Generic Business Strategies in Greece: Private Food Firms versus Agricultural Cooperatives

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Abstract

The purpose of this study is to identify differences in generic strategies and performance among organizations within the food sector in Greece. Data from a survey of 61 organizations in Northern Greece are analyzed with the help of factor analysis, one-way ANOVA, and multiple linear regression. Factor analysis reveals the existence of four generic strategies consistent with Porter's (1980) framework. The findings suggest that in Greece private food firms (investor-owned firms, or IOFs) and agricultural cooperatives follow different generic strategies. Private firms emphasize differentiation-based strategies, whereas agricultural cooperatives show greater proclivity for the low-cost focus strategy. Two of the four generic strategies (the low-cost strategy and the differentiation focus strategy) improve organizational performance within the food sector for both organizational types. This is the first Greek survey on strategy contrasting private food-sector firms (IOFs) with agricultural cooperatives. A central message is that cooperatives, unlike private firms, sustain a more conservative attitude revealing traditional preference for low cost. The findings of this study will help practitioners and policy-makers to advance their knowledge of how organizations establish competitive advantage within the food sector of a European country.

Keywords: generic strategies, Porter strategy framework, performance, agricultural cooperatives, food firms, investor-owned firms (IOFs)

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Introduction

Porter’s (1980) original model of distinctive generic business-level strategies has been widely acknowledged as a dominant paradigm in the strategic management and marketing literatures. Each of the four strategies is concerned with how a firm develops an advantage with respect to competitors in the same industry or in similar market environments along with the relative merits in terms of performance outcomes.

Although new theories have emerged since 1980, research still shows interest in the issue of whether firms can successfully pursue pure strategies or even combinations of these strategies. The central hypothesis of this paradigm is still under review because researchers seek to explain why the empirical findings are inconsistent in some countries, whereas in other countries they look for sufficient evidence to take an initial position (i.e., accept or reject the hypothesis). In particular, Porter’s descriptive scheme (original or refined) has been widely tested for empirical validity, primarily within the U.S., but little has been done within Europe, and much less in Greece.

Based on the above, the current study examines the generic strategies of 61 food organizations in Northern Greece. Data from 31 private firms (investor-owned firms, or IOFs) and 30 agricultural cooperatives within the food sector are analyzed with the help of factor analysis, one-way ANOVA, and multiple linear regression.

This empirical study contributes to the research on generic strategies. First, this study enhances the empirical evidence on generic strategies within Europe. Despite the numerous attempts at examining the usefulness of Porter’s classification scheme and its relation to performance across a wide range of business settings within the U.S., little has been done outside the U.S., especially in Europe (Spanos et al., 2004; Marques et al., 2000; Green et al., 1993; Douglas and Rhee, 1989). Second, this study advances our knowledge of how different organizational types establish their competitive advantage within the food sector. Although the food sector is of vital importance for the Greek economy, this is the first survey on strategy contrasting private food firms (IOFs) with agricultural cooperatives. Agricultural cooperatives, despite their small presence in the food sector (about 8% of the total number of organizations), constitute significant players with a long history in Northern Greece. This geographical region is dominated by isolated rural places with limited access to resources needed for survival or development.

The paper is divided into five major sections. After this introductory section, the research framework is discussed. Then the research methodology is
presented, followed by analysis and presentation of the results. The final section concludes with implications for researchers and practitioners.

**Research framework**

The theory of Porter’s (1980) model (see Table 1) consists of two elements: first, a scheme for describing firms’ competitive strategies according to their market scope (focused or broad) and their source of competitive advantage (cost or differentiation); and, second, a theoretical proposition about the performance outcomes of these strategic designs (Campbell-Hunt, 2000). Based on this theory, only pure strategies lead to superior performance. Combining generic strategies causes most businesses to be “stuck-in-the-middle” and experience poor performance.

Despite the emergence of new theories (e.g., resource-based theory) over the years, the Porter-based perspective, either original (urging against the simultaneous pursuit of more than one generic strategy) or re-conceptualized (favoring the simultaneous pursuit of more than one generic strategy), remains an interesting subject of analysis (Thornhill and White, 2007). This is so because the answer to the fundamental strategy question raised by this perspective (i.e., does strategic purity pay?) is still under review.

Evidence shows that some countries lag behind others in exploring the dominant paradigm of competitive strategy (Salavou, 2010). In some nations, like the U.S. (where the model was created) and Korea, the empirical evidence is ample. Nonetheless, it fails to provide a definite answer. Some studies find evidence for purity while others for a hybrid strategy. The inconsistent findings are due in large part to the ways in which different studies were designed, the constructs operationalized, and the hypotheses framed and tested (Thornhill and White, 2007). New research tries to revisit this important question and improve upon the prior empirical research.

Outside the U.S., and specifically in countries within Europe, the evidence is limited. Research is now trying to produce sufficient evidence in favor of or against strategic purity. Greece is an example of a European country lagging behind in the research of generic strategies. Only three, quite recent, empirical studies (Salavou, 2010; Salavou and Halikias, 2009; Spanos et al., 2004) report on the association of strategies (pure and hybrid) with performance for firms competing either at home or in foreign markets. All in all, these studies conclude that the hybrid, and not the pure, is the dominant form of competitive advantage for Greek firms.
Table 1: Generic strategies based on Porter’s (1980) model

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-cost</td>
<td>The strategy of low-cost involves giving consumers value comparable to that of other products at a lower cost (Porter, 1986). This strategy provides above-average returns because its adherents may lower prices to match those of their most efficient competitor and still earn superior profits (Miller and Friesen, 1986).</td>
</tr>
<tr>
<td>Differentiation</td>
<td>The strategy of differentiation requires that the firm either creates a product or provides a service that is recognized as being unique, thus permitting the firm to command higher-than-average prices. Because of brand loyalty, demand is price-inelastic, leading to higher profit margins for the manufacturer (Aulakh et al., 2000).</td>
</tr>
<tr>
<td>Focus (Low-cost focus and/or Differentiation focus)</td>
<td>The strategy of focus involves serving a specialized segment in terms of a limited geographical market, a specific kind of customer, or a narrow range of products, more effectively or efficiently than competitors who are competing more broadly. The focus strategy may be implemented by achieving low-cost (“low-cost focus strategy”), differentiation (“differentiation focus strategy”), or both (Karnani, 1984).</td>
</tr>
</tbody>
</table>

Based on the aforementioned observations, the present study focuses on the Porter-based perspective and addresses two questions:

- Can we detect differences in generic strategies among different organizations within the food sector?
- What is the direct effect of generic strategies on organizational performance within the food sector?
To answer the first question, this study performs factor analysis to identify generic strategies and one-way ANOVA to investigate differences across different organizations. A multiple linear regression analysis is used to answer the second question. Answering these questions is crucial, since Greece lacks empirical evidence on strategic issues for the food sector. Furthermore, this is the first Greek study that compares the strategies of private food firms and agricultural cooperatives. This comparison is particularly noteworthy because of fundamental differences in the nature of the respective organizations (Krogt et al., 2007; Hendrikse and Veerman, 2001; van Bekkum and van Dijk, 1997; Cook, 1995). First, cooperatives, unlike private firms, are mainly production-oriented and almost always vertically integrated, extending from farming operations to after-sales services (Kyriakopoulos and van Bekkum, 1999; Nilsson, 1998). Second, contrary to private firms, cooperatives aim to maximize the benefits of their members, have limited access to equity capital, and show greater reluctance to make long-term investments (Krogt et al., 2007; Hardesty, 2005; Kyriakopoulos et al., 2004; Nilsson, 2001). Third, cooperatives’ weak marketing efforts do not allow unique product offerings like those of private firms (Lamprinopoulou et al., 2006; Oustapassidis et al., 1993). And last, the lack of strategic focus (Kyriakopoulos et al., 2004; Katz, 1997; Hakelius, 1996; Fulton, 1995; Royer, 1995) makes Greek agricultural cooperatives extremely vulnerable (Benos et al., 2007) and incapable of responding to rapid changes in dynamic markets (Novkovic and Power, 2005; Goldsmith and Gow, 2004; Peterson and Anderson, 1996).

To the best of our knowledge, only few recent European studies (Baros and Santos, 2007; Sergaki and Semos, 2006) with a focus on performance contrast agricultural cooperatives and private food firms. For example, Baros and Santos (2007) apply benchmark analysis to Portuguese wine producers to detect differences in efficiency between cooperatives and private firms. The evidence shows that differences in resources (management practices, distribution networks, etc.) allow wine cooperatives to reach higher efficiency levels compared to private wine firms. Sergaki and Semos (2006) use financial data to compare the performance of 93 agricultural cooperatives and 967 private food firms in Greece. The results suggest that cooperatives are less efficient than private firms, as the former experience higher leverage levels and higher operating costs than the latter. Consequently, Greek agricultural cooperatives face greater difficulty in adopting differentiation-based strategies.

Apart from the limited research in Europe, the food sector represents an interesting case because of its importance for the Greek economy and manufacturing industry in general (IOBE, 2010). It constitutes 17% of the total number of Greek enterprises, contributing 22% of total employment and 21%
of annual turnover in the manufacturing industry. Agricultural cooperatives make a very small contribution to the food sector (about 8% of the total number of organizations). Nonetheless, they play a crucial role in uplifting the socio-economic conditions of their members (Greek producers) and the local communities. Greek agricultural cooperatives not only increase the negotiating power of farmers but also act as important development drivers (Sergaki and Nastis, 2011; Theodosiou et al., 2010) by contributing to the economic viability of rural areas in the less favored regions in Greece. However, Greek agricultural cooperatives have only recently begun systematic efforts to re-engineer their organizational attributes. The Greek law on agricultural cooperatives (Law of Greece number 2810/2000 adopted on 9 March 2000) permitted re-engineering in their organizational attributes as a way to become flexible, competitive, and develop a strategic focus. In addition, the EU Common Agricultural Policy (CAP) reform facilitated the smooth implementation of organizational changes to make differentiation a feasible strategic option for cooperatives (Benos et al., 2007).

To summarize, this study seeks to present empirical evidence on i) the Porter-based perspective within the Greek food sector and ii) the strategies adopted by private food firms and agricultural cooperatives in Greece.

Methodology

The research sample consists of 61 organizations, including 31 private food firms (IOFs) and 30 agricultural cooperatives in Northern Greece. According to the Pan-Hellenic Confederation of Unions of Agricultural Cooperatives (PASEGES, 2011), almost 30% of all Greek agricultural cooperatives are located in Northern Greece contributing 35% of the total revenue of all Greek agricultural cooperatives. To provide further understanding of the sampled organizations, additional information on the organizations’ age, size, marketing expenses, and capital investment is presented in Table 2. A lower level of marketing and infrastructure activities is expected in agricultural cooperatives as some of their major problems relate to poor financial situation, low capital equipment utilization, organizational arrhythmias, and weak marketing approaches (Sergaki, 2010; Lamprinopoulou et al., 2006; Oustapassidis et al., 1993). Contrary to these expectations, however, no statistically significant differences were found between private firms and cooperatives by the characteristics listed in Table 2.
Table 2: Profile of private firms and agricultural cooperatives within the food sector

<table>
<thead>
<tr>
<th>Features</th>
<th>Private firms</th>
<th>Agricultural cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Age, years since establishment</td>
<td>31</td>
<td>23</td>
</tr>
<tr>
<td>Number of employees</td>
<td>74</td>
<td>81</td>
</tr>
<tr>
<td>Number of external partners</td>
<td>17</td>
<td>54</td>
</tr>
<tr>
<td>Marketing expenses/sales(^a), %</td>
<td>10.6</td>
<td>10.8</td>
</tr>
<tr>
<td>Investment in new machinery and equipment/sales(^a), %</td>
<td>33.4</td>
<td>77.2</td>
</tr>
</tbody>
</table>

Note: none of the differences between private firms and agricultural cooperatives are statistically significant.

\(^a\) Ratios calculated based on three-year averages.

Data were collected during 2009 by a structured questionnaire through personal interviews with the top management, consisting mainly of general managers and sales managers. The questionnaire included specific questions to measure organizational performance and generic business strategies. Organizational performance was measured by a question asking respondents to evaluate the overall firm performance on a three-year basis (response format: 1 = “very low” to 7 = “very high”). This measure is based on a 7-point Likert-type scale adopted from Salavou (2010). Generic business strategies were measured by a question asking respondents to indicate the importance of each of 13 competitive methods (e.g., new product development, broad range of products, etc. – see full list in Table A.1 in the Appendix) to the firm’s overall strategy (response format: 1 = “not at all important” to 7 = “extremely important”). This measure is based on a 13-item, 7-point Likert-type scale adapted from Dess and Davis (1984).
Data analysis and findings

The data were analyzed in three steps using factor analysis, one-way ANOVA, and multiple linear regression. The first step applies factor analysis to the questionnaire data on 13 competitive methods to develop generic strategy dimensions, i.e., certain patterns of employing specific methods for competition. The results of factor analysis (see Appendix) produce four factors corresponding to four generic strategy dimensions:

- differentiation strategy,
- low-cost strategy,
- low-cost focus strategy,
- differentiation focus strategy.

The first strategy—differentiation—emphasizes new product development and broad range of products. The second strategy—low cost—centers on operating efficiency, experienced/trained personnel, and minimum use of outside financing. The third strategy—low-cost focus—pursues activities based on competitive pricing and serving specific geographical markets. The fourth strategy—differentiation focus—involves activities relating to innovations in marketing and manufacturing, specialty products, advertising, reputation within industry, and market growth projections. Taken overall, these four strategies fit to a large extent Porter’s (1980) model and are in line with recent empirical findings for service firms in Greece (Salavou, 2010). The averages of items pertaining to the four extracted factors (see Table A.1) are used to form the variables of differentiation, low-cost, low-cost focus and differentiation focus strategies for further statistical analysis.

The second step of the analysis involves the investigation of possible relationships between the four generic strategies (differentiation, low-cost, low-cost focus, and differentiation focus) and the two organizational types (private firms and agricultural cooperatives). Table 3 reports the findings of the one-way ANOVA, which indicate statistically significant differences ($p < 0.05$) across the organizational types on three of the four generic strategies, namely differentiation, low-cost focus, and differentiation focus. Private firms pay more attention to the two differentiation-based strategies (i.e., the means for both pure differentiation and differentiation focus are higher for private firms), whereas cooperatives emphasize low-cost focus (i.e., the mean for this strategy is higher for agricultural cooperatives). The low-cost strategy appears to be equally important for both types of organizations, as the difference is not statistically significant.
Table 3: Differences in generic strategies between organizational types – one-way ANOVA

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Private firms(^a) (n=31)</th>
<th>Agricultural cooperatives(^a) (n=30)</th>
<th>(F)</th>
<th>(p)-value(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation</td>
<td>5.23(^*)</td>
<td>4.45(^*)</td>
<td>6.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Low-cost</td>
<td>5.48</td>
<td>5.20</td>
<td>1.45</td>
<td>0.23</td>
</tr>
<tr>
<td>Low-cost focus</td>
<td>4.76(^*)</td>
<td>5.34(^*)</td>
<td>4.20</td>
<td>0.04</td>
</tr>
<tr>
<td>Differentiation focus</td>
<td>5.30(^*)</td>
<td>4.28(^*)</td>
<td>11.02</td>
<td>0.00</td>
</tr>
</tbody>
</table>

\(^a\)The values for each generic strategy are constructed as the averages of items pertaining to the four extracted factors (see Table A.1). The table shows the means of these values by organizational type.

\(^b\)Significance level (\(p\)-value) is based on one-way analysis of variance.

\(^*\)Differences statistically significant at 5% level.

The third step applies a multiple linear regression model to explore the direct effect of the four generic strategies on organizational performance while controlling for the organizational type. Table 4 reports the regression results. The findings indicate that two of the four explanatory variables—the low-cost strategy and the differentiation focus strategy—have statistically significant coefficients. The coefficient of the organizational-type dummy variable is not statistically significant, implying that in this study there are no differences in organizational performance between private firms and agricultural cooperatives. We see from Table 4 that the variation in organizational performance is satisfactorily explained by the following model (\(R^2=0.31\)):

\[
\text{Organizational performance} = 3.18 + 0.32\text{low cost strategy} + 0.29\text{differentiation focus strategy}
\]
Table 4: Results of multiple linear regression analysis (n = 61)
Dependent variable: Organizational performance

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Estimated standardized coefficient</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation strategy</td>
<td>0.13</td>
<td>0.99</td>
</tr>
<tr>
<td>Low-cost strategy</td>
<td>0.32**</td>
<td>2.60</td>
</tr>
<tr>
<td>Low-cost focus strategy</td>
<td>-0.01</td>
<td>-0.06</td>
</tr>
<tr>
<td>Differentiation focus strategy</td>
<td>0.29*</td>
<td>1.97</td>
</tr>
<tr>
<td>Organizational type (1= private firm, 2=agricultural cooperative)</td>
<td>-0.17</td>
<td>-1.16</td>
</tr>
<tr>
<td>Model F</td>
<td>5.40**</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.31</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01

Conclusions

Our study shows that Porter’s taxonomy is also applicable to strategic choices of organizations within the food sector of a European country, namely Greece. This extends the existing empirical evidence beyond the manufacturing sector and, geographically, beyond the U.S., which have previously been used as the testing ground for Porter’s model.

The objective of this empirical study was two-fold: i) to detect differences in generic strategies among different organizational types (private firms and agricultural cooperatives) and ii) to investigate the direct effect of generic strategies on organizational performance within the food sector in Greece. The evidence shows that private food firms and agricultural cooperatives in the food sector in Northern Greece indeed follow different generic strategies. Private food firms emphasize differentiation-based strategies (pure differentiation and differentiation focus), whereas agricultural cooperatives show greater proclivity for the low-cost focus strategy. The pure low-cost strategy is equally important for both types of organizations.

The empirical evidence further shows that some generic strategies have a positive effect on organizational performance. The pure low-cost strategy and the differentiation focus strategy improve organizational performance, regardless of the organizational type. The strategies of pure differentiation and low-cost focus, on the other hand, do not have a statistically significant impact on organizational performance.

Based on these empirical findings, the study offers meaningful implications for practitioners in Greece:
The strategy of low cost remains a performance-improving choice for both private firms and agricultural cooperatives within the food sector in Greece. Differentiation focus constitutes another performance-rewarding strategy and it furthermore appears to be a more attractive option for private food firms. The pure differentiation strategy, although a preferred choice for private food firms, does not influence organizational performance. The low-cost focus strategy, although the most suitable option for agricultural cooperatives, has no impact on organizational performance outcomes.

These implications will have a wider appeal once the findings are confirmed in comparable national contexts within Europe.

All in all, this study reveals differences in the strategic positioning of private food firms and agricultural cooperatives and highlights the leading role of some generic strategies to improve organizational performance. These findings are vital for policy-makers, as both globalization and concentration within the retail sector cause tremendous power imbalance between different parts of the food chain. Currently, a handful of retailers are the trading partners of some 13.4 million farmers and 310,000 food-industry enterprises across Europe, putting producers and small food firms in an unfavorable competitive situation (COGECA, 2010). Apart from this hostile environment, the majority of Greek agricultural cooperatives have difficulties in competing due to internal weaknesses (Goldsmith and Gow, 2004; Peterson and Anderson, 1996). Consequently, politicians are advised to establish mechanisms i) to help the farmers’ entrepreneurial initiatives, ii) to validate the appropriate agricultural legislation (compatible with competition law) that strengthens the producers within the food chain, and iii) to promote self-regulation by adopting codes of conduct (COGECA, 2010). Such mechanisms should be considered along with incentives helping organizations to adopt performance-improving generic strategies and secure competitive advantages. In this context, agricultural cooperatives might be able to advance low-cost drivers to gain a profitable cost leadership position and/or develop marketing elements for adopting differentiation-based strategic choices. Similarly, private food firms might be able to enhance the uniqueness in their product offerings and reap higher rewards.

This study has some limitations. First, the sample consists of agricultural cooperatives located in Northern Greece. A fruitful direction of future research is to examine whether agricultural cooperatives located in other regions of Greece confirm these empirical findings. Second, the organizational performance measure is based on perceived assessments of the respondents. Future research can help to confirm or refute these particular findings by using alternate performance indicators (i.e., objective performance measures).
Appendix: Extraction of generic strategies by factor analysis

Confirmatory Factor Analysis (CFA) using EQS – Structural Equation Modeling Software (Bentler and Wu, 1995) was applied to identify four factors corresponding to the four generic strategies from a list of 13 competitive methods (Table A.1). For each competitive method, the respondents indicated its importance to their organization’s overall strategy on a 7-point Likert-type scale ranging from 1 = “not at all important” to 7 = “extremely important”.

Unlike the traditional and more commonly used Exploratory Factor Analysis (EFA), CFA produces inferential statistics that allow for a stricter and more objective interpretation of validity (Gerbing and Anderson, 1988). Two sets of statistics are used for the verification of unidimensionality and convergent validity (Venkatraman, 1989): 1) the significance of the factor loadings (z-values > ± 1.96 and p<0.05), i.e., the estimated correlation between a particular item and the latent construct it represents, and 2) the overall acceptability of the measurement model in terms of its fit to the data, using a $\chi^2$ test and associated goodness-of-fit indexes (CFI, IFI, MFI), which should exceed the cut-off point of 0.90. Table A.1 reports the results in support of unidimensionality and convergent validity of the competitive methods measure. In addition, the inter-item reliability coefficient of this measure is 0.78, which is acceptable according to the organizational attribute reliability standards suggested by Van de Ven and Ferry (1980).

Table A.1. Generic strategies identified by Confirmatory Factor Analysis among 13 competitive methods (unidimensionality and convergent validity tests)

<table>
<thead>
<tr>
<th>Competitive methods grouped by strategy</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation:</td>
<td></td>
</tr>
<tr>
<td>New product development</td>
<td>1.00</td>
</tr>
<tr>
<td>Broad range of products</td>
<td>0.40</td>
</tr>
<tr>
<td>Low-cost:</td>
<td></td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>0.63</td>
</tr>
<tr>
<td>Experienced/trained personnel</td>
<td>0.73</td>
</tr>
<tr>
<td>Minimum use of outside financing</td>
<td>0.30</td>
</tr>
<tr>
<td>Low-cost focus:</td>
<td></td>
</tr>
<tr>
<td>Competitive pricing</td>
<td>0.40</td>
</tr>
<tr>
<td>Serving specific geographic markets</td>
<td>0.98</td>
</tr>
</tbody>
</table>
Competitive methods grouped by strategy

<table>
<thead>
<tr>
<th>Differentiation focus:</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation in marketing techniques and methods</td>
<td>0.78</td>
</tr>
<tr>
<td>Innovation in manufacturing processes</td>
<td>0.70</td>
</tr>
<tr>
<td>Capacity to manufacture specialty products</td>
<td>0.72</td>
</tr>
<tr>
<td>Advertising</td>
<td>0.78</td>
</tr>
<tr>
<td>Reputation within industry</td>
<td>0.72</td>
</tr>
<tr>
<td>Forecasting market growth</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Model summary statistics: $\chi^2 (55) = 44.49, p = 0.84$, CFI = 1.00, IFI = 1.05, MFI = 1.10.

All factor loadings are significant at $p<0.05$

References


