ECONOMIC CRISIS AND FIRMS' PERFORMANCE: EMPIRICAL EVIDENCE FOR THE GREEK CHEESE INDUSTRY

KONTOGEORGOS, Achilleas *
PENDARAKI, Konstantina
CHATZITHEODORIDIS, Fotios

Abstract
The main purpose of this paper is to empirically explore the characteristics of the cheese sector that lead businesses in Greece to profitability. It is also important to evaluate the impact of the current economic crisis on the economic performance of cheese enterprises. This study uses a panel data set that come from balance sheets and income statements of almost 100 companies operating in the cheese sector for the period 2006 to 2011. The first results show that during this economic crisis period, the profitability of cheese businesses has been affected adversely. Moreover, the smaller sized businesses are presenting the most significant efficiency and profitability losses.
JEL Classification: L25, Q13, C23
Keywords**:** Greece, Economic Crisis, Cheese industry, Firm performance, Panel Data Analysis

1. Introduction

Because of the Greek economic crisis almost all businesses are navigating difficult times with severe consequences for employment and the whole economy. During the 2010 the Greek government committed to lower its fiscal deficit through the implementation of a series of austerity measures because of the agreement with the International Monetary Fund, the European Central Bank, and the European Commission. The implementation of this strict austerity program caused a substantial decrease in demand for goods and services pushing the Greek firms to a deep recession. The initial economic downturn, has affected almost all sectors of the economy. Recent data report that the deficit of Greece is 10.8% of GNP and the public debt 367.3 billion €. The recession at 2011 had to do with the decrease of investments about 20% and the unemployment the first semester of 2012 has been about 22.6%. According to Bourletidis (2013), the economic crisis has affected all sectors of businesses activity. Voulgaridis et al. (2015) pointed out that the economic crisis leaded the companies cut off investments, wages, and reduced personnel. Nevertheless, the high rate of unemployment reduced workers' income resulting to a further reduction of consumption. The whole situation simply feeds a recession cycle that cannot break without radical economic reform for the whole country and its economic activities. Thus, the Greek economic crisis continues to be a severe shock to most enterprises.

Sternad (2012) demonstrated that severe economic crises and changing environments can pose constraints as well as create opportunities for organizations. According to Frishammar (2006), economic crises are environments which are both uncertain and complex, and in which individuals limited cognitive abilities and processing capacities

* Achilleas Kontogeorgos and Konstantina Pendaraki, University of Patras, Greece (akontoge@upatras.gr) , Fotios Chatzitheodoridis, Technological Educational Institute of Western Macedonia Terma Kontopoulou 53100 Florina, Greece (fxtheo@florina.teiwm.gr).
http://www.teiwm.gr/site/fxtheo, https://www.teiwm.gr/dir/cv/7en.pdf

make a full understanding of all involved factors and the relationship between them virtually impossible. Miller et al. (1996), claims that crisis situations such as a sudden decline in demand, subsequent cash shortages, and falling short of targeted performance levels lead to a need to broaden the strategic repertoire of managers as the success recipes of the past may no longer lead to desired outcomes. Anghel et al. (2013) stated that the companies must adapt their business strategies to cope with the crisis. A first step towards this adaption is to study performance mechanisms and understand how the economic crisis has affected businesses' profitability.

Notta and Vlachvei (2014) taking into account that firm performance deteriorates during a crisis, to a certain extent, estimate that firm performance will be impacted by the crisis. This paper attempts to identify the determinants of firms' performance and to investigate firstly if commercial, manufacturing firms and agricultural cooperatives confront the same effect of the economic crisis on their performance. Therefore, this paper aims to improve the general understanding about the performance of Greek both commercial and manufacturing food firms, cheese firms more specific, before and during the recent economic crisis by using firm level data.

The following paper is organized as follows: Next section argues about economic crisis and its effect on firms' profitability and summarizes the results of some recent surveys about the Greek Dairy and Cheese sectors. In section 3 there is a short description of the data set used in this paper. The section ends with the presentation of the theoretical model used to determine cheese firms' profitability. In Section 4 there are the empirical results of the analysis and the last section offers some concluding remarks.

2. Economic Crisis and Firms' Performance

According Bonciu (2010) there are many recent papers that have studied firms' performance during the 2008–09 crisis and how various factors propagated the shocks. For example, Claessens, et al. (2011) examined the performance of manufacturing firms in 42 countries and found that the crisis had a bigger negative impact on firms with greater sensitivity to aggregate demand and international trade. Laeven and Valencia (2011), using cross-country data found that the growth of firms more dependent on external financing was more positively affected by bank recapitalization and stimulus fiscal policies. Bricongne et al. (2012) using a sample of French firms showed that the effect of crisis on large firms has been mainly at the intensive margin and has affected less the products being offered to export destinations.

Latham (2009) revel that small businesses are the first victims of a prolonged economic crisis. Also, SMEs are those who are disproportionately affected compared with the larger enterprises, due to limited financial resources and the main dependence on bank lending, forcing them to pay higher interest rates than large firms, which the burden even more effective in times of crisis. Storey (1994) has discussed the general differences between large and small firms in terms of centrality of owner-manager, the structure, resources and number, and variety of products and range of markets served. In smaller firms, owner-managers are less able to influence competitive environment than larger firms. Jennings and Beaver (1997) have shown that the smaller firms' organization structures are likely to be organic and loosely structured rather than mechanistic and

highly formalized. In smaller firms, all the roles will either be performed by one manager or by a very narrow range of managers who may have been appointed because they are family members or friends rather than on the basis of ability or education.

Thus, it is worth investigating whether better corporate governance impacts the performance of family and non-family businesses during the crisis. Aldamen et al. (2011) claimed that better governance, irrespective of whether the firm is family or non-family, is associated with better accounting and market performance during the crisis, while Chaston (2012) claimed that family-owned hotels outperformed nonfamily businesses mainly due to their entrepreneurial orientation and strategic flexibility. Another, worth investigating point is the resilience of the agricultural cooperatives in economic crisis periods. It is believed, that cooperatives play an important role in discovering successful markets for agricultural products (see for example Gavruchenko et al., 2003 for organic olive oil). Moreover, according to Bardsley and Bardsley (2014) agricultural cooperatives could help to retain flexibility, and enhance resilience, in a rapidly changing agricultural marketplace. Nevertheless, performance seems to be strongly dependent on firms' strategy choices even for SMEs (Jones and Tiley, 2003; Anghel et al., 2013) and agricultural cooperatives (Baourakis et al., 2003, Salavou and Sergaki, 2013). A recent research of Pavlatos and Kostakis (2015) in Greece showed that during the crisis, strategic and planning tools as well as Strategic management accounting techniques were considered more important and thus were used more extensively by companies as compared to the period before the crisis.

Kontogeorgos et al. (2014) have shown that the major problems faced by the Greek dairy and cheese SMEs are the liquidity problems along with tax and social security payments in combination with the services provided to them by these public organizations. Most probably, the amount of the payments to these organizations makes the managers-owners of the SMEs to demand higher quality services. Some other important finding of the aforementioned study is that the efforts made by the examined SMEs to reduce production and labour cost had not a direct impact on their profitability. In addition, one out of three of the examined SMEs had chosen as their strategy to confront the economic crisis to wait, without any reaction in the whole economic situation. This study concludes that only those dairy and cheese firms who have choose to expand in new markets consider that investments are a necessary tactic to exit the economic crisis. This is, in accordance with the conclusion of Candemir and Zalluhoglu (2011), that the companies, giving importance to marketing expenditures and even increasing them during the crises periods may not only achieve the opportunity to overcome the difficulties of a crisis but also gain competitive power.

The results of another recent study about the Greek dairy industry (see, Notta & Vlachvei, 2014) have showed that before crisis (the period 2006 to 2008) only market share has affected positively and statistically significant the profitability of dairy firms. (i.e. the larger size, the greater the profitability). For the period during economic crisis (2009 - 2011) market share, liquidity and leverage have significant effect on profits and could be used to explain profitability differences among the dairy firms. The coefficient of market share was positive and significant, which proves that even during crisis firms with large market share and loyal customers are more competitive and profitable. The coefficient of liquidity was also positive and significant during economic crisis, which shows that liquidity during downturns is essential for the survival and competitiveness of dairy firms.

3. Survey Data and Methodology

The Greek cheese industry consists of many firms different in size and contribution to the sector. More specific there are a large number of small family firms with low manufacturing capacity and a considerable number of import and commercial firms with large market shares and widely known branded products and thus, with a significant contribution to the food and beverage industry. In addition, some of the most successful agricultural cooperatives are also operating in the cheese industry.

Table 1. Basic Figures for the Greek Cheese Market

Greek Production	Imports	Exports	Total Consumption	Market value
300,000tn	110,000tn	50,000tn	360,000tn	1.6 billion €

Source: ICAP, 2012

The Greek cheese industry can be characterized as traditional and at the same time as one of the most important and dynamic industry of the food and drink processing sector. In general, dairy sector in Greece has contributed in 2009 17% of production value, 15,5% in terms of gross value added and 20% of the total food and drink industry sales. According to ICAP (2012) the value of the domestic dairy market (at wholesale prices for 2011) was estimated at 1.6 billion €uro.

The sample of this study consists of 98 cheese firms, operating in Greece with more than 20% of their sales coming from Cheese products. Data were collected through financial statements for the period 2006-2011 obtained by the ICAP business directory. Annual data for each firm were calculated from their balance sheets and income statements. In contrast to other countries where firm level data are confidential, Greek manufacturing firms are obliged to publish their annual balance sheets and income statements. The relevant data are available on an annual basis from proprietary service companies. These detailed financial statements have been used to calculate a series of financial indicators used in this study.

There are many variables and econometric models, which have been used to investigate the factors that affect the performance of a firm. The available balance sheet data for the Greek cheese firms in combination with previous researches on estimating performance models (profitability) was used to come up with the following theoretical model in order to identify and quantify the factors that explain profitability of cheese firms operating in Greece, by using panel data analysis over the period 2006-2011:

$$Profitability = a_0 + a_1 Size + a_2 Liq + a_3 Cap\_Stru + a_4 Act + a_5 Firm\_type + a_6 Crisis$$

Where:

Profitability	*Firms' Profitability*
Size:	*Firms' Size*
Lig:	*Liquidity indexes*
Cap_Stru:	*Capital Structure indexes*
Act:	*Activity indexes*
Firm type:	*Commercial firm, manufacturing firm & Agricultural Cooperatives*
Crisis:	*Two time periods (2006-2008 & 2009-2011)*

Table 2, briefly presents the variables examined in this profitability model and their theoretical impact on profitability. The firms' size variable (TA) is expected to show the superior performance of the larger firms. In an oligopolistic market the larger firms could apply their own strategies (e.g. advertising, sales promotion, etc.) and make the other firms follow. Thus, increased size could provide firms with a comparative advantage that result in an increase of their profit margin. In addition, liquidity indexes (i.e. the ability of firms to convert assets into cash) could also have a positive impact on a firms' performance since a firm could easily access cash to respond to profit opportunities.

Table 2. The Variables used and their theoretical impact on the profitability model

Variable:	**Variable name:**		**Theoretical impact on profitability**
Profitability	GPSAL	Gross Profit over Sales	---
Firms' Size	TA:	Total Assets	Positive
Liquidity	QR:	Acid Test Ratio or Quick Ratio	Positive
Capital Structure	TLEQ:	Credibility index	Negative
Activity indexes	SATA:	Assets Turnover Index	Positive
	SAREC:	Receivables Turnover Index	Negative
Agricultural Cooperative	Coop:	Agricultural Cooperative = 1, else= (dummy variable)	Under investigation
Manufacturing /commercial Firm	Prod:	Manufacturing firm = 1 Commercial Firm = 0	Under investigation
Crisis Period	Crisis	2009-2011 = 1 2006-2008 = 0	Under investigation

A company's capital structure, at a particular point in time, (indicative also for financial solvency and leverage) can be calculated by the credibility index (TLEQ: total liabilities over total equity). Firms can finance their operations through either debt or equity. This index gives an idea of a firm's financial structure, or how it is financing its operations, along with some insight into its financial strength. The higher the index, the more debt the firm has compared to its equity. A firm with a higher index, compared to a general or industry average, may show weak financial strength since the cost of these debts may weigh on the firm and increase its default risk.

Activity indexes are calculated to measure the efficiency with which the resources of a firm have been employed. Total asset turnover measures a firm's efficiency at using its assets in generating sales, the higher the number the better the firm's financial position. In general firms with low profit margins tend to have high asset turnover, while those with high profit margins have low asset turnover. The receivable turnover shows how quickly a company collects what is owed to it and indicates the liquidity of the receivables. Activity indexes show how efficient is the management of a firm.

In the profitability model of this study we have also include two dummy variables for the different firm types; one to discriminate commercial and manufacturing firms and one more to distinguish agricultural cooperative firms from investor owned firms (for more details of the examined firms see table 3). Finally, one more dummy variable has been included for the two examined periods pre-crisis (2006-2008) and during crisis (2009-2011).

Table 3. Firms' types participating in the survey

Firm Type	Frequency	Percentage
Manufacturing Firms	69	71,5%
Commercial Firms	25	25,5%
Agricultural Cooperatives	4	4%
Total	98	100%

The method of least squares (OLS) in panel data format often violates the assumptions made for the form of the error (see Green, 2003). For example, the error may display heteroscedasticity which means that each Cooperative has its own variation, show contemporaneous correlation i.e., the error of the estimate of the profitability of a Cooperative to be correlated with the errors of others for the same year and finally, the error to be correlated serially (autocorrelation) which means that an error of a Cooperative is correlated with the errors of previous years for the same cooperative. Therefore, estimates of these methodologies (OLS, Fixed & Random Effects) are not valid since the residual check indicates a violation of basic assumptions of the used data.

The assessment of the examined model was conducted using the Generalized Error Structure model, which is based on the following model:

$$Y_{it} = X'_{it\beta} + E_{it} \quad i = 1,...,N; \quad t = 1,..., T \qquad \text{Generalized Error Structure Model}$$

This model examines panel data without separating the error term. Stata Software can calculate many approaches that have been proposed for assessing such models. The biggest advantage using these models is the fact that they can make estimates of the coefficients correcting heteroscedasticity and autocorrelation, both in general and for each separate firm. In this study, we have applied estimation with Driscoll and Kraay standard errors (see Hoechle, 2007) in order to have robust estimators. The results of the estimated model are summarized in Table 6.

4. Results

This section summarizes the results of the analysis. Table 4 presents the descriptive data (mean value and std. deviation) of the sample for the period 2006-2011.

Table 4. Mean values and std. deviation of the estimated model for the period 2006-2011

Variable	Mean	Std. Deviation
GPSAL	0.1495	0.1202
TA(,000 €)	24,900	45,900
QR	1.0310	1.3770
TLEQ	4.2308	14.1513
SAREC	0.4308	1.5573
SATA	1.1543	0.6020

To test whether there are significant differences between the variables used in the model for the pre-crisis and during crisis periods we have compared mean values for these two periods with the two-sample Wilcoxon rank-sum (Mann-Whitney) test for the variables' mean values. However, the Tests results indicate that there is no statistically significant difference, even for $\alpha < 0.10$, for the variables used in the examined

profitability model between the two examined periods. The results of the analysis are presented at table 5.

Table 5. Mean values and std. deviation for the periods 2006-2008 and 2009-2011

	2006-2008		2009-2011		
Variable	**Mean Value**	**Std. Deviation**	**Mean Value**	**Std. Deviation**	**Comparing Mean Values[1] Z value (Prob > |z|)**
GPSAL	0.1474	0.0071	0.1516	0.0074	-1.029 (0.3036)
TA (0,000 €)	23,200	2,691.9	26,900	2,891.2	-1.586 (0.1127)
QR	1.0510	0.0927	1.0163	0.0726	-0.478 (0.6328)
TLEQ	4.7524	0.7886	3.6974	0.9300	1.404 (0.1604)
SAREC	0.4936	0.1304	0.3679	0.0165	0.406 (0.6846)
SATA	1.2070	0.0405	1.0984	0.0311	0.980 (0.3269)

[1] Two-sample Wilcoxon rank-sum (Mann-Whitney) test for the variables' mean values (2006-2008 & 2009-2011), i.e. H_0: $GPSAL_{/2006\text{-}2008} = CPSAL_{/2009\text{-}2011}$. *Note: Tests results indicate that there is no statistically significant difference, even for $\alpha < 0.10$, for the two examined periods*

The next step in the analysis was to estimate the profitability model. It has been aforementioned that the model was estimated by using the Driscoll-Kraay Standard Errors in order to avoid the problems of heteroskedasticity and autocorrelation. Our estimation shows that almost all variables used are statistically significant (at a<0.1) and with the expected signs. The variables that are not statistically significant are the assets turnover index (with an opposite sign) and the credibility index (capital structure), however its sign is the expected one. The other indexes used in the analysis show that the size of the examined firms positively affects, as theoretically expected, the profitability of cheese firms (at 1% significance level). The index of liquidity (quick ratio) appears to affect positively, as theoretically expected, the profitability (at 1% significance level) and finally the receivables turnover index affects negatively (accordingly to theory) the profitability of cheese firms (1% significance level). Table 6 presents the analysis results.

Table 6. Profitability's determinants for the Greek cheese firms for the period 2006-2011

	Estimation Method			
	Regression with Driscoll-Kraay Standard Errors			
Dependent variable GPSAL	**Coef.**	**Std. Err.**	**t**	**P>t**
COOP	0.029013	0.0075	3.82	0.000
PROD	-0.0430	0.0109	-3.92	0.000
Crisis	-0.00641	0.0035	-1.79	0.077
TA	8.65e-10	2.99e-11	28.90	0.000
QR	0.0070	0.0018	3.90	0.000
TLEQ	-0.0004	0.0003	-1.63	0.107
SAREC	-0.0091	0.0017	-5.12	0.000
SATA	-0.0105	0.0097	-1.08	0.282
Constant term	0.156528	0.0135	11.52	0.000
Panels:	Heteroskedastic			
Correlation:	panel-specific AR(1)			
N (Comments)	5461			
F(8, 97)	496,350			
R^2	0.3220			

According to the descriptive data, there is no statistically significant difference between the two examined periods (pre-crisis and during crisis). Therefore, we have applied a single profitability model for the whole examined period; alternatively, we could have used two econometric models for the two sub-periods. Thus, we have used a single panel data set for the period 2006-2011 and we formulated a profitability model with firm size, liquidity, capital structure and activity indexes. In addition, we have used two dummy variables to describe manufacturing, commercial and cooperative firms. To test the difference between pre-crisis and during crisis period we have also used a dummy variable to describe these two-time periods.

To summarize the results of the analysis, it must be mentioned that the period of the economic crisis negatively affects the profitability of the Greek cheese firms. This result is a direct consequence of the deep recession of the Greek economy and the enormous decrease in demand for goods and food products. The rest results of the analysis show that the size of the examined firms positively affects the profitability of cheese firms (at 1% significance level), which strengthens that large firms, even during economic crisis, are more competitive and profitable. The index of liquidity (quick ratio) appears to affect positively the profitability of cheese firms (at 1% significance level). This result also enhances that liquidity during economic recessions is essential for the survival and competitiveness of cheese firms and enables them to maintain their market share and profits. Furthermore, the receivables turnover index affects negatively (accordingly to theory) the profitability of cheese firms. This result highlights the importance of a well-defined debt collecting policy. It has been aforementioned that liquidity problem is one of the most severe problems faced by the Greek cheese and dairy firms, so this makes evident that cheese firms' managers need to pay more attention to issues concerning debt collection and credit extensions.

5. Conclusions

To sum up this study attempts to identify the factors that affect the performance, measured as profitability, of the Greek cheese firms for a period of 6 years (2006-2011), with 3 of them during the severe crisis of the Greek economy. In order to accomplish our study, we have collected annual balance sheet data of 98 cheese firms operating in Greece with more than 20% of their sales coming from cheese products and we have calculated a series of selected financial indexes. According to the results of this study manufacturing companies are less profitable than commercial companies. This result could possibly be ascribed to the size of the examined cheese firms. The majority of manufacturing cheese firms is of small and medium size with low productivity capability; on the other hand, commercial firms are usually the largest firms of the cheese market. Moreover, agricultural cooperatives operating in the cheese market seem to better perform than investor owned firms. The corresponding variable in the profitability model affects positively the profitability of the cheese firms while it is statistically significant. This result could be used to prove the resilience of the cooperative business model in times of crisis. However, it must be noted that there are only four agricultural cooperatives in our sample and the most important these cooperative firms are among the most successful (in terms of profitability) cooperative firms in Greece. Nevertheless, this fact neither reduces the resilience of the cooperative business model to economic crisis nor their ability to address the current or future economic crisis.

Bibliography

Aldamen, H., Duncan, K., Kelly, S., McNamara, R. (2011). Performance of Family Firms during the Global Financial Crisis: Does Governance Matter? Proceedings of 2012 Financial Markets & Corporate Governance Conference, SSRN. (http://dx.doi.org/10.2139/ssrn.1976789).

Anghel, L.D., Constantinescu, M., and Caescu, S.C. (2013). "Innovation within the Strategic Marketing Management of Industrial SMEs as a Response to the Economic Crisis", *Transformations on Business and Economics*, Vol.12, No. 1A(28ª). pp. 412-428.

Baourakis, G. Kalogeras, N. Van Dijk, G. and Chatzitheodoridis, F. (2003). "Assessing the Financial Performance of Marketing Cooperatives and Investor Owned Firms: a multicriteria Methodology", Proceedings of the European Research Conference (EURESCO) on "*Vertical Markets and Cooperative Hierarchies: A Euro Conference on Agri-Food Cooperatives in the New Millennium: Competition & Organization*", Germany.

Bardsley, D.K. and Bardsley, A.M. (2014). "Organizing for socio-ecological resilience: The roles of the mountain farmer cooperative genossenschaft gran alpin in graubünden, Switzerland", *Ecological Economics,* Vol. 98, pp. 11–21

Bonciu, F. (2010). "Competition and State Intervention under Economic Crisis Circumstances: Some Characteristics of Romania", *Transformations on Business and Economics*, Vol.9, No. 1(19), pp. 260-272.

Bourletidis, K. (2013). "The strategic management of market information to SMEs during economic crisis", *Procedia - Social and Behavioral Sciences*, Vol. 73, pp.598 – 606.

Bricongne, J.C., Fontagné, L., Gaulier, G., Taglioni, D. and Vicard, V. (2012). "Firms and the Global Crisis: French Exports in the Turmoil", *Journal of International Economics,* Vol. 87, pp. 134-146.

Candemir, A. and Zalluhoglu, A.E., (2011). "The effect of marketing expenditures during financial crisis: the case of Turkey", 7th International Strategic Management Conference, *Procedia Social and Behavioral Sciences*, Vol. 24, 291–299.

Chaston, I. (2012). "Recession and Family Firm Performance: An Assessment of Small U.K. Family-Owned Hotels", *Journal of CENTRUM Cathedra,* Vol. 5, pp. 60-69.

Claessens, S., Djankov, S. and Xu, L.C. (2011). "Corporate Performance in the East Asian Financial Crisis", *World Bank Research Observer*, Vol. 15, pp. 23-46.

Frishammar, J. (2006). "Organizational Environment Revisited", *International Studies of Management & Organization*, Vol. 36, No. 3, pp.22–49.

Gavruchenko, T., Baltas, G., Chatzitheodoridis, F. and Hadjidakis, S. (2003). "Comparative Marketing Strategies for Organic Olive Oil: The Case of Greece and Holland", *Cahier Options Mediterranee*, Vol.61, pp. 247–256.

Greene, W.H. (2003). *"Econometric Analysis. 5th Edition*", New Jersey, Prentice-Hall.

Hoechle, D. (2007). "Robust standard errors for panel regressions with cross–sectional dependence", *The Stata Journal*, Vol. 7, No. 3, pp. 281-312.

ICAP, (2012). Cheese Industry in Greece. 2012 Report (in Greek).

Jennings, P. and Beaver, G. (1997). "The Performance and Competitive Advantage of Small Firms; a management perspective", *International Small Business Journal*, Vol. 15, No. 2, pp. 63-75.

Jones, O. and Tilley, F. (2003). *Competitive Advantage in SMEs: organizing for innovation and change*, Willey.

Kontogeorgos, A., Chatzitheodoridis, F., Arvanitakis, S. and Theodossiou, G. (2014). "Greek Small & Medium Sized Dairy & Cheese Enterprises: A Strategic Assessment under the Economic Crisis", *Studia Negotia*, Vol. 59, No. 3, pp.19-34.

Laeven, L., and Valencia, F. (2011). The Real Effects of Financial Sector Interventions during Crises, IMF Working Papers 11/45.

Latham, S. (2009). "Contrasting Strategic Response to Economic Recession in Start-Up versus Established Software Firms", *Journal of Small Business Management*, Vol. 47, No. 2, pp. 180-201.

Notta. O. and Vlachvei, A. (2014). "The impact of Financial Crisis on firm performance in case of Greek food manufacturing firms", *Procedia Economics and Finance*, Vol. 14, pp. 454 – 460.

Pavlatos, O and Kostakis, H., (2015). "Management accounting practices before and during economic crisis: Evidence from Greece", *Advances in Accounting,* Vol. 31, No. 1, pp. 150–164

Salavou, H.E. and Sergaki P. (2013). "Generic Business Strategies in Greece: Private Food Firms versus Agricultural Cooperatives", *Journal of Rural Co-operation*, Vol. 41, No. 1, pp. 44-59.

Sternad, D. (2012). "Adaptive Strategies in Response to the Economic Crisis: A Cross-Cultural Study in Austria and Slovenia", *Managing Global Transitions*, Vol. 10, No. 3, pp. 257-282

Storey, D.J. (1994). *"Understanding the Small Business Sector",* London: Routledge.

Voulgaris, F., Agiomirgianakis. G. and Papadogonas, T., (2015). "Job creation and job destruction in economic crisis at firm level: the case of Greek manufacturing sectors" *International Economics and Economic Policy*, 12:21–39.