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## Enter Private Investment? Infrastructure Financing in Asia

**Ramkishan S. Rajan** | 17 Oct 2007

Infrastructure bottlenecks are among the main factors that have prevented many developing countries like from fully benefiting from trade and investment openness, particularly in the cases of labour-intensive manufacturing and tourism industries. Not surprisingly, a growing body of empirical studies points to the positive correlation between investment in infrastructure, more rapid economic growth and declining poverty rates.



Asia's infrastructure needs are monumental. According to the Bangkok-based UNESCAP, the region will be faced with annual financing needs of about US\$200 billion a year for the next decade. This is arguably a conservative estimate insofar as India alone is estimated to require some \$60-70 billion annually of infrastructure investment over the next five to ten years.

The high asset specificity saddles infrastructural projects with significant financing risks which tend to place serious disincentives to private investors. This has meant that infrastructure projects have predominantly been publicly financed in the past. However, the growing fiscal stress faced by governments in this era of globalisation, along with stagnation and, in some cases, outright decline in funding from multilaterals in recent years, has led policy makers to consider alternative sources of funding to fill the large and burgeoning infrastructure gap.

Some countries such as China have funded large-scale infrastructure projects through domestic savings which have been intermediated via the banking system. This sort of directed lending at relatively low rates has ensured that infrastructure projects in China have been comparatively well funded at low cost of capital. While such a policy of financial repression appears to have worked very well for China, there are persistent concerns about the consequences of China's funding policies and arrangements on the domestic banking system (large non-performing loans), off-balance sheet liabilities of the government, as well as possible over-investments in fixed capital in some areas.

As China continues to reform its domestic banking system, directed credit policies and financial repression will become less commonly used. In any event, most other developing Asian countries do not have the quantum of domestic savings to emulate the Chinese experience, or have financial systems that are more market-based and are therefore unable to channel funds (bank deposits) into infrastructure projects.

While China has been spending about 15-20 per cent of its GDP on domestic infrastructure investments, India has been spending only about 4-5 per cent of GDP on infrastructure and is unable to raise this significantly in view of the already high consolidated fiscal deficit.

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Having heard the growing calls to find innovative means of closing India's huge infrastructure deficit, in the 2005-2006 budget, India's Finance Minister P. Chidambaram announced the creation of a "Special Purpose Vehicle" (SPV) for financially viable infrastructure projects that have difficulty in raising private resources.

The financial SPV - called India Infrastructure Finance Co. Ltd. (IIFCL) - was established on 5 January 2006 and is under the purview of the Ministry of Finance. It is allowed to raise long-term funds from the domestic market as well as international capital markets. The IIFCL offers long-term loans for selected projects in key areas including roads, ports, airports and the tourism sector generally to supplement other loans from banks and financial institutions.

The loan assistance by the SPV is not allowed to exceed 20 percent of the project cost. The Indian government provides at least a partial guarantee, thus reducing the credit risk. This in turn helps keep the cost of borrowing by the SPV fairly low, though conversely, it effectively raises the government's contingent or off-budget liabilities. Thus, while the SPV scheme is an innovative accounting device, for all intents and purposes, the economic consequences could be identical to running an actual fiscal deficit.

In addition, if the SPV sells foreign currency bonds, there is the question of who bears the risk of unhedged foreign currency borrowing by the SPV. Presumably the government will offer guarantees for exchange rate risks and thus compensate the SPV in the event of currency depreciation.

Because of such concerns, it has been suggested that a relatively greater share of funding for the SPV be drawn from available foreign exchange (forex) reserves rather than external borrowing which will raise the country's overall debt. Many countries in the region have in fact been contemplating the use of part of their built up forex reserves to finance at least part of their infrastructure gap.

While this appears to be an attractive proposition at face value, there are in fact some specific concerns about channeling reserves to fund infrastructure. In particular countries need to be wary of the potentially inflationary consequences, as the proposal effectively implies that additional liquidity will be released into the economy.

Of course, to the extent that the improvements in infrastructure needs raise the supply capacity of the country, the inflationary consequences due to excess liquidity may only be short-lived. However, the interim period can last for quite some time given the long gestation lag of infrastructure projects.

One seemingly ingenious method of limiting of potential inflationary consequences is to require that most of the intermediate inputs needed for local infrastructure projects be imported. The logic is that imports do not add to domestic demand and can thus temper the immediate inflationary pressures. The rise in imports will also reduce the size of the country's balance of payments surplus, hence moderating the pace of future reserve buildup. However, is not clear exactly how import-intensive infrastructure projects really are. Most of these projects have a high local or non-tradable component. Even if the infrastructure projects are import-intensive, the fact that the country is importing intermediate goods at an undervalued exchange rate implies that it is relatively more costly for the country (compared to if the country maintained and imported at a market-based

exchange rate).

In effect, therefore, the country is choosing to pay more for its capital equipment and resource needs while simultaneously subsidising its exporters. Such a policy is hard to justify on economic terms unless it can be argued that exports offer significant positive spin-offs to the rest of the society.

The evolution of new technologies has made it feasible to unbundle large-scale projects and to introduce a degree of competition into some infrastructure projects along with changes in the regulatory environment in many countries, including the introduction of various institutional innovations in contractual arrangements (such as Build-Operate-Transfer, Build-Operate-Own, etc), has further increased the feasibility of private sector involvement in and ownership of infrastructure projects in a number of areas.

A large variety of Public-Private-Partnerships (PPPs) have surfaced to facilitate provision of infrastructure services in both traditional areas such as small water and power systems along with newer ones like mobile telecommunications and airlines. However, many infrastructure projects in developing countries are often viewed as being financially non-viable to private investors because of perverse/non-economic pricing policies, ineffective delivery systems, uncertain regulatory frameworks, and a slow moving bureaucracy which hinders quick decision-making.

Improvements in institutional frameworks for protecting creditors' rights are imperative if a country is to successfully raise capital for infrastructure from private capital markets (equity and bonds) on a much larger scale. Capacity-building is also required to ensure that PPP projects - which can be complex - are effectively and efficiently managed.

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