# Chapter 12 Reviewing the European Innovation Activities and Industrial Competitiveness

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## **ABSTRACT**

The purpose of this chapter is to analyse and examine the evaluation and the development of Community's policy and how it can be implemented to European member states. This chapter also attempts to examine the effects of innovation activities and the impact of innovation policy on growth and productivity and integration process. More specifically, this chapter relates Research and Development with industrial infrastructure, productivity effects and regional development. Moreover, it analyses "national system of innovations" indicating the national technological capabilities, and also the structure and the planning on research and development. The main conclusion focuses on European technological policy and its important role for the economies of European member states with technological policy aiming to reinforce the competitiveness and enhance the convergence between member states.

#### INTRODUCTION

Since the early days of European economic integration, one of the central goals for the European Union has been greater equality of income and productivity among member states and regions. However, more recently, the process of European

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economic convergence has slowed down considerably and according to a widening group of economists, has ceased at the regional level after 1980. As a consequence, the costs and benefits of economic and monetary integration may not be equally distributed across European regions; it is possible that less developed regions will receive fewer benefits from the integration process. Therefore, it is of crucial importance to design

European policies directed to reduce such disparities, and to promote equality of opportunities in the territory. Indeed, if this is not achieved, the process of economic and monetary integration itself can be at risk.

Different studies dealing with the territorial cohesion in Europe highlight that income inequalities inside the E.U. are very pronounced, especially across regions. Moreover, European income disparities, in terms of per capita Gross Domestic Product (GDP), are more accentuated at a regional level than at a country level. If per capital income across countries seems to have converged (especially across poor countries), the same pattern is not observed across European regions, either if the E.U. is taken as a whole or inside each of the country members of the Union. It seems that poor European regions do not tend to completely converge with rich regions. One of the possible solutions could be the enhancement of capital investment, as well as the innovation and R&D promotion, with one main channel being the FDI activities. E.U. -27 has a major FDI policy orientation regarding the FDI activities, as far as both inward and outward investments are concerned:

This paper attempts to examine the effects of innovation activities and the impact of innovation policy on growth and productivity, and integration process.

# THE EUROPEAN INNOVATION POLICY

As it has been broadly described above, innovation is a key factor to determine productivity growth. Innovation helps in understanding the sources and patterns of innovative activity in the economy, as a fundamental prerequisite to develop better policies. As such, innovation assists member states in identifying their own strengths and weaknesses and in designing corresponding policies and programmes. Notably to overcome

weaknesses and valorise strengths by identifying policy priorities, providing examples to articulate policy strategies and to measure the impact of those strategies. Figure 1 illustrates that the innovation performance of the US and Japan is well above that of the EU27. The EU27-US gap has dropped significantlyup until 2007, but in the last 3 years the relative progress of the EU27 has slowed down. The EU27-Japan gap has remained stable between 2005 and 2009 although the gap has decreased up until 2008 but has increased again in 2009.

The 2009 European Innovation Scoreboard (EIS) provides a comparative assessment of the innovation performance of EU27 Member States, under the EU Lisbon Strategy, reporting overall innovation performance as calculated on the basis of 29 indicators covering five dimensions of innovation:

- 1. **Innovation drivers** measure the structural conditions required for innovation potential;
- 2. **Knowledge creation** measures the investments in R&D activities;
- Innovation & entrepreneurship measures the efforts towards innovation at the firm level;
- 4. **Applications** measures the performance expressed in terms of labour and business activities and their value added in innovative sectors; and
- 5. **Intellectual property** measures the achieved results in terms of successful know-how.

The 2009 EIS report shows that most Member States until 2008 were steadily improving their innovation performance. The economic crisis may, however, be hampering this progress. Early indications show that the worst hit are Member States with lower levels of innovation performance, potentially reversing the convergence process witnessed over recent years. Meanwhile, the latest statistics show that the E.U. is having difficulty in catching up with the US in innovation

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