Vietnam: The Impact of Infrastructure Development on Rural Poverty Reduction

Public investment has made an enormous contribution to economic growth and poverty reduction in Vietnam. But attempts to scale up this contribution will have to rely on increasing the quality—not the quantity—of investment. At roughly one-third of GDP, Vietnam’s investment rate is among the highest in the world. Attempts to raise it further would reduce growth in consumption, limiting progress in poverty reduction. Economic growth has also made an important contribution to poverty reduction, with higher growth resulting in lower poverty. But growth may become less pro-poor over time, as fast integration with the global economy favors the country’s economic hubs over its remote and mountainous areas. Thus the quality of public investment should be one of the main levers for expediting growth and reducing poverty in the next few years.

Vietnam is well positioned to focus on investment quality. Its recent Comprehensive Poverty Reduction and Growth Strategy, the country’s blueprint for economic development, identifies the main weaknesses of the public investment program. Investment in large-scale infrastructure is a core element of Vietnam’s strategy for reducing poverty and increasing growth, and the strategy emphasizes the importance of tightly linking infrastructure investments to socioeconomic goals, of selecting projects based on their effects over time and across sectors and provinces, and of identifying each project’s poverty reduction impacts and beneficiaries. The main challenge now is translating these principles into operational guidelines capable of guiding infrastructure development.

Rigorously evaluating the public investment program—both its successes and its failures—is an important step in that direction. So far, infrastructure investments have occurred without a systematic appraisal of their socioeconomic impacts.

Assessing the poverty impacts of public investment

Three perspectives can be used to assess the poverty alleviation impacts of public investment in Vietnam. A macroeconomic perspective shows that Vietnam’s incremental capital-output ratio (ICOR) has increased since the mid-1990s, and now compares unfavorably with that of other developing countries. As the ICOR is a crude measure of the productivity of capital, its increase over time is a matter of concern. But more refined analyses are needed to identify ways to raise the quality of public investment.

Perspectives based on investment impacts by province and project go beyond the macroeconomic approach and estimate how the public investment program—and each of its main components—contributed to poverty reduction during 1998–2002. However this approach poses considerable methodological and empirical challenges. Although substantial progress is possible using the provincial perspective, more work is needed on the project perspective.

Bearing is in mind, some patterns emerge from the provincial analysis. First, the public investment program has made a significant contribution to poverty reduction. Every 1 percent of GDP spent on public investment is associated with a 0.5 percent point reduction in the poverty rate. This is less than is suggested by crude estimates, which do not take into account the endogeneity of public investment.
decisions—that is, the fact that more investment goes to provinces with higher potential for growth and poverty reduction. Still, it is more than the macroeconomic perspective suggests.

Differences across sectors are also revealing. The provincial-level poverty impact of public investment in transportation and, especially, water and sanitation, is much higher than the average impact of the public investment program, which also includes investment in energy. This outcome can be partly explained by the fact that the poverty reduction impact of energy investment is geographically less concentrated. Dams, power plants, and power lines can raise electricity consumption throughout the country, yet have a limited impact on poverty rates in the provinces where they are based. Moreover, public investment in transportation and in water and sanitation appears to be highly progressive—having a higher poverty reduction impact in poorer provinces. Thus such investment could be used to reduce poverty in provinces that are lagging behind.

Overall, investment under the public investment program appears to be progressive, in the sense of having a greater poverty reduction impact on poorer provinces. This is not obvious at a first glance, because of the endogeneity problem mentioned above. There is more public investment in more dynamic provinces, which are also the ones when poverty declines faster. As a result, a spurious relationship arises, whereby public investment seems to contribute more to poverty reduction in richer provinces. But once this bias is removed, it becomes clear that public investment makes a bigger contribution to poverty reduction in poorer provinces.

Deciding where to direct investments—by province

At present, there is more public investment, in relative terms, in richer provinces. This choice can be justified on efficiency grounds, as returns to investment might be low in poorer provinces. Investing in provinces where returns are higher and redistributing through public expenditures to provinces where poverty is higher is, in principle, a sensible approach. But it carries two risks. The first concerns its long-term sustainability. Provinces that receive more resources for investment are bound to grow faster, so the productivity gap between them and their poorer counterparts would increase over time. The bigger the productivity gap between richer and poorer provinces, the bigger would be the transfers needed to more closely align their incomes. For this approach to be sustainable, budget transfers would need to grow over time, both in absolute terms and as a share of GDP.

Over time, richer provinces could be strongly tempted to renege on such an agreement. And without strong political determination to redress inequality across provinces, this approach could simply unravel. Containing the productivity gap between richer and poorer provinces could be necessary to keep transfers manageable and prevent the secession of the rich provinces. From this perspective it would make sense to invest more in poorer provinces—even if the overall poverty alleviation impact is not as high as in richer provinces.

Another risk of concentrating investment in richer provinces is that over time, it could lead to a less inclusive development pattern. Even if large budget transfers were sustainable and income disparities between provinces could be kept under a certain ceiling despite growing productivity disparities, sources of household income in poorer and richer provinces would still become increasingly different. Wages and profits would be the main source of income in richer provinces, while government transfers would
become increasingly important in the poorer provinces. It would not be socially acceptable to have a situation where some people see their well-being improve thanks to job creation, while others depend on handouts. So again, increasing public investment in poorer provinces would be justified even if the poverty alleviation impact were not as high as in richer ones.

Because data work is still under way, it is harder to reach conclusions about poverty alleviation impacts at the project level. Still, two points are worth making. First, a brief survey of existing studies on the social impacts of specific projects suggests that careful project-specific assessments can be a useful complement to broader statistical studies. Such assessments shed valuable light on the ways that public investment can contribute to poverty reduction—which is crucial to improving the design of future projects. Increased reliance on such assessments may require that proper baselines be assembled as part of the project preparation process, taking stock of the situation before a project is implemented.

Second, careful project appraisal may also be extremely useful for public investments not directly related to infrastructure. Although the focus here is on capital spending for transportation, energy, and water and sanitation, a large portion of Vietnam’s public investment program supports state enterprises operating in commercial sectors, including paper and steel mills, sugar refineries, and fertilizer plants. If public resources are used to support such investments, their poverty alleviation impact should be commensurate with that of infrastructure investments. And because relative prices are bound to change as a result of economic reforms and, especially, increased integration with the global economy, it is important to ensure that project returns remain high over time.

Improving domestic policies and donor coordination

The analysis of Vietnam’s public investment program also has implications for the implementation of investment projects. Disbursement is shown to be much slower for donor-funded infrastructure projects. Although slow disbursement is useful for assessing the poverty alleviation impact of public investments, delaying the implementation of projects with a considerable poverty alleviation impact is not desirable from a development perspective.

Radically simplifying donor procedures—including harmonizing donors’ procurement guidelines, resettlement mechanisms, and environmental safeguards—would be one way to expedite project implementation. Improving the operation of Vietnam’s guidelines, mechanisms, and safeguards, so that donors could disburse and operate through them with confidence, would be an even better approach.