

Divergence of Innovation Capabilities within the EU

Authors : Vishal Jaunky, Jonas Grafström

Abstract : The development of the European Union's (EU) single economic market and rapid technological change has resulted in major structural changes in EU's member states economies. The general liberalization process that the countries has undergone together has convinced the governments of the member states of need to upgrade their economic and training systems in order to be able to face the economic globalization. Several signs of economic convergence have been found but less is known about the knowledge production. This paper addresses the convergence pattern of technological innovation in 13 European Union (EU) states over the time period 1990-2011 by means of parametric and non-parametric techniques. Parametric approaches revolve around the neoclassical convergence theories. This paper reveals divergence of both the β and σ types. Further, we found evidence of stochastic divergence and non-parametric convergence approach such as distribution dynamics shows a tendency towards divergence. This result is supported with the occurrence of γ -divergence. The policies of the EU to reduce technological gap among its member states seem to be missing its target, something that can have negative long run consequences for the market.

Keywords : convergence, patents, panel data, European union

Conference Title : ICEMBIT 2014 : International Conference on Economics, Management of Business, Innovation and Technology

Conference Location : Paris, France

Conference Dates : April 28-29, 2014