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The Infrastructure Gap: Creating a Market Foundation for the Infrastructure Market

by Joseph Lufkin

It has been observed that physical infrastructure provides society a way to "manage chaos" by channeling people's movements, eliminating the daily search for drinking water, facilitating the movement and delivery of food and supplies, facilitating communications, and generally structuring people's lives so that they can be economically productive and live comfortably, even when in close quarters in cities.

Articles in the financial press report on "the infrastructure market" — from headline deals such as the regulator-induced sale of London's Gatwick Airport to breathless projections of the sums needed to modernize infrastructure in markets from India to Indiana where public spending on roads, bridges, water supply and sanitation services has been too-long deferred in favor of flashier or more politically profitable uses of funds.

At the same time, it is generally recognized that even stimulus-bloated public budgets are unable to catch up and keep up in infrastructure investment, and that public-private partnerships (P3s) in their many forms and guises are the only possible way for all these new public goods and services to be built and operated on the scale we need.

Substantial institutional capital has been raised during the past several years for infrastructure investment funds, particularly since the beginning of the global financial crisis, now that "boring is the new exciting." The managers of these funds, at least in Asia, where demand for new infrastructure is strong, are ostensibly receiving and busily reviewing dozens, if not hundreds, of well-documented and structured deal proposals, pulling the trigger left and right and closing deal after deal.

THE "INFRASTRUCTURE GAP"

Yet the big-picture market-watchers — such as the global and regional development finance institutions (DFIs), which include the Asian Development Bank or the World Bank, for whom private investment in infrastructure is the panacea for most development bottlenecks in emerging markets — lament the lack of connection between public projects and private finance. They point to an "infrastructure gap": on one hand, an overhang of private institutional capital, committed funds not yet invested, and, on the other hand, a mountain of government plans for light-rail systems, subways, urban transport, wastewater treatment plants, highways, alternative/renewable energy sources and a myriad other infrastructure assets needed to support rapidly urbanizing populations in Asia.

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Why is this, and can it be fixed? Moreover, can it be fixed in a systematic way that multiplies the number of bankable investment opportunities, increases communication and transparency in the market, improves price discovery, clears the backlog of projects, puts more investors' money to work, and improves the living standards of Asia's city-dwellers by providing better infrastructure?

To better understand and begin to close the infrastructure gap, we need to deconstruct what, at first glance, seems to be a unitary "global infrastructure market" — not by breaking it down into geographical markets as one might be tempted to do, but by breaking it down into temporal markets. This may be achieved by examining how infrastructure projects originate and progress through their various development stages, what funding is needed and when, who the interested audiences are at each funding point, and how (or whether) they communicate with each other.

KEY MARKET REALITIES

But first, what are some of the key realities of the infrastructure market as a market?

No central marketplace: Similar to real estate, but unlike liquid stock exchanges or over-the-counter securities markets, infrastructure has no central marketplace where all participants (buyers, sellers and transaction service providers) can easily meet to do business in a low-friction environment.

Top-down public promotion of private investment: Although there is substantial annual investment flow from the DFIs, compared with what needs to be built, they actually have quite limited balance-sheet capacity. Moreover, they have very limited data on or insight into the huge number of local municipal projects and privately initiated projects that do not drop directly out of the national development plans they agree to regularly with their member countries. Their answer has been to encourage policy reforms to "catalyze" private capital investment and to promote the acceptance of, and capacity for, P3 at national and state levels among developing markets. They also encourage national governments to design and implement programs to increase local government capacity for P3, and thus have the policy "trickle down" to the level where most projects originate. This is working, in India and elsewhere, but now these empowered local authorities need a way to communicate with the global financial markets.

"Sell-side" blind spots: The local governments that have plans for infrastructure projects and need to get them built have limited direct knowledge of, or access to, private institutional investors, particularly beyond their own national borders. They also are almost entirely unaware of the operational realities that drive and constrain investors, such as

asset class allocation limits, delegation of decision making to outside managers and third-party funds, geographical portfolio restrictions, a need to focus on particular risk/return characteristics, and so on.

"Buy-side" blind spots: Because of the current lack of market centralization, institutional investors face an uphill battle to be aware of all of the potentially investable projects and their sponsors. A quick look at today's Indian market shows a staggering number of construction projects under way and potentially seeking funding: more than 2,300 projects under national government supervision, more than 21,000 under supervision of the 35 state-level governments and more than 20,000 private sector initiatives. Beyond having to make sense of the sheer numbers of projects and their many disparate proponents, fund managers need to overcome their mild disdain for, and impatience with, the public processes that eventually give birth to the very projects in which they are mandated to invest.

SYSTEMATIC COSTS

With no marketplace per se for infrastructure, we see perpetuated inefficiencies in matching money to projects, lack of throughput or transaction volume, inconsistent valuations, pricing anomalies, illiquidity, and transactional and frictional costs, which remain high. There are obvious needs for better asset price discovery, pricing of risk, capital allocation and overall liquidity if the infrastructure gap is ever to be closed.

Allocated among the major participants, some obvious costs are as follows:

Costs to project proponents: Limited communication with the private financial markets means low visibility for their projects, and low visibility means small funding audiences. Small funding audiences mean less competition, therefore higher cost of capital. No standard transaction information templates mean they are constantly reinventing the wheel with regard to project documentation, increasing transaction costs, while no systematic mechanism for investor feedback means less "learning" and slower convergence of buy and sell sides.

Costs to investors: Ad hoc and suboptimal deal pipelines populated through word-of-mouth and random contacts mean incomplete project/asset inventory data and lack of comparability across countries and sectors. No systematic access to public-sector project sponsors means no systematic access to pipeline. The lack of a central marketplace restricts secondary market options to the same word-of-mouth informal networking, which is not the best way to optimize exit values.

Costs to DFIs: The lack of a secondary market for long-term loans means they cannot recycle capital as rapidly as the market could absorb it. There is also a lack of project continuity. No "hand-off" from early-stage technical assistance to commercialization/P3 partners means that many projects wither on the vine.

With such obvious high systematic costs, why does this not change? Is it the uniqueness of infrastructure assets compared to shares of a listed company? There are millions of identical fungible shares of Microsoft, but only one Channel Tunnel, only one North Luzon Expressway, only one M25 motorway, only one Beijing metro. Is it the control exercised by local governments as project sponsors and their lack of commercial instincts? Is it that project finance banks control transactions and stifle their competition, keeping prices for their services high? Is it the strong role played by investment bank M&A departments and financial advisers? Is it cultural differences between bankers and civil servants? Is it a lack of communication among market participants? Or, simply, is it that no one has tried to create the market framework to address these issues?

"PRE-GREENFIELD" TO "POST-BROWNFIELD" STAGES

Surely, objections were raised by vested interests as other markets evolved over the years, as exchanging shares under the buttonwood tree on Wall Street moved to the tickertape and telegraph, then the telephone, then the telex, then the computer — even real estate brokerage is now largely online and internationalized, giving buyers and sellers an increased range of choice, better prices and lower transaction costs not dreamed of even a decade ago.

Similar to large-scale commercial property developments, infrastructure projects move and evolve through many steps on their long journey from being an "idea in the mind of the mayor" to a smoothly functioning landfill or subway system. To make the transition from each step to the next, a project generally needs a new injection of funding. Because each type of funding has a different purpose, there are different natural audiences or target markets for each round.

In infrastructure finance, it is normal to speak of yet-to-be-built "greenfield" projects versus operational "brownfield" assets. But the spectrum is actually broader. We will understand the market better and widen our range of investment/funding opportunities if we think in terms of the infrastructure lifecycle running from "pre-greenfield" — when a project is still just a line item in a city planning office's prioritization study of potential investments — to a "post-brownfield" stage — when an asset is completely operational and cash flows are proven, it is largely de-risked, and it may reenter the market for debt refinancing or secondary sale of project equity.

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At its beginnings, infrastructure comprises projects whose financial characteristics resemble early-stage seed or venture capital, or a real estate project at the planning stage — more risk but more potential return. At the early stages, funding is required, usually in two or three rounds, for studies, planning and structuring — from advice to the local government on investment prioritization and structuring to prefeasibility and feasibility studies.

Currently, "pure" financial investors are reluctant to provide this sort of funding as they associate "infrastructure" with operating assets. Providers are typically public sector: national government project development facilities, development finance institutions, and other specialist multilateral project development entities. For example, the Cities Development Initiative for Asia (CDIA) is a joint program of the Asian Development Bank and the governments of Germany, Sweden and Spain, which provides grant-funded technical assistance to local governments to bring projects through prefeasibility study stage and prepare them for later private, public or P3 funding.

Later in its life, after construction is complete and operations stabilized, infrastructure comprises assets whose financial performance is closer to unlisted bonds than venture capital. From a financial point of view, mature infrastructure assets financially resemble fully tenanted shopping malls with steady foot traffic that could be injected into a REIT. Many, however, have the additional advantage of being relatively insulated from economic cycles and consumer spending patterns because they derive their income from regulated inflation-adjusted concession agreements with rated government entities. It is that characteristic which makes them so attractive, indeed as a substitute for government bonds, to pension and life insurance institutions with long-term actuarial liabilities — and is why most institutional investors' buying interest is focused on this last stage. As a side note, though, it seems an institution that makes room among its asset allocation for venture capital might consider doing the same for pre-greenfield or greenfield infrastructure in order to ensure "getting in early" and lowering its cost to later own operating assets.

"The Infrastructure Project Lifecycle" table on page 11 illustrates the principal steps through which an infrastructure project passes on its way to being an asset. Note that:

a. Data and documentation regarding the project builds up steadily through the stages, from initial sketches and projections to detailed operational reports, traffic analyses, etc.

b. Compiling and documenting information about a project at its early stages (e.g., by preparing a prefeasibility study) is the key "use of proceeds" in early-stage funding rounds.

c. The growing completeness and accessibility of such information is what keeps a project moving steadily forward through successive funding stages.

If we now overlay on this progression the various parties who typically participate in funding each stage (see red arrows in "Public and Private Market Participants and Sources of Project Funding," page 12), we see that the only participant present throughout the entire lifecycle is generally the "procuring authority" — the public agency that initiates the project, sees it through early structuring, then a public procurement scheme (in this illustration, a P3-style bid process), then through construction and operation, and finally, at the end of the concession period or term, puts the asset (or its operation and management) back out to bid in the private market.

Other players include (from left):

- Development finance institutions and the project development entities and facilities through which they act, who typically provide grant funding or technical assistance tied to project loans.

- National P3 agencies — good examples are the Public and Private Infrastructure Investment Management Center (PIMAC) in South Korea and Pakistan's Infrastructure Project Development Facility (IPDF) — which, depending on the country, can play various roles such as providing project review services to local authorities, conducting standardized "value for money" tests to determine if a proposed infrastructure asset would be more economically built through P3 or public finance, managing the procurement process itself, and engaging, or even acting as, transaction advisers to assist the procuring authority.

- Private project developers, such as construction or engineering firms, who bid on and, if awarded the contract, operate (and under some schemes, own) the asset under a concession agreement.

- Their suppliers, subcontractors and other consortium members (who may include "pure" financial investors such as infrastructure funds, as in the current Nottingham, U.K., tramway extension contract).

- And, finally, the commercial infrastructure finance or project finance market — commercial and investment banks, infrastructure funds, private equity funds and some hedge funds providing debt and equity, ranging from short-term construction loans up to long-term project equity.

What really characterizes the current market and explains much of its inefficiency is an almost total reciprocal lack of awareness by each of these participant types of the other major players and how they work, their limitations and their objectives. Such a lack of awareness gives rise to a lack of communication and an environment of opacity. In a market where different stages of the project "assembly line" are manned (and funded) by such disparate groups, improved collaboration is critical, as is increased visibility between the various participant groups and across project stages, and above all, better continuity and centrality of project information, data and documents.

A SOLUTION?

To many, the most obvious and sustainable structural improvement to the infrastructure market would be the creation of a centralized web-based marketplace or exchange to provide the following support to market participants:

- A searchable inventory of primary and secondary investment and financing opportunities related to projects from early planning to mature operational stages
- Collaboration tools for use among market participants
- Standardized templates for project data and documentation, with flexibility to accommodate differences among sectors, countries and individual projects
- Dependable, project owner–controlled document security
- Structured virtual data rooms for project documentation to aid investor evaluation and due diligence, as well as to guide project proponents in assembling the information that funders need
- Transaction processing, messaging and file transfer among participants

Such a basic transaction platform could provide institutional investors with many benefits:

- Access to a wider range of investment opportunities
- The ability to compare opportunities across sectors and countries
- Improved pre- and post-transaction reporting
- Due diligence support and public-sector liaison in local markets
- Quality control over pipeline assets, which would reduce triage costs
- The ability to generate market analytics
- Lower costs through more standardized transaction execution and settlement

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Public-sector project proponents would benefit through:

- A better ability to structure and execute P3 transactions
- Gaining a larger audience of qualified bidders for procurement notices, more competition and lower costs
- Global visibility for national priority and local infrastructure projects
- More options for privatization or P3 repackaging of existing assets
- Enhanced access to market and comparable project data for benchmarking
- Feedback from actual investors on their risk/return requirements to make project structuring more in tune with the market

Over time, it is reasonable to expect that the market as a whole would show ever-improving quality of project data and documentation, and that more closely reflecting, through collaboration and communication across the platform, investors' actual requirements and expectations. More transactions should reach financial close, leading to a gradual closing of the "infrastructure gap." Initiatives are already under way in this direction and should start to bear fruit by mid-2010.

Institutional real estate investors who are considering adding Asian infrastructure to their portfolios should stay tuned — new infrastructure is "soon to rise on this site."

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