

The FISCAL REPORT an informational update

Interest Rates May Be Too Low to Refinance!

A discussion of the key issues involved in making a decision to refinance

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Abstract: As interest rates continue to decline, school business officials are likely to be asked about the possibility of refinancing the school district's debt. This article presents an outline of the relevant issues and highlights an unusual feature of the current market environment that may make refinancing school debt less attractive than it may first appear. In the current market, short-term *taxable* interest rates are lower than long-term *tax-exempt* interest rates. If the debt that is under consideration for refinancing cannot be refinanced for several years (i.e., it is call protected) and thus the district must do an *advance refunding*, then the school district may not be able to achieve a sufficiently high investment return during the escrow period to ensure that refinancing produces actual savings. School district officials need to assess the costs and benefits of an *advance refunding* especially carefully because a district is allowed only one advance refunding per original debt issue. Among other things, the article endeavors to explain all of the jargon contained in the preceding sentences.

Short-term interest rates are as low as they have been in the last 40 years, largely as a result of the 10 times that the Federal Reserve has cut the discount rate this year. The discount rate is the interest rate that the Federal Reserve charges banks when they borrow money overnight from the Fed. The discount rate affects consumers indirectly through its effect upon short-term interest rates, which in turn affect longer-term rates, such as mortgage rates. Longer-term rates have also declined this year, though not as dramatically, and this may be a good time to refinance one's home. It thus quite reasonably appears that this is also an excellent time to refinance any debt that the school district has, provided that the debt in question has not already been advance refunded.

In order to illustrate why this is a good time to refinance your home, let us assume that one had a 7.5% mortgage that one could now refinance at 5.5% (note: numbers are hypothetical and are chosen and rounded for illustration purposes). If the original mortgage was for \$300,000 and one is refinancing 10 years into a 30-year mortgage and assuming \$3,000 in transaction costs, then one would stand to save \$285 per month in mortgage payments (assuming a 20-year term, which keeps the two payment schedules comparable).

The reason for the savings is fairly intuitive. When one takes out a loan, one is essentially buying money—the cost of the money is represented by the interest rate. When a borrower successfully refinances a loan, then he/she is exchanging expensive money for cheap money—in this case 7.5% money for 5.5% money.

The money that the borrower saves in this exchange is money that the lender is losing, and so it is in the interest of lenders to restrict the ability of borrowers to refinance their loans whenever rates drop. Lenders do this with what are commonly known as “prepayment penalties.” A prepayment penalty is some manner of premium that a borrower must pay if he or she chooses to refinance a loan; this prepayment penalty discourages refinancing and ensures that even if it should occur the lender still makes a profit. In California (and some other states), the ability of lenders to charge prepayment penalties on home mortgages is limited, and no penalty can be charged at all if the prepayment is made five years after the execution of the mortgage (California Civil Code Section 2954.9 3b—the law is, of course, more complicated than this).

Yet refinancing a school district’s debt is not entirely analogous to refinancing one’s home mortgage because prepayment penalties are not only allowed, but are *standard* for bonds and lease-purchases, including certificates of participation. In the case of home mortgages it is the individual homeowner whom the law seeks to protect, but, in the case of bonds, the parties presumed to be in need of protection are the bondholders, who are typically conceived of as “widows and orphans.”

There are two kinds of prepayment restrictions typical for school district borrowings. The first kind of prepayment restriction is known as “call protection.” What this generally means is that debt may not be repaid for the first 7-10 years after they have been issued.

The second kind of protection is called a “redemption premium” on the outstanding principal; for instance, one must pay an additional 2% of the outstanding principal in order to redeem the bonds. The redemption premium usually declines over time, say from 2% to 1% to no premium at all. All told, it is typical that approximately 10 years after issuance the debt can be refinanced without restriction.

Thus the first thing one must do when considering refunding debt is to check the possible prepayment dates and the penalties—“refunding” being the term used for the refinancing of public debt. The relevant prepayment restrictions are listed in the legal documents that describe the original borrowing. If the debt is no longer call protected, then the proposed refinancing would be a “current refunding.” If this is the case with the debt under consideration, then it is a very good candidate indeed for refunding precisely because rates have generally been declining for the last decade. For instance, on January 4, 1990, the Bond Buyer-20 year Municipal GO Bond Index was at 7.03%. The Index was at 6.53% on January 5, 1995, and, on November 1, 2001, the Index stood at 4.96%. This index, incidentally, is the standard by which municipal bonds are generally measured—it is compiled weekly by the *The Bond Buyer*.¹ Yet precisely because interest rates have been declining for most of the decade, there are relatively few non-call protected bonds that have not **already** been advance refunded once.

If the bonds are still call protected, then the proposed refinancing would be an “advanced refunding.” In the case of an advanced refunding, one could still issue refunding bonds for all of the debt currently outstanding in order to lock in the current low rates. The proceeds of the

¹ To be more specific, the 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to *Moody’s* Investors Service’s Aa2 rating and *Standard & Poor’s* Rating Service AA-minus.

refunding bonds that one would issue would be placed in escrow to pay debt service for the remainder of the call protection period and to pay off the remaining outstanding principal, with the required premium, on the call date.

As an aside, it should be noted that declining interest rates and the one-time only advance refunding restriction do place school business officials in a bit of a dilemma. A school district may stand to save money if it were to refund **now**, but would the school district not save more if it were to wait for interest rates to go still lower? A good rule of thumb is that if a potential savings is sufficiently motivating (and it might not be), then a school district ought to refund regardless of possibly greater savings in the future. Interest rates have been declining for the past decade or so, but there are also instances of interest rates rising over prolonged periods and attempting to predict long-term interest rate trends does not seem to be appropriate for a school district. That said, it can often be a good idea for a school district to prepare for a refunding and then proceed unless changed market conditions dictate a stop.

The escrow in an advanced refunding is calculated to be sufficient to meet the exact cash flow requirements for paying debt service on the original debt through the call date and then repaying the remaining principal with premium on the call date. This calculation takes into account expected interest earnings on the escrow account during the call protection period. In order for such an exact calculation to be possible, prospective advance refunders must be able to count on an investment for the escrow account that offers fixed terms, fixed returns, and maximum security. The Federal Government provides such securities in the form of SLGSs (pronounced “slugs”), which stands for State and Local Government Series.² SLGS are custom-made for each advance refunding.

Because the escrow amount is calculated to be sufficient, once this money is placed in escrow the original bonds are considered “defeased,” that is, no longer an obligation of the school district. While the money is in escrow it will be earning interest, and the more interest that the escrow can be anticipated to earn, the smaller the amount of money that will need to be placed in escrow to begin with. Put simply, there is an inverse relationship between escrow interest earnings and the size of the refunding bonds. The less that the escrow can be expected to earn, the greater the amount of new borrowing and the greater the debt service payments resulting from this borrowing. For instance, instead of having to borrow \$10 million at a 5% borrowing rate and a 5% investment rate, if the investment rate for the escrow were only 4%, then one might have to borrow \$11 million at 5%. This necessity of a higher borrowing amount is a result of the 1% differential between the borrowing rate and the investment rate. Clearly the school district would be making higher debt service payments on \$11million versus \$10 million.

The Federal Government does not allow tax-exempt proceeds in an advance refunding escrow to earn *more* than they pay out. That is, if the new refunding issue has a borrowing rate of 5%, then the escrow can only earn an investment rate of 5%. Earning this rate is generally not a problem because the money in escrow has been borrowed at a *tax-exempt* rate and may earn interest at a *taxable* rate, which is typically higher. However, the new refunding borrowing is usually *long-*

² The Federal Government does profit from providing this service because it is a means by which it can borrow money at lower interest rates. This is to say that the rates that the Federal Government pays on SLGS are lower than the rates that it pays on traditional Treasury notes.

term, while the escrow period is *short-term*. At the moment short-term interest rates are so far below long-term rates in general that short-term *taxable* rates are significantly lower than long-term *tax-exempt* rates.

Arbitrage is the difference between borrowing in one market and investing in another. When a school district borrows money, it is borrowing in the tax-exempt municipal market. When a school district places its escrow money in SLGS, it is investing in another market. Again, tax-exempt bonds can only earn as much in one market as they are paying out in another (i.e., the tax-exempt municipal market), and this rate is known as the "arbitrage yield."

Historically, it has not been difficult to construct escrow accounts that earn the arbitrage yield. This is to say that non-tax-exempt short-term interest rates, e.g., SLGS, were as high (indeed often higher) than tax-exempt long-term interest rates, e.g., the rates earned on refunding a school bond. As mentioned above, this is not the case today. Currently, the same factors that make interest rates low generally have forced the short-term taxable rates that bond proceeds are likely to earn in escrow well below the arbitrage yield. Negative arbitrage describes a situation in which one loses money through the interest rate difference between investments. Put another way, one earns negative arbitrage when one is using cheap money to buy more expensive money.

Earning negative arbitrage on an escrow account would force a school district interested in an advanced refunding to borrow more than it would otherwise have to (i.e., if the escrow earned the arbitrage yield). **This additional borrowing has the potential to overwhelm any potential savings resulting from getting a lower interest rate.** This is not a certainty, but it is likely in the current marketplace. If one is interested in an advanced refunding right now, the key factor is to determine the call date, i.e., to what date must the refunding money be kept in escrow. The longer the escrow period, then the higher the negative arbitrage and the lower the savings.

Our main goal in this article has been to give school business officials a map of the issues involved in refunding school district debt because we anticipate that they will soon be fielding questions about this subject (if they have not already!). As far as prescriptions go, what we wish to communicate is that the current situation is unusual and complex. This **might** be the right time to refund a school district's debt, be it bonds or a lease-purchase, including certificates of participation. One must look at the details of the issue that one wishes to refund. If the bonds are no longer call protected, then they are a very strong prospect for a current refunding. If the bonds are still call protected, then one must look to the date on which they can be refunded. The closer that date is, the more promising the refunding. For issues that are still call protected for several years, the best prognosis is probably to keep an eye on rates and consider refunding again as the call date approaches.

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