Institutional Investors and Infrastructure Financing

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Policy Dialogue on Infrastructure Financing Strategies in South-East Asia

29-30 August 2017
Manila, Philippines
Background

- Traditionally, infrastructure investments have been financed with public funds, given the inherent public good nature of infrastructure.
- Public deficits and increased public debt to GDP ratios have led to reduction in the level of public funds for infrastructure.
- The banking sector has traditionally played a major role in financing infrastructure projects in the region. However, bank dominant system increase the risk of an overexposed banking system.
- Capital markets would reduce the pressure on the banking system while also making available fresh equity to finance / refinance infrastructure projects.
- Much attention is being focused on the institutional investor, given the long-term nature of the liabilities.
Challenges

- Large international commercial banks, which had previously provided a significant portion of infrastructure financing have been deleveraging since the global financial crisis.
- Institutional investors at present allocate a very small fraction of their investments to infrastructure assets in both developed and developing countries.
- Most institutional investors, even those with long-term liabilities such as pension funds, life insurance companies continue to invest in liquid assets, often with a short-term investment horizon.
Bank dominant financial system

Source: Authors’ calculation based on data from BIS, ADB, World Bank.
Limitations of Bank-Based Financial System

- Refinancing risks, Single borrower limits, etc.
- These limitations illustrate why bonds are a useful alternative to loans for infrastructure financing.
- Bank financing should nevertheless continue to play a key role in the initial phase of an infrastructure project.
State of Capital Markets (1)

- Asia is home to diverse financial systems that vary in depth and sophistication, ranging from developed countries with sophisticated financial markets to emerging markets and low-income economies where markets are still in its infancy.

- The map in the next slide provides a snapshot of the depth of financial market development in the region based on the index developed by the International Monetary Fund (IMF).
State of Capital Markets

Source: IMF
State of Capital Markets (2)

- Capital markets in the region are at different levels of development, from Financial Hub (Singapore) to Nascent markets (Brunei, Cambodia, Laos, Myanmar, Viet Nam).

- Capital markets need to be further developed in some of the countries in the region before they can play a significant role for infrastructure development.
Institutional Investors

- The long-term nature of infrastructure projects matches the long-term liabilities of institutional investors.
- There is a high correlation between the size of the institutional investor base and the size of capital markets.
- Underdeveloped equity and bond markets prevent institutional investors to finance infrastructure investment.
- The region has diverse structure in terms of the size of its institutional investors.
Note: The insurance data of Brunei Darussalam and Indonesia represents 2014; the insurance data of Thailand and Viet Nam represents 2013; the mutual fund data of Singapore represents 2013; the pension fund data of Indonesia represents 2011.
Investment Modalities

- Infrastructure Companies
- Stock market
- Corporate Bond
- Infrastructure Projects
- SPV Listing
- Project Bond
- Infrastructure Funds
- Municipal Bonds
Investment Modalities
(Infrastructure Companies-Stock Market)

Stock Market Capitalization of Domestic Listed Companies To GDP%-2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Stock Market Capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>1.1</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1.1</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>13.5</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>33.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>46.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>99.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>105.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>129.9</td>
</tr>
<tr>
<td>Singapore</td>
<td>215.7</td>
</tr>
</tbody>
</table>

Stock Market Turnover Ratio (2015)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>..</td>
</tr>
<tr>
<td>Indonesia</td>
<td>20.72</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>..</td>
</tr>
<tr>
<td>Malaysia</td>
<td>29.17</td>
</tr>
<tr>
<td>Myanmar</td>
<td>..</td>
</tr>
<tr>
<td>Philippines</td>
<td>15.54</td>
</tr>
<tr>
<td>Singapore</td>
<td>29.71</td>
</tr>
<tr>
<td>Thailand</td>
<td>71.63</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>38.65</td>
</tr>
</tbody>
</table>

Source: CEIC and OECD issue paper on the corporate governance landscape and capital market development in Lao PDR
Note: Market capitalization of Cambodia, Lao PDR and Myanmar as of May 2016; GDP as of 2015.

Source: World Bank, 2016, Global Financial Database
Investment Modalities
(Infrastructure Companies-Bond Market)

Corporate Bond Outstanding (%GDP, Q1’17)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viet Nam</td>
<td>1.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.6</td>
</tr>
<tr>
<td>Thailand</td>
<td>11.7</td>
</tr>
<tr>
<td>Singapore</td>
<td>28.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>37.2</td>
</tr>
</tbody>
</table>

Note: There is no corporate bonds issuance in Cambodia, Lao PDR and Myanmar; no data available for Brunei Darussalam.
## Infrastructure Projects

<table>
<thead>
<tr>
<th>SPV Listing</th>
<th>Project Bond</th>
</tr>
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</table>
| • Establish a dedicated project company known as a “Special Purpose Vehicle (SPV) to acquire financing and implement project activities.  
• This legally isolates the parent organization from direct exposure to the financial risks associated with a project.  
• If the SPV is listed on the stock exchange, investors can invest directly in the project. | • Project bonds are a debt instrument used for financing stand-alone infrastructure projects, issued by SPV.  
• The creditworthiness of this bond depends on the cash flow performance of the underlying infrastructure project.  
• The volume of project bonds is $36 billion in world (2013). In Asia, the volume ranged between $1 billion and $3 billion.  
• Average maturity of the bonds is 8 years in Asia, compared to 15 years in advanced economies. |
Infrastructure Funds

- Another intermediary mechanism between investors and infrastructure projects.
- Serve as a vehicle to pool resources, skills and experiences from different investors while achieving economies of scale.
- Specialized skills are required for structuring and assessing infrastructure investments.
- Rail Mass Transit Growth Infrastructure Fund (BTSGIF-Thailand) and the ASEAN Infrastructure Fund are examples of this funds.
Municipal Infrastructure Bonds

- With rapid urbanization, municipalities are under strong pressure to deliver infrastructure services.
- Municipal bonds are debt instruments issued by local governments to finance infrastructure projects.
- These bonds normally attract funding at low cost given the implicit government guarantee and are subject to less stringent level of oversight than the corporate bond market.
Policy Recommendations: Develop domestic market

Sequencing of financial market development

Source: Managing risk in financial market development: The role of sequencing, Cem Karacadag and others, 2003
Policy Recommendations: Develop domestic market

Size of government and local corporate bonds (GDP%-Q1’2017)

Note: Brunei Government Sukuk (Government bond) outstanding as of 13 October 2016
Policy Recommendations: Strengthen financial integration

- Leverage offshore markets can provide alternative sources for infrastructure investment.
- Strengthen the financial ties with the regional and global financial markets. In this respect, to harmonize regulation, corporate governance and financial products with the objective of achieving mutual recognition of their trading transactions.
Policy Recommendations: Facilitate foreign investment

Key Impediments Facing Foreign Investors

- Capital Controls
- Lack of hedging instruments
- Low credit rating
Policy Recommendations: Support domestic institutional investors

Prudential regulations
- Abolish imposing prescribed limitations and narrow investment mandates
- Adopt a principal-based approach

Credit enhancement mechanisms
- Providing a guarantee
- Develop credit enhancement mechanism
Policy Recommendations: Improve Investment Climate

- Develop entrepreneurial capabilities
- Establish local rating agencies
- Strengthen accounting standards, disclosure requirements and data transparency
- Review tax policies
- Improve governance and regulation
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