Analyzing the Location Decisions of Agro-Industrial Investments in Greece

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ABSTRACT

This article examines empirically the factors determining the agro-industrial investments in Greece and their impact on tourism development. Firstly, the determinants influencing the spatial configuration, the socioeconomic forces and the political framework of the agro-industrial investments in Greece are examined theoretically, according to the literature considered by Regional Science. At next, a multi-ordinal regression analysis is applied on the determinants elected theoretically, utilizing statistical data from Greece that describe the period 2004-2008. The results of the analysis are interpreted under the regional developmental perspective, constituting an indirect evaluation of the Greek Developmental Laws 3299/04 and 3522/06, applied by the Government to orientate the developmental dynamics of the agro-industry in Greece. Finally, a further analysis is applied comparing the agro-industrial investments with the tourism dynamics in Greece, indicating a field of policy implementation.

Keywords: Agro-Industry, Greece, Location Decisions, Ordinal Regression Analysis, Regional Development

1. INTRODUCTION

Agro-industry includes enterprises processing agricultural raw materials, like ground, forest products, agricultural products as well as livestock. It plays an important role in regional economy, offering a means of increasing the domestic value added of a raw material through manufacture, but its importance in the manufacturing sector is often not fully realized (Austin, 1981). Food and fiber processing constitutes the foundation of the nation’s industrial base and agro-industry could be characterized as “cornerstone of the manufacturing sector”. Despite the importance of agro-industry to regional development, the existent location theory is not applicable to this type of manufacturing (Hsu, 1997; Hsu & Tan, 1999). Agro-industrial projects are unique due to seasonality, perishability, and variability of their raw materials as
well as the fact that the raw materials in agro-industries are usually the major cost component. (Austin, 1981).

Many agro-industrial products are also necessities, and governmental interest and involvement in agro-industrial activities consequently will often be high. For this reason the local and mainly the national policy makers help the less developed regions adopting suitable incentives to their enterprises. These incentives are differentiated between the regions and obviously the investments in the poorer regions take greater financing in order to influence investors’ location decisions (Polyzos & Arambatzis, 2006).

In general, the spatial distribution of economic activities and the choices of entrepreneurs for the location, where their enterprises would be installed, are a substantive factor for regional development. The researchers dealt with this subject consider selection of suitable sites as an important criterion for reducing the cost of production and maximizing profits (Polyzos, 2011). In the process of taking a decision about the best location, different types of costs are taken into consideration, such as transportation cost (Polyzos et al., 2013b), labor cost, raw material cost, land cost, utility cost, which are associated with production of a particular product. Decision makers consider these costs and try to minimize them all, but the nature of the decision often requires that trade-offs be considered before deciding to locate at a particular location.

Initially, before industrialization, the von Thünen model investigated the structure of agricultural land use. This theory emphasizes the non-institutional factors of location and it is an excellent illustration of the balance between land cost and transportation costs (Polyzos, 2011). Human concentrations follow agriculture and agriculture concentrates around people, while improvements in productivity, transport, or optimal scale can change the existing geographic economic interaction, typically favoring urbanization and rural depopulation (Kilkenny, 1998). Weber considered three general driving factors of location choices: transportation cost and labor cost, considered as general factors and agglomeration forces, regarded as local factors. A site where the cost of raw material is high, compared to other locations, is considered to be more remote than alternative sites. The labor factor exerts a location pull, where in some cases it attracts an industry from a point of low transportation cost to a point where transportation cost is high. The agglomeration factor can draw an industry closer together or away from each other.

Hoover extended Weber’s theory, by indicating the importance of climate in the location decision apart from other institutional factors. He identified three types of economic agglomeration, the economies of localization, economies of urbanization and internal returns to scale (McCann, 2001). Isard used an input-output table to quantify the cost advantage of combining a region’s industrial activities characterized by intensive forward and backward input - output linkages. Moses revised the classical Weber’s model, by incorporating a neoclassical production function into the original classical location theory model. Isard and Moses showed that firms maximize profits when they choose the site that minimizes transport costs if inputs are used in fixed proportions. Alonso has given much attention to integrating factor substitutability between land and a composite factor (i.e., labor and capital) into the classical von Thünen’s framework to develop the neoclassical land use model. Despite all these conceptual revisions, none of the neoclassical location theory models adequately explain why economic activities tend to group in geographical space (McCann & Sheppard, 2003; Polyzos, 2011).

According to new relevant theories, product differentiation, imperfect competition, trade costs and economies of scale are essential to explain firms’ location choices (Venables, 1996; Fujita et al., 1999). There are two opposite operated forces, which “attract” or “repel” enterprises to a region. On the one hand, positive
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