

CAPITAL IDEAS

a newsletter of the

FORUM FOR COLLEGE FINANCING ALTERNATIVES

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New Approaches To Debt Financing

The Issue

Over the past 25 years, colleges and universities have used tax-exempt financing as an effective method to raise capital for major equipment purchases and new facilities. The tax-exempt market has provided these institutions with a reliable, accessible, and a less expensive source of funds. In 1985, a record \$10.5 billion of tax-exempt bonds were issued for higher education. Uncertainty about the prospective Tax Reform Act of 1986 and subsequent restrictions in the legislation cut that volume in half last year and will most likely limit the ability of some colleges and universities to use tax-free bonds for the foreseeable future.

Within limits, however, significant opportunities still exist to utilize tax-exempt financing. And, for

a variety of reasons colleges, universities, and, most commonly, state and regional student loan authorities are increasingly issuing taxable bonds. Thus, an understanding of both taxable and taxexempt bonds and their markets is useful when making capital financing decisions.

This issue of **Capital Ideas** will clarify some of the more common practices and products of the tax-exempt and taxable bond markets. We have attempted to define terms when they are introduced, and give examples where possible.

Special thanks go to David C. Clapp of Goldman Sachs & Company and Larry Levitz, a consultant to the Forum, for their information and assistance in preparing this issue.

Some Historic Notes

Why are some bonds taxable and others exempt from taxation? Tax exemption for municipal bonds evolved from the constitutional doctrine of reciprocal immunity. According to early constitutional interpretation, neither the federal government nor the states were permitted to interfere in each other's affairs without cause. When the federal income tax was first instituted in 1913, tax exemption of state and local debt was written into the Internal Revenue Code. The original Code also recognized that organizations devoted exclusively to educational, charitable, or religious purposes deserved tax-exempt status; today, most private higher educational institutions enjoy the tax-exempt status written into section 501(c)(3) of the Internal Revenue Code.

Although state and local governments have long issued tax-exempt debt, it was not until after World War II that the tax-exempt market burgeoned. Between 1960 and 1980 the market experienced a six-fold increase. Growth is attributable to high tax rates which increased the value of tax-free income to high tax bracket investors, the increased needs of issuers, the expanding use of short-term debt to fund cash flow needs, and the explosive growth of revenue-supported debt.

Before the 1970s, most municipal debt was secured by a general obligation pledge. The governmental unit backed the bonds with its "full faith and credit," which obligated the government to impose whatever taxes were necessary to meet all debt service requirements of the bonds. During the period of expanding college and university enrollments in the early and mid-1960s, state authorities (such as the New York State Dormitory Authority or the health and educational financing authorities in the New England states) were willing to issue debt for both public and private educational institutions. By declaring that higher education fulfilled a public purpose, state and local authorities could issue tax-exempt bonds for private educational institutions.

Today, the most common tax-exempt instrument issued by higher education institutions is the revenue bond. Revenue bond issues give bondholders a lien on the revenues of a particular enterprise or project. Sometimes the revenues pledged are specific; for example, student dormitory rental fees may be pledged against a dormitory construction bond issue. Other revenue issues pledge all the institution's available resources.

A Project of the National Center for Postsecondary Governance and Finance



Tax-Exempt Debt Instruments

Until the early 1980s the most common form of tax-exempt financing was long-term fixed-rate debt. Each maturity contains a fixed coupon or interest rate which is paid, usually in semiannual installments, until the principal is retired (typically 10 to 30 years). This type of debt has a number of advantages. Because it is a well known, conservative instrument, it can take advantage of hedging opportunities, such as variable rate swaps, and use sophisticated marketing techniques such as deep discounts. Unfortunately, its greatest disadvantage is that it usually commands higher interest rates because the long term increases the bondholder's risk that interest rates will rise over that period of time, decreasing the value of the bond.

Variable or floating rate debt became popular during the early 1980s in response to the high interest rates of the late 1970s. Variable or floating rate debt allows bond interest to vary periodically according to an index, formula, or some other standard of measurement. By offering investors protection against future rate increases, issuers of variable rate debt can obtain lower interest rates characteristic of short-term issues, but under the structure of a long-term bond. Known as variable rate demand bonds (VRDBs), these bonds frequently contain a provision which allows investors to "put" or sell the bonds back to the issuer at par value. Put periods usually occur at interest rate reset dates. To ensure that funds are available to purchase all bonds which may be put back to the issuer, backup credit from a bank or another financial institution is usually obtained to provide liquidity. VRDBs often contain a one time fixing option that converts the variable rate to a fixed interest rate.

One example of a VRDB is the 7-day Variable Rate Demand Note (VRDN). This type of VRDB carries a long-term nominal maturity and an interest rate which is reset every seven days. The bonds can be put by the holder on a weekly basis and they can be "called" or brought back by the issuer at par with 30 days advance notice. Lower interest rate advantages of the VRDBs must be weighed against their disadvantages—the additional costs incurred to obtain a line of credit and the risk that securities put back to the issuer may not be remarketed quickly. Put bonds which cannot be re-

marketed are usually warehoused at the letter of credit bank's higher lending rate.

Many new developments concerning variable rate debt are essentially variations upon the VRDB. Some offer flexible interest rate setting periods and/or flexible put periods. The Flexible Variable Rate Demand Bond (Flex-VBRD) allows the issuer to change the put feature of a bond from one option to another if the bond trustee and noteholders are given adequate notice. Put options can be lengthened or shortened based upon changes in expected yield curves. If a decline in rates is anticipated the issuer can shorten put periods; conversely periods can be lengthened if rates are expected to increase. The variety of new instruments enhances an institution's ability to structure an issue to meet its own particular budgeting and cash flow needs.

Long-term vs. Short-term

Historically, capital projects were financed with long-term debt (maturities of 20 years or more). These bonds usually carried a combination of several maturities which enabled the issuer to spread out debt service costs and stay within budget constraints. Shorter maturities are structured as serial maturities and longer maturity bonds as term bonds. Term bonds generally contain mandatory sinking fund provisions which require regular interval payouts which gradually retire most or all of the principal before its stated maturity date.

Revenue Anticipation Notes (RANs) and Bond Anticipation Notes (BANs) are two common forms of short-term debt. Such debt is often used to provide interim financing for short term cash flow needs or for construction projects. These notes are structured to be retired with the proceeds of a long term issue. Thus the ability of the issuer to have future access to the capital markets is of paramount importance. The proliferation of short-term debt instruments among state and local governments originated from their need to fund cash requirements during periods of cash deficiency.

A more recent innovation which has become extremely popular is Tax-Exempt Commercial Paper (TXCP). TXCP is short-term, unsecured promissory notes with maturities ranging form 1 to 270 days. It is usually sold to tax-exempt money market

rate debt is well known it can take advantage of hedging opportunities and sophisticated marketing techniques.

Because long-term fixed

A New Book...

Financing Higher Education: Strategies After Tax Reform edited by Richard E. Anderson and Joel W. Meyerson, will be published July 1st by Jossey-Bass. This source book is the compilation of the edited papers presented at the Forum's Symposium on New Ideas in Capital Finance After Tax Reform, last October in Annapolis. It will be available for \$11.95 by writing to Jossey-Bass Inc., Publishers, 433 California St., San Francisco, CA 94104, or by calling them at (415) 433-1749.

Players

Underwriters. Underwriters accept the risk of purchasing a bond issue with the intent of reoffering the bonds to investors at a profit. In competitive sales, underwriters may join together forming syndicates to bid for the bonds. In negotiated sales, an underwriter is selected before the sale and works closely with the issuer in structuring and marketing the issue.

Bond Counsel. Bond counsel delivers an independent legal opinion certifying that the bond issue is a valid and binding obligation of the issuer and states whether or not interest on the bonds is tax-exempt according to federal, state and local law.

Bond Trustee. The bond trustee is usually a bank. It acts as custodian of the bond funds ensuring that all bond accounts are maintained and the issuer complies with the provisions of the bond contract.

Financial Advisor. The financial advisor acts in an ongoing capacity as a consultant to the issuer regarding all financing activities. It assists in setting up and structuring competitive bond sales

Rating Agency. The rating agency, Moody's Investors Service or Standard and Poor's Corporation, assigns a ranking to the issuers which serves as a guide to investors as to the credit-worthiness of the bond issuers. They base their ratings upon the issuers' ability and willingness to meet future debt service requirements.

Bond Insurers. Bond insurance assures the prompt payment of interest or of interest and principal depending upon the terms of insurance. Insurance serves to raise the rating a given issue receives. A higher rated bond will be more attractive to investors. The benefits of insurance to the issuer is lower interest costs. The cost of insurance will depend among other things upon the quality of the issuer, the maturity of the issue, and the amounts involved. The disadvantages include the additional cost of the insurance premium.

funds, bank trust departments, high net-worth individuals, and corporations. Although interest cost for TXCP is lower because of its popularity among investors, it must be redeemed frequently or rolled over with new debt. Also, TXCP requires extensive management oversight by the issuer on a daily basis.

Variable rate debt, as discussed before, combines features of long-term and short-term debt. Most variable rate issues carry interest costs which are higher than those of TXCP although lower than long-term fixed-rate debt.

Competitive vs. Negotiated Issues

Most higher education general obligation debt is sold on a **competitive** basis whereby two or more groups of underwriters, usually composed of either investment or commercial banks, will bid to purchase the bonds from the issuer. While commercial banks are restricted in some of their underwriting activities, these restrictions do not apply to activities relating to debt issued by 501(c)(3) organizations. The issuer generally chooses the underwriters with the lowest interest rate bid and sells the bonds to them at the bid price. The winning underwriters then attempt to sell the bonds to investors. The new tax law requires that a substantial portion of the issue be reoffered at the offering price

When an issue is **negotiated** the issuer chooses one underwriter or group of underwriters before the sale to purchase and market the bonds. The underwriters work with the issuer in structuring the deal. Revenue bonds are usually sold on a nego-

tiated basis because they are usually more complicated than general obligation issues. Privately placed issues, issues sold to only a few investors, are almost always negotiated. The underwriter works closely with the issuer and the investors to arrange a mutually acceptable agreement. Because a limited number of investors is involved, these issues tend to be relatively small.

Refundings

Refunding is a means of issuing new debt to refinance existing debt. However, refundings do not necessarily coincide with the expiration of old debt. When the proceeds from a new issue are placed into an escrow account which will redeem the old debt at a later date the transaction is known as an advance refunding. Advance refundings are used to either replace high interest rate or to remove restrictive convenants associated with the refunded debt. Because market rates during the first quarter of 1987 were relatively low, advance refundings were widely used. Approximately two-thirds of all debt issued in 1987 has been for refunding purposes.

There are several types of advance refundings. **High-low refundings** involve refunding bonds whose interest cost is lower than the interest cost on old bonds. Proceeds from the refunding are placed into an escrow fund, and are then invested, usually in federal securities or securities guaranteed by the federal government. Treasury regulations restrict the yield on the escrow to the arbiAdvance refundings are used to either replace high interest rate bonds with bonds carrying a lower interest rate or to remove restrictive covenants associated with the refunded debt.



trage yield on the refunding issue. The investments are structured such that they mature in time to pay principal and interest plus call premium, if necessary, on the refunded bonds. High-low refundings can be structured so that the savings are realized at the time of the issues or can be taken over the life of the issues in the form of lower debt service costs. Refundings commonly involve an escrow agreement between the issuer and the trustee, usually a bank. The trustee establishes and oversees the escrow fund and retirement of the bonds in accordance with the escrow agreement.

Low-high refundings, because they involve higher interest bonds refunding lower interest debt, can increase the issuer's interest costs. However, since the refunding involves a defeasance to maturity, the escrow is invested to maturity decreasing the issue size and reducing interest expense. Defeasance is a legal term which means that the rights of the refunded bondholders, as stipulated

in the contract or bond indenture between issuer and bondholders, are terminated. Low-high refundings are usually undertaken to relieve the issuer of certain onerous provisions of the bond indenture.

Crossover refundings establish an escrow fund whose earnings initially pay the interest on the refunding bonds until the refunded bonds' first call date. At that time, the escrowed funds are used to retire the refunded bonds. The issuer's pledged revenues on the refunded bonds now crossover and secure the refunding bonds. Crossover refundings can provide a hedge against a rise in future interest rates by allowing previously issued variable rate debt to remain outstanding while locking in favorable long-term rates with the refunding issue.

Most issuers of tax-exempt debt issue bonds so that the aggregate debt service is level on an annual basis. In **window refundings** the refunding

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Method	General Description	Advantages	Disadvantages
Tax-exempt Commercial Paper	Short term; 1-270 days un- secured promissory note, revolving line of credit or letter of credit; \$25 million minimum	Maturities tailored to needs, lowest interest rate, lowest front end fees, broadest in- vestor market	Reissuance risk, active management, annual renewal arbitrage complications.
Daily Demand Bonds	Maturity as desired with daily put, letter of credit and standby bank	Low interest rates, large investor pool, convertible to fixed rate, callable, protected from large fluctuation, can arbitrage proceeds	Daily put risk, puts must be remarketed, some fees higher that TXCP unremar- keted bonds in standby bank for a fee.
Variable Rate Demand Bonds	Short term with long term nominal maturities, period- ic rate resetting, call op- tion, conversion to fixed rate, letter of credit and standby bank	Long term and interim ma- turities locked in, attractive short term rate, callable on 30 days notice, wide mar- ket, convertible to fixed rate.	Risk of interest rate increase.
Quarterly Tender Notes	Maturity as desired with 3 month put, credit support depends on rating	Maturities locked in, 90 day rate, insulated from short term savings, convertible to fixed rate	Callable only on 90 days notice, must remarket put bonds, unremarketed bonds to standby for a fee.
Annual Tender Notes	Maturities as desired with annual put, no credit support	Maturities locked in, one year rate, insulated from short interest rate swings, puts are infrequent, no letter of credit, convertible to fixed rate	Callable only once per an- num without premium, rates may be high during rate setting period.
Fixed Rate Notes	6 month to one year maturity with no credit support	Fixed interest rate over fis- cal year, no letter of credit	Higher cost of borrowing, non-callable, somewhat restricted market.
Put Bonds	1, 2, 3, 5, year maturities, no credit support although credit worthy rating as- sumed	Taps intermediate market for long term maturities	Interest rate risk when remarketing.
Long Term Fixed Rate Debt	10-30 year maturities, credit of issuer or issuance for support	Fixed rate of interest, no put exposure, can utilize sophisticated marketing	High interest rates.
Pooled Capital Financing	5-30 year maturities, requires letter of credit or issuance	Economies of scale, credit homogenization	Arbitrage rebate requirement. Credit homogenization raises costs to some participants.

Tax Reform Implications

- Debt of 501(c)(3) organizations now considered private purpose.
- 95 percent of proceeds from 501(c)(3) organization issues and 90 percent from state and local issues must be spent for the exempt purpose.
- 90 percent of proceeds from federally guaranteed student loan bond issues must be spent for the exempt purpose. Other student loan bonds must meet the 95 percent standard.
 - 501(c)(3) organizations, except hospitals, limited to \$150 million of outstanding bonds.
- Issuance costs that may be financed by tax-exempt bonds restricted to 2 percent of total proceeds.
- Financial institutions can no longer deduct interest incurred on borrowings to carry taxexempt investments.
 - · Arbitrage opportunities are essentially eliminated.

See the last issue of Capital Ideas for a more complete discussion.

bonds are structured so that no principal payments mature in the early years. The refunding issue has a longer average life and higher interest cost than a normal structure but, especially in a low-high issues, the issuer is indifferent. A "window" in those early years is created by the lack of maturities. The issuer can issue additional non-refunding on "new money" debt designed for early maturity. Window refundings can achieve substantial savings for the issuer on new money since issues with shorter term maturities carry a lower interest cost.

Refunded bonds are generally defeased through refundings. In **legal defeasance** the rights of the bondholders are terminated and the bondholder's ties on any revenues previously pledged to the refunded bonds is also extinguished. How defeasance will be accomplished is stated in the indenture of the refunded bonds. Provisions of the bond indenture often require that an irrevocable escrow fund be established and dedicated solely to the retirement of the refunded bonds if they are to be defeased. The indenture or escrow agreement will specify the investments which may be purchased, the manner in which other investments may be

substituted for existing ones, and the procedure, if any, for amending the escrow agreement. Once the refunded bonds are defeased, the debt can be eliminated from the issuer's financial statements according to generally accepted accounting principles.

Economic defeasance in contrast to legal defeasance occurs when the original issue contains a nonrefunding provision. Proceeds from the refunding issue are used to finance the refunded bonds. These bonds, although refunded, remain the legal responsibility of the issuer and must still be shown on the issuers financial reports.

The Tax Reform Act of 1986 has restricted the use of advance refundings because the use of this technique results in a higher level of outstanding tax-exempt debt for a given project. For debt issued in 1985 or earlier, two advance refundings are generally allowed. For debt issued in 1986 or later, only one advance refunding is likely to be permissible. And, of course, the general reductions on length of maturities, cost of issuance, and other restrictions added by tax reform, apply to the refunding issue.

Reserve Funds After Tax Reform

One change resulting from tax reform arises from the new regulations relating to debt-service reserve funds. Rating agencies prefer that most revenue bonds be backed by a debt-service reserve fund at a level equal to the lesser of maximum annual debt service or the tax law's limit of ten percent of the proceeds. The law also requires that arbitrage profits earned on the money in the debt-service reserve funds be rebated to Treasury. A recent Moody's report offered four ways in which issuers may supplement the reserve fund to overcome the law's limits so that they can achieve and maintain a favorable credit rating. Issuers may supplement the fund with a letter of credit. They may provide the entire reserve through a letter of credit. They may start the fund at ten percent of the proceeds and then provide for an accumulation in a short period of time. Finally, they may sell a small taxable issue whose proceeds will be used to fund the debt-service reserve fund.

Moody's indicates that the requirements for a debt-service reserve fund may vary depending upon the issuer. A small private college or university without a major endowment would require a fully funded debt-service reserve fund. State universities in states with strong economies, if the debt is backed by a general obligation pledge of the university, could receive a favorable credit rating by funding their reserve at less than the 10 percent limit. Similarly institutions such as a major private university whose debt is backed by the university's general obligation pledge, where the school has unrestricted endowments much larger than the expected level of debt service, could achieve a favorable credit rating without any debt-service reserve fund.



Taxable commercial paper offers educational institutions a large pool of potential investors.

Taxable Debt Instruments

The capital development needs of higher education continue to grow each year. Although a vast majority of these requirements will continue to be met through the issuance of tax-exempt bonds, colleges and universities must begin to examine carefully other financing vehicles. The Tax Reform Act of 1986 placed restrictions on tax-exempt debt. One of the more significant new restrictions is the reduction in the percent of private activity permitted to be financed with tax-exempt funding. 501(c)(3) organizations must limit proceeds used for private activity to 5 percent. Student loan bonds are limited to 10 percent if federally guaranteed and 5 percent otherwise. Other tax-exempt issuers are limited to 10 percent. Furthermore, many of the largest private universities are virtually barred from further access to the tax-exempt market because of a \$150 million per institution limitation on outstanding tax-exempt debt. Consequently, the taxable bond market is being looked at with increasina frequency.

Taxable Commercial Paper

Taxable commercial paper—unsecured, short-term promissory notes of a borrower—is very similar to tax-exempt commercial paper. But there are a number of significant differences between the markets. In the taxable commercial paper market, commercial paper is generally sold to institutional investors on a discounted basis.

The market for taxable commercial paper is vast—it accounts for almost 38 percent of the U.S. money market. Investors like this form because it allows short-term investment at attractive interest rates and is an economical means of diversifying portfolios. Colleges and universities entering this bond market will find a large potential pool of investors. Of course, they will have to pay the price in higher, taxable interest rates.

Medium-term Notes

Another taxable vehicle which may be of use to higher education debt issuers is medium-term

Tax Reform Update

Last year the House version of the tax reform bill included 501(c)(3) organizations under the volume cap but this provision was eliminated in the final version of the tax bill. The House Ways and Means Committee, in an effort to increase revenues next year, may reintroduce this provision and include private non-profit universities within the state unified volume cap. Currently such institutions are exempt from the state limit but are subject to a \$150 million cap per institution.

The affect of the institutional \$150 million debt limit on research and development incentives was the topic of recent hearings held by the Senate Finance Taxation and Debt Management Subcommittee. One speaker asserted that the \$150 million limit will have a negative effect on "efforts to expand our research infra-structure." Although the Treasury opposes eliminating the cap, college and university representatives claim that such a measure would spur research and development efforts while costing the government less than \$20 million in revenue annually. Furthermore, encouragement of research and development activities would be in accord with the Administration's current emphasis on competitiveness. However, it is unlikely the President will support such a change at this juncture.

The Joint Tax Committee's explanation of the revenue provisions of the new tax law ("Blue Book") was released on May 7th. The Blue Book clarifies certain issues of the new tax law relating to refundings, arbitrage, pooled financing, etc. It appears to preserve the \$5 million small-issuer exemption from arbitrage rebate requirements but suggests that a bond bank may be subject to those requirements if all borrowers do not spend their bond proceeds within six months. The Blue book states that student bond loans and qualified 501(c)(3) bonds are exempt from certain public approval requirements regarding identification of facilities with which those issuers would not have been able to comply.

Some major issues remain to be resolved. Perhaps the most important concerns the issuance of bonds for working capital. Although the law did not specifically prohibit working capital financings, another provision limits the maturity of private-activity bonds to 120 percent of the economic life of the facility. Because no facilities are involved, issuers were uncertain whether they would violate the law when issuing bonds for working capital. Although some congressional staff members believe the restrictions do not apply, the issue remains open to interpretation.

The General Explanation of The Tax Reform Act of 1986, (Blue Book) is available at the cost of \$31.00 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-9325. In addition, Title 18, which includes the Technical Corrections to the 1984 Tax Bill is available for \$6.50. Prentice-Hall sells the books for \$16.00. It may be ordered by writing Prentice-Hall, 200 Old Tappen Rd., Old Tappan, N.J. 07675, or calling (201) 767-5000. These prices include mailing. CCH sells the book for \$15.00 plus mailing. It may be ordered by writing CCH, 4025 West Peterson, Chicago, IL 60642 or calling (312) 583-8500.

notes. Medium-term notes (MTNs) are debt securities offered on a continuous or intermittent basis. Maturities normally range from nine months to 15 years and are noncallable. There is no equivalent of MTNs in the tax-exempt arena.

The advantages of MTNs are numerous. MTNs are a form of incremental financing, available in small or large size. They can allow an issuer to average interest costs over several smaller offerings rather than gamble on a long-term issue. MTNs allow an issuer to pull out of the fixed income market with no prior notice. And active participation in the MTN market provides the issuer with broad and frequent exposure to the capital markets.

U.S. Domestic Public Markets

Historically, the domestic public market has been the largest and most liquid debt market. It offers consistent access to the full range of maturities from one to 30 years. Pricing is based on a spread over comparable maturity U.S. Treasury yields.

The obvious advantage of the public market is its size. It is possible to raise up to \$300 million per issuer. Again, the disadvantage is cost: The domestic market is one of the most expensive sources of funds.

Private Placement Market

The private placement market offers a substantial source of funds, particularly through life insurance companies. The average size of an issue is usually between \$5 million and \$50 million, and maturities range from three to 15 years. This market can be accessed quickly for small size issues, and

delayed funding (3-6 months) is sometimes available. But only limited funds are available for long-term maturities and large deals (over \$100 million) are not always cost effective.

Previously financial institutions purchased large amounts of tax exempt debt. Because the Tax Reform Act of 1986 eliminated much of the advantages of holding tax-exempt debt, these organizations will find taxable placements much more attractive.

Foreign Currency-Denominated Bonds

Foreign currency-denominated municipal bonds are a potential new area available to colleges and universities. These bonds would be identical to traditional bonds except that they would be denominated in, and would pay coupons denominated in, a foreign currency.

A few universities are now actively considering Eurodollar and Euroyen issues and plan to pursue an overseas financing when market conditions are attractive. However, only a small number of institutions have sufficient name recognition to attract overseas investment.

Concluding Comments

College and university financings occupy a reasonably good niche in the debt markets. But the environment for capital financing is not as good as it has been in the past. Indeed, tax reform has shut off access to some markets and severely limited access to others. Higher education financial administrators must continue to develop their understanding of the debt-financing markets and techniques as well as explore new vehicles and channels to meet capital needs.

Restrictions on types of activities which may be financed with tax-exempt debt and limitations on the amount of allowable outstanding tax-exempt debt will increase the use of taxable debt by educational institutions.

Taxable Bonds

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Method	General Description	Advantages	Disadvantages	
Taxable Commercial Paper	Short term, promissory note of borrower, sold at a discount, letter of credit required	Low interest rates, broad market	Reissuance risk, active management.	
Medium Term Notes	9 months to 15 years maturities, non-callable, agency rather than underwritten rated (Moody's or S&P's)	Variable size, specific use, tailored to buyers needs, active market	Higher rates than com- mercial paper.	
US Domestic Public Markets	1-30 years maturities	Large and liquid, fast time frame, call flexibility	High interest rates	
Private Placement	\$5-50 million, 5-25 year maturities, rate set at of- fering	Fast access, small size, de- layed funding	Not cost effective for large deals, stricter call provisions, limited market for long maturities.	
Foreign Currency- Denominated Municiples	Issue and payments in foreign currency, attractive to issuer with private purpose	Issues can be smaller than in the domestic market, lower total interest cost, arbitrage advantage, quick delivery	Requires market "name recognition", bond counsel approval can be difficult, short maturities, cost of currency hedge.	



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New Board Members

The Forum for College Financing Alternatives is pleased to announce that three new members have joined its Technical Advisory Board, Dr. Jack C. Blanton, Mr. Arthur J. Kalita and Dr. William F. Massy. Dr. Blanton is the Vice Chancellor for Administration at the University of Kentucky. He earned his Ph.D. there in higher education administration, and he has served as the Chairman of the Finance Management Committee of NACUBO, a position he will leave July 1, 1987 when he becomes a member of the NACUBO Executive Board. Mr. Kalita is Managing Director of J.P. Morgan Securities, Inc. He is also a Senior Vice President at Morgan Guarantee Trust Co. and has served as the Executive Director of the Public Securities Association. Dr. Massy is the Vice President for Business and Finance at Stanford University. He earned his Ph.D. in Economics from the Massachusetts Institute of Technology and has written numerous books, articles, and papers on higher education financial management.

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