Competitiveness, Clustering and Knowledge Management of Greek Manufacturing Industry at Post-Crisis Era

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Abstract. The globalization and the increasing competition especially during the latest years of crisis provide a new environment for SMEs. In the "knowledge-based economy", firms' competitiveness is strongly related to technical know-how and skills. The important keys for the survival, growth and development of SMEs are related to technological and scientific improvements, cooperation, innovation capacity and knowledge management. This is the first study which attempts to present the above characteristics of Greek manufacturing SMEs at the post-crisis era.

Keywords: firm competitiveness, financial performance, manufacturing, clustering, knowledge management.

JEL Classification: M10, M15, M16, M21.

Conference topic: Modern Business Management Problems and Perspectives.

Introduction

During the past decade and particularly after the eruption of the financial crisis in Greece, more and more emphasis is given on enhancing business and firm competitiveness. The manufacturing sector of the country, despite the significant decline in its contribution to the domestic GDP, remains one of the most important sectors of the Greek economy due to the large number of businesses and the workforce which employs.

The aim of the present research is the analysis of the profile of the Greek manufacturing firms on the most important determinants of competitiveness (Voulgaris, Lemonakis 2014). According to literature, determinants for the survival and successful performance of businesses are related to innovation, creation and management of knowledge and the development of internal technological capabilities.

Through a field research, qualitative characteristics such as method of organization, management and strategic marketing partnerships with companies in the domestic and international market, innovation, technology, level of personnel training, export activity, financing, etc. characterizing Greek manufacturing firms, are examined, during a particularly difficult economic period for the country.

The results show that the innovative activity of Greek manufacturing firms, knowledge management, financing, export activity, creation of partnerships and the development of domestic resources, enhance the competitive position of firms in the market place and provide a

competitive advantage over their competitors. Although considerable empirical work has been done on this subject, research on the topic is limited in Greece.

Data and methodology

A data sample of 406 small and medium size firms from all sectors of the manufacturing industry in Greece is used. The study covers the time period 2009–2011. The survey was carried out with the use of a questionnaire addressed to managers and CEOs of those firms, based on the Community Innovation Survey (CIS) framework.

Results

The results indicate that the majority of Greek manufacturing firms do not present innovative activity (39% innovators and 61 no-innovators), while the majority of them have export orientation (62% are exporters and 38% non-exporters), since the recent financial crisis, make firms turn their interest to exports as the domestic demand for their goods or services has been decreased (Lemonakis *et al.* 2013, 2015).

Manufacturing firms seem to have high levels of competitiveness in terms of price and product differentiation. Firms are observed to have low levels of cooperation with other firms in exports, distribution networks and R&D (Fig. 1).

Innovation plays a significant role, especially in the manufacturing sector. Through innovation firms gain competitive advantages against their rivals (Tsoukatos

et al. 2015). Thus, manufacturing firms in order to improve their competitiveness, must continuously exploit new opportunities for innovation. Competitiveness of enterprises depends on their ability to access information and create knowledge. Therefore, successful companies give great importance to knowledge management systems. Knowledge management can be the mechanism that fosters innovation through collaborations with external partners such as suppliers, customers and competitors

working together to achieve a common goal (Vassakis et al. 2015; Voulgaris et al. 2015) (Fig. 2).

The lack of resources and personnel capabilities at the stages of manufacturing, distribution, promotion and research funding, leads firms to cooperate with other firms, in order to reduce risk, cost and time required for innovation, as well as to gain access to sales and marketing networks (Fig. 3).

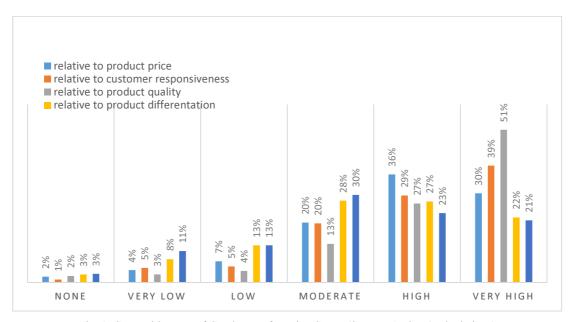
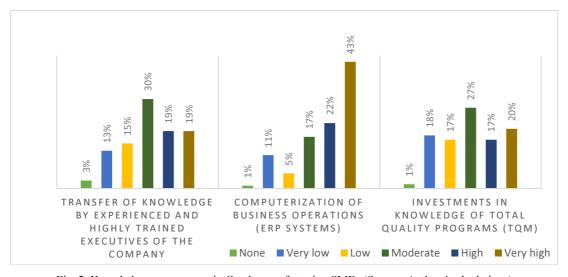


Fig. 1. Competitiveness of Greek manufacturing SMEs (Source: Authors' calculations)



 $Fig.\ 2.\ Knowledge\ management\ in\ Greek\ manufacturing\ SMEs\ (Source:\ Authors'\ calculations)$

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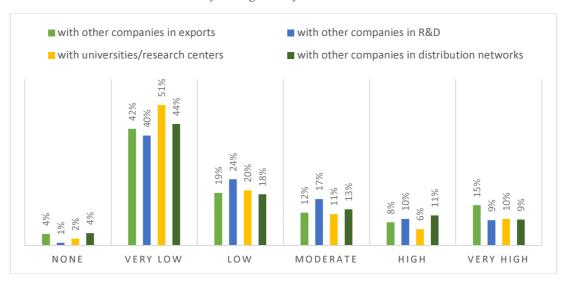


Fig. 3. Clustering of Greek manufacturing SMEs (Source: Authors' calculations)

Conclusions

The innovative activity of Greek manufacturing firms, the level of knowledge management, the proper use of foreign capital, the creation of partnerships and the further development of internal resources of enterprises, enhance their market position and provide a competitive advantage over their competitors (Vassakis *et al.* 2015). Since Greek economy is under a severe economic crisis, managers and policy makers should focus on practices and activities that foster innovative capacity and knowledge transfer between firms and universities/research centers, thus facilitating the growth of the manufacturing sector. This is especially important now in Greece and can contribute to the start-up of the Greek economy.

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