

REGIONAL COMPETITIVENESS: APPROACHES TO MEASUREMENT AND COMPARISON OF STATES AND UNION TERRITORIES OF INDIA

Abstract

In the present world, as globalization and technology bring opportunities, connectedness and also complexities, understanding of regional competitiveness to capture these opportunities and prepare for building capability has become extremely important. A big question that remains partially answered is the impact of regional disparity among many sub-national regions even if they are having same initial conditions or endowments. This is more relevant in emerging and large economies like India. In this context, studying regional competitiveness and its drivers in an attempt to answer some of these questions of business economics is required. Also, in this technology and innovation driven era, role of drivers of regional competitiveness like entrepreneurship and technology readiness need to be explored in large, emerging and innovation aspiring economies like India and its regions. These effectiveness of these drivers in turn may be closely related to quality of institutions in the economy which can act as enablers. The study focusses on select 32 states/union territories (sub-national regions) of India for empirical analysis for a period of 10 years i.e. from 2007-08 to 2016-17.

Firstly, to assess the relative capability of these sub-national regions, a regional competitiveness index (RCI) is developed after identifying relevant pillars and indicators from literature, and the ability of RCI explaining economic growth is tested using dynamic panel regression method- generalized method of moments (GMM). The bidirectional Granger causality has also been studied. Based on RCI score states have been ranked and rank analysis as well as performance matrix have been done for policy implications. The empirical analysis finds that there is significant association between RCI score and state economic growth indicating that measure of regional competitiveness could explain economic growth of states. The Granger causality shows that RCI score leads to growth but growth doesn't lead to RCI score.

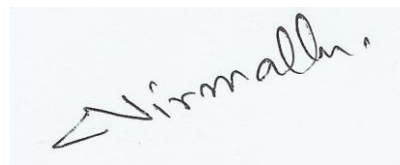
Secondly, to evaluate regional competitiveness from process perspective, an extended Diamond Based Pyramid framework has been developed to link pillars into Porter Diamond (1990) conditions and further to link them to the outcome of regional competitiveness. And

technical efficiency change and technology shift/change has been evaluated of this input-output process using data envelope analysis-Malmquist Productivity Index (MPI). Results show that regional competitiveness is almost singularly driven by the technology change, while there is negligible contribution of efficiency change.

Thirdly, to study the role of select drivers on economic growth, a composite index on regional entrepreneurship, technological readiness and institution quality (RETRIQ) has been developed and the effectiveness of RETRIQ capturing economic differences has been econometrically tested. Based on the scores of the index, 32 states and union territories of India have ranked. The estimation using Fixed Effect (FE) panel regression shows significant association between composite index and economic growth. Based on their comprehensive advancement in the eight constituent indicators of the index, states have been categorized as consistently high-rank, consistently low-rank, improving trend and deteriorating trend states. The study shows that the indicators under technological readiness have determined both consistently high and low rank of states. Similarly, under improving trend states it is also observed that technological readiness and institutions indicators show a trend of improving.

Keywords: Competitiveness, Economic Growth, Efficiency Change, Entrepreneurship, Generalized Method of Moment, Granger-causality, Institutions, Malmquist Productivity Index, Panel Regression, Porter Diamond model, Regional Competitiveness, Technology Change, Technological Readiness

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