

After the ground stopped shaking: Socioemotional wealth and social capital in post-disaster recovery of small family firms¹

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ABSTRACT

This study is the first to measure the interaction between socioemotional wealth (SEW) and social capital—in the forms of community support and institution support—to their impact on the post-disaster recovery of small family businesses. Hierarchical multiple regression is used based on a sample of 79 small family businesses in Indonesia. Our findings suggest that family firms in post-disaster situation are able to pursue both SEW goals and economic gains, thus breaking off the trade-off between SEW vs. economic benefits. More specifically, we found that SEW shows its prominence on the interaction between SEW-community and SEW-institution. This implies that small family businesses in post-disaster context need to find synergy between socioemotional endowments and social capital to help them bounce back and recover.

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INTRODUCTION

Examinations on the behavior of family firms under extreme events are insightful in shedding light on the critical aspects that account for family firms' resilience and sustainability. For example, family firms are reported to perform consistently better than non-family firms in weathering an economic downturn in the Japanese context (the Asian crisis of 1997) (Amann & Jaussaud, 2012) and in the Italian context (between 2002-2012) (Minichilli, Brogi, & Calabrò, 2015). Similarly, family firms in the US context were able to maintain employment stability with higher-than-average revenue growth during the US recession of 2001 (Lee, 2006). The resilience or 'sustainability' of family firms during hard times is argued due to the flexibility of family business to make do with limited resources such as reallocating time from personal sleep to business and the ability to acquire additional labor from friends and relatives (Olson et al., 2003).

While extreme events such as financial crises have been attended for investigation, the extant literature on family business have been scarce in examining family firms in natural disasters as another form of extreme events. Danes et al. (2009a) and Stafford, Danes & Haynes (2013) are among the very few that study small family firms in the natural disaster context. In these studies, they highlight the importance of federal disaster assistance for the recovery of family firms and found that federal disaster assistance increases the likelihood of family firms survival (Stafford et al., 2013). Moreover, higher levels of federal disaster assistance were associated with lower family firm resilience for male-owned businesses and higher family firm resilience for female-owned businesses (Danes et al., 2009a). Not much else is known about family business in a disaster setting and, to dig deeper, we have to draw from the literature on post-disaster recovery.

In their review on disasters and entrepreneurship, Galbraith & Stiles (2006) reveal that research on disaster recovery has been equally scarce on small business and is dominated instead by research on relief aid management, short- and long-term economic development, hazard and natural disaster risk management, and socioeconomic conditions after a disaster. Our literature review seconds their view. But more importantly, we found that the literature are unanimous that social capital plays an important role for disaster recovery and that disasters even strengthens the social capital (Aldrich, 2012; Cox & Perry, 2011; Johannisson & Olaison, 2007; Nak-

agawa & Shaw, 2004). The foregrounding of the social capital in disaster recovery gives us a starting point to draw a connection with the field of family business.

From the resource-based view perspective, the social capital represented by the family members is also suggested to create unique and valuable firm capabilities (Carr, Cole, Ring, & Blettner, 2011; Sorenson, Goodpaster, Hedberg, & Yu, 2009) and that the development and maintenance of the family social capital across generations contribute to generating family firms' financial value (Salvato & Melin, 2008). The centrality of social capital in family firms is echoed in Arregle, Hitt, Sirmon & Very (2007) where they argue that the cultivation of family's social capital is a defining feature of family firms. On the other hand, de Massis, Kotlar & Fratini (2013) acknowledge that social capital may be a source of competitive advantage as well as disadvantage for family firms. Specifically, they found that the internal social capital may pose (1) family conflicts that hamper the business, (2) disputes between family and non-family members, and (3) lack of alternative views generation; and that the external social capital may mean (1) limited access to new external networks and (2) higher risk of misbehavior by the partners.

Other scholars argue that it is not only the resource that contribute to the resilience and sustainability of family firms, but also family firms' characteristics and behavior such as long-term orientation and multitemporal perspectives (Chrisman, Chua, & Steier, 2011). This long-term outlook has been found to be of a concern that is particular for family firms in conjunction with other non-economic goals such as family reputation, wealth preservation, legacy perpetuation, as well as community involvement (Chrisman, Chua, & Litz, 2004; Chua, Chrisman, & Sharma, 1999; Miller, Steier, & Le Breton-Miller, 2003; Sharma & Manikutty, 2005). These concerns are understood as a set of family centered non-economic goals that are pooled together under the popular term of 'socioemotional wealth' (SEW) (Berrone, Cruz, & Gómez-Mejía, 2012; Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007). Under the framework of SEW, it is argued that family firms will place a higher priority on the non-economic goals (such as retaining ownership and control of the firm) over the economic ones (Gómez-Mejía, Cruz, Berrone, & Castro, 2011).

Both fields of family business and disaster recovery have pointed to a similar direction: the utilization of social capital is key. Yet, we do

not know whether the SEW preservation that are specific for family firms positively or negatively influence the utilization of social capital in the face of extreme events such as disasters. This is the gap that we endeavor to address. In this light, the reasons for understanding small family firms in the disaster context is twofold. First, a natural disaster is an extreme event that exert real damage and it is often associated with psychological and physical loss that are (1) multi-level (regional, national, and local) and (2) affect massive amount of people and firms. Hence, affected family firms are faced not only with the question of family recovery but also business recovery (Nigg, 1995). Second, given the relatively inherent conditions of small family firms such as the concern for non-economic goals, the context of natural disasters may illuminate important elements that contribute to their sustainability despite the absence or loss of particular resources.

By understanding SEW as a set of family centered non-economic goals, this paper asks the question: Does SEW enhance or diminish the role of social capital in post-disaster recovery of small family firms? To answer this, we draw from five major literature: post-disaster recovery, family firm, small firm, social capital, and SEW. Hierarchical multiple regression analysis is used to empirically test the hypotheses based on 79 small family firms in the earthquake-struck Bantul region, Indonesia. This paper contributes firstly to the SEW literature by concluding that small family firms after a disaster are able to achieve synergic relationship between SEW and economic goals, and secondly to the post-disaster recovery literature by arguing that the affective values held by small family firms' significantly affect the utilization of social capital in their recovery efforts.

This paper is structured in the following manner. The second section presents a review of literature that underlie the hypotheses. Then a short case vignette is provided in the third section to illustrate the context where the sample is derived. The fourth section elaborates on the research methodology and data, followed by the presentation of the results in the fifth section. The sixth section discusses the important limitations that are pertinent to this paper. Finally, the last section provides concluding remarks.

THEORETICAL FRAMEWORK AND HYPOTHESES

As presented earlier, this paper bridges five concepts that include post-disaster recovery, small business, family firms, social capital, and SEW. Due to the space constraint that does not permit elaboration on each concept independently, in this section we structure the presentation of each concept in conjunction with another.

Post-disaster recovery and social capital

Quarantelli (1999) distinguishes the notion of post-disaster recovery into four different types: (1) reconstruction, (2) restoration, (3) rehabilitation, and (4) recovery. He argues that, while all these types have a general meaning of recovery, there are important definitional differences. For example, the term 'reconstruction' puts more emphasis on the physical structures damaged in a disaster, 'rehabilitation' emphasizes more of people than things, and 'recovery' simply refers to bringing the post disaster situation to some level of acceptability. Other scholars define recovery based on the time frame from the disaster. Berke, Kartez & Wenger (1993), for example, define recovery as 'short-term relief' and 'long-term development'. Similarly, Nakagawa & Shaw (2004) define the recovery phase into (1) rescue, (2) relief, and (3) rehabilitation of which its temporal perspectives range from immediate to long-term. In drawing lessons learned from post-disaster response in Indonesia, Leitmann (2007) understands 'recovery' hand in hand with 'relief'. In particular, 'relief' is defined as the short-term period right after the disaster struck, and 'recovery' is comprised of 'rehabilitation' and 'reconstruction' with a longer time perspective.

Another term that is commonly used to allude to recovery after disasters is 'resilience'. Paton (2006, p. 8) defines 'resilience' as "a measure of how well people and societies can adapt to a changed reality and capitalize on the new possibilities offered." In addition, McCreight (2010, pp. 4-5) specifies five dimensions to resilience that include: "(1) personal and familial socio-psychological well being, (2) organizational and institutional restoration, (3) economic and commercial resumption of services and productivity, (4) restoring infrastructural systems integrity, and (5) operational regularity of public safety and government." Aldrich (2012) views resilience from the communal level and understands resilience as "a neighborhood's capacity to weather crises such as disasters and engage in effective and efficient recovery through coordinated efforts and cooperative activi-

ties.” Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum (2008, p. 131) further define ‘community resilience’ as “a process linking a set of networked adaptive capacities to a positive trajectory of functioning and adaptation in constituent populations after a disturbance” and that community resilience is produced through four primary sets of adaptive capacities that include: (1) economic development, (2) social capital, (3) information and communication, and (4) community competence.

The literature on post-disaster recovery converge to the point that recovery is more effective through community-driven approach that builds on the social capital (Aldrich, 2012; Berke et al., 1993; Cox & Perry, 2011; Leitmann, 2007). Social capital can be generally described as the ability of actors to extract benefits from their social structures by being members of a network (Davidsson & Honig, 2003; Lin, Ensel, & Vaughn, 1981). While other types of capital (such as human capital or economic capital) are focused on the quality of individuals, social capital put emphasis on the network *between* individuals (Lin, 1999). Coleman (1988) further specifies that social capital lies in the structure of relations between actors and among actors, and is manifested in the forms of (1) obligations and expectations, (2) information channel, and (3) social norms.

Aldrich (2012) provides an exhaustive, book-length discussion on the centrality of social capital in post-disaster recovery. There he draws from cases of the Tokyo Earthquake in 1923, the Kobe Earthquake in 1995, the Indian Ocean Tsunami in 2004, the Hurricane Katrina in 2005, and the Haiti Earthquake in 2010. By understanding social capital as “the networks and resources available to people through their connections to other,” he argues that higher levels of social capital—more than factors such as greater economic resources, assistance from the government, and low levels of damage—“promote recovery and help survivors coordinate for more effective reconstruction” (Aldrich, 2012, p. 2).

A study by Kaniasty and Norris (1995) in the context of the Hurricane Hugo found that the victims were united into ‘altruistic’ or ‘therapeutic’ communities characterized by solidarity, togetherness, and mutual helping. Other findings from earthquakes in Kobe and Gujarat have shown that the level of trust, norms, and participation for collective actions in the communities played important roles for disaster recovery (Nakagawa & Shaw, 2004). Scholars also understand the notion of community resilience as a “configuration of net-

worked adaptive capacities where social support and community bonds, roots, and commitments are the factors affecting the resilience” (Norris et al., 2008). Mayunga (2007) proposes that it is equally important to address community disaster resilience not only through social capital (in forms of trust, norms, networks) but also by utilizing the remaining four major forms of capital which include economic capital, human capital, physical capital, and natural capital. However, Keck & Sakdapolrak (2013) maintain that social capital remains central in building and maintaining resilience given the background that any other capital or assets are acknowledged to be products of social relations.

Alternatively, Nigg (1995) views disaster recovery as a social process. She proposes that community recovery should not be conceptualized as an outcome, but rather as a social process that begins even before the disaster occurs. In explaining the difficulties confronted by families during recovery, Trainer & Bolin (1976) argue that the material/physical constraint (i.e. loss) and the temporal constraint (i.e. routine tasks take more time) experienced by families impose a subjective constraint where the daily routines are dramatically disrupted and their sense of safety from integration to the social life vanishes. Hence, to advance our understanding on disaster recovery, there are values of attending ‘family recovery’ as well as ‘business recovery’ given the fundamental similarities that these two aspects have in the social and economic recovery processes (Nigg, 1995).

Small family firms, social capital, and disasters

Small family firms

There has been a long debate in defining ‘small business’ given the inherent assumptions that stem from the concept and the arbitrariness of the criteria to categorize whether a business is ‘small’, ‘medium’, or ‘large’. As Curran & Blackburn (2001, p. 5) put it:

Small does not mean simple. Neither is a small business merely a scaled-down version of a large business. A small number of human beings engaged in a common endeavor can create very complex, subtle interactions. Unravelling the underlying meanings and patterns of these interactions can be far from straightforward.

Consequently, a plethora of definitions on small business can be devised. For example, Carland, Hoy, Boulton, & Carland (1984, p. 358) define a small business as “any business that is independently

owned and operated, not dominant in its field, and does not engage in any new marketing or innovative practices.” Their claim that a small business does not engage in innovation practices, however, has received many counter-arguments. Small firms are found to have the innovative advantage in industries consisting of predominantly large firms (Acs & Audretsch, 1990) and act as innovation generators in the local regions (Almeida & Kogut, 1997) as well as within the industries (Baldwin & Johnson, 1999). From another point of view, Wynarczyk et al. (1993) delineate three ways of differentiating between small and large firms from the perspectives of uncertainty (small firms as being price-takers), innovation (small firms engage in constant process of innovation), and evolution (small firms have a greater likelihood to experience a greater range of changes than occurs in larger firms when they grow).

Storey (1994, p. 16) maintains that “there is no uniformly satisfactory definition of a small firm” and that “the debates about definition turn out to be sterile unless ‘size’ is shown to be a factor which influences the performance of firms.” In other words, imposing a threshold may be problematic if a clear performance difference between firms that are slightly below or above that band cannot be shown. Nevertheless, for researchers and policy-makers alike, measurability is important and the notion of small firm is generally operationalized by applying certain threshold of revenue, amount of assets, and number of employees (Curran & Blackburn, 2001). Furthermore, these thresholds vary between industries and countries. For example, the European Commission defines small business when the business has less than 50 employees and up to 10 million EUR annual turnover (European Commission, 2013). In Indonesia, as applied in this study, a business is a small business if it owns assets with an approximate value of up to 39,000 EUR and annual turnover of up to 238,500 EUR (Ministry of Cooperative and Small and Medium-Sized Enterprises of the Republic of Indonesia, 2013).

A large proportion of small firms are found to be family business. Donckles & Fröhlich’s (1991) examination on independent manufacturing firms with less than 500 employees in eight European countries indicated that the highest proportions of family firms were found in the smallest employment size bands. Similarly in Britain, Matlay (2002) reveal that between 70–80% of the small businesses are family-owned firms. While in the Chinese context, family firms represent almost all the businesses (Weidenbaum, 1996).

Family firms are not only high in numbers but also complex in nature given the conjoint existence and reciprocal relationship of the family and business systems in the day-to-day activities (Stafford, Duncan, Dane, & Winter, 1999). Similar to the issue on defining small business, scholars have been struggling to define family business and this is shown through the substantial amount of studies to address definitional problems (Astrachan, Klein, & Smyrnios, 2002; Chua et al., 1999; Sharma, 2004). Litz (1995, p. 75), for example, defines family business as a business that “its ownership and management are concentrated within a family unit.” As a comparison, Chua, Chrisman & Sharma (1999, p. 25) argue that a family business is:

A business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families.

Chrisman, Chua, and Sharma (2005) also conclude that definitions of family business can be distilled into its essence that include: (1) a family’s influence on a firm’s strategic direction; (2) a family’s intention to keep control; (3) family firm behavior; and (4) unique, inseparable, synergistic resources and capabilities arising from family involvement and interactions.

Family firms and social capital

Arregle, Hitt, Sirmon & Very (2007) step further to argue that a family firm is primarily defined through its cultivation of the family’s social capital. To this line, a growing number of studies support the notion that social capital plays a crucial part in family firms (Danes, Stafford, Haynes, & Amarapurkar, 2009b; Sorenson et al., 2009). For example, it is argued that internal social capital represented by the family members can create unique and valuable firm capabilities (Carr et al., 2011), that the simultaneous interaction between of the family and the business creates ‘familiness’ (Pearson, Carr, & Shaw, 2008), and that transgenerational value creation is produced through the maintenance and development of social capital in family firms (Salvato & Melin, 2008). Additionally, the notion of ‘family capital’ is introduced as a “special kind of social capital, one that is limited to family relationships” (Hoffman, Hoelscher, & Sorenson, 2006, p. 136) as well as “the total bundle of owning-family member resources

composed of human, social, and financial capital” (Danes et al., 2009b, p. 201).

It must also be acknowledged that social capital has its downsides. Granovetter (1973) noted the paradox of social capital that it may lead to integration and fragmentation at the same time. Portes (2014, p. 18407) elaborates on the negative effects of social capital that include (1) the particularistic benefits accrued by virtue of membership in ethnic or religious communities is experienced by others as exclusion from the same social and economic benefits, and (2) the excessive claims made on successful members of a particular community by others (excessive in-group trust). In family firms, de Massis, Kotlar & Fratini (2013) acknowledge that social capital may be a source of competitive disadvantage for family firms. By distinguishing between the internal and external dimensions of social capital, they found that the internal social capital may result in (1) family conflicts that hamper the business, (2) disputes between family and non-family members, and (3) lack of alternative views generation, whereas the external social capital may be perceived as (1) limited access to new external networks and (2) higher risk of misbehavior by the partners.

Family firms in disasters

Studies that investigate family firms under natural disaster context remain scarce and dominated by specific authors such as Brewton, Danes, Stafford & Haynes (2010), Stafford, Bhargava, Danes, Haynes & Brewton (2010), Danes et al. (2009a), Stafford, Danes & Haynes (2013).

Research on this area have found that factors such as community characteristics, family achievements, family processes during change, business and owner characteristics, and business processes during stability affected long-term survival of family firms (Stafford et al., 2010). Furthermore, federal disaster assistance is found to increase the likelihood of family firm survival (Stafford et al., 2013) and that higher levels of federal disaster assistance were associated with lower family firm resilience for male-owned businesses and higher family firm resilience for female-owned businesses (Danes et al., 2009a). On the other hand, Brewton et al. (2010) provides insight that, while social capital plays an important role for the community resilience, it has a significantly negative relationship on rural family firms’ resilience. They suggest that this is due to the divide experi-

enced by rural business owners between the needs of the family or firm and those of the community.

Socioemotional wealth in family firms

The term SEW is coined to refer to “non-financial aspects of the firm that meet the family’s affective needs” (Gómez-Mejía et al., 2007, p. 106; see also Berrone et al., 2012; Gómez-Mejía et al., 2011). As such, SEW may refer to—and is occasionally equated with—a wide range of value-related aspects held by the family such as family reputation, wealth preservation, transgenerational sustainability, as well as community involvement (Chrisman et al., 2004; Chua et al., 1999; Miller et al., 2003; Sharma & Manikutty, 2005; Zellweger, Nason, Nordqvist, & Brush, 2013). Despite their similarities, the position between SEW and non-economic goals need to be distinguished that SEW is not merely the non-economic goals of the family only, but SEW also encompasses the *motivation* to strive for, preserve, or enhance such non-economic aspects (Jennings, Eddleston, Jennings, & Sarathy, 2015b). Berrone et al. (2010, p. 87) argue that “the value of SEW to the family is more intrinsic, its preservation becomes an end in itself, and it is anchored at a deep psychological level among family owners whose identity is inextricably tied to the organization.” Hence, SEW is more appropriate to be seen as a framework that underlies family firms’ behavior in decision making (Berrone et al., 2010; Gómez-Mejía, Makri, & Larraza-Kintana, 2010).

To develop the notion of SEW further, Berrone et al. (2012) put forward the SEW dimensions that include (1) family control and influence, (2) identification of family members with the firm, (3) binding social ties, (4) emotional attachment of family members, and (5) renewal of family bonds to the firm through dynastic succession (abbreviated as FIBER). It is also claimed that SEW is “the single most important feature of a family firm’s essence that separates it from other organizational forms” (Berrone et al., 2012, p. 260). With the concept and construct being developed, SEW became highly adopted by researchers to check and extend if and when SEW preservation is the defining feature of family firms’ behavior. Several studies have been conducted to examine SEW in different managerial aspects such as social corporate responsibility (Berrone et al., 2010), family employment in micro and small enterprises (Cruz, Justo, & De Castro, 2012), proactive stakeholder engagement (Cennamo, Berrone, Cruz, & Gómez-Mejía, 2012; Kellermans, Eddleston, & Zellweger,

2012), corporate reputation (Deephouse & Jaskiewicz, 2013), and a multi-country investigation of SEW on family and non-family firms in developed and emerging countries (Jennings, Eddleston, Jennings, & Sarathy, 2015a).

The recent developments of SEW have been destabilizing in several aspects. For example, while the SEW dimensions have been generally portrayed as ‘prosocial’ and provide ‘positive stimulus’, Kellermans et al. (2012) pointed out that SEW may as well be a disutility or burden for family firms. This is argued to be the ‘dark side’ where the high levels of SEW may be destructive to the stakeholders. On the other hand, Jennings, Sarathy, Eddleston, & Jennings (2015) found little support for the discourse that SEW is unique for family firms—they reveal only slight difference of the SEW levels between family and non-family firms. It is further postulated that SEW is “a broad concept that captures something akin to organizational culture” (Jennings et al., 2015, p. 119). Nonetheless, these studies are insightful in illuminating the various avenues for further exploration.

It is necessary to make it explicit that the way SEW is conceptualized in Berrone et al. (2012) encapsulates two tenets: (1) when faced with a trade-off between fulfilling non-economic goals or economic gains, family firms will favor non-economic goals to fulfill their affective needs rather than uncertain economic benefits; and (2) extreme events may force family firms to forgo non-economic goals to achieve business survival. To discuss this further, we found it important to highlight the counter-example cases where (1) there is no trade-off between non-economic and economic goals—in other words, family firms are able to preserve SEW *and* gaining economic benefits—and (2) extreme events may allow family firms to accept economic benefits *without* undermining—instead of forgoing—their non-economic goals.

In the context of R&D investments, Chrisman & Patel (2012) and Patel & Chrisman (2014) found that family firms are able to reconcile their non-economic and economic goals by making investments in exploitative R&D projects. Chrisman, Fang, Kotlar & de Massis (2014) acknowledge this notion in the context of discontinuous technologies adoption and emphasize that family firms are inevitably heterogeneous given the various governance, goals, and resources available in both family and business systems (Kotlar & de Massis, 2013) and, thus, their behavior cannot be assumed to be linear and unidirectional. Minichilli et al.’s (2015) study on the entire population of

Italian family firms confirm the assumed trade-off between families' economic and non-economic utilities but specifies that the preference for the SEW tends to manifest in 'steady-state situations only'. In other words, under survival-threatening situation, a family firm may as well embrace economic goals *to preserve* the family's SEW.

While it can be surmised that the synergic relationship between SEW and economic goals may manifest in any context, cases that show this notion remain very limited. Hence, through this paper, we aim to approach this issue from the context of post-disaster recovery as one form of extreme events.

Summary and hypotheses

Insofar, we have presented and made the case that social capital is equally indispensable for both post-disaster recovery as well as family firms. Based on our review on the disaster recovery literature, we distinguish that the impacts of social capital for disaster recovery are manifested mainly in two forms: (1) community support (such as friends and neighbors) and (2) institution support (such as the government, NGOs, and disaster reliefs). The vast body of literature have shown that community support has a positive relationship with disaster recovery (Cox & Perry, 2011; Kaniasty & Norris, 1995; Mayunga, 2007; Shepherd & Williams, 2014). These lead us to the following hypothesis in the context of small family firms:

Hypothesis 1a: *Community support, as a manifestation of social capital, is positively related to small family firm recovery.*

Disaster is not only a concern for the surrounding communities, but it also receives magnitude of exposures that pull national and international institutions to participate in the relief process. At a glance, it comes naturally that the aid from these institutions will always positively influence recovery. But the evidence have shown mixed results. Becker (2005), for example, argues that while aid can obviously help in the immediate response to disaster, the large inflow of aid from rich nations will only assist in the very near term. The vast amount of aid given after the 1972 Managua earthquake in Nicaragua triggered massive corruption and engendered a revolution and counter-revolution, not rapid recovery (Garvin, 2010). On the other hand, household recovery is reported to be dependent on both private funds and federal and state public assistance programs (Dash, Peacock, & Morrow, 2000) and, specifically, federal disaster assistance is found to increase the likelihood of family firm survival

(Stafford et al., 2013). As suggested by these arguments, the relationship between institution support and recovery can be both negative and positive. We attempted to reconcile these difference by posing that these arguements differ in the level—the negative impact is more apparent in the macro level while in the positive impact is seen at the household/organizational level. However, to add to the confusion, Brewton et al. (2010) found that federal assistance has a significantly negative relationship on rural family firms’ resilience. In this regard, we chose to be conservative by submitting to the view that small family firms’ recovery will also dependent on institution support. Hence: **Hypothesis 1b:** *Institution support, as a manifestation of social capital, is positively related to small family firm recovery.*

Before moving to the next hypotheses, we deem it necessary to put forward that hypotheses 1a and 1b are not necessarily exclusive for small family firms. Arguably, these may also be true for any firms. However, the above hypotheses are necessary to be laid since they are the foundations for the next hypotheses that are based on SEW, which is family firm-specific.

In linking together SEW and social capital, we argue that SEW is a modifier that may enhance or restrict the creation and usage of social capital. Recalling that we distinguish social capital as proxied through community support and institution support, we propose that SEW may positively enhance the relationship of the community towards recovery because of the common principles held by both the SEW and community, which are based on reciprocity and trust (Coleman, 1988). Deephouse & Jaskiewicz (2013) found that the families’ strong identification with the firm is positively related to the family members’ motivation to pursue favorable reputation. Their findings confirm Cennamo et al.’s (2012) propositions that the normative motives that underlie the SEW dimensions will drive family firms to engage more proactively with the stakeholders. This is manifested through ‘investments’ in key stakeholders such as employees, customers, and communities, which in turn, “over-pay the family firm with supportive behaviours, enabling the family firm to remain prosperous over the long term” (Deephouse & Jaskiewicz, 2013, p. 353). Moreover, in the context of disaster, the catastrophe triggers the creation and reconstruction of social capital (Johannisson & Olaison, 2007). Therefore:

Hypothesis 2a: *SEW moderates the relationship between community involvement and small family firm recovery. SEW enhances the relationship that community support has with small family firm recovery.*

In post-disaster condition, institutions such as the governments and/or NGOs often provide support to the affected businesses through financial aids such as low-cost loans, giving out production tools, income tax deductions and business development programs (Burby, 2006). With regard to SEW, we acknowledge the common findings in Berrone et al. (2010), Gómez-Mejía et al. (2007), Gómez-Mejía et al. (2010), and Gómez-Mejía et al. (2011) that family firms will opt to accept certain levels of performance risk to preserve their non-economic goals. On the other hand, as also presented earlier, the trade-off assumption is argued to be true only in non-emergency situation (Minichilli et al., 2015) and that there are cases where both the economic and non-economic goals can be attained simultaneously (Chrisman & Patel, 2012; Patel & Chrisman, 2014). Given that this paper is a study of family firms under an emergency situation, we accept that both the economic benefits and the non-economic goals may be achieved. Our angle, however, is that the concern for control that prevails in the family firm may restrict the willingness to reach out and/or let in external institution support for the family firm recovery process. Hence, we suggest the following hypothesis:

Hypothesis 2b: *SEW moderates the relationship between institution support and small family firm recovery. SEW diminishes the relationship that institution support has with small family firm recovery.*

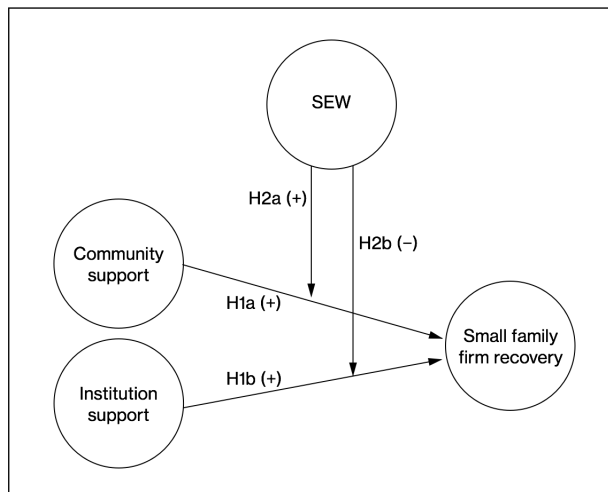


Figure 2. Hypotheses 1a, 1b as main effects and Hypotheses 2a, 2b as interaction effects.

CASE VIGNETTE

One morning has turned into a thrill. At 05:54 local time, a 6.3-magnitude earthquake struck the city of Yogyakarta, Indonesia in May 27, 2006 with the epicenter 20 km to the south-southeast of the city (USGS, 2006). What was supposed to be a rush morning for the people to go to their workplaces and schools unexpectedly became a calamity that was filled with terror and panic. The city was continuously shaken in one minute by the tectonic subduction that lies beneath. To make it even worse, rumors were spread that a tsunami will come after the earthquake just like the Indian Ocean tsunami that hit Aceh in 2004. People were chaotically fleeing to the north in the midst of a deadlock traffic. There was no tsunami occurred, fortunately. But the numbers of casualties reached more than 5,700 people with more than 38,000 people injured, and as many as 600,000 inhabitants were displaced in Bantul, Yogyakarta area (USGS, 2006). Plenty amount of houses and buildings were collapsed and rendered unusable. The victims were terribly shocked that they lost not only their houses but also their beloved relatives. The local economy was in a quagmire.

METHODOLOGY

Research design and sample

This study aims to examine the relationship between SEW and social capital—that are manifested through community support and institution support—towards the recovery of small family firms. To fulfill this aim, we set out a quantitative cross-sectional study and purposively chose small family firms in the Bantul region of Yogyakarta, Indonesia. This specific area is selected as our sample due to their proximity to the disaster when the earthquake struck the region in May 27, 2006. In defining ‘small family firms’, we follow Litz’s (1995) definition of family firms and incorporate the Indonesian financial threshold of ‘small’ business. Hence, we define ‘small family firm’ as “a business that is owned and operated by family with annual turnover of approximately up to 238,500 EUR.”

A preliminary data inquiry was carried out by contacting the Institute for Research and Community Service Universitas Gadjah Mada (LPPM UGM) to obtain local contacts for the small firms in Bantul that were affected by the disasters. We received a list of con-

tacts of handcraft producers in Bantul. However, further follow-ups to these contacts revealed that the list was no longer valid since the specified firms were not found through our field visit. Given the difficulty in gathering a comprehensive data, we decided to overcome this by deploying a convenient sampling in the designated place. As compared to other areas in Yogyakarta, Bantul has more density of small businesses per village and each village is most likely to have a specialization in handcraft. Hence, we combed the respective area to distribute the questionnaire.

Due to the distance constraint of the authors, we employed five bachelor graduates from Universitas Gadjah Mada, Indonesia as our enumerators in Yogyakarta to execute the data collection. The selection of the enumerators was purposive given that one of the authors knows the enumerators personally. The enumerators were briefed on the research design and purpose, and instructed to distribute the questionnaire in the targeted area. The survey was conducted between the second half of March until the first week of May 2013, with regular weekly (online) meetings to keep track on the progress in the fieldwork. This resulted in 87 responses and 4 no-returns. 5 responses were obtained directly on the spot whereas the remaining 82 were taken few days after the questionnaires were distributed. The final sample with full information comprised of 79 respondents (91% of the original sample) These sample, then, were used to test Hypothesis 1a, 1b, 2a, and 2b.

Variables and measures

Acknowledging the various definition that refer to 'recovery' (Quarantelli, 1999; Leitmann, 2007; Nakagawa & Shaw, 2004), we conclude that post-disaster recovery can be generally divided into two parts: immediate response and long-term recovery. However, it must be admitted that empirically measuring post-disaster recovery has been a challenge for researchers and it is highly dependent on issues such as timeframe (how long a recovery can be considered as successful or not), scale (whether it is individual, household, business, community, or neighborhood) and perception (whether they are independent, local, a funding provider or a recipient) (Brown et al., 2008). At the macro level, indicators such as levels of repopulation, reconstruction, and resettlement have been used (Chang, 2010) whereas at the individual level, measures such as housing stability, economic stability, physical health, mental health, and social role

adaptation were used (Abramson, Stehling-Ariza, Park, Walsh, & Culp, 2010).

For the purpose of this study, we select *small family firm recovery* as the dependent variable. Given that this study is conducted seven years after the Yogyakarta Earthquake in 2006, then to focus on the long-term recovery is warranted. To this end, we decided to adopt the definition of post-disaster recovery from Quarantelli (1999) and refer to 'recovery' as the regaining of the post disaster situation to an acceptable level. Hence, we operationalize family business recovery as "the financial regaining of the family firms after the disaster, measured by the discrepancy between the average monthly turnover in pre-disaster and the current time when the research was performed." Stafford et al. (2013) have used 'survival' and 'growth' as their dependent variables to measure family firm survival and growth after a disaster. We acknowledge this point, but we employ the term 'turnover discrepancy' to mean growth. We also assume that the discrepancies may have negative or positive values, and that the more positive the discrepancy is, the better they are recovering.

Three independent variables were used in this study comprised of community support, institution support, and SEW. We operationalize *community support* as "the support received from the surrounding friends and neighbors to the business owner's recovery in both terms financially and non-financially through moral, spiritual, and physical support." For *community support*, we adapted the items developed by Onyx & Bullen (2000) into two items: 'frequency of participation in the local community gathering and/or events' and 'level of helpfulness of friends and neighbors to the business after the disaster' ($\alpha = 0.84$). 5-point scales ranging from 'never' to 'always' were used for the former item and 'not helpful at all' to 'extremely helpful' were used for the latter. For *institution support*, we operationalize the term by following Aldrich (2012) as "the amount of aid, supplies, and experts provided to the area by the government and NGOs." Thus, we measured institution support by three items: 'receiving aid from the government, NGOs, or other institutions', 'participation in training held by the government, NGOs, or other institutions', and 'funding source of the business by the bank, government, other institution' ($\alpha = 0.72$). Dichotomous scale of 'yes' and 'no' were used on all of these items.

Finally for *SEW*, a SEW construct with five dimensions developed by Berrone et al. (2012) is used. For each dimension, we select-

ed three items that are most relevant for the context of small family firms in our study. There are two reasons. First is a practical one. Given that our sample are based on the rural areas of Yogyakarta, we attempted to develop the questionnaire as succinct as possible so it is relatively easy to understand. Second, there are several items in Berrone et al. (2012) that are not entirely applicable for micro and small scale enterprises. For example, in the 'family control and influence' dimension, we dropped the items of 'the board of directors is mainly composed of family members', 'nonfamily managers and directors are named by family members', and 'most executive positions are occupied by family members' since small firms do not yet have a well-established structure (Curran & Blackburn, 2001). As a result, we had 15 items with 5-point scales ranging from 'strongly disagree' to 'strongly agree' as our measure ($\alpha = 0.79$).

Control variables

We acknowledge that the damage from the disaster affects firms' level of recovery (Aldrich, 2012). Therefore, we control for 'level of damage caused by the disaster' by asking the business owners 4-point scales ranging from 'no damage' to 'severe damage' with the description of the damage on each point. In addition, 'gender' is found to affect family business resilience after a natural disaster (Danes et al., 2009a) and the fact whether the business is the main source of income of the owner may also influence the performance of micro and small businesses (Cruz et al., 2012; Lee & Rogoff, 1996). Thus, we control for 'gender' and 'business as main source of income' and dummy coded them. To take into account the impact of business owner's education on business outcomes (Fairlie & Robb, 2007), we also control for 'level of education' through 5-point scales measurement consisted of 'not attending school' to 'bachelor and beyond'. We did not control for other variables such as firm size or industry because the sample that we obtained are all small firms, and the industry is dominated by handicraft (64 in handicraft, 1 in furniture, and 14 in food industry). Once we obtained all the variables and achieve a robust value of reliability, we continued the analysis as we present in the following section.

RESULTS

The means, standard deviations, and correlations of all the continuous variables are shown in Table 1. The regression residuals distribution of the dependent variable fulfills the normality assumption (Jarque & Bera, 1987), thus permitting us to proceed for further analysis. We chose to use hierarchical multiple regression analysis to test the hypotheses because it enabled us to identify whether the interaction terms give significant contributions over and above the direct effects of the independent variables.

Table 1. Means, standard deviations and correlations for quantitative variables

Variables	Mean	S.D.	1	2	3	4	5
Turnover discrepancy	119,620	3,458,364	1				
SEW (standardized)	0	0.50	-0.17	1			
Community support (standardized)	0	0.93	-0.16	0.17	1		
Institution support (standardized)	0	0.80	-0.28*	0.10	0.54***	1	
Education	3.25	1.03	-0.12	-0.15	-0.09	-0.18	1
Damage level	2.67	1.08	-0.08	0.19	-0.38***	-0.20	-0.19

*p < 0.05; ** p < 0.01; *** p < 0.001 (n = 79)

Table 2. Independent and contingency models of community support, institution support, socioemotional wealth, and turnover discrepancy

	Base model		Independent model		Contingency model		Collinearity		
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	VIF		
Control variables									
Gender	-0.15	-1.11					1.35	1.41	1.42
Education	-0.13	-1.08					1.05	1.13	1.13
Business as the main source of income	0.06	0.52					1.06	1.11	1.13
Damage level	-0.16	-1.23					1.39	1.81	1.81
Main effect variables									
Community support			-0.08	-0.58				1.56	1.93
Institution support			-0.35**	-2.69				1.77	2.23
SEW			-0.14	-1.23				1.14	1.20
Interaction									
SEW × Community support					0.26*	2.20			1.63

SEW × Institution support			0.27*	2.43	1.40
Model					
R2	0.04	0.21	0.39		
Adj. R2	-0.01	0.13*	0.31***		
F-statistic		0.86	2.71	4.93	
Change in R2		0.17	0.18		
Change in F			4.99	10.23	

Standardized regression coefficients are displayed in the table.
*p < 0.05; **p < 0.01; ***p < 0.001 (n = 79)

Table 2 displays the results. The base model that contains only the control variables does not have any significant role to explain the variance in turnover discrepancy. It is on the main effects model where we have a statistically significant contribution over and above the base model ($R^2 = 0.17, p < 0.05$). The direct effect of community support shows no significance to accept Hypothesis 1a whereas the effect of institution support shows a significant contribution towards turnover discrepancy, but in the opposite direction from our Hypothesis 1b. Thus, for both of our first hypotheses, we did not find any supporting evidence. Moving to the interaction effects, both of the interaction terms display significant contributions over and above the main effects ($R^2 = 0.18, p < 0.001$). This result confirms Hypothesis 2a that SEW enhances the effect of community support on family business recovery. Hypothesis 2b is partly supported that SEW is statistically significant as a moderating variable, but, as it goes with the main effect, our hypothesis on the variable's direction is refuted. On the contrary, the interaction between SEW and institution support shows that it has a positive effect on family business recovery as measured by turnover discrepancy. The reported VIF of less than 10 indicate that there is an inconsequential sign of multi-collinearity within our measures (Hair, Anderson, Tatham, & Black, 1995).

To elaborate our results, we have produced interaction plots following the procedures by Dawson (2013) that visualize the impact for each moderating effect based on our full model (see Figure 3 and Figure 4). For the interaction between SEW and community support, we found that (1) a high level of SEW enhances the impact of community support towards small family firm recovery; and conversely, (2) a low level of SEW diminishes the impact of community support on recovery. On the other hand, for the interaction between SEW and institution support we found that (3) the low level of SEW worsen the impact of institution support on small family firm recovery; whereas (4) the presence of a high level of SEW weakens the negative impact

of institution support on recovery. We will discuss this further in the next section.

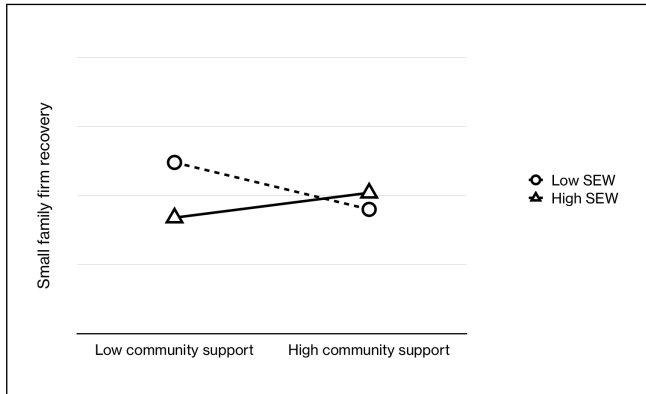


Figure 3. Interaction plot between community support and SEW

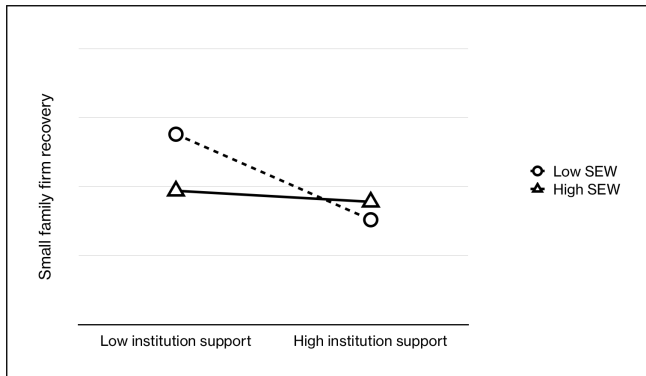


Figure 4. Interaction plot between institution support and SEW

DISCUSSION

Through the analysis of the main effect variables, our findings surprisingly did not support the notion that community support has a direct and positive relationship with small family firm recovery. In fact, community support is found to have a negative relationship (yet not significant) with recovery. Perhaps, this is because community support contributes more in the social aspect—rather than financial—of recovery. The interesting points, however, surface in the interactions between SEW-community support and SEW-institution support. The impact of community support on recovery is reversed from negative to positive by the presence of high SEW. In other words, the preservation of family non-economic goals are corroborated with the community support that may enhance its effect as an advantage that boosts

recovery. Brewton et al. (2010) argue that family firms may feel torn between fulfilling the needs of the family/firm and those of the community thus undermining the firms' recovery performance. In response to this, we argue that the role of SEW as a decision making framework in family firms may as well act as guiding principles in the involvement for seeking out or receiving support from the communities. To recall that one of the SEW dimensions is 'binding social ties', then when the families possess a high level of SEW, they are aware that building trust and creating reciprocal bonds with their surrounding neighbors and communities will provide a 'safety-net' for their survival. Through SEW, family firms may integrate their needs for affective endowments with the support provided by the communities that, in turn, benefited the business.

On the other hand, institution support is shown to have a direct, negative and significant impact on small family business recovery. This corresponds to the findings that external aid does not have any impact, and even negative for long-term recovery (Aldrich, 2012; Brewton et al., 2010; Burby, 2006). In addition, we found that the low level of SEW worsen the impact of institution support on small family firm recovery whereas the presence of a high level of SEW virtually cancels the negative impact of institution support on recovery. This suggests that SEW and institution support can cohabit and the combination between the two has a beneficial impact on small family firm recovery. Quite possibly, small family firms in the period of post-disaster may not have any reason to refuse the aid given by the institutions—for them to survive, they had to accept and utilize the support from the institutions. When survival is at stake, our findings indicate that family firms opted to let in external support to sustain the business; even more so when there is no apparent trade-off that letting in the support from external parties will undermine the pursuance of the families' non-economic goals. In such condition, family firms were able to achieve a synergic relationship between SEW preservation and economic benefits.

LIMITATIONS

We are aware that the design of our research has major shortcomings and therefore several important methodological and theoretical limitations need to be discussed. During the data collection process, we simplified the questionnaire. The small family firms surveyed in the

Bantul area, Yogyakarta are resided in the rural areas and they are less familiar with survey instruments such as questionnaire, let alone the one with a numerous amount of questions. In anticipation to this, we developed a much simpler questionnaire as compared to Onyx and Bullen's (2000) to measure social capital and selected only 15 out of 26 items developed by Berrone et al. (2012) to measure SEW (see APPENDIX). Next, there is an issue of recall decay of the respondents. As the earthquake was occurred in 2006, there is a risk of recall decay that might affect the responses given during the survey.

Analytically, we take a unidimensional approach of recovery through firm's turnover measure. Arguably, analytical distinctions could be made between 'survival', 'recovery', and 'growth'. If recovery is understood as a state of returning to normalcy, then any gain that occurred afterward can be seen as a form of growth. Our research blends together these notions under the term 'recovery' given the difficulty to measure recovery without including certain aspect of growth within it unless we have access to a detailed record on the firms' operation. The conflation between these three into one measure restrict our ability to draw further conclusion of the individual relationship between SEW and survival, recovery, and growth. Consequently, our unidimensional measure of recovery through turnover discrepancy can be argued as a generic measure of performance. While this might be acceptable in the businesses with accurate data, it only gives us a best approximate in the context of small family firms in Indonesia.

Lastly, and perhaps more importantly, is the number of sample that is obtained for this study. Given the limited time of only two months in data collection—and the lack of valid database from the governments or other institutions, we made trade-offs that resulted in low sample size with only 79 small family firms. Indeed, our relatively small number of sample restricts us to assert a bold generalization. At best, this study is indicative for further exploration in the context of family firms in post-disaster settings.

CONCLUDING REMARKS AND FUTURE RESEARCH

Our aim was to see if SEW is having an additive or restrictive impact on the recovery of small family firms. To this end, several (indicative) conclusions are drawn with regard to our contributions to the family business and disaster recovery literature.

For the family business literature, this paper extends our understanding of SEW by illuminating the dynamic nature of SEW as a moderating variable. Specifically, our study indicates the collaborative effect between SEW and social capital toward small family firm resilience. Adding to the argument that family firms are heterogeneous (Kotlar & de Massis, 2013), our findings also suggest that not all family firms can be expected to have high levels of SEW—the existence of the SEW dimensions alone does not imply that all family firms highly value such dimensions. If not all family firms have high levels of SEW, then not all family firms can be claimed to be unique in behavior based on the SEW framework. If SEW is not unique for family firms, then perhaps the contextual embeddedness is something that future research must take into account.

We also contribute to the disaster recovery literature by attending the largely overlooked aspect of business-level recovery. The literature have come to agree about the role of community for a more effective and efficient recovery (Cox & Perry, 2011; Mayunga, 2007; Nigg, 1995; Norris et al., 2008) but have just started to consider the role of organizations within the community that help the recovery process (Shepherd & Williams, 2014). In particular, we offer a glimpse on and raise the importance of the relationship between the family-level considerations—proxied through SEW—to the firm-level recovery performance after a natural disaster.

Practically, this study shows that a high level of family's aspirations for non-economic goals may act as a 'cushion' that absorbs the uncertainty of external disruptions. This implies that family values should be built and nurtured over time, which may help family firms to navigate the seeking and usage of supports from the community and other institutions.

Future research may learn from this study and investigate post-disaster family firm recovery with a more massive sample. By the least, this will enhance the ability of the study to say something more convincingly. Further exploration can also be made to figure out under which conditions SEW is beneficial or detrimental for family firm recovery, where 'recovery' is measured through various proxies not only in terms of financial growth.

If the contextuality is to play a central role, then it might be more insightful to understand SEW in conjunction with its relative importance to the family firms' embeddedness in their communities. Natural disaster as an extreme event is markedly different from financial

crises in the way that the rupture is not merely financial, but also deeply social and psychological that affect the discontinuation of the routine. In other words, in the case of society-wide emergency such as a disaster, family firms may place a higher emphasis on the recovery of their communities as a whole (not necessarily business-related) and therefore less concerning about their firms' financial performance. Consequently, SEW, which is more family-centric, may be of less importance than other community-laden non-financial goals. The study of micro family firms in Java by Bråten (2013) is insightful in taking into account that family firms are embedded in their surrounding neighborhood where social obligations (in cultural practices such as '*arisan*' or '*rewang*') represent a major part of the daily routine and are often more important than 'work' itself. These obligations are costly, in time and financial terms, and these may affect the financial conditions of the affected family firms in return for a social 'gain' that, someday, one may help each other in case of misfortune. If these socio-cultural practices are found to outweigh the family-centric considerations, then researchers are suggested to look at family firm recovery through a more multi-dimensional perspective that goes beyond economic measures.

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APPENDIX: ABBREVIATED QUESTIONNAIRE

General information

1. Name
2. Age
3. Marital status (y/n)
4. Latest education
 - Elementary
 - Junior high
 - Senior high
 - Bachelor and beyond
 - Not attending school
5. Name of the business
6. Starting year
7. Type of industry
8. Location
9. Business as the main source of income? (y/n)
10. Level of damage from disaster (1-Severe, 2-Medium, 3-Light, 4-No damage)

Pre- and post-disaster condition

11. Before the disaster, did you own the same business? (y/n)
12. [*If not*] what was your previous business?
13. How much employees did you have before the disaster?
14. How much employees do you have now?
15. How much was your monthly turnover before the disaster?
16. How much is your monthly turnover now?
17. After the disaster, how long (in month) did it take to re-operate the business?
18. Compared to before the disaster, how is the condition of your business now? (1-Much worse, 2-Slightly worse, 3-About the same, 4-Slightly better, 5-Much better)
19. Compared to before the disaster, how is the condition of your and your family's life now? (1-Much worse, 2-Slightly worse, 3-About the same, 4-Slightly better, 5-Much better)
20. In your business, is there any family member involved? *For example: being involved in the production, sales, book keeping, or capital ownership.* (y/n)
21. [*If yes*] how many are involved?

Socioemotional wealth

(5-point scale; 1-Strongly disagree and 5-Strongly agree)

22. The majority of the capital in my business is owned by family members.
23. In my family business, family members exert control over the company's strategic decisions.
24. Preservation of family control and independence are important goals for my family business.
25. Family members have a strong sense of belonging to my business.
26. My family business has a great deal of personal meaning for family members.
27. Family members are proud to tell others that we are part of the family business.
28. Building strong relationships with other institutions (i.e., other companies, professional association, government agents, etc.) is important for my family business.
29. My family business is very active in participating in social activities at the community level.
30. In my family business, contractual relationships are mainly based on trust and norms of reciprocity.
31. Protecting the welfare of family members is critical to us, apart from personal contributions to the business.
32. In my family business, the emotional bonds between family members are very strong.
33. In my family business, family members feel warmth for each other.
34. Successful business transfer to the next generation is an important goal for family members.
35. Family members would be unlikely to consider selling the family business.
36. Continuing the family legacy and tradition is an important goal for my family business.

Social capital

37. After the disaster, my family members and relatives give me financial support that helps my business recovery. (1-Strongly disagree and 5-Strongly agree)

38. After the disaster, my family members and relatives give me physical, moral, and spiritual supports that helps my business recovery (1-Strongly disagree and 5-Strongly agree)
39. After the disaster occurred until now, are you involved in any membership of business associations or community organizations? (y/n)
40. [If yes] how many associations or organizations are you involved in?
41. How often did you participate in the events or meetings held by your neighboring communities (such as religious events, community gathering, etc.)? (1-Never and 5-Always)
42. In general, to what extent was the contribution of your friends and surrounding neighbors to your business recovery? (1-Not helpful at all and 5-Extremely helpful)
43. Since the disaster occurred, have you been participating in any training or workshop regarding your business development? (y/n)

Economic capital

44. What are the sources of funding for your business? (in percentage, roughly)
 1. Personal saving
 2. Family/relatives
 3. Friends/neighbors
 4. Associations/community
 5. Banks/financial institutions
 6. Others, please specify
45. Have you received any insurance from the damage incurred by the disaster? (y/n)
46. After the disaster, have you received any aid in forms of financial aid or production tools? (y/n)