

## **Modeling Economic Impact of IFC Infrastructure Projects**

Topic: Investment and capital formation

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Infrastructure projects account for a substantial share of portfolio in the multilateral development agencies including the International Finance Corporation that allocated nearly 26 percent of total investment to ports, roads, and power sectors during 2014-2016. Investment in infrastructure generate additional growth effects compared to the real sectors of the economy such as manufacturing, agriculture, and services as they relax acute infrastructure constraints in developing countries and enable economic expansion. This study contributes to the existing literature in three main ways. First, it proposes methodologies to estimate the development impact of infrastructure projects in roads and ports focusing on forward production linkages in addition to effects stemming from the construction, operation, and maintenance widely discussed in the literature. With growing GDP, capacity constraints in roads and ports might hinder the economic development of countries. This study uses increased traffic including export, import, and domestic flow of goods enabled by infrastructure projects to compute the demand shocks to the economic sectors and economy-wide effects based on the Social Accounting Matrix (SAM) multiplier approach. In addition to the increased traffic, the paper computes economic impact of cost and time savings associated with the projects. Second, the proposed methodologies rely on various empirically estimated inputs such as import-GDP elasticities to enrich the methodologies with elements outside of the SAM multiplier setup. Finally, these methods suggest a new way of computing the job creation across countries based on empirically estimated GDP-employment elasticities. The paper uses data on traffic, capacity, costs and time savings from IFC projects, SAM tables from the Global Trade Analysis Project (GTAP), and GDP, inflation, and employment from the World Development Indicators.