Chapter 9

Interplays Among Railway Investment, Revenue, and GDP in India: An Empirical Study

Kamal Ray
Katwa College, India

Chiranjib Neogi
West Bengal State University, India

Ramesh Chandra Das
Katwa College, India

ABSTRACT

Indian Railways is a department owned and controlled by the Government of India, via the Ministry of Railways. Progress of additional railroad construction and railway-based infrastructure of the country could be assessed with the help of interrelationship between the revenue generated with corresponding investment and growth of GDP of the country. The present chapter attempts to test two hypotheses: 1) whether there is any causal link between railway investment and GDP of the country through its revenue and 2) what are the impacts of investment, revenue on the GDP of India over time. Results show that there are bilateral causalities between investment and GDP and unilateral causality from GDP to revenue but there is no way causality between revenue and investment. Additionally, investment, not revenue, influences GDP in a significant way but the revenue elasticity of investment is insignificantly changing over time.

DOI: 10.4018/978-1-5225-2361-1.ch009
INTERPLAYS AMONG RAILWAY INVESTMENT, REVENUE, AND GDP IN INDIA

INTRODUCTION

It does not require any empirical support to establish the fact that expansion of rail line and constructions of new railway stations have contributed immense benefit to the Indian economy so far as transportation of goods and traffic movement at relatively low costs is concerned. In the present context role of the government is very significant since incentives to invest fund to private sector are hardly given by India Government. So quality of the governance matters much when India’s governance indicators, as per World Bank report, are supposed to be shoddy to speak of. Of late FDI is pronounced so far as modernization, improvement of safety, performance and passenger amenities are concerned. Infrastructure is a heterogeneous term to speak of, different physical structures used by many industries as inputs to the process of production of goods, and service-rendering sectors are obviously the components of infrastructure as catalyst providing the ultimate wellbeing to the stakeholders when roll in luxury is the ultimate means of today’s concept of consumerism. The quantification of buoyancy of infrastructure at the national level with desired amount of energy, transport, water, housing, digital communications, and system of waste disposal, plants & machineries as means of production to the industries matters much in today’s digitized economy. Growth is the last word, despite the fact the word “development” is neglected due to unethical appropriation of self-interest by the politicians and other power brokers in almost all the countries. The schools, colleges, universities even hospitals are not the outside the infrastructure, social infrastructure. It is really a heterogeneous term that affects not only growth but also transmits social benefits to the grass root level, unprivileged section of mass. Hearsay suggests that sound infrastructure is supposed to be complementary to the economic growth; perhaps this proposition does not require any empirical documents as it influence GDP in two way: i) direct influence as an additional input in production process ii) indirect ways in the form of increment of total factor productivity with the help of reduction of overall transaction cost. Majority of studies opine that infrastructure investment is, no doubt, complementary to other investment in the sense that the insufficient infrastructure constrains other investment; in contrast, excess over required investment has no added value.

The wellbeing of the common people cannot be perceived at a higher level unless the institutions involving market, government, judiciary, political parties and media move together as a single engine of a vehicle. No doubt, performances of each institution depend on the quality of infrastructure that has been built up with the help of massive investment. National political system could be one of the major factors that cause slow growth of infrastructure or low quality infrastructural facilities. According to Barro (1996), democracy leads to a weaker growth pattern since growth-compromising factor undermines overall growth of the economy. In contrast, high rate of capital accumulation with rapid industrialization was observed in an authoritarian political system like China. The East Asian countries like Singapore, Korea and Taiwan deserve the high rates of growth over a long period of time under a political system which was highly authoritarian in nature. On the other hand, India grows slowly with help of democratic set-up if we consider the time span especially before 2005. Perhaps qualities of the infrastructures make a substantial difference.

Indian Railway network spreads like a spider web across the nation since British regime. It is supposed to be largest public sector under single management where about 64600 kilometer network enables to connect about 7146 rail stations today. Since it is energy efficient and less-expensive mode of conveyance and transport, about 19000 trains move daily basis transporting passengers and goods in bulk amount. Although one can raise a question about comfort of passengers in busy suburb stations like Kolkata, Mumbai because of inhuman rush in passengers trains in almost 24 hours, special attention must be taken...