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Decentralizing Infrastructure Services: Lessons from the East Asia Experience

Since the 1990s, most East Asian countries have increasingly shifted responsibilities for infrastructure services to subnational tiers of governments. This note takes stock of the results so far and draws lessons of experience.

Decentralization is the transfer of responsibilities from the central government to subnational agencies empowered to act as increasingly autonomous entities within their geographical and functional domains. In theory, decentralizing infrastructure services can deliver efficiency gains when service benefits accrue mainly to the local population—such as in water and sanitation, urban transit, and waste management. Subnational agencies are indeed better placed than the central government to tailor infrastructure services to the needs of local constituencies (allocative efficiency) and deliver them at lower costs (productive efficiency). In practice, the economic benefits of decentralized infrastructure services are by no means a given, as they are contingent upon effective coordination among tiers of governments ("regional coordination") and accountability mechanisms for results achieved.

The note presents the decentralization approaches adopted in China, Indonesia, and the Philippines—three countries that have taken important steps in decentralizing infrastructure services. It then assesses how each country fared in addressing the key challenges of promoting regional coordination and building accountability for infrastructure services in a decentralized environment.

Decentralization Approaches in the Infrastructure Sector

Infrastructure service provision involves a broad set of functions, including setting investment priorities, building and operating infrastructure facilities, and financing capital and operation and maintenance requirements. The extent to which each of these functions is transferred to subnational agencies defines a country's decentralization approach for infrastructure services.

China

In China, the central government plays a prominent role in setting investment priorities across infrastructure sectors by dictating targets for infrastructure coverage at local level. In this respect, provision of infrastructure services remains highly centralized. On the other hand, subnational governments have full responsibility for executing investments, operating infrastructure facilities, and framing their own urban development plans—including where to locate major capital projects and how to sequence investments to meet the national targets.

Subnational governments also have significant leeway in deciding how to mobilize funds for infrastructure projects because they rely significantly on off-budget revenue sources over which they have virtually total control (Ahmad at al. 2000). Although subnational governments are legally forbidden to finance their deficit through bonds and bank borrowing, they de facto raise credits (and bear the associated liabilities) through special purpose vehicles created for financing infrastructure investment (IMF 1997).

In China, decentralized provision of infrastructure services is rooted in a politically centralized system based on a top-down line of command that emphasizes accountability to the higher level of government rather than to the local constituencies.

Indonesia and the Philippines

Indonesia and the Philippines have adopted a "Big Bang" approach to infrastructure decentralization. As part of the decentralization initiatives launched in these countries, virtually complete responsibility for

The economic benefits of decentralization are by no means a given.

infrastructure services was transferred to subnational governments, almost overnight.

In both countries, subnational infrastructure investment is financed mostly through central grants and, to a lesser extent, own-source revenues. Subnational borrowing for infrastructure investment is limited. In Indonesia, long-term subnational borrowing from the central government is legally restricted to revenue-generating infrastructure projects—and de facto confined to financing investment by municipal water enterprises (PDAMs). In the Philippines, subnational borrowing is modest and constrained by a noncompetitive credit market, which is monopolized by government financial institutions.

In both countries, decentralization has largely reduced the functions of middle-tier levels of government, creating a "missing middle" in the architecture of decentralization (see Box 1). In Indonesia, provinces lack hierarchical authority over city (kota) and districts (kabupaten) (Law 22/1999). Although their role in coordinating provincial-level development activities has been recently enhanced (Law 32/2004), their functional responsibilities remain largely undefined. In the Philippines, provinces are authorized to play a coordinating role among cities and municipalities, but lack the financial and technical capacity to perform such a role effectively (World Bank 2005).

In both countries, decentralization was closely intertwined with their transition to democracy and it was accompanied by the promise of greater "downward" accountability for results achieved.

Comparing Decentralization Approaches

In spite of the heterogeneous environments in which decentralization has been implemented in the three countries, important lessons can be learned by comparing how each has fared in promoting regional coordination and building accountability for infrastructure services in a decentralized environment.

Promoting Regional Coordination

Devolving responsibilities for infrastructure services to subnational governments poses complex coordination challenges in the presence of economies of scale and spillover benefits. In both cases, regional coordination is essential for the benefits of decentralization to materialize (Box 1).

In China, regional coordination in infrastructure sectors is slowly starting to emerge—the most ambitious project is perhaps the establishment of a Pan-Pearl River Delta (Pan-PRD) Regional Cooperation and Development Area in 2004. The objective of the Pan-PRD project is to facilitate the construction and management of regional infrastructure facilities, which are expected to generate significant spillover benefits, such as interprovincial railway projects and inland waterways.

In Indonesia and the Philippines, the missing middle is obstructing regional coordination in infrastructure, leading to inefficiency in service provision and underinvestment in regional infrastructure. In Indonesia, a lack of regional coordination has resulted in a multiplicity of standards in transport regulation, thus distorting trade across municipalities. In South Sulawesi for example, trucks are required to carry three specific licenses: one for interprovincial transport, one for intraprovincial transport, and one for entering the subdistricts (kecamatan). The first two licenses are issued at the provincial level, while the third one is issued at local level. In the Philippines, a lack of coordination in managing secondary road networks has led to severe maintenance backlogs. This has resulted in a deterioration of provincial roads, whose status is worse than those of city and municipal roads—in 2000, only 21 percent of provincial roads were paved, compared to 77 percent of city and 34 percent of municipal roads. The small size of utilities has also resulted in dis-

Box 1. The Missing Middle

A missing middle in the intergovernmental structure arises when decentralization unduly weakens the role of middle-tier agencies by transferring the bulk of functions and/or financial resources to the lowest tiers of government (that is, districts in Indonesia and cities and municipalities in the Philippines). A missing middle can jeopardize the benefits of decentralization in the presence of economies of scale or spillover benefits in infrastructure service provision:

1. *Economies of scale* call for the aggregation of neighboring subnational governments into a single administrative unit for the delivery of more efficient services (albeit at the expense of downward accountability). In the presence of economies of scale, middle-tier agencies are needed to facilitate the aggregation process, especially when the bargaining power is unbalanced amount the subnational governments.
2. *Spillover benefits* arise when the benefits of infrastructure services span across subnational governments. Spillover benefits call for the involvement of middle-tier agencies in the management of shared infrastructure facilities—for example, establishing river basin organizations is recommended for the effective management of water production when water resources are shared among subnational governments.

Economies of scale and spillover benefits call for regional coordination in decentralized infrastructure service provision.

economies of scale in water supply and sanitation services. In the absence of regional agencies capable of leading the aggregation process, consolidation of service provision is mainly emerging as a voluntary process driven by the municipalities. However, voluntary consolidation brought a number of coordination challenges. For example, the aggregation of three neighboring municipalities to form the Laguna Local Government Unit was stalled by lack of agreement on the allocation of water rights. The Laguna Water District, a water utility supplying three neighboring municipalities, is another example of ineffective coordination among municipalities. The lead role played by the largest municipality (Los Baños) in driving the consolidation process generated the perception between the two smaller municipalities that the consolidation was not in their best interest. As a result, the smaller towns tried to exit the grouping, jeopardizing the prospect of attracting private sector participation in the water sector (ERM et al. 2005).

Building Accountability

In the decentralization process, it is essential to build upward accountability to higher tiers of government and downward accountability to local constituencies to ensure that the economic benefits of decentralization are achieved.

In China, decentralization is embedded in a centralized political structure, which highly rewards upward accountability for results achieved. This approach underscores the power of top-down performance targets in boosting subnational infrastructure investment. However, it also presents some drawbacks. First, centrally set performance indicators, when poorly selected, can fail to deliver the intended effects. For example, nationally established coverage targets for wastewater treatment (WWT) plants are expressed in terms of capacity of completed plants. However, targets are met regardless of whether the WWT plants are in operation or not. This gives subnational governments an incentive to invest in new WWT plants to meet the national standards, but not to operate and maintain the existing facilities, which have been running at 50 percent or less of designed capacity. Second, the targets do not provide municipalities with an incentive to consider economies of scale in service provision. For example, in the Guangdong River delta, China, each of 51 administrative districts built a wastewater treatment facility, although cooperative agreements based on economies of scale could generate significant efficiency savings.

In China, the balance of accountability is tilted upward at the expense of downward accountability, with limited scope for civil society participation in infrastructure service provision. For example, in the poor rural province of Guizhou, households can choose whether to receive private water connection or express reluctance to pay for it. However, community involvement is limited to information sharing; clients do not have a voice on tariff policy, nor can they opt for less expensive alternatives, such as public stand posts.

In the process of dismantling the old autocratic regimes, Indonesia and the Philippines failed to establish effective monitoring and evaluation mechanisms that can hold subnational governments accountable to the central government. Benchmarking the quality of infrastructure services among subnational governments is the first step to establish an effective monitoring system. In Indonesia for example, benchmarking the performance of PDAMs would enable the central government to direct financial support to the best performing utilities.

In Indonesia and the Philippines, decentralization reforms have not delivered the promised dividends in terms of downward accountability for results achieved. In the Philippines, for example, the short (three-year) term for elected officials attenuates accountability to local citizens for planning and implementing long-term, multiyear infrastructure projects (World Bank 2005).

Despite the weak institutional framework for accountability, a growing number of subnational governments in both countries are experimenting with innovative solutions based on civil society empowerment to reinforce formal accountability mechanisms. In the Philippines, Naga City succeeded in strengthening the accountability of its procurement process by making publicly available (in newspapers and on the Internet) all unit prices of awarded bids. In Indonesia, nongovernmental organizations have successfully monitored water coverage and quality as part of pilot projects undertaken in 24 PDAMs. Disseminating best practice is also emerging as an important tool to enhance accountability. In the Philippines for example, awards are granted to best performing local governments in specific sectors (such as sanitation and environmental protection) to reward innovative approaches and encourage their replication nationwide (see www.galingpook.org for more information).

The benefits of decentralization are contingent upon upward and downward accountability for results achieved.

Conclusions

Important lessons can be drawn by comparing how the infrastructure decentralization approaches adopted in China, Indonesia, and the Philippines fared in promoting regional coordination and building accountability:

- Meeting coordination challenges—There is a need to forge a new role for middle-tier agencies to coordinate regional infrastructure development, particularly in Indonesia and the Philippines, where lack of regional coordination has led to inefficiency in infrastructure service provision. The challenge is to establish regional agencies with the legal mandate and the financial and the technical capacity to play such a role.
- Balancing upward and downward accountability—Decentralized infrastructure provision has to be ingrained in a framework that promotes upward and downward accountability. The decentralization approach in China underlines the efficiency costs of tilting the balance of accountability too far upward. The approach in Indonesia and Philippines demonstrates that any attempt to shift the balance from top-down to local political accountability is deemed to fail if not accompanied by strong monitoring and evaluation, and effective public information systems.
- Promoting innovations in local governance—The innovative solutions adopted by a number of subnational governments in Indonesia and Philippines indicate that horizontal accountability towards civil society organizations can partially compensate for weak formal accountability mechanisms, provided that information is made available to the public through mechanisms of external scrutiny (such as the media or the judiciary).

This PREM*note* was written by Elisa Muzzini, East Asia and Pacific Infrastructure Unit (EASIN). The note is based on the Flagship Report "East Asia Decentralizes: Making Local Governments Work," Poverty Reduction and Economic Management (PREM).

Further Reading

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