

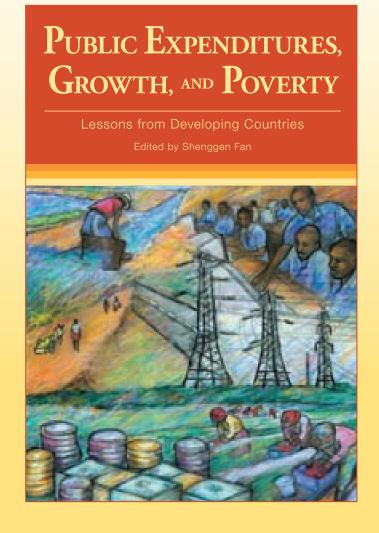
PUBLIC EXPENDITURES, GROWTH. AND POVERTY

Lessons from Developing Countries

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decades, developing countries have had mixed results in reducing poverty. While East Asia (particularly China) has achieved astonishing progress in eradicating severe poverty through strong agricultural and overall economic growth, many African countries have experienced an increase in the number of poor. Today, more than I billion people still live on less than US\$I per day, and the recent surge in food prices has



caused another 100 million people in developing countries to fall into poverty. It is obvious, therefore, that a "business as usual" approach is wholly inadequate.

In recognition of the fact that persistent poverty and malnutrition result in irreversible costs to human and economic development, developing countries and the international development community have been intensifying their efforts to increase and redirect resources in order to achieve specific development objectives such as the Millennium Development Goals (MDGs). However, public resources are limited, so prioritization is clearly critical. Policymakers want to know what public spending programs have the largest impact on the poor and how the resources should be allocated among different sectors, such as agriculture, infrastructure, health, and education.

In recent years, the International Food Policy Research Institute (IFPRI) has conducted numerous studies related to public spending and its impact on growth and poverty reduction. The findings from those studies have been brought together in a new book, Public Expenditures, Growth, and Poverty: Lessons from Developing Countries (published for IFPRI by the Johns Hopkins University Press and, in South Asia, by Oxford University Press). The approach used in the book differs from previous work in that it

- considers multiple types of government spending, including investments in agriculture, infrastructure, health, education, and social safety nets;
- 2. recognizes that investments have a direct impact on poverty reduction through multiple channels; and
- links the effects of public investment to its overall social benefits and cost, using a computable general equilibrium (CGE) framework.

THE ROLE OF GOVERNMENT SPENDING ON ECONOMIC GROWTH AND POVERTY REDUCTION

While there is broad consensus that renewed economic growth is a necessary condition for meeting development objectives such as the MDGs, it is also widely accepted that growth alone is insufficient. In order for growth to become a sufficient condition, more direct public action is required, especially in the form of more agriculture-intensive investments. However, it is not just the scale of government spending that matters; when, where, and how governments intervene is also crucial. Furthermore, it is important to recognize that there do not always have to be trade-offs between equity and efficiency. The poor are often poor because

they are disproportionately affected by market failures. This leads to "win-win" possibilities because government intervention, if designed properly, can lead to both a more efficient and a more equitable allocation of resources.

PATTERNS OF GOVERNMENT SPENDING IN DEVELOPING COUNTRIES

It is crucial to understand how patterns of public spending have changed over time and what factors have affected these changes. The book uses a dataset that includes 44 developing countries in Asia, Africa, and Latin America. Total government expenditures in these countries increased from US\$993 billion in 1980 to \$1,595 billion in 1990 (all measured in 2000 international dollars). By 2002, this spending had increased to \$3,347 billion, with Asia accounting for 67 percent of total expenditures. Latin America exhibited the slowest overall growth in expenditures (3.7 percent per annum), followed by Africa at 4.18 percent. Overall, total government expenditures as a percentage of GDP increased across all three regions, albeit somewhat erratically.

The composition of government expenditures also varied dramatically across all regions. In 2002, the top three areas of expenditure for Africa were education, defense, and health. A discouraging trend in Africa is that spending on agriculture, transportation, and telecommunications has gradually declined. Asia has seen a steady increase in education spending and social security, but the region's spending on agriculture has decreased by roughly half. Asian governments have also reduced their spending on health as a share of total government spending, which indicates that the economy is continuing to recover from the 1997 Asian financial crisis. In Latin America, social security ranks at the top of all government expenditure items, while agriculture accounts for just a small fraction. This is mainly due to the small share of agriculture in national GDP.

Agricultural expenditure as a percentage of agricultural GDP measures government spending on agriculture relative to the size of the sector. This measurement is very important because agriculture remains the largest sector in rural, developing regions. This percentage is extremely low in developing countries compared to developed countries. In the latter, it is usually more than 20 percent, while in the former it averages less than 10 percent. In Africa, it remained at roughly

7 percent between 1980 and 2002, while Asia's performance remained constant at 8–10 percent. Latin America saw more of a dramatic decrease, with its spending on agriculture moving from 20 to 12 percent in two decades.

Roads, electricity, telecommunications, and other infrastructure services are also important for stimulating growth in agriculture and in rural areas, as well as enhancing food security and reducing poverty. In developing countries, infrastructure scarcity is partly due to the high per capita costs of serving dispersed populations, but is also due to an urban bias in the allocation of public investments. There have been major differences in total infrastructure expenditures between regions. Africa's total spending increased between 1980 and 2002, while Asia's decreased, mainly due to an increase in private-sector participation in infrastructure provision in China. Latin America experienced a contraction in its spending in the 1990s, but has since recovered marginally. An analysis of government spending on infrastructure as a percentage of total expenditures reveals discouraging trends: in Africa, the share of infrastructure investment in total spending declined only slightly, from 6.5 percent in 1980 to 3.8 percent in 2002, but Asia's share dropped more than half, from 12 percent to 5 percent. In Latin America, the share declined from 6.7 percent to 2 percent in the same period.

PUBLIC INVESTMENT – AGRICULTURAL R&D AND RURAL INFRASTRUCTURE

The book uses four case studies to analyze how government spending patterns have helped to promote economic growth and poverty reduction. These case studies show that agricultural research, education, and rural infrastructure are the three most effective public spending items in promoting agricultural growth and poverty reduction. Of the three, agricultural research has the greatest overall impact on poverty and agricultural productivity in developing countries. It has the largest impact on agricultural production and second-largest impact on poverty reduction (after rural education) in China, and the second-largest impact on poverty reduction in rural India (after investment in roads).

Investing in rural infrastructure and education also has a significant impact on both economic growth and poverty reduction. In rural areas, the impact of these two types of investments on poverty reduction is often higher than their impact on productivity growth. In addition to their trickle-down effects on poverty reduction, rural infrastructure and education also have a positive impact on the nonfarm wages and employment opportunities of the rural poor and on rural—urban migration, leading to an increased overall impact on rural poverty reduction. However, it is important to note that different types of rural roads and education have differential impacts on rural poverty. Rural feeder roads, for example, often have larger impact than other types of roads, and rural primary education often has a substantially larger impact than secondary and tertiary education. There is a regional

dimension as well. Regional analysis conducted for China and India suggests that more investment in less-developed areas not only offers the greatest poverty reduction per unit of spending, but also leads to the highest economic returns.

Government spending on anti-poverty programs has generally not had a significant impact on poverty reduction, because of inefficient targeting and a misuse of funds. Government spending on irrigation has helped promote agricultural growth and poverty reduction, though this type of spending now has smaller marginal returns in terms of both growth and poverty reduction than it did in the past.

SOCIAL SPENDING — HEALTH/NUTRITION, EDUCATION, AND SOCIAL SAFETY NETS

Social spending on education, health, and social safety nets is designed to improve the human capital of the poor in the long run and meet their immediate needs in the short run. Two chapters in the book analyze in detail how these programs can be better designed and targeted to benefit the poor in the short and long run.

Health/nutrition—there is widespread agreement that primary healthcare investments can efficiently and effectively improve the health status of people in developing countries. However, the lack of quality healthcare is particularly a problem for poor households without access to affordable private provision. Thus, there is a need to find ways to deliver quality services to poor populations, first by recognizing the capacity-intensive nature of such services and then by finding cost-effective solutions. Improving the distributional impact of health expenditures requires both reallocating resources toward primary healthcare and increasing the access of the poor to quality health services. This may be done partly through enhanced resource allocation and mobilization. While there may be some role for the introduction of fees for some services and income groups, such an approach may not be consistent with improving the nutrition and health status of poor households. However, recent experience with targeted health subsidies suggests that conditioned transfers can be very effective in increasing the access of the poor to health services as well as addressing poverty and malnutrition. The results from Mexico's Oportunidades program suggest that an integrated approach that addresses access, information, quality, and poverty provides great potential. But the design of these programs needs to reflect the health and administrative realities of the targeted countries.

Education—public expenditures on education in developing countries are typically regressive, reflecting the large budget share of expenditures going to tertiary-level education. But even expenditures on primary education are at best only slightly progressive, reflecting the inequality of access. Extensive expansion of schools is worthwhile only if basic quality is maintained (such as ensuring access to basic infrastructure and instructional resources, including teachers or instructors who show up and are motivated to teach). Although building more schools and

facilities is likely to be more progressive on the margin, when initial enrollment levels are relatively high, it is unlikely to be a cost-effective way of improving the equality of access, relative to better-targeted expenditures. Further increasing enrollments from already high levels tends to be extremely difficult and often costly, partly reflecting the preferences and constraints facing extremely poor households. In such circumstances, targeted education subsidies can be a very cost-effective way of making education more accessible to children from the poorest households. Once a basic level of quality is attained, intensive expansion is more likely to have an effect on improving student performance than on increasing enrollment and is thus likely to be only slightly progressive even if confined to primary education.

Social safety nets—food subsidies and public works are two types of social safety nets. However, the evidence clearly shows that universal food subsidies are not very effective ways of transferring resources to the poor because they are very rarely progressive and often involve large consumption and production efficiency costs. For this reason, universal food subsidies are often viewed as stop-gap policies in developing countries, to be used until more cost-effective transfer instruments can be developed. Targeted food subsidies can potentially be more efficient and beneficial, but in practice they have not performed well because of coverage leaking to the nonpoor, high costs associated with distributing food, and corruption.

Public works are particularly effective in crisis situations and in addressing the issue of vulnerability to poverty. Although welldesigned and well-implemented public works programs appear to have great potential for targeting poor households, they also appear to be a relatively expensive way of dealing with current poverty; high nonwage costs and forgone earnings make the net cost per unit of income transferred to poor households relatively high.

Many countries in Latin America have recently introduced a program innovation whereby targeted transfers are conditioned upon households investing in their children's nutrition, health, and education. These new human capital programs (such as Mexico's Oportunidades program) are attractive because they address many of the shortcomings of existing social safety nets. Evidence shows that these programs are very well targeted, through a combination of geographic, demographic, proxy means, and community targeting methods. Rigorous evaluations have also shown that targeted human capital subsidies have a substantial impact on nutrition, health, and education outcomes.

RO-POOR SPEND MACROECONOMIC

A dynamic CGE model was developed to simulate the effects of various spending scenarios on growth as well as on poverty by taking into consideration the general equilibrium or economywide effects. The results indicate that economic performance can be improved when government resources are reallocated from unproductive areas to different target areas. The most positive overall effects are realized when agriculture is targeted. For example, the reallocation of 10 percent of government demand (1.9 percent of GDP) from unproductive areas in the beginning of the study period reduced the final-year poverty rate by 7.5 percentage points. The impact is less positive (and may be negative) when the government expands spending in the target areas without cuts elsewhere and without any additional foreign financing. This leaves fewer resources available for private consumption and investment. However, if additional foreign grants are sufficient to cover government financing needs, the scope for growth in domestic absorption is widened, with a positive impact on household welfare and poverty reduction.

CONCLUSION

Many governments in the developing world are faced with limited public resources and competing uses for those resources. Therefore, it is important to set the right priorities and use public resources efficiently. It is clear that governments must increase investment—especially in agricultural research, rural infrastructure, and education—to support agricultural growth. This type of spending not only yields high returns in agricultural production, but also has a large impact on poverty reduction because most of the poor still reside in rural areas and their main source of livelihood is agriculture. In addition to increasing investments in these areas, governments should also improve the targeting and efficiency of social safety nets to the poorest of the poor.

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