THE IMPORTANCE OF PRODUCTS MADE OF CERTIFIED WOOD MATERIALS TO CONSUMERS IN THE CZECH REPUBLIC

JAKUB MICHAL, ANDREA SUJOVÁ, DAVID BŘEZINA

ABSTRACT
These days, market tools are highly preferred voluntarily in order to protect nature and create ecological goodwill in society. They also attest to the fact that those societies apply the principle of a responsible approach to the environment in their trade policies. Monitoring and development of these market trends should ensure an increase in customers' awareness of and interest in "green products". The current business environment provides a broad range of production, which always makes it more difficult to find a criterion defining a product distinctive enough for a potential customer to accept this distinction and prefer it to others in the competitive environment. Pressure from interest groups and legislative measures forces society to realise the need to consider aspects of environment and sustainability. These facts are increasingly reflected not only in the business environment, which affects the environment by its nature, but also globally. The aim of the paper is to assess the current state of consumer attitudes towards the preference for environmentally friendly products as well as attitudes towards social responsibility. The results published in this article come from primary research which explored the relationship between consumer preferences for certified wood products and secondary data from research into social responsibility in the same year in the Czech Republic.

KEY WORDS
Certification, consumer opinion, marketing, business ethics, consumer behaviour.

Introduction

The historical evolution and application of the principles of business ethics originate from the USA. From 1900 to 1950, business ethics only mattered in the USA, yet beginning in 1950, it also started to penetrate into Europe, where interest in this issue has deepened significantly (Luknič 1994). In terms of the application of ethical principles, an interesting statement made by Howard Hughes is worth mentioning: “it is obvious that high principles cannot be achieved at the same time as high profit”. The current trends in management, as well as practice, put increasing emphasis...
on socially responsible business, which is also proved by the fact that sustainable development has been considered to be the only possible scenario for the further development of society since the 1980s. The increased expectations of society have made social reliability and environmental considerations some of the most important criteria (Figure 1) on the market where the customer interacts with the enterprises, not only as a criterion which is exploitable in the development of businesses in the form of increased sales, but supported by the state and European structures as a global incentive for the respective landscape with respect to sustainability.

In the European Union, small and medium-sized enterprises account for more than 99% of all enterprises; they ensure two-thirds of all jobs in the private sector and contribute more than half of the total added value created by enterprises in the EU (European Union 2014). The European Charter for Small Enterprises, adopted by the Member States in 2000, was crucial in the SME declaration that SMEs are the backbone of the European economy (European Union 2004). According to Churchill and Lewis (1993), Tunkele et al. (2011), Veber and Srpová (2012) and others, they play the most important role with respect to regional development and the local economy (Máté et al. 2017). Not only does an enterprise provide employment in the region, but they are located in the region, too, and are under the permanent control of their surroundings.

Such enterprises are essential in the Czech business environment. There are more than one million small and medium-sized enterprises in the Czech Republic, as seen in Table 1. Together they account for 60% of all jobs. Small and medium-sized enterprises are often called the driving force of an advanced economy.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Enterprises</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of active entities</td>
<td>SME</td>
<td>1,077,844</td>
<td>1,106,908</td>
<td>1,137,439</td>
<td>1,143,218</td>
<td>1,124,910</td>
</tr>
<tr>
<td></td>
<td>SME - natural persons</td>
<td>839,573</td>
<td>850,032</td>
<td>865,235</td>
<td>914,654</td>
<td>869,279</td>
</tr>
<tr>
<td></td>
<td>SME - legal entities</td>
<td>238,271</td>
<td>256,876</td>
<td>272,204</td>
<td>228,564</td>
<td>255,631</td>
</tr>
<tr>
<td></td>
<td>Enterprises - total</td>
<td>1,079,668</td>
<td>1,108,736</td>
<td>1,139,267</td>
<td>1,144,943</td>
<td>1,126,880</td>
</tr>
<tr>
<td>share of SME in the total</td>
<td>99.63%</td>
<td>99.84%</td>
<td>99.84%</td>
<td>99.85%</td>
<td>99.83%</td>
<td></td>
</tr>
<tr>
<td>Number of employees (thousands)</td>
<td>SME</td>
<td>1,893</td>
<td>1,833</td>
<td>1,820</td>
<td>1,875</td>
<td>1,782</td>
</tr>
<tr>
<td></td>
<td>Enterprises - total</td>
<td>3,096</td>
<td>3,026</td>
<td>3,038</td>
<td>3,037</td>
<td>2,972</td>
</tr>
<tr>
<td>share of SME in the total</td>
<td>61.14%</td>
<td>60.58%</td>
<td>59.91%</td>
<td>61.74%</td>
<td>59.96%</td>
<td></td>
</tr>
<tr>
<td>Added value (in millions EUR)</td>
<td>SME</td>
<td>4,267</td>
<td>5,199</td>
<td>5,468</td>
<td>5,488</td>
<td>5,349</td>
</tr>
<tr>
<td></td>
<td>Enterprises - total</td>
<td>85,709</td>
<td>95,868</td>
<td>101,243</td>
<td>98,840</td>
<td>98,097</td>
</tr>
<tr>
<td>share of SME in the total</td>
<td>53.99%</td>
<td>54.23%</td>
<td>54.02%</td>
<td>56.14%</td>
<td>54.79%</td>
<td></td>
</tr>
<tr>
<td>Wages (in millions EUR)</td>
<td>SME</td>
<td>17,535</td>
<td>18,102</td>
<td>18,628</td>
<td>19,269</td>
<td>17,571</td>
</tr>
<tr>
<td></td>
<td>Enterprises - total</td>
<td>31,746</td>
<td>33,280</td>
<td>35,272</td>
<td>35,211</td>
<td>33,246</td>
</tr>
<tr>
<td>share of SME in the total</td>
<td>55.24%</td>
<td>54.39%</td>
<td>53.38%</td>
<td>54.73%</td>
<td>52.85%</td>
<td></td>
</tr>
</tbody>
</table>

rather, they comprise a few principles enforced in the first instance by the owners and founders themselves. Few of them have created the position of a so-called CSR specialist, let alone an entire CSR department. These organisations do not “do” social responsibility, they naturally “live” it in a way (Hlaváčková and Březina 2015).

Thus, the regional economy significantly contributes to the development of the landscape economic indicators and, to a large extent, affects socio-environmental tendencies. As long as SME (small and medium-sized enterprises) apply the principles of social responsibility and declare environmental concerns while consumers appreciate these principles through their purchasing preferences, the three fundamental pillars of sustainability can be successfully combined, not only within the conditions prevalent in the forestry business, but also within other sectors of the national economy which transform or use forestry resources.

The aim of all the abovementioned findings is to indicate the connections among social responsibility, environmental concerns, businesses, and consumers. All these relationships are manifest in the development of the social, economic, and environmental values of the given landscape. It is not often easy to find the relevant means for achieving the economic, environmental, and social interests which would meet all the requirements of each of the sectors of the national economy at the same time. In the forestry-timber sector, however, such a means is available which combines social responsibility with environmental protection and which influences the economic efficiency of enterprises: the FSC, PEFC and other certifications. The certification of forests shall improve forestry management by providing the producers which meet the higher standards with a means by which they can distinguish their products in the market, and which would enable consumers to recognise and prefer products from forests whose production is more beneficial to the environment and society than production from forests with commonplace management (FSC Czech Republic 2002; WWF 2002).

On its web page, the FSC Czech Republic also states in the article ‘How much do environmentally friendly forest management and FSC certification cost?’ that the direct costs of FSC certification are higher in the case of smaller forest assets. Auditors must perform part of the tasks on sample terrain, no matter whether the assets to be certified account for 1 ha or 1 million ha, which increases the price in the case of smaller forests. Surveys conducted by the FSC CR cost approx. CZK210 per ha of the total costs of certification of an enterprise. However, the costs cannot be standardised evenly for all subjects, since the price is categorised as an average (FSC Czech Republic 2018).

The same applies to timber SME and the C-o-C certification, which assures the end consumer of products made of wood or forest products that the material used for its production was obtained legally and from sustainably managed forests. This certification is available in full for the FSC and PEFC systems.

Whereas the problem in terms of forestry certification is mainly the fear of the level of direct costs in the initial stage of certification, the situation is much more complicated in the case of indirect costs associated with the C-o-C timber consumer chain certification. The difference in the costs is due to the fact that it is a product certification, i.e. the product is certified providing it meets the required characteristics, but partly also a system certification since the normative documents contain requirements on both the processes and the level of management. As a result, the costs aris-
From both product certification and system certification accumulate. The level of indirect costs of certification of the timber consumer chain are strongly dependent on whether the company has already implemented the management system pursuant to the standards of the ISO 9000 series, ISO 14000 series, EMS or EMAS. On the condition that the organisation already possesses certification pursuant to the standards of ISO 9000 or 14000 series, the PEFC certification system recognises the fulfilment of certain requirements through the submission of an ISO series certificate (CFCS 1004: 2006, 2008). If the company has implemented the EMS or EMAS system, the process of certification is significantly simplified (Kobylka 2010).

If the company has not implemented those standards, the costs are naturally substantially higher. This further reinforces the belief that, in the case of small and medium-sized enterprises, certification costs are inversely related to large entities, which raises the question of the return on such investments. The return on investment depends on buyers' relations and customer behaviour in cases in which customers are willing to accept potential changes in relation to the price for certified products in particular. Based on primary data obtained from a nationwide survey, Michal and Sujová (2017) argue that almost 87% of the respondents in the Czech Republic were willing to pay a "premium price" for a (certified) value-added timber product. Moreover, the willingness of the respondents to pay was influenced by their knowledge and perceived importance of forest certification as well as by their tendency to choose timber products made of certified wood. There is also a positive relationship between the willingness to pay a premium price and the respondent’s income level. Seeing the certification as a system which starts its lifecycle in forests and ends on the market, it is important to realise that the market, and hence the consumers who buy or consume the respective goods on the market, are the decisive factor in the success or failure of certification and the global awareness of this issue. In view of these as well as other facts, this article concentrates on consumer behaviour and social reliability. The survey focused on an analysis of consumer behaviour in terms of their preferences for purchasing certified timber products. The survey also researched possible reasons for interest or disinterest in the purchase of non-certified timber products.

1. Literature review

Sustainability lies in the change in approach to the exploitation of natural resources, in reducing the negative effects on the natural environment (for example, excessive waste production and pollution), and economic as well as social balance in the development of all cultures and social groups (Koubská and Hralová 2006). Environmental policy-making also concentrates on decisions in the market, or even voluntary tools, more frequently despite the uncertainty about their actual impact (Bernstein 2001).

The increasing number of publications on ecological customer behaviour and the creation of marketing in business shows that the issue is highly topical, for example see McDonagh and Prothero 2014; Von Meyer-Höfer et al. 2015; Akehurst et al. 2012.

Under certain conditions, higher economic efficiency can be achieved in the primary and secondary sectors, which ensures the production and processing of raw wood material by means of interconnecting social responsibility with ecologically oriented enterprise strategy. This is also evidenced by the fact that all the pillars of sustainable development – eco-
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A customer with a sense of environmental protection shall create incentives for rewarding certified producers and encourage non-certified producers to seek certification and the related market advantages. In this way, certification directs demand away from non-certified forests and to products from forests that meet strict management criteria, including the implementation of management systems to support the conservation of biodiversity (Gullison 2003).

The problem of certification comes with the confrontation between the price of certification in the form of both input and ongoing costs (especially with small and medium-sized forestry and timber businesses) and consumer opinion, providing they can distinguish, and prefer, the certified products. The first problem is rather controversial, and information about the level of costs often differs in the case of various sources; therefore, their quantification is usually characterised by average values. Some foreign authors claim that the level of costs is not modified according to the size of the administrative unit, and the costs often show disproportional values. This claim can partly be supported by Innes and Hickey (2005), who also mention that the character of costs is inversely related to the size of the administrative unit to be certified. Hence, in principle, the costs per certified hectare should be substantially lower for large businesses (Vidal et al. 2005).

A survey carried out by Cubbage et al. (2003) showed that the costs of an audit in North Carolina ranged from $2 to $3.60 per hectare. In a subsequent survey, Cubbage et al. (2008) focused on the comparison of the median value of the total costs between larger enterprises with a surface area of more than 400,000 ha and smaller enterprises of less than 4000 ha. The survey indicated an evident difference in the costs of $0.07-$0.49 per hectare as opposed to $6.45-$39.31 per hectare, respectively.

An important finding of this as well as of other surveys is the fact that the input costs of obtaining a certificate represent a significant component of the overall costs; it is, therefore, important to review the relationship between the input costs and the ongoing costs. Cubbage et al. (2003) argue that the costs in the years following the certification only account for one-fifth of the costs invested in the first year. It is not surprising that smaller owners are mainly afraid of the initial stage of certification.

2. Material and methods

The material for the given topic was obtained by means of primary and secondary data from a nationwide survey carried out on a sample of respondents in the Czech Republic. Research consisted of the selection of findings from available foreign and domestic materials and articles. All the reviewed materials clearly show the path for contemporary European countries to achieve efficiency in terms of social responsibility and the model of sustainable development in an advanced society.

In 2017, Kaufland was awarded a prize in the Múza Merkúra contest in the “CSR
in trade" (Corporate Social Responsibility) category, for a business plan in which they exclusively offered products made in an environmentally friendly way for sale, and presented their ecological activities. Such a step can be considered very good with respect to rationalisation and increasing economic potential, yet even more so considering that they have been pursuing these activities since then, which are followed by a positive reaction of their customers. The use of simple marketing tools or complex market models leads to the more efficient fulfilment of both customers’ needs and owners’ objectives. In the case of marketing tools oriented towards encouraging interest in the environment, environmental concerns and options for sustainability are realised by supporting products which were made according to environmentally friendly principles. These steps mean that a number of subjects appreciate such business activities, and thus ensure a social incentive which should trigger interest from a growing group of both productive and non-productive businesses.

According to a recent survey carried out by “Ipsos CSR & Reputation RESEARCH 2016”, up to 35% of the Czech population can spontaneously recall a specific organisation devoted to social responsibility, which is a sharp increase in comparison to previous years, when only 24% could do so (the survey was carried out on a sample of n=1009 respondents). This survey shows that social responsibility plays an important role in consumer behaviour as well as in choosing an employer (NIP 2017).

So-called “opinion-leaders” represent an important group which, according to the survey, accounts for 17% of the population. Such people determine their actual purchasing behaviour based on the social responsibility of companies and encourage others to act accordingly. (Ipsos CSR, 2017). The goal of the CSR & Reputation Research project was to analyse the different areas of CSR, the perception of CSR activities and their influence on the reputation of companies, both according to the opinion of the general population and experts in the Czech Republic. Research was conducted by Ipsos in November 2016 on a representative sample of the adult Internet population (by region, size of place residence, sex, age and education). The size of the base population was 1009 respondents. Research was also carried out with groups of experts - representatives of the media, non-governmental non-profit organisations, representatives of associations, unions, institutions, CSR managers from large companies and representatives of communication and PR agencies. All outputs were measured based on know-how and Ipsos methodology.

The results of the Ipsos research were compared with the results of the research undertaken by Michal and Sujová (2017). This survey was oriented towards an analysis of consumer behaviour in terms of deciding their preference, or clarifying reasons for their disinterest, in non-certified timber products and certified timber products respectively. The sample of respondents was statistically significant when it comes to the working age population in the Czech Republic. The percentage of error rate was set to 5% as the default statistical value used, and the size of the base population was 404 respondents. Data evaluation was distributed via the contingency that evaluates dependencies between qualitative (plural) features which acquire a number of variations. This method was applied because of the interest in tracking the relationship between multiple statistical features.

3. Results and discussion

The issues of sustainability and social responsibility are interconnected by their
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very nature and result in an increasing level of interest in the protection of the landscape and environment. This is also demonstrated by the fact that people are most engaged in environmental protection: 91% of the population sorts waste, 51% of the population has been active in terms of recycling during the last year, and more than one-third of respondents prefer environmentally friendly products, which can be seen in Figure 1. The trend is upward since the interest level of consumers is very high and increasing every year; in 2015, only 79% of the sample surveyed sorted waste. Taking into account the results of the survey, the orientation of companies towards environmental protection is a crucial marketing option when addressing consumers. Such surveys provide important information and set the direction which is to be followed within the long-term business strategy. Each sector in which those principles have a crucial role must be monitored with respect to both direct and indirect benefits.

![Figure 1. Survey of environmental nature-friendliness in the Czech Republic](source: Own elaboration based on Ipsos CSR & Reputation Research 2016.)

Environmental concerns as perceived by consumers demonstrate that one-third of the population prefers green products. These results can be supported by the findings of the survey (Figure 2) carried out on a nationwide sample of respondents in 2017, which show that the interest of consumers demonstrably exists, but a quarter of respondents would need justification from a technical standpoint, and the decision of almost half the respondents depends on the difference between the prices of an environmentally friendly product and a standard product without the added value.
The results obtained led to an interesting finding, namely that Question 5 – “Is it important to you that goods made of wood or wood materials are made in line with nature protection and conservation principles?” - was answered positively, showing clear interest by marking the answer: “Yes, it is a priority” - by only slightly more than 15% of respondents, in spite of the fact that 25% of respondents showed a positive reaction to preferring green products and another 66% would decide based on technical reasons and the difference in price (see Fig. 2). Table 2 indicates the percentage of the individual age categories in relation to preferences pertaining to environmental concerns applied in the production process. It is striking that the largest proportion comprises respondents aged 40 and over, while the younger generation of respondents does not consider it a priority.

<table>
<thead>
<tr>
<th>Respondent’s age</th>
<th>0-17</th>
<th>18-25</th>
<th>26-39</th>
<th>40-54</th>
<th>55-64</th>
<th>Over 65</th>
<th>in total</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of answers</td>
<td>3</td>
<td>16</td>
<td>7</td>
<td>18</td>
<td>9</td>
<td>6</td>
<td>59</td>
<td>15.17%</td>
</tr>
<tr>
<td>Respondents in total</td>
<td>9</td>
<td>117</td>
<td>95</td>
<td>111</td>
<td>37</td>
<td>20</td>
<td>389</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage</td>
<td>33.33%</td>
<td>13.68%</td>
<td>7.37%</td>
<td>16.22%</td>
<td>24.32%</td>
<td>30%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Taking into consideration the respondents’ opinions on environmentally friendly products depending on age, more than 33% of respondents aged 40-54 stated that they preferred an environmentally friendly product with a higher price to a product without added value for the lower price. Almost 20% of respondents in the same category said that they would prefer this option based on technical justification. The preferences mentioned - dependent on the age category – potentially serve to distinguish the most environmentally-oriented group of respondents. On the basis of the
information obtained, it can be claimed that the age limit for environmental concerns culminates in the 40-54 age group, with respect to the number of respondents in this age group as well.

Despite some scepticism, the growing level of social interest in issues of social responsibility, which is interconnected with the protection and preservation of nature to a large extent, has to be taken into consideration. This interconnection is demonstrated in (Fig. 3), too. According to the respondents, environmental performance is one of the most common forms of social responsibility. Ipsos CSR & Reputation RESEARCH 2016 also mentions that 68% of respondents were willing to pay more for a green product (Figure 3), which is consistent with the author’s primary data from 2017, when almost 87% of respondents stated that they would be willing to pay a “premium price” for a timber product with added value.

One of the ideas which is common in practice, and which is typical of the area of certification and social responsibility too, is the fact that negative reactions spread faster than positive ones. This is also one of the reasons why it is important to raise concerns about good examples from practice. A good example which offers hope for the future is demonstrated in Figure 4, which shows that, for Czech citizens, a fair attitude towards employees interests (since work and employment are inevitable with respect to income) are of almost the same importance in terms of social responsibility as environmental protection. Therefore, it can be concluded that if the personal interests of Czech citizens continue to intermingle with the interests shared by society to the same or the prevailing extent, the conservation of nature and the landscape for the next generations will not be endangered.
However, the situation in terms of certification, and problems with its acceptance mainly by small and medium-sized enterprises in both the timber and forestry sectors, cannot be solved by merely pointing to positive indicators and values. The same applies to the actual willingness of the consumers to accept products with added value, where any survey is merely statistical in nature. It would be very difficult – if not unrealistic - to determine the actual purchasing behaviour at the moment of deciding on the purchase, which would substantially serve as a relevant viewpoint of the consumer in relation to certification. All the analysed facts originating from articles, publications, reviewed internet materials, and oral interviews intersect at several levels with approximately the same problems, namely the actual costs spent on certification and the return of such expenses, the long-term benefits which certification brings, consumer behaviour and the actual willingness to pay a “premium price” for a certified product, the usefulness and effectiveness of certification, and raising awareness of certification among the general public. Despite the number of facts and opinions which evoke disinterest from businesses and forest managers as one of the key problems with certification, the fundamental rule of business must be mentioned: “there is no supply without demand”. The fact that consumers decide to what extent a certification is a valid sustainability tool must be accepted. Encouraging the opinion that consumers do not currently have a justified need to buy certified products, figures can be provided which clearly speak against the efficacy of certification systems. A survey conducted in 2017 (Table 3) shows that despite using a graphic logo in the questionnaire, only slightly more than half the consumers saw a link between recognising the logo and its meaning, or had a partial idea of the meaning of the logo or its graphical identification. The values mentioned do not indicate a significantly low level of awareness of the FSC and PEFC certification systems, but a subsequent control question at the end of the questionnaire contradicts those values considerably.

The control question “Do you know which logo (mark) the products of wood and materials produced in compliance with landscape protection and conservation bear?” was answered positively, i.e. the answer “Yes, I do” was marked by only slightly over 20% of respondents, while the negative answer “No, I do not” was ticked off by more than 79% of respondents.
Lastly, it should be mentioned that all the information and analyses provided come from various authors from various countries, and it is therefore not possible to prove unequivocally that the conclusions contained in this document relate to the situation in the Czech Republic, rather than representing a summary of the most serious problems of certification in general.

Conclusions
The choice of certification system is an important step for the sustainable development of the sector in the forestry-timber industry. The essence of forestry management conservation for the next generations has a direct effect on ensuring the production and, consequently, long-term sales to some extent. The precondition for the use of certification systems is that they bring efficiency to enterprises as well as a wide range of possibilities, which is not always easy to facilitate. As a result, certification is often considered to be unsubstantiated with respect to the potential benefits even though it serves as a market incentive in most cases. The generation of market potential is one of the priority tasks of the marketing of these certification systems and must be continuously formed according to the requirements of end consumers (enterprises, economic entities, and natural persons). All the facts analysed suggest that the marketing concept of the certification systems has its weaknesses, which need to be eliminated with respect to market requirements and customer behaviour.

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