Consumers Research for Certified Wood Products in Greece

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Abstract
The purpose of this study is to advance our current understanding of consumers' WTP for certified wood products in Greece. Furthermore, it is important to identify consumer characteristics that affect the likelihood of observing preferences in the market for a variety of certified wood products in order to develop efficient marketing strategies. The results showed that a growing number of consumers of younger age that are aware of the sustainable management of forests, start to buy certified wood products, however this increment is independent to the awareness of sustainable forest management and chain of custody in forest products certification. A great number of Greek consumers may not be aware of certification, however half of them are willing to pay extra more than 5% in relation to not certified wood products. A potential consumer-focused campaign on sustainable forest management and certification should be carefully designed based to the characteristics on certified wood products purchase decision. The national and European legislation on the certification of wood products do not seem to be well known, from Greek consumers.

Keywords: Sustainable forest management, forest certification, wood products certification, green marketing

JEL Classifications: Q23, Q13, M31

Introduction

For forest products, as a certified product is considered this which includes a certified raw material and its content is ascertain by the chain of custody procedure (Kollias, 2012; Vidal et al., 2003; Upton and Bass, 1996). This procedure constitutes a tracking mechanism of the certification throughout the whole supply chain, from the forest till the final product. The standards that are used for the several certification schemes are different between the schemes but also between different territories into the shame certification scheme, however they are equal regarding the legislative demands and often include quite high standards(Rametsteiner, 2003).

Forest certification is a voluntary procedure to address the degradation of forest areas and resources aiming to the sustainability of forest management practices (Vogt et al., 2000; Viana et al., 1996, Brusselaers and Buysse, 2021). Furthermore, forest products certification created potential marketing opportunities(Owari et al., 2006; Jie, 2008; Papadopoulos et al., 2010). As a result, different kinds of certification have been developed for forests and forest products as well. The most common certification schemes today are those of the Forest Stewardship Council (FSC), PEFC (originally Pan European Forest Certification, now Program for the Endorsement of Forest Certification), and Sustainable Forestry Initiative (SFI) (Aguilar and Vlosky, 2007). As mentioned, it is a voluntary process, based on the belief that consumers of forest products are likely to prefer products from organizations committed to protect the natural environment (Morone et al., 2021; Brusselaers et al., 2017). The main aim of forest certification is to improve forest management by providing participating companies with marketing incentives (Upton and Bass,1996; Paletto et al., 2017). Companies are encouraged to participate with the promise of acquiring market benefits such as access to niche markets or better prices for products, new markets entries and other benefits like the enhancement of the ecological profile of the company Paletto et al., 2017; Papadopoulos 2010; Papadopoulos and Karagouni 2007; Rametsteiner and Simula 2003).

On the other hand, green consumers seems to stand as a driving force of the way that companies are operating in the new business environment. Especially for certified wood products, several studies have shown that consumers play an important role for the development of environmentally friendly or environmentally certified wood products market (Forsyth et al, 1997; Rametsteiner 2000; Ozanne et al., 1999; Ozanne and Smith 1998; Ozanne and Vlosky 1997, Papadopoulos et al., 2010; Anderson and Hansen 2004, Hansen et al., 2006, Morone et al., 2021). However, an expressed willingness to pay does not always translate into purchase behavior (Forsyth et al, 1999; Ozanne and Vlosky 1997; Sakagami and Sakaguchi, 2018).

The supporters of this "green consumers' movement" in Greece are more aware and seem more responsible for the sustainable management of natural resources and environmental protection. Their number is continuously increasing and they constitute the main target group for the producers of certified wood products. In a relative study (Papadopoulos et al., 2010) has emerged that, the meaning of certified wood products that are produced from sustainable managed forests, remains rather blur for the 24% of the surveyed population. However, the same study has shown that a 41.2% of the consumers are willing to pay more from 1-5% for the purchase of certified wood products and furniture that come from certified sustainable managed forests, in relation to conventional wood products. The weighted average of this additional price was estimated up to 5.6%.

In another study regarding the Greek market of certified wood products by Kollias (2012), including both consumers and producers, results has shown that: the Greek consumers seem to be supporters of actions that protect the environment and relative initiatives and they are willing to financially support these efforts. The majority states that they give a great attention to the price and the utility of wooden products, while the majority is aware of the sustainable forest management and only a 28,4% is aware of the certified wood products. However, the study reveals a positive attitude against the market of certified wood products.

A relevant research by Papadopoulos *et al.* (2012) concludes that the SME's Greek furniture companies prefer the strategy of differentiation for addressing the competition and they are investing in strategies including "green entrepreneurship" and certification of products and processes. Same seem to be the conclusions of Trigkas et al. (2012) that, a number of wood and furniture SME's in Greece are investing in management systems, certification of products and processes, eco-design etc. However, the need of investing significant resources in the development of a "green" and "environmental sound" strategy, arise several obstacles for the Greek SME's of the wood and furniture sectors. Thus, the adoption of such a strategy still remains marginal requiring a number of preconditions to be met throughout the whole value chain. The above are also supported by another research of Trigkas et al. (2020), which has revealed that the forest cooperatives, can play also a very important role for the promotion of forest products certification. This could be done as part of their core strategy to develop a shared vision for value creation and delivering through the establishment of a framework related to sustainable forest management, satisfying the increasing needs for innovative forest-based products, which constitutes a challenge for the sustainable management of forests.

The purpose of this study is to advance our current understanding of consumers' WTP for certified wood products in Greece. Furthermore, it is important to identify consumer characteristics that affect the likelihood of observing preferences in the market for a variety of certified wood products in order to develop efficient marketing strategies.

Based on literature review the main Hypothesis of the present research is that the consumers and especially those of younger age, start to buy in a bigger percentage certified wood products. The development of the specific market is based on the awareness of the certification of sustainable forest management and their final products. The supplementary hypotheses that were also tested are the following:

- H1: The majority of consumers over 35 and of higher educational level are aware of certified wood products and they are willing to pay an extra amount over 5% of the basic cost of the product.
- H2: Most of the consumers that are head of families, they choose certified wood products because they combine both quality and price and they would recycle the products if this was subsidized by the state.
- H3: The better the opinion of friends and relatives from the purchase of certified wood products, the more they positively affect the in situ market research of Greek consumers.

Materials and Methods

For the purposes of the present field study, the questionnaire was selected as the suitable methodological tool for data collection. The research hypotheses as long as the literature review, have contributed substantially to the development of a specially constructed questionnaire (Keplanidis, 1999). Questionnaires' distribution was made in electronic format due to the restrictions of the COVID-19 pandemic, using google forms by e mail and through the use of social media (Facebook, Messenger, Viber). The questionnaire is formed of 19 questions, of which a group of five (5) questions refer to the profile of the surveyed population,(Table 1). Most of the questions were of closed type e.g. ranking, dichotomous, Likert, willingness of purchase, multiple choice and of Thurstone scale. A reminder was used after a logical period to increase the response rate of the surveyed population. Finally, the sample of the study was formed by 118 Greek consumers throughout the whole country. Data collection was made in November 2020. A pilot survey involving ten (10) specialists on the topic of the study also took place for potential ambiguities to be managed. Data were edited and statistically processed using SPSS 26 statistical package.

Table 1: Profile of the surveyed Greek consumers

Gender	**Percentage %**	**Profession**	**Percentage %**
Men	45.3%	Public servant	55.6
Women	54.7%	Private servant	18.8
Group of age	**Percentage %**	Retired	6.0
18-25	8.5	Unemployed	6.8
26-35	18.8	Freelancer	8.5
36-45	17.1	Other	4.3
46-60	49.6		
>60	6.0	**Family status**	**Ποσοστό %**
Education level	**Percentage %**	Single	24.8
Primary school	0.9	Married	29.1
Highschool	9.4	Married with children	21.4
University	46.2	Divorced	2.6
Post graduate studies	35.0	Divorced with children	11.1
Doctoral studies	8.5	Other	11.1

Results and Discussion

The analysis of the data shown that a 60.7% of the surveyed Greek consumers is aware of the sustainable forest management. Regarding the certification of wood products, a 54.7% of the surveyed population states that is aware of the existence of such types of products in the market. Crosstabulation analysis has revealed that the awareness of certified wood products is not statistically correlated with the gender (X^2=0.142 for Asymptotic Significance (2-sided)=0.707), the age (X^2=8.98 for Asymptotic Significance (2-sided)=0.062)and level of education (X^2=1.741 for Asymptotic Significance (2-sided)=0.783)of the respondents.

It seems that there is a significant willingness for purchasing certified wood products by the Greek consumers in a percentage of 87.9%, while only a 0.9% of the surveyed consumers has a negative attitude towards this potentiality.

The variables that play the most significant role in the decision for purchasing of wooden products by the surveyed Greek consumers, are ranked as in the following table 2.

Table 2: Preference characteristics of wooden products by the Greek consumers

Variable	N	Mean	Std. Deviation
Low price	117	2.91	.187
High quality of the construction	117	2.97	.230
Best relation of quality – price	117	2.96	.237
Great time endurance	117	3.16	.227
High aesthetic	117	3.36	.216
Made by ecological materials	117	3.19	.214
Long time of guarantees	117	3.60	.232
Prototype design	117	3.61	.213

Responses to the question regarding the willingness for the extra amount of money that the Greek consumer could dispense for certified wood products, e.g. for wooden furniture, the 27.4% is willing to pay an extra amount of 6-10%, while a percentage of 19.7% is willing to pay a 11-20%, and only a 7.7% are willing to pay more than 20% in relation to the price for conventional products. The percentage of consumers that would pay an amount of 0-5% extra, regards the 16.2% of the surveyed consumers.

Based to the previous analysis, the testing of our basic hypotheses follows. Our main hypothesis is that Greek consumers, especially those of younger age, start to buy in a higher percentage certified wood products. The growth of the relative market has to do with the greater awareness for the certification of sustainable forest management and of the final products. The combination of the variables of age with the willingness for purchase of certified wood products, shows that only a 0,9% of the consumers wouldn't buy certified products and this percentage belongs to the group of age between 36-45. Furthermore, in younger group of ages among the consumers(18-35), only the 15.4% are not sure if they would buy certified wood products. Using crosstabulation for the verification of our hypotheses, the Pearson coefficient X^2 =14.192, for $p<0.001$, thus the correlation of the variables age and willingness for purchasing certified wood products is statistically significant.

Furthermore, correlation of the purchase of certified wood products and the awareness of the sustainable forest management and their final products, has highlighted that fact that the correlation is not statistically significant for $p<0.001$. In relation to the variables of age and the awareness of the sustainable forest management, our results shows that in the age sample a 56.2% is aware of the sustainable forest management. Correlation between the two variables seems to be less statistically significant, since Pcc X^2=8.98 for $p<0.01$.

Hence, for the main hypothesis of our research that a growing number of consumers of younger age that are aware of the sustainable management of forests, start to buy certified wood products, we argue that the hypothesis is partially confirmed; an increment in the purchase of certified wood products occurs, however this increment is not caused only by the awareness of sustainable forest management and chain of custody in forest products certification.

Other hypotheses:

H1: The majority of consumers over 35 and of higher educational level are aware of certified wood products and they are willing to pay an extra amount over 5% of the basic cost of the product.

A 27% of the surveyed consumers has stated that is willing to pay an extra amount up to 6-10% in relation to the prices of conventional wood products, for purchasing certified wood products (Figure 1). The X^2 test for the exploration of statistically significant correlation existence between the group of ages of consumers and especially of those over 35 years old, and the percentage % of willingness to pay an extra amount for certified wood products in relation to conventional ones, has finally shown that it isn't statistically significant(Pearson X^2 =17.688, for p=0.342). These consumers in their majority (84%) are of higher educational level. However, in respect to the awareness of certified wood products, X^2 test has revealed that, although more than the half of the consumers are of higher educational level, there is no statistically significant correlation between this awareness and the willingness to pay extra for purchasing certified wood products (Pearson X^2 =1.741, for p=0.783). Thus, we argue that the H1 is not totally confirmed.

H2: A. Most of the consumers that are head of families, they choose certified wood products because they combine both quality and price B. They would recycle the products if this was subsidized by the state.

A: It is observed from the following ANOVA results that, the relation of quality and price for the purchase of certified wood products, constitutes a very significant factor for married consumers (3.06), for those with children (3.00) but also for those who are married with children (2.48).

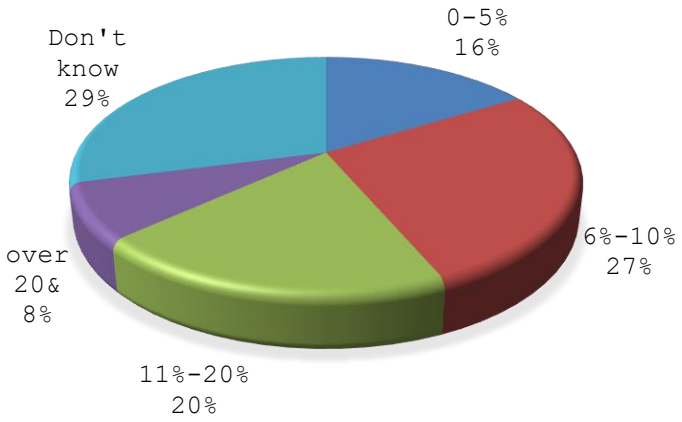

Figure 1: Willingness of consumers to pay an extra amount for purchasing certified wooden products.

According to our results (Table 3) we have: Levene Statistics = 2.629 (p<0.028), thus our tests is statistically significant and the variance is similar among the sum of the groups regarding family status of the consumers. Th ANOVA table shows the likelihood of the F-test =1.161 for (df=5, p=0.333). The significance level p is statistically significant. Hence, it is accepted that the family status affects the choice of certified wood products. Thus, our hypothesis is confirmed regarding the first part. Regarding the second part, that head of family consumers would recycle the products if this was subsidized by the state, it is observed that it is a quite significant reason for married consumers, and for married with children, following the same ANOVA analysis, resulting to: Levene Statistics = 1.213 (p<0.308) hence our test is statistically significant and the variance is equal among all the groups of consumers' family status. Furthermore the ANOVA table shows the

likelihood of the F-test=0.692 for (df=5, p=0.631). Significance p is statistically significant. Thus, family status affects the choice of certified wood products.

Table 3: ANNOVA between family situation and value for money

	N	Mean	Std. deviation	Std. error	95% confidence interval		Min	Max
					Upper	Lower		
Not married	29	3.72	2.644	.491	2.72	4,73	1	8
Married	34	3.06	2.870	.492	2.06	4,06	1	8
Married with children	25	2.48	1.873	.375	1.71	3,25	1	7
Divorced	3	1.33	.577	.333	-.10	2,77	1	2
With children	13	3.00	2.915	.809	1.24	4,76	1	8
Other	13	2.23	2.421	.671	.77	3,69	1	8
Sum	117	2.96	2.564	.237	2.49	3,43	1	8

		Levene Statistic	**df1**	**df2**	**Sig.**
Optimum relation of quality-price	Based on Mean	2.629	5	111	.028
	Based on Median	.955	5	111	.449
	Based on Median and with adjusted df	.955	5	94.524	.450
	Based on trimmedmean	2.334	5	111	.047

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	37.897	5	7.579	1.161	.333
Within Groups	724.890	111	6.531		
Total	762.786	116			

H3: The better the opinion of friends and relatives from the purchase of certified wood products, the more they positively affect the in situ market research of Greek consumers.

Regarding the question which are the information sources that the Greek consumers trust the most when they are conducting a market research for wood products in general, a correlation analysis was made using the Pearson correlation coefficient (Pcc) and the results of Table 4 have shown that at a significance level 0.01 the factors that affect positively one each other are the following: a) The more the positive impressions of friend and relatives form the purchase of certified wood products the more they positively affect in situ market research (Pcc=0.650). Hence, our Hypothesis 3 is confirmed 3, b) Higher use of internet affects positively more information based on relative published articles (Pcc=0.507).

Table 4: Pearson Correlation between information sources that Greek consumers trusts the most for their market research on wood products in general

	Adverti-sement	In situ market research	Friends/ relatives opinion	Internet	Articles	Other
Advertisement	1	-0.067	0.154	0.177	.321**	0.101
In situ market research	-0.067	1	.650**	.406**	.183*	-0.090
Friends/relatives opinion	0.154	**.650****	1	.360**	.321**	-0.038
Internet	0.177	.406**	.360**	1	**.507****	0.074
Articles	.321**	.183*	.321**	.507**	1	.306**
Other	0.101	-0.090	-0.038	0.074	.306**	1
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Using factor analysis for the above variables, after the rotation of the component matrix (Table 5)it has emerged that the six variables that describe the affection rate of the consumers for the purchase of certified wood products, are grouped into two groups. The first group refers to the variables 1-5 and the second group the variables 5 and 6, with advertisement and in situ market research as the most significant. Both these two variables explain the 61,6% of the total variance approximately.

Table 5. Factor analysis of the communication means role for the purchase of certified wooden products

Component Matrix[a]		
	Component	
	1	2
Advertisement	**,347**	,530
In situ market research	**,692**	-,563
Friends/relatives opinion	**,768**	-,360
Internet	**,762**	,054
Articles	**,709**	**,465**
Other	,167	**,670**

Total Variance Explained

	InitialEigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,301	38,349	38,349	2,301	38,349	38,349
2	1,395	23,246	61,596	1,395	23,246	61,596
3	,900	14,999	76,595			
4	,680	11,341	87,936			
5	,438	7,299	95,235			
6	,286	4,765	100,000			
Extraction Method: Principal Component Analysis.						

Conclusions and Proposals

We conclude that for the main hypothesis of our research that a growing number of consumers of younger age that are aware of the sustainable management of forests, start to buy certified wood products, we argue that the hypothesis is partially confirmed since an increment in the purchase of certified wood products occurs, however this increment is not caused only by the awareness of sustainable forest management and chain of custody in forest products certification. Our results would be better confirmed if our sample in the ages 18-35 was greater, so that the growth curve of certified wood products market could be better shaped for the next five years. A potential dissemination strategy which would aim to the consumers regarding sustainable forest management and certification, is proposed to include this specific age category of consumers as well.

A possible awareness campaign targeting to the consumers regarding the sustainable forest management and certification, should include this group of consumers as well, among the other target groups. National and European legislation regarding certification of wood products seems to be not aware by the Greek consumers, since the half of them seem not to be familiar with. Labeling is another issue that should be further and better clarified.

Our results show that a great number of Greek consumers may not be aware of certification, however half of them are willing to pay extra more than 5% in relation to not certified wood products. It should be noticed that since consumers exists that are not confident for this extra amount that may be willing to pay, it could be possible by implementing suitable marketing strategies they could constitute a dynamic market share. Thus a profitable potentiality seems to exist for the growth of certified wood products market.

The choice of certified wood products (furniture and construction materials)is independent from the age and the family situation. Those who are moving to the purchase, they are motivated by psychological factors because they seem to connect their decision with environmental protection. The results indicate also that, motivations could be established for the purchase, recycle and reuse of wood in all of its forms; one of those motivations is proposed to be governmental subsidies, mainly towards families with children. Furthermore, any type of grouping of the consumers in order to choose the right marketing mix, is not obvious, since there are no relative studies in Greece during the recent years.

The identification of the main characteristics of Greek consumers for certified wood products has revealed two sides to it. On one hand, it demonstrates that the information concerning the importance of certification, labeling and sustainable forest management, is not wide spread among most parts of the Greek society. This is highlighted here by the fact that consumers of higher income and with a specific family status and age, are more willing to pay for the purchase of certified wood products and act as drivers of this potential market. On the other hand, this group represents a target that can be aimed by marketing strategies working to increase and establish a steady demand curve by the group identified.

It is strongly proposed to benchmark the findings of the present study with other relative studies at international level regarding the preference of the consumers in purchasing certified wood products.

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References

Anderson, R.C., Hansen, E.N. (2004). The impact of environmental certification on preferences for wood furniture: a conjoint analysis approach Forest Products Journal, 54(3), 42-51.

Aguilar, F., and Vlosky, P. (2007). Consumer willingness to pay price premiums for environmentally certified wood products in the U.S. Forest Policy and Economics, 9(8), 1100-1112.

Brusselaers, J., & Buysse, J. (2021). Legality requirements for wood import in the EU: Who wins, who loses?. Forest Policy and Economics, 123, 102338.

Brusselaers, J., Van Huylenbroeck, G., & Buysse, J. (2017). Green public procurement of certified wood: spatial leverage effect and welfare implications. Ecological Economics, 135, 91-102.

Forsyth, K., Haley, D., & Kozak, R. (1999). Will consumers pay more for certified wood products?. Journal of Forestry, 97(2), 18-22.

Hansen, E., Fletcher, R., Cashore, B., Mc-Dermott, C. (2006). Forest Certification in North America. EC 1518. Oregon State University Extension Service, Corvallis, OR.

Jie, J. (2008). From Forest Certification to the Region Ecosystem Certification——Marketing Path for Regional Sustainable Development. World Forestry Research, 4.

Kelpanidis, M. (1999). Educational Research Methodology with Statistics. Kodikas, Thessaloniki, Greece.

Kollias E. (2012). Study of the Greek Market of Certified Wood Products from Sustainable Managed Forests. Doctoral dissertation, Aristotle University of Thessaloniki. Department of Forestry and Natural Environment, Thessaloniki.

Morone, P., Caferra, R., D'Adamo, I., Falcone, P. M., Imbert, E., & Morone, A. (2021). Consumer willingness to pay for bio-based products: Do certifications matter?. International Journal of Production Economics, 240, 108248.

Owari, T., Juslin, H., Rummukainen, A., & Yoshimura, T. (2006). Strategies, functions and benefits of forest certification in wood products marketing: Perspectives of Finnish suppliers. Forest Policy and Economics, 9(4), 380-391.

Ozanne, L.K and Smith, P.M. (1996). Consumer segments for environmentally marketed wooden household furniture. 28(4), 461-477.

Ozanne, L.K and Smith, P.M. (1998). Segmenting the Market for Enivronmentally Certified Wood Products. Forest Science, 44(3), 379-389.

Ozanne, L.K and Vlosky, R.P. (1997). Willingness to pay for environmentally certified wood products: A consumer perspective. Forest Products Journal, 47(6), 39-48.

Ozanne, L.K., H.R. Bigsby, and. Vlosky, R.P. (1999). Certification of forest management practices: the New Zealand customer perspective. NZ Journal of Forestry. 43(4), 17-23.

Paletto, A., Notaro, S., Pastorella, F., Giacovelli, G., Giovannelli, S., & Turco, R. (2017). Forest certification in Calabria (Italy):

attitudes, preferences and willingness to pay of manufactures and enterprises of forest-wood chain. Forest@, 14, 107-123.

Papadopoulos, I. and Karagouni, G. (2007). European timber trade analysis: an economical overview and regional market potential, International Workshop, Larnaka, Cyprus, Cost Action E34 "Bonding of Timber", 22-23 March, pp. 141-9.

Papadopoulos, I., Karagouni, G., Trigkas, M. & Platogianni, E. (2010). Green marketing. The case of Greece in certified and sustainably managed timber products. Euro Med Journal of Business, 5 (2), 166-190.

Papadopoulos, I., M. Trigkas, and A. Papadopoulou (2012). Cross Country Contagion of Economic Crisis at Firm Level. Evidence from Cypriote and Greek Furniture and Wood Enterprises. 5th Annual International EuroMed Conference, Building New Business Models For Success Through Competitiveness and Responsibility, ISBN: 978-9963711079, Montreaux, Switzerland, Oral presentation, October 4-6, 2012, pp 1253-1270.

Papadopoulos, I. (2010). Marketing of Furniture and Wooden Products. Stamoulis, Athens.

Rametsteiner, E. (2000). Sustainable Forest Management Certification: Frame Conditions, System Designs and Impact Assessment, European Commission, Ministerial Conference on the Protection of Forests in Europe, Vienna, Austria.

Rametsteiner, E. and Simula, M. (2003). Forest Certification: An instrument to promote sustainable forest management? Journal of Environmental Management, 67, 87-98.

Sakagami, M., & Sakaguchi, D. (2018). Estimating preferences for wood products with environmental attributes. Forests, 9(1), 41.

Trigkas, M., Anastopoulos, C., Papadopoulos I. and Lazaridou D. (2020). Business Model for Developing Strategies of Forest Cooperatives. Evidence from an Emerging Business Environment in Greece. Journal of Sustainable Forestry, 39 (3), 259-282.

Trigkas, M., Papadopoulos, I. and Karagouni, G. (2012). Economic efficiency of wood and furniture innovation system. European Journal of Innovation Management, 15 (2), 150-176.

Upton, C. and Bass, S. (1996). The Forest Certification Handbook, St. Lucie Press, Delray Beach, FL

Viana,V., Gholz, H., and Donovan, R. (1996). Certification of Forest Products: Issues and Perspectives, Island Press, Washington, DC.

Vidal, N., Robert, K., and Cohen, D. (2005). Chain of custody certification: an assessment of the North American solid wood sector. Forest Policy and Economics, 7(3), 345-355.

Vogt, K.A., Larson, B.C., Fanzeres, A. (2000). Forest Certification: Roots, Issues, Challenges, and Benefits. Yale University, New Haven, Connecticut, CRP Press.