

## **Euro and Technology Effects on Job Turnover in Greek Manufacturing**

**Theodore Papadogonas<sup>1</sup> and Fotini Voulgaris<sup>2</sup>**

### **Abstract**

*This paper investigates the effects of Greece's European Union (EU) accession and European Economic and Monetary Union (EMU) entry, as well as R&D intensity and industry concentration on job creation and job destruction in the Greek manufacturing sector. The study is based on firm-level economic data of 1418 firms and covers the time period from 1995 to 2004. The econometric model, besides other firm-level determinants used in similar studies, incorporates variables that capture the potential impact of EU accession and EMU entry. In addition, the effects of variables, such as R&D, size, age, exports, new investment, profitability and industry concentration ratios are examined. The study reveals that EMU has a substantial negative effect on employment growth in the Greek manufacturing sector. However, it strengthens the effect of exports, new investments in tangible assets and R&D expenditures on the creation of new work positions.*

**Keywords:** Industry study, dynamic growth, manufacturing, financial performance

**JEL classification:** C23, D21, G32, J23, L11, L6

### **1. Introduction**

Employment growth is a key measure of a country's economic performance. In Greece, for the last 20 years job destruction has been higher than job creation, leaving a net unemployment rate of approximately 10% (IMF, 2009 World Economic Outlook). The issue of unemployment is a big one also on an international level and many empirical studies so far have been undertaken on determinants of employment growth in firms. A growing number of studies have analyzed data at the firm level and have found correlations between employment growth and variables, such as size (Hall, 1987; Singh and Whittington, 1975), age (Audretsch, 1995), ownership structure (Variyam and Kraybill, 1992), research and development (R&D) activities (Hall, 1987), capital structure (Lang, Ofek and Stulz, 1996), human capital and export activities (Liu, Tsou, and Hammitt, 1999).

This study examines the effects of various factors on the employment growth of Greek firms and especially the Euro effect after the European Monetary Unification of Greece, through the use of econometric models based on panel data analysis.

The main contribution of this paper is the investigation of the Euro effect, besides

---

1. Technological Educational Institute of Chalkis, GR-34400 Psachna, Evia, Greece - email: tpapadogonas@yahoo.com

2. Technological Educational Institute of Crete, GR\_72100 Agios Nikolaos, Crete, Greece - email: fvoulgari@finance-ins.teicrete.gr