

Exploring the Causal Relationship between Telecommunications and GDP Growth in India, 1988-2007

Alpana Kateja and Debajit Jha

In the emerging global economy telecommunication sector has made a significant impact on economic growth. Amongst various components of infrastructure, telecommunication as a determinant of economic growth is somewhat different because of the network externalities, a phenomenon that increases the value of service with increasing number of users. Recent growth in network infrastructure and tele-accessibility in India has been phenomenal. The present study investigates into causal relationship between rapidly developing telecommunication industry and economic growth in India. It is found that in the short-run, growth of telecommunication is influenced by growth in the Gross Domestic Product (GDP), while the reverse does not hold true.

I Introduction

The broad facts of economic growth are now well-known, but they clearly defy any single explanation and require economists to draw on such diverse fields as political economy, development theory and economic history. In the long list of variables, the telecommunications infrastructure has been recognized globally as an important tool for socio-economic development of a nation. It is one of the prime support services needed to promote growth and modernization of various sectors of an economy. With enormous growth of Information Technology (IT) and its impact on the economy, telecom services have become all the more important. Telecommunications provide a cost and time effective mechanism for flow of information, and diffusion of new ideas and technology.

Telecommunications infrastructure is somewhat different from other infrastructure, as a determinant of economic growth because of the existence of network externalities, a phenomenon that increases the value of a service with increasing number of users. Thus, the impact of telecommunications infrastructure on economic development is more pronounced as compared to other traditional infrastructure. Kim *et al.* (1997) demonstrated this phenomenon with the analysis of online service competition. Telecommunications

Alpana Kateja, Reader, Department of Economics, Banaras Hindu University, Varanasi, India.

Email: alpanakateja@gmail.com

Debajit Jha, Research Scholar, Dept of Economics, Banaras Hindu University, Varanasi, India and ICSSR Doctoral Fellow, Institute of Economic Growth, Delhi, India. Email: jhadebajit@gmail.com