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Employee layoffs in times of crisis: do family firms differ?

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ABSTRACT

In this study, we seek to understand firm behaviour during times of crisis, with a particular focus on family firms in different contexts. We theorize that family control mitigates (i.e. negatively moderates) the relationship between economic crisis and the layoff of employees, resulting in a higher propensity of family firms to retain their employees during a crisis compared to their nonfamily counterparts. Furthermore, taking a closer look at family firms, based on their location, we argue that family firms in rural regions are more likely to adopt measures leading to involuntary job turnover than family firms in urban areas due to a higher sensitivity to the loss of socioemotional wealth following a business closure. Relying on a panel dataset of Swedish private firms active in the period 2004–2012, our study contributes to a better understanding of family firms as employers in different contexts.

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Family firms; socioemotional wealth; local embeddedness; rural environment; economic crisis; employee layoff

Introduction

Crises are unfortunately present in our daily news (e.g. COVID-19, the Ukraine-Russia war) and, consequently, have become a core topic in entrepreneurship research (Doern, Williams, and Vorley 2019). Negative exogenous shocks, such as the global financial crisis, inevitably lead to downturns in the labour market and increased unemployment. Family firms – organizations owned and managed by a family (Miller et al. 2007) – have been found to behave differently from other businesses during times of crisis, such as environmental jolts (Smith 2016), earthquakes (Salvato et al. 2020), financial distress (Chirico et al. 2020) or internal shocks (Bjuggren 2015). In this regard, their social ties, coupled with their long-term focus and desire to transfer the business to future generations, are identified as reasons for their superior resilience (Salvato et al. 2020). For instance, the studies of Gómez-Mejía et al. (2021) and Chirico et al. (2020) find that family firms are the ‘best among the worst’ under duress and tend to persist under adversity while opting for exit options that may preserve at least part of the organization. As such, there is increasing interest in family firms as role models for business conduct that emphasize values of trustworthiness, respect, responsibility, fairness, caring and citizenship (Blodgett, Dumas, and Zanzi 2011).

Employees are a significant group of key stakeholders in businesses (Neckebrouck, Schulze, and Zellweger 2018). Therefore, it is crucial to understand the employment practices of family firms, especially in times of crisis. To date, the literature has rendered mixed results. On the one hand, some

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literature suggests that family firms offer employees a more stable work environment with higher levels of job security (e.g. Amato et al. 2021; Bjuggren 2015; J. Block 2010; J. Block, Fisch, and Praag 2018; J. H. Block et al. 2019; E. Stavrou, Kassinis, and Filotheou 2007). Following this tradition, family firms foster talented and loyal employees to aid future prosperity (Miller, Le Breton-Miller, and Scholnick 2008) and are therefore concerned with retaining stable, trustful, and long-term relationships with them (Déniz and Suárez 2005; Miller and Le Breton-Miller 2005). In this vein, previous studies find that family firms conduct fewer employee layoffs than nonfamily firms (K. Kim et al. 2020). Furthermore, the altruistic and inclusive management style of family owner-managers is viewed to contribute to a committed workforce among nonfamily members (Tabor et al. 2018). However, on the other hand, the focus on preserving nonfinancial wealth through intrafamily succession and support for family members can lead to unfavourable conditions for nonfamily employees, which may lead to increased employee layoffs in family firms (Neckebrouck, Schulze, and Zellweger 2018; Vardaman, Allen, and Rogers 2018; Verbeke and Kano 2012). Following the conflicting results of previous research, there is a need to develop a more fine-grained understanding of the contextual conditions that can explain the coexistence of different theoretical predictions and empirical findings, particularly on family firm-specific reactions to external stimuli.

Combining the socioemotional wealth (SEW) logic (e.g. Gómez-Mejía et al. 2011; Swab et al. 2020) and threshold theory (e.g. DeTienne and Chirico 2013; Gimeno et al. 1997) with insights from the local embeddedness perspective (Baù et al. 2019; Bird and Wennberg 2014), we address the critical lack of knowledge on how family firms react to crisis situations of employee layoffs. Specifically, we theorize that while an economic crisis increases involuntary job turnover, family control mitigates (i.e. negatively moderates) this relationship so that for family firms, the involuntary job turnover resulting from an economic crisis is lower. As such, family firms are acknowledged to have a cushioning effect on negative shocks given their willingness to preserve the SEW endowment, which includes the relationships with employees and the reputation of the firm within a given context. Then, based on threshold theory predictions, we take a closer look at the various assessments that family firms can make about their SEW endowment and the subsequent reactions to crisis situations. Specifically, we assume that different reference points for the SEW endowment depend on the context in which a family firm operates (see, e.g. Baù et al. 2019; Bird and Wennberg 2014). As such, we postulate that family firms in rural regions¹ are more sensitive to the threat of ultimate SEW loss due to a possible failure and therefore are more likely to adopt measures leading to involuntary job turnover than their counterparts operating in urban areas.

To test our assumptions, we make use of the global financial crisis of 2007–2009. The onset of the crisis was sudden and constituted the most severe decline in employment since the Great Depression in the 1930s (Aliber and Zoega 2019; Bishop 2019), making it a particularly appropriate case for studying differences in approaches to involuntary dismissals across types of firms. More specifically, we rely on a unique, longitudinal matched sample of 121 thousand privately held Swedish firms exposed to the 2007–2009 subprime crisis and subsequent global financial crisis. With generally supportive empirical results, our study offers two important contributions. First, we advance the literature on firms experiencing crisis situations in general (e.g. Bundy et al. 2017; Doern, Williams, and Vorley 2019; Williams and Shepherd 2016) and the 2007–2009 crisis in particular (Habib, Uddin Bhuiyan, and Islam 2013; Lins, Servaes, and Tamayo 2017). Specifically, we provide novel insights related to how privately held family and nonfamily firms react to a crisis in terms of involuntary employee layoffs. Second, we contribute to the ongoing debate on family firms as employers (e.g. Baù et al. 2020; J. H. Block et al. 2019; Neckebrouck, Schulze, and Zellweger 2018) by detailing how the level of job security offered by family firms is dependent on the relative importance of the SEW endowment, which, in turn, depends on the local context where the firm is embedded. The combination of our two contributions allows us to add to recent theorizations about the role of SEW in family business decision-making as a complex interplay between self-interest and moral values (Craig and Newbert 2020; Newbert and Craig 2017). In particular, our findings allow us to theorize that the levels of community embeddedness affect the ability of family owners to assess

the impact of their decisions on internal and external stakeholders, which in turn will increase their willingness to make decisions that balance self- and other-regarding interests from a long-term survival perspective.

Theoretical framework and hypothesis development

Socioemotional wealth and family firms' attitudes toward employees

It is well established in the family business literature that family owners and managers – in comparison to their nonfamily counterparts – pursue more goals in addition to profit, typically associated with the 'affect-related value embedded in the family firm' or the family's socioemotional wealth (SEW) (Gómez-Mejía et al. 2007, 108; see also Berrone, Cruz, and Gómez-Mejía 2012; Chrisman et al. 2012; Zellweger et al. 2013). SEW goals often favour strategies that emphasize cumulative, tacit knowledge that is developed and shared with employees and inspired by mutual trust, personal respect, and deep knowledge of business operations (e.g. Le Breton–Miller and Miller 2006). Furthermore, the nurturing of a strong and long-lasting community of employees also helps the perpetuation of a positive family image and reputation among stakeholders (Dyer and Whetten 2006; Zellweger et al. 2013) and the enhancement of binding social ties within the family business and in the local context (Miller and Le Breton-Miller 2005). Positive identity, binding ties and emotional attachment have been identified as the crucial dimensions of SEW (Swab et al. 2020). Specifically, binding ties between family firms and their local community have been found to be stronger in rural areas where the community depends more on each local business, given that, for example, employee layoffs generate greater negative social externalities (K. Kim et al. 2020). Family firms, therefore, tend to emphasize loyalty and caring in work relations (Christensen-Salem et al. 2021), as well as attention to the welfare and quality of life of employees (E. T. Stavrou and Swiercz 1998), which tend to result in more stable employment overall (J. Block 2010; J. H. Block et al. 2019; Gómez-Mejía et al. 2021; E. Stavrou, Kassinis, and Filotheou 2007). For nonfamily firms, on the other hand, the pursuit of noneconomic goals is less salient (Chirico et al. 2020; Hoskisson et al. 2017), as the relational capital among owners—e.g. reciprocity, trust, shared norms, and values – is often absent or less pronounced. The long-term orientation may also be weaker, as nonfamily owners and managers might be more focused on short-term horizons, such as those imposed by outside investors (e.g. Le Breton–Miller and Miller 2006).

Crisis and downsizing

Global economic crises generally increase the frequency of company failures and closures (e.g. Doern, Williams, and Vorley 2019; Lambert and Van Reenen 2021). The hostile environmental conditions triggered by a crisis tend to drag companies into a phase of decline, in which the prerequisites for competitive advantage, profitability, and survival can be severely eroded (Robbins and Pearce 1992; Trahms, Ndofor, and Sirmon 2013). As an immediate response to this decline, companies often pursue retrenchment strategies (Trahms, Ndofor, and Sirmon 2013; Wenzel, Stanske, and Lieberman 2020). Such strategies include measures to reduce costs (Pearce and Robbins 1993) and complexity (Benner and Zenger 2016), with the main goal of maintaining liquidity and preserving a solid basis for long-term recovery once external conditions become less hostile (Pearce and Robbins 2008). A key retrenchment action involves workforce downsizing (Pearce and Robbins 1993; Rico and Puig 2021), which may have both negative and positive consequences for the subsequent economic turnaround. On the one hand, reducing personnel costs may lead to an increase in employee productivity and promote efficiency gains via the replacement of obsolete work practices (e.g. Tangpong, Abebe, and Li 2015). On the other hand, workforce downsizing can also have negative effects in terms of morale and commitment among 'surviving' employees (Kawai 2015). It can also deplete a firm's intellectual capital, reputation, and innovation potential (e.g. Nixon et al. 2004).

Firms, therefore, need to consider multiple financial and nonfinancial factors in evaluating the option to downsize. If we consider the distinction between family and nonfamily firms, a key differentiating factor is typically linked to the value placed by owners on nonfinancial goals or SEW. Next, we theorize whether the distinctive features of family firms towards employees are maintained in times of crisis.

Hypothesis development

Crisis, family firms, and involuntary turnover

The key to any firm's survival during a financial crisis is to first start with carefully considered cost reductions (Pearce & Robbins, 1992; Pearce and Robbins 1994). The focus of the retrenchment strategy (i.e. what costs and assets to reduce) depends on the cause, severity, and duration of the situation (Pearce and Robbins 1993). Previous research suggests that firms under conditions of decline pay particular attention to stakeholders providing economic benefits and disregard claims from stakeholders who are considered less financially salient (Jawahar and McLaughlin 2001; Laffranchini et al., 2022). Donaldson and Preston (1995) suggest that important stakeholders are those (i) who control the resources needed to stop the decline and (ii) who have time-sensitive claims such that delaying the fulfilment of these claims might accelerate performance deterioration and cause the withdrawal of stakeholder support (Tangpong, Abebe, and Li 2015). According to this view, lenders and providers of financial resources fall in the category of critical stakeholders, and employees are instead placed among the less salient stakeholders. As such, we expect that firms will likely lay off employees during an economic crisis. Accordingly, our baseline hypothesis states the following:

Hypothesis 1: An economic crisis increases involuntary job turnover.

This argument may, however, not apply as strongly to family firms as they typically pursue a mix of economic and noneconomic goals (Zellweger and Nason 2008). That is, we predict that pursuing nonfinancial goals aimed at preserving SEW may have distinctive implications for family firms in times of crisis. Indeed, the stakeholder management of family businesses in times of crisis considers not only the provision of economic benefits but also the nonfinancial benefits and the preservation of the SEW endowment (Cruz and Justo 2017; Chrisman et al. 2012; Laffranchini et al., 2022). In particular, considerations of SEW may induce family firms to avoid or delay the adoption of drastic measures that may negatively affect their relations with stakeholders that are considered critical for the socioemotional benefits of the owning family (e.g. Casillas et al. 2019; Wennberg et al. 2011). In this respect, employees are a key group, as the owning family often strives to build SEW by, for instance, enhancing the family image, creating strong social bonds, reinforcing owner identification with the firm, deriving positive emotions, and building a positive family legacy into the future (Berrone, Cruz, and Gómez-Mejía 2012; Christensen-Salem et al. 2021). The pursuit of these dimensions of noneconomic utility induces the owning family to refrain from taking actions that harm the family reputation in the eyes of employees and that may create tensions and negative emotions in the relationship between the owning family and the nonfamily stakeholders (Christensen-Salem et al. 2021). In an economic crisis, therefore, we expect family firms to be more reluctant to engage in extensive workforce layoffs than their nonfamily counterparts. Hence, we predict the following:

Hypothesis 2: Family control mitigates the relationship between an economic crisis and involuntary job turnover such that family control reduces the effect of an economic crisis on involuntary job turnover.

The moderating role of the rural versus urban context

According to threshold theory (DeTienne, Shepherd, and De Castro 2008; Gimeno et al. 1997) applied to the decisions of family firms to exit the business (DeTienne and Chirico 2013), a higher value placed on SEW endowment makes family owners willing to adopt increasingly drastic measures that result in a great reduction in performance to protect nonfinancial benefits arising from family control over the business (Gómez-Mejía et al. 2007). General economic crisis situations, due to their systemic nature, pose a significant threat to the survival of companies, and it is therefore likely that the responses of family firms to crisis vary depending on the value placed on SEW loss induced by the possible failure. Particularly, it is reasonable to assume that if the perceived potential SEW loss induced by potential failure remains under a certain level, family firms act in the direction of protecting key stakeholders, such as their employees, preserving the current SEW levels connected to the enduring relationships centred on the family business system, and this prediction is consistent with our Hypothesis 2.

However, if the potential loss of SEW associated with business failure further increases, family firms also become increasingly willing to adopt severe measures to safeguard their SEW endowment. The importance that family firms attach to the failure-induced loss of SEW depends on a variety of factors (e.g. Laffranchini et al., 2022). Among these factors, spatial localization in rural versus urban areas is particularly relevant (e.g. Amato et al. 2021; Baù et al. 2019). In rural areas, families have 'the possibility to form alliances and build close connections with the community and are exposed less to the anonymity of urban areas' (Bird and Wennberg 2014, 425). Indeed, in those areas, family firms often represent a vital source of employment and wealth creation for otherwise economically weak contexts (Karlsson 2018). The families behind businesses in rural areas are therefore perceived and often see themselves as invested with a high responsibility towards the local community (Baù et al. 2021; K. Kim et al. 2020; Lundberg and Öberg 2021).

Specifically, compared to family firms in urban areas, family firms located in rural areas place a higher value on their long-term survival because those firms often represent a key driver for the development of the community, and this, in turn, is a distinctive aspect of the owning family's identity. Therefore, we need to account for the heterogeneity of SEW for family firms in different geographical locations (Swab et al. 2020). For these reasons, the perception of the potential loss of SEW associated with a possible failure is likely higher for family firms in rural areas than for family firms in urban areas. Moreover, the perception of a potential failure-induced SEW loss may be even higher among rural family firms since, in comparison to firms located in urban areas, firms in rural regions generally suffer from higher resource constraints and less munificent environments, they are more vulnerable to the influence of external shocks and ultimately face a more severe threat to their survival during a crisis (Backman 2013; Backman and Wallin 2018; Duranton and Puga 2004). Therefore, as suggested by threshold theory, the use of the potential SEW loss as a reference point predicts that, in comparison to urban family firms, rural family firms take riskier measures to avoid the closure of the company and the ultimate loss of SEW, which would severely spill over into the rural community. Business closure in the rural community would be seen as a business failure and a family failure, affecting reputation and identity much more than a family business operating in an urban context. In other words, if a rural family firm were to go bankrupt, then there would be a greater loss of economic and social wealth to both the family and the community where the family firm resides than would be the case for a family firm operating in an urban context.

Family firms in rural areas, due to their higher community embeddedness, will be especially aware of the impact of their decisions on internal and external stakeholders (e.g. Craig and Newbert 2020); therefore, they are particularly hesitant to exit the business, and when faced with survival threats, the family feels pressure to take actions that could save the firm and its legacy (Casillas et al. 2019; DeTienne and Chirico 2013). These actions can involve significant restructuring (Chirico et al. 2020; Kavadis and Castañer 2015), including the layoff of employees (King et al. 2022), at the expense of SEW in the short term but in the interests of the family and critical stakeholders in the long term

(Craig and Newbert 2020; Newbert and Craig 2017). A short illustrative case is provided by the rural furniture producer Kinnarps AB:

Kinnarps AB² is a third-generation family business founded in 1942 in Kinnarp. Kinnarp is a small community in Sweden with a population of 963 inhabitants as of 2020. The 2007–2009 global financial crisis hit Kinnarps hard with a severe decrease in sales, reluctantly leading to the layoff of 105 employees to save the business from failure. According to a press release, 25 May 2009, CEO and family owner, Henry Karlsson said:

Of course, it feels extremely sad that talented employees have to leave the company, but at the same time we have to adapt to the prevailing economic situation to be able to strengthen our positions for the future and secure employment for the majority of our staff.

Having also survived the COVID-19 crisis, Kinnarps AB is even still the largest provider of employment in Kinnarp and continues their legacy of caring for the local community, high quality, and sustainable development.

In summary, due to the higher survival risk and the higher socioemotional value attached to firm survival, family firms located in rural areas are more likely to react to a crisis with employee layoffs. Hence, we postulate the following:

Hypothesis 3: The effect of family control in mitigating the relationship between an economic crisis and involuntary job turnover is less pronounced in rural contexts than in urban contexts, such that the increase in involuntary job turnover during an economic crisis will be higher in rural family firms than in urban family firms.

Methods

Research design

To test our hypotheses, we use the total population data from Statistics Sweden. The data are structured as matched employer–employee data concerning all individuals and privately held firms for the 2004–2012 period. To warrant comparability, the population is delimited in several ways. First, to study firms under equivalent legal conditions, the population is restricted to nonlisted limited liability firms, as they are the largest comparable and most economically significant group in Sweden in terms of employment. Next, to isolate the effects of specific contexts on involuntary employee turnover, we also delimit the data to single-establishment firms. Moreover, to increase comparability in terms of crisis exposure, we use a symmetric window of three years before and after crisis onset. Last, to avoid survival bias (Johnson, Parker, and Wijbenga 2006), we allow for firm exit given that the firm was established before the onset of the crisis and survived at least one year of the crisis. Our population of firms is presented in Table 1.

Variables and measures

Involuntary employee turnover rate. We calculate the involuntary employee turnover rate as the share of employees that have been dismissed—i.e. involuntarily displaced – during a given year (Burrows, Porter, and Amber 2022; Rosenbaum and Kariya 1989) relative to the total number of employees at the beginning of that year ($\text{Dismissals}_{it}/\text{No.ofemployees}_{it}$) (Hancock et al. 2011; Park and Shaw 2013; Rubenstein et al. 2019; Stumpf and Dawley 1981).³ Dismissals are captured in two ways. First, we capture all individuals who have previously been employed in a firm that has entered unemployment the subsequent year. This is operationalized in terms of whether they have received unemployment benefits. Second, to capture involuntary turnover that has not resulted in a period of

Table 1. Distribution of the firms across context and industry and levels of family involvement.

	Industry	Urban		Rural		Total		
		Share of Family Firms	Family Owners and Managers (avg.)	Share of Family Firms	Family Owners and Managers (avg.)	Share of Rural Firm	Share of family firms	Family Owners and Managers (avg.)
1	Agriculture, forestry and fishing	87.53%	3.33	92.43%	3.37	68.97%	91.14%	3.36
2	Manufacturing, mining and quarrying and other industry	79.54%	3.16	88.69%	3.43	50.96%	84.80%	3.32
3	Construction	61.54%	2.98	84.18%	3.10	42.95%	72.70%	3.05
4	Wholesale, retail trade, transportation and storage, accommodation and food service activities	79.35%	2.96	88.23%	3.16	41.08%	83.60%	3.06
5	Information and communication	80.43%	2.58	89.46%	2.79	50.79%	85.62%	2.70
6	Financial and insurance activities	67.65%	2.75	75.25%	3.58	18.98%	69.39%	2.96
7	Real estate activities	73.47%	3.03	90.12%	2.96	13.13%	76.32%	3.02
8	Professional, scientific, technical, administration and support service activities	71.90%	2.54	85.29%	2.81	23.40%	75.76%	2.63
9	Public administration, defence, education, human health and social work activities	75.00%	2.76	88.37%	2.74	28.64%	79.67%	2.75
10	Other services	72.43%	2.49	83.45%	2.84	30.66%	76.47%	2.63
	Total	74.88%	2.90	86.55%	3.18	36.95%	79.55%	2.95

unemployment, we analyse the job flows in and out of each business to discern whether positions have been terminated within each organization. This is done by using information on the occupational classification of each employee who has entered or left the business in the past year (ISCO-88). From this, we categorize the displacement of an employee as involuntary if no new employees have been recruited under the same occupational classification during that year, i.e. if their previous position has not been renewed within the business.⁴

Family firm. We adopt a binary measure of family firms. Specifically, we define family firms as those where two or more family members own and manage the business (e.g. Chrisman and Patel 2012; Miller et al. 2007), where families cover both households (spousal couple) and biologically or adoptively linked families (i.e. father, mother, and adult children; see also Baù et al. 2019; Wennberg et al. 2011; Wiklund et al. 2013). The variable takes the value '1' if a firm is family controlled and '0' otherwise.

Financial crisis. The global financial crisis is captured using a binary measure. The onset of the crisis is identified on the three-digit industry level (NACE rev. 2), where an industry is identified as having been affected by the crisis if the median firm experienced negative yearly median sales growth at any point during the 2007–2009 period, which means that at least 50% of all firms in a given industry experienced negative sales growth in a given year (Y. C. Kim and Oh 2018; Loderer and Waelchli 2015).⁵ The choice of the period is, in turn, based on prior knowledge of the rollout of the crisis (Hansen and Welz 2011; Yazdanfar and Öhman 2020). We use a data-driven identification strategy that allows the analysis to consider the specific timing of the crisis onset in evaluating the effects on dismissals and allows for unaffected comparison groups in industries that were not significantly affected by the crisis itself.⁶ The measure is operationalized as such that it takes the value '1' if an industry has entered the crisis during a given year and '0' otherwise.

Firm context: rural versus urban. Swedish municipalities are categorized into two groups, urban and rural (Baù et al. 2019; Naldi et al. 2015). We classify as urban areas those municipalities with a population of at least 30,000 inhabitants and where the largest city has a population of 25,000 people or more. Smaller municipalities that are neighbours to these urban municipalities will be included in a local urban area if more than 50% of the labour force in the smaller municipality commutes to a neighbouring municipality. Municipalities not included in the urban areas are classified as rural areas. This operational definition was elaborated by economists at the Swedish

Board of Agriculture (*Jordbruksverket*) and adopted in previous studies (e.g. Karlsson 2018; Nilsson 2015; Westlund, Larsson, and Olsson 2017). Context typologies are operationalized as a binary variable that takes the value '1' if a firm is located in a rural context and '0' otherwise.

Control variables

First, previous research shows that the age of a firm's CEO is closely related to its risk preferences and ability to manage external threats (Belenzon, Shamshur, and Zarutskie 2019; Miller 1991; Serfling 2014), whereas younger CEOs tend to undertake riskier strategies and have less experience in responding to abrupt market changes. Therefore, we control for the current age of the CEO.⁷ Similarly, firm age is also closely linked to the dynamism of firms, as well as their accumulation of intrinsic resources, such as market- and firm-specific knowledge (Coad 2018; Coad, Nielsen, and Timmermans 2017). Subsequently, we also control for the current age of each firm.

Next, both family firms and nonfamily firms are known to exhibit heterogeneity in terms of growth ambitions and entrepreneurial orientation (Hernández-Linares and López-Fernández 2018), whereby we also control for each firm's historical hiring rates. Similarly, the ability of firms to retain employees is also dependent on their financial status (Beck et al. 2008; Siemer 2019). Therefore, we also control for firm financial status using the Altman Z score. In line with Altman (1983, 2013) and recent studies in the field (e.g. Gómez-Mejía et al. 2021; Wennberg et al. 2010), we calculated the Altman Z score as $A * 3.3 + B * .99 + C * .6 + D * 1.2 + E * 1.43$.⁸ Third, dismissal rates are also likely to be directly linked to the initial size of the firm itself (Coad and Hözl 2012; Karlsson 2021; Klaas, Brown, and Heneman 1998), whereby we control for the value of the absolute number of employees. Fourth, as employee skills, knowledge, and social ties to their employer are known to increase with time on the job (Starr, Ganco, and Campbell 2018), it can also be expected that employee retention will increase with the latter. Based on this, we control for the two-year average tenure of employees, measured as the average number of consecutive years of employment across staff from 1990 onward. Fifth, the global financial crisis disproportionately affected the global trade sector and Swedish exports in particular (Yazdanfar and Öhman 2020; Yazdanfar, Öhman, and Homayoun 2019). Subsequently, we also control for trade openness, measured as imports plus exports as a share of annual sales (e.g. Chongvilaivan and Hur 2012).

Moreover, the resilience and performance of firms are also related to firm-external factors, such as networks, as well as industry- and context-specific characteristics. To capture the influence of business networks, we control the number of interlocking directorates in each firm (Wang et al. 2021). This is captured in terms of the number of executive directors that hold positions on other boards. Next, to capture industry conditions, we also control for industry affiliation (NACE rev. 2), as well as the values of industry complexity, density, profitability, and munificence calculated at the 4-digit NACE sector (Bradley, Shepherd, and Wiklund 2011). Industry complexity captures the heterogeneity in the environment and concentration of resources by using the Herfindahl – Hirschman index (Li and Simerly 1998). Industry density controls the level of competition for available resources in the industry and is measured as the number of competing firms in the same sector (Bradley, Shepherd, and Wiklund 2011). Industry profitability might influence intrasectoral labour mobility (Patel et al. 2020), and it is measured as the logarithm of average profitability for firms within the same sector as the focal firm (Bradley, Shepherd, and Wiklund 2011). Industry munificence influences firm growth (Baù et al. 2019); thus, we averaged the regression coefficients of a given industry's sales over a 5-year period to capture the growth of a sector (Keats and Hitt 1988).

Next, to capture the regional economic conditions of each firm, we also control for the value market size of each context, measured as the gross wage income of a given municipality and surrounding regions, discounted by driving distance in time (e.g. Karlsson 2018). Finally, to capture the development of involuntary job turnover over time, we also include the overall time trend. We used a two-year lagged value for the time-variant controls.

Temporal endogeneity

To study the influence of the global financial crisis on involuntary turnover rates, considerable attention is needed in terms of *when* covariate controls are measured in relation to the current year. Specifically, a number of central covariate controls linked to firm employment are also likely to directly correspond to the dismissal rates in a given firm and year, such as firm age, historical net growth rates, and the share of white-collar workers (Hijzen, Mondauto, and Scarpetta 2017; Kugler and Pica 2008). Therefore, the findings might be subject to endogeneity by simply including the present-year value of these variables to capture the studied outcome. The choice of lag structures has been explored for the identified controls to address this issue. By studying the autoregressive process of involuntary turnover, it is found that it follows a first-order autoregressive structure with homogenous variances (i.e. AR(1) structure) (Garson 2013). Based on this, the one-year lagged value of covariates is likely to be subject to the same endogeneity issues. Meanwhile, the two-year lagged value lies outside the autoregressive structure across all controls, whereas it constitutes the closest possible value of the latter. This is also in line with the recommendations by Bellemare et al. (2017). Thus, the two-year lagged value is used for the time-variant controls. Moreover, the choice of the uniform lag structure was made to promote model parsimony, whereas the use of longer lag structures was refrained from, as it would exclude young firms. The applied two-year lag structure yields a satisfying model fit across covariates.

Model

In capturing the influence of the crisis on involuntary turnover rates across the family-nonfamily and rural – urban contexts, a significant empirical challenge emerges. In modelling this outcome across family-nonfamily and rural – urban contexts, researchers may be tempted to model mediation using a standard three-way interaction approach, i.e. *Family* × *Rural* × *Crisis*. However, as this is the interaction of three dummy variables, this would only capture the marginal change in rural family firms in crisis *relative to all other firms and all periods*. As such, the estimate would imply a comparison to 1) rural family firms before the crisis; 2) rural nonfamily firms before and during the crisis; 3) urban family firms before and during the crisis; and 4) urban nonfamily firms before and during the crisis. In other words, this implies that a single equation approach using a three-way interaction is not compatible with measuring the *change* imposed by the crisis on family firms across the rural – urban context in comparison to other firms.

To remedy this property, we instead employ seemingly unrelated regression (SUR), which allows for coestimation of the variance–covariance matrix across subpopulations. This means that their standard errors become directly comparable despite differences in population sizes (see also Fabel, Mináriková, and Hopp 2022; Karlsson 2018; Lin and Shi 2020). This, in turn, allows for consistent estimation of the difference in coefficients (Gujarati 1970). The hypotheses are tested using three equations: 1) a baseline model across all years using the standard three-way interaction; 2) an equivalent model before the crisis, omitting the mediation of crisis; and 3) a third equivalent model during the crisis. The three equations are specified as follows:

$$\begin{cases} Y = X\beta + \text{Family} + \text{Rural} + \text{Crisis} + \text{Family} \times \text{Rural} + \text{Family} \times \text{Crisis} + \text{Rural} \times \text{Crisis} + \text{Family} \times \text{Rural} \times \text{Crisis} \\ Y = X\beta + \text{Family} + \text{Rural} + \text{Family} \times \text{Rural}, & \text{given that Crisis} = 0 \\ Y = X\beta + \text{Family} + \text{Rural} + \text{Family} \times \text{Rural}, & \text{given that Crisis} = 1 \end{cases} \quad (1)$$

where $X\beta$ refers to all covariate controls. For brevity, individual and time indices are suppressed. Next, since the baseline model (1) controls for the variation induced by the crisis across the family-nonfamily and urban–rural context, equivalent variation can be extracted from Equation 2 and Equation 3 and substituted into Equation 1. As such, the estimates can be consistently adjusted to account for the intended reference groups by estimating the difference between parameters in the second and third equations, such that:

$$\text{Family} \times \text{Crisis} = (\text{Family}|X, \text{Crisis} = 1) - (\text{Family}|X, \text{Crisis} = 0)$$

$$\text{Rural} \times \text{Crisis} = (\text{Rural}|X, \text{Crisis} = 1) - (\text{Rural}|X, \text{Crisis} = 0)$$

$$\text{Family} \times \text{Rural} \times \text{Crisis} = (\text{Family} \times \text{Rural}|X, \text{Crisis} = 1) - (\text{Family} \times \text{Rural}|X, \text{Crisis} = 0)$$

Next, owing to the coestimation of the variance–covariance matrix, the standard errors for the change between periods can be estimated using the formula:

$$SE_{\text{crisis}} = \left[\left(\frac{N_1 \text{Var}_1 + N_2 \text{Var}_2}{N_1 + N_2} \right) \right]^{0.5} - 2\text{COV}_{1,2} \quad (2)$$

where N refers to the number of observations and subscripts 1 and 2 refer to the period prior to the crisis versus during the crisis, respectively.

Empirical results

The descriptive statistics and Pearson correlations are presented in [Table 2](#). An inspection of the variance inflation factors (VIFs) and tolerance showed that multicollinearity was not a concern. Indeed, all VIF coefficients were below the cut-off of 5 (O'Brien 2007).

Next, [Figure 1](#) presents the geographic distribution of rural and urban regions, along with the percentage increase of dismissals in each municipality during the crisis, compared to their precrisis levels. As shown in [Figure 1a](#), the majority of Swedish municipalities are classified as rural, where most urban regions are centred around the metropolitan regions of Stockholm (central-east), Gothenburg (south–west), and Malmö (south). Next, from [Figure 1b](#), we can see that most regions were significantly impacted by the crisis, with many facing an increase in dismissals of over 50%. Moreover, most of the regions that were the most severely affected are also rural, which are known to have a high concentration of family firms (Karlsson 2018). As such, [Figure 1b](#) appears to indicate that rural firms were the most adversely affected by the crisis, and with that, many rural family firms.

Hypothesis 1 predicts that *an economic crisis increases involuntary job turnover*. As expected, the related coefficient is *positive* and significant ([Table 3](#), Model 2; coeff. = 0.366, $p < 0.001$). In terms of effect size, the global financial crisis is found to have had a significant economic impact on employment, increasing involuntary job turnover across all Swedish firms by an estimated 37%.

We also find support for Hypothesis 2, i.e. that *family control negatively moderates the relationship between an economic crisis and involuntary job turnover* ([Table 3](#), Model 4; coeff. = -0.059 , $p < 0.05$). In terms of effect size, family firms attenuated the impact of the global financial crisis, experiencing an involuntary job turnover that was 5.9% lower than for nonfamily firms.

The influence of the crisis on family firms and nonfamily firms in terms of comparative levels and marginal effects is presented in [Figures 2a,b](#). Family firms have a lower involuntary job turnover throughout the period, and in particular, the *difference* between family firms and nonfamily firms increased due to the crisis. Once we established that family firms are less inclined to lay off employees during crises (Hypothesis 2), in Hypothesis 3, we introduce the urban vs. rural contexts to explore different behaviours among family firms specifically. According to Hypothesis 3, *the mitigating effect of family control on the relationship between a crisis and involuntary job turnover is less pronounced in rural contexts than in urban contexts, such that, among family firms, those operating in rural areas exhibit a higher crisis-induced turnover*. In line with our theorization, this hypothesis is also confirmed by a *positive* and significant coefficient for the three-way interaction Family*Rural*Crisis ([Table 3](#), Model 6; coeff. = 0.123, $p < 0.01$). As seen from [Figure 3a](#), rural family firms exhibit a more pronounced increase in turnover levels before and during crisis compared to urban family firms. It is interesting also to observe that the reaction to the crisis by rural family firms in terms of increase in involuntary job turnover is higher also in comparison to nonfamily firms (both

Table 2. Summary statistics and correlations table.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Involuntary turnover	0.08	0.15																
2. Family firm	0.80	0.40	-0.02															
3. Rural	0.37	0.48	0.03	0.07														
4. Financial crisis	0.55	0.50	0.10	0.01	0.01													
5. Interlocked directorates (num)	0.80	1.47	0.04	-0.11	-0.05	0.01												
6. Hiring rate	0.09	0.16	0.12	-0.03	0.00	-0.08	0.08											
7. Firm size (employees)	20.25	190.24	0.05	0.01	0.00	0.01	0.23	0.09										
8. Firm age	10.91	7.75	-0.16	0.10	0.07	0.20	-0.06	-0.25	0.03									
9. Industry complexity	0.04	0.08	0.00	-0.01	0.02	-0.03	0.05	0.00	0.04	-0.01								
10. Industry density	4,385.69	4,069.31	0.03	-0.01	0.02	0.11	-0.05	0.00	-0.03	0.00	-0.29							
11. Industry profitability	6.21	1.13	-0.03	-0.02	-0.03	-0.01	0.15	0.00	0.04	-0.01	0.39	-0.18						
12. Industry munificence	0.98	0.03	-0.01	-0.01	-0.01	0.08	0.02	-0.03	-0.03	0.07	0.04	-0.05	-0.12					
13. Market size (MSEK)	1,961.79	4,088.44	-0.02	-0.09	-0.34	0.04	0.06	0.00	0.00	-0.05	-0.01	0.01	0.02	0.04				
14. Altman Z score	4.01	1.91	0.00	-0.03	-0.08	-0.01	-0.07	-0.03	0.04	0.00	0.03	-0.11	-0.01	0.02	0.06			
15. Avg. tenure of employees (years)	6.81	4.64	-0.14	0.06	0.04	0.24	-0.12	-0.39	-0.13	0.63	-0.03	0.05	-0.02	0.09	-0.02	-0.03		
16. Trade openness	42.27	35,008.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17. CEO age	50.03	9.26	-0.06	0.10	0.03	0.12	-0.06	-0.14	-0.03	0.27	0.01	-0.02	0.04	0.03	-0.03	-0.03	0.33	0.00

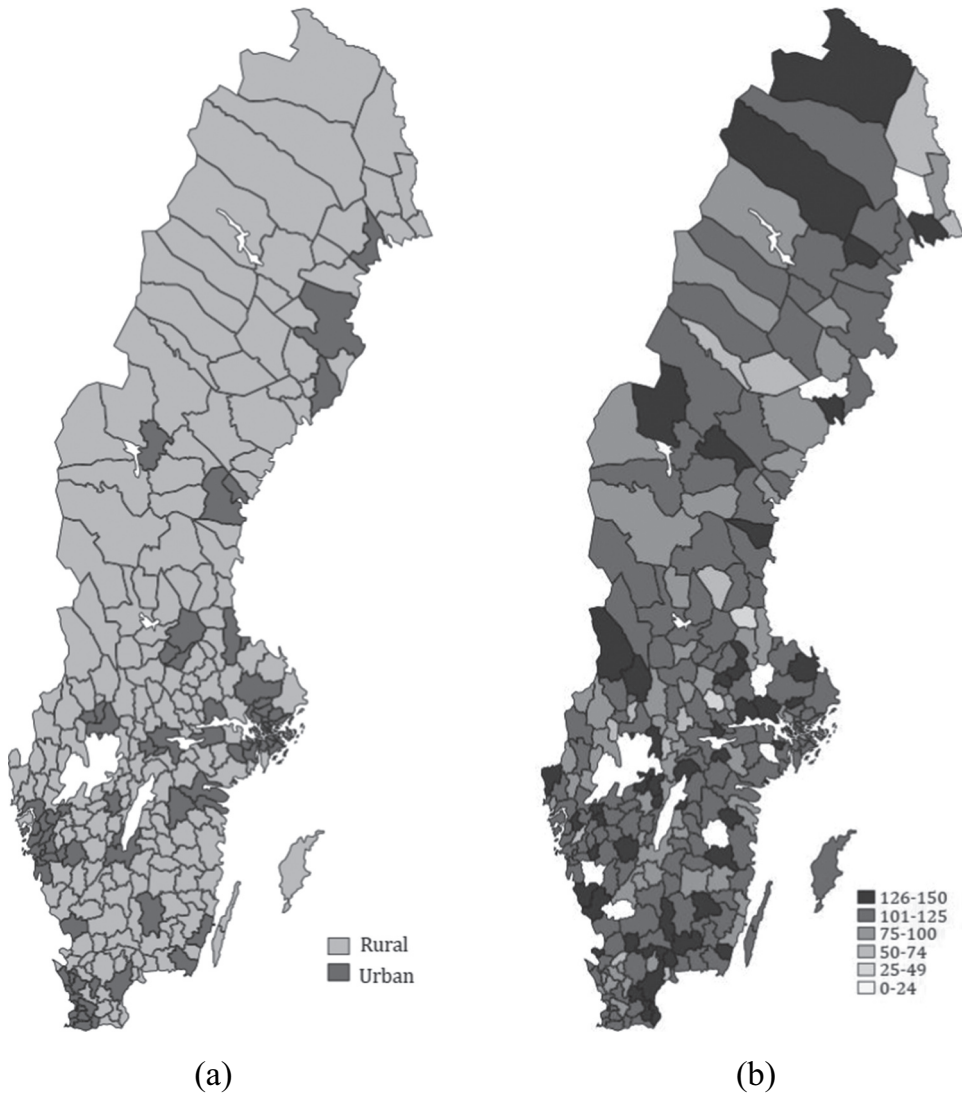


Figure 1. Distribution of municipalities across the rural–urban typology and percentage change in dismissals during the crisis, compared to previous years. Single plant limited liability firms, 2004–2012. a. Distribution of rural and urban municipalities. b. Percentage change in dismissals within municipalities during the crisis compared to preceding years. Ratio between change in total dismissals in the two periods, divided by precrisis levels. Private, single plant limited liability firms, 2004–2012.

urban and rural). However, as seen from [Figure 3b](#), given their exceptionally low involuntary turnover rates prior to the crisis, rural family firms are still able, in absolute terms, to retain more employees in comparison both to their urban family counterparts and to nonfamily firms.

Robustness

We performed robustness tests to verify our main results. First, we run our analyses adopting a fixed panel set approach, confirming our original results. Second, we validated our approach to temporal endogeneity using lag structures based on covariate-specific Granger causality statistics that support the notion of endogeneity in the present value and first-year lags of covariates. Additionally, in this case, the main results are consistent and significant. Third, we additionally

Table 3. Results of seemingly unrelated regression analysis based on ordinary least squares (OLS). Limited liability firms, 2004–2013.

Variables	Involuntary job turnover					
	(1)	(2)	(3)	(4)	(5)	(6)
Interlocked directorates (<i>t</i> -2) (log)	0.027*** (0.001)	0.027*** (0.001)	0.025*** (0.002)	0.025 ⁺ (0.004)	0.025 ⁺ (0.004)	0.025** (0.002)
Hiring rate (<i>t</i> -2) (log)	0.066*** (0.002)	0.066*** (0.002)	0.047*** (0.002)	0.047* (0.001)	0.047* (0.002)	0.047** (0.001)
Number of employees (<i>t</i> -2) (log)	1.747*** (0.006)	1.751*** (0.006)	1.950*** (0.009)	1.950** (0.029)	1.951** (0.027)	1.951** (0.017)
Firm age (log)	-0.107*** (0.002)	-0.106*** (0.002)	-0.105*** (0.002)	-0.105* (0.003)	-0.105 ⁺ (0.009)	-0.105** (0.010)
Industry complexity (<i>t</i> -2) (log)	-0.000 (0.006)	0.008 (0.006)	0.007 (0.007)	0.007 (0.002)	0.008 (0.012)	0.008 (0.0146)
Industry density (<i>t</i> -2) (log)	0.012 ⁺ (0.006)	0.018** (0.006)	0.027*** (0.008)	0.027 (0.004)	0.028 ⁺ (0.003)	0.028** (0.001)
Industry prof (<i>t</i> -2) (log)	-1.013*** (0.050)	-1.021*** (0.050)	-0.876*** (0.064)	-0.874* (0.046)	-0.876 ⁺ (0.090)	0.876** (0.067)
Industry munificence (<i>t</i> -2) (log)	-1.406*** (0.239)	-0.259 (0.246)	-1.158*** (0.301)	-1.150 (0.864)	-1.168 (0.975)	-1.168+ (0.708)
Market size (<i>t</i> -2) (log)	-0.066*** (0.003)	-0.067*** (0.003)	-0.107*** (0.005)	-0.097* (0.005)	-0.106 (0.017)	-0.106** (0.022)
Altman Z score (<i>t</i> -2)	0.005 (0.003)	0.004 (0.003)	0.004 (0.004)	0.005* (0.000)	0.005 (0.007)	0.005 (0.011)
Average tenure of employees (<i>t</i> -2) (log)	-0.030*** (0.004)	-0.032*** (0.004)	-0.035*** (0.004)	-0.035 (0.011)	-0.035 (0.011)	-0.035** (0.009)
Trade openness (<i>t</i> -2) (log)	-0.025*** (0.002)	-0.026*** (0.002)	-0.019*** (0.002)	-0.019 ⁺ (0.002)	-0.019 ⁺ (0.003)	-0.019** (0.003)
CEO age (log)	-0.471*** (0.033)	-0.470*** (0.033)	-0.331*** (0.039)	-0.332* (0.013)	-0.333 ⁺ (0.038)	-0.333** (0.053)
Crisis		0.366*** (0.019)	0.319*** (0.022)	0.366** (0.002)	0.357* (0.024)	0.357** (0.025)
Family			-0.148*** (0.019)	-0.108 ⁺ (0.014)	-0.031 (0.009)	-0.031** (0.004)
Rural			-0.054** (0.020)	0.071 (0.047)	0.071 (0.047)	0.071 (0.058)
Family*Crisis				-0.059* (0.001)	-0.086* (0.003)	-0.086** (0.002)
Family*Rural					-0.216* (0.006)	-0.216** (0.007)
Rural*Crisis					0.023 (0.010)	0.023* (0.009)
Family*Rural*Crisis						0.123** (0.003)

+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Clustered robust standard errors in parentheses (family ownership and rural contexts) Estimates are controlled for industry and year trends.

investigated the differences between rural and urban contexts based on firm age, firm asset density, and firm size. We did so by running our analyses in subsamples of the population. We split the variable firm age into three age groups: 1–9 years, 10–19 years, and 20 years or older. The subsample analyses found consistent and significant results. In particular, our key hypothesis is confirmed for all age groups. We accounted for asset density by splitting the firms into three groups (terciles) based on their level of total assets. We used the Stata command *xtile* to obtain three asset groups, small, medium, and large. The subsample analyses found consistent and significant results. In particular, H1 was confirmed in all groups, and H2 and H3 were confirmed in the small and medium assets groups. Finally, we considered the size of the firm measured as the number of employees. We considered small firms (1–49 employees), medium-sized firms (50–

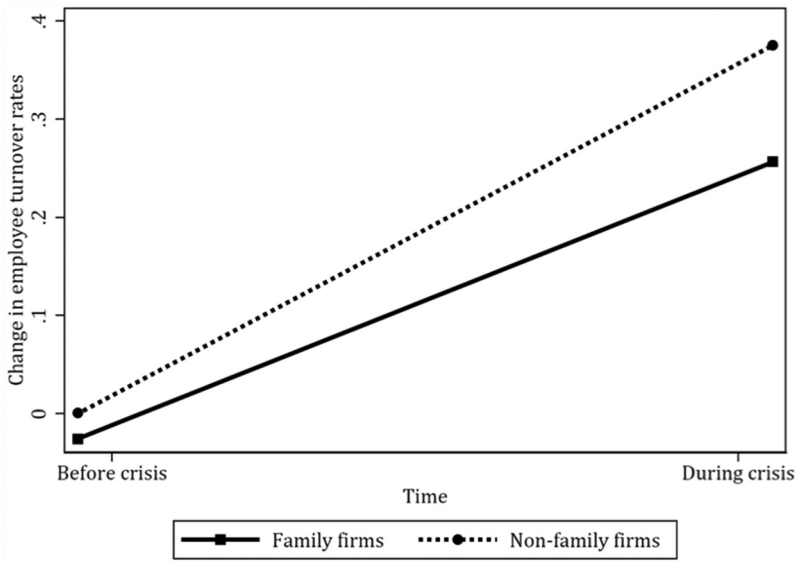


Figure 2a. Marginal effects of the crisis on the involuntary job turnover of family firms and nonfamily firms, 2004–2012. Reference group: nonfamily firms before the crisis.

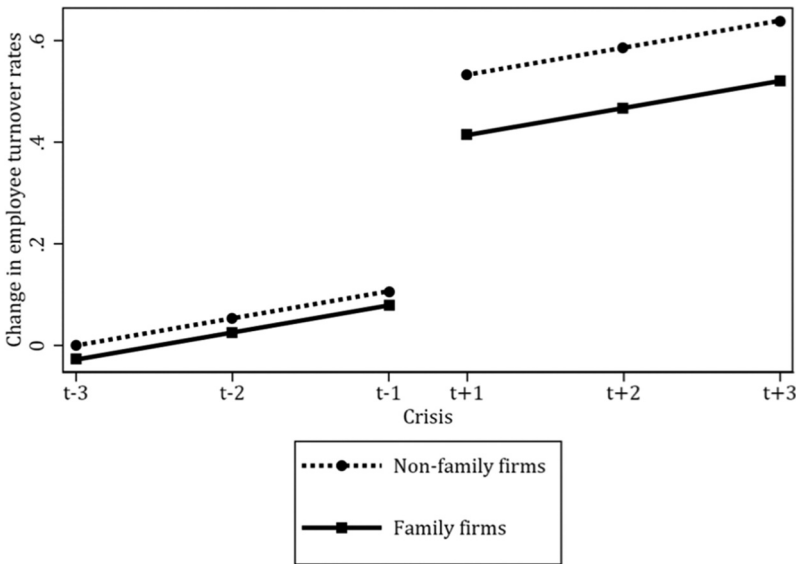


Figure 2b. Comparative levels of involuntary turnover three years before versus three years after the onset of the crisis. Family firms and nonfamily firms, 2004–2012. Reference group: nonfamily firms three years before the crisis ($t-3$).

249 employees), and large firms (more than 250 employees). The subsample analyses found consistent and significant results. In particular, H1 was confirmed in all groups, and H2 and H3 were confirmed in small and medium-sized firms.

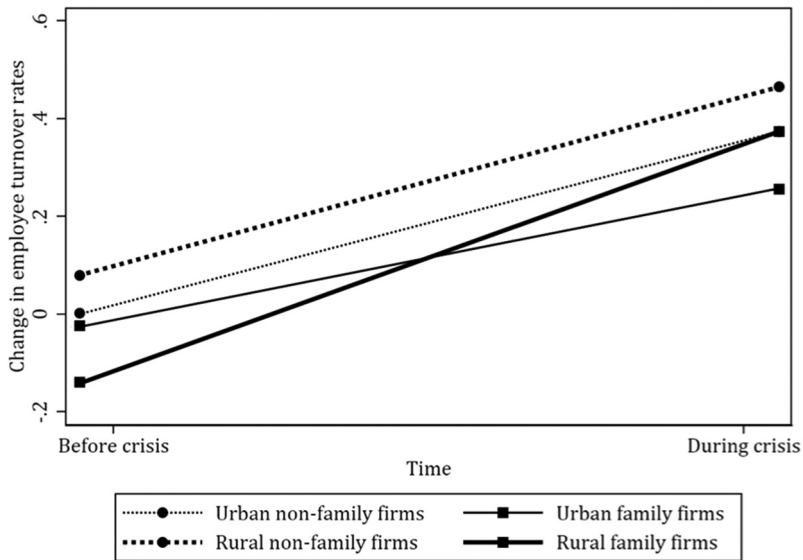


Figure 3a. Marginal effects of the crisis on the involuntary job turnover of family firms and nonfamily firms across the rural – urban context, 2004–2012. Reference group: urban nonfamily firms before the crisis.

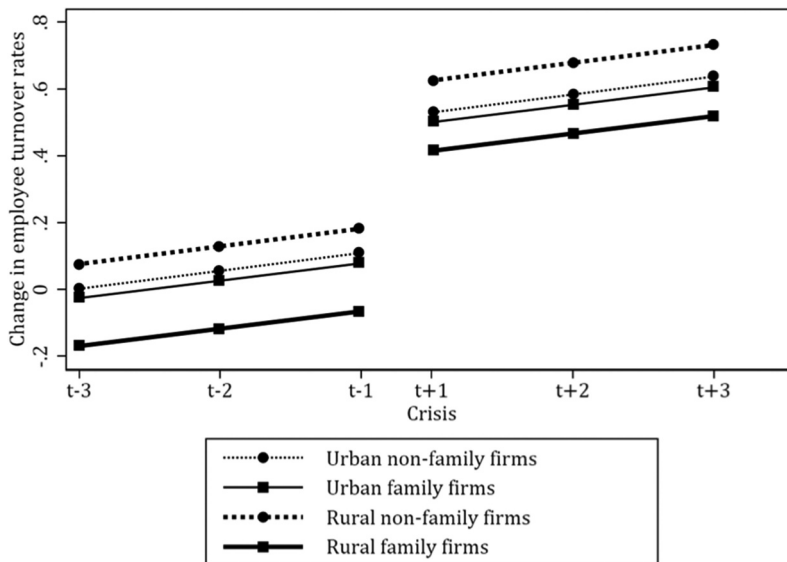


Figure 3b. Comparative levels of involuntary turnover three years before versus three years after the onset of the crisis. Family firms and nonfamily firms across the rural – urban context, 2004–2012. Reference group: urban nonfamily firms three years before the crisis ($t-3$).

Discussion

Challenging times such as pandemics, natural disasters, and financial crises have far-reaching consequences for societies. Recessions lead to increased unemployment, and the labour market depends on healthy businesses to recover (Trahms, Ndofor, and Sirmon 2013). This paper has furthered our understanding of firm behaviour in times of crisis by examining the relationship between firm ownership and location in relation to involuntary employee turnover. We compare

differences in layoffs between privately held family firms and nonfamily firms in rural and urban areas of Sweden during the latest financial crisis. A matched sample of over 120 thousand firms was used to test our three hypotheses. First, the global financial crisis was found to be significantly related to increased involuntary employee turnover. This confirms previous knowledge on the societal effects of financial downturns (e.g. Doern, Williams, and Vorley 2019; Lambert and Van Reenen 2021). Second, family firms behaved differently than nonfamily firms by demonstrating higher employee retention. This supports the claim that family firms see employees as an important stakeholder group. Considering previous mixed results, our findings thereby support the positive view of family businesses as reliable, stable employers (e.g. Amato et al. 2021; J. Block, Fisch, and Praag 2018; E. Stavrou, Kassinis, and Filotheou 2007) over the negative view of family businesses as unfavourable employers (e.g. Neckebrouck, Schulze, and Zellweger 2018; Vardaman, Allen, and Rogers 2018; Verbeke and Kano 2012). This positive family firm behaviour is explained by their pursuit of long-term goals and striving to preserve their SEW (e.g. Cruz and Justo 2017; Chrisman et al. 2012; Laffranchini et al., 2022). Considering this result, family businesses are important for social sustainability given their superior employee retention during times of crisis.

Urban versus rural areas

Comparing urban and rural areas, we also find that family businesses in rural areas have a higher relative increase in involuntary employee turnover than family firms in urban areas. This finding needs to be contextualized, as it is necessary to consider the initial relative levels of turnover within this group. Through this, it can be inferred that rural family firms had an approximately 22% lower involuntary turnover before the crisis than other firms. Accordingly, although rural family firms are the most severely impacted by the crisis, they still exhibit a lower relative level of involuntary job turnover than urban family firms and even their nonfamily counterparts, both in urban and rural contexts. In other words, due to their exceptionally low turnover levels prior to the crisis, rural family firms are still found to retain more employees than any other group in absolute terms. This can be understood as occurring because they exhibit the highest local embeddedness coupled with resource scarcity in terms of human capital. During the crisis, however, rural family firms face a higher potential loss of SEW due to the higher socioemotional value attached to their survival combined with a higher risk of failure. Therefore, compared to urban family firms, rural family firms are more likely to take necessary measures to prevent firm failure and the ultimate loss of SEW by a drastic increase in involuntary employee turnover. This drastic measure can, however, be seen as a last resort to secure long-term survival, which is equally important for the prosperity of rural areas.

Our study offers important contributions by providing a more nuanced understanding of firm behaviour during times of crisis, with a particular focus on family firms' behaviour in different contexts. To the family business literature, we first contribute new insights into the mixed question of how family firms treat their employees. Our results support the view that family firms provide better job security than other ownership forms (e.g. J. Block 2010; J. Block, Fisch, and Praag 2018; J. H. Block et al. 2019; K. Kim et al. 2020; E. Stavrou, Kassinis, and Filotheou 2007) by demonstrating that family firms are generally less inclined to lay off employees during times of crisis. This finding is integrated and corroborated by the observation that family firms in absolute terms exhibit the highest employee retention both before and during the financial crisis. Furthermore, we contribute to a more fine-grained understanding of differences in family firms' behaviour, supporting the idea that family firms undertake drastic measures when the potential SEW loss due to a possible failure rises above a given threshold (e.g. DeTienne and Chirico 2013). Our results extend the implications of previous work on family businesses' retrenchment responses when firm survival is at risk (Casillas et al. 2019).

Theorizing about the role of SEW

Our analysis, focusing on private family firms and with geographic location as a moderator, contributes to the further conceptualization of how family firms consider SEW as a reference point in their decisions, especially in times of crisis (e.g. Nason, Mazzelli, and Carney 2019; Symeonidou, DeTienne, and Chirico 2022). We infer that the extent of perceived SEW loss due to a business failure is contingent on the location of the business, and this is due to the combination of two factors: the socioemotional value of the potential loss for the family and the likelihood that such loss occurs with business closure. Family owners of firms located in rural areas are likely to 'suffer' more from the failure of their businesses for several reasons related to the salience of family identity and family role in the community; therefore, they will be more likely to activate retrenchment measures than family owners in urban areas. In comparison to previous findings (e.g. K. Kim et al. 2020) indicating that family firms lay off fewer employees in rural areas, we provide more detailed insights by measuring differences in behaviour between rural and urban firms facing the same conditions (exogenous shock). In partial contrast with previous analyses, we contend that family owners in urban areas will experience a relatively lower loss of SEW from a possible business failure, given that the dimension of the 'community' among urban family firms may be combined with more typical factors of the urban culture, which refer to 'market' and 'bureaucracy' (Astrachan 1988). This makes family owners relatively more propense to interpret the closure of the firm as a business lifecycle event, which could give room to new initiatives from family members. This aspect is related to a shifting of SEW as a reference point (e.g. Nason, Mazzelli, and Carney 2019, 2019) for urban family firms, whereby SEW-related considerations related to survival become less salient. These arguments are in line with more recent conceptualizations of the role of SEW in family owners' decision making. In particular, Craig and Newbert (2020) propose a view of SEW-inspired decision making as a balance of self-interest (by family owners) and other-interest (by internal and external stakeholders). This balance varies across family firms and can take different forms according to specific contingencies. Our results lead us to theorize that the level of local community embeddedness is a key contingency in this perspective. We propose that the higher the level of local community embeddedness is, the higher the ability of family owners to assess the impact of their decisions on internal and external stakeholders, which Craig and Newbert (2020, 6) call 'sympathy', referring to Adam Smith's concept (1976). This in turn improves the capability of family owners to make decisions that balance self and other interests. In the case of rural family firms, layoff behaviour can be seen as a decision that involves a complex balance among owners' interests and internal/external stakeholders' interests, with the aim of preserving the long-term viability of the organization. Specifically, owners decide to sacrifice their own interest (from the point of view of the reputation in the community) and stakeholders' interests (especially regarding the employees and their families in the community), in favour of another dimension of owners' self-interest (economic survival) but also, especially, in favour of the broader community interest in the long term (the firm continues to operate in the community, with positive spillovers potentially coming back in the future).

Practical implications

The practical implications of our contributions include a cautionary tale for family businesses in rural areas during the crisis since they have the inclination to retain their employees, which can jeopardize the survival of the business and threaten their legacy and employees' job security. This constitutes a delicate balance of preserving the reputation and good relations with employees without endangering business longevity. Policymakers are advised to acknowledge the 'cushioning effect' of family firms during crises because they provide major contributions to social sustainability and especially aid in the achievement of prosperity in rural areas. Crisis packages should therefore be formulated to better adhere to the needs of family firms.

Limitations and future research

The limitations of this study need to be recognized. We have studied a specific crisis in a particular institutional setting. In particular, the generalization of our findings to other types of crises in other institutional settings is uncertain. Additionally, we acknowledge our inability to control for firm-specific factors, such as entrepreneurial skills. Moreover, as the crisis impact is estimated over several years, it is unable to fully estimate the heterogeneous impact of the crisis over time.

Understanding firm behaviour during a crisis is as relevant as ever, and there are many avenues for further research. We need a deeper understanding of how and why different types of firms decide on employee layoffs among other strategies for crisis management. What information are those decisions based on, and what stakeholders are considered and involved in the decision-making? Time and level of analysis are also of the essence; we know little about which crisis behaviour generates the best results in the short-, mid-, and long-term, and what are the consequences for individual firms, communities, and the broader society.

There is also a need to examine more in depth what happens in firms operating in rural areas during times of crisis, when firm survival is at stake. On the one hand, family firms are more reluctant to dismiss their employees, particularly since they tend to develop 'overembeddedness' in rural areas (Pittino et al. 2021). On the other hand, rural firms are also more sensitive to potential SEW loss due to business closure, which makes them more likely to adopt drastic measures in terms of layoffs. In-depth qualitative analyses are needed to explore how this tension manifests itself in actual decision making at the firm level.

Notes

1. Rural regions have low population and firm density as well as resource scarcity, making them relatively poor. Urban regions have high population and firm density as well as resource abundance and are, conversely, relatively rich (Karlsson 2018).
2. The information about the company Kinnarps AB is retrieved from their webpage and their press releases in Swedish media (<https://www.kinnarps.se>). The population of the community Kinnarp is based on Statistic Sweden data from 2020 (<https://www.statistikdatabasen.scb.se>).
3. By focusing on involuntary turnover – rather than overall job turnover – we are able to generate a lower bound on the displacement effects of the crisis by only considering the change in confirmed displacements, rather than any change in employment. It is likely that additional employees took voluntary measures to change their employer in anticipation of the crisis effects.
4. The ISCO-88 categorization allows us to distinguish between 390 distinct occupational codes, allowing for a fine-grained analysis of job flows in and out of each business.
5. For firms operating in multiple industries, this refers to the industry of its largest plant or subsidiary in terms of sales.
6. By adopting a data-driven identification strategy, we follow the growing literature on entrepreneurship that utilizes data-driven methodology (Coad and Karlsson 2021; Coad and Srhoj 2019; Karlsson 2021).
7. Another prominent factor related to crisis management that has been identified in the literature is CEO tenure (Graf-Vlachy, Bundy, and Hambrick 2020). However, although used in initial estimates, the variable proved to not add to the empirical model in excess of CEO age due to high collinearity between measures. Meanwhile, when included in isolation, the measure also proved inferior in terms of model performance. Therefore, for the sake of model parsimony, the variable was excluded from the specification.
8. A = Earnings Before Interest and Taxes/Total Assets (measures the productivity of firm assets); B = Net Sales/Total Assets (sales-generating ability of firm assets); C = Book Value of Equity/Total Liabilities (measures the potential for insolvency); D = Working Capital/Total Assets (measures net liquid assets relative to total capitalization); and E = Retained Earnings/Total Assets (measures the amount of reinvested earnings and/or losses in the firm; Altman 1983).

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