Infrastructure policy in developing countries in Asia

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Infrastructure needs: challenges on the supply side

Infrastructure policy has attracted increased interest across developing countries in Asia in recent years. The urgent need for very large increases in investment in infrastructure in most developing countries in Asia is clear. Nearly all of the main issues for policymakers in Asia in addressing infrastructure needs are on the supply side. There are seven related supply-side issues now of high priority for developing countries across the region:

- selection and preparation of appropriate projects
- finance
- pricing
- access
- governance and management
- policy and regulatory policies
- climate change.

Selection and preparation of projects

Key questions for project planning include the following: what is the optimum level of investment in infrastructure? Which projects should be given priority? How can appropriate projects be prepared?

It has not been easy to decide on the optimum level of infrastructure in a particular country at any given time. A rough rule of thumb is that total investment needs appear to be more than 7 per cent of gross domestic product (GDP) in low-income countries and about 3 per cent of GDP in upper middle-income countries.

Apart from noting these broad guidelines, however, it is probably not useful for policymakers to announce specific ‘top-down’ targets for investment levels in infrastructure. A better approach would be to approve only individual projects that meet rigorous investment criteria.

Finance: where will the money come from?

A benchmark figure of 6–7 per cent of GDP for investment in infrastructure is well above levels seen in most developing countries in Asia in recent years. In some countries, the current investment ratio is as low as 2–3 per cent of GDP.

Estimates of future needs vary widely. The UN Economic and Social Commission for Asia and the Pacific (ESCAP) recently suggested that on a region-wide basis at least $228 billion per annum would be needed for infrastructure investment during the period 2006–10. Other investment surveys provide estimates that are much higher. Realised investment in infrastructure in regional developing countries has, however, been much lower than...
any of the amounts mentioned. ESCAP noted that, overall, there was likely to be a very large investment gap—as large as $180 billion per annum in the period 2006–10.

What can be said about the longer-term prospects for mobilising funds? In recent decades, the main finance options for governments in developing Asian countries have been: official budget financing, private sector investments and requiring domestic utilities themselves to raise investment funds.

**Official budget financing**

Official budget financing has traditionally been a major source of funds for infrastructure in developing Asia. In some sectors—such as electricity—it has been common for 80 per cent or more of investments to come from official sources.

In many countries, however, governments now cannot afford to provide these high levels of support. After the 1997–98 East Asian financial crisis, debt service levels rose sharply, thus squeezing government budgets. Further, beginning in the early 1990s, international donor support for infrastructure projects fell away because donors and the international banks shifted attention to other sectors.

**Is private sector funding the answer?**

Largely because of the difficulties of relying on limited official budget financing, in recent years in Asia there has been much hopeful talk about the possibility of attracting private investment into infrastructure. There have even been suggestions that perhaps as much as 80 per cent of new infrastructure might be funded by the private sector.

The track record is, however, not encouraging. In practice, in recent years it has proved difficult for most developing countries in Asia to tap into private sector funding to support large infrastructure projects. In addition, the recent modest boom in private sector funding in infrastructure in developing Asia, which occurred in the early to mid 1990s, brought unexpected and negative consequences.

Looking over this recent history, it seems unlikely that governments in most developing countries in Asia will be able to attract significant amounts of private sector funding into infrastructure investments in the near future.

**Self-funding as an option**

A third main option is to encourage domestic utilities themselves to raise investment funds. This can be done by permitting utilities and other infrastructure suppliers to retain earnings or by encouraging utilities and agencies to raise investment funds by entering into borrowings.

The crucial issue of the pricing of infrastructure services underpins both of these options.

**Pricing of infrastructure services**

A common problem of infrastructure policy in many developing countries in Asia is price suppression. The political and other factors that lead policymakers to suppress prices are easy to understand. The undesirable consequences of the subsidies that price suppression give rise to, however, often include: macroeconomic costs through the impact on the national budget; inequality in the use of government monies; restricting investment and growth prospects in infrastructure sectors; and misallocation of resources.

**Access**

A major factor contributing to the reluctance of consumers to pay adequate prices for infrastructure services appears to be lack of effective access. Two of the most important aspects of access for low-income consumers are: 1) physical access; and 2) the minimum amount that must be paid for services.

In principle, the solution to these problems is relatively straightforward. Market structures need to be designed to ensure that suppliers of infrastructure services face market pressures to tailor their products to meet the needs of the mass consumption market. There appear to be at least three kinds of barriers that discourage large, formal sector suppliers from entering the mass market: regulatory, technical and institutional. Various types of regulatory requirements set minimum standards (technical, safety, financial, workplace-related, and so on) that firms in the formal sector are expected to observe. Self-imposed preferences within the formal utility sector for the use of modern technology and standards often create barriers that are difficult to overcome. Institutional barriers also appear to be common.

A lesson from the way that informal markets in infrastructure work in much of developing Asia is that physical access is generally more important for consumers than the unit price. The twin challenges for state-owned utilities are to find ways of being more inclusive in the products they provide while, at the same time, covering minimum costs.

**Governance and management**

Across developing Asia many infrastructure services
are provided by state-owned enterprises (SOEs). While SOEs are often perceived to have advantages such as national ownership and responsiveness to non-economic community goals such as equity, it is also true that in recent years SOEs have increasingly been criticised. The consensus in an increasing number of countries is that whatever the precise ownership arrangements, there is much to be gained from encouraging greater competition in infrastructure sectors.

Policy and regulation

Good policies and effective regulatory structures are vital to the expansion of efficient infrastructure in developing countries in Asia. Clear policy statements are needed so that all actors in infrastructure sectors know the rules of the game.

Regulatory arrangements are just as important. In practice, however, many governments find it very difficult to provide adequate budgetary resources to regulatory agencies. In these circumstances, a second-best approach would include: aiming to establish minimalist regulatory regimes; raising at least part of the cost of regulatory activities from the regulated sectors; involving the media and other civil society actors as monitors; and inviting the main multilateral development banks to give renewed attention to issues concerning infrastructure policy and regulation.

Climate change

It is uncertain how infrastructure investment programs in developing Asia are likely to be influenced by the need to respond to global climate change concerns. One major challenge is the expected continuing reliance on coal for power generation to at least 2030. A second issue is the additional cost to infrastructure budgets of mitigation and climate change adaptation measures. These increased cost pressures will clearly complicate the job of designing infrastructure projects during the coming decade.

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