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Identifying market mobility barriers for wooden single-family house producers to enter the multi-family segment.

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ABSTRACT

In the past decades, the housing shortage in Sweden accumulated to a level that led to acute problems for many people combined with continuously rising housing prices. The market for single-family houses, where wood dominates with 85 – 90 % of market share, is highly competitive with many companies offering relatively similar products or services. To serve the demand on that market, only 38 % of the existing companies were needed. One way to tackle the existing housing shortage, and to develop new business opportunities, could be to get more companies from the single-family house industry to produce multi-family houses. Current competence in prefabricated house production could be utilised, yet, other areas could act as barriers for these companies.

The aim of this study is to identify potential market mobility barriers for Swedish companies currently producing wooden single-family houses to develop towards the construction of multi-family houses. This will be conducted by initial interviews with decision makers in those companies, combined with a survey-study covering companies within the industry.

The results show that the main market mobility barriers are related to the strong market presence of traditional building materials, lack of knowledge by the market of wood as a suitable building material and the importance of governmental guidance and actions.

Keywords: Wooden single-family houses, Market mobility barrier, Wooden multi-family houses, Industry analysis, Market development strategies.

INTRODUCTION

As many other European countries, Sweden faces a housing shortage that might have severe consequences for society and welfare (Lindblad et al., 2016). According to the Swedish National Board of Housing, Building and Planning, about 60 000 housing units were required per year in order to recover and catch up within a five-year period (Boverket, 2012). That was in 2012. Soon it was understood that these numbers could not be realised and in 2015, a new target of about 70 000 units was set. By 2025, 700 000 new units are needed (Boverket, 2015). Comparing that aim with the actual numbers of house starts, i.e. ca. 42 500 in 2016 and 50 550 in 2017 (TMF, 2018), results in the fact that there are still too few units produced annually.

Considering the Swedish aim of carbon neutrality by 2050, as well as other national and international goals about, e.g. greenhouse gas reduction (Regeringskansliet [Government Offices of Sweden], 2017), the Europe 2020 strategy (EU, 2011. COM 2020), wood should be implemented in technologies and strategies to achieve more sustainable housing solutions, enabling to reach the environmental targets (EU, 2012. COM 433). For the single-family house segment, this is already the case for decades. About 80 % of the 13 400 produced single-family houses in 2017 were made of wood (TMF, 2018a). However, even though the absolute numbers of apartments in wooden multi-story houses constantly increased from 882 units in 2011 to 3797 in 2017, their relative market share of about 10 % leaves a lot to be desired. According to Brege et al. (2017), industrialised wood buildings could increase from currently 10 % to 50 % market share in 2025 in the multi-family segment. Yet, who should do that, as the number of firms in Sweden offering wooden building systems for multi-story applications and are utilising the advantages of industrialised building, is quite limited (Lindblad et al., 2016).

As described in, e.g. Lindblad et al. (2017) and Schauerte & Lindblad (2015), companies operating in the industry for wooden single-family houses are already working with many aspects of industrialised building, e.g. a high degree of prefabrication. Furthermore, Schauerte et al. (2014) could show that due to perfect competition on the market, only about 40 % of the existing companies producing wooden single-family houses actually were needed. The remaining ones should a.o. invest in product and production development towards wooden multi-story houses.
However, entering a new segment on the market means overcoming existing market barriers. Therefore, the aim of this study is to identify potential market barriers for Swedish companies currently producing wooden single-family houses to develop towards the construction of multi-family houses.

THEORETICAL FRAMEWORK

The possibility for successful company development is based on several different factors or barriers, e.g. the importance of business development, competitive position, consumer demands, distribution channels and business image are all influencing company development (Aladwani, 2001). These factors are influenced by both internal and external barriers for the companies. Hence, companies striving towards an improved market position have to optimise the combined effect of these market barriers with their available internal resources. Therefore, applying a resource-based view on the organisational development activities provides an understanding how to enhance the competitive advantage using internal strengths and capabilities to minimise market entry barriers.

Companies strive to organise their resources based on prevailing market conditions in a way making their products and services hard to copy and creating a sustainable competitive advantage by increasing the market barriers for their competitors (Wernfelt, 1984). Kim & Park (2006) predominately highlight two factors that make a company competitive: product quality and brand. This, in combination with good design, innovative products, and brand building, supports companies in achieving a competitive advantage. Furthermore, using internal resources to improve competitive advantage is also dependent on how companies develop their resources and capabilities in comparison to the market conditions, i.e. company drivers and market barriers (Hax & Wild, 2002). Having the ability to optimise the use of internal company resources, in relation to the market situation, improves the competitive advantage (Chesbrough, 2003). This highlights the importance of using internal competencies for development in combination with the external market context (Prahalad & Hamel, 1990). Also, anticipating and understanding the various development trends within an industry provides opportunities to react to internal and external situations and utilising resources efficiently. Success is dependent on the companies’ abilities to deal with the industry forces and market situation in comparison to their competitors. Therefore, having the possibilities to create entry barriers affects the competitive nature of the industry (Karakaya & Parayitam, 2013). Hence, when reviewing the market conditions for companies and understanding their market barriers for development is linked to the perception that entry barriers are interchangeable with the definition of market mobility barriers (Caves & Porter, 1977). The concept of market mobility barriers is based on the difficulties for companies moving from one strategic group to another and barriers differentiating products despite similar market profile. Therefore, entry barriers can influence both new companies entering a market as well as for companies already present on the market (Bazzi, 2015).

The characteristics of an industry with low entry barriers are that it is easy for new companies to enter the market and that there is a high probability for already established companies to be faced with new competitors. Thus, these industries also have a weak effect on the long-term competitive advantage, unless companies constantly adjust their market position. Therefore, most entry barriers are purposely created by incumbents to deter new entrants, reducing competition and improve profitability (Niu et al., 2012). However, industries with high entry barriers tend to prolong the competitive advantage, which can be derived from companies tending to increase operational efficiency based on the competitive nature of the industry. For new companies to succeed entering into an industry or market with high entry barriers, it is recommended to adjust their strategy with the defined barriers (Pehrsson, 2009), as e.g. power held by suppliers and buyers, existing competitors, the nature of competition and substitutes for those products already provided.

Porter (1980) describes the connection and relevance between market barriers in the five forces model, Fig. 1. Having the ability to understand how these factors impact company development and review how these barriers influence the long-term strategy, enables competitiveness and the ability to make good strategic decisions (Porter, 1980). Also, by comprehending and using the barriers (Fig. 1) for company development efficiently includes a number of different actions that hinder new companies’ to enter, or incumbents’ capabilities to operate efficiently in an industry discussed (Porter, 1980, 1985, Singh et al., 1998, Robinson et al., 2001, Jost et al., 2015).
Figure 1: Market barriers, an adaptation of the Five-force model, Porter (1980).

Also, Fig. 1 stresses the companies’ ability to assess entry barriers in a structured way to develop their competitive advantage. Therefore, the focus for established companies’ is to develop their competitive advantage by utilising the entry barriers to minimise the possibility for new competitors to enter the industry. However, an opposing assessment regarding the value of entry barriers for companies is discussed by Rangone (1999) and Barney (2015), comparing it to the role played by competition in an industrial organisation versus a strategic market approach. Despite the theoretical approach, having the ability to create resources that are difficult to copy by competitors is always essential. Hence, the entry barriers are not considered as important in isolation and only matter to the extent they influence the allocation of resources that enhance entry barriers further (Geroski et al., 1990).

Focusing on the strategic significance of entry barriers and reviewing them from a company development context is researched by, e.g. Porter (1980, 1985), Singh et al. (1998), Robinson et al. (2001), Jost et al. (2015). Entry barriers are not seen to be based on market structure alone and are also the result created by companies developing strategies to minimise the threat of new entrants and already established competitors within the industry. Hence, companies are recommended to create a long-term approach towards competitive advantage. Thereby, fully taking advantage of the internal strength of the company in response to opportunities and external threats without weakening the strategic position of the company (Barney 1991).

Porter (1980) does not define specific entry barriers in Fig. 1, but presents six main categories of barriers influencing market entry activities, which are explained below.

- **Economies of scale** occur when the unit cost declines as production volume increases. This requires new entrants to either develop towards a larger scale of operation or face a possible cost disadvantage by competing on a smaller scale (Schmalensee 1981, Auerswald, 2010). Furthermore, other factors that are hard to duplicate also act as entry barriers and drive up costs, e.g. experience, good access to raw materials, government subsidies and technological advantage (Thomas 1999).

- **Product differentiation** is a concern for new entrants since established companies already have created brand awareness and customer loyalty through product recognition. This acts as a barrier, forcing new entrants to invest time and capital to differentiate their products to overcome the customer loyalty, thereby gaining access to the market (Karakaya & Michael 1993).

- **Capital requirements** are perceived as a barrier when companies try to enter an industry that requires investments to create a sustainable market presence. This can include investments in inventory and facilities and the impact vary based on project risk, general financial situation etc. (Niu et al., 2012, Porter, 1980).
Switching costs are related to the impact of changing from one supplier to another that can create a requirement to redesign products, technical support, need to retrain employees or changing license fees (Blut et al., 2014). This can force new entrants to, e.g. provide incentives for potential customers to change towards their products or other activates enhancing the benefits of the new product, which erode the profit margins (Porter 1980).

Access to distribution channels is considered a necessity to facilitate an efficient sales process and is normally developed over a long time-period, generating a solid relationship and trust (Pehrsson 2004). Hence, the costs for new entrants to gain access to a distribution channel are high and can include various incentive schemes and activities that will add costs for a new entrant and might reduce profitability over time.

Government policies could according to Goverse et al. (2001) include various regulatory measures, such as limits on access to raw materials, licensing requirements, pollution standards, product testing regulations, and taxation, etc. (Riala & Ilola 2014). Further, the political system must publically support and contribute to the development of a stable market situation where local strategies by municipalities act as an incentive for the industry strengthening their competitive advantage (Markström et al., 2016).

Even if entry barriers are discussed as a rigid concept for both new entrants and established companies, the nature of barriers is that they change over time, based on external factors that influence the dynamics in an industry. Hence, current barriers should not be considered as fixed obstacles, since companies have different capabilities dealing with the long-term effect of barriers, reducing the barriers to entry (OECD 2007).

METHOD

The information collection process was based on companies involved in building processes associated with wooden multi-family houses in Sweden. The data collection started by identifying the framework of the study and the key stakeholders, i.e. included municipalities, developers, contractors, architects and real estate companies, which is consistent with the convenience sample strategy (Robinson, 2014, Holmes et al., 2017, Zikmund 2016). The data collection was conducted by using the key informant approach for data collection (McKendall & Wagner 1997), aiming at collecting information regarding the perceived market situation as interpreted by the stakeholders relevant for this study. Additional selection criteria’s were used, and companies had to build wooden multi-family houses higher than three floors to be selected. Approximately 63 % of the companies build higher than three floors, and 54 % construct buildings higher than five floors. Also, the companies included in this study are represented in one or more roles within the building process, i.e. procurer, developer, architects, contractor, sub-contractor and real estate company. Out of these companies, more than 55 % are represented by higher-level functions in the building process, i.e. procurer, developer and architects, which provided an opportunity to understand the key stakeholder’s perception to the research question (Burke, 1984, Lilien, 1979).

An e-mail survey was used to collect data for this study, and the questions were developed to understand entry barriers at all levels within the building process. The survey was sent out to 157 respondents, with a response rate of approximately 42 %. The survey consisted of 10 questions that were designed to use a 10-graded Likert scale and an additional 10 open-ended questions. The data were initially analysed qualitatively to establish general trends, after that, data were analysed quantitatively by using a mixed methodology to provide greater depth and range than a single method could deliver (Wallerstein et al., 2011, Mertens, 2012). Thus, the choice of combining qualitative and quantitative deliverables in this study was motivated by entry barriers and market mobility barriers not being reviewed in this context earlier. This research approach provides a structured approach of the complexity faced by the respondents by identifying the most important factors influencing the market development activities for the wooden multi-family house industry (Yoshikawa et al., 2013).

RESULT AND ANALYSIS

The result and analysis are based on a combination of qualitative and quantitative data. Table 1 incorporates the entry barriers discussed by Porter (1980). Linking them to the appropriate questions helps to get a general picture of how the entry barriers are related to the survey questions and the answers provided by the respondents. The table is based
on 10 qualitative questions and 10 quantitative questions, where the average result from each question in the survey has been used to classify the importance/relevance of the topic, i.e. 0 – 3.3 low importance/relevance, 3.3 – 6.7 average importance/relevance and 6.7 – 10.0 high importance/relevance.

Table 1: Result in relation to identified barriers.

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Questions</th>
<th>Market strength of concrete</th>
<th>Insufficient understanding of wood as a building material</th>
<th>The importance of product differentiation for increased market growth</th>
<th>Limited collaboration between different actors in the value chain</th>
<th>Economies of scale, a requirement for sustained market development</th>
<th>Production cost is higher for wood buildings than traditional building materials</th>
<th>R &amp; D a necessity for market development</th>
<th>Rules or regulation limits competition</th>
<th>Essential for legislation to change</th>
<th>To what degree is legislation possible to change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economies of scale</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Product differentiation</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Capital requirements</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Switching costs</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Access to distribution channels</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Government policy</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>ave.</td>
<td></td>
<td>8.17</td>
<td>7.00</td>
<td>6.13</td>
<td>7.02</td>
<td>7.27</td>
<td>5.60</td>
<td>7.56</td>
<td>6.21</td>
<td>6.25</td>
<td>3.77</td>
</tr>
<tr>
<td>max</td>
<td></td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>9.00</td>
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<td>10.00</td>
<td>10.00</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>min</td>
<td></td>
<td>5.00</td>
<td>1.00</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>3.00</td>
<td>2.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Std.</td>
<td></td>
<td>1.28</td>
<td>2.35</td>
<td>1.96</td>
<td>2.05</td>
<td>1.98</td>
<td>1.89</td>
<td>1.61</td>
<td>2.03</td>
<td>2.49</td>
<td>1.87</td>
</tr>
<tr>
<td>Std. Error mean</td>
<td></td>
<td>0.18</td>
<td>0.34</td>
<td>0.28</td>
<td>0.30</td>
<td>0.29</td>
<td>0.27</td>
<td>0.23</td>
<td>0.29</td>
<td>0.36</td>
<td>0.27</td>
</tr>
</tbody>
</table>

The market strength of concrete as a building material compared to wood is identified as a barrier and the respondents included in this study perceive the average value at 8.17 (Table 1) on a ten-graded scale. This makes the market strength of concrete a barrier of high importance for the development of the industry. This is also reflected in how many of the entry barriers that are influenced by this issue, according to the five forces model (Porter, 1980). Furthermore, approximately 90 % of the market is based on concrete solutions, which, according to Karakaya & Parayitam (2013), highlights the value for established companies to create barriers based on their market strength, which in this case provides a competitive advantage over wood-based building solutions. The market strength of concrete further enhances the insufficient understanding, or knowledge, of wood as a building material and is considered as a barrier for the buyers as well. This barrier will influence the development of wood buildings since people tend to buy building solutions they are familiar with or for architects to present solutions they are comfortable designing. Hence, the respondents consider this barrier to be of high importance and score this 7.00, which also relates...
to several of the entry barriers (Table 1). These factors contribute to make this barrier a major hinder for the development of wood as a building material. This situation is related to the discussion made in the study by Barney (1991), where companies or solutions with a leading market share create entry barriers towards new entrants by leveraging the strength of the established solutions available on the market.

Product differentiation was highlighted as a barrier that can impact improved market development. However, the respondents only considered this to be of average importance and scored it 6.13 (Table 1). Yet, this barrier was linked to having an impact on 2/3 of the entry barriers defined by Porter (1980). Further, Karakaya & Michael (1993) and Hax & Wild (2002) discuss the implications for new entrants related to investments in time and resources to differentiate their product accessing the market. In addition, Niu et al. (2012) consider capital requirements as a limitation in the differentiation process to overcome market barriers and create a competitive advantage, which also was supported by the respondents. Furthermore, the limited collaboration between different companies in the value chain to achieve increased market strength was considered as an important barrier by the respondents, scoring it 7.02 (Table 1). This topic is also connected to three of the entry barriers displaying strategic importance for the companies to increase collaboration, thereby improving the market position compared to the traditionally used building solutions. By creating an understanding of the development, requirements provide possibilities to initiate collaboration and improve the strategic fit between company resources and existing market barriers, which according to Pehrsson (2009) is a necessary success factor to bridge the existent knowledge gap and strength of concrete as a building material.

In addition to barriers regarding product differentiation and industry collaboration, the ability to generate economies of scale for future development and improved competitiveness in the market is essential. Hence, it is perceived to be of high importance by the respondents with an average score of 7.27 (Table 1), since it can provide improved profitability, competitive pricing and increased market share, which are all important for increased competitive advantage. Furthermore, this barrier also can influence the capital requirements for new entrants and lower the switching costs based on reduced end-user costs, which is further reinforced by most companies perceiving this as significant for industry development. Schmalensee (1981) and Auerswald (2010) studied the impact from economies of scale related to the development of a company. They highlighted factors such as how improved production technology and knowledge can affect the production cost per unit and thereby leverage prevailing market barriers.

Also, a barrier that can affect the success related to economies of scale is the focus on research and development (R & D) for the development of wood as a sustainable building material. The average score is 7.56 (Table 1), i.e. being of high importance, which is reflected considering its potential to enhance the market position according to the respondents. R & D is a necessity in order to leverage several of the defined entry barriers such as economies of scale and product differentiation. However, this is to a certain extent out of the companies control, since it can involve additional capital to facilitate development or it could be limited by the governmental interaction that affects the competitive nature of the industry (Karakaya & Parayitam, 2013).

Further, the building costs associated with wooden multi-family houses have been seen as a constraint for market development. The respondents consider the final production costs to be higher than those of traditional building materials. This issue has, to a certain degree, been highlighted in this study, and the respondents scored this 5.60 (Table 1), which is of average importance for improved market development. Yet, it is considered as an important limitation for producers of a wood-building solution, which, according to Porter (1980) and Blut et al., (2014), can be associated to switching costs when customers attempt to change from one supplier to another. The main factors influencing this, according to the respondents, are the costs of material, personnel costs, an insufficient building process, poor knowledge of wood buildings and a lacking project management structure for the building process.

The last area that was brought up as a constraint for market development was the municipality and governmental actions. These were considered conservative in regards to product development towards new building technologies using wood. This will act as a development barrier for the companies since incentives towards new alternatives will be limited, which will erode the competitiveness of the market. Hence, the respondents score the effect of governmental legislation and regulation as a barrier towards an efficient competition 6.21 (Table 1). They also believe that having an ability to change and influence the legislation is essential for the development of wood constructions and score this 6.25 (Table 1). However, they consider their possibility to influence and change rules and legislation as limited, with an average score of 3.77 (Table 1). These issues were also discussed in the study by Goverse et al. (2001)
as an important aspect that can restrict market entry for new companies or change the dynamics within a market. Additional topics that create barriers for the development of wooden multi-family houses are presented below.

- The municipalities tend to develop their own rules for building development, which creates confusion and delays. Their strategic work is focused over a long timeframe, i.e. up to 20 years, while the market requirements have a time span of shorter 3 – 5 years.
- The government has a conservative and unjustified approach towards the development of wood buildings that work against the increased use of wood-building solutions.
- The industry would benefit from an introduction of taxation on CO₂ emissions, and that life cycle analysis becomes a requirement.
- Initiate a plan to reform the building process radically, including increased transparency of the municipalities’ actions.
- Change the conservative nature regarding legislation and development, which is a contributing factor for unsuccessful product development.

The information regarding governmental legislation and regulation act as a possible barrier and, together with the comments in the bullet points, displays a situation where governmental actions restrict the development of wooden multi-family houses in Sweden. Riala and Ilola (2014) reinforce this by discussing the possibilities for governmental actions to influence market barriers dependant on their strategic plan.

**DISCUSSION**

The aim of this study was to identify potential market barriers for Swedish companies currently producing wooden single-family houses to develop towards the construction of multi-family houses. Thereby, identifying ways in which wooden multi-family houses better could compete with established building solutions, generating an increased market share in Sweden. The survey results have been used together with the entry barriers defined in the five forces model (Fig. 1) and were applied in an analysis model (Table. 1). The model displays a connection between the market activities mentioned in the questions and several of the entry barriers, which indicates that several entry barriers can influence the defined market activities.

The current demand for housing units in Sweden influences the development of wooden multi-family houses to a certain extent. However, fulfilling this requires considering market barriers when developing competitive strategies. In this context, the market strength of concrete as a building material, combined with the insufficient knowledge of wood as a building material of many public organisations, creates substantial barriers for the industry to overcome. This limits the potential for an increased market share of wooden multi-family houses since the default choice normally is based on well-known and established building solution, i.e. using concrete. Furthermore, this influences companies’ possibilities to achieve economies of scale. This was of great importance for the development of the industry and seen as an entry barrier, which is connected to several other areas identified in this study, e.g. R & D, investment possibilities and an efficient building process. Therefore, economies of scale can enable the transition towards a larger market share, reducing existing market barrier and is a requirement to reduce the absolute cost advantage of the traditional building materials.

The absolute cost advantage is associated with more factors than production costs and economies of scale. Hence, an adequate understanding of the potential using wood as a building material by those procuring building solutions is equally important. This issue is a substantial challenge and a barrier for sustained market development, which directly influences the public procurement activity and the requirements on new building developments using a wood-based solution. These issues contribute to not reaching an optimum production level and economies of scale, which in turn provides a more expensive solution using wood frame building technologies and a challenge being shortlisted for public building projects. Therefore, it becomes important to highlight the long-term benefits of wood buildings to improve the competitiveness of the market using, e.g. LCC, to display the environmental benefits. Furthermore, product differentiation is an important action to deal with the market barriers, increase the general understanding of limitations in the building process and leverage the advantages of wood as a building material. The requirements for product differentiation is associated with capital requirements, which can be a constraint considering the recent financial recession is making investments towards market development activities challenging. Hence, combining these
factors emphasise the importance of the cost advantage held by the traditional building materials as a barrier, since market development activities, i.e. marketing and education, require financial resources.

Creating a possibility to change well-known buying patterns is perceived as a barrier without the support of legislative actions. Therefore, governmental interaction is a contributing factor towards the limited development of wooden multi-family houses, compared to the traditional building materials. This also is combined with the existing infrastructure and production network associated with concrete that requires significant investments or actions to overcome. Hence, the general understanding is that the rules and regulations favour traditional building material and do not emphasise the strength of wood as a building material. The high financial costs associated with switching production towards wood buildings, combined with the building requirements in Sweden makes this transition less likely to happen organically. It might require a more direct approach towards the actions taken in the public procurement situation, promoting sustainability using LCC, thereby reducing the existent market barriers.

Further research should focus on how the public procurement process is used in comparison to the various demands from both buyers and sellers respectively. This will contribute to understanding how wood construction can improve its market share by identifying barriers and drivers restricting an efficient procurement process, thereby growing the market share of wooden multi-family houses in Sweden.

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