Taking a Closer Look at Infrastructure Investment

Dr. Offei Adarkwa[1] & Matija Radovic[2]

(August, 2016)

In an attempt to boost economic growth around the world, infrastructure has been touted as a key approach to stimulate growth in developed and developing economies. A solid infrastructure system provides innumerable benefits to the general public and participants in the infrastructure investment market. By facilitating movement and commerce, infrastructure serves as the backbone of the economy. It is therefore no coincidence that infrastructure is one of the 12 pillars by which competitiveness is measured in the World Economic Forum's Global Competitiveness Index (World Economic Forum, 2016).

Infrastructure development has been one of the very few issues which has had support from both sides of the aisle for a long time. On the campaign trail, both Donald Trump and Hillary Clinton have outlined plans to address the infrastructure spending gap in the country (Watts, 2016). Business leaders have also expressed the need for increased spending to upgrade the nation's infrastructure. In an interview with CNBC, Jamie Dimon, CEO of JPMorgan Chase identified proper infrastructure spending as one of the three key areas which the next president of the US should focus on in order to double economic growth rate (Long, 2016). Bill Gross of Janus Capital has also stated that government should spend more on the crumbling infrastructure in his monthly investment outlook (Gross, 2016). Laurence D. Fink, head of one of the world's largest asset managers, BlackRock Inc., also noted in an annual letter to shareholders that over reliance on extraordinary monetary policies while failing to make key decisions and investing in infrastructure may damage the growth that central banks around the world are trying to spur (Scheer, 2016). Similar statements from other business and political leaders further reinforce the fact that infrastructure investment will be one of the priorities for the US and other governments in the near future. As a result, it must be given due consideration by investors. It is worth noting that global infrastructure needs are far greater than the ability of governments to provide them alone. Estimates from the OECD suggest an annual investment of about $5 trillion per year in infrastructure to support a future global population of 9 billion (OECD, 2013).This is a sad commentary but one that presents a unique opportunity for investors.

Provision of infrastructure has long been perceived as the sole responsibility of governments. However, there have been gradual changes over the years with the private sector being given an increasing role in development of infrastructure. The role of the private sector in infrastructure development can range from financing, construction, operation and maintenance where efficiencies of the private sector can be harnessed to provide quality service to the public.

[1] Postdoctoral Research Associate, Institute for Transportation and/or Iowa State University, 2711 S. Loop Drive, Suite 4700, Ames, IA 50010-8664, Email:oadarkwa@iastate.edu
[2] Research Fellow, Department of Civil and Environmental Engineering, University of Delaware, 301 DuPont Hall, Newark, DE, 19716. Email: mradovic@udel.edu

With the current uncertainty in the global markets, infrastructure may be seen by investors as a way to diversify their portfolios to address risks. As such, various investors including pension funds, insurance companies and investment funds with low risk appetites and long-term liabilities are becoming interested in the infrastructure field. Attractive characteristics of infrastructure assets include low competition as well as long-term, predictable and stable cash flows over time which are often inflation-linked (OECD, 2014; Inderst, 2014, Adarkwa and Radovic, 2015).

Institutional investors can access the infrastructure asset class in various ways. Investors can invest in either equity or debt instruments. For equity investments, the typical approach is an indirect one where an institutional investor employs the services of a fund manager. The fund manager with the requisite expertise and experience in infrastructure investment then invests in assets. These funds may be listed or unlisted on stock exchanges. Even though there are listed infrastructure funds, the specific assets that are invested in may not be listed. Listed companies on the stock markets can also be used by investors to gain exposure to infrastructure. There are several stock market indices which focus on the infrastructure. These can be used to track the general behavior of infrastructure assets with economic trends. The composition of companies in the indices are usually based on region or infrastructure sector. A few of the indices include the Dow Jones Brookfield Communications Index, Dow Jones Brookfield Toll Roads Infrastructure Index, Dow Jones Brookfield Water Infrastructure Index, S&P Emerging Markets Index, S&P Global Infrastructure Index and the Macquarie Global Infrastructure Index. The selection of an infrastructure indexed fund must be based on expert advice to ensure the definition of infrastructure by the index is in line with that of the investors. For example, indices made up of companies which sell construction equipment will exhibit risk-return behavior that may not be suitable for investors hoping to gain exposure to assets with a stable, steady cash flows. Another index that is worthy of mention is the IPD Australia Unlisted Infrastructure Index which tracks the performance of unlisted infrastructure investments. It provides asset managers and investors with a return performance that can be compared with other asset classes (MSCI, 2015).

On the other hand, larger institutional investors with in-house infrastructure investment experts may choose to invest directly in specific assets. An example of such an institutional investor is the California Public Employees Retirement System (CalPERS, 2016). At CalPERS, infrastructure is considered as part of the Real Assets Division which aims to generate inflationprotected long-horizon income. With this approach, there are high barriers to entry as only large funds with the adequate capital and expertise can participate. Some advantages of direct equity investment in infrastructure projects include direct control over assets (Inderst, 2014) as well as lower costs compared to external funds where the management fees must be paid.

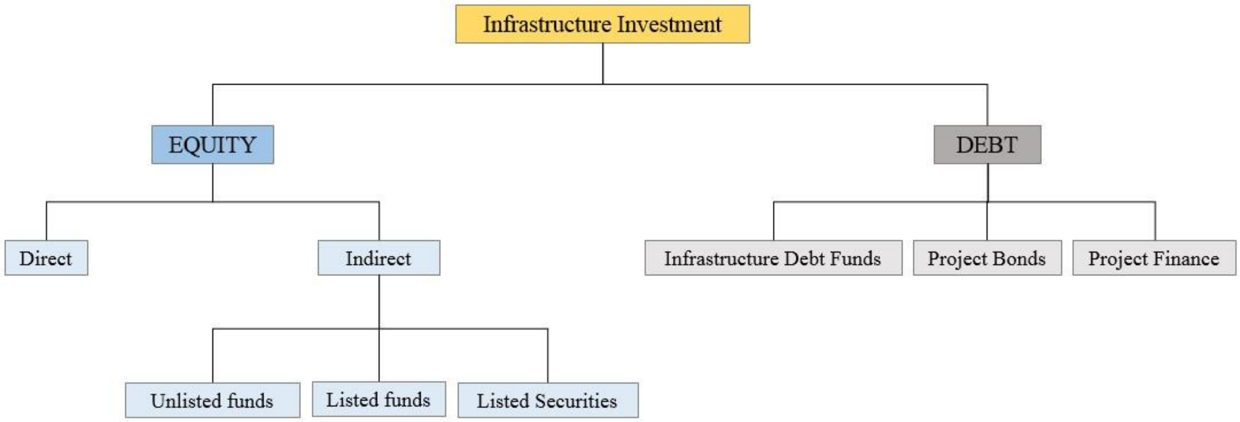

Fig.1 Approaches for infrastructure investment

Investors can also consider debt financing of infrastructure projects. Since banks have scaled back on long-term lending activities, institutional investors have stepped in to provide debt financing for projects. Asset management firms such as Brookfield Asset Management and StepStone Group have been increasing their focus on infrastructure debt in the past year. There are several opportunities for debt financing due to the fact that infrastructure projects are highly leveraged. Infrastructure debt funds can be used as one approach to gain exposure to assets. It is estimated that infrastructure debt funds raised about $11.5 billion last year (Jacobius, 2016). Some experts view infrastructure debt funds as one of the cost-effective ways for smaller pension funds to access the infrastructure investment field (Scott-Quinn et al., 2015). Investors may participate in projects using a project finance approach where loans are secured by developers based on a project's assets. Loans are serviced using cash flows from the project during the operational phase. Institutional investors can also utilize bonds directly in order to participate in the infrastructure debt market. Infrastructure debt is typically perceived as being a lower risk investment with relatively higher yields compared to government bonds. However, past performance may not necessarily guarantee future performance due to the level of heterogeneity in the infrastructure market.

As the infrastructure investment market matures, there will be several other investment options for potential investors. With the governments worldwide gradually involving the private sector more in infrastructure development, there will be a lot of opportunities going forward. However, private capital can only be deployed to fill the infrastructure spending gap when the right regulatory environment exists. Governments around the world seeking to make use of the over $100 trillion in assets from pension and sovereign wealth funds (Caplen, 2016) will need to improve the regulatory framework to make such investments more attractive to potential investors. Since investment returns have shown mixed performance in the last decade, it will be very valuable for investors to dedicate more resources into researching infrastructure as an asset class. Returns from infrastructure projects can differ based on the sector, region, economic timing among other factors. As such, the value for in-depth evaluation of the risks and potential returns cannot be overstated.

References

1. Watts, W. (2016). What will stocks do if Clinton or Trump boost infrastructure spending. MarketWatch. http://www.marketwatch.com/story/what-will-stocks-do-if-clinton-or-trump-boostinfrastructure-spending-2016-08-08 Accessed: 08/15/2016
2. Long, H. (2016). How America's next president can double growth. CNNMoney. http://money.cnn.com/2016/08/01/news/economy/jpmorgan-ceo-jamie-dimon-us-economy/ Accessed: 8/15/2016
3. Gross, B. (2016). Culture Clash. Monthly Investment Outlook from Bill Gross. https://www.janus.com/insights/bill-gross-investment-outlook/may Accessed: 8/15/2016
4. Scheer, D. (2016). Fink Warns Negative Interest Rates Could Lead to 'Dangerous Consequences'. Bloomberg News. http://www.bloomberg.com/news/articles/2016-04-11/finkwarns-negative-rates-could-lead-to-dangerous-consequences Accessed: 8/15/2016.
5. World Economic Forum, 2016. General Questions Relating To The Global Competitiveness Index. http://reports.weforum.org/global-competitiveness-report-2015-2016/faqs/ Accessed: 8/16/2016
6. OECD (2014). Pooling of Institutional Investor Capital-Selected Case Studies in Unlisted Equity Infrastructure. https://www.oecd.org/finance/OECD-Pooling-Institutional-Investors-Capital-Unlisted-Equity-Infrastructure.pdf Accessed:8/16/2016
7. OECD (2013). http://reports.weforum.org/green-investing-2013/required-infrastructureneeds/#view/fn-26 Accessed: 8/17/2016
8. CalPERS (2016). Infrastructure & Forestland. https://www.calpers.ca.gov/page/investments/asset-classes/infrastructure-forestland Accessed: 8/17/2016
9. Inderst, G. (2014). Pension Fund Investment in Infrastructure: Lessons from Australia and Canada. Rotman International Journal of Pension Management
10. MSCI (2015). IPD Australia Unlisted Infrastructure Index. https://support.msci.com/documents/1296102/8ec13e3e-5db3-4bb5-852f-39502974c6eb Accessed: 8/18/2016
11. Adarkwa, Offei, and Matija Radovic. (2015). "Investing in the Nation's Infrastructure-the Role of Institutional Investors & Public-Private Partnerships." http://www.civildatanalytics.com/uploads/4/6/2/5/46259103/ppp__nation.pdf Accessed: 8/18/2016
12. Caplen, B. (2016). Why isn't infrastructure investment booming? The Banker. http://www.thebanker.com/Editor-s-Blog/Why-isn-t-infrastructure-investment-booming Accessed: 8/18/2016
13. Jacobius, A. (2016). Managers set to cash in on infrastructure debt upswing. Pensions & Investments. http://www.pionline.com/article/20160530/PRINT/305309983/managers-set-tocash-in-on-infrastructure-debt-upswing Accessed: 8/20/2016
14. Scott-Quinn, B, Cano, D., Watson, R., Fergusson, R., Pacheco, C., Kelly, K., Haegeli, J., Celic, M., Bowman K. (2015). Guide to infrastructure financing: Bank loans, debt private placements and public bonds- smoothing the pathway for effective funding. AFME-ICMA. June, 2015