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# Corporate Responsibility via Community Betterment: Characterizing Firms and Communities in a Sample of SME Wood Manufacturers



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## Abstract

*Community betterment is a little-known component of corporate responsibility, and yet one that could be pursued by nearly all wood-based manufacturers. While considerable research has investigated how wood and forest-related companies adopt traditional corporate responsibility initiatives, little work has been done concerning how industry executives relate to their communities. In order to better understand these relationships, we surveyed pallet industry executives regarding their opinions on whether companies should contribute to the betterment of their local communities. We utilized secondary data to explore the communities' crime indexes, population sizes, unemployment levels, education of residents, and percentages of annual resident turnover. We differentiated between firms based on their marketing expertise and the extent to which they were hiring. Results suggest that a relationship exists between local community conditions, namely low annual resident turnover and high formal education, and an executive's beliefs about whether a firm should play a role in bettering its community. Executives who reported a belief in bettering their community were also with firms that had greater marketing expertise, and were increasing in size compared to their counterparts. Implications are drawn for leadership to engage in community betterment as a form of corporate social responsibility.*

**Keywords:** community betterment, corporate responsibility, marketing, pallets, wood

## 1. Introduction

Common wisdom says it pays for companies to engage in social responsibility (Wang et al. 2016), and more specifically, it pays for companies to better their local communities (Hovde 1943, Porter & Kramer 2002). While being socially responsible may be one justification for

firms striving to better their communities, there may also be a business case for a component of corporate social responsibility (CSR) known as community betterment (Wójcik 2018). For example, businesses are more likely to thrive if the communities they reside in are healthy, as they have a shared fate with the welfare of their community (Hovde 1943, Besser & Miller 2004).

The trend toward businesses contributing to their local communities seems to be growing. For example, for-profit hospitals are investing in bettering their communities in a national trend that is occurring in cities across the country (Chisolm 2018). We note, however, that no known work has been done to examine wood manufacturers in this specific context of corporate social responsibility. Perhaps wood manufacturers could see a myriad of benefits (e.g., enhanced corporate image) if they focused more on their communities and considered local stakeholder interests. Large forestry companies were

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shown to put considerable efforts into community development and relations (Vidal & Kozak 2008) as part of their corporate responsibility (CR) practices. Moreover, local community interactions have been noted as a key area of public debate for the forest products industry (Panwar et al. 2006) and thus warrant additional research focus.

We presume that leadership at some wood manufacturers already puts efforts toward bettering their local communities, but we don't know the characteristics of either the firms or the communities. As has been noted previously (Han & Hansen 2017), many forest products companies are not highly skilled at marketing. Perhaps emphasizing community relations is or could be a way of doing non-traditional marketing for industry firms.

We chose to conduct exploratory research into the relationship between community betterment and small wood manufacturers by focusing on the transport packaging industry. The aims of our research included investigating the associations between community attributes and executives' desires to better their communities, with additional focus on the firm's marketing and hiring. Pallet producers are a key component of the transport packaging industry and were an appropriate venue for a number of reasons. For example, as light manufacturers they will require access to a local workforce of both managerial and blue-collar employees. Moreover, while the largest pallet corporations will sell or rent their products nationally, all other producers will deal with more localized business partners for sales, rental and/or retrieval of used pallets (e.g., Dunn et al. 2000). Thus, transport packaging firms have the potential for strong local connections in terms of both business partners and human capital. This work sampling from SME (small and medium-sized enterprises) forest products manufacturers provides a contrast to previous works focusing on CR in larger corporations (e.g., Han & Hansen 2012)

## 2. Contextual and Conceptual Background

The conceptual background for our research comes from Carroll's four-part "pyramid of CSR" (Carroll 1991, 2016). This depiction has been one of the most popular constructs of CSR and helps to visualize how community betterment fits into the larger picture of business's responsibility to stakeholders. Carroll's framework for CSR included the elements of economic, legal, ethical, and philanthropic (Figure 1). It is noted that philanthropic

efforts are some of the most important components of corporate responsibility.

Carroll (2016) states that corporate philanthropy includes all forms of voluntary corporate giving, including monetary gifts, product or services contributions, volunteerism, and community development. These would also include any other discretionary contributions to the community at large or to local stakeholder groups. Taken together, corporate philanthropy can be seen as a way for the firm to better its local community, while perhaps satisfying stakeholder demands. The components of the pyramid of CSR as designed by Carroll (2016) differ from corporate community involvement (CCI) in that CCI refers more narrowly to the provision of goods and services to nonprofit and civic organizations by corporations (Burke et al. 1986). Our view on community betterment includes more than just nonprofit and civic organizations.

Carroll (1991) argued almost 30 years ago that businesses are expected to contribute financial and human resources to the local communities where they operate, while also improving the quality of life. We would contend that in today's world there is even greater expectation for small and medium-sized enterprises to make the same contributions. While some executives may contribute in a strictly altruistic manner, most firms engage in philanthropy to augment or enhance their reputation (Carroll 2016). This implies that there is a business case to be made for community betterment and suggests that most if not all business leaders should consider such investments.

The literature on the business case for CSR has evolved over the past decades, such that many of today's authors are more supportive of CSR's benefits. It wasn't always this way, with authors such as Friedman (1970) and Levitt (1958) arguing that the primary social responsibility of a firm's management is to increase profits. Jensen & Meckling (1976) also discussed the agency view that the "agent" (i.e., manager) should act primarily to maximize the welfare of the principal. Recently, research has illuminated the business case for specific CSR components, such as community betterment, to show that businesses can benefit from engaging in acts of corporate social responsibility (Barnett 2019, Fombrun et al. 2000). That is, firms do better by ensuring that society does well, in part because helping to address local problems can improve a firm's relationships with its primary stakeholders (e.g., by promoting trustworthiness) (Barnett 2019).

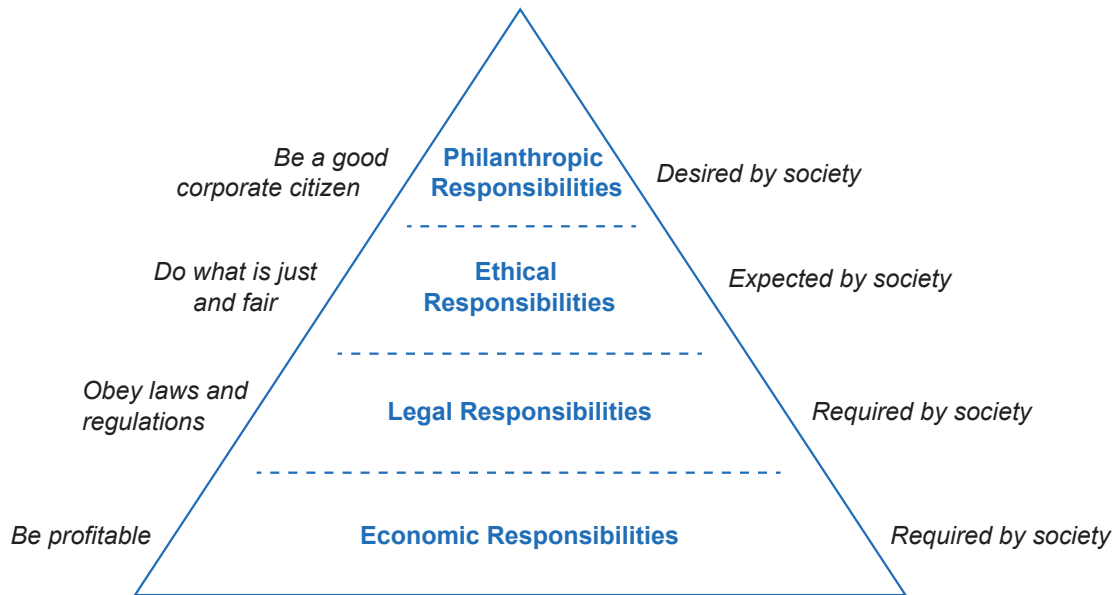


Figure 1. Pyramid of CSR (Source: Carroll 2016).

Godfrey et al. (2009) express this when they say that demonstrating concern for others in society enables firms to build trust with their primary stakeholders. Thus, serving others in the community by doing any one or more of a host of different activities, such as donating to local charities or sports teams, sponsoring the local food bank, investing in local entrepreneurs, etc., can endear the firm to the community via betterment efforts (c.f., Barnett 2019). Residents see that the firm is committed to making the community a better place to live, and this in turn endears the firm to the community. Given this rationale for community betterment reflecting CSR, a top executive may include in their firm's agenda a goal of bettering the local community, with the related goal of indirectly generating increased profits.

We found very few studies connected to research on community indicators as used in the present study. No studies exist that directly explore firms and community betterment in terms of community descriptors, or firms' marketing or hiring strategies. Thus, our research should be viewed as exploratory, referring to the fact that there is a dearth of directly applicable literature on our constructs as they specifically pertain to community betterment. However, we do draw upon literature related to factors contributing to various forms of community investment, while assuming that investing in a community can be a form of betterment.

From the literature that does exist on community betterment, we note that Besser (1998) found that the majority of small business owners are committed to providing support for their community. Besser & Miller (2001) differentiated between business managers on the basis of community-level social responsibility, leading us to believe that top managers will differ in their responses to community betterment. Besser & Miller (2001) reinforced the notion that community support is a strategy for business success by showing "a significant segment of small business operators believe in tenets of the enlightened self interest model of business social responsibility, that is, that doing good is good business" (p. 221). But this begs the question of what are the characteristics of communities that leaders want to better, and are there firm-level attributes that are similarly related.

The initial goal of our research is therefore to investigate the associations between community attributes and wood manufacturing executives' desires to better the communities in which they operate. Secondly, we explore community betterment with respect to the firm's marketing and hiring. These latter objectives enable us to begin to support the business case for community betterment, albeit indirectly.

The following sections begin by detailing five community indicators with hypotheses for how they may relate to community betterment. We then propose two

additional firm-level variables to provide greater insight into how those characteristics may relate to executive opinions.

## 2.1 Community Indicators

In the present exploratory study, we look to traditional indicators of communities (e.g., crime, population size, unemployment, education level, and turnover) in order to determine whether the communities that pallet executives report an interest in bettering have characteristics in common—characteristics that distinguish them from communities that executives do not express an interest in bettering. Our analyses used these five constructs in part because they are well-known community indicators that are frequently weighed when deciding to locate to an area (see Rabianski et al. 2001 for a review). Our dependent variable is community betterment, and our independent “community indicator” variables are crime, population size, unemployment, education level, and turnover.

### 2.1.1 Crime

Crime can have a ripple effect in an economy, with negative impacts on both business and society (Graham 2012). Firms (in this study we will consider firms and their executives as representing each other) in our target industry may react to these negative impacts by being less willing to engage in betterment activities in communities with higher crime rates. If so this might be reflective of overall, unequal external investments (with these investments being a proxy for betterment) in neighborhoods based on crime rates (Saporu et al. 2011). One of the most discussed examples comes from mortgage lenders that restrict lending (or adopt predatory lending practices) in certain high-crime communities (Williams et al. 2005). More affluent, low-crime neighborhoods are rewarded by banks with greater investments in forms ranging from philanthropy to direct lending; it is thought that this occurs in part because poorer neighborhoods with higher crime levels provide less “exchange value” to the efforts of community and business leaders (Velez et al. 2012). Moreover, it is thought that “...property crime is more visible to banks and potential investors and may dampen investment more directly than violent crime” (Velez et al. 2012, p.1048).

Finally, it has been suggested that merely fear of local crime may stimulate and even accelerate community decline; this decline can be due to individuals and organi-

zations withdrawing from community life (Skogan 1986). That crime may “dampen” a local community’s ability to attract external resources may be an important factor related to our respondents’ willingness to better their communities. Therefore, we propose that executives of firms located in low-crime areas will be more interested in bettering the local community than are executives of firms in high-crime areas.

Hypothesis 1. The higher the crime rate, the lower the firm’s belief that a firm should better its community.

### 2.1.2 Population Size

There are a variety of reasons why community size could have an impact on local firms and their willingness to engage in betterment. For example, Besser (1999) believed that the community work performed by a firm in a small community is likely to be more visible than would be the case for a firm in a large community. Yet, larger populations have more to offer firms with regards to such matters as labor force, connections to other firms, and amenities (c.f., Ferreira et al. 2016). Cities with large and growing populations are attractive to firms, but they may be associated with congestion, crime, and related problems (Gabriel & Rosenthal 2004). In such a context, firms may become more successful than would have been possible in smaller communities and thus, such firms may have greater ability to give back to the community. However, given the dearth of literature on the relationship between giving to a community and community size, we build on Besser’s (1999) and Hovde’s (1943) cases to posit the following in favor of smaller locales:

Hypothesis 2. The smaller the population size, the higher the firm’s belief that a firm should better its community.

### 2.1.3 Unemployment

The unemployment rate may be a factor in determining whether and the extent to which firms give back to their local communities. If unemployment is high, it is likely that many people will be in need of assistance from services such as food banks and other charitable organizations; firms can have a positive impact by providing employment and by giving to these charities. However, we take the position that firms will be less likely to contribute to community betterment when unemployment



is high because they have less need to make themselves look attractive to job seekers, since the supply of potential employees obviously exceeds the demand (c.f., Backhaus et al. 2002, Greening & Turban 2000).

Hypothesis 3. The higher the unemployment rate, the lower the firm's belief that a firm should better its community.

#### 2.1.4 Education Level

The overall educational level of a community's population is thought to be correlated with a number of relevant variables. For example, not only is educational attainment related to what amenities citizens demand from their communities, but also to the investments individuals are willing to make in bettering a community (Testa & Sander 2010). This can be manifested at the individual level by more households choosing to make greater investments in their local community (e.g., home improvement, volunteering, donating, etc.) as the average educational level increases.

The relationships noted above may occur in part due to the correlation between adult education attainment and other factors such as criminal activity, social disorganization, poverty, etc. (Tach et al. 2016). Another underlying factor may be the inverse correlation between academic achievement and local socioeconomic conditions (Reardon 2012). Poor socioeconomic conditions in so-called "distressed communities" have led to various policy solutions (e.g., the Community Reinvestment Act) designed to overcome historically lowered investment in these low-income, low-education communities (Macey & Miller 1993).

We therefore recognize that communities with lower educational levels may have concurrent socioeconomic conditions that often lead to reduced willingness to engage in betterment actions by businesses such as lenders. This leads us to predict that executives in other industries, such as the one we focus on, may also lower their belief that poorly educated communities should be invested in via betterment efforts.

Hypothesis 4. The more educated the community, the higher the firm's belief that a firm should better its community.

#### 2.1.5 Turnover

Turnover of community members, also known as transience, is believed to be correlated with a number of

community-related variables. Some of these may be tangible to a local business leader and thus relevant to decisions made with respect to bettering the local community. For example, in communities where turnover is high, residents are transient and the community is viewed as less stable. People who do not live in a community for very long often do not try to make their community better, and they are less willing to invest in the area. Low levels of investment may be reflected, for example, in higher levels of renting versus home ownership, with transient renters sometimes perceived as a threat to community safety (Rollwagen 2014).

The rate of turnover in a community may affect a firm's interest in contributing to community betterment, due to the various negative impacts from high turnover. For example, high turnover in a local workforce (especially in rural areas) mirrors a regular movement of workers and their families, with no opportunity to develop close ties and no common sense of community (Grey 2000). High turnover has also been suggested as a factor driving higher crime rates (Broadway 1990).

Higher transience in community members implies that a firm's ability to keep employees (especially blue-collar workers) will be reduced. High levels of employee turnover lead to a variety of increased costs for employers (Tziner & Birati 1996) as well as overall lowered organizational performance (Shaw 2011).

Therefore, firms operating in high-turnover communities may have a lowered willingness or ability to commit resources to community betterment.

Hypothesis 5. The lower the turnover in the community, the higher the firm's belief that a firm should better its community.

## 2.2 Firm-Level Indicators

Next, we explore two firm-level constructs—marketing expertise and hiring—that may explain a desire to pursue community betterment.

### 2.2.1 Marketing Expertise

Community betterment is a form of doing good that can be seen as a form of marketing (Andreasen 1994, Hildebrand et al. 2011, Hovde 1943, Maignan & Ferrell 2004). Appealing to local communities and spending energy to better your community is a similar form of marketing (Hovde 1943). Marketing expertise is related to positive company performance (Morgan et al. 2009),

and high performing companies are likely to give back to their communities because they can (c.f., Besser 1998). Thus, strong marketing expertise may be associated with strong beliefs about bettering one's community.

Marketing expertise makes sense in that a primary motivation for contributing to the community is a desire to help the firm's business; that is, contributing to the community is by no means purely altruistic (Barnett 2019, Carroll & Shabana 2010). It is reasonable to hypothesize, therefore, that a firm with strong marketing expertise may seek to better its community as a way to create positive outcomes for the firm itself. We therefore propose the following:

Hypothesis 6: The higher the firm's level of marketing expertise, the higher the firm's belief that a firm should better its community.

### 2.2.2 Hiring

A firm that is hiring will be more motivated to contribute to its community, as doing so signals a relationship and a sense of dependability (Barnett 2019). By contributing to its community and making its work in this area known, a firm indicates that it cares about its employees' quality of life outside work and as a result may attract a workforce that is more loyal and skilled. Prospective employees are attracted to companies that participate in corporate social responsibility (Backhaus et al. 2002, Greening & Turban 2000, Turban & Greening 1997) because, as Barnett (2019) claims; "...the firm's employees may view it as more trustworthy and so a more desirable place to work" (p. 10). Trustworthiness breeds loyalty (Fombrun et al. 2000); there is thus value in using CSR as a way to make a firm attractive to prospective employees (c.f., Voegtlin & Greenwood 2016). This leads to our last hypothesis:

Hypothesis 7: The more the firm is hiring, the higher the firm's belief that a firm should better its community.

## 3. Methods

We utilized a survey to collect primary data from executives in the pallet industry. These data were collected over two time periods, and then analyzed with secondary data obtained from a variety of government sources. The following sections provide details on our methodology, including the industry profile, data collection, and variables.

### 3.1 Industry Profile

We focused our study on executives at pallet manufacturing firms. Pallets, otherwise known as "transport packaging," are generally made from wood and are used as a platform to move product throughout the supply chain. All firms in our sample dealt primarily with wooden pallets. There are an estimated two billion pallets in use at any given time in the U.S. and up to 80% of all products in the U.S. are moved on pallets (Carrano et al. 2014). Most pallet producers will sell pallets, while a few (generally the large poolers) only rent their pallets. Further, firms have the option of producing new pallets or refurbishing used pallets that are purchased on the open market from retailers and other supply chain partners.

The pallet industry consists of a small number of large (revenues over \$100 million) rental firms (i.e., CHEP and PECO), which were purposely excluded from our sample; there are approximately 2,100 smaller producers, including those with revenues under \$1 million in sales (McGinley 2019, Quesada et al. 2012). Thus, while the size of the firms varies significantly, there is little concentration in the pallet manufacturing/recycling industry. Regardless of firm size, the pallet industry is generally very labor intensive, with minimal automation (and less capital intensity) outside of new pallet production (McGinley 2019).

Pallet producers also vary in their geographic location. Some producers choose to locate in rural areas due to lower operating costs, but others choose to be in or near an urban area, since proximity to a city provides better access to both markets and used pallets.

### 3.2 Sampling and Data Collection

Our research is survey-based, with this method being a dominant approach in measuring CSR (Wang et al. 2016). An initial survey (i.e., Time<sub>1</sub> data) was administered to collect data from firms operating in this industry, with a second survey (i.e., Time<sub>2</sub> data) used to collect longitudinal data approximately one year later. We pre-tested our surveys with a panel comprising both management scholars and industry experts. After we had finalized the Time<sub>1</sub> instrument, the president of the wooden pallet industry's leading trade association sent an email to upper-level executives of 1,195 firms that consisted of both members and non-members of the association. The mailing list was screened by the association so that only those with executive positions would be included. We

use the term “executive” to describe our respondents, since that describes their position within the firm. Our sample was designed to capture responses only from upper management, since they would be in the best positions to have knowledge of the matters in question.

The email provided a brief description of the study, encouraged participation, and included a link to the online questionnaire to be completed by the executive. Based on techniques found to be successful for mail surveys, a series of follow-up emails was sent in the next two weeks in an effort to increase participation (Dillman et al. 2008). We received a total of 183 responses from the Time<sub>1</sub> collection. After we had removed incomplete responses and responses from non-manufacturers, the usable sample consisted of 136 responses. Our adjusted Time<sub>1</sub> response rate was 11.4%. For the Time<sub>2</sub> data collection, we sent emails to all 136 Time<sub>1</sub> respondents and asked them to complete another online survey. We received 105 surveys but could only confidently match 99 of these with the Time<sub>1</sub> responses. Our adjusted response rate for Time<sub>2</sub> was 72.8%. Of these, we retained only the firms headquartered in the United States, such that our sample at this point in the process comprised 89 firms.

We then used secondary-source archival data to supplement the survey data. We collected data from the US Census Bureau as found on [www.Realtor.com/local/\[zipcode\]/](http://www.Realtor.com/local/[zipcode]/) for each zip code in which the firms in the sample were located. We used [www.Realtor.com/local/\[zipcode\]/](http://www.Realtor.com/local/[zipcode]/) as our source of US Census data because it was readily available, well organized, and easily accessible, compared to the way in which the data were formatted by the US Census Bureau—and it is freely available to the layperson. For each zip code, we collected data summarized by the US Census Bureau to describe the communities in which the firms were located. When we use the word “local” we mean within the firm’s zip code. We had missing data for three firms, and thus our final sample comprised 86 firms.

The mean age of the 86 firms in our sample was about 35 years. On average, firms in our sample had 59 full-time production employees (from 2 to 375). Only four of the respondent firms had 250 or more full-time production employees, and 70 of the firms had fewer than 100 such employees.

To address concerns related to nonresponse bias, we compared the answers of early respondents with those of late respondents. We evaluated the mean re-

sponses to the survey questions for the executives who completed the survey before the stated deadline and for those who completed the survey after the deadline had passed. The perceptions of the late respondents are assumed to be more similar to those of non-respondents than to those of early respondents (Kanuk & Berenson 1975). Therefore, significant correlations between item measures and the survey completion date would point to the existence of nonresponse bias (Combs & Ketchen 1999). Using t-tests, we compared the mean responses of these two groups for multiple variables. The results of these tests indicated that early respondents did not differ significantly from late respondents for any of the chosen variables ( $p < 0.001$ ), thereby mitigating concerns in regard to potential nonresponse bias.

### ***3.3 Dependent Variable***

#### **3.3.1 Community Betterment**

We focused on one dependent variable from our survey: firms bettering their communities. The exact wording of the relevant survey question was “Please check the response that best describes your agreement with the following statement: Companies should contribute to the betterment of their local communities.” Responses were collected across a 1-5 Likert scale from Strongly Disagree (1) to Strongly Agree (5) with Neutral (3) in between. The term “community betterment” is open and means to makes one’s community better in whatever ways the responder sees fit.

### ***3.4 Independent Variables***

The first five independent variables below are taken from descriptions on the [www.Realtor.com/local/\[zipcode\]/](http://www.Realtor.com/local/[zipcode]/) website as provided by the US Census Bureau. The point of using these variables is that they are easily understood and easily accessed by the layperson and business professional alike, as well as by policy-makers looking to research community indicators and thus estimate Community Betterment likelihoods based on our findings.

#### **3.4.1 Crime**

This variable captures the percentage of property crime, as related to population for the zip code under investigation, as either above or below the national average. We considered only property crime, in part because it is more likely than personal crime to be business-related

and more visible to management. According to the US Census Bureau, the crime index of 100 represents the national average.

### 3.4.2 Population Size

This variable represents the size of the community (number of residents in that zip code) per the US Census Bureau. The measure for population is an actual count.

### 3.4.3 Unemployment

This variable, which can range from 0 to 100%, represents the unemployment rate for the zip code under investigation, per the US Census Bureau.

### 3.4.4 Educational Level

This variable, which can range from 0 to 100%, refers to the percentage of people in a zip code's population who have graduated with a bachelor's degree, per the US Census Bureau.

### 3.4.5 Turnover

The percentage of annual turnover refers to the percentage of residents who move from the zip code each year. This variable can range from 0 to 100%, per the US Census Bureau.

### 3.4.6 Marketing Expertise

This variable was measured using one question on the survey: "Compared to other companies in the industry, please rate your company's position in terms of having expertise in marketing." We used a 1-5 Likert-based scale for this question, whereby (1) was Much Weaker, (3) was No Different, and (5) was Much Stronger. The higher the score, the greater the firm's level of marketing expertise.

### 3.4.7 Hiring

We measured hiring using the formula:  $\text{Natural Log Time}_2\text{-Employment} - \text{Natural Log Time}_1\text{-Employment}$ .  $\text{Time}_2\text{-Employment}$  and  $\text{Time}_1\text{-Employment}$  each refers to the total number of production employees in the firm. If the firm is increasing the number of its employees, then it is hiring.

## 3.5 Control Variable

### 3.5.1 Firm Size

Firm size was measured by the natural log of the number of production employees employed during  $\text{Time}_1$  (Lepoutre & Heene 2006). Firm size matters to a firm's sustainability efforts, and especially when it comes to

pursuing business functions like marketing and hiring (Gallo & Christensen 2011). Previous findings with forest-based corporations showed that corporate responsibility activities differ by company size (Han & Hansen 2012).

## 4. Results

Table 1 provides descriptive statistics and a correlation matrix for the variables included in our initial analysis. As shown in Table 1, the correlations among our independent variables are low.

We performed our initial analyses using forward linear regression. Crime, Population Size, and Unemployment were not supported, thus they were excluded from being entered into the linear regression model where Community Betterment was the dependent variable. This means that Hypotheses 1, 2, and 3 are not supported. Crime, Population Size, and Unemployment do not explain any of the variance in Community Betterment. There is no relationship that we found with these three variables and our dependent variable. Both Education Level and Turnover, however, did enter the model, and thus those two variables are explored in greater detail below.

To test Hypotheses 4 and 5, we regressed Education Level and Turnover on Community Betterment. The results of our linear regression models are presented in Table 2.

Each of these two independent variables—Educational Level and Turnover—significantly contributed to the model. This result confirms support for Hypothesis 4 and Hypothesis 5. Firms with executives who express a belief in bettering the local community are located in communities in which the residents tend to be educated with a bachelor's degree, and are located in communities in which residents do not move often. In fact, for laypeople using the [www.Realtor.com/local/\[zipcode\]/](http://www.Realtor.com/local/[zipcode]/) website, one can enter the zip code of the company under consideration and note that for every .014 change in Education Level, the company's belief that firms should better the community goes up by 1 point. Likewise, for each .039 decrease in Turnover, the company's belief the firms should better the community goes up by 1 point.

Table 2 shows that the control variable, Firm Size, was also entered in order to test Hypotheses 6 and 7. Firm Size contributes to a significant change over the baseline model of community indicators. This means



**Table 1. Means, standard deviations, and correlations.**

Variable	Mean	Std. Dev.	1	2	3	4
1. Community Betterment	3.82	0.75				
2. Firm Size	3.56	1.15	.22*			
3. Crime	2.46	88.36	0.00	0.22*		
4. Population Size	21,393	15,592	-0.04	0.09	0.39**	
5. Unemployment	6.18	1.71	-0.02	0.18+	0.20+	0.04
6. Educational Level	24.86	14.16	0.23*	-0.09	-0.12	0.02
7. Turnover	17.40	5.20	-0.28**	0.18	0.25*	0.20+
8. Marketing Expertise	0.00	1.00	0.17	-0.06	-0.02	-0.10
9. Hiring	0.49	1.96	0.33**	-0.14	-0.01	-0.02
Variable			5	6	7	8
1. Community Betterment						
2. Firm Size						
3. Crime						
4. Population Size						
5. Unemployment						
6. Educational Level			-0.23*			
7. Turnover			0.10	-0.06		
8. Marketing Expertise			0.08	0.06	0.23*	
9. Hiring			-0.19+	0.38**	-0.19+	0.18+

Pearson product moment correlations based on two-tailed tests (N = 86)

\*\*  $p \leq 0.01$ ; \*  $p \leq 0.05$ ; +  $p \leq 0.10$

**Table 2. Linear regression analysis—community descriptors and marketing capabilities on community betterment.**

	Beta, Community Indicators Model [H4, H5]	Beta, Firm Size (Control) Model	Beta, Marketing Expertise Model [H6]	Beta, Hiring Model [H7]
Constant	4.138***	3.555***	3.019***	3.018***
Control Variables				
Firm Size		0.190**	0.185**	0.197**
Independent Variables				
Education Level	0.014*	0.015**	0.013*	0.009
Turnover	-0.039**	-0.047**	-0.043**	-0.038**
Marketing Expertise			0.158*	0.139*
Hiring				0.089*
R-square	0.142	0.224	0.269	0.311
R-square Change		0.082**	0.045*	0.042*
Model F	6.873**	7.876***	7.447***	7.226***

\*\*\*  $p \leq 0.001$ ; \*\*  $p \leq 0.01$ ; \*  $p \leq 0.05$ ; the beta coefficients shown are non-standardized; (N = 86)

that Firm Size explains some of the dependent variable, and thus, controlling for such explanation is meaningful.

We then regressed Marketing Expertise on Community Betterment and found that the more marketing expertise a firm has, the greater its interest in bettering its community, as both the variable, Marketing Expertise, and the model were statistically significant (at  $p \leq 0.05$ ). Hypothesis 6, therefore, was supported.

Lastly, we regressed Hiring on Community Betterment. The more employees the firm is hiring, the greater it believes that firms should better their communities. The results of this final model—i.e., the Hiring Model—show a substantial improvement over those of the Control-Only Model and of the Marketing Expertise Model. Further, the Hiring Model tells us that all three independent variables contribute in statistically significant ways to explaining Community Betterment; executives of firms with a higher marketing expertise in communities with a higher percentage of educated residents with a bachelor's degree and a lower percentage of annual turnover within their zip code express a stronger wish to better their communities than do executives in the opposite circumstances. And as stated previously, having marketing expertise (Morgan et al. 2009) and, by association, practicing good firm management overall are related positively to hiring (growth), as well as to corporate social performance (Dutton et al. 1994). Therefore, because hiring is statistically significant, we find support for Hypothesis 7.

## 5. Discussion

One of our main goals with this research was to investigate the community-level characteristics that a sample of wood manufacturers expressed an interest in bettering. That is, we asked whether there were differences between the local communities that pallet manufacturer executives expressed a wish to better and the local communities for which they did not. Our findings did show significant differences, with executives who expressed a belief that firms should better their communities being located in communities in which the population held more bachelor's degrees than average (c.f., Hypothesis 4) and for which annual population turnover was low (c.f., Hypothesis 5). Neither crime, population size, nor unemployment showed any relationship to whether firms expressed a wish to better their local communities.

A second purpose was to ask how the firms that expressed a wish to better their local communities differed from those where the executive did not express a wish of this nature. We predicted that firms would differ by marketing expertise (Hypothesis 6) and hiring (Hypothesis 7). That is, firms with higher levels of marketing expertise would be more prone to bettering their communities than would firms with lower levels. Hypothesis 6 was indeed supported. We also posited that firms would differ by hiring: firms that increased the number of their employees between Time<sub>1</sub> and Time<sub>2</sub> would be more likely to support Community Betterment than would firms that did not do this. Such was the case, as we found support for Hypothesis 7.

We find the relationship between community betterment beliefs and marketing expertise to be especially interesting. The greater the firm's perceived marketing expertise compared to its competitors, the more the firm's manager believed in community betterment. Firm size was controlled for, and marketing expertise still had a positive significant relationship with the extent to which executives reported believing that firms should better their local communities. However, firm size was not the only explanatory factor in the model. Change in firm size, or hiring of production employees, also contributed to explaining a firm's reported interest in community betterment. Thus, we posit that firms with a reported desire to better their communities are marketing-motivated, while growing their workforce, and hence are more willing to invest in educated, low-turnover communities during this process than are other firms. This result may be understood as suggesting that it is plausible for a wood manufacturer to make its community better by investing in it under the marketing rationale, in part because doing so will attract the types of new hires it can depend upon (Borzaga & Defourny 2001). This is a business case for community betterment in that such preference for social action is done as marketing for a business outcome: hiring. Labor-related issues have historically been a challenge for the pallet industry (e.g., Dunn et al. 2000), and the positive influence of enhanced community relations would be especially important in times of tight labor markets.

### 5.1 Implications and Future Research

We can draw several managerial implications from this research. The first is that leadership at SME wood man-

ufacturers should consider engaging in community betterment as part of their corporate responsibility practices. Community betterment should be seen as a component of philanthropy and is a form of CR that forest and wood-based companies should focus more on. Even small companies can afford to invest in community betterment, and thus it should be part of any firm's overall CR portfolio. It costs very little to show support for a local community, especially in rural areas where many wood producers operate.

Second, while firms in general are thought to benefit from improved relationships with key stakeholders, SME wood manufacturers may benefit from community betterment as a specific means to engender better relations with local stakeholders. Serving others in the community by doing any one of a host of different activities, such as donating to local charities or sponsoring the local food bank, can endear the firm to the community via betterment efforts. We suggest that wood manufacturers will see a variety of benefits (e.g., enhanced corporate image) if they focus more on their communities and considered local stakeholder interests. Large forestry companies put considerable efforts into community development and relations (Vidal & Kozak 2008) as part of their CR practices, and SME firms may benefit from similar efforts.

Future research could delve deeper into community-focused CR as a means of non-selling, integrated marketing that some have suggested is needed in our industry (Han & Hansen 2017) and to investigate the links between philanthropy, local investments, and business outcomes. Given that our measure of "community betterment" was a single item, future research should endeavor to develop a more robust measure of this concept to more accurately reflect management beliefs; having a valid and reliable measure of community betterment will be an important step for any researchers hoping to study this concept. It would be helpful to replicate our findings with other segments of the wood-based industries to determine if other firms could also benefit from this form of CR. Moreover, local community interactions have been noted as a key area of public debate for the forest products industry (Panwar et al. 2006) and thus warrant additional research focus. And finally, testing key relationships over time would allow for cause-and-effect relationships to be determined.

## 5.2 Limitations

As with any survey-based research our study has limitations. Nonresponse bias is a common problem with survey data, and yet we attempted to test for evidence of such an effect. It should also be noted that we are not seeking to promote these findings as representing an entire industry (either pallets or overall wood manufacturing). We do acknowledge that our sample is from just one segment of wood manufacturers, and this is a business-to-business industry instead of a business-to-consumer segment.

Our research assumes that respondents have some feel for the attributes of their local communities and are cognizant of needs and changes going on around them. Given that ours is a sample of relatively small businesses, it seems logical to assume that management would have a closer understanding of stakeholders in the local community.

The use of zip codes to represent a community also has limitations. For example, the firm may be located at the edge of one zip code while its relevant community may be located in an adjacent zip code. The crime variable used in this research perhaps could have been more inclusive than the narrow definition we used (e.g., including crime measures beyond just property crime).

Our dependent variable, Community Betterment, was left open to interpretation by respondents; that is, it is in the eye of the beholder. The respondents were not asked to indicate actual betterment behaviors, but instead were asked only about their attitude toward betterment toward their communities. As such, we did not qualify this variable to define it as a specific definition of "betterment." A related limitation is that betterment was a single item measure and thus has less validity than a multi-item measure. Our marketing variable suffers from the same limitation.

Lastly, we wish to make the point that our exploratory research here is correlational and not causal. It was set up as an exploratory study to determine if any relationships existed at all, and if so, which ones. We have found that there could be worthwhile relationships for future study based on our initial perfunctory findings.

## 6. Conclusions

Corporate social responsibility has been suggested as an important focal area for forest products industry leader-

ship (Panwar et al. 2006), and community betterment should be seen as a form of corporate responsibility. Not all industry leaders may think of their community as a viable option for investing time and money, but we suggest that wood manufacturers will benefit, in part because investing in one's local society can improve a firm's relationships with its primary stakeholders (e.g., local policy makers, business partners, etc.) (Barnett 2019). Godfrey et al. (2009) reinforce this when they suggest that demonstrating concern for others in a firm's localized environment enables firms to build valuable relations with their primary stakeholders.

This research is one of the first studies to look at the demographic and geographic conditions in which wood-based manufacturers operate and the relationship between these conditions and what a firm's executive believes about the firm's social responsibility. Our results suggest there is a relationship between community betterment and firm-level attributes. Perhaps leaders who are smart enough to have increased marketing expertise, and run their business well enough to need increasing numbers of employees, are also savvy enough to know the benefits of investing in local communities. We would therefore suggest that knowledgeable executives understand the value in community betterment as a form of CR, and they reap multiple benefits that less knowledgeable managers do not. This would reinforce previous research showing that a lack of skilled management in SME wood manufacturers is a constraining factor in business success (Elser & Michael 2019, Grace et al. 2018).

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