Self-Help
Internal Credit Enhancement to Boost Bond Ratings

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Tranching: Strategies for Building a Tiered Credit Structure

James Calpin

Last night at dinner I was party to a conversation about cruise ships, which makes for a good analogy for the whole concept of tranching, or layering, the various credits inherent in an issuer's capital structure. At the top of the heap you find the senior lien, or first lien. Think of these holders as your first-class passengers: the ones with the ocean views and a seat at the Captain's table. Next are the junior lien holders. These folks are in line for a seat at the Captain's table, but bear a little more risk. Further down the food chain are the passengers in steerage. Their liens can be so deeply subordinated that they might not get fed, but at the same time, they might not care. Instead, they are more focused on the availability of a lifeboat if the ship (the bonds) hits the proverbial iceberg.

Ultimately, when you are thinking about tranching, it boils down to the priority of payments both to investors and to partners from a dedicated repayment source. There are four major, and interrelated, objectives for structuring a transaction in a tranched fashion. The first is to achieve project feasibility—to get the project completed. Second, tranching can advance the goal of maximizing project capacity or bonding capacity. Third, tranching can preserve, or at times and depending on the market, actually enhance the bond rating of a particular senior or junior lien. Finally, tranching can be used to reduce the cost of capital, which is the overarching goal from either the banking or the issuer's perspective.

To set the stage for the rest of my presentation, I want to contrast a traditional flow of funds with a more "modern," or partnered, one. In either case, the flow of funds begins with revenue—such as tolls or taxes—available to repay obligations. In the traditional flow of funds, revenues then pay ongoing operating expenses. Senior lien bondholders are next, and the junior lien bondholders follow. Further down the flow are contributions to reserve funds for such things as extraordinary renewal and replacement expenses. Nearing the bottom of the flow of funds are the subordinate holders—the ones bearing the highest risk and typically the ones most willing to be patient investors in receiving repayment of their obligation. These subordinate positions could include intergovernmental agency loans, developer loans, operations and maintenance repayment, or state infrastructure bank loans.

Now let's look at a more modern flow of funds. A key difference is that ongoing operating expenses are moved from the top to the middle of the flow of funds. This creates what is referred to as a gross revenue pledge and has the impact of strengthening the credit of the senior and junior lien bondholders. Next, reserve fund contributions are made and are followed by payment of subordinate obligations and of operating and maintenance expense borne by a public agency. These last two are frequently said to have "soft maturities," since their repayment requirements typically include more flexible terms than those of a senior or junior lien bondholder.

Let's now take a closer look at the various elements of the flow of funds, starting at the top with the revenue stream. First, you need to recognize that different types of facilities create different types of revenue curves. Consider a mature toll facility like the Orlando–Orange County Expressway or the Ohio Turnpike. These facilities have been operational for decades, and their respective traffic and revenue bases are well established. The projected revenue curves of many mature facilities tend to be flat as shown in the first example, reflecting that they neither expect nor rely on significant traffic growth or periodic toll increases into the future. In contrast, the second example highlights a start-up project, which typically has a very steeply sloped projected revenue curve well into the future. This represents a bit of an "if you build it, they will come" (and in droves) assumption. The third example presents the revenue curve of a "hybrid" such as the Alameda Corridor project. Hybrids rely on some considerable near-term growth, which then levels off, representing a more conservative revenue growth forecast than you will find with a true start-up facility.

When does it make sense to add tranches of debt for a mature facility? First, realize that for many mature facilities, senior lien debt is many times structured as level debt service that fits well within a projected low-growth revenue curve. Any added junior lien debt also has to fit within the restrictions of those same revenues. An additional challenge for many mature facilities can be the inability to leverage future revenues because of legal constraints based on prior-year performance. Many bond resolutions contain provisions that restrict additional bond capacity to past revenue performance rather than anticipated or projected revenue growth. This is commonly referred to as a historical additional bonds test. Adding a new level of debt, junior or subordinate, can offer an ability to work around such restrictions.

In judging when to tranche for a mature facility, the first thing to measure is current bonding capacity versus capital needs. A facility might be nearing its current senior lien bond capacity, but it may have strong projected revenues that offer capacity opportunities. In our example, an issuer might add a tranche of junior lien debt, so that while senior lien holders would still enjoy a steady 1.5x debt service coverage ratio, the new junior tranche would realize lower coverage of 1.25x or lower down to a 1.10x coverage level. This new tranche taps into a portion of surplus revenues inherent in the system. It would not introduce a prohibitively risky structure for an issuer; rather, it would add another layer of capital-raising capacity.

Now let's look at a start-up facility and its projected upward-sloping revenue curve. A curve this steep would likely give rating agencies and potential investors some pause. Revenues rely on significant nominal growth and typically include future toll or rate increases well into the future. Many times, start-ups need to fully leverage the revenue curve to fund all of their capital needs. Debt service for senior lien bonds escalates in relation to the revenue curve. We also see junior lien debt structured parallel to these curves but with even less room for error. As for any subordinate holders, such as equity partners or governmental credit enhancers, there are almost no surplus revenues remaining for payment in the early years, so repayment is deferred to the out years. In this start-up example and many real-world projects, there is very little room for nonperformance of the revenues. If actual revenues were to flatten out anywhere along the projected curve, thus falling short of expectations, some investors are likely to get into trouble. The pain begins in the reverse order of the flow of funds with the most subordinate holder, but many times (as described) they can offer flexibility to defer and carry the repayment into subsequent years. Next in order of risk would be the junior lien holder, and finally, the senior lien holder.

Let's move from a general discussion to three examples. First is the 27-km (17-mi) Southern Connector start-up toll road in Greenville, South Carolina, which Robert Probst discussed yesterday. The Connector 2000 bonds were sold in 1998. The security source for the bonds was interesting in that it was almost a gross revenue pledge. That is, although operating costs were paid ahead of debt service, maintenance expenses were subordinated such that Connector 2000 was able to repay South Carolina DOT for these expenditures further down the flow of funds. This feature enhanced the ratings on the senior lien bonds by offering a stronger revenue stream, which was the sole security source for bondholders. Significant features of the transaction included projected toll revenues that rely on six future rate increases and the overall ramped debt service structure, which fully capitalizes the projected revenue curve. This translated into a capital structure with a high level of inherent risk, although the Connector 2000 finance team was successful in receiving an investment grade rating on the senior lien bonds from one of the rating agencies.

To fill the funding gap and get the project financed, Connector 2000 also issued $47 million of nonrated subordinate or junior lien bonds. The remaining portion of surplus revenues after debt service will be consumed by these subordinate obligations in the form of maintenance repayment to the patient investor, the South Carolina DOT. Of significance in the structure is that any underpayment or nonpayment of these subordinate obligations does not trigger a bond default; rather, the liability would continue to accrue at a 5 to 6 percent rate, with ultimate repayment to DOT.

By creating this tranched structure, $153 million, or 75 percent, of the $200 million bond issue achieved an investment-grade rating. This was critical to the financing because such rating enticed investors on board and had the effect of anchoring the deal. Including junior lien bonds and subordinate obligations through a creative flow of funds and legal structure created more capital financing capacity and was a critical element in the success of the financing.

The second example is the Maine Turnpike Authority, a mature facility. Tranching was a necessity for the Southern Connector, but the Maine Turnpike Authority was able to tranche as a matter of choice. Its existing debt service for senior bondholders is a traditional level debt structure. Interestingly, the authority does have a significant "junior" lien obligation. However, it is in the form not of subordinate debt but rather pay-as-you-go funding commitments for the long-term capital program. Below that tranche is special obligation debt, which capitalized an ongoing payment to the state DOT.

In 1998 the authority was looking at refunding a portion its senior lien bonds for savings and was considering a restructuring of special obligation bonds to a senior level status. The question was whether there was value in refunding the special obligations to the higher-rated, and theoretically lower-cost, senior lien without unduly compromising the capacity at the senior lien. At the same time the authority had to comply with its internal, conservative policy of maintaining a 2.00x senior lien debt service coverage ratio. Restructuring the special obligations to a senior position would have breached this coverage level and required an additional deposit to the debt service reserve fund. Further, the authority was nearing a rating upgrade prospect, from single-A to AA–, and did not want to jeopardize the value of the upgrade.

To deal with this dilemma, we analyzed credit spreads in the market as a possible opportunity. At that time in late 1998 and again in late 1999, lower rated credits (BBB bonds) were at comparable prices (yields) of other more highly rated AAA bonds, a market anomaly resulting from the overall buying strength in the market. This allowed the authority to consider the option of adding capital funding capacity at very little cost versus its traditional approach. That is, the authority saw an opportunity to refund the special obligations on their existing lien, but at prices that mirrored the higher-rate senior lien bonds.

What did the authority do? With credit spreads extremely tight and very little supply in the market, we looked to the bond insurers, who were also willing to offer insurance at prices that reflected the very narrow credit spreads. In fact, we received the same price for both the senior lien (A category rating) and the nonrated subordinate obligations. At pricing the authority received no market penalty between the two series of bonds. Thus, the authority was able to issue subordinate obligations at yields on par with the senior lien bonds, which preserved capacity of the senior lien for future borrowings. In the end, the Maine Turnpike Authority, because of the market anomaly that existed at time of issuance, was able to incorporate tranching as a choice, and ultimately "have its cake and eat it too."

The last example is what I will refer to as the mother of all tranching—the Alameda Corridor project. Tranching was really the only way to finance this project. As you know, this is a $2.5 billion project that involved the issuance of $1.2 billion in taxable and tax-exempt bonds; 85 percent of those bonds were sold on a senior lien basis. A number of partners were involved in the financing plan; the ports contributed $400 million in up-front capital, and the Los Angeles County Metropolitan Transportation Authority kicked in grants of almost $350 million. Then, of course, there was a pre-TIFIA federal loan of $400 million that closed the remaining funding gap.

ACTA has a rather complex debt structure with numerous layers of claims on the cash flows. Key to the structure was the fact that the DOT loan repayment does not begin until 2014—it negatively amortizes until that point. That provided a great opportunity because we were able to incorporate more costly junior lien bonds in the earlier years and pay them down during the front end of the structure. Perhaps most interesting is that even though the junior bonds are subordinate to the U.S. DOT loan in terms of their priority claim on cash flow, as a practical matter, they will be paid down second because the bulk of the federal loan does not kick in until 2014.

Another key piece of the credit story is the ports' provision of additional security to guard against revenue risk. This creates a revenue curve with two components: the revenues that come from user fees, and second, a backstop from the ports in the event of shortfalls against debt service and the U.S. DOT loan. The ports are obligated to pay almost 40 percent of annual debt service, if needed, for all tranches of debt, including the U.S. DOT loan. This created a significant amount of additional coverage and was a key element in getting the senior and junior lien bonds to an investment-grade level.

Further, repayment of any advances the ports make under this backstop scenario as well as the ports' up-front contributions is deeply subordinated; the ports represent those truly patient investors needed to make some projects viable. A final feature of the structure that was important to the credit was the fact that both the port payments and the U.S. DOT loan are nondefaulting. If payments are delayed, these obligations continue to accrue until they are eventually paid from surplus revenues.

I would like to sum things up with a brief list of issues to gauge when deciding whether to consider tranching. The first is to assess an issuer's asset base of projected revenues and all ongoing funding commitments. Second, you have to review existing legal documentation limitations. Third, look at potential partners who might be willing to offer capital with an expectation of repayment, but also with a flexible approach in terms of the timing of that repayment. Fourth, it is important to review an issuer's credit goals. Sometimes it might be advantageous not to strive for an upgrade but instead to trade that away, in whole or in part, for future capital capacity, either on a senior lien or a junior lien basis. And finally, always look to take advantage of market opportunities: efficiencies and inefficiencies abound to create tranching opportunities for you at many different levels.

Early Stage and Other Public Guarantees

Robert Rich

In keeping with Jim Calpin's cruise ship theme, I would like to speak about early stage credit enhancement, in which the task before us is to convince state DOTs, local governments, and certain toll authorities not only to go on the cruise, but to go on the cruise in steerage.

Early stage credit enhancement involves guarantees or other supports that are provided during the earliest stages of a project's development. Most investors recognize that this stage involves some real risks and demands substantial returns in exchange. Some contractors, engineers, and other benefited parties may want to participate during these early stages of a project, but detached guarantors or investors are very difficult to find, since they have nothing more than a purely financial stake in the outcome.

Before we talk about specific enhancements, I think we have to lay out the stages of project risk: the development stage, construction, ramp-up, stabilized operations (which sometimes occur later than expected), and finally, mature operation.

During the development phase the expenses are the lowest but the risks are the greatest. Feasibility has not yet been determined. Environmental issues are uncertain. Local approval needs to be obtained for projects. What can be done?

A governmental partner can induce private involvement in this stage of the process in at least four ways. It can make an outright commitment of equity either directly or indirectly; examples include right-of-way contributions or a fee or tax pledge. Second, a government agency can theoretically offer development risk insurance. Some of you may remember that this idea was incorporated in early versions of what later became the TIFIA legislation. Such insurance would reimburse expenses incurred for reasons beyond the control of the developer. Third, governments can assist developers in managing the local approval process, being more aware of the local political scene. And fourth, eminent domain powers can be helpful. Although this is not a particular bond-enhancement per se, it can help get the project through the development phase by accessing right-of-way in a much easier fashion.

As a coda to my comments on the development phase, I should note that financing takes place between the development and construction phases. As a result, investors bear the risks from the construction phase forward but are generally not involved in the development phase.

Now let's look at the construction phase and its unique risks, which include such things as cost overruns and delays. Commercial insurance, contractors' guarantees, and other private-sector activities can address most of these concerns, and I believe that many private participants feel very comfortable during this phase. Also, the bond structure serves to mitigate risk during the construction period by capitalizing interest beyond the construction period. Funding a debt service reserve during this period is another mechanism used to mitigate risk, and this is a key place for governmental support through provision of this reserve fund. A further role for a government partner during the construction phase is to streamline the approval process to ensure timely completion. The essence of risk during this stage is to get the project completed on time, and any delays can have serious adverse effects on the revenue curve.

The next stage, ramp-up, is arguably the riskiest operating phase. The facility is brand new. Potential customers are deciding whether to change their commuting pattern. Operational challenges are also coming to the fore. A governmental partner can help mitigate risk in at least four ways during this phase. The governmental partner can assume the first loss by providing a subordinated loan to enhance senior lien bond coverage. We have all seen cases where traffic and revenue projections have proven wrong, and the subordinate debt provides an effective cushion if revenues are lower than projected. A government agency can also provide standby funding, akin to a line of credit. In this instance, a governmental partner would step in financially should revenues fall short of what is needed to repay bondholders. Third, the public agency can assume the operating and maintenance responsibility at

no cost, or on a subordinate basis. And finally, the absence of new competing facilities is absolutely critical at this point, when customers are selecting which facility to use. So public agencies have a real role to play in reducing or eliminating the bondholders' exposure to the financial effects associated with new competing facilities.

Finally, you have the stages of stabilized and then mature operations. If the project ramped up as expected and projections are being met, these phases entail minimal risk. Insurance is generally in place to cover any damage to the facility. Debt service reserves, either through surety or cash, are also available should any sudden hiccup in revenue operation threaten debt service. At this stage, your greatest need is to have flexibility in your operations to be able to roll with the punches and thus maintain credit strength. And once again we see the benefits from a governmental partner's willingness to protect investors by subordinating reimbursement for provision of operations and maintenance. Another potential public role during this phase is to allow for the asset and service to be priced in a way that maximizes earnings potential.

So governmental partners can play a very meaningful role in mitigating risk during all project phases, and in many ways they are uniquely positioned to do so. This is because most other investors derive no benefit other than financial return from these investments and thus are unwilling to accept risk unless amply compensated. The public sector, in contrast, has deeper pockets and a greater capacity to withstand ups and downs. Furthermore, governmental entities are in a better position to recognize the nonmonetary benefits that many of the facilities offer, especially if they appear on a state transportation improvement program and are poised to reduce congestion, improve mobility, and boost economic productivity sooner. And after all, most of the time the agency is going to pay for the project anyway. If you know that you will be giving money to the project eventually, why not contribute it in the form of credit enhancement at an earlier date—particularly when that enhancement can potentially lower costs, secure other resources that may not be available later, and improve the chances that the project will be self-supporting.

I now want to discuss five specific projects: the San Joaquin Hills and Foothill/Eastern toll roads in Orange County, California; the George Bush Turnpike in Texas; the Osceola County Parkway in Florida; and a broad transportation program sponsored by the Kansas Department of Transportation.

I bundle together the San Joaquin Hills and Foothill/Eastern toll roads because both used development impact fees (DIFs) that greatly increased the financial feasibility of these projects. Developers in the vicinity of the toll roads paid these fees either with cash or through right-of-way contributions. For the San Joaquin Hills project, the Transportation Corridor Agency collected $46 million in DIFs during the prefinancing and construction period; these functioned as equity to fund design, construction, and right-of-way acquisition before the 1993 financing. At the time of the financing, more than $185 million in DIFs was projected over a 28-year period; the proceeds were pledged as additional security for the 1993 bonds.

For the Foothill/Eastern facility, the story was a little different. There, analysts projected more than $400 million in DIFs to be collected over a 26-year period. The agency sold $246 million worth of variable rate bonds, pledging the DIFs to repay the principal; the interest was to be paid on parity with the agency's fixed-rate debt. Four commercial banks provided a 14-year letter of credit on the variable-rate bonds. The additional debt capacity, leveraged through the DIF payments and letter of credit, allowed for full funding of the project costs.

The George Bush Turnpike, sponsored by the North Texas Tollway Authority, also faced a capacity crunch. The construction costs were estimated at more than $500 million, and the authority's outstanding debt at the time would have doubled had it financed those costs on its own. Furthermore, such a large growth in debt would probably have lowered its credit ratings as well. The Texas Department of Transportation agreed to lend the project $135 million, as permitted under state law and ISTEA Section 1012 (later codified at 23 U.S.C. 129). The interest rate was below market rate, so Texas DOT did subsidize the transaction to some extent.

The loan repayment was subordinated to the outstanding bonds, which further bolstered the credit of the senior lien. Savings on issuance costs, reserves, and other costs that would have been associated with that $135 million if issued in the normal capital markets were also substantial, and this too helped to deleverage the senior lien debt. Debt service coverage for senior bondholders was boosted from what would have been about 1.16, which is below the threshold for any senior lien toll road bond in the country, to about 1.35, which preserved the authority's ratings.

The Osceola County Parkway, which connects the Florida Turnpike to Walt Disney World, benefited from a very unusual guarantee. Osceola County sold $150 million worth of transportation improvement bonds for the construction of the parkway. The bonds were backed by a number of sources: toll revenues, payments from landowners, a limited deficiency makeup from Osceola County, payments from a local improvement district called Reedy Creek, and a guarantee from Reedy Creek as well. This guarantee is secured by the full faith and taxing power of the improvement district.

The bond guarantee can be terminated by the bond trustee once certain threshold requirements are met—such as attainment of a required fund balance, sufficiency of specified revenues (including toll revenues) to meet annual debt service as well as specified contributions to a renewal and replacement fund, and a track record whereby net tolls for each of the three prior fiscal years meet or exceed 1.25 times maximum debt service. In the words of David Seltzer, the guarantee behaves a bit like a booster rocket of credit enhancement that can drop off once the project's orbital stability is achieved. In this case the booster rocket really was needed; the bonds qualified for insurance because of the guarantee. The guarantee remains in effect today, and I think senior lien bondholders and the insurers are very grateful for that, because unfortunately, revised projections fall short of initial assumptions and the guarantee really has been necessary as a credit support mechanism.

Finally, let me talk about the Kansas Department of Transportation (KDOT). KDOT issued variable-rate debt in 1994 to lower funding costs and diversify its investor base. It is necessary to provide additional liquidity for variable-rate debt because of the "put" feature of these bonds. KDOT, on its own, had strong enough credit to provide an eventual backstop, but more liquidity was still needed. So KDOT looked to the state itself, which provided further liquidity through the state's Pooled Money Investment Board, a fund with an investment profile that met rating agency standards for liquidity. The cost was well below market rates, again demonstrating that states often have more complex motives than simple return on investment; in this case, completing these transportation projects was a high priority as well.

So, we can see that public-private partnerships can be strengthened through governmental risk-sharing in a number of different forms: debt guarantees, direct equity or indirect equity through taxes or fees, subordinated loans, lines of credit, operating and maintenance contracts at no cost or deeply subordinated to other obligations, insurance for certain risks, and liquidity for variable-rate debt.

Public Pension Funds as Credit Enhancers

Daniel Stone

We heard yesterday from Dan Flanagan, who spoke about the $3 trillion of public pension fund assets as yet unable to find a home in the infrastructure market. Today I would like to talk a bit about how larger public pension funds might be used to provide credit support.

I would like to speak to you about several things today. First, why sponsors of transportation projects would be interested in pension funds and vice versa. Next, how we as rating agencies look at pension programs, especially since involvement in credit enhancement is one of the things that we focus on. Third, how all this might be helpful to real-world projects. After all, pension funds have provided credit enhancement in the past; I believe the first time a pension fund issued a guarantee was in 1983. In that instance, the New York Teachers Retirement System wanted to build its own headquarters and some other office space for the state of New York. The state was going to issue bonds itself, and it ended up doing that with a guarantee from the pension fund to get a stronger rating and achieve some interest savings.

Why might a sponsor of a transportation project want to get a guarantee from a pension fund? One thing we have been seeing is that many bank letters of credit and lines of credit have been getting a lot more expensive. So people are looking at different ways of providing liquidity, and pension funds make for a strong candidate, in part because they tend to enjoy very high credit ratings. After all, most of the sponsors of large public pension funds are states, which themselves are rated AA, so you are talking about pension funds rated at the upper end of the AA category and even at the AAA level. So when they provide guarantees, letters of credit, and the like, they often can do it with a higher credit rating than a bank and thus provide even more interest savings for your project.

Why do pension funds even get involved? Why would they give a guarantee to a public finance project or a transportation project? Often large infrastructure projects provide benefits not only through financial returns but also through meeting broader objectives. A sponsoring government may have been seeking construction of a project in a particular area; the facility may also benefit its own pension fund members. Of course, financial returns count for something, and pension funds do not offer credit enhancement for free. They charge a fee, much as a bank or an insurance company would. The fee income helps them offset their administrative expenses and lower the cost to both the members of the pension fund and the sponsors.

We assign the same rating categories to pension funds as we do for any other entity. We provide either an issuer credit rating, which assesses the fund's strongest capacity to repay its obligations, or a separate rating on a specific letter of credit or guarantee.

Rating agencies consider four criteria when looking at a fund. First, we look at the sponsor and the relationship of the sponsor to the pension fund. Second, we

look at the resources the pension fund has. Third, we consider its existing obligations. Finally, the fund's credit enhancement programs are important as well.

Then, last in terms of the four criteria I mentioned, but the most important for what we are talking about today, are credit enhancement programs. Here we look at cases in which the fund will step in and provide a letter of credit or a line of credit for a given project. We like to see some sort of legal limitation that ensures that the fund cannot do so many guarantees that it gets in trouble. We also look at the lien level of pension guarantees as compared with pension payments. As a general rule of thumb we do not like to see pension funds investing more than 10 percent of their assets in these sorts of contingent liabilities and credit enhancement programs. We look also at the types of credit enhancement offered, and of course we look at the specific terms of the guarantees.

What does this all mean for you attending this session? Without question, public pension funds can provide valuable support for public projects. It has not yet been done a lot, and nowhere close to what is possible. I think we will see public pension funds increasing their interest in doing this sort of thing, which will provide some added competition for banks, insurers, and such. This is good news for you, since pension funds can certainly help issuers achieve high ratings, even though a guarantee is invariably junior to the repayment of pension obligations.

Now I would like to talk about some specific examples. The first one I will touch on is the California State Teachers Retirement System, affectionately known as CalSTRS. It is rated AAA with an A1+ short-term rating. You may ask how can it be rated AAA when the state of California is only AA– and was A+ for a while. There are a couple of reasons. First, it is not just a state-funded program; it is really a multiemployer program, including just about every school district in the state. In addition, it is currently overfunded at 104 percent. Also, CalSTRS has high independence from the state.

CalSTRS has had an ongoing enhancement program since 1994. The fund is willing to commit up to $2 billion to provide guarantees and other forms of enhancement for various public projects. It has done some industrial development bonds and a lot of smaller bonds like that, but it has also done some big public-sector facilities as well as some hospital financings. Its first transaction, interestingly enough, was in the transportation sector, providing $90 million in liquidity for a Port of Long Beach financing.

The CalSTRS program has now reached a total commitment of $1 billion. One of the interesting things that helped us get comfortable with the program is that if one of these projects had a particular problem, CalSTRS could go to the bank with which it is partnered before it could raid its own finances. This provides an added source of liquidity for CalSTRS. In sum, although this program has only been around since 1994, it is fairly deep and has a history to it. I think it will provide somewhat of a model for the future.

Second, a few words on the Tennessee Consolidated Retirement System. The state is rated AA+, but the fund is rated AAA and A1+ on the short-term side, reflecting a strong funding ratio of 100 percent, conservative investment management, and a lot of distance from state interference. One interesting feature of the Tennessee program is its provision of liquidity to the state's $250 million commercial paper program. As most of you know, when commercial paper matures, there is often a remarketing in which new commercial paper pays off the old paper. But there is always that risk of a market problem or a remarketing failure. So, generally, one of the rating requirements is that there be some form of letter of credit just in case of a major problem. The state of Tennessee was frustrated because it had to pay those fees to out-of-state banks. But by using the retirement fund to provide that liquidity, it was able to pay a fee to its own retirement fund, thus keeping everything in-house.

Last, I will touch on Minnesota. Earlier this year, the state sold $28 million worth of bonds to finance a headquarters facility for its retirement systems. The bonds represent a general obligation of the state; but in addition, the state's three principal retirement systems are backing it up. You would think a state with an AAA rating would not need additional backing, but apparently the strategy helped them achieve some savings.

To sum up, I do think that pension funds are potentially a good source of high-quality credit enhancement, particularly for projects in the transportation sector. We have been seeing a slow increase in this sort of guarantee activity over the last couple of years on the part of pension funds. So long as it is a large pension fund, provision of credit enhancement does not seem to cause a problem from a rating perspective. And it certainly can help lower project costs as well as provide some collateral benefits both to the sponsor of the pension fund and the members of the pension fund.

TIFIA and Private Equity: A Marriage Made in Heaven?

Robert Brown

If you looked at the titles of the presentations in the program this morning, you probably wondered what my topic is doing here. Although a slug of equity certainly enhances the creditworthiness of any

project financing, this is not exactly the same kind of topic that the other speakers were addressing today. But, as we at U.S. DOT begin to talk about what we have learned after a bit over a year and look ahead to reauthorization, the role of equity in a TIFIA transaction is one issue that is beginning to surface. On that theme, today I would like to speculate on why we are not seeing a lot of private equity in the TIFIA program, whether U.S. DOT could do things to change that, and finally, whether it really matters. Before launching in, I should say that my views, as always at these kinds of things, are my own.

When the TIFIA statute was enacted, we heard a lot of talk about how this would create public-private partnerships. When you say public-private partnership, the first thing that occurs to many people is the presence of equity investors. But in previous talks this morning we have seen many forms for public-private partnerships, and I think it is a little too narrow to look at equity alone as the definition of a public-private partnership. Nonetheless, some people expect private participation to take the shape of equity, and I want to address that this morning.

First of all, let's revisit the TIFIA statute itself. The congressional findings speak to TIFIA as a mechanism whereby new investment capital can be attracted to infrastructure projects. At the same time, statutory language uses the word "equity" only in the enumeration of eight statutory selection criteria. In this instance the statute talks about attracting "private debt or equity investment." For the lawyers in the group, I would point out that the use of the disjunctive "or" rather than the conjunctive "and" surely suggests the indifference of the statutory draftsman to the form of private-sector investment, regardless of whether it is an investor buying a bond or an investor putting equity into the project.

Now let's take a quick look at the TIFIA scorecard to date. In Fiscal Year 1999, U.S. DOT selected five projects for TIFIA credit assistance. Of that batch, State Route 125 in San Diego County has an equity component. And in fact, the equity participation in that project has been substantially downsized during the course of negotiations and the process of structuring that deal. A second project from the 1999 round, the Farley–Penn Station project, intends to include a private equity component as well, but both the size and the identify of that investor are yet to be determined. That deal is still being structured.

In Fiscal Year 2000 we received six applications for TIFIA assistance; they are being evaluated and no selections have yet been made. None has proposed an equity investment. In fact, sponsors of one project that very much involves a privatized project financing told us very specifically that they did not want private equity in their project because it was too expensive.

I would also note that the 1999 cycle saw two true project financings, meaning total or near-total reliance on project revenues, out of the five selected projects. For a third project, the Miami Intermodal Center, one of two TIFIA loans will essentially behave like a project financing because the repayment stream is based on a rental car facility. The other loan, which in fact is the larger portion of the financing, consists of a loan secured by gas tax receipts, so that is not really a project financing.

Now, once you move beyond straight project financing, you get into some serious policy questions about whether equity makes sense. You also start having to ask what kinds of equity returns are appropriate.

When Jim Calpin spoke earlier, we visited investors all the way down into steerage, but we did not even touch on equity investors. I don't know how far down you have to go into the bowels of the ship to find the equity investor, but surely this fellow is the most subordinated, patient, and risk-tolerant participant in any typical project financing. Really, however, that is also the role that TIFIA has assumed and was intended to assume under statute. TIFIA is supposed to be, if not the biggest risk-taker, certainly a non-investment-grade risk-taker. What's more, despite the risk, TIFIA is very cheap: there is no cheaper source of taxable money—or even long-term tax-exempt money, as some of our clever applicants are figuring out.

So equity is more costly and possibly less patient than TIFIA may in fact be. During the TIFIA session some of you may have heard Jim Preusch speak about how deeply the Alameda Corridor backloaded debt service on the federal loan. I doubt that you would find many equity investors who would accept a situation in which they would have to continue to inject money into a project for 10 to 20 years before starting to get their return.

Possibly a program like TIFIA, which is both very patient and very cheap, crowds out equity. Perhaps it raises the question as to whether there is room for two patient investors and two high risk-takers in the same transaction. I think those questions may be answered by the dearth of private equity in these deals.

I think another reason for the dearth of private equity is that it is difficult to price public works–type services at levels that pay equity investors the kind of returns they want. Maybe more important, I think we as Americans have very basic notions about how much money the private sector should make in providing public services and public works projects.

A couple other limiting factors relate to U.S. DOT policy and management decisions. DOT, as I said, is willing to be very patient—but not more patient than equity investors are. In situations characterized by a very long ramp-up period, U.S. DOT, as the subordinated lender, is willing to defer interest and add it to the

principal balance of the TIFIA loan, but as a matter of policy it will not permit a return to be paid out to an equity investor in the interim. Some prospective investors may have initially thought that equity investors could receive payment at the same time that U.S. DOT was capitalizing interest, but to us it looked like federal money was being passed right back out through another door as a return to private investors, which does not make a lot of sense.

On the other hand, we at U.S. DOT are certainly prepared, I think, to accept a substantial deferral and backloading of principal and in certain situations permit some return to equity investors. Again, this approach maps back to legislative language appearing in the conference report that recommends that the Secretary encourage borrowers to prepay their direct loans or guaranteed loans as soon as practicable from excess revenues or the proceeds of refunding bonds. Of course, you have to ask about the meaning of "excess revenues" in that sentence. If the TIFIA debt has already been scheduled to be substantially deferred, perhaps revenues then available to pay an equity return would not be excess. But, as I say, the matter of returns on equity to investors in cases of a heavily backloaded TIFIA repayment stream raises policy questions and would require scrutiny on a case-by-case basis.

This is really just the beginning of a long discussion, and I do not want to suggest that we have a lot of conclusions at this point about how all this is going to work. Still, in my view it is fairly clear that the program's structure virtually ensures that TIFIA will not, itself, stimulate a lot of equity investment. I also suggest that maybe that does not matter. Equity certainly does have its place in other kinds of projects. It may be, for example, that some projects are done with tax-exempt senior bonds and TIFIA subordinated debt and others are done with taxable bonds and equity. There are lots of combinations, but at the end of the day, TIFIA's ultimate objective is to boost investment in transportation infrastructure and get transportation projects built. Creating opportunities for public-private partnerships might be a nice sideline, but it is certainly not the program's primary policy objective.

My preliminarily conclusion is that although we are not seeing a lot of equity in TIFIA, perhaps it does not really matter. On that score, I thought I would close with the words of our session moderator, David Seltzer. In the course of e-mailing back and forth occasionally to get his wisdom, I saved this little missive, which I think speaks well to the matter at hand. "On the broader question of why there isn't more equity investment, I think the more relevant question is whether a project has at-risk capital invested in it, regardless of its form. I would go back to my definition of private capital, where neither the funding source nor the repayment source is derived from public tax-supported dollars. Why should we care if that private, at-risk capital is a non-recourse tax-exempt bond, a non-recourse taxable bond, or non-recourse equity?" To my mind, an excellent question.