strategy+business

ISSUE 84 AUTUMN 2016

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REPRINT 16309

FINANCE

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New investments in infrastructure by private asset managers are changing the way the world finances its cities, power systems, and transportation links.

by Julien Courbe and Peter Raymond

The deal was inked in 2007, and at the time it garnered little attention. The New York–based private equity firm Blackstone Group Holdings had cobbled together a group of financiers to put up US$120 million for a two-thirds stake in a dam on the White Nile in Uganda.

Any way you looked at it, the move was risky. The hydroelectric project had kicked off more than a decade earlier and had languished ever since. Progress had been hindered by construction delays, cost overruns, corruption, and even pirate attacks. Nonetheless, Blackstone decided to take a chance. It hammered out a deal that would provide the firm with a cash annuity from energy fees in a country badly in need of electric power. When Blackstone signed the agreement, only 10 percent of Uganda's population had electricity.

The investment made a difference — especially because of the expertise and oversight that Blackstone added. In 2013, the 100-foot dam was completed, and it now supplies half of the Ugandan population with electricity. Blackstone may sell the asset in a few years, in keeping with its usual short-term approach to buying businesses. Or it may hold on to it and enjoy the reliable and plentiful cash flow, which is hard to come by in the global low-interest-rate environment. Either way, Blackstone's success with the Ugandan dam represents an investment trend that is changing the way infrastructure projects are planned and funded.

Since the financial crisis, asset management companies, including some private equity firms and hedge funds, have become the backers of choice for huge, multiyear infrastructure development efforts like this one. Following on the heels of Blackstone's success, many of the world's largest private investment firms have begun to view these projects — mostly involving basic services like energy, transit, and water, but also medical and educational facilities — as an attractive channel for investment-grade credit. J.P. Morgan, Allianz Global Investors, BlackRock, and KKR are among the asset managers pouring hundreds of millions of dollars into capital projects in both the operating and construction phases. Pension funds have also begun to invest, finding that they can hire the expertise themselves instead of paying fees to asset managers. This unlikely romance between private asset management and infrastructure development could become the critical factor enabling industrial society to keep pace with the ever-growing needs of billions of people around the world.

Many of these global infrastructure investments have traditionally been the province of major commercial banks (U.S. projects tended to be funded by municipal bonds). The banks viewed these investments as desirable because the returns they offered were generally higher than those from sovereign or corporate debt. But the global banking collapse changed the investment landscape. When the dust settled from the crash and money began to flow again around the world, the banks were left with very different rules of en-

Illustration by Lars Leetaru

gagement. Increased capital-to-debt requirements forced them to clean up their loan books, and tighter controls on derivatives and other proprietary trading activities limited their ability to invest widely. Seeking more liquidity and wanting to simplify their portfolios, many banks pulled out of infrastructure investments, which are generally long-term instruments and complex to manage.

With the banks sitting on the sidelines, asset management firms suddenly found that a huge number of capital investment opportunities had been unleashed into the marketplace. They have moved in, albeit somewhat gingerly, to take advantage of the unexpected prospects.

Meanwhile, the supply of opportunities is growing rapidly; indeed, some forecasts suggest it will grow exponentially. A recent PwC analysis found that worldwide annual infrastructure spending will expand to more than $7 trillion by 2025, from $4 trillion in 2012. As much as 60 percent of these investment opportunities will be located in Asia and Africa, where urbanization and economic development are boosting the need for roads, bridges, airports, public transportation, power distribution, and water systems.

Other projects represent responses to demographic shifts. For example, aging populations in Western Europe and Japan will necessitate the construction of more hospitals and clinics, whereas countries bulging with younger residents in the Middle East will need more schools. And in developed regions such as the U.S. and Europe, local governments are seeking to privatize infrastructure projects, such as the modernization of highways and water systems, as a way of overcoming the budget shortfalls that leave them unable to support new construction efforts.

Less Risk, More Ripple

As financing opportunities become more common, more asset management firms will move into global infrastructure investment. The most persuasive rationale for doing so, of course, is the money to be made. Infrastructure investments are an excellent fit for asset management firms. The assets are long-term: Post-construction concession agreements can run from 30 to 99 years. This matches the preferred time horizon of many asset management programs because their aging clients need investments that preserve capital. Moreover, at a time when neither fixed income nor equity has been able to deliver reliable returns, infrastructure projects offer relatively stable returns with low correlation to other markets. And for knowledgeable investment managers, they offer potential double-digit earnings. In short, these investments can provide high-yield returns with relatively low risk.

Infrastructure investments can also have positive ripple effects on the rest of the economy. Analysts estimate that in the U.S., for each dollar of GDP invested in infrastructure (above current spending), there would be an increase of about $3 in overall economic output. In less developed regions, the data is not as clear-cut, primarily because legal and regulatory trends, literacy, labor availability, and corruption could have an effect on GDP growth separate from public and private investments. Still, no one will dispute the idea that emerging countries need modern roads and airports, reliable electricity, clean water, and schools to develop their economies.

The returns for investors, however, are contingent on getting it right. They must choose the highest-potential projects and ensure they have the management and financial acumen needed for success. Asset managers have both a big opportunity and a big challenge. Until now, banks have played a relatively passive role, financing projects by providing loans to private-sector infrastructure development companies. But most asset managers hope to squeeze out better paybacks from infrastructure investments than the banks received, even if that entails additional risk, because their investors expect more. And in infrastructure funding, the biggest rewards go to firms that act as aggressive investors and become partners in the projects.

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In fact, given the potentially significant returns for investors helping shape projects, some of the more aggressive pension funds — traditional sources of capital for many of the infrastructure funds — are setting up their own origination teams. They eschew the conventional ways of finding opportunities, such as working through infrastructure funds that tend to charge high fees for a stake in a project. Instead, they research their own prospects, put up seed and development money, navigate the permitting process, oversee construction, manage the facility once it is completed, and pay the necessary fees to government regulators. In return, they control the eventual revenue stream, which is often exceptionally reliable.

Investment activities by Caisse de Depot et Placement du Quebec (CDPQ), a huge Canadian management firm specializing in pension funds, illustrate this tactic. The firm has taken the lead in a series of infrastructure investments in Mexico and the U.K. and is looking at similar projects in India. It also recently signed a deal with the province of Quebec to plan, finance, and manage two new rail projects, including transit links to Trudeau International Airport and across Montreal's Champlain Bridge, that will together cost about C$5 billion (about US$3.8 billion). Quebec's provincial government is drowning in debt and could not have funded these efforts without CDPQ's help. For its part, CDPQ says that it expects "significant commercial returns" from what should be well-traveled routes.

Other institutional investors taking a more active stance include the Ontario Teachers' Pension Plan and the California Public Employees' Retirement System. They are motivated by factors such as the declining number of so-called brownfield projects (existing facilities whose track record is well established) and the sudden influx of sorely needed new projects with less public and private banking money to pay for them.

Private equity firms typically view investments in infrastructure through a more creative lens than banks do. And they draw untapped value out of these projects. For example, in 2009 the Carlyle Group led a consortium that took over nearly two dozen service plazas on highways in Connecticut. This group invested almost $200 million to upgrade the sites, and added revenue opportunities by installing new tourist-attracting shops and eateries. The state's transportation department collects rent from the Carlyle Group, which is based in part on receipts.

Five Point Capital Partners has taken a similarly novel approach to enhancing infrastructure returns. In January 2016, the private equity firm kicked off a $200 million campaign to fund the acquisition of water management systems developed by oil companies. As the price of oil has dropped, some energy producers have sought to offload their water infrastructure to raise capital for continued exploration and to support the "balance sheet." Under this plan, Five Point's partner Waterbridge will pay to take over these systems. Waterbridge will use its expertise and industry-wide scale to bring down the costs of running them, in exchange for long-term annual payments that are well below the outlays that energy companies had previously earmarked for water management.

Tapping the Potential

Even with a growing number of projects under way, asset managers have barely tapped the potential of infrastructure investment opportunities. As of 2014, of the $50 trillion of capital managed by pension funds, sovereign wealth funds, insurance companies, and other institutional investors, only 0.8 percent was allocated to infrastructure, according to the *Economist*. Many have resisted the allure of infrastructure investments out of fear that they may get in over their heads. They worry that they lack the expertise to assess the quality of these projects, or that they may be vulnerable to regulatory, currency, or political crises.

But that attitude is slowly changing. In the first quarter of 2016, private investors completed 224 infrastructure deals, up about 50 percent over the same period in the prior year, according to Preqin, an alternative assets market researcher. And in 2015, the average infrastructure deal size rose to $521 million from $493 million the year before, Preqin reported. One of the more emphatic signs that international infrastructure investments are finally moving to the front burner was the inaugural meeting in 2016 of the Global Infrastructure Forum, an event held this year in the U.S., sponsored by the United Nations, the World Bank, the African Development Bank, the Asian Development Bank, and 193 countries. The 300 or so attendees got an earful about the enormous potential for these investments as well as the dire need for them — and also heard about the corruption and regulatory constraints that hold them back.

Yet many asset managers, especially institutional investors, still remain relatively passive. They tend to take minority positions in stable existing projects with reliable revenue streams. They offload risk, usually to an infrastructure fund, and are satisfied with a somewhat lower return than they would get in a riskier environment. (To be sure, that return is still higher than typical returns from public or private bonds.) They feel they are unable to bridge the skills gap that separates them from more aggressive investors.

The Capabilities Required

But as investors lose patience and demand ever-higher returns in a world of low interest rates, a passive infrastructure investment stance could become more difficult for asset managers to justify. They should then undertake a significant internal transformation to gain the capabilities they need. These changes can be put into three critical categories: location, regulation, and digitization.

- **Location.** Asset managers new to infrastructure must initially determine which regions and which types of projects to invest in. Developed countries tend to be the most popular, because of the lower risk. But they also yield lower returns than emerging markets.

Some firms have entered emerging markets safely by recruiting local talent — those who understand the commercial culture and who are sufficiently clued in to navigate finance idioms and challenges. Leaders may be tempted to give them a broader set of tasks, such as portfolio and risk management, or to integrate them immediately into the larger organization. But they are more valuable when kept close to the reason they were hired: to uncover local infrastructure opportunities and to be the eyes, ears, and visible presence of the firm in the market.

The most successful asset management firms develop brand awareness campaigns that increase their recognition in local markets. They court local investors, regulators, politicians, financial instrument distributors, and infrastructure experts, and bring them all into the firm's orbit. A well-known and well-respected name is a useful calling card for building these relationships. For example, Blackstone's globally recognized brand allowed it to forge a partnership with Nigerian billionaire Aliko Dangote, chairman and CEO of the Dangote Group and Africa's richest person. He is supporting the private equity firm's African infrastructure investments with his valuable local knowledge and relationships.

These asset management firms use social media and other modern public relations tools to further elevate their presence. They develop campaigns highlighting examples of their investments, especially when they can point to environmental sustainability and positive social impact. They also invest in information technologies that allow them to work in an integrated fashion with local governments and sources of capital.

- **Regulation.** Regulatory pressure on the banking sector after the 2008 recession has so far played into asset managers' hands. They have been able to broaden their activities and take advantage of opportunities that they were cut off from before. But as asset managers move more aggressively into infrastructure investments, it is likely that regulators will take a close look at this trend and impose new reporting measures on them. These regulations will be intended to improve financial data transparency and enforce portfolio safeguards.

To address these and other potential regulatory issues proactively, private equity firms such as Blackstone, Macquarie Group, and 3i Infrastructure have recruited former government policymakers to manage their infrastructure efforts. These managers provide expertise and contacts that make it easier to choose the most profitable projects and avoid costly mistakes. For example, in 2014 Blackstone hired two former water infrastructure executives from the financing arm of the World Bank to head up its new Global Water Development Partners business. That same year, when investment firm Rothschild Australia lost its infrastructure specialist Bruce MacDiarmid to Deutsche Bank, it replaced him with Danny Bessell, who had led government road projects in Australia and utilities and infrastructure banking at Goldman Sachs.

Some asset managers heavily invested in infrastructure could be subject to global rules involving "too big to fail" finance companies, particularly the so-called systemically important financial institution (SIFI) regulations. These policies require SIFI firms to maintain ostensibly safe levels of capital to cover risky investments, thus preventing failures from cascading across international markets. To a lesser degree, money laundering laws, which are regularly tightened, could also lead to increased scrutiny of asset managers working with infrastructure assets. Other rules vary from one country to the next. Nigeria imposes tough restrictions on agricultural land use, but is relatively lenient in allowing foreign companies to fund projects and repatriate the gains. Meanwhile, new wind farms in Scotland, Australia, Canada, the U.S., and parts of Asia can easily run afoul of local environmental and noise abatement laws.

Tax regulations are equally inconsistent, and outside investors may be subject to residency requirements or specialized taxes. Reporting rules also vary widely among municipalities, provinces, regions, and central governments. It may be difficult to keep track of these differences and factor their costs into an infrastructure investment strategy, but it is essential.

- **Digitization.** The IT networks in most asset management firms are not designed for local infrastructure investments. They do not collect the specific types of data needed to determine which infrastructure projects are worth backing and what kind of returns can be anticipated under various outcomes and scenarios. While evaluating investments, for example, few asset managers consider geopolitical risks or the frequency of natural disasters and their impact on the region. Nor do they take into account environmental constraints or the biases inherent in any local culture. Yet this is precisely the type of information that could determine the success of an infrastructure effort.

This shortcoming was highlighted in a 2015 survey of asset managers who fund infrastructure projects. In this study, conducted by the Infrastructure Asset Management Exchange, the top investor priority, chosen by 29 percent of respondents, was to improve data management and data quality. Fifty-one percent said they planned to invest in data-gathering tools. But of the asset managers who selected data management gains as a priority, 49 percent said that current tools "are not able to support business decisions."

These results point to a remarkable opportunity for asset managers. Firms can still achieve a competitive edge by adopting technology that helps them outthink their rivals. These systems must manage huge flows of data from financial documents, newsfeeds, historical investment patterns, and public records, and then extract the patterns that drive unique insights to bolster exposure and performance models. In addition, robotic cognitive intelligence and machine learning capabilities are critical enhancements that could facilitate high-quality decision making.

Advanced data systems can also help in client relations and acquisition, providing real-time information and customized financial products to investors. With these tools, asset managers can attract clients interested in infrastructure investments by educating them about the risks and the potential of individual programs. Unfortunately, many asset management firms are not ready to put up the resources required for new big data strategies. They have yet to fully comprehend the essential value of distinctive data in furthering long-term asset management strategies.

Although asset managers have still not enthusiastically embraced infrastructure investments, much of their reticence has to do with a lack of familiarity with these instruments. But events will no doubt eliminate this shortcoming. Indeed, one thing is clear: Governments in rich and poor countries alike are loath to finance infrastructure improvements alone anymore; they lack the political will and financial wherewithal to do so. Public–private or solely private infrastructure projects will thus be the norm for the foreseeable future. This trend should translate into more attractive and reliable returns for private investors, as each regional improvement builds momentum toward overall local economic gains that result from predictable economic development. For asset managers, this presents a stunning opportunity that only the wariest would ignore. +

Reprint No. 16309

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