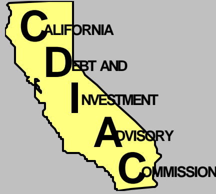

ISSUE BRIEFS

California Debt and Investment Advisory Commission

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UNDERSTANDING THE UNDERWRITING SPREAD

INTRODUCTION

One of the issuer's primary goals in any public debt offering is to borrow needed funds at the lowest possible cost. Inevitably, this entails not only obtaining favorable interest rates, but also holding other borrowing costs to a minimum. A major cost component of public debt issuance is the underwriter's compensation, which usually takes the form of the *underwriting spread*. While the amount of the underwriting spread will vary significantly depending on the characteristics of (1) the issuer, (2) the project, and (3) the financing, a general discussion of its components can prove valuable to an issuer evaluating proposed underwriting spreads.

The amount of the underwriting spread poses more of a concern to issues offering debt through negotiated rather than competitive sale. In a competitive sale, the bonds are awarded to the underwriter offering the lowest qualifying bid (combined interest and spread), regardless of the level of underwriting spread which is imbedded in the bids. For instance, an underwriting firm with a superior distribution network might be able to offer the lowest bid even while setting the underwriting spread at a higher level than its competitors. By contrast, a negotiated sale requires the issuer and the underwriter to agree on the terms and conditions of the bond sale. These negotiations focus on the interest rate pricing and on the other major cost factor in the sale of bonds: the underwriting spread. Because the underwriter has obtained the exclusive right to purchase the bonds, the issuer cannot rely on competition between underwriters to keep the underwriting costs down. Consequently, it is critical that issuers become familiar with the various components that make up the underwriting spread.

THE UNDERWRITING SPREAD

The underwriting spread is defined as the difference between the price at which an underwriter purchases bonds from an issuer and the price at which the bonds are resold to investors. Bonds are generally offered in $5,000 increments. Spreads, however, are typically quoted in dollars per $1,000 bond. Thus, if an underwriter purchases a $1,000 bond from the issuer at $990 and reoffers it to investors at the face value, the underwriting spread is $10, or one percent. If the underwriter purchases bonds at par or at a premium, the underwriting spread is earned by reoffering the bonds to investors at a higher premium. Hence, if an underwriter purchases a $1,000 bond from the issuer at the full face value, the bonds could be reoffered at $1,010 to generate a spread of $10, or one percent. The underwriting spread compensates the underwriter for certain services rendered and is the source of underwriting profits.

Small issues generally require only one underwriter to distribute the bonds. Consequently, one underwriter assumes all the risks of the transaction and receives all the profits from the reoffering of the issue. Large issues, however, often require the purchase and selling power of an underwriting *syndicate*. A syndicate is a group of underwriters convened to collectively purchase and re-offer an issue. Syndicate members share the liability of, and the profits from, the purchase and the resale of the

issue. Generally, a syndicate is headed by a *senior manager* (and *co-senior managers*, if any) who usually negotiates with the issuer, signs all contracts on behalf of the syndicate, and allocates the bonds among the syndicate members. A syndicate may also have *co-managers* who assist the issuer in preparing the issue for the sale.

In an underwriting syndicate, the senior managers typically take on the highest share of the underwriting liability. Accordingly, they receive the highest share of the syndicate profits. The senior managers are followed by the co-managers in terms of level of liability and share of the profits. The remaining members of the syndicate typically assume the smallest share of liability and profits. In addition to, or in lieu of, a syndicate, the underwriter may opt to form a *selling group*. A selling group consists of dealers and brokers brought together to help sell bonds. They do not share the underwriting risk and, consequently, do not receive a share of the syndicate profits.

THE FOUR COMPONENTS OF THE SPREAD

As indicated earlier, the spread is where the underwriter recoups the costs of providing investment banking services and derives its profits. The four components of the spread are **management fee, expenses, underwriting fee,** and **takedown**. While it is customary for the underwriting spread to be quoted as a percentage of the issue size, some components of the spread, such as the management fee and certain expense items, can be quoted in fixed terms, irrespective of the issue size.

Management fee. The management fee compensates the underwriter for the investment banking services provided to the issuer, above the amount of compensation earned from other components. In the case of an issue underwritten by a syndicate, the management fee is paid to the senior manager (and co-senior manager if any) for managing the affairs of the syndicate. Depending on the conditions agreed upon by the syndicate and the issuer, a management fee may also be paid to the co-managers for providing services to the issuer. Some of the services covered by the management fee include:

- Development of a financing plan and a maturity schedule best suited to the needs of the issuer. These activities may be conducted in coordination with the financial advisor.
- Origination and marketing tasks such as preparation of bond documents, rating agency presentations, and circulation of disclosure information.
- Assessment of market conditions and advice on the timing of the sale.
- Preparation of reports on the post-sale results of the transaction.

The management fee can vary significantly from one transaction to another depending upon the time and effort expended by the underwriter.

Expenses. This component of the spread reimburses the underwriter for out-of-pocket costs incurred in the course of the sale. The biggest expense item is usually the underwriter's counsel fee. In addition, travel expenses can be a significant expense item, especially if the underwriter does not have an office located near the issuer or access to necessary professional expertise in the vicinity of the issuer. Other expense items include advertising and printing costs, computer services, bond clearance, communications (phone, FAX, courier, messenger services), Municipal Securities Rulemaking Board fees, and California Debt and Investment Advisory Commission fees.

Underwriting fee. Because the underwriter cannot always be certain that all of the issuer's bonds will be readily purchased by investors, the underwriter may charge a fee to cover the possibility that some of the bonds may have to be reoffered at a lower price or taken into the underwriter's inventory. The size of the fee is directly related to the market risk involved. In a strong and stable market, characterized by an abundance of buyers, all the bonds may already be pre-sold. In this instance, the underwriting

fee can be waived because the underwriter's risk has been eliminated.

Takedown. The takedown is the biggest and perhaps the most confusing component of the spread. Essentially, the takedown is a sales commission paid to the underwriter. In order to obtain the most favorable interest rates, the issuer has to provide the underwriter's sales force sufficient incentive, in the form of the takedown, to work hard at finding investors willing to accept the lowest rates.

In effect the takedown functions as a discount from the listed reoffering price given to the firm that sells the bond to the investor. The takedown consists of two parts: the *concession* and the *additional takedown*. [Note that the term "additional takedown" does not refer to an amount *in addition* to the takedown. Rather, it refers to a sub-component of the takedown.] Apportioning the takedown between the concession and the additional takedown is basically a convention that provides an incentive for *nonmember firms* to sell bonds. If a syndicate member sells the bonds directly to investors, that firm receives a discount equal to the sum of the concession and the additional takedown, or the *full takedown.* When a nonmember firm sells the bonds, it takes down the bonds from the syndicate *at the concession* – at a discount equal to the concession – and re-offers them to investors at the listed reoffering price. The remaining portion of the takedown, the additional takedown, stays with the syndicate as profit.

Each maturity in a bond issue carries a separate takedown. Generally, the takedown bears an inverse relationship to credit quality and a direct relationship to the length of principal maturities. For example, a triple-B credit maturing in 10 years typically will have a higher takedown than a triple-A credit of the same maturity because a lower rated bond is more difficult to market. In addition, bonds which mature in the 20th year will normally have a higher takedown than bonds from the same year which mature on the first year because short maturities are usually more marketable than long maturities. Because the takedown varies among different maturities within the same bond issue, the *average takedown* – the average of the takedowns for each maturity in the issue – is often used when discussing the total spread.

AN ILLUSTRATION OF UNDERWRITING SPREAD

For a more concrete understanding of the underwriting spread, consider the following illustration of a hypothetical $10 million negotiated serial bond issue. Leaving the interest rate pricing aside for the purposes of this discussion, assume that the underwriter offers to purchase the issue for $9.9 million with a plan to re-offer it to the public at par or face value – leaving a $100,000 underwriting spread.

Table 1 (see Page 6) breaks down the underwriting spread of $10 per $1,000 bond. (The spread figures used in this illustration were chosen for ease of calculation only and may not reflect current or historical spreads.) Of this amount, $1.50 per $1,000 bond (a total of $15,000 for this issue) is designated as the management fee, paying for such services as developing the debt service schedule and obtaining a rating. If this issue is being underwritten by a syndicate, the management fee also compensates the senior underwriter for negotiating with the issuer, allocating the bonds, and confirming customer orders. Another $1.50 per $1,000 bond (a total of $15,000) is designated reimbursement for the underwriter's expenses such as bond counsel fee, travel, and printing.

Table 1 also shows that he underwriting fee is 75 cents per $1,000 bond, or $7,500 for the entire issue. Remember, the underwriting fee compensates the underwriter for the possibility that it may not be able to sell all the bonds at the listed reoffering price. The presence of a $7,500 underwriting fee suggests that at least some portion of the bonds remains unsold at the time of the sale. Essentially, this amount serves as the hedge for the syndicate in the event that the remaining bonds cannot be sold at par. However, if the underwriting syndicate manages to sell all the bonds at par, it keeps this amount free and clear. Considered part of the syndicate profits, this amount will be divided among the

members of the syndicate based on the proportion of each member's participation (share of the liability) in the underwriting. Say, for example, that this issue is being underwritten by a six-member syndicate consisting of two senior managers with 25 percent participation each ($2.5 million liability each), two co-managers with 15 percent participation each ($1.5 million liability each), and two members with 10 percent participation each ($1 million liability each). The $7,500 underwriting fee will be divided according to their liability, with each of the senior managers receiving $1,875 (25 percent), each co-manager receiving $1,125 (15 percent), and each member receiving $750 (10 percent).

The average takedown for this issue is $6.25 per $1,000 bond or $62,500 for the entire bond issue. Of that amount, $3.75 represents the concession and $2.50 represents the additional takedown. As noted in the previous section, however, the average takedown is a figure used mainly for general discussion purposes. The takedown of the bonds actually varies by maturity. To fully understand the mechanics of the takedown, it is necessary to look at each maturity in the issue.

Takedown distribution. Table 2 (see Page 6) shows the ten maturities of the hypothetical $10 million serial bond issue, as well as the takedown for each maturity. As indicated earlier, members of the syndicate take down the bonds at the full takedown – at a discount equal to the sum of the concession and the additional takedown. For instance, the 1995 maturity carries a full takedown of one-fourth of one percent (1/8 concession + 1/8 additional takedown) or $2.50 ($1.25 concession + $1.25 additional takedown) for every $1,000 bond. Hence, if firm A, which is a member of the syndicate, takes down a $1,000 bond from the 1995 maturity, it would pay the syndicate $997.50 ($1,000 – $2.50) for the bond and reoffer the bond to investors at par (the listed reoffering price). A firm that is not a member of the syndicate, however, purchases or takes down the bonds from the syndicate at the reoffering price less the concession. Hence, for the 1995 maturity, nonmember firm B would receive a one-eighth of one percent ($1.25 concession) discount for every $1,000 bond it takes down. This means that firm B would purchase a $1,000 bond from the syndicate at $998.75 ($1,000 - $1.25) and reoffer it to investors at par. The syndicate, in turn, would retain one-eighth of one percent ($1.25 additional takedown) for every $1,000 bond in the 1995 maturity sold by a nonmember firm as part of its profits. This amount will eventually be divided among the syndicate members based on their participation, in the same fashion as the underwriting fee.

As an example of the variation of the takedown between maturities in the same issue, compare the total takedown for the 2003 maturity with the total takedown for the 1995 maturity. The $11.25 per $1,000 bond total takedown for the 2003 maturity is significantly higher than the $2.50 per $1,000 bond total takedown for the 1995 maturity. The profit margin for the longer maturity is obviously bigger. Thus, if a syndicate member sells bonds from the 2003 maturity, it would receive a discount from the listed reoffering price (par) equal to $11.25 ($6.25 concession + $5.00 additional takedown) for every $1,000 bond taken down versus $2.50 for $1,000 bond taken down from the 1995 maturity. A nonmember firm taking down bonds in the 2003 maturity would receive the $6.25 (concession) discount from par for every $1,000 bond versus $1.25 for every $1,000 bond from the 1995 maturity.

NEGOTIATING THE UNDERWRITING SPREAD

The breakdown of underwriting spread shown on Page 6 is for illustrative purposes only. It is not intended to represent an ideal spread distribution. Actual spreads vary between issues due to differences in credit quality, maturities, debt service payment sources, tax status, and a host of other factors. Two issues of the same size sold at the same time will not necessarily have the same spread. Two issues with the same spread will not necessarily have the same distribution of spread among component parts. The following section offers suggestions for negotiating proposed underwriting spreads.

Setting spread parameters in the RFP. One approach used by some issuers to control costs, while retaining the flexibility to adjust the spread to reflect the underwriter's performance in the sale, is to set spread parameters in the Request for Proposals (RFP). Under this approach, the issuer requires underwriters to indicate an estimate for each component of the spread in their responses to the RFP. Given that the takedown and underwriting fee are closely tied to the interest rate pricing which occurs much later, it is sometimes unrealistic to expect a concrete estimate for these two components. However, the issuer can obtain fairly sound estimates for the management fee and expense components. To hold the underwriters true to these estimates, the issuer specifies in the RFP that the estimates will be considered as bids and the selected underwriter's bids will function as caps for the management fee and expense components. Thus, while the issuer may want to leave final spread negotiations until closer to the sale date, it can set the parameters for at least the management fee and expense components of the spread based on the underwriter responses to the RFP.

Management fee. When negotiating the management fee, issuers should consider the level and the quality of the services provided by the underwriter. An underwriter that helps the issuer structure a complex offering might merit a higher management fee. However, for a straightforward issue, the management fee is often waived or nominal. If financial advisory tasks such as developing the financing plan, structuring the issue, and obtaining a rating are performed in-house or by a financial advisor, the issuer should also seek a waiver or nominal management fee.

Expenses. It is important that issuers hold underwriters accountable for expense reimbursements. At the outset, the issuer and the underwriter should identify which expenses are eligible for reimbursement. The issuer should require the underwriter to provide a line-item listing of reimbursable expenses, including underwriter's counsel fees. Issuers should not be shy about asking underwriters for explanations of questionable items.

Underwriting fee. Issuers should not agree to pay any underwriting fee unless, during the pricing process, there is evidence of the risk that the underwriter cannot sell all the bonds at the listed reoffering price. Hence, when negotiating the underwriting fee, issuers should monitor the progress of the bond orders. If the underwriter receives orders for a significant portion of the bonds by the end of the initial order period, the issuer should look for a nominal, if any, underwriting fee. If all the bonds have been pre-sold to investors during the initial order period, the underwriter faces no inventory risk and should not be paid an underwriting fee. Issuers should also be aware that some managers are willing to commit their capital to a successful sale, even if it means underwriting a portion or all of the issue. Thus, issuers should always explore the possibility of waiving the underwriting fee at the outset of the negotiations for every offering.

Takedown. Obtaining orders at market rates while paying the lowest possible takedown is the issuer's challenge. However, a single-minded pursuit for the lowest takedown without regard to the interest rate pricing, would not necessarily serve the issuer's interest. The takedown provides an incentive for the sales force to aggressively market competitively priced bonds. If the takedown is set too low, there is less motivation for the sales force to find investors willing to accept the issuer's rates. Thus, when maturities are *undersubscribed* (not receiving sufficient orders) during the initial order period, the issuer should recognize that it may be able to generate adequate orders for some of the undersubscribed maturities by increasing the takedowns, rather than raising the rates. If the issuer insists on keeping the takedowns at low levels, the only option would be to raise the rates to generate sufficient orders for the undersubscribed maturities. On the other hand, when maturities are *oversubscribed* (receiving more orders than there are bonds available) during the initial order period, the issuer should not be shy about pursuing reductions in the interest rates or the takedowns for those maturities.

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Table 1

Hypothetical Underwriting Spread
$10 Million Issue

Components	Amounts per $1,000 bond	Percentage of Issue	Total for Issue
Management fee	$1.50	0.150%	$15,000
Expenses	1.50	0.150	15,000
Underwriting fee	0.75	0.075	7,500
Average takedown	6.25	0.625	62,500
Concession	(3.75)	(0.375)	(37,500)
Additional takedown	(2.50)	(0.250)	(25,000)
Total spread	**$10.00**	**1.00%**	**$100,000**

Table 2

Hypothetical Takedown By Maturity
$10 Million Issue
(per $1,000 bond)

Maturities	Amounts	Coupon Rates	Prices/ Yields	Conc./ Add TD (fractions)	Conc./ Add TD (dollar amounts)
1994	$1,000,000	4.65	100	1/8 + 1/8	$1.25 + $1.25
1995	1,000,000	5.15	100	1/8 + 1/8	1.25 + 1.25
1996	1,000,000	5.30	100	1/8 + 1/8	1.25 + 1.25
1997	1,000,000	5.50	100	1//4 + 1/8	2.50 + 1.25
1998	1,000,000	5.65	100	3/8 + ¼	3.75 + 2.50
1999	1,000,000	5.80	100	½ + ¼	5.00 + 2.50
2000	1,000,000	5.90	100	½ + ¼	5.00 + 2.50
2001	1,000,000	6.05	100	½ + ¼	5.00 + 2.50
2002	1,000,000	6.15	100	5/8 + ½	6.25 + 5.00
2003	1,000,000	6.25	100	5/8 + ½	6.25 + 5.00