# The contagious effects of the economic crisis regarding wood and furniture sectors in Greece and Cyprus

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**Abstract:** The present study investigates the consequences of the economic crisis in the wood and furniture sectors of two economically linked countries, Greece and Cyprus, in order to study the contagion mechanisms and its impact on firms' performance. It further compares ways to confront the crisis and indicates strategies that may lead to strong competitive advantages, firms' survival and growth in both countries. In their majority, Greek and Cypriot wood and furniture enterprises have been affected by the crisis negatively or very negatively, while there is a very small percentage showing positive performance. There are many similarities among the companies of the industry in both countries with a time lag of 18–24 months approximately. The evaluation of proposed measures by the Cypriot wood and furniture enterprises for the crisis intervention has indicated better efficient monitoring, innovation, technology and furniture certification according to European norms as the most important ones.

**Keywords:** economic crisis; furniture and wood enterprises; marketing strategies; crisis cross-country contagion; firms; Greece; Cyprus.

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# **1** Introduction – motivation

The globalised markets of today do not allow any open economy to insulate itself from what is happening in the rest of the world. The recent global financial crisis of 2008 and the Euro zone debt crisis reveal in the most vivid way the interactions and linkages between national economies and the world's global market. The question that rises from this experience is whether crises are contagious and which are the transmission channels between countries and specific economic sectors. Extended research in this field attempted to explore whether a crisis can be contagious based on macroeconomic data and to focus towards the determination of the specific channels by which a crisis in one country spreads to others, using firm-level micro data (Claessens et al., 2012). Exploring and decoding the relevant contagion mechanisms is a major way to prevent the spread of economic crisis (Fasika and Pozo, 2008).

Transmission through these channels can be common and affect multiple countries at the same time or it can be country specific. The second is often possible to depend on country's specific financial and trade linkages, exposure to financial markets, structural characteristics, vulnerabilities or implementing policies (Balakrishnan et al., 2009; Berglöf et al., 2009). A common belief regarding sectoral economic activity is that crises have a negative impact on development (Berkmen et al., 2009; Kroszner et al., 2007). Trade channels are highlighted as important ways of crises transmission among firms between countries (Forbes, 2004).

The purpose of the present study is to benchmark the consequences of the economic crisis in the wood and furniture sectors of two economically linked countries (Greece and Cyprus), in order to study the contagion mechanisms and its time lag and the effects concerning alterations in enterprises' sales, profits, market share and their number of customers. Furthermore, the present study aims to highlight the initiatives and mainly the directly applied strategies of the enterprises in order to confront economic crisis and their forecasting regarding their future.

# 2 Literature review

#### 2.1 Cross-country economic linkages and transmission channels of crises

During the last period there has been a diligent discussion about the causes and the effects of the recent global financial and economic crisis across countries. Although researchers seem to agree on the causes of the crisis, conflicts emerge on the channels of transmission regarding mainly the latest global crisis across countries as well as the impact of country-specific characteristics on the economies (Claessens et al., 2012). Recent theories argue on weaknesses in exposure, vulnerability of economies and financial systems to the fluctuations which have their origins in the financial centres, as well as heterogeneities in the macroeconomic and institutional frameworks and in the implementing policies (Chevallier, 2012; Cetorelli and Goldberg, 2011; Berkmen et al., 2009). Serious structural and political weaknesses and extreme endogenous problems of the Greek economy were revealed with the Euro zone debt crisis and the global financial crisis. These have also accelerated the impacts at national level (Kouretas and Vlamis, 2010; Berglöf et al., 2009).

Research on the transmission channels of financial crises is the subject of a rich literature (Rose and Spiegel, 2011, 2012; Chevallier, 2012; Claessens et al., 2012; Berkmen et al., 2009; Balakrishnan et al., 2009; Fasika and Poszo, 2008; Forbes, 2001, 2004; Kaminsky and Reinhart, 2003; Eichengreen and Rose, 1999). The main two channels of transmission identified in the literature are trade and financial channels while several researchers emphasise also on macroeconomic similarities and neighbourhood effects (Claessens et al., 2012; Forbes, 2001, 2004) under this framework, several researchers (Claessens et al., 2012; Forbes, 2001, 2004) argue that in the examination of the role of country level linkages, including trade and financial linkages, trade linkages play a significant role in the spill over of crisis. Financial channels seem to be less important. Macroeconomic characteristics are important determinants of entrepreneurial activity but in general they are less significant than firm and sector-specific characteristics. Yet, the ways a country responds to a crisis act as mechanisms that denote how the crisis may hit other economies (Forbes, 2001).

#### The contagious effects of the economic crisis regarding wood and furniture 337

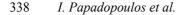
The question that rises from these studies is, whether these transmission channels could act as a proactive mechanism for predicting and preventing crises contagion across countries and more specifically across the same industrial sectors. Although it is difficult for crises to be predictable, however using a set of data on a multilevel approach, such as country National Accounts and firm – level performance data, we can foretell similar crises across countries and generalise over time. Furthermore, studies focusing on firm-level data could act as revealing mechanisms regarding the gamut and the severity of the consequences of financial and economic crises contagion across countries regarding specific economic activities, such as the manufacturing sectors. Therefore, confrontation measures can be formed and evaluated. Under this framework we will be able to study the real impacts of the recent economic crisis in firm-level performance and the role of national and regional linkages in transmitting the crisis as well as to compare these impacts among markets.

# 3 The Cypriot and Greek economies: linkages and similarities

#### 3.1 Macroeconomic and sector's similarities

The effects of the recent economic crisis are presented in a dramatic way in the national accounts of both Cyprus and Greece, with the latter one to suffer the most dramatic changes in its recent economic history. The Cypriot economy seems to show better resilience to these effects, mainly because of its small size and flexibility in fiscal adjustments. Cyprus constitutes one of the Eurozone countries entering in the bailout mechanism, mainly because of its banking system exposure to the Greek financial system. On the contrary, the Greek economy had many endogenous problems that have accelerated the impacts in national level (Kouretas and Vlamis, 2010), such as corruption, weaknesses of the public administration and tax evasion.

According to EL.Stat. (Hellenic Statistical Authority) (2012), during 2012 the Greek GDP in constant prices of 2005 suffers from a reduction up to -12% in total, while the Cypriot GDP shows an increase of 11%, entering in recession during 2011 (Figure 1). The percentage of total participation by sector in the national GDP of both countries is presented in Table 1. Both Greece and Cyprus show a similar course having a significant decline mainly in manufacturing and construction. The negative consequences of the crisis are also been impressed regarding the time series of the new orders in industry. The construction activity in Greece has been slow down up to -27% during the period October 2011/2012 while in Cyprus this percentage has reached -32.9% (National Statistical Services, 2013). This recession has a significant impact regarding the sectors of wood and furniture, since they are directly related to the course of construction activity. Similarities also exist regarding the distribution of the available household income in both countries. According to EL.Stat. (Hellenic Statistical Authority) (2012), during the third quartile of 2012 the average income per household was €15.809 in Greece and €23.797in Cyprus respectively, which corresponds to the income of 2008.



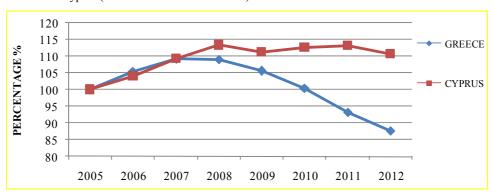


Figure 1 Time series of the GDP percentage growth (in constant prices of 2005) in Greece and Cyprus (see online version for colours)

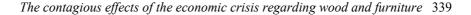
Source:	Processing	of National	Statistical	Service data
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Table T	and Cyp	1	ctor in the i	national GL	op and new	orders in ir	idustry, for	Greece
<i>m</i> :	201004	201101	201102	201102	201101	201201	201202	201202

Time	2010Q4	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3	
Industry (%)									
Greece	13.7	14.0	13.0	13.3	13.1	14.4	13.9	14.3	
Cyprus	9.3	9.4	8.9	9.3	8.9	8.9	8.4	9.1	
	Manufacturing (%)								
Greece	10.1	9.6	9.2	9.0	8.9	9.6	9.7	9.5	
Cyprus	6.4	6.2	6.1	5.9	6.1	6.0	6.0	5.7	
			Ca	onstruction	(%)				
Greece	3.3	2.9	2.6	2.2	2.4	2.3	2.3	1.9	
Cyprus	8.8	8.1	9.2	6.5	7.3	6.8	7.5	5.2	
Time	2011Q1	2011Q2	2011Q3	2011Q4	2012Q1	2012Q2	2012Q3	2012Q4	
New orders (%)									
Greece	-3.0	-10.7	-4.7	-9.6	-18.5	-12.1	-12.3	-13.3	
Cyprus	-29.6	-34.2	-32.1	-43.8	-51.8	-53.3	-33.9	-43.3	

Source: National Statistical Services data

Focusing on the wood and furniture sectors, during November 2012 the Greek Industry Production Index of the wood sector has shown a decline of -5.1%, in relation to November 2011, from 75.0 to 69.9. Accordingly in relation to 2005, the total reduction has reached up to -24.6% during 2011 (Figure 2). Regarding the Greek furniture sector, the related Index during November 2012 in relation to November 2011 has shown a decline of -2.4% while in relation to 2005 the total reduction has reached up to -51.03%, representing the dramatic situation of the sector's enterprises, mainly because of the recession in the construction sector (Figure 2). The furniture sector shows a continuous decline while the wood and wooden products sector is showing weak signs of recovery. This is due to the extroversion of the wood industry as a measure to confront the effects of the economic crisis (Papadopoulos et al., 2010).



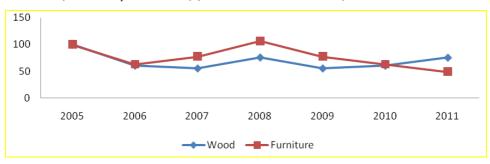
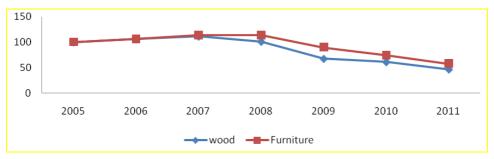


Figure 2 Time series of the Industry Production Index of the Greek wood and furniture sectors (in constant prices of 2005) (see online version for colours)

Source: Processing of National Statistical Service data

Similar is the evolution of the Industry Turnover Index (ITI) for the Greek wood and furniture sectors. In November 2012, ITI has reached 43.4% and 40.6% for the wood and furniture sector correspondingly from 50.6% and 50.3% for the same period of 2011 in constant prices of 2005. The time series of the evolution of the specific index are also presented in Figure 3. Regarding Cyprus, the Industry Production Index of the wood sector has shown a decline of -20.4%, during October 2012 in relation to October 2011, while the total annual reduction reached -14.8% (National Statistical Service of Cyprus 2013). For the furniture sector this decline was -5.9% for the period October 2012/October 2011 and -11.6% in total.

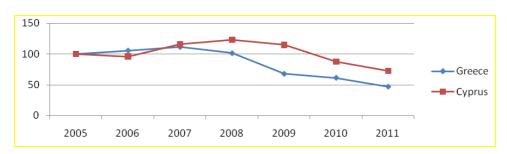
Figure 3 Time series of the ITI of the Greek wood and furniture sectors (in constant prices of 2005) (see online version for colours)

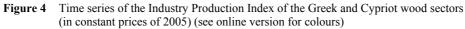


Source: Processing of National Statistical Service data

The common course of wood and furniture industries in both countries is evident in the following Figures 4–7, regarding the time series of their Industry Production Index and the ITI, referring to the period 2005–2011. The figures indicate that wood and furniture industries in Cyprus and Greece are converging regarding their production volume and turnover during the reference period. This fact highlights similar problems in the demand of wood and furniture products, mainly because of the dramatic decline of the construction sector in both countries and especially in Greece. In both countries the sectors of wood and furniture suffer a major recession with the year 2008 as a turning point when the financial crisis storkes global markets and the real economy. For the specific sectors the effects of the crisis started becoming severe long before the countries

entrance to the support mechanism of the EU and IMF and the multiple posed austerity measures.





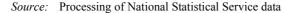
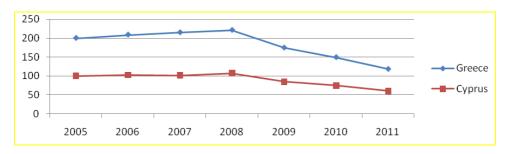
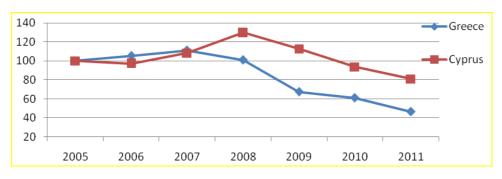


Figure 5 Time series of the Industry Production Index of the Greek and Cypriot furniture sectors (in constant prices of 2005) (see online version for colours) (see online version for colours)

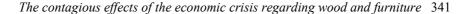


Source: Processing of National Statistical Service data

Figure 6 Time series of the ITI of the Greek and Cypriot wood sectors (in constant prices of 2005) (see online version for colours)



Source: Processing of National Statistical Service data



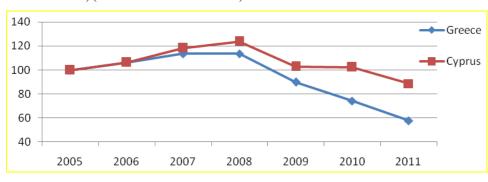


Figure 7 Time series of the ITI of the Greek and Cypriot furniture sectors (in constant prices of 2005) (see online version for colours)

Source: Processing of National Statistical Service data

# 3.2 Trading linkages

The converging of the economic interests and the complementarities of the economies of both countries are also clearly impressed on the sector of bilateral trade. Greece has been Cyprus' leading supplier of consumer goods during the last decade. The volume of bilateral trade between Greece and Cyprus in 2011 amounted  $\notin$ 1.67 billion (a 14.4% increase over 2010) and Greek products continue to represent 25% of total imports. Until 2010, Cyprus was Greece's third trade partner, and since 2011 the fourth, after Germany, Italy and Turkey. After a limited decline during 2009, the bilateral trade volume is continuously growing, showing an increment regarding both imports and exports from Greece towards Cyprus and vice versa.

Million $\epsilon$	2008	2009	2010	2011	Growth rate 2010/2011 (%)
Import from Greece (c.i.f.)	1,238.9	1,138.3	1,218.7	1,337.3	9.7
Exports to Greece (f.o.b.)	228.5	220.3	241.8	334.1	38.2
Trade volume	1,464.7	1,358.6	1,460.5	1,671.4	14.4
Trade balance	1,010.4	918	976.6	1,003.2	2.7
Covering Imports Index	542.2	516.7	504.0	400.3	-20.6

 Table 2
 Bilateral trading relationship between Cyprus and Greece

Source: Processing of statistical data of National Statistical Services

The trading balance between the two countries shows a continuous surplus regarding Greece which reached  $\in 1.34$  billion in 2011 showing a growth rate of 9.7% in relation to 2010. Greek exports towards Cyprus cover a wide range of products.

Focusing on the wood and furniture sectors, the total imports of wood and wooden products in Cyprus has reached  $\notin 4.92$  millions during October 2012 and  $\notin 41.003$  millions for the period January to October 2012 (Cypriot National Statistical Service, 2013). Regarding furniture, the amounts reached  $\notin 8.6$  millions and  $\notin 97.2$  millions correspondingly within the above mentioned periods. Greece stands as the most significant trade partner (first in rank) of Cyprus during 2012 regarding wood chips, wood pellets, charcoal, logs and particle boards. It is also and one of the major partners

regarding medium density fibre boards and veneer sheets (Cyprus Trade Centre, 2012). The bilateral trade between Cyprus and Greece shows a great interdependence in volume and value regarding also furniture, with wooden furniture for office, kitchen and bedroom to stand as one of the major components of this relationship. Nevertheless, the pressure of both global financial crisis and the deep recession of the Greek economy start to become clear, regarding wood and furniture sector's bilateral trade.

The data already mentioned above, show a great interdependence between the bilateral trades of the two countries in general and in the wood and furniture sectors specifically. Cyprus stands as one of the major trading partners of Greece in the EU and vice versa. Furthermore, due to macroeconomic similarities and specific sector's similarities we can argue that there is a high probability for the Cypriot wood and furniture sectors to be 'contaminated' by the Greek recession, facing similar negative effects. Therefore, it is quite normal that the spillovers of the Greek economic problem are expected to show up in the Cypriot economy as well, and more specifically in wood and furniture sectors. The present research tries to highlight these effects at firm level performance, through benchmarking of the main effects in both countries.

#### 4 Methodology

For the primary data collection of the study, the methodology of editing, gathering and processing of specially constructed for the purpose of the study questionnaires was used, according to the basic principles of marketing research, responsibility, transparency, liability, perspicacity and the connection to strategy (Gordon and Langmaid, 1988; Tull and Hawkins, 1990; Doyle, 1998; Aaker et al., 2004). The participating researchers were specialised scientists and they were addressed to the entrepreneurs or to staff members using personal interviews.

The related questions were formulated in such a way, so as to be concise for the maximum facilitation of the interviewed. The questionnaire contained two different groups of 25 questions in total. The first group contained 15 questions related to the effects of economic crisis and the applied marketing strategies and the second group ten questions, in order to detect the profile of each enterprise.

The study lasted 18 months (beginning of 2009 till autumn of 2011). At the first stage, a random sample of 60 questionnaires was gathered from Greek wood and furniture enterprises and in 2011 (after the expiration of the 18 months period) from 91 related Cypriot enterprises (namely 10% of the total population approximately).

A pilot questionnaire was applied in five enterprises in Greece and Cyprus. From this pre-sampling we were able to detect parts of the questionnaire that clarifications were needed and thus the quality of the questionnaire was improved and took its final form (Dillman, 2000).

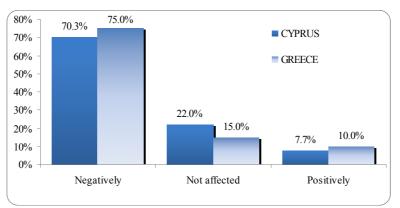
Data were edited, processed and analysed using the statistic package SPSSWIN version 17.0 and all the related tests of frequencies, descriptives, crosstabs, analysis of variables independency using chi-square criterion, correlation analysis and analysis of variance – T-test were made (Norusis, 2007; Howitt and Cramer, 2003).

The construct validity was based on the test of unidimensionality of the elements constituting each factor, as well as the content validity of each factor separately. We used factor analysis according to the method of principal component analysis. Regarding the content validity of the research's variables, the statistical factor of Cronbach alpha was used (Siomkos and Vasilikopoulou, 2005, Chantzoudis et al., 2009, Sarigiannidis et al., 2009).

# 5 Results

In total, Greek and Cypriot wood and furniture enterprises believe that their sectors have been negatively till very negatively affected from the recent economic crisis in a percentage of 88.3% and 84.4% respectively. The one-way ANOVA analysis has revealed that the difference between the answers of the entrepreneurs in both countries is not statistically significant. Further analysis of homogeneity using Levene test, shows that the null hypothesis is confirmed ( $H_0$  = the average of the answers regarding the impact of wood and furniture sectors by the crisis – positively, negatively, neutrally, very positively, very negatively – between the two countries, do not shows differences). From the above finding we can assume that the negative consequences of economic crisis in Cyprus, regarding wood and furniture enterprises, get transmitted from Greece, showing a time lag of 1.5 years.

Figure 8 Economic crisis impact value in wood and furniture enterprises, of Cyprus and Greece (see online version for colours)



This is further proved by the forma statistical date of statistical services of both countries (EL.STAT., 2013; Cyprus Statistical Service, 2013), according which

- 1 the Industrial Production Index of the Greek wood sector was 62.0 for 2010 (with 2005 as reference year) and the Cypriot one 60.0
- 2 the Turnover Index for the Greek wood sector was 77.4 for 2010 (with 2005 as reference year) and the Cypriot one was exactly the same; i.e., 77.4.

Concerning the enterprises that have participated in the study, the impact of the economic crisis has till now negative impacts in a percentage of more 70% of them in both countries (Figure 8). Only 10% and 7.7% correspondingly, of the enterprises that are in their majority (80%) small enterprises, showing an annual turnover less than  $\notin$ 1,000,000, have been affected positively. This reveals that the economic crisis has negatively affected mainly medium and big-sized enterprises more intensively, confirming also the

null hypothesis ( $H_0$  = the average of the related answers concerning the impact of the wood and furniture enterprises by the economic crisis in both countries) using the one-way ANOVA analysis.

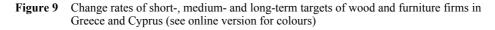
The financial crisis has led to complete changes and modifications of short-, mediumand long-term targets already set of both Greek and Cypriot firms (Figure 9).

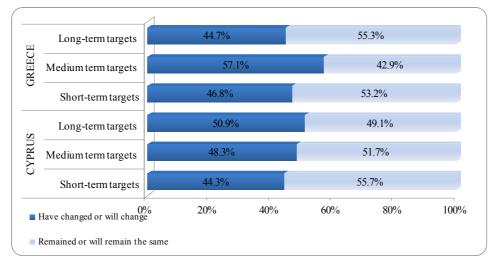
The  $X^2$  test has shown that there are statistically significant relations between the change of the short-term targets and

- 1 annual turnovers (Pearson  $X^2 = 8.948$ , Cramer's V = 0.315 for a significance level bigger than 90% approx. sig = 0.062)
- 2 the employee number (Pearson  $X^2 = 3.676$ , Cramer's V = 0.315 for a significance level bigger than 90% approx. sig = 0.055).

Enterprises of a bigger turnover or more personnel carried out changes of short-term targets at a bigger percentage than those with lower turnovers.

This  $X^2$  test has shown that there are no statistically significant differences for medium- or long-term targets in relation to the size of the companies.



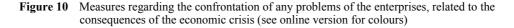


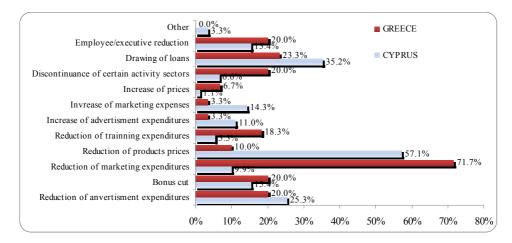
# 5.1 Economic crisis confrontation efforts

The direct efforts that the study's enterprises have undertaken for the confrontation of the economic crisis seem to vary between Greece and Cyprus (Figure 10). Although the main measures were the reduction of the products' prices and the reduction of the advertisement expenditures in both countries, a variation seems to exist regarding the percentage of their implementation. Hence, the main measures that Greek enterprises have undertaken during the end of 2009 were the reduction of products' prices in a percentage of 73.3% and of the advertisement expenditures in a percentage of 46.7%, while the relative percentages regarding Cypriot enterprises were 57.1% and 25.3%

respectively. As a second choice Cypriot enterprises have preferred loans contracting, in order to enhance their financial liquidity. It is very possible that the Greek enterprises did not have this choice, since funding with the help of the banking had been minimised because of the major consequences of the economic crisis that continues in Greece during 2012, to the banking system. Although the reduction of products' prices is an indicated measure, which always has to be under serious consideration in relation to the production cost, the reduction of advertisement expenditures have negative consequences for the enterprises themselves. In this way enterprises are getting introverted and lose the capability to occupy a position in consumers' preferences. Hence, during a market research, they are not going to visit an enterprise that does not advertise itself in any way.

Cross-tabulation has shown that the enterprises that occupy more than ten employees, have implemented in bigger percentage, as measures for their confrontation to the economic crisis, the rescission of some sectors of their activities, the cutting off of bonuses, the reduction of personnel and their personnel training expenditures. On the contrary, the direct measures of the smaller enterprises were mainly the reduction of their products' prices and less the increment of marketing and advertisement expenditures.





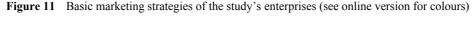
The basic marketing strategies that Greek and Cypriot enterprises are following seem to vary regarding their ranking (Figure 11). The ANOVA analysis using homogeneity test (Levene statistic) and the use of the F-test, has shown that the implemented strategies in which the means of the above ranking are statistically significantly correlated to the country in which each enterprise is operating (rejecting the null hypothesis  $H_0$ ), are:

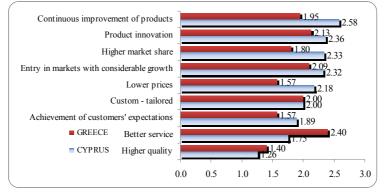
- better customer service (F = 13.124 for df = 1, p < 0.001)
- lower prices (F = 11.352 for df = 1, p < 0.001)
- the continuous products' improvement (F = 9.943 for df = 1, p < 0.005)
- the bigger market share (F = 3.754 for df = 1, p < 0.1).

The rest of the strategies that are presented in Figure 11, do not seem to vary statistically significantly between the wood and furniture enterprises in both countries. The disposal of products of higher quality seems to be the first major strategy of the Greek and Cypriot enterprises (1.40 and 1.26 in ranking with 1 as excellent), while in the last position of the ranking stands the implementation of the better customer service, regarding Greek enterprises (2.40) and this of the products' continuous improvement regarding the Cypriot ones (2.58).

The Pearson correlation concerning the implemented marketing strategies of the Greek and Cypriot wood and furniture enterprises for the confrontation of the economic crisis has shown that:

- 1 The more the Cypriot wood and furniture enterprises invest in their products' innovation, the higher is their quality (Pearson correlation coefficient = 0.636, at a significance level a = 0.01).
- 2 The more the Greek and Cypriot wood and furniture enterprises emphasise on the quality the higher are the products' prices (Pearson correlation coefficient = -0.536 and -0.596 respectively, at a significance a = 0.05 and 0.01 respectively).





A basic parameter of the study was the formation of comparative advantages for the Cypriot wood and furniture enterprises regarding their competitors, in order to form policies to confront the crisis as well as for further enhancement of competitiveness.

Content validity (Cronbach's alpha = 0.891) regarding the significance of the strong advantages of Cypriot firms has shown that the determinants (answers) that have been detected constitute concrete and reliable structures, capable to contribute to the measurement of the factor in which they belong to. From the evaluation (Table 3, column 2) of the Cypriot wood and furniture entrepreneurs' competitive advantages there are five ones highlighted as most significant in descending order are (ranking from 1–7 with 7 as the most significant): customer service (6.14) > good relations with customers (6.06) > product/service quality (5.93) > strategic planning/programming (5.90) > management capabilities (5.90).

Table 3	Factor matrix after rotation regarding the competitive advantages of Cypriot and
	Greek wood and furniture enterprises

α/α Competitive advantages		Factors						
		Average ranking	1	2	3	4	5	
1	Good relations with customers	6.06	.768	066	.343	107	.225	
2	Market knowledge	5.74	.727	.076	.158	.218	102	
3	Corporate climate	5.52	.647	.388	110	060	.248	
4	Resource management and activity coordination	5.24	.545	.319	.068	.102	.167	
5	Effective production units	5.3	.526	.263	.389	105	.245	
6	Equipment	5.29	035	.756	.198	.149	.339	
7	Management capabilities	5.79	.157	.691	.144	143	.362	
8	Recruitment of efficient and motivated workforce	5.11	.258	.655	.170	.185	290	
9	Strategic planning	5.9	.492	.604	070	.288	.076	
10	Product/service quality	5.93	.425	.460	.286	336	.231	
11	Competitive product/service prices	5.4	075	.177	.749	.195	.109	
12	Product/service guarantees	5.44	.221	.239	.660	126	240	
13	Distribution channels	4.9	.237	075	.627	.161	.303	
14	Customer service	6.14	.514	.165	.557	184	.224	
15	Access and control of distribution channels	4.86	.449	.042	.461	.279	.129	
16	Financial resources' location	4.72	.199	.005	.155	.844	012	
17	Availability of financial resources	4.4	093	.178	.015	.807	.264	
18	Personnel knowledge and capabilities	5.48	.155	.123	.108	.122	.751	
19	Know-how	5.51	.326	.319	.146	.146	.659	

The factor analysis has shown that all parameters of column 2 of Table 3 are related at least with one factor, since no communality is low (Siomkos and Vasilokopoulou, 2005). The rotation of the factor's matrix highlighted the five factors that describe the competitive advantages of the Cypriot wood and furniture entrepreneurs; i.e., organisation-market-customers (1–5 variables), planning and management (6–10 variables), marketing (11–15 variables), financial resources (16–17 variables) and knowledge (18–19 variables). The interpretation of the above five factors reaches the percentage of 64.9% of the total variance (eigenvalues).

A basic parameter of the study was also the formation of proposals for the Cypriot wood and furniture enterprises regarding their confrontation to the economic crisis, based also on the former existing experience of the Greek economic crisis management in the sector and the related enterprises. The research has further formed such proposals concerning the Cypriot wood and furniture entrepreneurs. The analysis led to five ones as most significant in descending order which ranking from 1–7 with 7 as the most significant are: better and more effective monitoring of the departments of the firm (5.67) > emphasis on innovation and technology (5.63) > furniture certification according to

European norms (5.55) > greater emphasis on effective marketing (5.55) > maintenance of prices in realistic levels (5.51).

The factor analysis has shown after the rotation of the factor's matrix that five factors that describe the proposals regarding the confrontation to the economic crisis are: operation strategies, certification processes, sales process and monitoring, internet and marketing and the reduction of expenditures. The interpretation of the above five factors reaches the percentage of 67.9% of the total variance (eigenvalues).

# 6 Conclusions – proposals

Greece and Cyprus which are two countries with bilateral economic, trading and national linkages have been affected significantly by the recent economic crisis. In their majority (more than 70%) Cypriot wood and furniture enterprises have suffered from the economic recession showing a time lag of 18 months approximately in relation to the Greek ones. There are many common elements and common choices that have been highlighted in the present study, so that the enterprises prevent the consequences of the economic crisis.

The fact that there are at least a small but significant percentage of firms to have been positively affected by the crisis is quite encouraging. Every economic crisis breeds opportunities, but a major assumption is that one has to recognise and exploit such opportunities.

The economic recession imposes changes and modifications in all kinds of corporate targets while companies make also certain changes in their product range as well.

The main initiative that the study's enterprises are undertaking regarding the confrontation of the economic crisis is the reduction of the prices of their products. As a second choice Greek enterprises in early 2009, have moved towards the reduction of the advertisement expenditures, a fact that has worsened their position (Papadopoulos et al., 2010). Cypriot enterprises in late 2011 have chosen this initiative in a smaller percentage, having though as a second choice bank lending. The above mentioned initiatives according to relative previous experience do not seem to be recommendable regarding the enterprises that show a declining trend in their statistics. A successful 'recipe' and exhortation for the enterprises that face economic recession and show a declining turnover being in an emergency is:

- 1 granting of smart advertisement
- 2 reconsideration of their operational basis
- 3 saving
- 4 preparation for the delivery of the best possible product
- 5 enforcement of greater discipline and morality in their interior.

The 'secret' is that the above initiatives' sequence is being followed precisely (Papadopoulos et al., 2012).

Statistically significant variations do not seem to exist regarding the ranking of the basic marketing strategies that Greek and Cypriot wood and furniture enterprises are

applying and specifically regarding the disposal of products of better quality, the over-satisfaction of their customers' expectations, tailor made products and services, their entrance to markets with great potential and the application of products' innovations.

Of great importance are also the findings of the present study, that the more emphasis the above enterprises show on quality the higher are the prices of their products, as well as that the more they invest in products innovation the better is the quality.

The evaluation of the proposed initiatives regarding the confrontation of the economic crisis from the Cypriot enterprises has highlighted that the most significant are: better and more effective monitoring in all of the departments in the firm, innovation and technology and furniture certification according to European norms.

The research has highlighted the most important competitive advantages for the wood and furniture enterprises in Greece and Cyprus, which are customer service and development of excellent relations combined with high product and service quality. These issues reflect the personal (and quite subjective) believes of most entrepreneurs with micro- and small wood and furniture companies. A further research interviewing consumers of the firms that participated in this study can confirm such opinions and indicate possible divergences, which can however be quite significant in certain directions.

Factor analysis of the present research indicated that competitive advantages of the Cypriot wood and furniture enterprises can be grouped in five categories; i.e., organisation-market-customers, planning and management, marketing, financial resources and knowledge.

Within the wider set of this research, factor analysis regarding the 20 proposals for the confrontation to the economic crisis has also shown that referring to the Cypriot firms these can be grouped in five categories, i.e., operation strategies, certification processes, sales process and monitoring, internet and marketing and the reduction of expenditures.

As it is a common belief that when a problem occurs and it is left to chance or when we spent time without dealing with the problem, it leads to great confusion, disorder, stress and bad mood in a personal level and even more in a firm level. The solution is its immediate confrontation. According to the philosopher L.R. Hubbard "Whatever can be confronted by somebody, can also be handled. Problems spring from the inability of confronting something. You can't solve a problem by running away from it." Thus, wood and furniture enterprises have to realise the above and act aggressively. Furthermore, they should give major emphasis on initiatives that will strengthen the trust of their customers and become even more reliable. (Papadopoulos, 2012).

Further research could be done by analysing the basic financial indexes of Greek and Cypriot wood and furniture enterprises and correlating them to the applied strategies of the previous one to years, in order to investigate their effectiveness. The research results can be also related to the perceived competitive advantages of the enterprises themselves combined with a customer satisfaction research.

The research could also be expanded to the wood and furniture enterprises of rest European countries that are economically and trade linked with Greece and Cyprus such as: Italy, Spain, Bulgaria, etc. in order to benchmark the consequences of the economic crisis as well of the applied marketing strategies.

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