once the deal team is selected, the "Kick-off meeting" is the starting point to plan a course of action for the transaction, including:**
  - Familiarize team and establish roles
  - Financing Timetable
  - Review market conditions
  - Discuss any potential issues that may affect the credit and bond structure
  - General Financing Structure
    - Fixed rate versus variable rate bonds
    - Derivate products
  - Discuss if any credit enhancements are anticipated
    - Bond Insurance
    - Letter of Credit
    - Liquidity Facility
    - Determine Strategy



Deal Participants and Responsibilities

Participant	Description of Role(s)
Issuer	Defining Financing Requirements Setting and Implementing Debt Management Policy Identify Services Required Establishing a Financing Process
Underwriter	Work with issuer and financial advisor to design the financing plan Assist in the development of bond documents as well as other negotiations Assist in preparing rating agency strategy and presentations Obtain and evaluate letter of credit or bond insurance bids "Run Numbers" - quality of analysis and models to present alternative structures is key Pre-sale marketing Recommend optimal timing for pricing Manage the pricing process Provide proceeds at closing and obtain funds from investors Prepare distribution analysis Assure secondary market support: orderly marketing research and analysis Reinvestment of bond proceeds
Financial Advisor	Assists in developing the financing plan Drafts or assists in the preparation of the Notice of Sale and preliminary Official Statement for competitive issues Assists in underwriter evaluation and selection Prepares rating agency presentations Evaluates market conditions and pricing performance of senior manager
Rating Agencies	Assigns credit rating to the issue Update ratings periodically while debt is outstanding May be consulted on potential credit structures and fiscal actions

Deal Participants and Responsibilities (Continued)

Bond Counsel	Affirms issuer's conformity with all legal requirements and authorization of the bond offering Attests to validity and enforceability of the bonds Confirms tax-exempt status of offering Discloses and examines litigation that may jeopardize the validity of the offering Interprets arbitrage regulations and tax law and provides guidance in structuring issues Drafts certain documents, including the Resolution or Indenture Series Resolution, tax certificate and other required documents Drafts enabling legislation Interprets existing legislation, Constitution and local finance law
Underwriter's Counsel	Share drafting responsibilities including Preliminary Official Statement, final Official Statement, Bond Purchase Agreement, Blue Sky Memorandum and Agreement among Underwriters Advise underwriters regarding their legal positions with respect to the issue On occasion bond counsel may act as underwriters counsel
Syndicate	The main functions of a syndicate are distribution and sharing underwriting risk Composed of different types of firms; role and capabilities should be well defined
Credit Enhancers	Provide substitute for or support of a issuer's credit in exchange for a fee or premium Consult for program structures Maximize pricing competition between providers
Trustee	Acts in fiduciary role for the benefit of bondholders
Feasibility Consultant	Conducts a study and provides a written report that summarizes the project is viability which is used by potential investors in determining if they should purchase the bonds

The Syndicate

- **Factors in Determining Size and Structure of the Syndicate Group**
  - Size of offering
    - Will need more managers to optimally distribute larger issues
  - Nature of services required
    - Structuring
    - Marketing
    - Pricing
  - Anticipated distribution across buyer segments
    - Select well-balanced group with varying specialties
    - Retail/Institutional
    - National/Local
    - Syndicate Group vs. Selling Group

Syndicate Group
Syndicate members share underwriting risk
Ability to price aggressively
Ability of group to price quickly
Importance of on-going investment banking relationship and continuous service
Importance of affirmative action goals
Selling Group
Selling group members do not share underwriting risk
Ability to underwrite

Additional Syndicate Considerations

- **Minimizing the size of the management group increases the co-managers participation and broadens distribution**
- **The utilization of special bracket managers can increase selling incentive and broaden the investor base**
- **Varying the types of firms in the management group diversifies investor network improving bond allocations**
- **Rotating management groups and senior managers**
- **Set participation's for managers and each tier of syndicate**
- **National retail vs. in-state retail**
- **Members of the management group go beyond traditional sales role in educating the marketplace or bringing new ideas**
- **Management group can facilitate broader administration goals and policies**

Remember:
The goal is always to broadly distribute the bonds to final investors to obtain the lowest cost of capital

Distribution Agreements

- **An example would be a distribution agreement between an investment bank and another broker-dealer that has retail customers, but no investment banking function.**
- **By entering into the agreement, the investment bank gains access to retail customer base, thus expanding the universe of potential buyers for the bonds they are underwriting.**
- **The broker-dealer with no investment banking function gains access to new bond issues as if they were the underwriter, which allows them to better serve the interests of their retail clientele.**

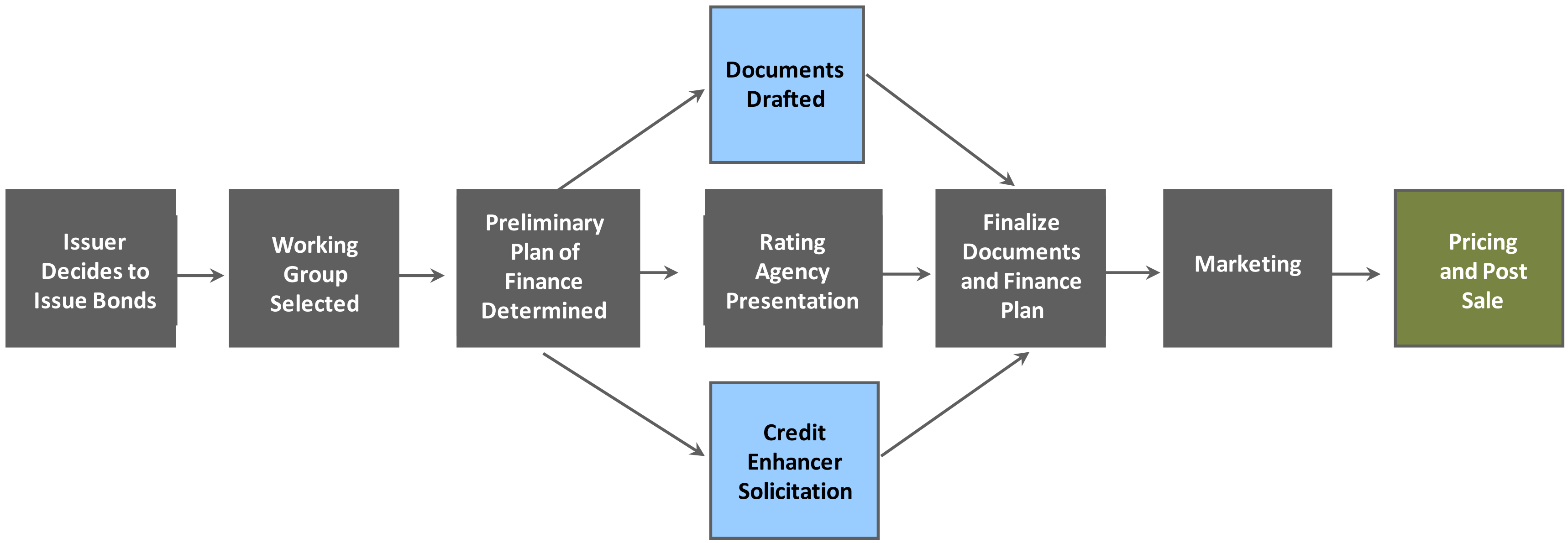
Such agreements are fully disclosed to the issuers, who are free to disclose them in the Official Statement as well. The distribution agreement is good for the issuer because it brings the distribution capabilities of a firm who would not otherwise be involved into the syndicate team.

Underwriter's Compensation

- **Difference between price paid to the Issuer for a new issue and the price at which securities are offered to the public is gross spread.**

Gross Spread Components	
Item	**Description:**
Management Fee:	Compensates managers for work involved in structuring the issue
	Can be split among entire management group based upon percentages determined by issuer.
	Book running senior manager typically receives substantial portion of management fee
Underwriters' Risk:	Compensates managers for market-related risk involved in underwriting the issue
	Split among all underwriters according to percentage of participation in the financing
Takedown:	Compensation firms receive for the cost of selling the securities; the amount of the takedown increases with maturity of the bonds
	Apportioned on a per bond basis to any firm that actually sells bonds
Expenses:	Compensates senior managers for out-of-pocket expenses, such as underwriters' counsel, interest expense, DTC charges, travel, syndicate expenses, communication expenses and postage
	Some firms claim computer time as an expense
	Clearance - although increased use of DTC has curtailed pure clearance expenses, legitimate back office expenses remain

The Underwriting Process



Pricing Timeline

Pricing Timeline						
Forward Calendar	Set Pricing Schedule	Investor Information	Book-runner Polls Managers	Release Pricing Wire	Allotments	Closing
Notify Bond Buyer	Economic	Mail POS	Market Call	Run Order Period	Written Award	
Establish Schedule	Credit Market	Rating Release	Discuss Sale Timing	Review Order Book		
	Treasury Borrowing Schedule	Sales Memorandum	Solicit interest rate views from managers	Adjust Interest Rates and Structure		
	Holidays	Information	Identify Comparables	Verbal Award		
	Marketing Strategy	One-on-One Investor	Order Period			
	Settlement Needs	Public Information	Retentions			
	Visible Supply at 30-Day Mark	Notice for Bond Buyer, Times, WSJ, Local				
		Managers Call				
		Review Timing - Forward Calendar and Credit Market				
		Discuss Sales				
		Agree on Management Rates				

Appointment of Underwriter	Four-Six Weeks Prior	1-2 Weeks Prior	Friday Before	Pricing	Day After Pricing	2-3 Weeks After

Bringing the deal to market – Game Day

Transaction Summary as of August 22, 2013

August						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Board Meetings: Aug 20, Sep 17; Holiday: Sep 2

- **Schedule**
  - Syndicate Call: Monday, August 26, 12:00 PM Eastern
  - Price Views Due: Monday, August 26, 4:00 PM Eastern
  - Order Period: Wednesday, August 28
  - BPA Signing: Thursday, August 29
  - Closing: Tuesday, September 10
  - Settlement: Thursday, September 26

Designations—An Example

Designation Options - For $1,000,000 Order

Assume Takedown = $5.00/Bond

Total Profit = $ 5,000

Role		Liability	Percentage
Senior Manager	$	25,000,000	50.00%
Co-Senior		15,000,000	20.00%
Co-Manager A		5,000,000	10.00%
Co-Manager B		2,500,000	10.00%
Co-Manager C		2,500,000	10.00%
Total	**$**	**50,000,000**	**100.00%**

Sample Designation Policy
Priority of Orders as Follows:
1. Retail (during Retail Order Period)
2. Net Designated
3. Member
Designation Policy:
At least 3 firms must be designated
No firm may receive more than 50% of any designation
The Senior Manager requests the identification of all priority orders at the time the orders are entered
There are to be no soft-dollar designations
Selling group members may not enter priority orders, and may not be designated
In-State Retail orders will be given special consideration. Please specify when entering your orders

How can issuers know if they got a good price for their bonds?

- **Signs the yields proposed were too high:**
  - The deal is oversubscribed quickly (within 30 minutes)
  - The deal is very heavily oversubscribed (5X +)
  - The deal has attracted speculators (example: taxable bond funds) along with "traditional" buyers
- **Signs the yields proposed were too low:**
  - The order period concludes without full subscription
  - There are "holes" in certain maturities where no orders are present
  - Institutions that have been heavy buyers recently are not present
- **The difference between "too high" and "too low" can be amazingly small.**
- **What is the proper balance between takedown and yield that best delivers the lowest overall cost of funds?**
  - Takedown speaks to rewarding sales motivation
  - Yield is the terms of the transaction
  - If the yield is to low, there is no takedown that will induce a sale

How is pricing transparency achieved in the markets?

- **All trades get posted to EMMA, including new issue prices at settlement.**
- **All new issue deals go through a closing process with attorneys and review of relevant documents.**
- **Deals are frequently covered in financial media, watched carefully by market participants, especially the investors.**

Is there any such thing as a "Perfect Deal" where every party is satisfied?

- **No. The deal is the result of a negotiation between a buyer and a seller. In every case the seller thinks the rate of interest they pay is too high, while the buyer thinks the rate is not high enough.**
- **The closest approximation to a "perfect deal' would be an "aggressive" price, per the Financial Advisor, oversubscription by 1.5X to 1.75X, one price bump that resulted in 1.25X oversubscription, and allotment on the same day. This set of circumstances would result in all parties generally feeling good about the transaction.**

Why do institutional buyers receive better pricing than retail buyers?

- **To the extent that institutional investors in fact do receive better pricing on new issues than retail buyers, the difference would relate to *the difference in trade processing costs, commissions to brokers and increased regulatory burden of maintaining a retail business.***
- **Retail buyers are less price sensitive and rely on advisors for pricing.**
- **The advantage of ‘buying in bulk’.**
- **Broker-dealers are extra careful to comply with rules and regulations when pricing bonds in order to protect their reputation and avoid the fines.**
  - Morgan Stanley agreed to pay a $1 million fine and compensate harmed investors in connection with allegations that they failed to charge fair prices for corporate and municipal bonds.
  - While FINRA did not allege any willful or fraudulent conduct by the firm, Morgan Stanley was charged with failure to use "reasonable diligence" to ensure that prices were fair and reasonable under current market conditions in 116 corporate bond and 165 municipal bond transactions.
  - These transactions took place from January 2008 through September 2011, a period during which Morgan Stanley conducted some 4 million such trades.

Do smaller or less frequent issuers find it difficult to ascertain the “real” cost/price that they are paying to borrow money?

- **No. The real cost should be very evident at closing, if not prior.**
- **Municipal bonds are highly differentiated and are bought and sold on over-the-counter market. Even in exchange markets, the price of execution for a stock may be different than what you see on your screen.**
- **For that reason, there is no way of knowing <u>in advance</u> the ‘true’ cost an issuer is paying for borrowing because the clearing price can never be completely accurately known in advance.**
- **There are more than 1 million muni CUSIPS, there is no such thing as an ‘exact’ price! Almost all transactions are negotiated between buyer and seller.**

The motivations of the participants

- All participants have an incentive for the deal to close, so that they can achieve their objectives. If the deal does not close, the issuer will not receive the funds and financial professionals involved in the process will not get paid.
- Participants in this transaction, at some point, begin to look ahead to the next deal.
- Since issuers may access market on a recurring basis, everyone knows that they will see many of the same participants from this deal on future deals.

The motivations all boil down to results, revenue, relationships and reputation. The underwriting of municipal bonds is a sequential process where the hired professionals seek to boost revenue by cultivating relationships based upon performance, results, and reputation.

What incentives do realtors have?

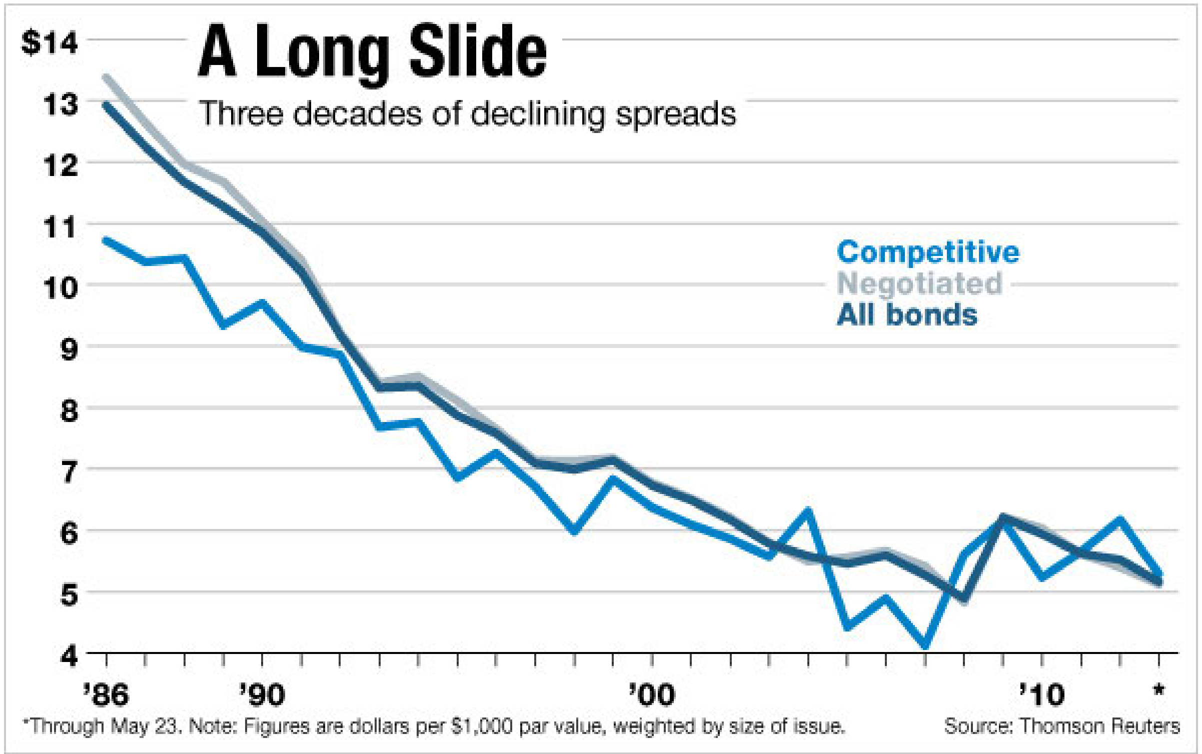
The Underwriter – An Excedrin kind of job

- **The Underwriter doesn't make any more money if the price is higher or lower. The desired outcome is the mutually satisfied client scenario achieved by balancing investors' interests with issuer fairness.**
- **The Underwriter has to manage the expectations of the issuer and his Financial Advisor, get a good price (low yield) and yet satisfy the investors, who usually either dislike their allocation, the ultimate price, or both. Since the investor has the option of dropping on a price change, price "bumps" are very tricky.**
- **The Senior Manager must communicate with the syndicate members. If that were not the case, the syndicate members would let the issuer know.**
- **Underwriter's job is difficult because they are constantly pressured from all sides to accommodate competing interests.**

Recommendation: The issuer should not lose control of the transaction!

- **Strong leadership from the issuer is not only in the issuer's best self-interest, but makes the job of the syndicate much easier.**
- **Decide in advance what decisions you want to be involved in and which ones you do not.**
- **Examples:**
  - Do you have an opinion about how the allocation process should work? Do you want to see the order book? At what times?
  - How do you want the relationships between the professionals to work?
  - Do you want all the other managers beside the senior to have more involvement or less?
  - Are you going to be physically present when the deal is priced and sold?
  - Who is giving you information and is it unbiased?
- **Select professionals you can trust.**
- **Be involved in the transaction from beginning to end.**
- **"Trust but Verify"**

Underwriting Spreads



- **The average spread on a new municipal issue is about 50%-75% of what a Fortune 500 firm willingly pays their corporate bond syndicate.**

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