

THE EFFECTS OF ECONOMIC CRISIS ON GREEK WOOD AND FURNITURE SECTOR AND WAYS TO CONFRONT IT

Papadopoulos, Ioannis¹; Trigkas, Marios²; Karagouni, Glykeria³

¹Department of Wood & Furniture Design and Technology. Technological & Educational Institute of Larissa, Greece. E-mail: papad@teilar.gr

²Department of Wood & Furniture Design and Technology. Technological & Educational Institute of Larissa, Greece. E-mail: mtrigkas@cereteth.gr

³Department of Wood & Furniture Design and Technology. Technological & Educational Institute of Larissa, Greece. E-mail: karagg@teilar.gr

Abstract

The aim of the present research is to analyze and evaluate the impacts of the current financial crisis on the Greek enterprises of timber, furniture and wooden frames and define effective ways of confrontation. Based on a prototype questionnaire, specifically structured for the aim of the research, 60 responses were collected from Greek timber, furniture and wooden frames enterprises on January – March 2010. The questionnaires were processed and analyzed with the statistical program SPSS of ver 17.0 using descriptive statistics and correlation analysis. The main purpose was to explore the current situation of the sector's enterprises and their prospects of survival and growth. In their majority the Greek wood and furniture enterprises have been affected by the recent economic crisis negatively or very negatively, while there is a very small percentage which enjoyed a positive impact. The forecasts show that the situation is getting worse, which points to a real crisis in the sector's economic basis. The reduction of sales and profits exceeded 25%. The enterprises believe that recovery will come through their own planning, by setting new short and long term objectives and strategies such as new collaborations with suppliers and customers, reduction of product prices, and consequently the reduction of total expenses such as marketing and personnel / executive costs, the bonus -cut, as well as the increased emphasis on publicity. The core marketing strategies are focused mainly on high quality, low prices and a culture of continuous improvement. The present research constitutes a basis for cooperation and synergy creation of Greek timber and furniture enterprises in order to overcome the consequences of the national and global economic crisis and secure a further development. The forecasts of sales, profits, number of customers and share of market, as well as the discussed ways and strategies of crisis management will contribute to erase awareness among the sector's enterprises and enable entrepreneurs plan their future strategy. This field research is the first to investigate the consequences of the resent economic crisis in the Greek wood and furniture market. It is also one of

the few efforts at international level that focuses on the specific problem in an explorative way beyond simplistic statistical data.

Keywords: Economic Crisis, Furniture & Wood Products Enterprises, Effects of crisis, Marketing Strategies

Introduction

Economic and credit crisis and growth.

The global economy is recovering from the deep recession that has occurred during the last period. While the crisis resulted quickly in deep recessions in a number of advanced economies, the emerging market and developing economies were also seriously affected, but the impact varied across regions and countries (World Bank 2009, International Monetary Fund (IMF) 2010, Claessens, Kose and Terrones 2010).

Although the process of global economic recovery is already underway, the nature and implications of the crisis have still been at the centre of academic and policy discussions. Its root causes are thought to lie in the excessive global savings, flowing through a poorly regulated shadow banking system in the United States to its housing market (Krugman 2009) along with European economies imbalances (IMF 2009 and 2010). Some others claim that the idea of this crisis being different is misleading, as an analysis and compared with earlier ones, presents remarkable similarities with them (Reinhart & Rogoff, 2009). The crisis originated in the United States, but it took place in a highly integrated global economy and spread rapidly across markets and borders. Although it was not surprising that a global crisis led to a significant decline in global activity, the extent and duration of this decline have been a major area of research.

Furthermore, credit booms in some developed countries and in emerging economies, combined with poor lending practices and the long lasting period of these booms, increase in systemic risk and failures in regulation and supervision created much vulnerability. While only a small number of credit booms end up in a banking crisis the probability of a crisis increases with a boom (Helbling & Terrones 2003, Dell'Ariccia, Barajas et al. 2008, Dell'Ariccia et al. 2008). The effect of financial liberalization on growth and its impact on producing financial crises is a fact with banking and currency crises increasing as a result of financial liberalization (Demirguc-Kunt and Detragiache 1998, Kaminsky and Reinhart 1999, Glick and Hutchinson 2001).

However, the crisis has also highlighted some specific financial sector reform challenges for emerging markets and developing countries (Claessens, Kose and Terrones 2010). In most advanced economies, fiscal and monetary policies should maintain a supportive thrust in 2010 to sustain growth and employment (IMF 2010). Economic recovery is on the way for many of the developed economies according to IMF projections for 2010 and 2011.

Focusing to sectors economic activity, researchers argue that financial crises have a negative impact on sectors development (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). Unfortunately, financial crises are cyclical phenomena and a characteristic of the capitalism economic system (Buitter 2007). Meanwhile, the ongoing macroeconomic shocks will expand the weakness of households that are unable to service their debt, many of them from among the ranks of relatively richer households. Finally, there is evidence that the food and fuel crisis is not over and a new round of price increases, via currency adjustments, will have substantial effects on net consumer's income (World Bank 2009).

The E.U. manufacturing - construction sector

The EU economy and its manufacturing sector seem at last to be emerging from the recession with Gross Domestic Product (GDP) in the third quarter rising by 0.3% on the previous quarter after five consecutive quarters of contraction, and manufacturing output up by 2.8% in November as compared to its trough in March 2009 (European Commission 2010). Most Member States showed a clear rebound in GDP with only Spain and Greece still in negative territory. Among the largest Member States, the strongest growth was seen in Germany (0.7%) and Italy (0.6%). However, manufacturing output in eight Member States has not really recovered yet, and construction output is still on a downward trend in most countries (European Commission 2010). The available data shows that for the 20 Member States for which data is available, industrial production increased in 16 and fell just in four, while construction sector continues to decline. The output in the EU27 fell by 1.6% in the third quarter of 2009 compared with the previous quarter. Not only the activity in building construction declined by 2% but also the production value of civil engineering remained stagnant in the third quarter of 2009 compared to the previous quarter (European Commission 2010). Many EU countries, are still concerned by this decline of the economic activity in the construction industry. Among the countries for which data are available (European Commission 2010) for the third quarter of 2009, construction output compared to the previous quarter rose only in Poland (+5.3 %), Luxemburg (+4.5%), Finland (+3.0 %) and the Czech Republic (+0.4%). The largest quarterly decreases were registered in Lithuania (-15.3%), Latvia (-11.8%), Estonia (-11.4%), Ireland (-9.9%), Slovenia (-9.8%), Romania (-7.9%), Greece (-7.2%) and Spain (-6.1%). There are pessimistic views about the stabilisation of the situation and a possible recovery in the coming months.

There are several powerful forces holding back the recovery in Europe. Sizable fiscal and current account imbalances are constraining recovery in several euro area countries, with potentially negative spillover effects to the rest of Europe. Indeed, concerns about sovereign

solvency and liquidity in Greece (and possible contagion effects on other vulnerable euro area countries) have threatened the normalization in financial market conditions (IMF 2010).

Focusing to the sectors of wood and wood products and furniture, available data (European Commission 2010) shows that, the furniture sector at the end of 2009 had already started rebounding since its previous peak at the first quarter of 2008 having an up to 1,5% growth during a three months period at late 2009, while decline still goes on for wood and products of wood sector showing lower performance up to 20% since its peak at the first quarter of 2008. Never the less the % growth rate is still at negative territory for both sectors with -17,5% and -11,0% concerning the third quarter of 2009 and up to -17,2% and -15,2% for the 2009 (till November) for furniture and wood sector respectively. Seasonally adjusted data of the 2009 monthly evolution (European Commission 2010) show that variances are present for both sectors. Finally, data concerning exports value % change show that, still much has to be done in both sectors, as growth lies in negative numbers for 2008 and for 2009 (-15,6% and 22,3% for October and November respectively of 2009 in comparison to previous year corresponding period for furniture and -12,5% and -16,4% for wood and products of wood) (European Commission 2010).

The Greek problem

The Greek economy expanded quickly through 2008, narrowing the income gap with the euro area. However, after the boom years Greek economy faces one of the deepest recessions in its modern history. Projections for 2010 – 2011 shows Greece having a negative development (-2% in 2010 and -1.1% for 2011) and unemployment rising from 12% to 13% respectively (IMF2010), while till recently previous data were more optimistic (IMF 2009). Furthermore, domestic demand is weakening along with industrial and manufacturing production and private consumption declining (IMF 2009).

Indicators also, suggest a significant competitiveness gap. Although restructuring has taken place over the last decade, as suggested by technological upgrading of exports, increasing specialization in high-growth services, and orientation toward fast-growing Balkan markets, Greece has lost market share (at least in volume terms) and competitiveness relative to peers. Greece's price competitiveness gap reflects high administrative costs and inefficiencies, high margins in several sectors, and rising labour costs. Doing business in Greece is difficult especially on information society and enterprise environment. Steps have been taken to improve the business environment, boost competition in specific sectors (Erasmus Research Institute of Management 2006, European Commission 2007, Observatory of European Small-Medium Enterprises 2007) as long as in wood sector (Karagouni and Papadopoulos 2006, EOMMEX 2006, Karagouni et al. 2010).

Greece is, facing nowadays one of the most strict and heavy program of economic, financial and structural reforming in its latest history. One of the questions that rise now in Greece is how to overcome this crisis, not only through the IMF and EU support, but also through a

political reforming and facing the challenge in building the skilled labor force needed, supporting industrial sector, social unity and banking system stability, to ensure that the country embarks on a path of sustained, and equitable, economic growth.

The financial crisis has caused unusual uncertainty to Greek enterprises because of the lack of demand, liquidity and confidence. A first analysis of general statistic data (Hellenic Statistical Authority (2010a & b) shows:

- A reduction of building activities volume by -22.6% and of the number of building licenses by -14.2% (December 2009/ December 2008). The biggest reduction has been observed in Ionian Islands (-20.1%), Thessaly (-17.9%), Northern Aegean (-17.6%), Attica (-17.3%), while the smallest reduction of licenses has been observed in Western Greece (-0.1%), Eastern Macedonia, Thrace (-7.3%) and in Epirus (-8.5%).
- The Industrial Production Indicator for timber (February 2010 /February 2005) is decreased by -24.7%, and for furniture by -31.2% (February 2010 /February 2005).
- The Turnover Indicator in the furniture retail trade (February 2010/ February 2005) presented a decrease of -4.0%.

The above official data reveal that the Greek production of furniture and wood products is following a permanent recession. It should be mentioned the timber sector has confronted it long before the economic crisis because of the international competition (Industrial Production Indicator 2008 = 77.0, 2010=75.3, using 2005 as a basis of 100). During the last two years, the Greek furniture sector has been affected by both the reduction of its products' competitiveness and even more the worldwide economic crisis (Industrial Production Indicator 2008 = 99.4, 2010=68.8, using 2005 as a basis of 100). The reduction of the degree of intensity (-25.3% 2009/2008, -7.3% 2010/2009) seems to be the only positive development.

On the contrary, the sector of furniture retail trade does not appear to be particularly influenced by any factor yet. Moreover, the indicators of turnover and volume of sales of retail trade present a light increase of + 2.9% and 3.4% respectively for the period 2010/2009. The Greek market appears to be a breeding ground for imported furniture. This fact, although positive for the commercial Greek enterprises, is however not so much encouraging for the Greek economy which should keep sustainability rather on a productivity basis. Besides, this phenomenon is not only observed in the timber and furniture sectors, since the total indicator of industrial production has been decreased in one year (February 2010/February 2009) by -9.2%.

The present field research was contacted in order to investigate the effects of the economic crisis in the Greek enterprises of timber and furniture and impose solutions and recovery policies by combining the research results to the forecasts and estimations of the entrepreneurs or their executives. Moreover, the research tried to allocate the criteria of customer choice as well as new ways of forming strategies and setting targets, in order to face

the competition. Finally, the research focused on marketing strategies and the allocation of particular sector characteristics, suitable to be straightly applied in order to enable the Greek timber and furniture enterprises survive and prosper in a rather turbulent and highly uncertain future.

Methodology

The data of this primary research were collected using the method of questionnaire formulation, collection and elaboration. The questionnaires were specifically structured for the aim of the present research, according to the basic principles of marketing research (Gordon and Langmaid, 1988; Tull and Hawkins, 1990; Doyle, 1998; Aaker et al. 2004), also using the essential preconditions of responsibility, transparency, reliability and the perspicacity as well as the connection with the strategy (Avlonitis, 2008). The researchers are marketing research fellows and addressed the company executives with personal interviews. The questioned sample was selected after particular control processes, when considered suitable to answer.

The research questionnaire included 29 questions in total, grouped in 2 categories. The first one included 11 questions about the general characteristics and the profile of each enterprise (name, address, legal form, year of foundation, activities, main products, occupied personnel etc). The second group included 17 questions about the effect of economic crisis on the Greek timber, furniture and joinery enterprises.

60 enterprises were randomly selected. They are all located in Greece and their owners or executives were questioned during their presence at two International Trade Shows in Athens and during visits in the enterprises' plants. The interviews were carried out in the period of January – March 2010. The questions were structured to be short and comprehensible in order to be easily answered.

The pilot application of the questionnaire in five companies revealed the weak points of questions which were further elaborated and led to its improved final form (Dillman, 2000).

The data were processed and analyzed with the special statistical program SPSSWIN ver 17.0. The analysis includes Frequencies, descriptive statistics (Descriptives) and Crosstabs, controls of independence among all the variables with the X² criterion, correlation analysis and analysis of variance (t-test) (Norusis, 2007; Howitt and Cramer, 2003).

The profile of the sector enterprises

Most enterprises (55.0%) are placed in the region of Athens and state the trade of domestic furniture, kitchen and office furniture, products of timber or wooden frames as their exclusive activity at a percentage of 48.3%, while the rest 51.6% are engaged in both production and trade.

Regarding the type of legal form of enterprises that participated in the present research, the largest percentage (43.3 %) are individual enterprises followed by General Partnerships (GPs) (35.0%), Societe Anonyme (SAs) (10.0%), Limited Liability Companies (Ltds) (8.3%) and Commercial and Industrial Societe Anonyme (1.7%).

The mean of enterprises occupies about 22.5 individuals. The 80.0% are micro enterprises (less than 10 employees), 15.0%, are small ones (10-50 individuals) and a 3.3% occupy more than 50 individuals.

In their majority they are mature and experienced enterprises established before 1990 at a percentage of 50.9%, while an important percentage (28.1%) have been founded during the last decade, that is to say after 2000.

Finally, regarding the annual turnover, the 89.7% of the enterprises present a turnover less than 1.000.000 €, a 5.1% 1.000.000 - 5.000.000 €, and a 5,2% above 5.000.000 €.

Results

The main factor that influences Greek enterprises is the world economic crisis and especially the financial problems of Greece. In total the Greek enterprises share the opinion that the furniture and timber sectors have been influenced negatively at a percentage of 60% and very negatively at a percentage of 28,3%. A small percentage of 6.7% consider that the sector has been improved (Figure 1). This observation appears to be further supported by the statistical data that present an increase of the indicator of retail sales turnover by 2.9% during last year. This positive attitude is only developed by furniture retail enterprises that present a turnover which is smaller than 1.000.000 €, employ less than 10 people, no matter when they were founded.

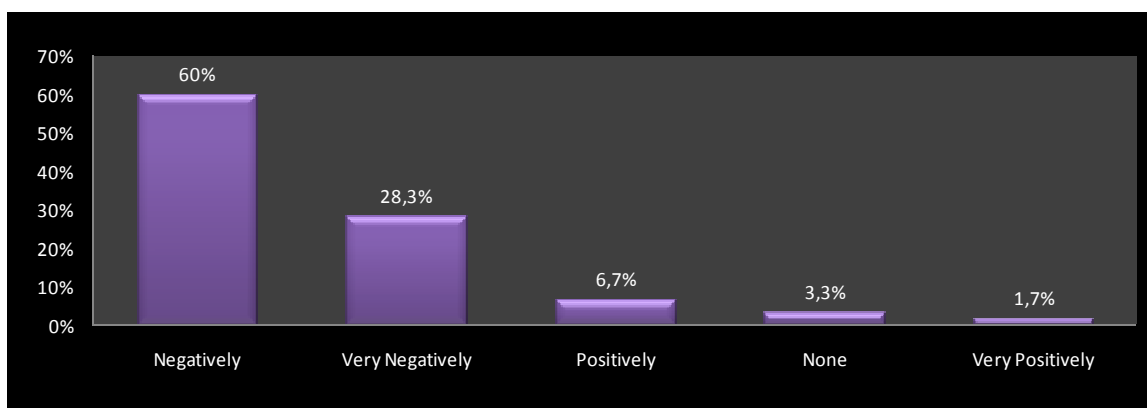


Figure 1. Degree of Impact of the recent economic crisis on wood, furniture and wooden frames sectors

The implications of the economic crisis are negative for 75% of the enterprises that participated in the research (Figure 2). A minor share of 10% that represents very small

enterprises with less than 10 employees reports a positive impact. These are mostly individuals (15,4%) and General Partnership's (9,5%). The SAs and the Industrial and Commercial SAs have been influenced negatively by the economic crisis in their total, while a 40% of Ltds have not been influenced yet (Figure 3).

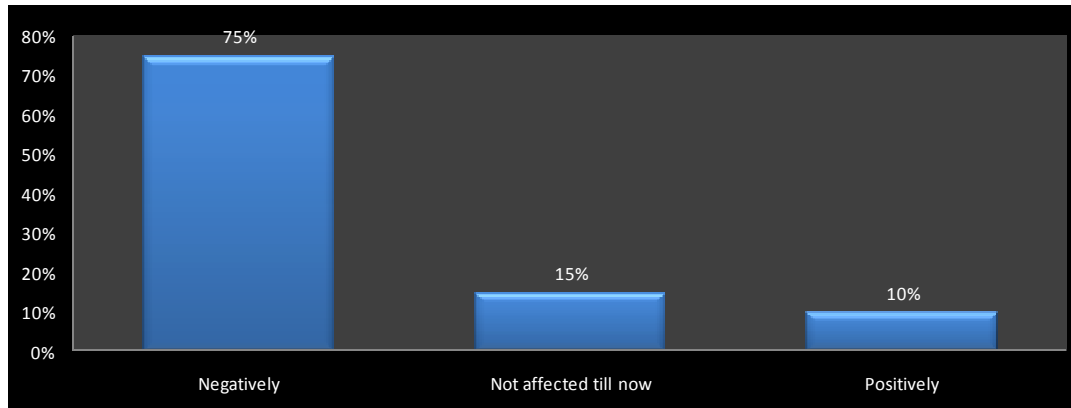


Figure 2. Degree of Impact of the recent economic crisis on wood, furniture and wooden frames enterprises

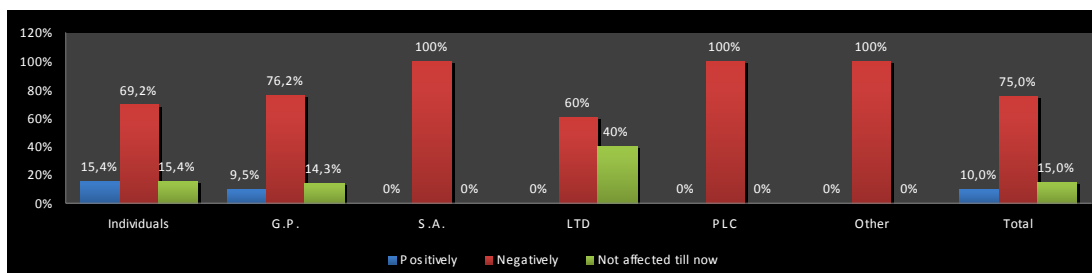


Figure 3. Degree of Impact of the recent economic crisis on wood, furniture and wooden frames enterprises in relation to their turnover

On the quantitative side, the research revealed some rather interesting results on the effects of the economic crisis; especially on sales, profits, share of market and number of customers of the questioned enterprises. The analysis revealed that a negative impact on the total performance of the enterprises resulted to a reduction of their sales by -26.5%, profits by -29.8%, number of customers by -25.0% and their share in the market by -26.5%. On the contrary, the small percentage of enterprises (around 10%) that turned some crisis threats into opportunities and were positively affected, enjoyed an increase in profits by 8.3%, in sales by 16.9%, in customers' number by 25.0% and their share of market by 16.9% (Figure 4).

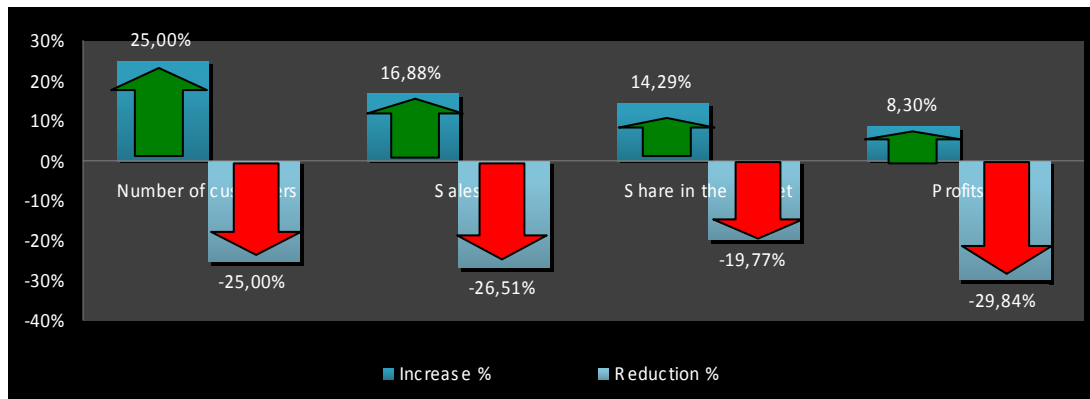


Figure 4. Degree of Impact of the recent economic crisis on the enterprises' financial indices

Table 1 presents analytically the changes of basic economic characteristics of enterprises according to their activity, as stated by the entrepreneurs. The rates of sales reduction reveal some unimportant alterations for all entrepreneurial activities and range on average, from -16.5% (office furniture) to -20.2% (domestic furniture). On the other hand, there is a quite noteworthy increase of sales, which goes up to +17.5% for the 21.4% of enterprises activated in the domestic furniture. These are mainly commercial enterprises.

As regards profits and losses, the timber sector has been less influenced since it presents the smaller rate of reduction (-13.8%) compared to the other sectors. On the other hand, the rate of profits reduction of the negatively influenced enterprises was rather discouraging (-34.7%).

The share of market varies also considerably depending on the activities of the sector enterprises. The timber sector has suffered the smallest losses (-2.1%) while the domestic furniture the biggest ones (-16.4%).

Finally, there was a remarkable case of a single enterprise of the wooden frames sector which succeeded in increasing the number of customers by 80% and deserves to be studied further as a case of success.

Sub-sector	Type of effect	Changes %			
		Sales	Profits	Share of market	Number of customers
Domestic furniture	Mean	-20,2%	-27,1%	-16,4%	-19,0%
	Negatively	-27,1% (22)*	-31,4% (24)	-20,4% (12)	-28,1% (21)
	Positively	+17,5% (6)	+7,2% (3)	+7,5% (2)	+28,8% (4)
Kitchen Furniture	Mean	-20,0%	-25,3%	-0,5%	-22,0%
	Negatively	-29,0% (15)	-34,7% (15)	-18,0% (5)	-30,0% (12)
	Positively	+13,7% (4)	+10,0%	+17,05%	+10,0%

			(4)	(5)	(3)
Office Furniture	Mean	-16.5%	-19.6%	-7.2%	-16.9%
	Negatively	-25.0%	-28.0%	-20.0%	-21.8%
		(10)	(10)	(5)	(11)
	Positively	+11.7% (3)	+8.3%	+8.8%	+10.0%
			(3)	(4)	(2)
Timber, products of timber	Mean	-20.0%	-13.8%	-2.5%	-13.8%
	Negatively	-27.5%	-20.0%	-12.5%	-13.8%
		(4)	(3)	(2)	(4)
	Positively	+10.0% (1)	+5.0%	+7.5%	-
			(1)	(2)	
Frames	Mean	-17.8%	-21.0%	-15.0%	-5.0%
	Negatively	-21.3%	-23.8%	-19.2%	-15.6%
		(8)	(8)	(6)	(8)
	Positively	+10.0% (1)	+1.5%	+10.0%	+80.0%
			(1)	(1)	(1)

Table 1. Changes of sales, profits, share of market, number of customers per sub-sector for the Greek furniture and timber enterprises

* The number of answers

Referring to the prospective developments of the sector, there was a positive mood of optimism detected in the forecasts of the enterprises for next year. The 38.3% of these estimates a further recession (the 8.3% expect considerable sector deterioration). Almost the 1/3 of them reckons that the situation will not be altered and will remain stable. On the contrary, the 23.3% of them forecast a small improvement (Figure 5). Big enterprises with an annual turnover over 50.000.000 € appear to be more pessimistic in total, while the more optimistic ones are the older enterprises, established before 1980. The 41.2% of them expect a slight improvement of their economic situation, mainly due to their experience.

The above forecasts, for the total of the enterprises that participated in this research, reveal an estimation of a reduction of sales by -19.7%, profits by -24.3%, number of customers -19.2% and share of market -11.6% (Table 2). Variations at sub-sector level are expected by the enterprises of timber production and trading (-6.3% profits reduction), the kitchen furniture producers (-0.5% market share reduction), and the enterprises of wooden frames which forecast a reduction of the number of their customers close to -5%. Still, the biggest reduction of customer number is expected by the kitchen furniture producers.

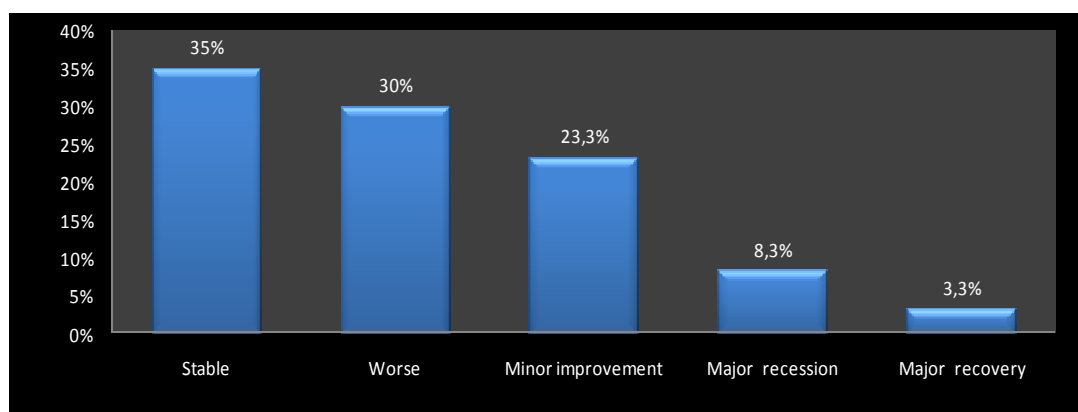


Figure 5. Configuration of the sector situation in the immediate upcoming 12month

Sub - sector	Changes % on average			
	Sales	Profits	Share of market	Number of customers
TOTAL OF ENTERPRISES	-19.7% (23.6)	-24.3% (24.2)	-11.6% (20.5)	-19.2% (26.2)
Domestic furniture	-17.5% (27.1)	-27.1% (24.1)	-16.4% (17.5)	-19.0% (32.3)
Kitchen Furniture	-20.0% (24.2)	-25.3% (26.1)	-0.5% (23.4)	-22.0% (24.8)
Office Furniture	-16.5% (19.8)	-19.6% (19.3)	-7.2% (16.8)	-16.9% (14.2)
Timber, products of timber	-20.0% (20.9)	-6.3% (23.6)	-2.5% (11.9)	-13.8% (4.8)
Frames	-17.8% (20.3)	-20.9% (16.6)	-15.0% (18.0)	-5.0% (33.3)

Table 2. Forecasts of sales, profits, share of market, number of customers by sub sector for the Greek furniture and timber enterprises

* Std. Deviation

Measures and policies to recover from the crisis

The reduction of product prices (by a 73.3% of the enterprises) and consequently the reduction of total expenses (by a 46.7%) were named as the best ways adopted by the questioned enterprises in order to tackle the economic crisis and move forward (Figure 6). It should be underlined that especially the furniture sector enjoyed till now big profit margins, which in certain cases exceeded even a 200% percentage. Consequently, the reduction of product prices is an "honest" policy which will result to certain profits for the consumers. However, it will inevitably alter the "luxury" level of the existing entrepreneurial status of the sector companies. The problem lies with those companies that used to work under sensible prices, striving for their survival and growth. These enterprises do not have the ability to lower the prices of their products further and thus they try to face the crisis with more publicity of their products. This policy is proposed to be an effective one by many experts, although it demands a considerable increase of promotion expenses.

Some further measures taken by the sector's enterprises, are new forms of collaboration with both suppliers and customers at a percentage of 65.0% of enterprises, while there are some thoughts on the possibility of mergers with bigger companies (5.0% of the companies) or acquisitions (being bought out – 1.7%).

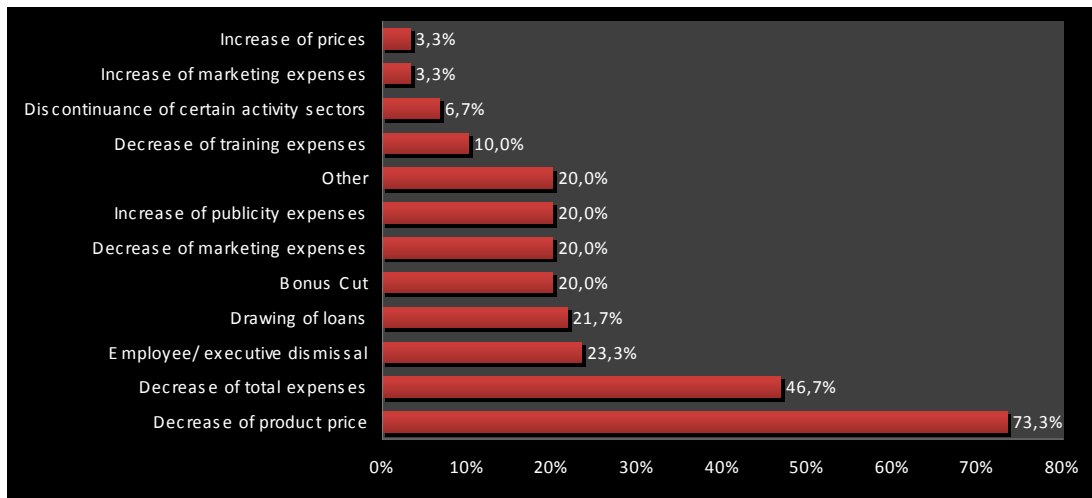


Figure 6. Policies to tackle company problems emerging from the economic crisis

The economic crisis has led to a reformation of short – medium and long term entrepreneurial objectives, according to the studied companies. Figure 7 shows that most enterprises maintain their short-term objectives at a percentage of 40.0%, since they are rather cautious about the developments of Greek economy, while the 36.7% of them have already changed them. On the contrary, the biggest percentage of the companies (40.0%) has already altered their medium-term objectives (2-5 years), while the 1/3 of enterprises has changed their long-term ones (more from 5 years). The enterprises that are activated in the timber sector have already reformed their short-term objectives at a percentage of 50.0% and the medium-term at a percentage of 66.7% while they have not made particular changes to the long-term ones (16.7%). The sector of wooden frames remains the most cautious and hesitant, since there is only a 30% which dared some short-term changes.

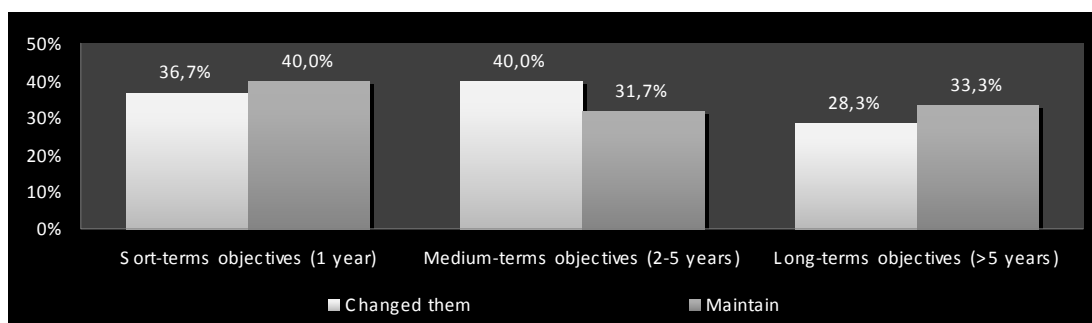


Figure 7. Change or intention of change of the entrepreneurial objectives

The main marketing strategies used by the questioned enterprises are the quality dimension (production and disposal of products of higher quality), customer satisfaction (their focus in the better satisfaction of customers’ expectations) and price reduction (Figure 8). Innovation

does not seem to comprise a strategic asset, perhaps due to the small size of the questioned enterprises. This is further proved by the X² control, where the factor of innovation application appears to relate itself statistically significantly with the annual turnover of enterprises (Pearson X² = 9.000, Cramer 's V = 0.548 for sig. level> 90%, Approx. Sig = 0.061).

The factor of lower product price appears to relate itself statistically significantly with the activity of these enterprises (Pearson X² = 11.345, Cramer 's V = 0.392 for sig. level> 95%, Approx. Sig = 0.023, kendall's tau-c = -0.302). This leads to the conclusion that for trade companies the reduction of price comprises their main strategy, while manufacturers engage this strategy to a much smaller degree. This is partly explained by the fact that producers have already tried hard to reduce the production and operation costs, because of the strong competition from the big multinational enterprises of the sector and thus they do not appear to have other margins.

Companies with less than 10 employees prefer to invest in Quality more than those with a higher number of personnel (Pearson X² = 9.151, Cramer's V = 0.412 for sig. level>90% Approx. Sig = 0.057, kendall's tau-c = -0.041). This factor is also related statistically significantly with the legal form of enterprises (Pearson X² = 11.028, Cramer's V = 0.429 for sig. level>90% Approx. Sig = 0.088, kendall's tau-c = -0.027). The individual and G.P. enterprises focus in the quality more than S.As.

The share of market desired by the enterprises of the research appears to be related statistically significantly with the groups of companies formed with regard to the year of foundation. The newer companies (after 2000) consider the share increase as their basic strategy (Pearson X² = 11.667, Cramer's V = 0.764 for sig. level>90%, Approx. Sig = 0.070, kendall's tau-c = -0.510).

There is a significant statistical relation between the continuous improvement of products and the age-groups, with the oldest companies (before 2000) to consider it as their basic strategy (Pearson X² = 14.454, Cramer's V = 0.617 for sig. level>95%, Approx. Sig = 0.025, kendall's tau-c = 0.482).

The cross-correlation analysis using the Pearson correlation criterion (Table 3) with regard to the basic marketing strategies applied by Greek wood and furniture enterprises as measures against the economic crisis, showed that:

- The more the timber and furniture enterprises invest in quality, the bigger the share they acquire in the market (Pearson correlation coefficient = 1.000, Correlation is significant at the 0.01 level (2-tailed)).
- The greater the emphasis on quality, the higher the products' prices (Pearson correlation coefficient = -.536, Correlation is significant at the 0.05 level (2-tailed)).

Variables	t-test	Pearson correlation coefficients								
		1	2	3	4	5	6	7	8	9
Higher quality	13.614	1.000								
Better service	15.771	,183	1.000							
Lower prices	11.908	-,536*	-,312	1.000						
Higher share of market	9.000	1.00**	,500		1.000					
Custom - tailored	7.746	-,577				1.000				
Continuous improvement of products	9.831	,114	-,302	-,273			1.000			
Innovations in products	10.993	-,048	-,0046	-,371	,577	-,447	,870	1.000		
Entry in markets with considerable growth	7.347			-,632	,500		,204		1.000	
In favour-achievement of customers' expectations	5.284	,500		,167						1.000

Table 3: Pearson of correlation coefficients of main marketing strategies against economic crisis

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

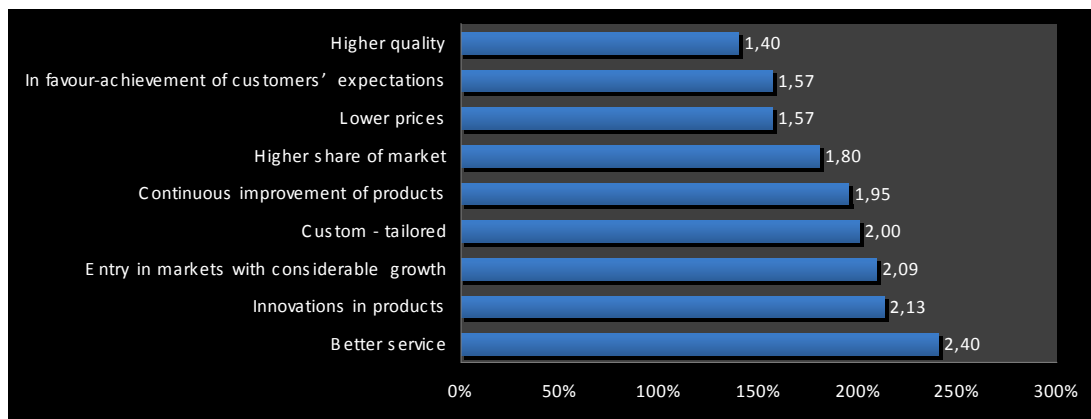


Figure 8. Main marketing strategies (1=most important factor)

Internal factors of the questioned enterprises are evaluated as the only solution to economic crisis and the only ones which can alter the existing negative effects of recession. They refer to resources development and mainly actions that the enterprises alone have to undertake. There was further evidence that these actions should be supported by appropriate governmental guidance but no other external factor seemed to be important. Control H 2 did not prove any statistically significant relation with the particular characteristics of enterprises. Of particular interest is the fact that the questioned enterprises are able to criticize their current position in the entrepreneurial landscape and form their strategy based on their own strengths, aiming at overcoming the crisis and sustain a growth process.

The cost reductions along the whole value chain, as well as the price reduction in combination with differentiation and operational excellence comprise the most effective ways

in order to regain competitiveness in the timber and furniture world market. Control X2 did not show any statistically important relation between the ways of recovery and the characteristics of the enterprises in question (size, legal form, year of foundation etc).

The research also investigated the new requirements of customers and in particular those characteristics of timber and furniture products that will affect positively the final buying decision in the crisis and meta - crisis period. The questioned enterprises consider that the main focus will be in the low price of products as well as the level of confidence that exists among customers and companies (Figure 9).

Control X2 showed that high quality of furniture and timber products regarded as a factor of customers' choice, relates in a statistically significant way with the companies' turnover (Pearson $X^2 = 34.192$, Cramer's $V = 0.781$ for sig. level >99%, Approx. Sig = 0.001, kendall's tau-c = -0.184) and with the number of occupied personnel (Pearson $X^2 = 45.928$, Cramer's $V = 0.758$ for sig. level >99%, Approx. Sig = 0.001, kendall's tau-c = 0.135). Actually, this factor is considered as the most important one by micro enterprises (annual turnover < 1.000.000 € and employment of less 10 individuals).

Brand name is statistically related with the sub - sector where the enterprise belongs (Pearson $X^2 = 22.838$, Cramer's $V = 0.571$ for sig. level >95%, Approx. Sig = 0.011, kendall's tau-c = 0.179). This factor is mainly vital for commercial enterprises since they sell brand name products.

Environmental protection is statistically related with the number of occupied personnel (Pearson $X^2 = 12.522$, Cramer's $V = 0.436$ for sig. level >90%, Approx. Sig = 0.051), that is to say it is considered as important by medium enterprises that occupy more from 50 individuals.

The fact that all 7 factors, presented in Figure 9, influence one another, led to a cross-correlation analysis with the Pearson correlation criterion. The results are shown in Table 5 and generally conclude that:

- The lower the price of a product, the smaller the confidence towards the enterprise (Pearson correlation coefficient = -0.615, Correlation is significant at the 0.01 level (2-tailed)).
- The bigger the innovativeness of a product, the smaller the company's service towards the customer (Pearson correlation coefficient = -0.457, Correlation is significant at the 0.01 level (2-tailed)).
- The more innovative the product, the higher its price (Pearson correlation coefficient = -0.375, Correlation is significant at the 0.05 level (2-tailed)).



Figure 9. Order of factors that will affect the buying decision (1=most important factor)

Variables	t-test	Pearson correlation coefficients						
		1	2	3	4	5	6	7
Low product price	12.139	1.000						
Service of customers	18.974	,216	1.000					
Relation of confidence with the enterprise	14.799	-.615**	-.192	1.000				
High quality of product	16.939	-.284	-.231	-.107	1.000			
Brand name product	22.946	-.269	-.247	.113	.275	1.000		
Innovativeness of product	25.012	-.375*	-.457**	.039	.070	-.172	1.000	
Protection of environment	40.674	.050	.039	-.026	-.259	-.603**	.135	1.000

Table 5: Pearson correlation coefficients of the main choice criteria

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

General aspects

Since marketing is about value, the research tried to detect the better values engaged by the questioned companies, either producers or only retailers. These are found to be mainly the combination of price, product reliability and convenient service that 86.7% of the companies claim to offer, as well as the achievement of the finest integrated custom-tailored solutions offered by the 73.3% of the companies (Table 6).

In order to distinguish those features that lead to success and growth, the opinions of the entrepreneurs or their executives were asked and led to the following ones listed in declining line: The focus of all departments and employees on customer satisfaction (nourished by market observation), the existence of a good labor climate in and within departments (i.e. marketing - R&D -production, marketing - sales - customer service) and the choice of markets and target groups which exploit the specific competitive advantages of the company, or /and the avoidance of markets where it detects weaknesses (Table 7).

<i>a/a</i>	<i>Values</i>	<i>Percentage %</i>	<i>N</i>
1	<i>The combination of price, product reliability and convenient service that we offer is invincible</i>	86,7	52
2	<i>We offer the finest integrated custom-tailored solutions</i>	73,3	44
3	<i>We help you to define your problem, determine the best solution and operate its application</i>	51,7	31
4	<i>We provide the best products</i>	25,0	15
5	<i>Our products have the higher output for our customers</i>	23,4	14
6	<i>No one supplies customers with a lower total cost than us</i>	13,3	8

Table 6. Order of values of excellence for the products of Greek furniture and timber enterprises

Control X^2 revealed a statistically important relation between:

a) Success derived from the company's ability to "build" a name and an image with the legal form of the enterprise (Pearson $X^2 = 13.388$, Cramer's $V = 0.489$ for sig. level >90%, Approx. Sig = 0.099, kendall's tau-c = -0.256). Actually SAs and LTDs rate the factor as "most important".

b) Success derived by the company's ability to continuously "build on" the satisfaction and loyalty of its customers, with the number of occupied personnel (Pearson $X^2 = 9.969$, Cramer's $V = 0.476$ for sig. level >95%, Approx. Sig = 0.041, kendall's tau-c = -0.322). Actually medium sized companies, in contrast to micro enterprises, rate the factor as "most important".

c) Success derived from the company's ability to be flexible in the satisfaction of different requirements of customers, with the year of foundation (Pearson $X^2 = 13.150$, Cramer's $V = 0.446$ for sig. level >95%, Approx. Sig = 0.041, kendall's tau-c = -0.300). The newest the companies, the most important they rate this factor.

<i>α/α</i>	<i>Features</i>	<i>Importance</i>	<i>St.dev</i>	<i>N</i>
1	<i>The focus of all departments and employees on customer satisfaction and market</i>	1,53	0,74	15
2	<i>A good labor climate between marketing, R&D and production.</i>	1,75	1,04	8
3	<i>A good labor climate between marketing, sales and service of customer.</i>	1,75	0,79	20
4	<i>The choice of markets and target groups which exploit the specific competitive advantages of the company or /and the avoidance of markets where it detects weaknesses.</i>	1,85	0,91	27
5	<i>The enterprise manages a Value Chain System in collaboration with powerful supplies and distributors.</i>	1,92	0,67	12
6	<i>The company continuously "builds on" the satisfaction and loyalty of its customers.</i>	2,00	0,87	25
7	<i>The company cultivates the ability "to build" a name and an image.</i>	2,00	0,86	28
8	<i>The company's flexible in the satisfaction of different</i>	2,00	0,78	34

	<i>requirements of customers</i>			
9	<i>The enterprise applies a system of motives planned to leads to certain in-house behavior.</i>	2,38	0,74	8

Table 7. The main features of a successful timber and furniture company in Greece (scale from 1-3 with 1 to be the more important)

The questionnaire ended by asking about the usefulness of the present research and its success in supporting the Greek timber and furniture sector to tackle ways in order to recover the economic crisis. A 95% commented positively on its contribution.

Conclusions –Proposals

In their big majority the Greek furniture and timber enterprises have been affected by the recent economic crisis negatively to very negatively. A very small percentage of these have presented some improvement.

The forecasts for the economic situation of the sector reveal a further recession for next year. A percentage that does not reach even a 25% of the total appears to be quite optimistic about the future, believing in a reversal of the situation and an improvement of sales and profits.

The reduction of sales amounted about 27% on average and the reduction of profits 30%, while their share in the market was decreased by 20%. On the contrary, the enterprises that exploited the crisis – mainly traders - increased their profits by 8% on average as well as their share in the market by 14% roughly.

The forecasts for the forthcoming year refer to even worse reductions, i.e. -30% in sales, -32% in profits, -24% in customers and -24% in the share of market. A minority of enterprises that forecast some recovery expect an increase of 14% in their sales and 12% in their profits. The enterprises of timber production and trade forecast smaller reductions i.e. about -6.3% in profits, and kitchen furniture companies a -0.5% in market share.

Internal factors such as resources development and policies that the enterprises alone have to built and realize are evaluated as the only solution to economic crisis and the only ones which can alter the existing negative effects of recession. They should also be supported by appropriate governmental guidance.

The more important criteria for customers are the low price and the combination of confidence and loyalty to the enterprise, followed by customers' service and the high quality of products.

Reduction of product prices, and consequently reduction of total expenses such as marketing and personnel / executive costs, contracting of loans, bonus -cut, as well as the increased emphasis on publicity are considered to be the best direct ways adopted by the

Greek timber and furniture enterprises in order to tackle the economic crisis and move forward.

Respectively their future strategy is focused mainly in new collaborations or even in no action, expecting the developments in Greek economy.

The long-term objectives remained or will remain the same for the 1/3 of the questioned enterprises, while a somewhat smaller percentage (28%) declares that they will change or have already changed them. The medium-term objectives remained or will remain the same for a percentage of 32%, while a 40% declared that they have changed or will soon change them. Finally, the short-term objectives have not changed by the 40% of the enterprises while a 36% do not intend to make any changes.

Basic marketing strategies applied by the enterprises of timber and furniture focus mainly on high quality and low prices, a bigger share of market, a culture of continuous improvement, product innovation, better customer service and entry in markets with big growth potential. Innovativeness is related statistically in a significant way with the annual turnover, while commercial enterprises turn to price reductions, a strategy not easily adopted by manufacturers. The statistical analysis of the basic marketing strategies revealed that the more the enterprises of timber and furniture invest in quality, the higher share they acquire in the market.

Finally, it is expected that during the period of economic crisis the customers' main buying criteria will be low prices and their trust and loyalty to certain Greek timber and furniture enterprises.

The contribution and usefulness of the present research and its success in supporting the Greek timber and furniture sector to tackle ways in order to recover the economic crisis was positively commented by a 95% of the questioned enterprises. The data analysis and elaboration in combination with literature and the theory of crisis management led to the formation of the following 17 general principles:

- A strong focus on profitable entrepreneurial activities
- Redefinition of strategic suppliers in a win-win relation (reasonable requirements, negotiation, attendance in the vision of growth)
- Emphasis in innovation and technology know-how
- Emphasis on personnel selection
- A good understanding of production costs and profit margins
- Considerable reduction of production costs
- A further improvement and elaboration of entrepreneurial skills
- Innovative ways of collaboration

- Differentiation strategies
- Maximum effectiveness of the web site
- Measurement of efficiency using established indicators
- Special policies for non active customers
- Realistic products pricing
- IT and corporate support wherever possible (e.g. accounts, wages, economic reports)
- Strategies for market growth
- Well defined personnel policies which enhance low skilled employee turn over
- Establishment of formal routines for strategy reconfiguration and redefinition

The above principles are accomplished with 12 simple "secrets" which cost practically nothing but have been proved very effective when applied:

- Positive thought and enthusiasm
- Self-confidence
- Emotional distance of bad news
- Communication of good news.
- Advice to customers. "A very well served customer could have been of bigger value than a publicity of 10.000 \$ value" Jim Rohn
- Bigger emphasis on marketing and especially publicity (there is no way for a company to grow, unless it communicates its message)
- Supply of excellent services
- Value for the customer
- Search for additional income resources
- Development of e-business
- Smile!!!
- Development of knowledge intensive entrepreneurship through constant learning, adapting to modern ways of business activities with zest and personal commitment!!!

An important limitation is the fact that the sample was too small and a single case and that although selected by current literature, the final list of questions was selective and filtered after the initial pilot research. Thus, we have engaged the most popular choices – but not all

of them. Despite these limitations, the findings and suggestions are useful, given the absence of proposals for encounter the economic problems of Greek furniture enterprises.

The research could be further expanded at international level, in order to collect comparative data on the effects of the economic crisis on timber and furniture sector and the ways the enterprises in other countries have used to tackle the problems caused by it. The results could thus enable the formation of suitable alternative solutions and best practices which in turn can constitute policies and drivers of survival and growth for the enterprises of timber and furniture. The application of benchmarking could also support the creation of forecasting models used in crisis management. Furthermore, the present research could be used as a model research for other productive and commercial sectors of Greece or other European countries.

Biography

Ioannis Papadopoulos is an Associate Professor in the Department of Wood and Furniture Design and Technology of TEI, Larissa. He has a Phd at Economics and Marketing of Wood and Wooden Products. His current research interests are in Financial Analysis, Forecasting Models, Market and Marketing Research in wooden products and furniture, Consumer Behaviour, Applied Innovation, Entrepreneurship and Competitiveness. E-mail: papad@teilar.gr

Marios Trigkas is an M.Sc. Forester, specialized in wood and furniture business economics. He works on his Ph.D. on economics of innovation in wood and furniture enterprises. He is a scientific collaborator of the Centre for Research and Technology – Thessaly (CE.RE.TE.TH.), at the Institute of Technology and Management of Agricultural Ecosystems (I.TE.M.A.) and a Laboratory Collaborator of the Department of Wood and Furniture Technology and Design. His current research interests are: innovation, economic analyses, models of forecast, business plans etc, E-mail: mtrigkas@cereteth.gr

Glykeria Karagouni is a Mechanical Engineer and a Lecturer in the Department of Wood and Furniture Design and Technology of TEI, Larissa. She holds a MSc at Modern Industrial Management and works on her PhD on Advancing Knowledge-Intensive Entrepreneurship and Innovation in low tech sectors. Her current research interests are in Technological and Entrepreneurial Strategy, Strategic Investment Decision Making, Innovation Management and Production Management. E-mail: karagg@teilar.gr

Bibliography

- [1] Aaker, D., Kumar, V. and Day, G. S. (2004). Marketing research, 8th edition. New York: John Wiley & Sons, Inc.
- [2] Buiter, Willem H., (2007). Lessons from the 2007 Financial Crisis. Centre for Economic Policy Research, Policy Insight, No. 18. pp. 1-17.
- [3] Claessens, S., Kose, A., Terrones, M. (2010). The global financial crisis: How similar? How different? How costly?" Journal of Asian Economics, 21 (2010), pp.247 – 264.

- [4] Dell'Araccia, G., Barajas, A., & Levchenko, A., (2008). Credit booms: The good, the bad, and the ugly. International Monetary Fund.
- [5] Demirguc-Kunt, A., Detragiache, E., (1998). Financial Liberalization and Financial Fragility. IMF Working Paper 98/83.
- [6] Dillman, D.A., (2000). Mail and Internet Surveys: The Tailored Design Method. John Wiley & Sons, New York, NY.
- [7] Doyle, P., (1998). Marketing Management and Strategy. 2nd edition, Prentice-Hall Europe, Chapter 3.
- [8] EOMMEX- National Observatory of SME's (2006). "Existing situation and the perspectives of Greek SME's". Annual report of 2006».
- [9] Erasmus Research Institute of Management (ERIM), RSM Erasmus University / Erasmus School of Economics, Erasmus University Rotterdam, (2006). Entrepreneurship at country level. Economic and non-economic determinants. A.R.M. Wennekers.
- [10] European Commission, (2007). SMEs in FP7. General Research Secretariat.
- [11] European Commission, (2010). Impact of the economic crisis on key sectors of the EU – the case of the manufacturing and construction industries. February 2010.
- [12] Forbes, K.J. (2004). The Asian flu and Russian virus: the international transmission of crises in firm-level data, *Journal of International Economics* 63 (2004), pp. 59–92
- [13] Glick, R., Hutchinson, M., (2001). Banking crises and currency crises: How common are the twins. In: Glick, R., Moreno, R., Spiegel, M. (Eds.), *Financial Crises in Emerging Markets*". Cambridge University Press, New York.
- [14] Gordon, W, Langmaid, R (1988), *Qualitative Market Research: A Practitioner's and Buyer's Guide*, Gower, Aldershot.
- [15] Helbling, T., & Terrones, M., (2003). Real and financial effects of bursting asset price bubbles. Washington, DC: World Economic Outlook, April, International Monetary Fund.
- [16] Hellenic Statistical Authority (2010a). http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0503/PressReleases/A0503_DKT21_DT_MM_02_2010_01_P_GR.pdf.
- [17] Hellenic Statistical Authority (2010b), http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0508/PressReleases/A0508_DKT39_DT_MM_02_2010_01_F_GR.pdf.
- [18] Howitt, D. and Cramer, D. (2003). *Statistics with SPSS 11 for WINDOWS*. Kleidarythmos Eds, Athens, p. 291.
- [19] I.M.F., (2009). Greece: 2009 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Greece IMF" Country Report No. 09/244, August 2009
- [20] I.M.F., (2010). World Economic Outlook. April 2010 rebalancing growth", I.M.F. multimedia services division.
- [21] Kaminsky, G., Reinhart, C., (1999). The twin crises: the causes of banking and balance of payments problems. *The American Economic Review* 89 (3), pp. 473–500.
- [22] Karagouni G., and Papadopoulos, I., (2006). The Impact of Technological Innovation Capabilities on the Competitiveness of a Mature Industry. *MIBES Transactions On – Line International Journal* ISSN 1790-9899, Vol. 1, Issue 1, pp. 17-35
- [23] Karagouni, G. Papadopoulos, I. and Trigkas, M., (2010). The innovativeness of Thessalian wood and furniture SMEs: towards an understanding of internal and external drivers. *MIBES transactions On-line International Journal*, Vol.4, Issue 1.
- [24] Kroszner, R.S., Laevenb L., Klingebield, D. (2007). Banking crises, financial dependence, and growth. *Journal of Financial Economics* 84 (2007) pp. 187–228
- [25] Krugman, P., (2009). Revenge of the glut, *New York Times*. March 1.
- [26] Norusis, M., (2007). *A guide of data analysis with SPSS 12.0*. Kleidarythmos Eds, Athens.

- [27] Observatory of European SME's, (2007). Flash EB No 196- Analytical Report.
- [28] Reinhart, C. M., & Rogoff, K. S. (2009). This time is different: Eight centuries of financial folly. Princeton Press.
- [29] Tull, D.S, Hawkins, D.I (1990). Marketing Research, Measurement, and Method, Macmillan, New York, NY.
- [30] World Bank, (2009). Europe and Central Asia. The Crisis Hits Home Stress Testing Households in Europe and Central Asia". Report No. 50158-ECA. Office of the Chief Economist and Poverty Reduction and Economic Management Unit Europe and Central Asia Region.