

## **Stepping Up: An empirical analysis of the role of social innovation in response to an economic recession**

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**Abstract:** Categorizing organizations as either for-profit or nonprofit is a false dichotomy as existing for-profit firms are becoming more socially conscience while nonprofits are adopting profit-making activities to ensure their viability. This paper conceptualizes the array of social practices as a continuum of social innovation and empirically demonstrates variation not captured by legal designation. Using a survey from the US state of North Carolina, this paper examines how organizations across the continuum responded to the 2008 economic recession. Results indicate that more socially innovative organizations responded to the increase in need by increasing environmental, community, and employee support.

**Key Words:** Social Innovation; Social Enterprise; Organizational Forms; Social Responsibility

### **JEL Codes:**

L33 (IO: Nonprofit Organizations: Comparison of Public and Private Enterprise and Nonprofits),  
M14 (Business Administration: Business Administration: Corporate Culture and Social  
Responsibility)

**Acknowledgements:** We would like to thank Dawn Trembath and the NC Fourth Sector Resource Project for their help in designing and distributing the survey and for their work on the survey report. We would also like to thank Madison Rivers and Jongmin Choi for their work on the survey and Carolina Public Policy for their financial support.

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This paper has been accepted for publication. This is a pre-copyedited, author-produced version of the article accepted for publication at the Cambridge Journal of Regions, Economy, and Society following peer review. The version of record will be available online.

## I. Introduction

Organizations are typically either characterized as for-profit or nonprofit – an outdated dichotomy that does not accommodate the observed blended range of organizational practices and the improvised adaption to changing economic circumstances. Many for-profit businesses have made substantial changes to their practices to be more socially conscience at a time of greater need while nonprofit enterprises have adopted profit-making activities to ensure their viability in light of decreased government support and fewer private donations (Graddy-Reed et al., 2013). Moreover, both for-profit and nonprofit organizations may be important contributors to their local economy depending on the quality of employment benefits provided, concerns for environmental sustainability, and contributions to address quality of life concerns in their community (Feldman 2014). Relatively little is known about how organizational practices have shifted across the legal distinction of for-profit and nonprofit or how the 2008 recession affected the use of different practices. This paper contributes by examining the role socially innovative practices play in responding to economic challenges and considering how these practices vary by legal structure.

A variety of labels have been used to describe organizations that blend for-profit models with social goals. The terms *social enterprise* and *social entrepreneurship* have been applied to the adoption of revenue-generating models within nonprofit organizations (Dees, 2007; Foundation Center, n.d.) as well as to for-profit organizations operating with a social mission (Fleishman, 2007; Peredo and McLean, 2006). Terms like *triple bottom line* and *corporate social responsibility* are used to describe for-profit firms that attempt to create social benefit, while legal incorporation schemes, such as Low-Profit Limited Liability Corporation are introduced as a hybrid tax status. Other terms, like *fourth sector*, are being introduced more recently in a search for new definitions, with uncertain degrees of precision. There are discrepancies between the terms organizations use, their legal structure, tax status, and what they actually do. To move the agenda forward, we use the umbrella term *social innovation* to broadly capture organizational efforts aimed at alleviating social problems. Our focus is on innovative practices used by organizations to address societal problems and concerns.

This paper analyzes a survey of organizational practices in the US state of North Carolina to understand the range of practices in use and specifically examine how organizations responded to the 2008 economic recession. We conceptualize the use of social innovation practices as a continuum and reveal variation that is not captured by prevailing legal distinctions. The paper provides empirical evidence about how organizations across the continuum from for-profit firms to nonprofit organizations used social innovation to respond to the 2008 economic recession. Results

indicate that many organizations, across the range of legal structure, responded to the recession by increasing support to the environment, their local community, or their employees. Existing social practices positively influenced the decision to provide support, indicating a deepening of commitment during the economic recession. This paper contributes to the process of identifying socially innovative organizations, documents variation in the use of social innovation practices across legal structure, and demonstrates how social innovation was used in reaction to increased need due to an economic shock.

The paper is organized as follows. The next section reviews the theory and literature regarding social innovation. Section three presents the research design with a review of North Carolina's economy, the survey design, and empirical methods. Results are presented in section four. The final section concludes with discussion and implications of our finding, and suggestions for future research.

## **II. Defining Social Innovation: Existing Theory & Literature**

Social innovation is an emerging field of research that lacks a conclusive definition and theoretical framework. While the practice is not new, the concept has grown in popularity in recent years as seen by President Obama's creation of the Office of Social Innovation in 2009 and the increased presence of the topic in academic publications<sup>1</sup> (Figure 1).

[Figure 1 Position]

The burgeoning field has a spectrum of prior research that utilizes varying definitions and research methods. According to Stanford's Center for Social Innovation (2009), social innovation "is a novel solution to a social problem that is more effective, efficient, sustainable, or just than present solutions and for which the value created accrues primarily to society as a whole rather than private individuals". Much of the existing literature follows this definition and frames social innovation as an extension of innovation applied to social problems (Brozek, 2009; Dees, 2008; Martin and Osberg, 2007; Peredo and McLean, 2006; Reis and Clohesy, 2001). Related terms of *social entrepreneurship* and *social enterprise* are also used in the literature to describe individuals and organizations that strive to create social innovation (Dees, 2008; Foundation Center, n.d.; Martin and Osberg, 2007; McGrath and Desai, 2010; Peredo and McLean, 2006). While efforts to define the concept have focused on ties to innovation and entrepreneurship literature, theoretical

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<sup>1</sup> Conducted using Scopus Database, this number includes journal articles, conference papers, and book chapters.

developments have been made by grounding the practice in institutional theories of social capital, organizational change, and legitimacy (Agrawal and Hockerts, 2013; Habisch and Adai, 2013).

While much progress has been made in developing our understanding of social innovation, we are still limited in our knowledge of how social innovation is produced. Social innovation can be understood as the process of creating novel solutions to further a social good – it is innovation relating to the solution of a social problem (Mulgan, 2006; Pol and Ville, 2009). Thus there may be direct and indirect paths and as a result multiple motives that lead to its creation. When discussing production however, the literature focuses on social entrepreneurship as the only route to social innovation, thus ignoring other viable organizational pathways. Other literatures highlight alternative ways that organizations provide for the public good without reference to their common goal of achieving social innovation.

[Figure 2 Position]

Figure 2 presents the multiple paths to social innovation that existing literature has focused on separately. The most direct path is through organizations, whether they be for-profit, nonprofit, or a hybrid structure, that are created with the explicit aim to attempt to address a social problem. For example, TOMS Shoes is a for-profit entity with a business model that provides a pair of shoes to a person in need with every pair of fashion shoes purchased.

However there are indirect paths as well. Any innovation may have a social effect: profit-seeking business technological or organizational innovation can produce externalities that generate social benefit (Pol and Ville, 2009). Thus businesses can indirectly create a social innovation through a positive externality with a social application. For example, a firm can offer training to enable current employees to engage with new production processes. This would be an alternative to closing a plant and moving to a greenfield site.

For-profits may also create social innovation through their social involvement, namely their corporate social responsibility practices. Corporate social responsibility (CSR) is the practice by for-profit firms to give back to their community through the provision of time, funding, or services. Reis and Clohesy (2001) find that female and young entrepreneurs as well as family-firms have the largest CSR profiles. Delevingne, (2009) finds that CSR is perceived to positively influence firm reputation, suggesting that firms may decide to expand their CSR programs in the wake of poor economic conditions. CSR's affect on financial performance has been indeterminate, with the most rigorous studies finding no effect (Aupperle et al., 1985; McWilliams and Siegel, 2000). This may be due to the diversion of profits into social innovation, which is reflected in marketing strategies (Hess

et al., 2002). However, CSR decisions could be treated as profit maximizing investments that increases revenue more than the associated costs for a firm (McWilliams and Siegel, 2001).

These three alternative routes suggest that social innovation will not be limited to social enterprises but will span the range of organizational forms.

### ***Innovation Out of Necessity: The Role of Economic Crisis***

There is a more altruistic orientation that describes the rise of social innovation in the wake of an economic slump. As the economy slumps, firms may increase their philanthropy not just to garner more consumer support but also to sustain their community (Acs and Phillips, 2002). Our hypothesis is that organizations adopt new socially innovative practices in times of economic downturn, responding directly to greater need.

Given the lingering effects from the recent recession, there is a great deal of opportunity for organizations to step in where government funding is falling short. Many traditionally for-profit organizations are implementing more socially responsible, environmentally sustainable, and community-oriented practices. This is occurring not only because of connection to local communities, but also out of necessity. In these difficult economic times, having first mover advantage and being the low cost producer are no longer sufficient strategies; thus, organizations are adopting a range of nontraditional practices, and offering a means to create viability in local communities at a time of decreased government capacity. Recognizing the importance of their workforce and their local community context motivates organizational response.

The multiple sources of social innovation coupled with the potential influence of economic conditions prompts three research questions:

1. *What types of organizations engage in socially innovative behavior and what role does legal structure play?* Since social innovation can come from any type of legal structure it is unclear if one type is more likely to create social innovation or more generally, attempt to create it.
2. *What role does socially innovative behavior play in responding to a recession?* As organizations are faced with business decisions in response to economic downturn, is their business behavior motivated by their social behavior?
3. *What role does socially innovative behavior play in providing increased social support in response to the recession?* We expect that those organizations that are more socially innovative would be more likely to increase social support when need is higher due to worsened economic conditions.

### **III. Research Design**

To answer these questions, this study uses data from the 2012 North Carolina Social Innovation Survey to examine what role legal structure plays in achieving social innovation and how both influenced responses to the 2008 economic recession. The design utilizes one US state, North Carolina, to control for economic, political, and cultural conditions.

While social innovation as a practice benefits from a business' ability to create change and an entrepreneur's innovative approaches, it is weakened by the difficulty of defining and measuring social success (Dees, 2008). Thus a primary challenge to studying social innovation is finding an appropriate measure of it. As discussed previously, existing methods of classifying socially innovative organizations rely on legal structure or self-identification. Legal structure fails to capture socially innovative behavior that is occurring across multiple legal structures. Self-identifying terms are also a poor indicator as it assumes a universally accepted and known definition of the behavior. But there is no consensus on a common definition and the terms in use are not widely spread. These methods are biased and inefficient at classifying socially innovative organizations.

We, instead, proxy for social innovation by measuring an organization's investment in social goals, captured by the practices they have in place. Practices in place identify common behavior across organizations that may or may not describe themselves as socially innovative and across legal structure. It captures what an organization is actually doing to work towards social progress as opposed to what they would like to do. By surveying a variety of practices we are able to categorize behavior into classes around how challenging and costly they are to implement and by their area in the business process, whether it be in production, delivery, or investment. This approach, of using existing practices, provides a more concrete perspective to social engagement and provides perspective as to how organizations are operationalizing the concepts with which they may or may not identify.

This section follows with a brief presentation of North Carolina's economic and business environment, a review of the survey design and sample statistics, creation of key variables, and the methods for analysis.

### ***Legal Structure and the Impact of the Recession in North Carolina***

North Carolina, the 10th largest US state, has a population of approximately nine million residing in 85 rural and 15 urban counties. While currently growing, North Carolina's economy is in a state of transition as it moves away from labor-intensive manufacturing industries to technology and service industries with manufacturing losing over 100,000 jobs in the state since 2007 (Bunn and

Ramirez, 2011). Although North Carolina's real GDP grew at a faster rate than the US from 2004 and 2009, the recession significantly damaged the state's economy and as of 2011, the state's median household income had declined to 84% of the US average, with high concentrations of wealth in the urban counties (Bunn and Ramirez, 2011). Further, the state unemployment rate rose from 5 to 11.2% between April 2008 and February 2009, with the poorest counties experiencing the highest peak of 13.3% in March 2010 (Bunn and Ramirez, 2011; Center on Poverty, Work and Opportunity, 2010).

Each state in the US is responsible for oversight of the legal structure of organizations within their boundaries. North Carolina has a common set of available legal structures for organizations. Traditional for-profit business forms include the corporation and the Limited Liability Company (LLC) or Partnership (LLP). These structures can be used by social enterprises as they permit flexibility, allow for private investment, and are often viewed as more efficient than nonprofit forms. Corporations make profits their primary aim but can incorporate social benefits as a factor in long-term profitability calculations while LLCs and LLPs incorporate a social purpose into the operating agreement (Graddy-Reed et al., 2013). North Carolina organizations may also form as a for-profit entity with cooperative principles in place. These organizations consist of members who share in ownership and governance rights.

These for-profit structures can also obtain a third-party certification of their social efforts. The most well-known option is the B Corp certification, which requires an impact assessment by B Lab, a private association. This is not the same as the benefit corporation business structure, which is available in some states and is a for-profit organization with a social mission that submits an annual report on their social impact (Foundation Center, n.d.).

The Low-Profit Limited Liability Corporation (L3C) is a hybrid legal form of a for-profit business structure with an explicit charitable mission. It became available in North Carolina in 2010 for organizations that met the statutory requirements to advance a social goal, with the creation of profits as not a significant goal, and no political or legislative purpose. This form enables for-profit organizations to receive financing from private philanthropic foundations that previously was only available to nonprofits. However, the North Carolina legislature repealed the L3C as an available legal structure effective January 2014. Meaning no new organizations could register as an L3C but existing organizations could remain as such (Graddy-Reed et al., 2013).

North Carolina allows for the formation of tax-exempt nonprofit corporations. These organizations exist solely for a social mission and allow financing in the form of donations and

grants. Nonprofits can incorporate for-profit strategies to accomplish their mission as long as the business activity is significantly related to its social purpose (Graddy-Reed et al., 2013).

### ***Survey Design***

The 2012 North Carolina Social Innovation Survey was a web-based survey. It received a 20% response rate from organizations in the state of North Carolina regarding their business, employee, community, and environmental practices. It was not a randomized study but utilized samples aimed at capturing statewide responses in urban and rural areas across industry and legal structure. Survey responses appear to be representative of organizations in the state and completion rates were not correlated to the size, age, or location of the organization. However, other limitations do exist from self-selection and non-response bias. Further, the survey was given out to organizations in the Fall of 2012, after the Great Recession, meaning the survey responses are representative of organizations that survived the recession or were created after it; there is no information on the behavior of firms that failed as a result of the recession.

[Table 1 Position]

Seventy-one of the 100 counties are represented in the survey from across the state (Table 1). There is an oversampling of urban respondents, who account for 71% of the sample while accounting for 58% of establishments with employees in the state (Figure 3).

[Figure 3 Position]

North Carolina's Department of Commerce classifies each of the 100 counties in one of three economic distress tiers. Tier 1 is made up of the 40 most economically distressed counties, Tier 2 accounts for the middle 40 counties, and Tier 3 comprises the 20 least distressed. Counties are ranked annually based on their unemployment rate, median household income, population change, and property values in the previous year (Weisbecker, 2012). The designations are used in multiple state programs that provide tax credits to promote economic development (NC Department of Commerce, 2013). The 2013 classifications are used in this analysis because they were based on the 2012 economic conditions, the year of the survey. The survey sample's distribution of economic distress tiers is similar to the state's, however, Tier 2 establishments are somewhat underrepresented in the sample while Tier 3 organizations are overrepresented (Figure 4).

[Figure 4 Position]

Of the 29 counties not represented in the survey, 20 are Tier 1 counties, or the most economically distressed. Their absence may be tied to a lack of Internet access. Since the survey was

only available online, many potential respondents were not able to respond. More than 15 percent of the state's rural population lacks high-speed Internet access and all Tier 1 counties are rural, thus include areas without broadband coverage (NC Broadband, n.d.). This is a limitation in the results and of all internet-based surveys. It also limits the generalizability of the analysis of Tier 1 organizations to those with Internet access.

### ***Sample & Descriptive Statistics***

The sample for this analysis uses complete survey responses from organizations located in North Carolina counties, excluding government and quasi-government organizations. This produced a sample of 556 organizations.<sup>2</sup> Table 2 presents the descriptive statistics for the sample and by sub-samples of legal structure and use of self-identifying terms.

[Table 2 Position]

#### *Legal Structure*

Legal structure historically identifies the types of practices and strategies an organization employs. However, these boundaries are blurring as nonprofits adopt for-profit strategies and for-profits become more socially involved. Survey respondents provided their legal structure. These values were categorized into three groups: *For-profit*, *Nonprofit*, and *Hybrid*. *For-profit* organizations consist of those that are not incorporated, operate as an LLC or LLP, or as an S or C corporation. *Nonprofit* organizations consist of those that reported a 501(c)3, 501(c)4, 501(c)6, or other nonprofit designation. *Hybrid* organizations are those with either an L3C or cooperative structure. As seen in Table 2, nonprofit or hybrid organizations were more likely to provide increased community support following the recession and have more community practices in place than for-profit organizations. However, for-profits provide similar levels of environmental and employee support and benefits. The similarities in many areas confirm that legal structure is not a clean indicator of socially engaged organizations.

#### *Terminology*

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<sup>2</sup> Respondents were asked to provide address information, which was optional. The survey received 1,004 responses with a survey completion rate of 62%.

Respondents were asked to self-identify, using multiple classifying terms including *entrepreneurial*, *green enterprise*, *environmentally responsible*, *hybrid*, *for benefit*, *fourth sector*, *triple bottom line*, and *social enterprise*. These were grouped by type as *Entrepreneurial*, *Green* (containing *green enterprise* and *environmentally responsible*), or *Social/Hybrid* (containing *hybrid*, *for benefit*, *fourth sector*, *triple bottom line*, and *social enterprise*). Because there is no well-accepted definition of social innovation, the use of a definitive term is not an appropriate means of identifying socially innovative organizations. However, many do use terms that imply a social mission appropriately. Within this sample, those that used a social term of identification were significantly more likely to have increased environmental and community support in response to the recession, and have more environmental and community practices in place. It is important to note that those using social terms were also more likely to be in an urban county. This may mean that such terms are not geographically widespread in their use, another signal that they should not be used as the sole means of identification.

### *Innovation*

Innovation is a process rather than simply an outcome. In order to innovate, firms must by definition try new things. Trying something new is risky and thus susceptible to failure. By asking firms about practices they have tried and their subsequent failures, there is an understanding of the risks they are taking and thus their efforts to innovate. Respondents were asked about failed or incomplete projects and socially engaged practices to capture this risk-taking behavior and innovative process. Both risk types and the combination of either attempt are fairly evenly distributed across respondents both by legal structure and self-identifying terminology, confirming that these distinctions do not serve as accurate measures to capture social innovation.

### *Responses to the Recession*

Respondents were asked how they responded to the recession through two questions that addressed the introduction of new products and methods and changed practices. Regarding products and methods, organizations were asked if following the recession they introduced new or improved: goods, services, methods of manufacturing or production, support processes, marketing methods, or methods of logistics, delivery, or distribution. The count of these responses creates the *Recession Introductions* variable, ranging from zero to six with a mean of 2.03 introductions. Twenty percent of survey respondents reported no new or improved introductions and approximately 27% reported

one introduction. The most frequent response was introducing a new or improved service with roughly 40% of respondents followed with 37% reporting new or improved marketing methods.

Respondents were also asked if in response to the recession, their organization changed certain business and social practices. This included changes to decrease costs by: decreasing employment, increasing operating efficiency, and increasing material efficiency. Over half of respondents reported decreasing employment in response to the recession. The question also included options related to social involvement of: increasing environmentally sustainable practices, increasing assistance to the local community, and increasing assistance to employees. Environmental practices had the highest response of this set with 28% reporting increases. Only 16% of respondents indicated they increased support to their employees.

Respondents were also provided an additional option of *other* and space to describe these alternative changes. Almost 8% of respondents specified additional changes. Write-in responses fell into two categories of further methods of decreasing costs and expansion. Regarding cost related activities, respondents also reported that they decreased wages and benefits of existing employees and increased prices of goods and services to consumers. Regarding expansion, some respondents reported increasing employment and expanding into new branches of products and services. While these write-in responses could not be used in the analysis, as they were not posed to all respondents, they do provide a broader understanding of how organizations respond to an economic shock.

### *Scales of Social Engagement*

Respondents were also asked about their engagement with a series of social practices – 11 environmental, 13 community, and 13 employee. Appendix Table 1 lists each of these practices, their frequency, and differences by legal structure and use of self-identifying terms. Figure 5 presents the quartile distribution of all practices by legal structure. Although there are heavier tails in either direction for each structure, both are well represented across the distribution again signaling that legal structure does not alone capture the social motivations of an organization

[Figure 5 Position]

These practices were combined to form three series of scales. These scales proxy for socially innovative activity by capturing an organization's investment in social goals – how involved they are in achieving a social good based on the practices they are actually engaged in. The first series of scales are grouped around the focus area of practices. They are count scales of the number of environmental, community, and employee practices an organization has in place. These scales do not

capture how valuable or innovative any one practice is but instead captures the breadth of support an organization has in either the environment, their community, or their employees with the premise that organization's with a higher number of practices are more socially engaged and devoted to meeting a social mission.

The second series of scales was created by dividing the former by type of practices. Environmental practices were divided into two categories of basic (recycle, conserve water, and save energy) or advanced (track emissions, produce renewable energy, etc.) practices. Community practices were divided into three categories of production related (local suppliers, suppliers with good practices, etc.), donation-based (company service day, donate use of facilities, etc.), and outreach activities (support K-12 education, promote economic equality). Employee practices were divided into two categories of benefits (retirement contributions, health insurance, etc.) and investments (job-training, employee education, etc.) in employees. These more detailed scales group practices by focus and attempt to capture the value of practices as they relate to solving social problems.

The third series of scales groups these more detailed scales across focus area to capture a more fluid picture of social engagement. This consists of three scales: basic, production, and investment. The basic scale includes the employee benefits and basic environmental practices. These are practices that are important at an individual level but do not directly work to solve a large social problem and are well spread across organizations. The production scale includes the advanced environmental and production-related community practices. These practices likely provide personal advantages and benefits to the organization but also contribute to meeting larger social goals. Finally, the investment scale includes the community donation, community activities, and employee investment practices. These practices may also provide some benefit to the organization but are significantly contributing to a social mission – they are practices that signal a desire to improve a community through innovative strategies.

## ***Methods***

Three models were run using the survey data to assess the role of legal structure in social engagement and how both impacted responses to the 2008 economic recession. Adjustments were made to certain variables. *Start Year Categories* was created from the year an organization began to categorize respondents into one of four bins given the average lifespan of a firm is now fifteen years (Gittleston, 2012). *New firms* contains organizations created between 2008 and 2012; *Young firms*, those

15 years old or younger, were created between 1997 and 2007; *Established firms* were created between 1981 and 1996, and *Lasting firms* were created before 1980. The number of employees was also categorized and divided into groups to create the variable *Employee Categories*. It is comprised of five bins of: *Very small* (two to four employees), *Small* (five to 15), *Medium* (16 to 85), *Large* (86 to 500), and *Extra Large* (over 500 employees).

#### *Organizational Traits in Socially Innovative Practices*

Given the challenges in identifying socially innovative organizations it is unknown what types of organizations are engaged in this behavior. The scales of social engagement are used here as a proxy for social innovation as they capture the breadth of investment an organization makes towards a social aim. The organizational factors are then examined that influence the number of practices an organization has incorporated. Equation 1 regresses the number of practices an organization has in place on legal structure and other organizational traits.

$$\log(\text{Social Engagement Scale}) = \alpha + \beta_1 NP + \beta_2 Hyb + \beta_z \mathbf{Z} \quad (1)$$

The key independent variable of interest is the legal structure of the organization. Legal structure is included as a categorical variable with binary indicators for nonprofit (*NP*) and hybrid (*Hyb*) with for-profits as the referent group. Additional covariates ( $\mathbf{Z}$ ) included are the types of self-identification terms used by an organization (*entrepreneurial*, *social/hybrid*, and *green*), age of organization, size by number of employees, location in an economic distress tier, and presence of innovative behavior.

This model evaluates the importance of organizational traits across multiple scales including the count scale of all social practices in place, the combination of employee and community practices, and then the three grouped scales of investment, production, and basic practices. This will help establish if certain traits are more important to certain types of social involvement.

Since each of the scales are count variables, either a negative binomial or Poisson model is used. For each regression a Poisson model was run and a goodness of fit test calculated. If the Poisson model was rejected, the negative binomial model was run and confirmed through the likelihood ratio test. The Poisson model was used for the production and basic practices scales but rejected for the combination scales and investment scale, resulting in the use of a negative binomial model.

### *Responding to the Recession: Introduction of New Products & Methods*

The differing social scales are then used as explanatory variables in assessing the response to the recession made by organizations. Were more engaged organizations more likely to be proactive in their business response to the recession? Equation 2 addresses this question by regressing the business response of an organization on their scale of practices, legal structure, and other organizational demographics.

$$\log(\text{Number of Recession Introductions}) = \alpha + \beta_1 \text{Scale} + \beta_2 \text{NP} + \beta_3 \text{Hyb} + \beta_z \mathbf{Z} \quad (2)$$

The outcome variable used is the number of introductions made in response to the recession. As discussed above this is a count ranging from zero to six and includes the introduction of new or improved goods, services, logistics, processes, marketing, or manufacturing methods. This captures how diversified organizations were in responding to the economic downturn.

The key independent variable is the scale of social engagement. Three models are run using different types of scales. The first uses the simple count scales by type of practice – environmental, community, and employee. The second utilizes the three grouped scales of investment, production, and basic practices. The third uses the detailed scales of basic and advanced environmental, production, donation, and activity in the community, and employee benefits and investment.

Legal structure is also included as a categorical variable with nonprofit and hybrid structures in reference to for-profits, as it was in the modeling of social innovation (Equation 1). It is included here to account for any additional impact it may have outside of its influence on the social engagement scales. Control variables included the types of self-identification terms used by an organization (*entrepreneurial, social/hybrid, and green*), age of the organization, number of employees, location in an economic distress tier, and presence of innovative behavior.

Due to the count nature of the outcome, both a negative binomial and Poisson model were fitted. However with each case, the Poisson was rejected through the goodness of fit and likelihood ratio tests resulting in the use of the negative binomial model.

### *Responding to the Recession: Increasing Social Support*

Finally, the social scales are used to examine what types of organizations responded to the increased need from the recession with increased social support. Equation 3 regresses the decision to increase any type of social support (environmental, community, or employee) on a series of organizational characteristics and demographics ( $\mathbf{Z}$ ) and the scales of practices in place.

$$\log(\text{Increased Social Support}) = \alpha + \beta_n \text{Scales} + \beta_z \mathbf{Z} \quad (3)$$

The key independent variables are the individual social scales by either general type (environmental, community, and employee) or detailed type (basic and advanced environmental, production, donation, and activity in the community, and employee benefits and investment). Control variables include whether the organization is a for-profit or not, the age of the organization, number of employees, economic distress tier of their county, the types of self-identification terms used by an organization (*entrepreneurial*, *social/hybrid*, and *green*), and the presence of innovative behavior.

There is, however, the potential for endogeneity between responsiveness to increased need and the number of social practices currently in place. To obviate this concern, additional models were run by each type of social support (environmental, community, and employee) while omitting the corresponding type of practices, correcting for any potential endogeneity (Equations 5-7).

$$\log(\text{Increased Environmental Support}) = \alpha + \beta_n \text{ComScales} + \beta_m \text{EmpScales} + \beta_z \mathbf{Z} \quad (5)$$

$$\log(\text{Increased Community Support}) = \alpha + \beta_n \text{EnvScales} + \beta_m \text{EmpScales} + \beta_z \mathbf{Z} \quad (6)$$

$$\log(\text{Increased Employee Support}) = \alpha + \beta_n \text{EnvScales} + \beta_m \text{ComScales} + \beta_z \mathbf{Z} \quad (7)$$

Due to their binary outcome values, these equations were fitted with logit models to examine what factors influence an organization's decision to increase social support in response to the recession.

#### IV. Results

Empirical results are presented in Tables 3, 4 and 5, which are discussed in turn.

##### *Organizational Traits in Socially Innovative Practices*

Table 3 presents the marginal effects resulting from Equation 1 evaluated at the various scales of social practices. The estimations' predicted means slightly overestimate the real sample means but are very similar. The importance of organizational traits vary by scale.

[Table 3 Position]

Looking first at model 5, basic practices, we see that age and size most impact the number of practices in place. These practices are widespread across organizations and in high frequency and thus least likely to be an indicator for socially innovative organizations. The results show no significant effect from innovation or using entrepreneurial or hybrid terminology. Further, legal structure has only a small effect with nonprofits providing a third of a practice more on average than similar for-profit organizations.

However, in model 3, with the outcome of investment practices, we see large and significant effects from legal structure and innovation activity. Being a hybrid as opposed to a for-profit is

associated with an additional 4.3 investment practices on average while being a nonprofit has a smaller but still significant effect of less than one additional practice than a for-profit. Being innovative or using hybrid terminology similarly are associated with almost one more additional practice, on average. Being a larger organization or in a less economically distressed area are also positive and significant indicators of investment practices.

Model 2 uses the count of employee and community practices in total - this includes the investment practices but also practices less likely to be associated with social innovation. Results show similar but larger effects than in model 3. Isolating the production related practices in model 4 that may lead to social aims but also benefit the organization so much weaker effects than model 3.

These results indicate that legal structure and terminology are indicators of social behavior and they are positively associated with the use of practices more strongly linked to social innovation (model 3). This effect indicates that those that select a hybrid legal structure are doing so appropriately as they have a *policy* significant number of more practices in place, as compared to for-profits. There is less of an obvious distinction between nonprofits and for-profits with an average difference of less than one practice. This indicates that these traditional legal structures are not a good indicator of one being inherently more socially innovative.

Use of a social term is a positive but not a strong indicator of social innovation with having almost one more practice on average than those that did not use a social term. This confirms that using self-identification, as a means of classifying socially innovative organizations, is not a good policy. This may be because there are not set definitions of the terms and that the terms are not widespread. Overall, hybrid legal structure is the strongest predictor of investment related practices, signifying the importance of these alternative structures in promoting social innovation.

### ***Responding to the Recession: Introduction of New Products & Methods***

Table 4 presents the marginal effects resulting from the negative binomial model of introductions made in response to the recession. The model fitted an average of 1.96 introductions as compared to the sample average of 1.88.

[Table 4 Position]

Self-identifying as entrepreneurial had a consistent positive and significant effect of 0.6 additional introductions following the recession. Innovation had a smaller but still consistent positive and significant effect of 0.4 additional introductions on average. However, legal structure failed to have a significant effect on introductions as did an organization's age and location.

In model 1, the general count of environmental and community practices are positively associated with introductions. In model 2, these elements are highlighted again with production-related and investment practices being significant. When broken down by detailed type in model 3, only advanced environmental practices are significant with 0.14 more introductions on average. Given the predicted average of 1.96 practices, this represents approximately a 7.3% change in the average outcome. Though significant this is a much smaller indicator than self-identifying as entrepreneurial which represented a 30.6% change from the fitted average. The results indicate that organizations with advanced environmental practices are slightly more likely to respond to the recession with more business changes but the overall minimal effect of socially innovative practices indicates that they are not a strong driver of business-related introductions post recession.

### ***Responding to the Recession: Increasing Social Support***

Table 5 presents the marginal effects from the logistic regressions used to analyze the response of increased social support. Models 1 and 2 on any social support produced a similar fitted average to the sample mean of 0.41 as compared to the sample mean of 0.43. Models 3 and 4 run similar models for environmental support only, while models 5 and 6 examine the effects on community support, and models 7 and 8 on employee support; all with similar predicted means to their sample means.

[Table 5 Position]

The number of community practices is positively and significantly associated with increasing environmental and employee support with a 3.3 or 3.9 percentage point increase in probability on average, respectively. Increased employee practices are positively and significantly associated with increased community support but not environmental. These results hold with the detailed scales with production-related community practices, community activities, and investment in employees positively affecting additional social support. Increased investment in employees, practices that are associated with social innovation, is associated with a 3.8 percentage point increase on average in the probability of providing additional community support in response to the recession. Similarly, increased community activities, practices also associated with social innovation, are associated with an increase of 5.0 percentage points in the probability of providing employee support. These results indicate that socially innovative practices are small indicators of providing additional social support following an increase in need.

Innovative activity and self-identification as entrepreneurial are stronger indicators of increasing employee support with an average increase in probability of approximately 9 percentage points. Use of a social or hybrid identification term is associated with roughly a 10 percentage point increase in the probability of providing community support. Community support was the only type for which legal structure matters – being a for-profit decreases the probability of providing community support by approximately 10 to 12 percentage points, on average. Being in a Tier 2 as opposed to Tier 1 county increased the probability of providing community support by approximately 17 percentage points on average, while there was no statistical difference between Tier 1 and Tier 3 county residents. This may mean that Tier 2 counties, those that are distressed but still have resources had the increased need and had the resources to meet it while Tier 3 had less need and Tier 1, less resources.

## **V. Discussion**

Organizations have begun to adopt a range of socially engaged practices in an attempt to create viability in local communities at a time of decreased government capacity. In an effort to determine identification of socially innovative organizations, this analysis highlights the importance of hybrid legal structures. Though the L3C is no longer available in the state of North Carolina, organizations that incorporated as L3Cs and as cooperatives did so appropriately – they self-selected into a legal structure that allowed for their high level of social engagement. The results suggest that this tax status encourages greater involvement from organizations in the provision of public goods and provides support for the value of having this option. Given the low cost to states to implement hybrid legal structures that do not decrease tax revenue North Carolina should reconsider their policy regarding the L3C. This analysis also provides support for the introduction of the L3C as a means of fostering social involvement from private organizations in other US states, where debate is underway on whether to adopt the structure.

Regarding terminology, many organizations that engage in socially innovative practices do not use a social term to self identify. Although the various labels have proliferated they have not widely diffused and still lack a definitive definition. Many who are socially innovative do not identify with a social term thus making it an inefficient indicator of socially innovative organizations. The many organizations pushing these multiple terms should instead focus their efforts on providing support to organizations to be more socially engaged. A widely accepted and simple term and definition are necessary for this type of work to flourish. Such consensus can shift the focus away

from marketing terminology and towards behavioral change. If the goal is increasing social support, the actions by these support organizations should be focused on educating organizations about practices they can implement, not terms they can use.

In considering responses to the recession, many organizations introduced new or improved products and methods to survive the economic downturn. Organizations that did so were more likely to be innovative and have advanced environmental practices. Legal structure did not provide a means of identifying these organizations, nor did age or location. This implies that organizations across type and place were proactive responders to the recession.

In terms of social support, many organizations increased their support to sustaining the environment, their local community, or their employees in response to the recession. Organizations with more socially innovative practices were more likely to increase social support. When the recession increased need for such support, many organizations working towards social goals responded by increasing support to their employees and communities. With global concern over government's ability to provide or sustain public good provision, private organizations are becoming more valuable in their service to their communities. Encouraging this social involvement and focus in organizations may then increase support to the public at the crucial time of an economic downturn.

The 2012 North Carolina Social Innovation Survey has some limitations. Since it was executed in 2012, it provides no record of organizations that did not survive the economic recession of 2008. These organizations would have provided a valuable counterfactual in terms of their social engagement and perhaps enlightened organizational characteristics correlated with not surviving the recession. In addition, many Tier 1 counties, those that are the most economically distressed, were not represented. This may be due in part to the limited Internet access available in those counties. Internet-based surveys prevent this segment of the population from participating and thus responses are not representative of those without access. There are also limitations to using one state as a case study. Using one state as a case limits the external validity of the results, as the interpretation of results cannot be extrapolated to other states or regions. However it does provide a starting point to evaluate the response to a recession through social practices while controlling for the political, economic, and cultural atmospheres of a state.

More research is needed from a larger sample that crosses over state boundaries. This will allow the results to be vetted in multiple geographies to examine if different states inherently respond differently to crises. Also, a follow-up study should be done within North Carolina to see if

the introductions and increased social support in response to the recession had lasting affects for the organizations and if these efforts improved their surrounding economy.

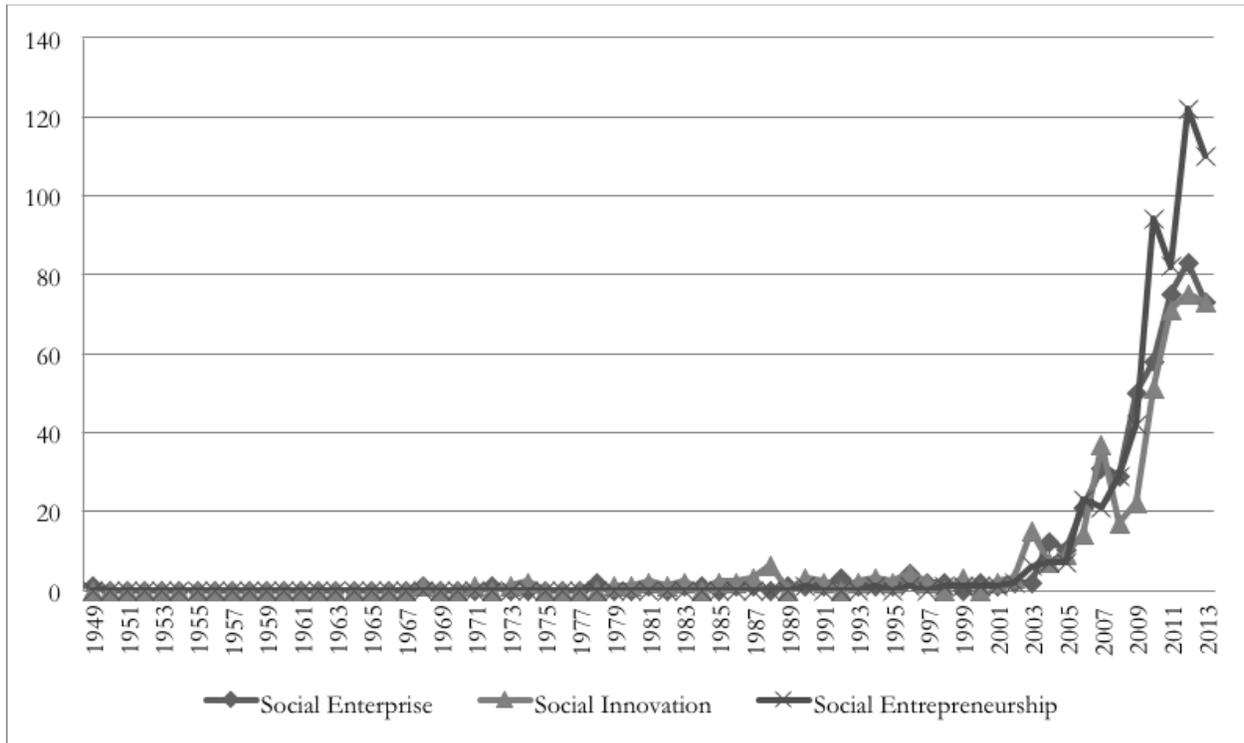
This paper examines the difficulty in identifying socially innovative organizations as their behavior crosses legal boundaries, self-identification, and organizational characteristics and puts forth a classification method that utilizes how organizations operationalize their social mission. Knowing the extent to which organizations are incorporating practices provides a means of accurately identifying the more socially engaged organizations. These more engaged organizations were more pro-active in responding to the economic recession by providing needed support to their employees and communities. This paper contributes to the literature on social innovation by clarifying the pathways to social innovation, demonstrating the organizational traits associated with socially innovative practices, highlighting the value and accuracy of hybrid legal structures, and demonstrating a link between socially innovative practices and supportive responses to economic downturn.

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Figure 1: Frequency of “Social Innovation” and related terms in academic publications



Source: Scopus Database

Figure 2: Sources of Social Innovation

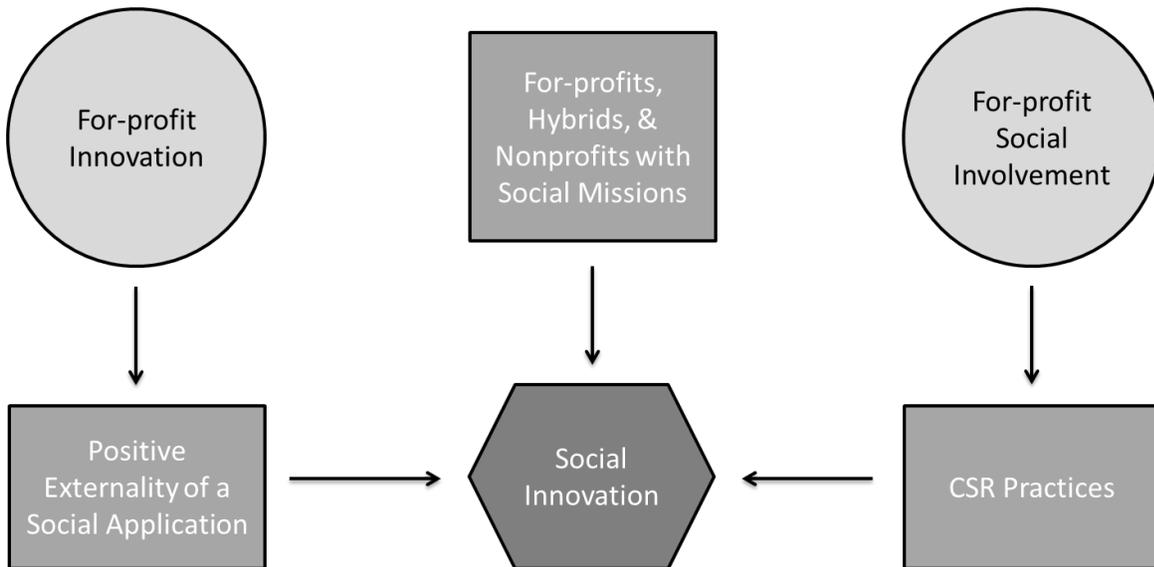
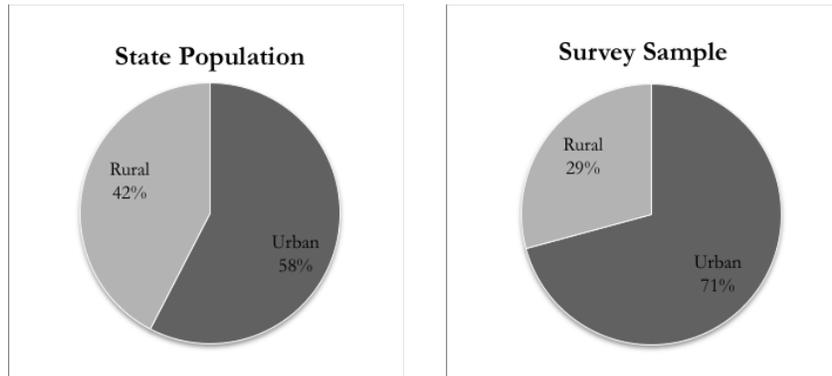
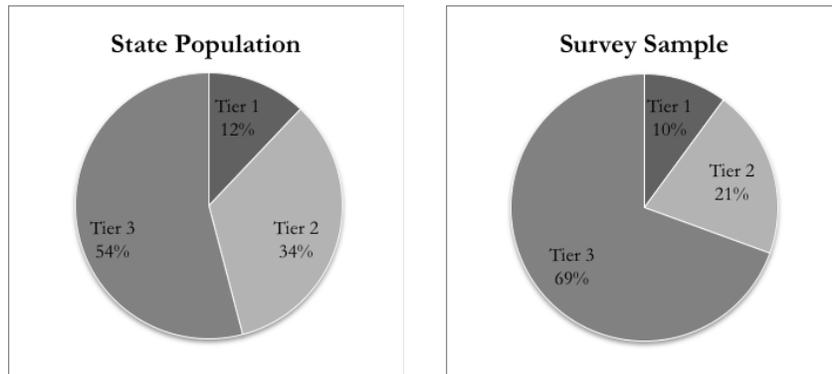


Figure 3: Comparison of State and Sample Rural-Urban Distributions of Establishments with Employees



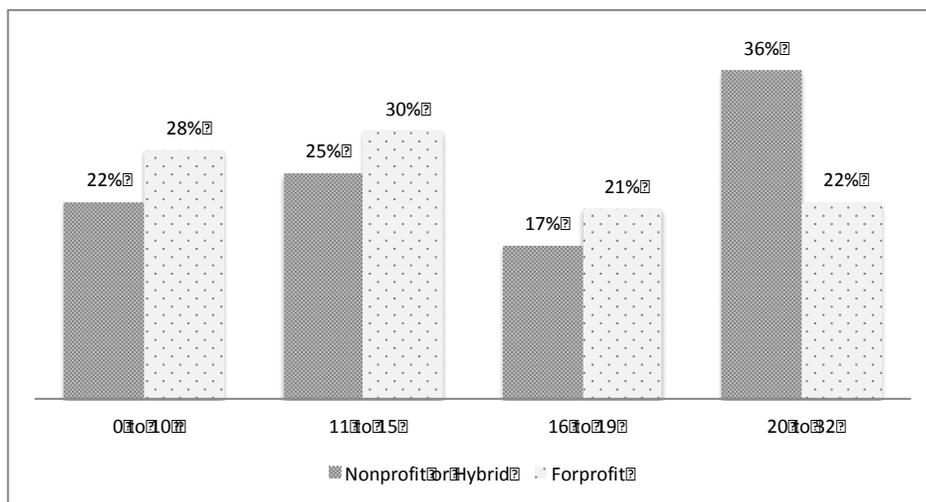
Source: NC Employment Security Commission 2011 via the Rural Center Data Bank

Figure 4: Comparison of State and Sample Economic Distress Tier Distributions of Establishments with Employees



Source: NC Employment Security Commission 2011 via the Rural Center Data Bank

Figure 5: Quartile Distribution of All Social Practices by Legal Structure



*Table 1: Comparison of State and Survey Sample County Distributions*

<b>Counties</b>	<b>State</b>	<b>Sample</b>	<b>Share Represented</b>
Urban	15	15	100%
Rural	85	56	66%
Tier 1 Urban	0	N/A	N/A
Tier 1 Rural	40	20	50%
Tier 2 Urban	7	7	100%
Tier 2 Rural	33	25	76%
Tier 3 Urban	8	8	100%
Tier 3 Rural	12	10	83%
<b>Total Counties</b>	<b>100</b>	<b>71</b>	<b>71%</b>

Table 2: Descriptive Statistics by Legal Structure and Hybrid Terminology Sub-Samples

VARIABLES	Total	Nonprofit or Hybrid	For-Profit		Hybrid ID Term	Term Not Used	
	N = 556	N = 124	N = 432		N = 246	N = 287	
<b>Start Year of Organization</b>	1987.00 (24.87)	1983.60 (26.91)	1988.00 (24.22)	*	1987.90 (25.15)	1986.10 (24.65)	
<b>Number of Employees</b>	1259.60 (12391.80)	116.50 (369.90)	1587.40 (14044.50)		1762.40 (16045.80)	797.50 (7651.70)	
<b>Legal Structure</b>							
Nonprofit	0.22	0.99	-		0.30	0.15	
Hybrid	0.003	0.01	-		0.01	0.00	
For-profit	0.78	-	-		0.69	0.86	
<b>Rural County</b>	0.28	0.15	0.32	***	0.21	0.35	***
<b>Community's Economy</b>				***			**
Growing	0.19	0.23	0.17		23.17	14.63	
Stable	0.29	0.36	0.27		31.71	27.53	
Mixed	0.34	0.33	0.34		31.30	35.89	
Declining	0.14	0.03	0.17		9.76	16.72	
Uncertain	0.05	0.05	0.05		4.07	5.23	
<b>Self-Identification Terms</b>							
Entrepreneurial	0.74	0.57	0.79	***	0.79	0.69	*
Green	0.67	0.62	0.68		0.79	0.56	***
Social/Hybrid	0.48	0.66	0.43	***	-	-	
<b>Innovative Activity</b>							
Business	0.53	0.51	0.53		0.54	0.51	
Social	0.20	0.20	0.20		0.21	0.20	
Either	0.60	0.61	0.59		0.63	0.57	
<b>Post-Recession Changes</b>							
Decreased Employment	0.52	0.53	0.52		0.48	0.55	**
Increased Operating Efficiency	0.79	0.78	0.80		0.82	0.77	
Increased Material Efficiency	0.34	0.30	0.35		0.31	0.36	
Increased Environmental Support	0.28	0.23	0.30		0.38	0.19	***
Increased Community Support	0.18	0.30	0.14	***	0.23	0.13	**
Increased Employee Support	0.16	0.14	0.16		0.18	0.14	
<b>Post-Recession Introductions</b>	2.03	2.00	2.04		2.20	1.87	*
Range: 0 - 6	(1.51)	(1.26)	(1.58)		(1.50)	(1.51)	
<b>Environmental Practices</b>	3.46	3.36	3.48		4.10	2.93	***
Range: 0 - 11	(2.32)	(2.18)	(2.35)		(2.42)	(2.08)	
<b>Community Practices</b>	4.56	5.74	4.24	***	5.65	3.65	***
Range: 0 - 13	(3.30)	(3.20)	(3.25)		(3.31)	(3.03)	
<b>Employee Practices</b>	7.12	7.28	7.07		7.30	7.00	
Range: 0 - 13	(2.72)	(2.75)	(2.71)		(2.72)	(2.68)	

Standard deviations in parentheses; Proportions reported for binary variables  
T-test or PR-test results significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Table 3: Scale of Social Innovation Regression Results

VARIABLES	(1) All Practices	(2) Emp & Com Practices	(3) Investment Practices	(4) Production Practices	(5) Basic Practices
Age of Organization [Post Crash (2008-2012)]					
Young (1997 - 2007)	0.777 (0.768)	0.0992 (0.603)	-0.355 (0.458)	0.159 (0.271)	0.884*** (0.322)
Established (1981 - 1996)	0.903 (0.838)	0.799 (0.660)	0.0279 (0.500)	-0.0311 (0.293)	0.807** (0.331)
Lasting (1980 or older)	0.954 (0.897)	-0.342 (0.688)	-0.658 (0.521)	0.299 (0.301)	1.056*** (0.337)
Employee Count [Very Small (<5 employees)]					
Small (5-15)	1.452** (0.654)	1.235** (0.496)	0.512 (0.372)	-0.261 (0.320)	0.998*** (0.262)
Medium (16-85)	3.339*** (0.713)	3.291*** (0.547)	1.521*** (0.407)	-0.408 (0.321)	1.614*** (0.262)
Large (86 - 500)	6.487*** (0.927)	5.172*** (0.693)	2.920*** (0.522)	-0.266 (0.357)	2.525*** (0.272)
Extra Large (500+)	7.308*** (1.270)	4.459*** (0.896)	2.639*** (0.679)	-0.198 (0.443)	2.817*** (0.302)
Economic Distress Tier [Tier 1 (most distressed)]					
Tier 2	1.108 (0.875)	1.607** (0.643)	0.976** (0.475)	-0.289 (0.293)	0.147 (0.278)
Tier 3	1.689** (0.790)	2.096*** (0.574)	1.317*** (0.423)	-0.351 (0.249)	0.423* (0.257)
Legal Structure [For-profit]					
Nonprofit	0.941 (0.640)	1.764*** (0.479)	0.751** (0.355)	-0.329 (0.211)	0.366* (0.204)
Hybrid	9.507*** (3.401)	6.093** (2.493)	4.322** (1.726)	1.052*** (0.386)	-0.0312 (0.718)
Either Innovation Type	1.212** (0.502)	0.849** (0.378)	0.817*** (0.281)	0.279 (0.176)	-0.128 (0.157)
Entrepreneurial ID Term Used	-0.178 (0.580)	-0.158 (0.435)	-0.143 (0.323)	-0.165 (0.190)	0.0804 (0.186)
Social/Hybrid ID Terms Used	2.253*** (0.538)	1.051** (0.410)	0.853*** (0.305)	0.904*** (0.185)	-0.193 (0.188)
Green ID Terms Used	3.726*** (0.574)	-0.299 (0.476)	-0.310 (0.353)	2.693*** (0.259)	0.491** (0.194)
Scale of Environmental Practices		0.767*** (0.0980)	0.443*** (0.0723)		
Scale of Employee Practices				0.148*** (0.0421)	
Scale of Community Practices					0.125*** (0.0275)
Predicted Mean	15.292	11.809	6.828	2.954	5.231
Sample Mean	14.933	11.534	6.615	2.860	5.169
Model	Negative Binomial	Negative Binomial	Negative Binomial	Poisson	Poisson

Marginal Effects reported; Standard errors in parentheses; (4) & (5) uses Robust Standard Errors  
N = 477; Referent group in brackets; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4: Scale of Post-Recession Introductions Negative Binomial Regression Results

VARIABLES	(1)	(2)	(3)
Legal Structure [For-profit]			
Nonprofit	0.0854 (0.189)	0.0907 (0.187)	0.164 (0.197)
Hybrid	0.774 (1.212)	0.820 (1.214)	0.662 (1.219)
Either Innovation Type	0.383** (0.152)	0.367** (0.152)	0.364** (0.153)
Self-Identifying Terms Used			
Entrepreneurial	0.602*** (0.176)	0.608*** (0.176)	0.605*** (0.177)
Social/Hybrid	-0.00891 (0.167)	-0.0190 (0.167)	-0.0160 (0.168)
Green	-0.0295 (0.193)	-0.00953 (0.192)	-0.0534 (0.196)
Scales of Practices			
Environmental	0.117*** (0.0408)		
Community	0.0592** (0.0262)		
Employee	0.0319 (0.0371)		
Basic		0.0247 (0.0507)	
Production-Related		0.121*** (0.0410)	
Investment		0.0558** (0.0265)	
Basic Environmental			0.0878 (0.0865)
Advanced Environmental			0.144*** (0.0520)
Production in the Community			0.0542 (0.0872)
Community Donation Types			0.0331 (0.0732)
Community Activities			0.0667 (0.0538)
Employee Benefits			-0.0255 (0.0675)
Investment in Employees			0.102 (0.0775)
Predicted Mean (Sample Mean: 1.881)	1.959	1.960	1.963
Significant Demographics	Size (+)	Size (+)	Size (+)

Marginal Effects of negative binomial regressions reported; N = 407

Standard errors in parentheses; Referent group in brackets; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Each regression includes controls for age, economic distress tier, and size (employee count)

Table 5: Post Recession Increases to Social Support Logistic Regression Results

VARIABLES	Any Social Response		Environmental		Community		Employee	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
For-profit Legal Structure	-0.0428 (0.0597)	-0.0569 (0.0621)	0.0430 (0.0535)	0.0481 (0.0559)	-0.0984** (0.0455)	-0.120** (0.0482)	0.0364 (0.0447)	0.0359 (0.0445)
Economic Distress Tier [Tier 1]								
Tier 2	0.0181 (0.0842)	0.0217 (0.0835)	-0.0917 (0.0799)	-0.0839 (0.0801)	0.166** (0.0736)	0.173** (0.0711)	-0.0498 (0.0668)	-0.0461 (0.0665)
Tier 3 (Least Distressed)	-0.0640 (0.0784)	-0.0583 (0.0780)	-0.126* (0.0753)	-0.115 (0.0759)	0.0785 (0.0623)	0.0893 (0.0591)	-0.0429 (0.0627)	-0.0390 (0.0632)
Either Innovation Type	0.0391 (0.0469)	0.0306 (0.0470)	0.0948** (0.0425)	0.0936** (0.0424)	0.0227 (0.0410)	0.0178 (0.0416)	0.0889** (0.0369)	0.0898** (0.0366)
Self-Identifying Terms Used								
Entrepreneurial	0.0626 (0.0518)	0.0660 (0.0517)	0.0914* (0.0483)	0.0919* (0.0483)	-0.0195 (0.0446)	-0.0220 (0.0450)	0.0843** (0.0417)	0.0857** (0.0418)
Social/Hybrid	0.0460 (0.0500)	0.0384 (0.0500)	0.0364 (0.0460)	0.0375 (0.0462)	0.109** (0.0436)	0.106** (0.0437)	-0.0536 (0.0410)	-0.0540 (0.0406)
Green	0.103* (0.0579)	0.0798 (0.0588)	0.261*** (0.0548)	0.236*** (0.0565)	-0.0181 (0.0535)	-0.0219 (0.0535)	-0.0189 (0.0463)	-0.0192 (0.0472)
Scales of Practices								
Environmental	0.0226* (0.0127)				0.00950 (0.0107)		-0.00318 (0.00986)	
Community	0.0404*** (0.00756)		0.0325*** (0.00703)				0.0390*** (0.00608)	
Employee	0.0100 (0.0112)		0.00770 (0.0103)		0.0258** (0.0102)			
Basic Environmental		0.00946 (0.0262)				0.0402* (0.0238)		-0.00288 (0.0202)
Advanced Environmental		0.0272 (0.0170)				0.00198 (0.0143)		-0.00307 (0.0125)
Production in the Community		0.0819*** (0.0250)		0.0728*** (0.0224)				0.0369* (0.0214)
Community Donation Types		0.0372 (0.0230)		0.0147 (0.0207)				0.0175 (0.0161)
Community Activities		0.0196 (0.0160)		0.0196 (0.0147)				0.0500*** (0.0119)
Employee Benefits		-0.00439 (0.0206)		0.0147 (0.0192)		-0.00323 (0.0188)		
Investment in Employees		0.0291 (0.0229)		0.00932 (0.0209)		0.0382* (0.0207)		
Predicted Mean	0.410	0.410	0.286	0.285	0.187	0.188	0.146	0.146
Sample Mean	0.434	0.434	0.292	0.292	0.198	0.198	0.148	0.148
Significant Demographics	No	No	Age (-)	Age (-)	No	No	Size (+)	Size (+)

Marginal Effects of logistic regressions reported; N = 378; Standard errors in parentheses; Referent group in brackets

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1; Each regression includes controls for age (start year) and size (employee count)

Table A1: List of Practices in Use by Legal Structure and Hybrid Terminology Sub-Samples

VARIABLES	Total N = 556	Nonprofit or Hybrid N = 124	For-Profit N = 432		Hybrid ID Term N = 246	Term Not Used N = 287	
<b>Environmental Practices</b>							
Recycle	0.94	0.96	0.93		0.96	0.91	
Conserve water	0.57	0.63	0.55		0.66	0.48	***
Save energy	0.76	0.77	0.76		0.80	0.73	
Provide a product or service that benefits the environment	0.45	0.40	0.47		0.55	0.35	***
Track emissions	0.22	0.09	0.27	***	0.23	0.22	
Actively engage in toxic substance reduction, pollution prevention and/or remediation	0.46	0.32	0.50	***	0.49	0.43	
Use clean and/or low emission transportation	0.30	0.32	0.29		0.40	0.20	***
Purchase renewable energy and/or clean fuels	0.16	0.12	0.17		0.19	0.12	**
Produce renewable energy on-site	0.13	0.09	0.14		0.18	0.08	**
Purchase carbon offsets	0.05	0.05	0.05		0.08	0.02	**
Other practices in place	0.03	0.06	0.02		0.05	0.01	*
<b>Community Practices</b>							
Favor local suppliers	0.85	0.88	0.84		0.89	0.81	*
Favor suppliers with good social/environmental practices	0.63	0.71	0.60		0.74	0.51	***
Change suppliers for ones with better social/environmental practices	0.36	0.49	0.32	**	0.48	0.22	***
Provide services for special populations	0.31	0.64	0.21	***	0.40	0.21	***
Have a company service day	0.27	0.37	0.24	*	0.35	0.20	*
Donate use of your facilities	0.58	0.81	0.50	***	0.65	0.50	*
Donate a share of profits/revenue to local charities	0.44	0.28	0.50	***	0.48	0.41	
Sponsor programs to promote health	0.56	0.59	0.55		0.60	0.53	
Support K-12 education	0.52	0.49	0.53		0.50	0.56	
Support higher education	0.49	0.38	0.52	*	0.52	0.47	
Promote economic equality	0.48	0.67	0.42	***	0.57	0.39	***
Provide financing for community enterprises	0.25	0.22	0.26		0.30	0.22	
Other practices in place	0.03	0.07	0.02		0.05	0.02	*
<b>Employee Practices</b>							
Provide vacation and/or sick leave	0.91	0.91	0.91		0.89	0.93	
Contribute to employee retirement plan	0.61	0.68	0.58		0.56	0.65	*
Pay a portion of health insurance costs for all full-time employees	0.82	0.88	0.80		0.80	0.84	
Pay a portion of disability insurance costs for all full-time employees	0.57	0.66	0.55		0.59	0.55	
Offer to pay for employee education	0.51	0.50	0.52		0.55	0.48	
Offer to pay for employee development/training	0.81	0.86	0.80		0.83	0.79	
Provide on-site job training	0.87	0.82	0.89		0.87	0.89	
Offer paid maternity leave	0.49	0.59	0.46	**	0.50	0.48	
Offer paid time off for employees to volunteer	0.33	0.43	0.29	*	0.40	0.26	**
Offer profit-sharing	0.36	0.09	0.45	***	0.36	0.38	
Employ special populations	0.25	0.35	0.21	**	0.34	0.15	***
Include employees in decision-making	0.89	0.93	0.88		0.91	0.88	
Other practices in place	0.02	0.01	0.02		0.01	0.02	

Proportions reported; PR-test results significance levels: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001