

## CROSS COUNTRY CONTAGION OF ECONOMIC CRISIS AT FIRM LEVEL. EVIDENCE FROM CYPRIOTE AND GREEK FURNITURE AND WOOD ENTERPRISES

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### Abstract

The present study investigates the situation that was formed 18 months ago in Greek wood and furniture enterprises after the economic crisis, benchmarks it to the corresponding situation of the Cypriot enterprises, and also compares the ways of confronting the crisis in both countries.

In total, 151 specially formed questionnaires for the purposes of the study were gathered in early 2010 from 60 Greek wood and furniture enterprises and 91 in late 2011 from relative Cypriot enterprises. The questionnaires were processed using the statistical package SPSS ver 17.0 and all the relative statistical tests were made, such as descriptive statistics, correlation analysis, analysis of variance, T-test, content validity and factor analysis, in order to achieve the purposes of the study, to extract useful conclusions and formulate relative proposals.

In their majority, Greek and Cypriot wood and furniture enterprises have been affected from the economic crisis negatively or very negatively in a percentage of over 70%, while there is a very small percentage showing positive effects. The situation in related enterprises of both countries, which have economic and trading linkages, is similar, showing a time lag of 18 months approximately. That means that what has been happening in Greece 1,5 years ago is happening now in Cyprus. Hence, statistical significant variations in the basic marketing strategies that the enterprises apply do not seem to exist, and these are mainly focused on better quality and better customer service. Finally, the evaluation of the proposed initiatives in confronting the crisis by the Cypriot wood and furniture enterprises has highlighted as most important the: better and more efficient monitoring in all of the departments of an enterprise, emphasis on innovation and technology, and furniture certification according to European norms.

The results of the present study could help especially the Cypriot wood and furniture enterprises, while following the results and the initiatives of the Greek ones they could avoid negative consequences of economic crisis, taking under consideration these measures that could lead to their survival and growth. On the contrary, for the Greek enterprises the present study

contributes in the direction of determining the miscalculations of the past 2 years that have led many of them to economic recession and of ensuring that they are going to implement more effective strategies in order to return to viability.

It is the first time that we benchmark the consequences and ways of confronting the economic crisis between economically linked countries in two significant sectors such as the wood and furniture sectors.

**Keywords:** Economic Crisis, Furniture & Wood Products Enterprises, Effects of crisis, cross-country contagion, Marketing Strategies

## Introduction

During the few past years, there has been a lot of discussion between academics and politics, about the causes and the effects of the recent global financial crisis across countries and emerging markets. Although, the causes of the crisis are well known, there is a turbid opinion on the channels of transmission of the latest crisis across national borders and the role of country differences in how the economies were affected (Claessens et al., 2012). From a first point of view this may reflect differences in exposure and vulnerability of cross countries economies, banking systems and stock exchange markets to the real and financial jitters emanating from the financial centers, but also heterogeneity in the macroeconomic and institutional frameworks as well as in the policy responses (Chevallier, 2012; Cetorelli and Goldberg, 2011; Berkmen et al., 2009). The Euro zone debt crisis and more specifically the Greek problem, reveals structural and political weaknesses in the response of European Union to the global financial crisis and endogenous problems of the Greek economy that have accelerated the impacts in national level (Kouretas and Vlamis, 2010; Berglöf et al., 2009).

Focusing to sectors' economic activity, researchers argue that financial crises have a negative impact on sectors' development (Berkmen et al., 2009; Kroszner et al., 2007). On average, a country experiencing a banking crisis, would experience a 1.6% greater contraction in growth in value added between the crisis and pre-crisis period (Kroszner et al., 2007) and an overall mean decline in growth of 3.5% between these two periods. Similar are the results concerning at a firm-level (Kroszner et al., 2007), with trade channels to be important factors determining how crises are transmitted internationally, among firms (Forbes, 2004).

## Transmission Channels of Economic Crises

At the present globalized markets, no open economy can insulate itself from what is happening in the rest of the world. In order to prevent contagious financial crises countries may need to adopt regionally or globally coordinated measures. But the specific measures that should be taken to prevent the spread of financial crisis presuppose knowledge of the relevant contagion channels (Haile and Pozo, 2008). Understanding the transmission of financial crises is the subject of a rich literature (Rose and Spiegel, 2012, 2011; Chevallier, 2012; Claessens et al., 2012; Berkmen et al., 2009; Balakrishnan et al., 2009; Haile 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 emphasize also on common shocks, macroeconomic similarities, neighborhood effects and business cycle channels (Claessens, 2012; Haile 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 latter is often thought to depend on country-specific financial and trade linkages, structural characteristics, and vulnerabilities or policies, such as current account and budget imbalances (Balakrishnan et al., 2009). The related literature on trade transmission channels is more limited in theoretical modeling of the transmission than the empirical literature testing this importance (Forbes, 2001), aiming to the explanation of how crises could spread globally (Corsetti et al., 2000; Gerlach and Smets, 1995). Most researchers use empirical data in order to test the theoretical explanation of economic crises contagion, since specific characteristics of trading channels could play a significant role in the volume of crises transmission.

The question that rises from these studies is, whether these transmission channels could be used as a tool for predicting and preventing crises expansion across countries and more specifically across the same industrial sectors namely. Furthermore, studies focusing on firm's level data could act as revealing mechanisms regarding the gamut and the severity of the consequences of financial and economic crises contagion across countries in specific economic activities, such as the manufacturing sector. 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 global and regional linkages in transmitting the crisis as well as to compare these impacts among markets.

From a first point of view it may seem unlikely that crises become predictable using a systematic approach with any degree of accuracy however using a set of data on a cross section panel, such as country and firm – level performance data, we can foretell whether crises are sufficiently similar across countries and over time to allow generalizations (Berg and Pattillo, 1999).

Under this framework, several researchers (Claessens, 2012; Forbes, 2004, 2001) argue that when examining the role of country level linkages, including trade and financial linkages, trade linkages play a significant role in the spill over of crisis, with financial channels being less important. For instance, if a country competes in the same industries as a crisis country, or exports directly to the crisis country, then the country will have significantly lower stock returns during the crisis. Country-specific effects, although important determinants of company performance, are generally less important than firm-specific characteristics, although the way a country responds to a crisis is an important determinant of how the crisis impacts other economies (Forbes, 2001).

## **Cypriot and Greek Economies Shaking Hands.**

### **Macroeconomic and sector's similarities**

The effects of the recent economic crisis are presented in a dramatic way in the national accounts in 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. According to the national statistical services (2012) of both countries, for the period 2005 – 2010 the Greek G.D.P. suffers from a reduction up to -1.2% in constant prices of 2005, while the Cypriot G.D.P. shows an increase of 1.1%. Cyprus has an extrovert economy because of its geographical location considering its access to markets as a very significant factor for development. As a consequence external trading constitutes one of the most significant sectors of the Cypriot economy. During 2009, the total exports of the country constituted

approximately the 6% of the national GDP (Cypriot Statistical Service, 2012). Comparing the Greek Consumer Prices Index of April 2012 to the corresponding one of April 2011, occurs an increment of 1.9%, in relation to an increment of 3.9%, that has occurred during the same period of 2011 and 2010, while it's increment between April and March of 2012 reached 0.8% in relation to a 0.6% during the same period of the previous year and finally the increment for the period May 2011 – April 2012 has reached a percentage of 2.5% (Greek National Statistical Service, 2012).

Furthermore, the Retail Services Value Index in the furniture sector during February of 2012, compared to February 2011, has shown a decline of -19.3% and this one of Retail Services Volume a decline of -16.6% for the same period. Regarding Cyprus, Consumer Prices Index of 2010 shows an increment of 2.4% to the corresponding one of 2009, occurs an increment of 1.9%, while the Retail Services Value Index of the furniture sector shows a decline up to -4.3% during May 2011 in relation to May 2010 (Cypriot National Statistical Service, 2012).

According to figures 1 and 2, comparing the Total Producers Prices Indexes in wood and furniture sectors of the two countries for the period 1/2010 till 7/2011 (in constant prices of 2005), we can conclude that Greece shows a decline in both wood and furniture sector, while Cyprus shows an increment keeping the related indexes in a positive course. Thus, wood and furniture sectors in Greece are trying to become more competitive and that is a significant factor that the related Cypriot industries should take under consideration in order to avoid negative impacts in their performance.

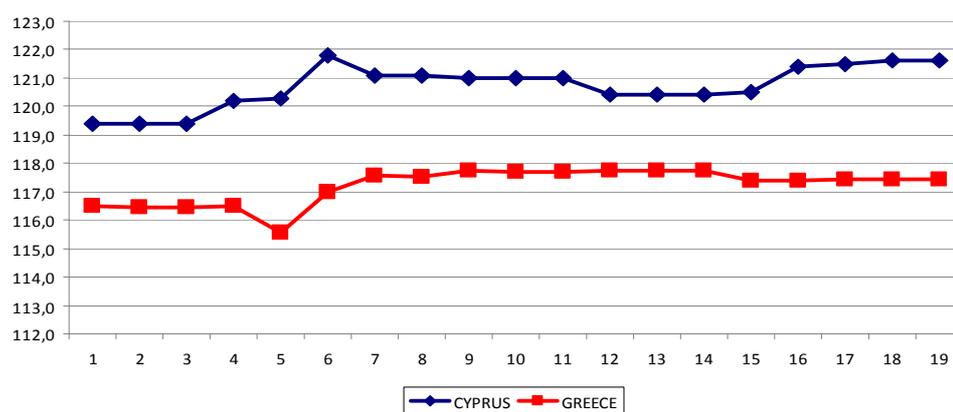


Figure 1: Total wood and wooden products Industry's Producers Prices Index from 1/2010 – 6/2011. (Source: Processing of statistical data of national statistical services).

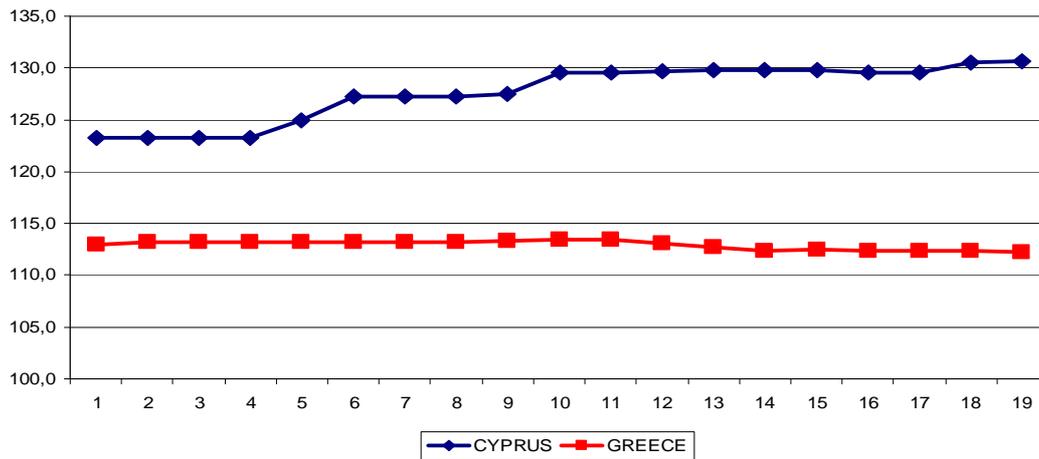


Figure 2: Total furniture industry's producers prices index from 1/2010 – 6/2011. (Source: Processing of statistical data of national statistical services).

The common course of wood and furniture industries in both countries is also presented in the next figures 3 and 4, regarding the time series of their Total Production Volume Index referring to the period 1/2010 – 6/2011. As we can notice, wood and furniture industries in Cyprus and Greece are converging regarding their production volume during the recent period, a fact that 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.

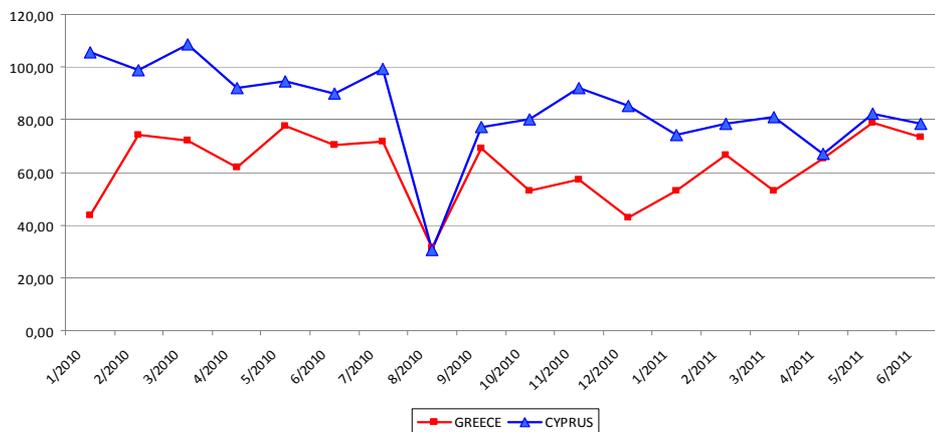


Figure 3: Time series of Total Production Volume Index in wood sector (Source: Processing of statistical data of national statistical services).

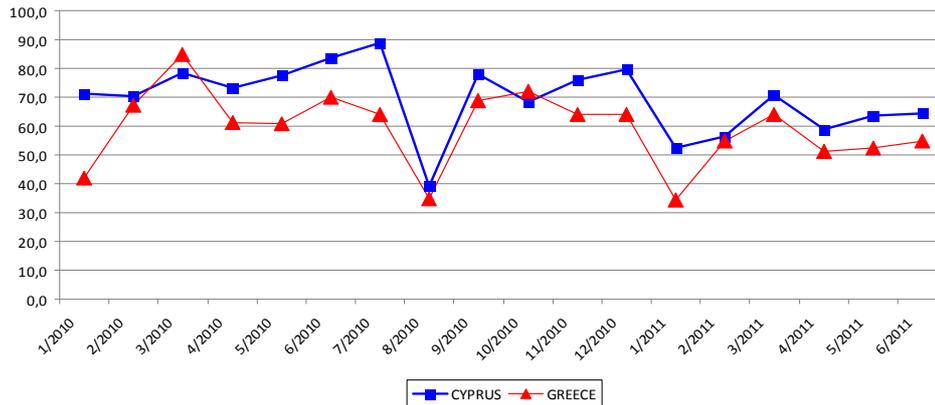


Figure 4: Time series of Total Production Volume Index in furniture sector (Source: Processing of statistical data of national statistical services).

### Trading linkages

The consequences of the global economic crisis in global trading have also not left Cyprus unaffected. During 2009, it is estimated that they have forced the reduction of Cypriot total external trading up to 22% in relation to 2008 (Cypriot Statistical Service, 2012). More specifically, total exports have been reduced up to 17% reaching €963 million in relation to €1.167 million in 2008. Total imports have also been reduced up to 23%, reaching €5,654 million from €7,349 millions in 2008. According to the Cypriot Trade Central (2012), the exports of industrial products constitute the majority of the Cypriot domestic exports with a percentage of 61% of the total. In 2009 they have declined to €291 millions from €318 millions in 2008. European Union stands as the main exporting market of Cypriot economy. During 2009, E.U. countries have absorbed the 59% of the domestic exports of €282 millions in value. Germany, Greece, United Kingdom and Italy are the main trading partners. The furniture sector has reached in 2009 exports up to €5 millions in value.

More specifically, regarding the bilateral trading range between Cyprus and Greece we can say that it has been developed dynamically reaching €1.450 millions in 2010. Greece strengthens its position, mainly after 2004 (Figure 1), and in 2010 reaches its exports towards Cyprus up to €1,218.7 millions booming up to a percentage of 75.8% in relation to the €693 million of 2004. Regarding Cypriot exports Greece has absorbed during 2010 imports of €241 millions marking an increment of 117.6% in relation to 2004. Finally, regarding the bilateral trading balance this is continuously negative and during 2010 has reached €976,9 millions rising up to 68% in relation to 2004 (Figure 5).

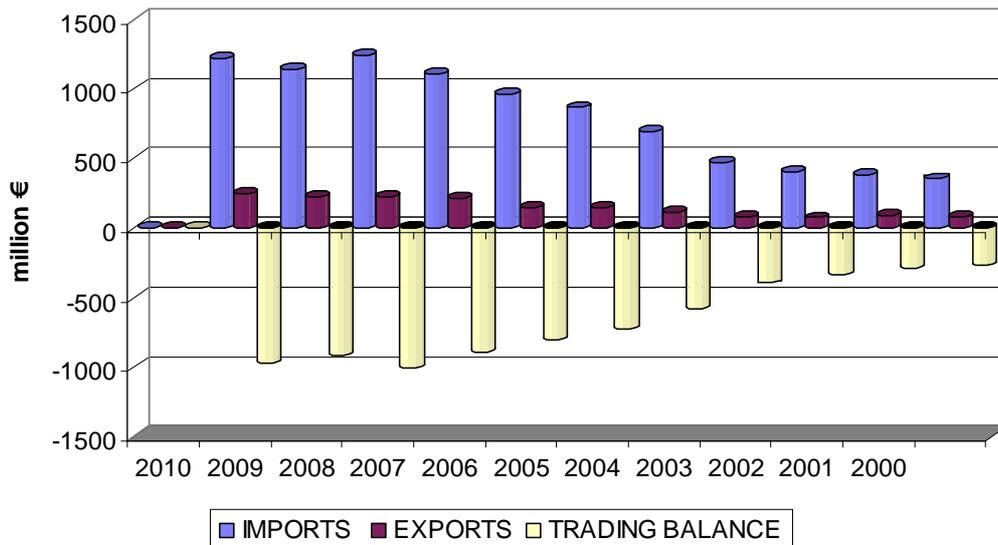


Figure 5: Bilateral trading relationship between Cyprus and Greece. (Source: Processing of statistical data of national statistical services).

Focusing specifically on the wood and furniture sectors, bilateral trade between Cyprus and Greece shows a great interdependence in volume and value. Nevertheless, the pressure of the global financial crisis and this of the deep recession of the Greek economy start to become clear, regarding wood sector’s bilateral trade. During the period 2006 – 2008 the total value of Greek wood and wooden products imports from Cyprus has reduced from €7,970 millions to €6,924 millions, while exports towards Cyprus have also been reduced from €12,282 millions to €11.488 millions (Figure 6). Same is the picture regarding the volume of wood and wooden products trade for the same period, with imports to show a reduction up to -13% and exports -6.5% respectively.

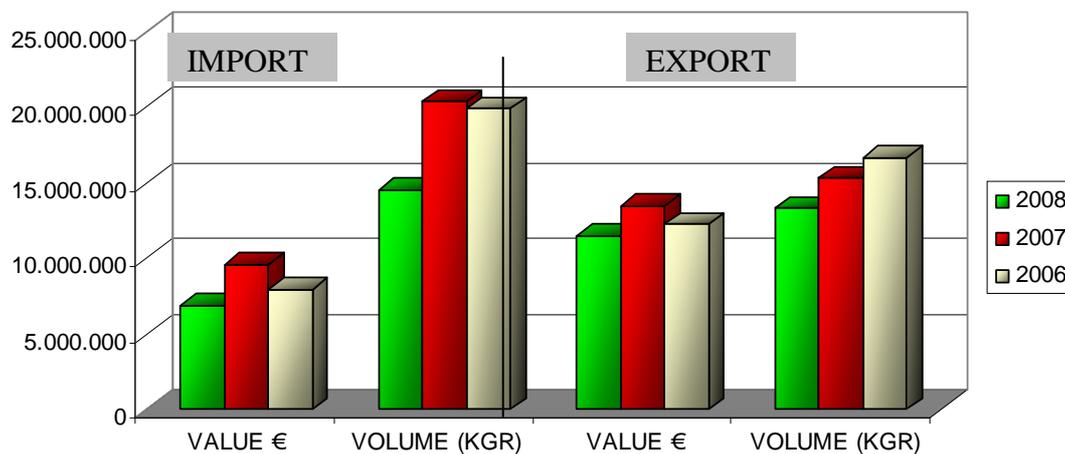


Figure 6: Bilateral trade of wood and wooden products of Greece and Cyprus for the period 2006 – 2008. (Source: Processing of statistical data of national statistical services).

Slightly different seems to be the situation in the furniture sector’s bilateral trade between the two countries. Hence, Greece’s furniture imports have increased during 2006 – 2008 in value and volume up to 182% and 63% respectively, while exports have also a positive image reaching €21,077 millions in value and Kg 4,25 millions in volume during 2008 (Figure 7).

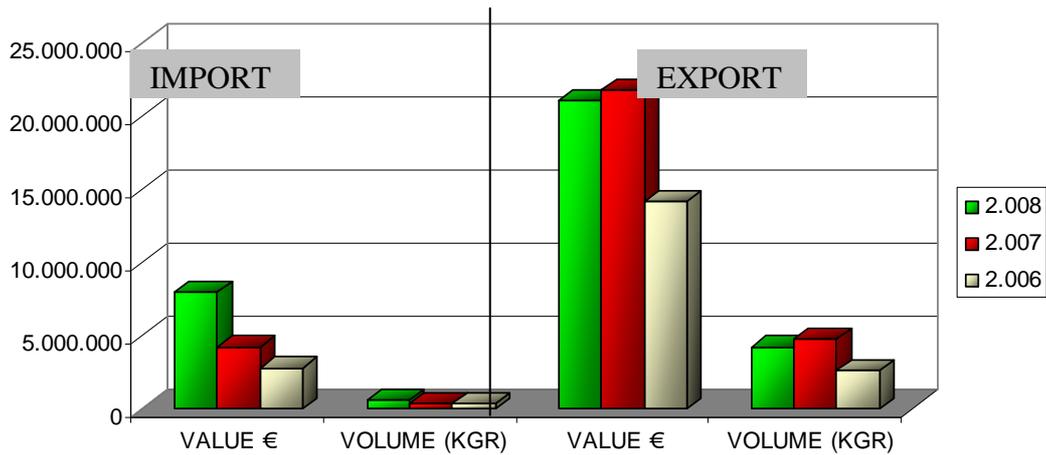


Figure 7: Bilateral trade of furniture products of Greece and Cyprus for 2006 – 2008. (Source: Processing of statistical data of national statistical services).

The above data, as we have mentioned, 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 E.U. and vice versa. Furthermore, due to macroeconomic similarities and specific sector's similarities we can argue that foretell that it is very possible that the Cypriot wood and furniture sectors can be "contaminated" by the Greek recession, facing similar negative effects. Therefore, we could argue that the spill over's of the Greek economic problem are being 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 making the necessary benchmarking of the main findings in both countries.

The purpose of the present study is to benchmark the consequences of the economic crisis in the wood and furniture enterprises of two economic linked countries (Greece and Cyprus), in order to study the contagion mechanisms and it's time lag and finally which are 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.

## 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 specialized 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 10 questions, in order to detect the profile of each enterprise.

The study lasted 18 months (beginning of 2009 till autumn of 2011). At a 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 analyzed using the statistic package SPSSWIN ver 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).

## 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. A small percentage (8.4% and 4.4% respectively) seems to show growth (Figure 8). The positive affection of the sector constitutes the belief of the majority of the enterprises that have less than 10 employees and shows an annual turnover of less than 1,000,000 €. The One-Way Anova analysis has revealed that the difference between the answers of the entrepreneurs in both countries is not statistically significant. Farther analysis of homogeneity using Levene test, shows that the null hypothesis is confirmed ( $H_0$ = the average of the answers regarding the affection of wood and furniture sectors from 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.

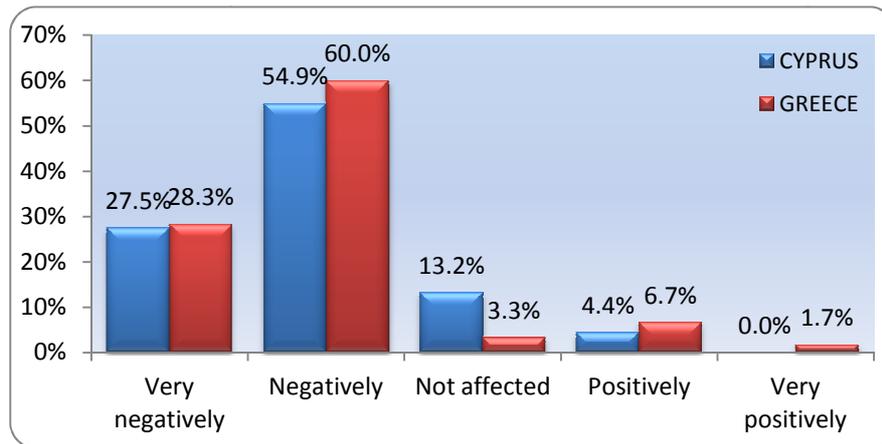


Figure 8. Affection of wood and furniture sectors from the economic crisis in Cyprus and Greece

Concerning the enterprises that have participated in the study, the affection of the economic crisis has till now negative impacts in a percentage of more 70% of them in both countries (Figure 9). Only 10% and 7.7% correspondingly, of the enterprises that are in their majority (80%) small enterprises, showing an annual turnover less than 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 affection of the wood and furniture enterprises by the economic crisis in both countries) using the One-Way Anova analysis.

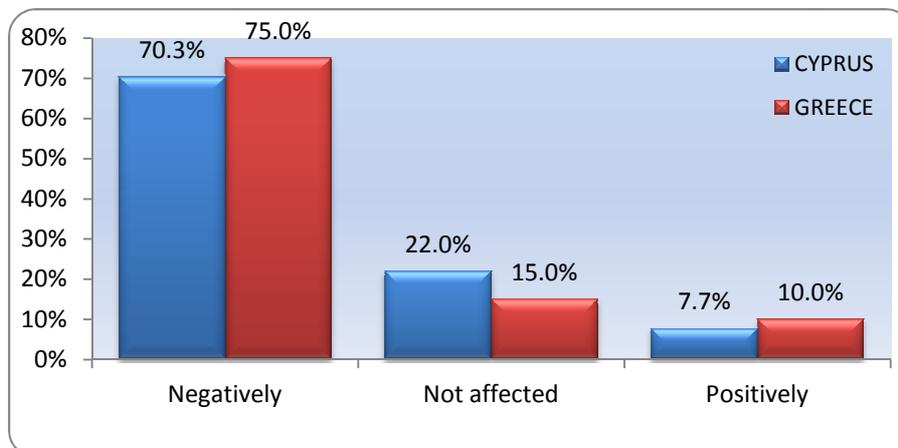


Figure 9. Economic crisis affection value in wood and furniture enterprises, of Cyprus and Greece.

At this point it is interesting to quantitatively register the impacts of the economic crisis concerning the sales, profits, market share and the number of customers of the study's enterprises. The variations of the basic economic characteristics of the enterprises per country are analytically presented in Table 1, according to their statements. Results show that there are no significant variations between the enterprises in both countries, at least concerning the average of the sales, profits and customers number reduction and market share reduction.

COUNTRIES	Type of affection	Alterations %			
		Sales	Profits	Market share	Number of customers
CYPRUS	Average	-21.1%	-21.2%	-17.1%	-16.4%
	Negatively	-21.8% (64)*	-21.9% (60)	-18.4% (43)	-27.8% (36)
	Positively	+17,5% (6)	+7,2% (3)	+7,5% (2)	+28,8% (4)
GREECE	Average	-19,7%	-25,9%	-19,2%	-11,6%
	Negatively	-26.5% (43)	-29.8% (44)	-25.0% (38)	-19.8% (22)
	Positively	+16.9% (4)	+8.3% (5)	+25,0% (5)	+14.3% (7)

\* The number of answers

Table 1. Sales, profits, market share, number of customers alterations per activity for Cypriot and Greek wood and furniture enterprises

The forecasts that enterprises make regarding their economic situation during the next year, show that are being relatively optimistic (Figure 10). Only 38.3% of the Greek and the 23.1% of the Cypriot enterprises foresee that the situation is going to get worse (more or less). Of course more pessimist seem to be the Greek enterprises, since the country's economic crisis is much more intensive! This fact does constitute a pessimistic attitude from the Greek enterprises but a reality, since 1.5 years after the period of the data collection, the situation in Greece has become substantially worse. Recent official statistical data (EL.STAT. 2012) shows that industry's production has been reduced per 59.9% regarding furniture and 18.9% regarding wood and wooden products, in a two years period (March 2012 – March 2010)!

The  $X^2$  test has shown that there are no statistically significant differences between the answers regarding the above mentioned forecasts and the size of the enterprises.

Using the One Way ANOVA in order to statistically analyze the data concerning the reduction or increment percentages of the 4 indexes that are being presented in Table 2, the null hypothesis was rejected only for the following variables «sales reduction percentage forecasting» at a significant level  $\alpha < 0.01$ , «market share increment percentage forecasting» at a significant level  $\alpha < 0.1$  and «profits reduction percentage forecasting» at a significant level  $\alpha < 0.005$ .

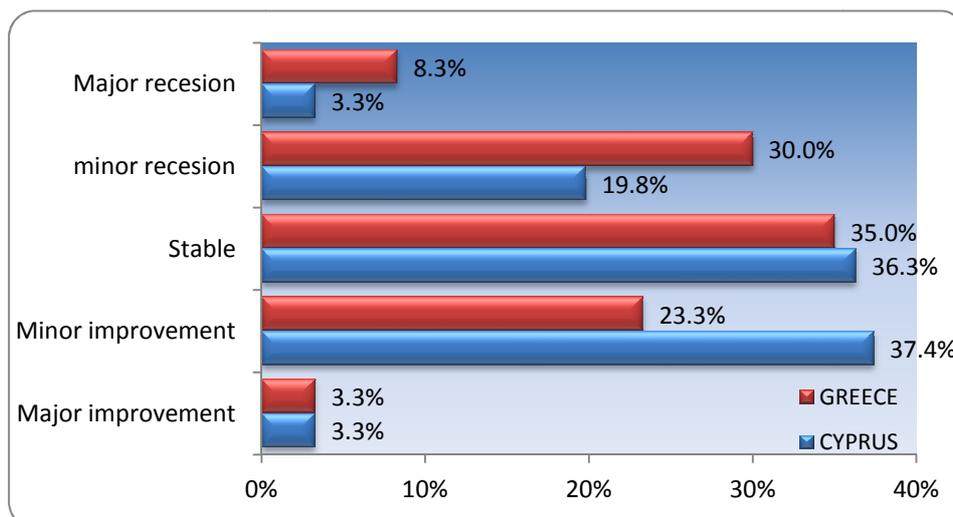


Figure 10. Forecasting regarding the situation of wood and furniture sectors in Cyprus and Greece during the next 12 months period

COUNTRIES	Alterations % per average			
	Sales	Profits	Market share	Number of customers
CYPRUS	-19.7% (23.6)	-24.3% (24.2)	-11.6% (20.5)	-19.2% (26,2)
GREECE	-17.5% (27.1)	-27.1% (24.1)	-16.4% (17.5)	-19.0% (32,3)

\* Std. Deviation

Table 2. Forecasting of sales, profits, market share and number of customers per activity of the Cypriot and the Greek wood and furniture enterprises

### 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 11). 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 minimized 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.

Crosstabulation has shown that the enterprises that occupy more than 10 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.

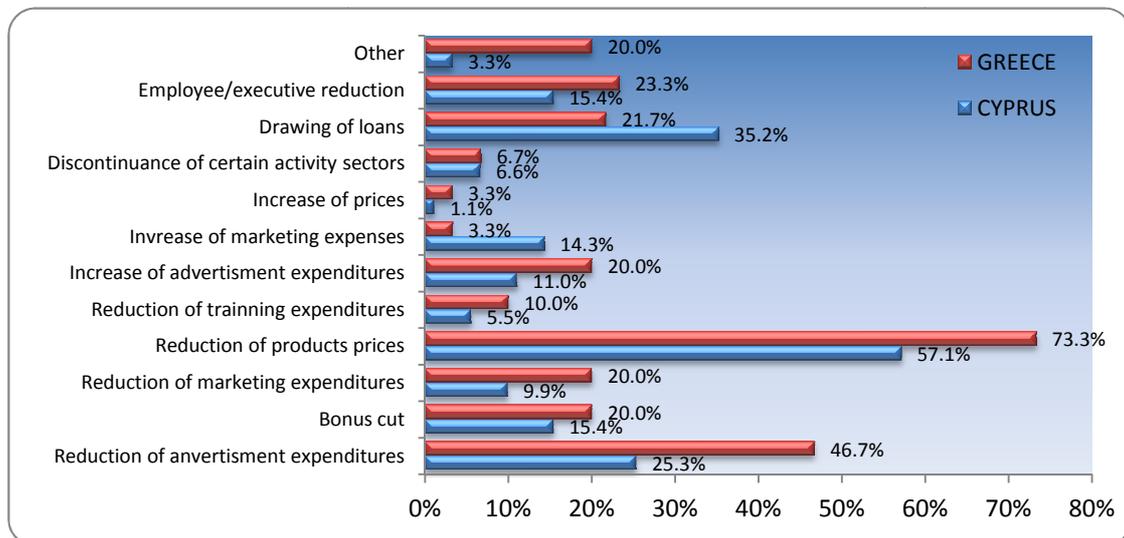


Figure 11. Measures regarding the confrontation of any problems of the enterprises, related to the consequences of the economic crisis

The basic marketing strategies that Greek and Cypriot enterprises are following seem to vary regarding their ranking (Figure 12). 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 12, 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:

- 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  $\alpha=0.01$ )
- The more the Greek and Cypriot wood and furniture enterprises emphasize on the quality the higher are the products' prices (Pearson correlation coefficient = -0.536 and -0.596 respectively, at a significance  $\alpha=0.05$  and 0.01 respectively)

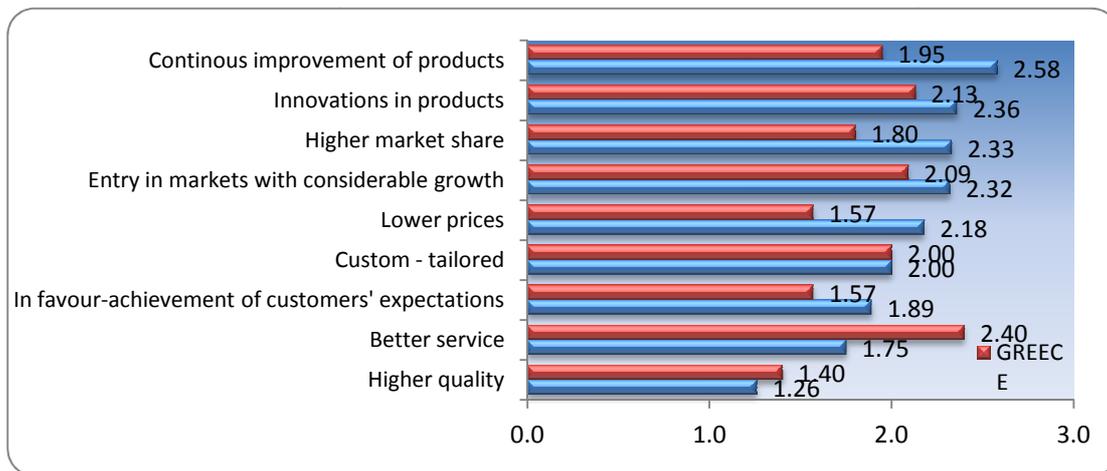


Figure 12. Basic marketing strategies of the study's enterprises

A basic parameter of the study was 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.

Content validity (Cronbach's Alpha = 0.891) regarding the significance of the proposals for the confrontation of the economic crisis from the Cypriot enterprises 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 above proposals concerning the Cypriot wood and furniture entrepreneurs, the 5 ones that have been highlighted as most significant in descending order are (ranking from 1-7 with 7 as the most significant): 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 5 factors that describe the proposals regarding the confrontation to the economic crisis are: operation strategies (1,2,3,4,5,6,7 variables), certification processes (8,9,10,11 variables), sales process and monitoring (12,13,14,15 variables), internet and marketing (16,17,18 variables) and the reduction of expenditures (19, 20 variables). The interpretation of the above 5 factors reaches the percentage of 67.9% of the total variance (Eigenvalues).

Cronbach a (Alpha) coefficient is: for the 1<sup>st</sup> factor (0.849) for the 2<sup>nd</sup> (0.833) for the 3<sup>rd</sup> (0.765), for the 4<sup>th</sup> (0.843) and for the 5<sup>th</sup> (0.514). From the above mentioned results it is ascended that for the 1 – 4

factors, Alphas are very high (not for the 5<sup>th</sup> one), hence the content validity of the scale is very high, since they overcome 0.70 (Siomkos and Vasilokopoulou 2005).

## 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 average sales, profit and number of customer's reduction of the enterprises do not show statistically significant variation between Greece and Cyprus for a period of 1.5 years. This fact shows that the present situation of the Greek wood and furniture enterprises is very possible to become a reality for the Cypriot enterprises 18 months later. The above mentioned scenario may not be verified because of the smaller size of the Cypriot enterprises in relation to the Greek ones, since the present study has shown that the smaller wood and furniture enterprises seem to have more possibilities to have a positive influence in their operation by the economic crisis.

The short term (1 year) forecasting of the enterprises seem to be relatively optimistic and they do not seem to statistically vary between both countries, at least regarding the profits and sales increment, the reduction of their market share and the increment or the reduction of their customers' number.

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: a) granting of smart advertisement b) reconsideration of their operational basis c) saving d) preparation for the delivery of the best possible product and e) 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.

$\alpha/\alpha$	PROPOSALS	Average ranking	FACTORS				
			1	2	3	4	5
1.	<i>Modification from the competition</i>	4,92	,810	,073	,265	,218	,048
2.	<i>Use of timber and wooden products that comes from sustainable managed forests .</i>	4,72	,802	,156	-,140	,004	,205
3.	<i>Entrance to a sustainable building cluster</i>	4,88	,721	,058	,203	,313	,015
4.	<i>Reforming the way of thinking in doing business until today</i>	4,78	,685	,011	,107	,216	-,087
5.	<i>Realization of the new rules of the market duties</i>	5,11	,642	,048	,067	,185	,164
6.	<i>Emphasis in innovation and technology</i>	5,63	,562	,457	,102	,110	,071
7.	<i>Retention of the prices at realistic levels</i>	5,51	,545	,027	,400	,083	,388
8.	<i>Import of environmental management ISO14000,</i>	5,22	,049	,878	,060	,036	,213
9.	<i>Import of quality management ISO 9000,</i>	5,20	,072	,815	,177	,190	-,105
10.	<i>Import of health and safety management ISO18000</i>	5,44	,005	,758	,280	,039	,062
11.	<i>Certification of furniture according to European norms</i>	5,55	,290	,751	,177	,165	-,085
12.	<i>Provision of additional benefits (insurances etc) to the customers instead of price reduction</i>	5,36	,112	,258	,767	,146	-,201
13.	<i>Selling of better products quality instead of production or procurement cost reduction</i>	5,40	,174	,217	,741	,113	,202
14.	<i>Occupation of specialized personnel</i>	5,36	-,097	,398	,647	,104	,024
15.	<i>Better and effective monitoring at the departments of your firm</i>	5,67	,397	,047	,622	,107	,051
16.	<i>Better utilization of your site</i>	5,35	,242	,111	,123	,854	,146
17.	<i>Participation to an internet professional exhibition</i>	5,05	,222	,119	,133	,846	,049
18.	<i>Bigger emphasis to effective marketing</i>	5,55	,399	,236	,158	,691	,151
19.	<i>Personnel reduction</i>	3,09	,043	,128	-,172	,209	,793
20.	<i>Compression of profit margins</i>	4,98	,275	-,074	,343	,040	,646

Table 3. Factor matrix after rotation regarding the proposals in confronting the economic crisis of Cypriot and Greek wood and furniture enterprises

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. Finally, the factor analysis has shown that a total of 20 proposals regarding the confrontation of the economic crisis that have been proposed in the questionnaire of the study only for the Cypriot wood and furniture enterprises, could be grouped in 5 major categories of proposals which are: operational strategies, certification processes, sales processes and monitoring, internet and marketing and finally, 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 it's 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 realize 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 analyzing the basic financial indexes of Greek and Cypriot wood and furniture enterprises and correlating them to the applied strategies of the previous 1-2 years, in order to investigate their effectiveness. 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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