

Institutional Investing in Infrastructure

Stimulating Infrastructure Investment in the United States

by Robert Johnson, Jr.

The need for trillions of dollars to be invested in U.S. infrastructure is well documented. Future models for infrastructure investment in the United States will include elements of both private equity and debt, but something is needed to better mobilize vast amounts of private capital sitting on the sidelines. Might investment structures involving long-term debt, inflation protection and federal government credit enhancement help open the floodgates for pension fund and other institutional investor capital to enter the infrastructure asset class?

The following "Food for Thought" report explores a hypothetical model that uses federally credit-enhanced taxable revenue bonds for institutional investors to finance U.S. infrastructure projects. The paper also explores alternatives that leverage private equity structures to expand the possibilities, and in all cases, the design-build-operate-and-manage model is the framework. This is the first part of a multi-part report. The next installment will publish in the December issue of Institutional Investing in Infrastructure with input from infrastructure investment professionals.

Private equity investment managers have raised a substantial amount of capital for infrastructure investment during the past four years. As cited in the September *Institutional Investing in Infrastructure* newsletter, Morgan Stanley maintains that some \$180 billion has been raised for global projects. However, the general consensus among infrastructure industry professionals

is that a lack of appropriate investment product has caused a surplus of money waiting to be invested.

Yet, according to a 2009 report by the American Society of Civil Engineers, the United States needs \$2.2 trillion in infrastructure investment during the next five years to remain competitive in the global marketplace. What is the cause of this disconnect?

It could be that the private equity model that has predominated infrastructure investments to date is less suitable for some infrastructure projects, or that a new model is needed to more expeditiously attract the sidelined private capital.

In this "Food for Thought" report, we briefly explore the issues and opportunities associated with financing large-scale infrastructure projects with debt as the vehicle through which institutional investors invest (as an alternative to equity). But this does not imply that equity structures are less desirable. It may be that the model proposed helps expand the asset class and opportunities for both debt and equity.

BACKGROUND

In helping Institutional Real Estate, Inc. (IREI) recruit key institutional investors and government officials to our winter 2009 Institutional Investing in Infrastructure conference in Washington, D.C., Nov. 30 to Dec. 2, I have found that a significant number of U.S. pension funds are still on the sidelines with respect to infrastructure investment, and even some of those that have made an allocation to the asset class have not

been active. It became clear that the reason for this seemingly low enthusiasm was more than pure timing.

The infrastructure asset class is in a similar stage of development to real estate in the late 1980s/early 1990s. But rather than being perceived as more of a "core" investment, the asset class has been promoted primarily within a traditional private equity "opportunistic" investment model — shorter term, higher leverage and higher perceived risk/return. Yet, except for the development (greenfield) period, most infrastructure projects are very long term with stable cash flows, suggesting a more core-oriented financing strategy might be more suitable.

IREI has spoken with numerous institutional investors about infrastructure's role in the institutional investor portfolio. What seems to be solidifying among those who have done asset allocation studies for infrastructure is an allocation of between 2 percent and 5 percent and a classification encompassing a range of options such as a) as a discrete asset class, b) as part of a "Real Assets" allocation, which may or may not include real estate, but usually does include commodities, inflation-linked bonds and assets such as forestland, c) grouped within real estate, or d) within an incubator-like allocation used to introduce programs to new asset types.

But there remain scores of pension funds and other institutional investors that have not studied the asset class. And, furthermore, why are

we seeing muted enthusiasm among those with an allocation?

Many of these investors are expressing a desire for a more income-oriented, inflation-hedged investment vehicle for infrastructure, preferring to see their investments lower on the efficient frontier risk spectrum. So with a dearth of investment opportunities fitting this description available, how might the industry structure new investment products to fully engage a huge segment of capital currently on the sidelines? And can a structure be created to attract institutional investors that have no allocation, perhaps via their fixed-income departments?

It seems that an investment structure whereby institutional investors invest in a long-term debt instrument, with a coupon set slightly above Treasuries and which provides a level of inflation protection, would be of interest to such investors. This might be particularly true if principal risk can be mitigated via some sort of enhancement supported by the federal government.

THE APPEAL OF DEBT STRUCTURES TO FINANCE LARGE U.S. INFRASTRUCTURE PROJECTS

What if a new investment structure were created that would have the following features/benefits:

1. Costs less to finance, thus alleviating pressure on the underlying infrastructure asset in terms of end-user fees and annual fee increases in order to provide the higher investment returns common in equity ownership models;
2. Allows states and municipalities to retain ownership/control of key infrastructure assets (where appropriate), thus alleviating opposition by consumer advocacy groups (and others) to sell or lease such assets to private enterprise;
3. Helps large state, county and local pension funds fulfill mandates or preferences to invest locally; similarly attractive to other domestic capital sources;
4. Offers a term of 25 to 35 years, providing a better matching of investment term to asset lifecycle (duration); alleviates the need to

recapitalize the asset after seven to 10 years, as can be the case with the current models;

5. Provides a full amortization of principal (similar to a traditional muni bond), which provides build-up of equity over time, and ultimately free and clear title to the state or municipal entity and sufficient cash flow for future repairs and maintenance and capital improvements; and

6. Brings billions of dollars of domestic capital that has otherwise been on the sidelines to the table quickly, and even attracts investors that have not yet made an allocation to infrastructure (perhaps via their fixed income departments).

The following hypothetical example is provided to help illustrate how institutional investors could invest in a federally credit-enhanced (state) revenue bond issue, and obtain the investment attributes (lower risk, more core, stable income yield, longer term, etc.) that they seem to be waiting for.

POSSIBLE STRUCTURES

While the life-cycle of an infrastructure asset includes the greenfield (development and stabilization) stage and brown-field (long-term operations/stabilized) stage, the focus of this discussion is on getting new projects built. Our focus is to help mobilize a huge segment of inactive private capital to the table quickly and marry it with existing (and new) federal stimulus programs to maximize construction of crit-

ical infrastructure soon. So we will be exploring possible ways to expedite greenfield development projects.

Government Agencies:

- State: State or municipal entity, or chartered entity such as a rail authority, Department of Transportation (DOT), etc.
- Federal: DOT TIFIA, Federal Highway Administration, National Infrastructure Development Bank (if H.R. 2521 passes), Department of Energy

Investors:

- Public pension plans
- Taft Hartley plans
- Investment funds, including infrastructure funds or REITs
- Insurance company general accounts
- Retail investors through mutual funds, 401(k) plan administrators, etc.
- Others — family offices, foreign investors, etc.

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Financing:

- Have state provide 10 percent to 15 percent of anticipated project cost as a direct investment, possibly with proceeds from a General Obligation bonds offering.
- The federal government could provide a project subsidy of 5 percent to 10 percent of anticipated project costs. The level of direct subsidy could vary from none to significant, depending on the project pro forma.
- More importantly, the federal government could provide a form of credit enhancement or partial guarantee for the taxable state revenue bonds. The Department of Transportation's TIFIA group (Transportation Infrastructure Finance & Innovation Act) would be a logical federal entity to underwrite such a credit enhancement. This credit enhancement could be a bridge the institutional investment community uses to enter into infrastructure finance in a meaningful way. In fact, based on several conversations with key state plan sponsors, such involvement by the federal government would practically be a necessity for them to invest in large greenfield infrastructure projects.
- Have a state-controlled entity, such as a rail or toll authority, issue taxable revenue bonds of up to 75 percent to 85 percent of anticipated project cost.

Revenue Bond Details:

- Note that the following examples are specifically for *taxable* state revenue bonds. The federal government does not back, wrap or otherwise credit enhance tax-exempt municipal bonds and many institutional investors gain no benefit from the tax exempt feature of most municipal bond offerings.
- These taxable revenue bonds can be pre-sold via subscription agreement to institutional investors before the greenfield development period begins. A public finance firm such as Barclays, Citigroup, J.P. Morgan or other Wall Street investment banks could handle the bond issuance.

- Set the revenue bond term at 25 to 35 years, and incorporate a fully amortizing payment structure.
- Set the coupon level of revenue bonds at a spread to U.S. Treasuries of 100-plus basis points *and* overlay an inflation indexing feature on the bond's principal. This is a key selling point to attract the massive pool of pension capital (and other institutional capital), as well a key attribute to have such investments be considered part of a "Real Asset" allocation. The point is to have solid inflation protection. This is common in Europe and the rest of the world, and there is every reason to adopt it in the United States.
- The overall rate parameters need further analysis, but initial feedback from the industry is that a state-issued bond instrument with reasonable credit enhancement and inflation protection could attract plenty of capital.

GREENFIELD PERIOD

A range of alternatives for infrastructure investment exist, including the aforementioned taxable revenue bond model, with the federal government providing a more robust risk mitigation (construction, usage, etc.). Another option could be a model with a bias for private capital, where private investors finance the project during the greenfield period but with a "takeout" from the taxable revenue bond issuance. And yet another option could be a blend of these two alternatives. In all cases, the public-private partnership, design-build-operate-and-maintain model would be used.

Public Capital Model: The concept is to employ the revenue bond model discussed above, but for the federal government to take on a more robust guarantee to mitigate the construction, operation and ridership/usage risk. Once a given infrastructure asset is stabilized, with minimum ridership/usage levels ascertained and operations going according to plan, such federal guarantee could be reduced to only offering credit enhancement for the previously issued revenue bonds.

In this example, the revenue bonds could have a construction/

development period interest reserve fund, which would essentially accrue interest until the asset reverts to a stabilized or brownfield status, whereby the amortization period could commence. The interest rate or coupon could be set at a higher rate to reduce the amount of federal guarantee during this period. Furthermore, there could be a specified dollar amount to compensate the federal government agency providing the greenfield-period risk mitigation, and this amount could be capitalized in the cost of the infrastructure asset.

Private Capital Model: The private capital (2/20) model that has predominated the infrastructure asset class to date is an obvious structure to finance a greenfield development. But in this case, private investors could fund 80 percent to 85 percent or so of the project cost, with an investment period timed to coincide with the construction and stabilization of the asset.

A key point with this model is that the long-term investment piece would be already secured via subscription agreements with the institutional investors. So upon stabilization of the asset, the proceeds from the revenue bond issuance would be the "takeout" for the greenfield private capital investors. General partner promoted interests and limited partner and other accrued compensation would be monetized at takeout.

Additionally, because this would be a private capital model, with higher expected returns to the investors in exchange for higher than average risk, any cost overruns or ridership issues would be borne by the equity investors at some level. The takeout financing would not be adjusted upward to bail out private investors or to help make up shortfalls from pro forma. Of course, this piece would need much further development.

Hybrid Private Capital Model: Another interesting possibility could be to bring in a level of federal risk mitigation to lower the overall required return and cost of the private capital. The amount booked by the federal government to provide the risk mitigation could then be reimbursed at takeout with proceeds from the revenue bond issu-

ance. The private capital model does not have to take all of the construction financing. It is quite conceivable that private investors could finance a portion of the construction or green-field operations.

Key Benefits of the Revenue Bond Model (institutional investors)

1. Fits plan sponsor infrastructure allocation parameters;
2. Ideally suited to pension funds and insurance companies' portfolios for asset-liability matching considerations;
3. Produces strong (say, 5.5 percent to 7.0 percent) stable income returns that are inflation hedged and credit enhanced by the federal government, attributes that are sought after the world over;
4. Directs private domestic (and international) capital into local job-creating projects that the United States needs and for which there is no time to waste; helps pension plan sponsors and other domestic capital sources fulfill local investment mandates.

Key Challenges of the Revenue Bond Model

1. Structure: How might investment managers participate in this structure to help the state entity or entities? Many factors need to be addressed before a more concrete structure can emerge.
2. Determining the level of credit enhancement necessary to fully engage institutional investors — the goal is to dramatically and

quickly expand infrastructure investments in the United States.

3. How might this model be scaled nationally? Could it be adopted within the U.S. DOT TIFIA program or folded into the proposed National Infrastructure Development Bank? Preliminary conversations with federal officials have been positive, but much more work is needed to meet public policy parameters. A pilot program may be a likely first step.

4. How might this model work with the more traditional private equity model? Possibilities for a hybrid approach have been identified in this report, but certain infrastructure projects and assets will be more naturally suited to one model versus another.

CONCLUSION

This report is offered as food for thought: It is a conceptual framework to facilitate dialogue at our upcoming Institutional Investing in Infrastructure conference in Washington, D.C. It seems a large segment of capital targeting infrastructure investment can be activated to expeditiously kick-start the stimulus investing that is so greatly needed in the United States given the economic crisis that has prevailed since late 2007. The models discussed are meant to complement existing models, not replace them. Surely, any investment structures that accelerate and expand infrastructure investing in the United States are a step in the right direction and have the potential to be a win-win for all parties.

Much of the disconnect between institutional investors targeting infrastructure investment and the investment

advisers in this market can be traced to investor expectations. In many cases, plan sponsors are no longer willing to commit capital to the traditional private equity model because they believe the risk/return profile does not match their reasons for including infrastructure in their portfolios — long-term stable yields, diversification and inflation protection. This trend is likely due in part to the current conditions of the markets where high risk/high return models are under scrutiny in more than just the infrastructure space. The private equity model has a place in infrastructure investment, but it is clear institutional investors are searching for alternatives. The long-term nature of many plan sponsor investment horizons lends itself to an infrastructure investment product aligned with lower, more stable returns and longer-term investment periods, and this is why the exploration of a federally credit-enhanced revenue bond model is worthy.

The next installment of this "Food for Thought" report will include a more in-depth analysis of this model, and will employ the assistance of several industry professionals from the pension fund and investment management communities. Part two of this report will propose a series of questions that will be explored at IREI's Institutional Investing in Infrastructure conference Nov. 30 through Dec. 2 in Washington, D.C. The results of those discussions will be published in the January issue of *Institutional Investing in Infrastructure*. ❖

Robert Johnson, Jr. is an IREI consultant. He was previously a private equity fund manager and is a veteran real estate industry professional.
