

**CRESCITA E CONVERGENZA IN EUROPA:  
MENTE UMANA, PROPENSIONE ALL'INNOVAZIONE E SPILLOVER TECNOLOGICI  
COME MOTORI DELLA CRESCITA ENDOGENA NELL'UE.  
TEORIA E ANALISI EMPIRICHE**

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**- Abstract -**

**GROWTH AND CONVERGENCE IN EUROPE:  
HUMAN MIND, PROPENSITY TO INNOVATION AND TECHNOLOGICAL SPILLOVERS  
AS ENDOGENOUS GROWTH ENGINE IN EU.  
THEORY AND EMPIRICAL ANALYSIS**

Technological innovation is an essential factor in the long run, to accelerate the growth rate of an economic system in a permanent way. According to the endogenous growth theory the production of new technology is the only way to reach a higher steady state, as it changes the growth path of the system. Growth and its speed are relevant elements for the dynamics of convergence and technological innovation may represent a leading force not only for growth acceleration but also for convergence strength. We are looking for technological spillovers and knowledge flows in Europe as the drive behind innovation and, as a consequence, growth and convergence. We first test convergence in European Union and in Euro Area and we find there is slow convergence or no convergence at all. A general sign of convergence is traceable, due to some Central-Eastern Countries catching-up processes and to the inertial convergence of older Countries, but a North-South analysis shows a structural difference in convergence and an increase in the pro-capita income dispersion caused by the East-side enlargement. Moreover the convergence processes are not continuous either in the space or in the time and, in any case, they suggest a polarization trend among European Countries. With a second set of tests we find strong evidence of the positive relation involving innovation-growth-convergence. Using data about patent citations in 252 European Regions (NUTS2 level), we find evidence of knowledge flows and, even if geographical distance and spatial proximity are still relevant in knowledge transmission, the spillover radius is extending its space over time. This is a key-fact for Europe's future in order to stimulate a necessary growth, also according to the new growth strategy 'Europa 2020'. Innovation is a result of human mind, an expression of man's intellect, so we can consider human mind as the real propulsive factor for economic growth; this opens the possibility for a "New Humanism" era for Europe.

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