

## **Singapore as the Hub for Infrastructure Finance**

*By Ranjan Chakravarty and Joseph Cherian (October 2015)*

The global infrastructure finance market will grow to US\$9 trillion by 2025, as predicted by Price Waterhouse Coopers (PwC), with half accounted for by emerging markets. This is three times greater than the current notional size of the global over-the-counter (OTC) market in commodities and equity-linked instruments combined.

Global projections of real GDP point decisively towards a shift to the rapidly urbanizing emerging markets, which predominantly are in Asia. Major Western economies, accounting for 58 percent of global GDP in 2000, are expected to account for less than 42 percent by 2030. In contrast, Asia/Oceania will jump from 22.4 to 36 percent during this same period. Emerging Asia's share of infrastructural spending is expected to increase from 30 to 48 percent from 2012 to 2025.

The key investor in infrastructure is sovereign wealth funds (SWF). Asian SWF dominate the infrastructure asset class with China leading, followed by Abu Dhabi, and then Singapore, Kuwait and Korea.

With infrastructure as an asset class growing, it needs capital markets scalability, risk sharing and marketability so that investors can seamlessly allocate their infrastructure holdings using advanced portfolio management techniques available to institutional managers of already marketable asset classes. Currently, the infrastructure market is nascent, fraught with liquidity, regulatory and transparency issues.

Herein lies an opportunity for Singapore. Ironic as it may seem, despite its limited land, Singapore's financial expertise, human capital and ability may well see it as the next generation infrastructure finance hub and ecosystem for Asia.

### **Liquidity**

Infrastructure investors, such as sovereign and pension funds, and insurance corporations, look for steady, predictable and guaranteed cash flows. Among alternative investments, infrastructure accounts for the largest proportion in sovereign wealth funds' asset allocation. Of this, 79 percent have a dedicated allocation to it compared to less than 40 percent among long-term liabilities investors.

Although infrastructure is already a *de facto* asset class, it has the potential to grow as it becomes more creditworthy and liquid. They can become substitutable for other asset classes like fixed income. Once investors in the more liquid and long-term asset classes feel comfortable to reallocate assets to it, the infrastructure market will expand. However, for this market to have liquidity, it is imperative that it is prudently regulated with well-capitalized institutions.

### **Risk Management and Governance**

Currently, the risk management needs of infrastructure are scarcely met. An ecosystem that provides regulation, dispute resolution, asset recovery, price discovery, market making, liquidity and settlement needs to be enabled.

Despite possible sovereign guarantees, sometimes backed by multilateral agencies, infrastructure projects can still go awry. A case in point would be instructive.

The Indonesia Infrastructure Guarantee Fund (IIGF) is a single window institution, which is well capitalized and rated AA- for the appraisal and approval of Public Private Partnership (PPP) projects requiring government guarantees.

The IIGF's presence notwithstanding, a recent highly-publicised Indonesian government-related incident, where the nature of a large infrastructure project and post-funding sovereign commitment were vastly altered during the course of its implementation, highlights the potential need for infrastructure finance market reform from the PPP perspective. It is one that requires careful pre-planning, sufficient transparency and governance, and time-consistent policies, along with the right sovereign credit assurance when necessary.

It is imperative that the current lack of non-financial project performance guarantees for global markets, where consistent governance standards can be applied across countries, is addressed and implemented on a priority basis. This should also be part of the infrastructure finance ecosystem structure, similar to the Federal Guarantee for infrastructure bonds in the U.S.

### **Transparency**

While investors tend to view infrastructure assets as long-term cash flows, which provide them with asset-liability management capability, the OTC nature of this market tends to inhibit this capability. This forces infrastructure to be clubbed with private equity-type investments, creating hedging that is approximate, "noisy" and dependent on listed infrastructure indices. Again, the need for a clear, listed, transparent financial market in infrastructure is apparent.

## Singapore's Competitive Advantage

Singapore clearly emerges as a prime location for an infrastructure finance ecosystem as it is highly-rated, business friendly with a fully functional and robust infrastructure and regulatory system, safe and easily accessible. And to top it off, it is at the physical intersection of all the major parties and itself a major investment participant.

Apart from meeting all of the market-critical criteria, Singapore's performance from an infrastructure investment perspective has been outstanding – it ranks as the world's most attractive market for infrastructure investment for two years running given its leadership in knowledge, transparency and governance. Other structuring centres come in at a much lower rank than Singapore in this space.

The case is clear – Singapore can be a leading candidate for developing the infrastructure finance market.

## Evolving Nature of the Infrastructure Finance Product

As infrastructure asset allocation becomes more uniform across geographies, there will be more standardization in product development, origination and appetite as the market matures. By extension, there will be more trading though not necessarily of the high frequency kind.

The future capital structure of infrastructure assets are likely to develop: (1) as tranche-based hybrids, similar to asset- and mortgage-backed securities, (2) as a form of REIT to provide investors with liquid stakes in mature infrastructure assets and receive special tax benefits and high dividend yields, and/or (3) as plain-vanilla deferred coupon (or accrued interest) bonds.

As the infrastructure market grows and evolves into the next multi-trillion asset class, and if governed right and managed transparently, it will undoubtedly be the revolutionary equivalent of the ABS and REITs markets, and Singapore should be its rightful global hub.

-----  
*Ranjan Chakravarty is a Visiting Research Consultant at the Centre for Asset Management Research and Investments (CAMRI) at National University of Singapore (NUS) Business School and Joseph Cherian is Practice Professor of Finance at the NUS Business School and Director of CAMRI.*

For more information, please contact [camri@nus.edu.sg](mailto:camri@nus.edu.sg)