The Importance of Infrastructure

Introduction

Dr. Jeffrey Delmon, senior infrastructure specialist of The World Bank, begins his book indicating that, “Poor infrastructure impedes a nation’s economic growth and international competitiveness (The World Bank 2006). Insufficient infrastructure also represents a major cause of loss of quality of life, illness and death (Willoughby 2004). This raises infrastructure services from good investment to a moral and economic imperative. In order to stimulate growth and reduce poverty, it is essential to improve the supply, quality and affordability of infrastructure services. The unmet demands are huge, and investments have not matched demand (The World Bank 2008).”

The Relevance of Infrastructure

• The Global Competitiveness Report 2010-2011 of the 2010 World Economic Forum values the competitiveness of 133 economies and thus provides the most complete economic evaluation of its kind. The Forum uses 12 determinants, which the report calls “pillars”, to measure competitiveness. The second basic pillar is infrastructure (World Economic Forum 2010).

• The report emphasizes that, "Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy, as it is an important factor determining the location of economic activity and the kinds of activities or sectors that can develop in a particular economy. Well-developed infrastructure reduces the effect of distance between regions, integrating the national market and connecting it at low cost to markets in other countries and regions. In addition, the quality and extensiveness of infrastructure networks significantly impact economic growth and affect income inequalities and poverty in a variety of ways. A well-developed transport and communications infrastructure network is a prerequisite for the access of less-developed communities to core economic activities and services.”

• “Effective modes of transport, including quality roads, railroads, ports, and air transport, enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitate the movement of workers to the most suitable jobs. Economies also depend on electricity supplies that are free of interruptions and shortages so that businesses and factories can work unimpeded. Finally, a solid and extensive communications network allows for a rapid and free flow of information, which increases overall economic efficiency by helping to ensure that businesses can communicate and decisions are made by economic actors taking into account all available relevant information.”

Aerial view of the Phase I of PR-66 toll road between the Carolina and Canóvanas municipalities.
Effects of Infrastructure on Economic Activity

- Dr. Rafael Izquierdo, Emeritus and Jean Monnet Professor, highlight the existing correlation between infrastructure and economic activity: the economic effects originated in the construction phase and those that rise during the usage phase of the infrastructure (Izquierdo 2004).

- The construction phase is associated with the short-term effects and are a consequence of the decisions in the public sector that could affect macroeconomic variables: GDP, employment, public deficit, inflation, among others. The public investment expands the aggregate demand, yielding a boost to the employment, production and income.

- The macroeconomic effects at a medium and long term, associated with the utilization phase are related to the increase of productivity in the private sector and its effects over the territory. Both influence significantly in the competitiveness degree of the economy.

- Infrastructure investments have a remarkably positive effect on economic development. The results obtained when applying models like the Cobb-Douglas yield a median value of 0.30, which means that public investment equivalent to 100% of the public capital stock would lead to a private production growth of 300%.

Conclusion

- Investing in infrastructure constitutes one of the main mechanisms to increase income, employment, productivity and consequently, the competitiveness of an economy.

References


