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Does CEOs' prior experience in global crises matter for family firms in their next crisis? Emotional and rational advantages across cultural contexts

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Abstract

Purpose – This work analyzes the antecedents that explain family-owned firms' resilience during an external global crisis. Our research proposal contends that a CEO's successful experience in managing a previous external global crisis will increase a family firm's performance when facing another global crisis. On the one hand, we argue that a rational advantage exists as CEOs' past experience in external crises will increase their willingness to invest in identifying environmental challenges and aligning the business strategy with digital transformation. On the other hand, we claim that an emotional advantage exists because a CEO who has survived other global external crisis will be able to increase family identification with the security of having succeeded previously. These advantages of a CEO's experience will vary depending on the national cultural context. In countries with high individualism, the impact of a family firm's CEO will be higher than in collectivist ones.

Design/methodology/approach – We test our hypotheses using SEM analysis on a dataset of 1,548 firms, a survey collected globally by the STEP Global Family Business Survey in 2021.

Findings – CEOs' experience in previous global crisis impacts family firms' resilience in a new crisis. The experience provides a rational advantage through digital alignment of the family firm, enhancing resilience, but not an emotional advantage, boosting family firms' identification and enhancing resilience. The direct effect of CEOs experience on resilience during a new crisis increases in highly individualistic cultures.

Originality/value – The quantitative and multi-country evidence of the role of family firms CEO experience in achieving resilience.

Keywords Resilience, Individualism, CEO experience, Digital alignment, Family firm identification

Paper type Research paper

Introduction

The new century has brought with it a series of external disruptive events, such as the global financial crisis (GFC) (2008–2012), the COVID-19 pandemic, and the energy crisis resulting from the Russian-Ukraine war. Each of these crises has posed significant challenges to firms' survival and recovery, i.e. to resilience outcomes, which strategic researchers have sought to understand (Annarelli and Nonino, 2016; DesJardine *et al*., 2019; Duchek, 2020). As a consequence, the factors that explain resilience have attracted growing interest (DesJardine *et al*., 2019; Iborra *et al*., 2020), and since family firms (FFs) account for so much of the world economy, several recent studies have explored the particularities of resilience in family businesses when facing global crises [1] (e.g. Amore *et al*., 2022; Hadjielias *et al*., 2022; Rivo-Lopez *et al*., 2022; Zukowska *et al*., 2021). This research stream states that FFs may differ from other businesses in how they respond to these external challenges (Calabro *et al*., 2021;

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Le Breton-Miller and Miller, 2022; Zahra, 2022) and that FFs CEOs play a significant role in successfully navigating disruptive events (Minichilli *et al.*, 2016). In this line, Smith *et al.* (2024) highlight, through a case study, how a family firm CEO's prior experience with numerous adversities influences two key systems—the family and the firm— both of which are crucial to achieving FF resilience.

However, the prior experience of FF CEOs in navigating global crises may not be a panacea, given the differences in their nature as well as their main causes and consequences (Su and Junge, 2023); as March (2010, p. 2) points out, "experience is often ambiguous and the inferences to be drawn from it are unclear". In fact, researchers suggest that overcoming a firm's crisis, e.g. failed performance, demands the replacement of the CEO. Thus, it is essential to gain insight into the potential advantages derived from the experience of FF CEOs in previous global crisis in order to ensure a firm's survival in the next disruptive event. We argue that in the context of an external global crisis, a firm's decline can be mainly attributed to external causes and we propose that experienced CEOs can bring rational and emotional advantages that are relevant to FF resilience outcomes.

To address the question regarding the advantages of CEOs' experience in the face of a new global crisis and its impact on the resilience of FFs, we draw on the following: (1) new insights into how CEOs' experience shapes the actions and behaviors of firms, as outlined in the upper echelons theory (Hambrick and Mason, 1984); (2) developments in the socioemotional wealth (SEW) theory to identify the mechanisms through which CEOs' experience may generate advantages in FFs.

On the one hand, we expect a rational advantage of prior experience. Global crises, such as the GFC and the COVID-19 pandemic, highlighted the importance of responding to disruptions quickly, using information and knowledge to identify opportunities and threats (Williams *et al.*, 2017), with researchers arguing that the ability to adapt to new environmental jolts is improved by digital alignment (DA), i.e. aligning the firm's business strategy with its digital transformation. Therefore, DA helps to sense new disruptive events and confront their challenges (Li *et al.*, 2021). Following the upper echelon research, which supports the impact of a CEO's experience on the decisions and behaviors of firms (Finkelstein *et al.*, 2009) and that some types of CEO experience have been linked with the likelihood of digitalization (Qin and Lin, 2024), we argue that CEOs with experience in past crises recognize the need to react quickly and will invest in DA. We consider this a *rational advantage*: CEOs' experience will increase the DA of the FF, thereby enhancing the resilience outcomes in new global crises.

On the other hand, we expect an emotional advantage from prior experience in surviving such events. We contend that CEOs who have successfully navigated previous global crises will bring a sense of security and confidence to the FF, along with a feeling of being on solid ground rather than quicksand (Iborra *et al.*, 2020). Under previous stressful events, these CEOs were able to connect with and rely on their external network to obtain the information and resources needed to weather the storm. These successful experiences will offer emotional support to CEOs who overcame a previous disruptive event, helping them feel secure in their capacity to manage a crisis, which they may transmit to FF members and networks. Based on the SEW perspective, we argue that this emotional effect could encourage a stronger identification with the FF and its decisions and behaviors, fostering a shared vision and reducing equivocality in decision-making processes. Identification with the FF, i.e. the close affinity and bonds of the family with the firm, is one of the key dimensions of the SEW proposal (Berrone *et al.*, 2012; Gomez-Mejia *et al.*, 2007). We consider this an *emotional advantage*: CEOs' experience in a prior crisis will boost identification with the FF, thereby enhancing the resilience outcomes in new global crises.

The advantages associated with the experience of FF CEOs may differ across national cultures. The literature review of Bornhausen (2022) highlights the relevance of national culture in explaining the diverse relationships that exist between family firm characteristics and FF outcomes. For example, Au *et al.* (2018) provide evidence that the impact of FF CEOs on renewal differs across national cultures (Kerai *et al.*, 2023; Liu *et al.*, 2023). Specifically, we focus on one dimension of national culture, individualism, because it shapes the extent to which CEOs influence firm outcomes (Crossland and Hambrick, 2011; Pucheta-Martínez and Gallego-Alvarez, 2024).

To summarize, the purpose of this paper is to examine how a CEO's previous experience in managing external global crises influences FF resilience outcomes during another such event. Based on a sample of 1,548 firms, using a survey collected globally by the STEP Global Family Business Survey, we apply Structural Equation Modeling (SEM) techniques to analyze the role played by CEOs who have successfully surpassed an external global crisis -the 2008 GFC- with their crisis response involving both a rational advantage by enforcing the DA of their firms and an emotional advantage by increasing identification with the FF. Both advantages increase the chances of achieving resilience during a new global crisis, such as COVID-19, and differ between high- and low-individualistic countries.

This study makes several contributions. Due to the number and relevance of global crises in the last century, improving our understanding of what explains FF resilience is a must. First, the study provides a new and positive perspective on CEOs' experience in the resilience of FFs, offering a theoretical explanation of how CEOs' prior experience in handling external global crises can impact a firm's recovery. By opening the black box of CEOs' experience, we relate this experience to a rational advantage linked to digital alignment and to an emotional one tied to identification with the FF, which varies across national cultural contexts. This positive perspective on experience raises questions about well-known recommendations to replace top management when firms confront crisis. Second, our study contributes to the growing literature on organizational resilience by presenting CEOs' experience as an antecedent of FF resilience. Furthermore, digital technology and its alignment with strategy are also relevant in fighting crises effectively and achieving FF resilience. Because the process of digital transformation involves changing firm value creation paths and includes structural changes, CEOs face numerous barriers to successfully implementing and integrating it into strategic decision-making. Nonetheless, our evidence clearly suggests that DA enhances performance under a crisis context.

Theoretical background

The rational advantage of CEOs' experience in a global crisis: digital alignment and FF resilience outputs

Information technologies (IT) are strategic business tools essential to firms and central to their competitive strategy (Clemons and Row, 1991; Mata *et al*., 1995; Porter and Millar, 1985). IT can serve as a digital options generator in contemporary organizations (Sambamurthy *et al*., 2003), which need to undergo a digital transformation process in order to pursue innovation and remain competitive (Ferreira *et al*., 2019; Hinings *et al*., 2018; Leonardi, 2020). The process of digital transformation is viewed as disruptive, triggering strategic organizational responses that alter value creation paths while the corresponding structural changes and organizational barriers of this process have to be navigated (Vial, 2019). Digital transformation activities leverage digital technology to (re)define an organization's value proposition, leading to a new organizational identity (Wessel *et al*., 2021). Finally, digital transformation also affects the alignment between IT and business strategy, i.e. the degree to which business strategy, IT strategy, business infrastructure, and IT infrastructure fit and are integrated (Henderson and Venkatraman, 1993). Therefore, high alignment means the timely application of appropriate IT in given situations, and that these actions align with the organization's business strategy, goals, and needs (Luftman and Brier, 1999).

Nowadays, digital technologies directly affect the mechanisms through which businesses create and capture value (Autio *et al*., 2021; Drnevich and Croson, 2013; Verhoef *et al*., 2021). Firm performance can be influenced by these technologies through developing dynamic organizational capabilities (agility, digital options, and entrepreneurial alertness) and strategic processes (capability-building, entrepreneurial action, and *coevolutionary adaptation)*

(Sambamurthy *et al*., 2003). These dynamic capabilities and strategic processes influence a firm's ability to launch multiple and diverse competitive actions, which are antecedents of firm performance. A number of performance impacts are related to digitalization, including productivity enhancement, profitability improvement, cost reduction, and inventory reduction (Devaraj and Kohli, 2003). Furthermore, agility serves as the primary digital transformation mechanism for an organization's strategic renewal (Warner and Wager, 2019), with digitalization and gross investments in intangible assets increasing family firm agility exponentially (Skare and Soriano, 2021). In the case of disruptive events, such as the COVID-19 pandemic, digital technologies boost the resilience of firms during these occurrences (Autio *et al*., 2021) in that firms become strategically resilient by leveraging digitalization and agility as enablers (Miceli *et al*., 2021). In European family businesses, digital alignment has been shown to be associated with company performance (Issah and Calabro, 2024).

However, the inability to realize value from IT investments is partially due to the lack of alignment between the business and IT strategy. This strategic alignment is not a casual event but a process of continuous adaptation and change (Henderson and Venkatraman, 1993). According to Venkatraman (1994), the potential benefits of IT are directly related to the degree of change in organizational routines and to the managers' view of digital capabilities as a source of opportunity for redefining their strategies instead of as a threat to the status quo. A challenge facing senior executives is how to handle the opportunities and risks of digital transformation (Hess *et al*., 2016), both of which are involved in the process and which may be difficult to mitigate or anticipate (Amankwah-Amoah *et al*., 2021). Moreover, companies might not fully benefit from digital transformation due to the gap between formulating and implementing a strategy (Correani *et al*., 2020).

Researchers have used the term performance to define both intermediate process-level and final organizational measures, encompassing efficiency and competitive impacts (Melville *et al*., 2004). Tallon *et al*. (2000) argue that economic and financial measures fail to accurately assess the payoff of digitalization projects and suggest determining their value through executives' perceptions instead.

As evidenced by Li *et al*. (2021), aligning a firm's business strategy with its digital technology can help achieve market agility, thereby increasing its performance by being able to adapt to the new environmental jolts. These authors state that "It is acknowledged that firms embracing digital technologies are most likely to sense and react to internal and external opportunities and threats, identify and evaluate current and potential competitors in the business environment very quickly' (p. 699). Furthermore, Li *et al*. (2021) contend that strategic alignment and shared vision reduce equivocality in the decision-making process, enabling a firm to respond more effectively to environmental changes.

Thus, we can expect the following:

H1. The higher the degree of digital alignment, the higher the firm's resilience during a global external crisis.

Although certain firms can develop dynamic capabilities for sensing environmental changes and reacting agilely to new scenarios, digitalization allows them to respond more effectively to new consumers' needs through innovative products and services, enabling firms to make quicker decisions than before (Baines *et al*., 2019). However, digital transformation poses relevant challenges to firms and upper echelons, and in this regard, researchers contend that CEOs could play a crucial role in the digitalization process (López-Muñoz and Escribá-Esteve, 2022).

It is believed by Lengnick-Hall *et al*. (2011) that resilience after a crisis is influenced by the number of prior experiences a company has faced in disruptive events. In a similar sense, Su and Junge (2023) consider that a key feature of adverse events is their novelty, which implies that a firm may or may not have effective responses in its repertoire. Experienced CEOs are likely to have developed a set of cause-effect strategies for navigating and combatting the crisis that they can apply to future disruptive events.

In this sense, we can expect the following:

H2. A CEO's experience in dealing with an external global crisis will be positively related to the firm's resilience during a new global external crisis.

However, not all researchers share this positive view. This advantage based on the rational side of experience or learning effect through experience can have relevant shortcomings in certain situations, such as rare events. According to Zollo (2009), experience accumulation might not be the most effective learning mechanism when dealing with rare and complex strategic decisions. Under these circumstances, experience can be counterproductive in that causal ambiguity will intensify, i.e. uncertainty about cause-effect relationships that may change during different crises, increasing the chance of superstitious learning, a term introduced by Levitt and March (1988). In this line, March (2010) highlights that experience is not a good teacher in situations with few repetitions and complex causal relationships.

Global crises differ in their causes and effects. Su and Junge (2023) state that they vary in terms of emergence -gradual vs. acute-, novelty -non-novel vs novel- and severity -livelihood-threatening vs life-threatening-. Miklian and Hoelscher (2022) consider four types of external shocks – financial/economic, natural disasters, armed conflict and political violence, and societal insecurity that differ in the causes and type of disruption they bring to firms. For example, financial/economic shocks, like the 2008 financial crisis, often result in firms facing a reduction in access to finance, increased input costs, and a decline in demand. Natural disasters, such as the 2023 Turkish earthquake or Hurricane Katrina, usually cause physical damage to assets -factories, equipment, or disrupt supply chains-. Armed conflicts, such as the Russia-Ukrainian war, can trigger significant economic impacts like the energy crisis. Furthermore, their consequences include physical security, instability, financial and economic restrictions as well as disruptions in supply chains and logistics. Finally, the COVID-19 pandemic, differing in its causes and consequences, represents a health crisis with unimaginable economic repercussions derived from lockdowns and imposed curfews in most countries.

While specific formulas are likely to change in each of these crises, we argue that CEOs who have successfully handled a precedent crisis are more prompt to increase their firm's capacity and agility through its DA to react to new environmental disruptions efficiently. Qin and Lin (2024) provide support for this statement. Drawing on upper echelons theory (Hambrick and Mason, 1984), they state that the international experience of a CEO positively influences digital transformation due to the impact of this type of experience on enhanced competency and tolerance to change. We consider that both channels -increased ability and tolerance to change-can be applied to a CEO's experience in a global crisis. We anticipate that these CEOs are more apt to overcome the barriers to digital transformation and promote their FF's digital alignment in order to obtain diverse, rich, and fast information from their network, having realized the importance of leveraging their connections and relying on their external network sources of information and resources for crisis management (Minichilli *et al.*, 2016). Thus, we can expect the following:

H3. A CEO's experience in dealing with an external global crisis will be positively related to the degree of digital alignment of the family firm.

The emotional advantage of CEOs' experience in a global crisis: FF identification and resilience

We assert that a CEO's successful management of a previous crisis will provide emotional support, enhancing the members of the FF's identification with the firm and, through it, the likelihood of resilience.

The SEW approach to analyzing family firms relies on the nonfinancial benefits attached to the ownership of the family firm (Gomez-Mejia *et al.*, 2007). According to Berrone *et al.* (2012), SEW serves to differentiate FFs and explain their behavior; these authors identify five key dimensions of SEW labeled as FIBER. Among them, the identification of family members with the firm is related to the strong relationship between the firm and the family. Family ownership fosters a sense of identity for the family and its members.

Empirical evidence suggests that this identification is closely linked to sustaining a positive family image and reputation (Sharma and Manikutty, 2005; Westhead *et al.*, 2001), and that image and reputation may come into play in specific events like a crisis. Identification is a key SEW factor connected to a family's desire for the firm's continuity and can lead to behaviors that help achieve resilience. Furthermore, when the FF considers that the external and distressful crisis could threaten SEW endowment and its non-financial goals, identification will increase efforts to be resilient (Alayo *et al.*, 2023). It is plausible that family members who strongly identify with the firm tend to seek options that decrease its likelihood of failure. The authors Mihotic *et al.* (2023) find that a strong identification with the business can provide an essential buffer during periods of crisis, helping attain resilience. In this situation, the FF may achieve a synergistic effect between the relevance of financial goals -to achieve performance- and the preservation of SEW. Thus, we can expect the following:

H4. FFs' identification will be positively related to their resilience during an external global crisis.

CEOs who were successful during a crisis feel secure about their capacity to overcome another (Smith *et al.*, 2024). Rivo-López *et al.* (2022) demonstrate that, in times of crisis, FFs establish stronger social and emotional bonds with their employees, which fosters their identification with the company. In addition, CEOs' experience in dealing with and surpassing a relevant global crisis, i.e. demonstrating success in crisis management, can legitimize their power and role as CEO in times of disruptive events (Calabro *et al.*, 2021). This enforcement of their power can help weather the storm and secure approval and engagement for the difficult decisions to be made (Smith *et al.*, 2024). This emotional advantage may also strengthen the family firm's shared vision and reduce equivocality in decision-making, facilitating commitment and cohesion (Cater and Schwab, 2008). Moreover, since CEOs' prior experience will help develop a stronger linkage and identification with the FF's decisions and behaviors, the firm's ability to respond to environmental changes will also be more effective. Therefore, we can expect the following:

H5. A CEO's experience in dealing with external global crises will be positively related to FF identification.

National cultural context and the role of the CEOs experience: Individualistic countries vs. Collectivistic countries.

The impact of CEOs in their firms varies in different cultural contexts (Liu *et al.*, 2023; Pucheta-Martínez and Gallego-Álvarez, 2024). National cultures influence how individuals behave and react, and how they understand the role of others and the role of the individual vs. the team when it comes to explaining decisions. Specifically, national cultural differences help to explain the relationships that exist between FF characteristics and outcomes (Bornhausen, 2022). One of the most well-known models of national cultures is Hofstede (1980), who describes six dimensions of national culture in his model: individualism vs collectivism; power distance; uncertainty avoidance; masculinity vs femininity; long-term vs short-term orientation; and indulgence vs restraint. Given that individualism is one of the most relevant aspects for decision-making, we mainly focus on this cultural dimension (IDV) (Crossland and Hambrick, 2011; Pucheta-Martínez and Gallego-Álvarez, 2024). As Huang and Lu (2023) point out, in nations where individualism is highly valued, the relevance of the individual is prioritized in decision-making. Thus, the impact of individual experience on FF decision-making may vary between individualistic and collectivistic countries.

Individualistic societies are characterized by the fact that the individual's interests prevail over those of the groups. This dimension is defined by Hofstede (1991, p. 51) as follows: "Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong and cohesive in-groups, which throughout people's lifetimes continue to protect them in exchange for unquestioning loyalty".

In individualistic societies, tasks prevail over relationships (Hofstede, 1991). We can expect different responses to conflict or problems, which may be addressed directly or avoided. Labor relations are somewhat paternalistic or focus on contribution-compensation schemes and diminish the importance of the social or group dimension or, on the contrary, emphasize the individual in decisions, opinions, or management style (Hofstede, 1991). In summary, we can expect that the rational advantage of the CEOs' experience will be stronger in individualistic societies -higher relevance of the individual experience in decision-making- while this impact will be diminished in respect to the emotional advantage -lower relevance of the social group.

H6. The impact of CEOs' experience in dealing with external global crises will vary in different national cultures in such a way that the more individualistic the national culture, the greater the impact on resilience.

Figure 1 represents our theoretical model.

Methods

Data collection and sample description

Family business data were collected globally by the STEP Global Family Business Survey 2021, Regeneration edition. The STEP Project Global Consortium is an academic initiative launched to explore entrepreneurial practices and offer the best support to entrepreneurial families across generations. This survey relies on a convenient sampling strategy replicated in multiple countries and regions. Affiliated national teams identified potential respondents for the project by considering their own country's industry characteristics and business structure. The survey was designed by a knowledgeable and multidisciplinary research team with more than ten years of experience in conducting qualitative and quantitative research. Previously validated scales were used for each question in the questionnaire, which was first written in English and then translated into 13 other languages. The survey was launched between September and November 2021 to better understand how family businesses regenerate after the global pandemic crisis and how they perform. When the survey was closed, a total of 2,441 companies had completed the questionnaire. For this study, to ensure the quality and representativeness of the data, we selected firms with more than 10 employees from countries where at least 30 questionnaires were received. The study sample consists of 1,548 companies (see Appendix 1).

Variables description

In studies on resilience in external crises, it is common to use variations in sales, stock prices, profitability, or employees as proxies of resilience since this concept is a latent variable that

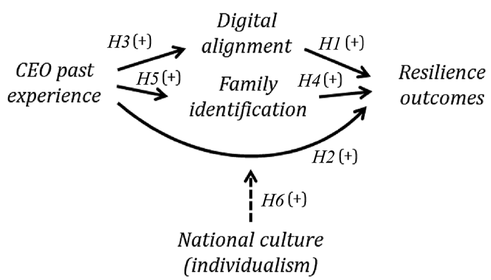

Figure 1. Theoretical model. Source: Authors' own creation

cannot be directly observed, thus explaining why past research has inferred it indirectly from its impact on firm outcomes (Safon *et al.*, 2024). In this paper, we have approximated resilience outcomes with a financial performance construct.

Resilience outcomes were measured through items adapted from Eddleston *et al.* (2008) using a perceptual scale of the firm performance compared with competitors in the last three years. *Digital alignment* was measured with a multi-item scale adapted from Li *et al.* (2021). This scale measures the degree to which the firm's digital transformation is aligned with the strategic management of the family business. *CEO experience in crises* is a dichotomous variable that takes the value of 1 when the CEO was in charge during the Great Recession and the COVID-19 crisis and the value of zero if the CEO was not in charge during the Great Recession. *Family identification* was measured with a multi-item scale adapted from (Berrone *et al.*, 2012; Gomez-Mejia *et al.*, 2007). *Individualism* was taken from the values provided by www.hofstede-insights.com (accessed April 2024). *Firm size* is used as a control variable measured by the logarithm of the number of employees in 2020.

The mediating and dependent variables are latent constructs measured by reflective items. The scales were subjected to a depuration process that resulted in the exclusion of some items. The confirmatory factor analysis for the final measurement model gives a good fit, with indicators above the threshold recommended by the literature ($\chi^2 = 720.11$, $df = 62$, $p = 0.00$, AGFI = 0.89, CFI = 0.96, RMSEA = 0.08). In addition, we evaluated the discriminant validity of the measures by constraining the interfactor correlations to unity (taken in pairs) and performing chi-square difference tests. A significantly lower chi-square for the model without restrictions on the interfactor correlations demonstrates the existence of discriminant validity. The items and their loadings are reported in Appendix 2.

Analysis

A cross-sectional correlational design was used to analyze the relationships between variables. The empirical test is based on the positivist paradigm, using quantitative data and statistical analysis to test hypotheses. Due to the existence of mediating variables, we use SEM techniques (Hair *et al.*, 2010) implemented with IBM SPSS AMOS 28.0.0 Graphics software. SEM allows for the simultaneous estimation of direct and indirect relationships and the evaluation of the model's overall fit. According to Sidhu *et al.* (2021), SEM is currently the preferred technique for conducting mediation analysis, as it enables the analysis to be performed in a single run, unlike other approaches, such as the stepwise approach proposed by Baron and Kenny (1986). The moderating effect suggested by hypothesis 6 is tested using SEM sub-group analysis.

Results

Table 1 shows the descriptives, and Figures 2 and 3 provide the results of the hypothesis testing.

Table 1. Descriptives

		Mean	S.D.	1	2	3	4
1	CEO past experience	0.55	0.50				
2	Firm size (log)	4.01	2.05	0.06			
3	Family identification	−0.02	0.77	−0.02	−0.03		
4	Digital alignment	0.11	0.77	0.13	0.06	0.20	
5	Resilience outcomes	0.35	0.91	0.05	0.18	0.08	0.27

Note(s): Correlations greater than |0.05| are statistically significant at $p < 0.05$
Source(s): Authors' own creation

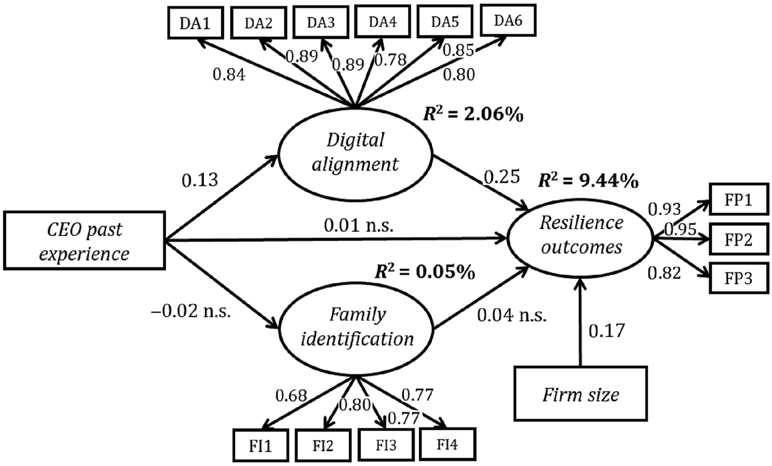

Figure 2. Tested model. Note: see items in Appendix 2. Source: Authors' own creation

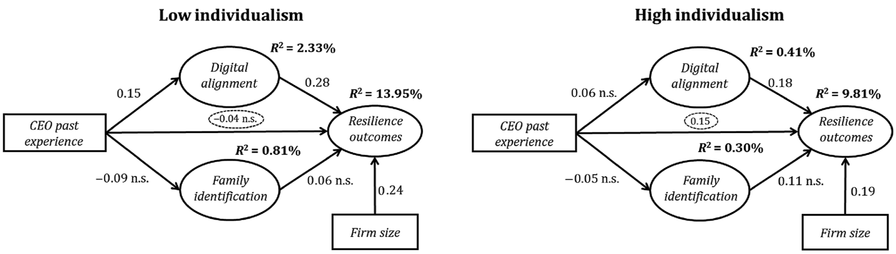

Figure 3. Tested sub-models. Source: Authors' own creation

Figure 2 illustrates the results of the mediation model for the whole sample. Here, hypotheses 1 to 5 are tested across the entire sample (N = 1,548). The model shows good levels of fit (χ^2 = 803.34, df = 85, p = 0.00, AGFI = 0.90, CFI = 0.95, RMSEA = 0.07), with the mediating, independent, and control variables explaining 9.44% of the dependent variable. In this model, firms' *Digital alignment* has a significant positive direct effect on firms' *Resilience outcomes* (0.25, $p < 0.01$), while *CEO past experience* in a crisis has a significant positive direct effect on *Digital alignment* (0.13, $p < 0.01$). Thus, hypotheses 1 and 3 are supported. Meanwhile, *CEO past experience* has no statistically significant effect on *Family identification* (−0.02, $p > 0.05$), nor does the latter influence *Resilience outcomes* (0.04, $p > 0.05$). Consequently, hypotheses 4 and 5 are not supported. Contrary to our expectations, *CEO past experience* does not have a significantly direct relationship with *Resilience outcomes*. However, given that its indirect effect on *Resilience outcomes* (standardized indirect effect = 0.031) is statistically significant at $p < 0.01$ (tested by bootstrapping), hypothesis 2 is partially supported (via indirect effects). Finally, the control variable (size) is statistically significant, and the model with only this variable explains 3.38% of the *Resilience outcomes*.

Figure 3 presents the results of the subgroup analysis carried out with SEM techniques. This analysis serves to test the moderating effect of the *Individualism* variable. The sample was split into three groups based on the level of individualism of their countries: high (values above the mean plus one standard deviation), medium (values between the mean minus 1 s d and the mean plus 1 s d), and low (values below the mean minus 1 s d). A model with the groups "high individualism" (N = 308) and "low individualism" (N = 314) was estimated without restrictions ($\chi^2 = 473.86$, $df = 170$, $p = 0.00$, AGFI = 0.87, CFI = 0.94, RMSEA = 0.07), while another model imposed an equality constraint on the parameter associated with the relationship between *CEO past experience* and *Resilience outcomes* ($\chi^2 = 480.15$, $df = 171$, $p = 0.00$, AGFI = 0.87, CFI = 0.94, RMSEA = 0.05). The significance of the difference in χ^2 was then assessed, and the test was found to be significant ($\Delta\chi^2 > 3.84$), leading to the conclusion that the models differ for high and low levels of *Individualism*. Furthermore, as shown in Figure 3, the parameter associated with the relationship between *CEO past experience* and *Resilience outcomes* is greater in the "high individualism' model and statistically significant, therefore supporting hypothesis 6. Appendix 3 shows total and indirect effects for the total sample, as well as for the low and high individualism sub-samples.

Robustness analysis

In order to add robustness to our results, the model in Figure 2 was tested with another resilience construct based on growth items: growth in sales, market share, and number of employees. Although the results turned out to be similar, the relationship between *Family identification* and *Resilience outcomes* was found to be significant, with a normalized beta of 0.08.

Discussion

Our results demonstrate the existence of full mediation. The independent variable (*CEO past experience*) positively influences the dependent variable (*Resilience outcomes*) but not directly; instead, it does so through other (mediating) variables. The influence of the independent variable, despite having a positive and significant bivariate correlation with the dependent variable ($r = 0.05$, $p < 0.05$) and a total impact that is also significant (STE = 0.04), primarily occurs through the *Digital alignment* mediator (SIE = 0.03). Thus, this mediator acts as the true mechanism that explains the positive impact on outcomes. This finding is relevant because it suggests that merely having an experienced CEO is not enough; what is important is that their experience is reflected in appropriate strategic decisions regarding digital and business strategy alignment.

Our results are partially contrary to expectations concerning *CEO past experience*. While Hypothesis 3 is supported (beta = 0.13, $p < 0.05$), Hypothesis 2 and Hypothesis 5 are not (0.01 and −0.02, $p > 0.05$, respectively). In a study also using the STEP database, Issah and Calabro (2024) found that a CEO's years of experience was a statistically significant predictor of FF performance, even when controlling for the *Digital alignment* variable. Differences in our results may be due to sample design, model specification -direct versus mediation model- and variable definitions, among other factors.

On the other hand, although contrary to expectations in the total sample, our result is consistent with the predictions for the subsample of companies located in countries with high individualism. Hypothesis 6 predicts a moderating effect of national culture, measured using the individualism variable. Our results support this hypothesis and demonstrate that in countries with high individualism, *CEO past experience* is a predictor whose main effect is direct (see Appendix 3).

Hypothesis 4 predicts a positive impact of the SEW factor related to *Family identification* on *Resilience outcomes*. Our results do not support this hypothesis despite the significant bivariate correlation between these two variables ($r = 0.08$, $p < 0.05$). These results contradict expectations based on the conclusions of Mihotic *et al.* (2023) but align with those of Issah and Calabro (2024), who found no positive evidence of the relationship between SEW construct and *Resilience outcomes*. Mihotic *et al.* (2023) discuss how non-economic goals, strong emotional commitment, and long-term orientation can provide family businesses with a buffer against disruptions and financial shocks. They also mention that the social capital of these businesses is generally embedded within the family, fostering trust and creativity in problem-solving. However, while their study addresses aspects related to emotional commitment and social ties within family businesses, it does not directly examine *Family identification* as a specific dimension of SEW. A possible explanation for our results could be model misspecification, which may be inferred from the strong correlation between *Digital alignment* and *Family identification* ($r = 0.20$). Given this strong correlation in the context of our research, one could question whether *Family identification* might be a legitimate antecedent of *Digital alignment*, further reinforcing *Digital alignment*'s mediating role in business resilience. We tested an additional model based on this assumption, which yielded good fit indicators. The *Family identification* → *Digital alignment* path is positive and statistically significant (beta = 0.20, $p < 0.05$), and the total effect of *Family identification* on *Resilience outcomes* is significant (STE = 0.08). This would allow us to consider Hypothesis 4 as partially supported.

Finally, Hypothesis 1 predicts a positive impact of *Digital alignment* on *Resilience outcomes*. Our results support this hypothesis, and these findings are consistent with those of Issah and Calabro (2024) in terms of direction, significance, and effect size.

Conclusions

The new century has brought about significant changes for all of us and created new challenges in the form of worldwide crises for family firms that demand our attention (Zahra, 2022). Several unresolved questions remain, including what explains FFs' results (Calabro *et al.*, 2021; Le Breton-Miller and Miller, 2022). In this study, we developed a model showing that a CEO's experience in successfully dealing with previous crises can be a key source of performance, and we provide evidence that this CEO attribute can impact the FF's recovery after a new crisis.

We contend and demonstrate that a CEO's prior experience in global crises influences FF resilience outcomes. This finding aligns with the case study of Smith *et al.* (2024), which gave a critical role to the FF CEO in surpassing multiple adversities influencing two key systems—the family and the firm— allowing for resilience.

The proposition that FF CEOs learn from their experience in managing crises and that this learning is positive indicates that, at least in cases where the firm confronts an external worldwide crisis, replacing FF CEOs can be counterproductive. This outcome is consistent with Chen and Hambrick's (2012) fit/refit model, emphasizing the importance of aligning the CEO's capabilities with the demands of the situation rather than seeking a new replacement. When faced with extreme supervening crises, having previous experience is a critical factor.

However, in what ways does the experience of a CEO have a role to play? Thus, can CEOs learn through experience from a crisis of a different nature, whose causes and consequences differ from the new crisis? In that sense, our evidence supports one of the paths through which the experience of a CEO in managing external global crises helps to improve a firm's performance. The first path of advantage is what we call a rational advantage, involving an increase in the FF's DA. CEOs with a clear understanding of different business processes can sense from experience where and how much business value can be created by digital technologies. Because digital transformation is a path-dependent process, CEOs' situated experience is extremely valuable (López-Muñoz and Escribá-Esteve, 2017, 2022). Experienced CEOs will likely have a distinctive understanding of incremental potential opportunities compared to someone who recently joined the FF. Based on a sample of 1,548 firms, we show how CEOs who have successfully overcome the GFC enforce their FF's digital alignment. Our evidence clearly suggests that DA enhances performance under a crisis context. While digital transformation is a process that involves changing firm value creation paths and includes structural changes, CEOs' experience in handling other global crises helps them overcome the barriers to achieving digital transformation and including it in strategic decision-making. In that sense, whereas other firm actions can be more crisis-specific, this is not the case for DA. Our study shows that FFs that act according to the opportunities and threats brought on by disruptive and extraordinary crises are better equipped to deal with them. Furthermore, our findings indicate that FFs with greater strategic alignment in their digital transformation are associated with better chances of obtaining performance during a new crisis, which is consistent with the results of Issah and Calabro (2024).

Additionally, we present a second path of advantage, what we call an emotional advantage, in which CEOs' prior experience provides emotional support and security through the increase of family identification. Nonetheless, our results do not confirm this point.

Family identification with the firm implies that the family is tied to the organization. As stated by Berrone *et al*. (2012), the firm is seen by stakeholders as an extension of the family itself. The GFC was compared to the Great Depression, and firms faced considerable constraints in overcoming it. It is likely that family identification suffered due to the measures taken during the crisis that involved actions taken towards different stakeholders, such as employees (through temporary or long-term layoffs) or clients (through reductions and changes in the quality of the services and products they provided) (Pompei *et al*. (2019). Consequently, because of the nature of the disruption and the actions taken for survival, the experience provided by the GFC did not increase emotional support as we had anticipated.

Regarding the impact of FI on resilience outcomes, robustness analysis provides partial support for this relationship. It could be said that in a situation like the one we describe (recovery after a crisis), greater identification drives the family to prioritize growth rather than profitability, in that after a crisis, a long-term vision can focus on recovering sales and then efficiency. The additional analysis included in the discussion section opens a new pathway through which *Family identification* may impact FF resilience outcomes. It also reinforces the mediating role of *Digital alignment* in business resilience.

Finally, our evidence suggests that national context matters. FFs typically have more control and discretion over actions and resources (Gedajlovic *et al*., 2012). In the cases where the CEO belongs to the family, the likelihood that the firm will rely on a single decision-maker increases (Stanley *et al*., 2019). In countries with high individualism, we obtain evidence that CEOs' experience increases the likelihood of resilience during the crisis in coherence with Huang and Lu (2023). We support the findings of Crossland and Hambrick (2011), which posit that in a national culture that emphasizes the individual's role in actions and results, the individual' experience has a greater impact on resilience outcomes than in low individualistic countries.

In summary, FF resilience outcomes benefit from DA, while CEOs' experience in prior crises enforces DA. Thus, this study makes several contributions. First, it adds to the family firm research by offering a theoretical explanation for the effects of CEOs' experience on performance in the context of a global pandemic crisis. Consequently, this experience provides a rational advantage linked to digital alignment and an emotional one tied to FF identification. Second, our study contributes to the growing literature on organizational resilience by investigating CEOs' experience in managing crises as antecedents of FF resilience. Our results suggest that the term experience in management research is too fuzzy and that it requires specific attributes to clarify what experience is and when it is positive or negative.

Finally, we provide support for the relevant role that digital technology and its alignment with strategy can play in fighting crises effectively. Given that digital transformation is a process that involves changing firm value creation paths and includes structural changes, CEOs face numerous barriers in their pursuit of digital transformation and its integration into strategic decision-making. Our evidence clearly indicates that DA enhances performance under a crisis context.

Practical implications. Although an event such as COVID-19 is unlikely to take place to the same extent, other threatening and stressful events will occur and affect FFs. Understanding FFs' experience can help increase the chances of recovery by equipping the family firm with the necessary tools. The role of experience in crises seems relevant to performance, and thus, seeking diverse ways to involve a past CEO in decision-making could be key to the FF's future.

The cultural context also plays a crucial role. In countries with high individualism, the CEO's experience tends to have a direct greater impact on the resilience of the family business, as culture encourages reliance on individual experience to overcome crises. This suggests that crisis management strategies should be adapted to the cultural particularities of the environment in which they operate since the level of individualism will modify the CEO's fit with the situation according to Chen and Hambrick's (2012) model.

Limitations. The study has certain empirical limitations. We have not been able to control for aspects such as the pre-pandemic financial health of companies due to limited data in the STEP questionnaire. Additionally, while most of our constructs are based on well-known scales provided by the literature -Digital alignment, Family Identification, Size, and Resilience Outcomes-the measurement of CEOs' experience is a proxy that has not been directly observed nor evaluated in terms of positive or negative experience, which further research may improve. Nonetheless, the database contains a large number of firms from many industries and countries, allowing us to obtain reliable statistical contrasts.

Future research agenda. The findings and conclusions of this work provide valuable insights into the role of specific experience and its impact on recovery during crises. Several future research directions can be derived from these conclusions. An in-depth study could be conducted exploring how and when experience in dealing with a crisis matters, which may require establishing a connection between factors such as the nature of the crisis and the influence of past experiences. Thus, further studies could analyze the impact of CEOs' experience on survival, recovery, and long-term performance across various crises and national contexts. Finally, the study's limitations carry important implications for future research.

Notes

1. We focus our research on resilience to global crises, wild card crises, black swans, and external disruptive global events. Resilience in family firms in terms of their ability to navigate adversity to attain transgenerational success has been the focus of family firms research (see, for example, the review of Yilmaz *et al*. (2024)).

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(The Appendix follows overleaf)

Appendix 1

Table A1. Sample and individualism score

Country	*N*	Individualism score*
Argentina	53	51
Australia	36	73
Brazil	61	36
Canada	30	72
Chile	45	49
China	108	43
Colombia	47	29
Ecuador	30	24
Germany	229	79
Greece	68	59
Hong Kong	47	50
India	50	24
Ireland	58	58
Italy	68	53
Japan	34	62
Mexico	65	34
Morocco	51	24
Norway	43	81
Portugal	48	59
Singapore	60	43
Spain	195	67
USA	51	60
Venezuela	71	26
Total	*1,548*	

Source(s): Authors' own creation based on https://www.theculturefactor.com/country-comparison-tool (2024)

Appendix 2

Table A2. Constructs, items and loadings

Constructs and items	Standardized regression weights
Resilience outcomes	
• Return on equity	0.93***
• Return on total assets	0.96***
• Profit margin on sales	0.82***
Digital alignment	
• Integrate digital technology and business strategy to attain strategic alignment	0.84***
• Create a shared vision of the role of digital technology in the business strategy	0.89***
• Jointly plan how digital technology will enable the business strategy	0.89***
• Accurately anticipate digital transformation that is relevant to the firm	0.78***
• Make sure that the firm's strategic plan identifies value from digital transformation	0.86***
• Inform the management team about valuable options of digital technology before a decision related to digital transformation strategic change is made	0.80***
Family identification	
• Family members are proud to tell others that they are part of the family business	0.68***
• Family business has a great deal of personal meaning for family members	0.80***
• Family members feel that the success of the family business is their own success	0.77***
• Family members have a strong sense of belonging to the family business	0.77***

Note(s): ***$p < 0.001$
Source(s): Authors' own creation

Appendix 3

Table A3. Total and indirect effects

	CEO past exp	Firm size	Family id	Dig. alignment
Standardized effects				
Standardized total effects (total sample)				
Family identification	−0.02			
Dig. alignment	0.13			
Resilience outcomes	0.04	0.17	0.04	0.25
Standardized indirect effects (total sample)				
Resilience outcomes	0.03			
Standardized total effects (low individualism sample)				
Family identification	−0.09			
Dig. alignment	0.15			
Resilience outcomes	0.00	0.24	0.06	0.28
Standardized indirect effects (low individualism sample)				
Resilience outcomes	0.04			
Standardized total effects (high individualism sample)				
Family identification	−0.05			
Dig. alignment	0.06			
Resilience outcomes	0.16	0.19	0.11	0.18
Standardized indirect effects (high individualism sample)				
Resilience outcomes	0.01			

Source(s): Authors' own creation

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