

Leadership for quick recovery: CEO tenure, risk-taking and corporate resilience

International
Journal of
Entrepreneurial
Behavior &
Research

Maria Angela Manzi

*Department of Economics, Management, Institutions (DEMI),
Family Business Lab on Accounting and Governance (FLAG),
University of Naples “Federico II”, Naples, Italy*

Carlotta Benedetti

Venice School of Management, Ca’ Foscari University of Venice, Venezia, Italy

Alessandro Cirillo

*Department of Economics, Management, Institutions (DEMI),
Family Business Lab on Accounting and Governance (FLAG),
University of Naples “Federico II”, Naples, Italy and
Centre for Family Entrepreneurship and Ownership (CeFEO),
Jonkoping International Business School, Jonkoping University,
Jonkoping, Sweden, and*

Salvatore Sciascia

*Family Business Lab (FABULA), School of Economics and Management,
Università Carlo Cattaneo - LIUC, Castellanza, Italy and
Centre for Family Entrepreneurship and Ownership (CeFEO),
Jonkoping International Business School, Jonkoping University,
Jonkoping, Sweden*

Received 30 November 2025
Revised 21 April 2026
1 July 2026
Accepted 21 July 2026

Abstract

Purpose – When adversity hits, CEO’s leadership is determinant in interpreting, responding to and recovering from shocks. Yet, despite extensive research on corporate resilience across macro-, meso- and micro-levels, little is known about the individual-level drivers through which CEOs shape the firm’s ability to recover quickly. Building on upper echelons theory, we examine how CEO tenure functions as a double-edged sword, balancing accumulated experience against risks of rigidity, and whether CEOs’ risk-taking moderates this relationship.

Design/methodology/approach – We draw on a panel of non-financial firms listed on Euronext Milan from 2013 to 2023. Corporate resilience is operationalized as the time needed to recover from episodes of financial distress, estimated through a Cox Proportional Hazards model.

Findings – Our results reveal a U-shaped relationship between CEO tenure and corporate resilience in terms of time to recovery. Recovery time decreases, thus increasing corporate resilience, during the mid-phase of a CEO’s tenure when experiential learning and organizational knowledge are at their peak, thereby enhancing resilience. Additionally, CEO risk-taking negatively moderates this relationship: a higher risk propensity increases the likelihood that CEOs pursue rapid actions to overcome distress, further boosting resilience.

Originality/value – By framing resilience as time to recovery, our study shows that CEO tenure and risk-taking orientation are key factors in corporate resilience, bridging two largely separate research domains: leadership studies and resilience research.

Keywords Corporate resilience, Time to recovery, CEO tenure, CEO risk-taking, Upper echelons theory, Survival analysis

Paper type Research article

© Maria Angela Manzi, Carlotta Benedetti, Alessandro Cirillo and Salvatore Sciascia. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/>



International Journal of Entrepreneurial
Behavior & Research
Emerald Publishing Limited
e-ISSN: 1758-6534
p-ISSN: 1355-2554
DOI 10.1108/IJEBR-11-2025-1752

1. Introduction

One of the main challenges for modern organizations is to be persistent under uncertain conditions: to manage increasing complexity, rapid environmental change, as well as crisis events that have the potential to cause serious damage (Van der Vegt *et al.*, 2015). Today, less than a fifth of companies across the world can sustain growth before, during and after a disruptive event (Accenture, 2023). Therefore, firms start to consider the “cost of resilience” to ensure both cost competitiveness and agility (Boston Consulting Group, 2025). That is, resilience, generally conceived as the entrepreneurial ability of firms to withstand and recover from adverse shocks (Williams *et al.*, 2017), has become a central construct in strategic management and organization theory (e.g. Linnenluecke, 2017; Korber and McNaughton, 2018).

Specifically, corporate resilience has recently been defined as “a process in time” (Conz and Magnani, 2020, p. 401), a dynamic attribute of the firm in which the temporal dimension assumes a crucial role. Along this line of reasoning, resilience lies in a company’s ability to develop appropriate responses to shocks, to overcome adversity, and, where possible, to turn disruptive events into advantages (van Essen *et al.*, 2015). This conceptualization implies a dynamic adaptation to shocks, which translates into anticipating, withstanding, coping with and adapting to uncertainty by rapidly reallocating existing resources (Li *et al.*, 2015). From this perspective, resilience also entails the capability to remain attentive to changes and respond swiftly. This emphasis on responsiveness, in turn, highlights the importance of the recovery time, which indicates the length of time the firm needs to restore its functioning and performance after a shock. The shorter the time to overcome adverse situations and re-establish stability, the more resilient the firm can be considered (Ambulkar *et al.*, 2015).

Academic interest in resilience has grown substantially over time, drawing on insights from multiple disciplines, levels of analysis and organizational contexts. Traditionally, most of the research was oriented toward analyzing organizational-level determinants such as resource endowments (Lengnick-Hall and Lengnick-Hall, 2005), routines and capabilities (Duchek, 2020) or network embeddedness (Schoenherr *et al.*, 2014). Nevertheless, this stream of research only partially considers the temporal dimension, assuming that the capacities required to demonstrate resilience remain consistent before, during and after the shock(s). Recently, literature on resilience has shifted toward corporate entrepreneurial orientation, which reflects a firm’s ability to anticipate and act on future opportunities and thrive in uncertainty through effective decision making, risk-taking and strategic entrepreneurial behaviors (Zighan *et al.*, 2022). In contrast with the research tradition that has advanced our understanding of how organizations manage and adapt to crises, this recent theoretical perspective considers how individual leaders define the strategic boundaries, considering the temporal dynamicity of resilience. In line with this argument, crises are managed by individuals who interpret threats, allocate resources and make critical decisions under uncertainty. Thus, it is essential to capture the influence of individual leaders who have the power to shape strategic responses and recovery trajectory, taking rapid decisions (Walumbwa *et al.*, 2014). In other words, resilience is not only a function of organizational resources but also of who leads the organization and how strategic decisions are made under pressure. Industry reports confirm this emphasis on leadership: for instance, a recent McKinsey and Company survey found that around two-thirds of respondents indicated that Chief Executive Officers (CEOs, hereafter) or other top executives are accountable for resilience programs (McKinsey and Company, 2023).

Despite this evidence, much of the resilience literature continues to treat leadership as a contextual factor or control variable, rather than as a central explanatory mechanism (e.g. Ayala and Manzano, 2014; Nautiyal and Pathak, 2024). Consequently, who drives resilience and how leadership influences the capacity and timing of shock management remain underexplored. In our study, we contend that CEOs play a pivotal role in this process: they set the tone for how the organization perceives adversity, strategically deciding whether to pursue retrenchment or renewal and orchestrating the redeployment of resources needed for recovery (Carmeli and Markman, 2011). Most importantly, as strategic responses to shocks often need

to be enacted under severe time pressure, the role of CEOs becomes critical in ensuring that these actions are taken quickly (Yao *et al.*, 2019), thereby influencing how rapidly organizations can recover from disruption.

Building on this argument, our study narrows its focus on the individual micro-level, specifically examining the role of CEO leadership and considering it as an essential determinant of resilience. In particular, we focus on CEO traits that can capture the temporal dimension that lies at the heart of resilience. First, we analyzed how CEO tenure, a fundamental yet underexplored leadership characteristic, may play a critical role in shaping firm resilience. Drawing from upper echelons theory, we argue that CEO tenure reflects both the accumulation of experience and the risk of rigidity (Simsek, 2007; Cirillo *et al.*, 2021), making it a double-edged sword in navigating crises. While early-tenure CEOs may lack organizational knowledge and internal legitimacy to effectively and rapidly orchestrate recovery, long-tenured CEOs may become overconfident or resistant to strategic renewal, ultimately impairing the resilience considered as the time to recovery. Within this tension, we propose the first research question: *How does CEO's tenure affect corporate resilience in terms of time to recovery?*

In this context, the CEO's propensity for entrepreneurial risk-taking plays a crucial role in shaping the scope and direction of strategic actions, influencing the length of time an organization takes to respond to and recover from crises. We further explore how CEOs' risk-taking orientation moderates the relationship between CEO entrenchment in business and resilience, highlighting the concurrent behavioral mechanisms through which leadership models recovery time dynamics. Thus, we aim to answer a second research question: *To what extent is the relationship between CEO tenure and corporate resilience, conceived as time to recovery, contingent upon CEO risk-taking?*

To answer our research questions, we draw on a panel of non-financial firms listed on Euronext Milan between 2013 and 2023, modeling resilience as the time to recover from episodes of financial distress using a Cox Proportional Hazards framework. Italian companies appeared suitable for our analysis as they are typically led by long-standing CEOs and therefore amenable to tenure analysis (e.g. Minichilli *et al.*, 2010) and recognized in previous literature as an ideal context for studying corporate resilience strategies (e.g. Santoro *et al.*, 2021). Specifically, our findings support the existence of a U-shaped relationship between CEO tenure and time to recovery, suggesting that the time to recovery tend to minimize during the mid-stage of a CEO's tenure—around 11 years after appointment—when experience and business knowledge have sufficiently consolidated: neither too inexperienced as in the early stage of appointment nor affected by inertia and entrenchment as tenure in the same firm becomes prolonged. Moreover, results show that the relationship is negatively moderated by the level of CEO risk-taking, indicating that as risk propensity increases, CEOs are more likely to implement bold and rapid decisions aimed at overcoming episodes of financial distress, reflecting a more entrepreneurial orientation in corporate decision-making.

As a result, the paper conceptualizes resilience as the time to recovery and links it to characteristics at the CEO level. Drawing on and contributing to upper echelons theory, the CEO is considered the central actor in driving corporate survival: by examining tenure and risk orientation, results show that CEO leadership is a determining factor not only in a company's ability to recover from a crisis, but also in how quickly this recovery occurs. Therefore, from a theoretical standpoint, the study aims to bridge leadership and resilience research, suggesting that time and risk are at the heart of corporate resilience, and precisely the responses of leaders based on these two aspects at critical moments profoundly influence the organization's survival. This also offers important practical implications. First, firms should include targeted support for newly appointed leaders and, conversely, resilience-oriented governance mechanisms for long-tenured CEOs to avoid cognitive rigidity. Second, since CEOs' risk propensity acts as a catalyst for recovery, it underscores the importance of framing recovery strategies within a risk management approach.

2. Theoretical background

2.1 Corporate resilience and time to recovery

Resilience has emerged as a dynamic attribute of the firm (Conz and Magnani, 2020), which reflects its entrepreneurial ability to withstand and recover from the adverse shocks (Williams *et al.*, 2017) and to overcome and turn disruptive events to advantage (van Essen *et al.*, 2015). Initially, researchers conceptualized resilience as a synonym of organizational stability, focusing on the role of key resources and robust structure that allow firms to face critical scenarios (Meyer, 1982; Sheffi and Rice, 2005). This perspective emphasizes the protective capacity of resilience, suggesting that resourceful and well-equipped organizations are less likely to experience severe performance decline when confronted with adverse conditions (Lengnick-Hall *et al.*, 2011). Such a static view, however, has been challenged by scholars who have provided a more dynamic understanding of resilience (Joussen *et al.*, 2025). According to this perspective, corporate resilience leverages the temporal dimension as it is an attribute the firm possesses before, during and after an event (Conz and Magnani, 2020). Specifically, scholars identify three categories that refer to a conceptualization of resilience related to time.

First, resilience as a proactive trait, a quality a firm possesses before an event occurs, in which the “stock” of resources and capabilities at a firm’s disposal is essential for responding to unforeseen events, as it enables the agility to take proactive measures to thrive during and after a crisis (e.g. Brewton *et al.*, 2010; Pal *et al.*, 2014). For instance, studies taking the financial crisis of 2008 as a benchmark show that companies investing in sustainable practices were better able to respond to the crisis, suggesting that stakeholder-oriented strategies reinforce corporate resilience by providing legitimacy, learning and resource access to organizations (e.g. DesJardine *et al.*, 2019). Similarly, studies grounded in social capital theory suggest that building relational ties with suppliers, communities and institutional actors can accelerate access to resources during distress, facilitating recovery (Kim and Cannella, 2008; Lin, 2002). Also, innovation and strategic flexibility have been recognized as essential determinants of corporate resilience. Specifically, firms that develop dynamic capabilities are shown to recover more effectively when existing strategies and business models become obsolete under conditions of crisis (Teece *et al.*, 2016). Further, governance structures and organizational design also influence corporate resilience dynamics (Salvato *et al.*, 2020). Distributed decision-making and decentralized governance structures can translate into faster local responses to disruptions, whereas rigid hierarchies may impede timely reactions (Crocini *et al.*, 2024).

Second, resilience as an absorptive and adaptive attribute defines the flexibility that a firm exhibits while facing an unexpected event. In this dynamic phase, the transition from the availability of heterogeneous assets to adaptability is essential for resilience. The absorptive perspective emphasizes robustness and stability. Research in this area has described resilience as the capacity to “sense and absorb” change, thereby enabling a firm to persist and withstand significant environmental discontinuities while maintaining its existing structure and performance levels (e.g. Acquaah *et al.*, 2011; Jaaron and Backhouse, 2014). The goal is to demonstrate resistance to disturbance, where the firm employs its robustness to minimize vulnerability and quickly return to the original state of equilibrium (e.g. Bogodistov and Wohlgemuth, 2017). Conversely, the adaptive perspective conceives a shock as an opportunity for innovation rather than a mere threat to be resisted. Research on this topic suggests that firms pass to a new state of equilibrium through the capacity to reconfigure and redeploy extant technical and organizational resources in a novel and timely manner to address the exigencies of the crisis (e.g. Ahmed *et al.*, 2014). Moreover, this adaptive capacity is frequently defined as an ensemble of cognitive, behavioral and contextual properties that facilitate the development of customized responses (e.g. Lengnick-Hall and Lengnick-Hall, 2005; Akgün and Keskin, 2014).

Finally, the concept of resilience as a reactive attribute refers to the capacity of a firm to recover or adapt in the aftermath of an event. This phase is primarily concerned with the survival of a business in the face of disruption and the maintenance of competitive advantage

in the aftermath of a crisis. This line of research follows a dual conceptualization of reactive resilience as the ability to “bounce back” to a stable, pre-disturbance state (e.g. Carmeli and Markman, 2011; Bhamra *et al.*, 2011) or recombine structure and resources to evolve into a new organizational form that reflects changed environmental conditions (e.g. Tracey and French, 2017).

As a result, corporate resilience is theorized as a dynamic attribute that is defined by its processual nature in which three different phases arise: disruption, response and recovery (Hillmann and Guenther, 2021). This implies the capacity to respond to a shock, which consists of anticipating, withstanding, coping with and adapting to uncertainty by reallocating existing resources in a rapid and timely way (Li *et al.*, 2015). In fact, the timing of action and reaction is a characteristic that runs throughout the entire *continuum* of resilience (Conz and Magnani, 2020). On the one hand, it lies in agility, which represents a company’s ability to provide a rapid organizational response to turbulence, whilst maintaining its existing structures and strategies. On the other hand, it relies on flexibility, which implies the ability to implement rapid decision-making processes and fast learning to quickly adapt routines to shock conditions. Time to recovery is the length of time in which a firm is able to restore its operations and performance following a shock. In this sense, the dynamic model suggests that the effectiveness of recovery is linked to the firm’s ability to absorb the shock or to adapt through a timely reconfiguration of resources. Therefore, rather than a simple measure of time, time to recovery is seen as the efficiency of the transition between the response and recovery phases. The more rapidly a firm is able to recover and (re)establish stability, the more resilient it can be considered (Ambulkar *et al.*, 2015).

For this reason, a recent perspective introduces entrepreneurial orientation and experimentation into the discussion, considering these dimensions as key antecedents that help organizations rapidly handle environmental shocks, positioning innovation not only as a growth lever but as a resilience-building mechanism (Teece *et al.*, 2016). From this viewpoint, corporate resilience also embodies the capacity to seize future opportunities and overcome uncertainty through effective decision making, risk-taking and strategic entrepreneurial behaviors (Zighan *et al.*, 2022). In this process, individuals become the strategic agents of corporate resilience: they interpret threats, allocate resources and make critical decisions under uncertain conditions. Human capital is a core “stock” resource of resilience (Brewton *et al.*, 2010) and cognitive and behavioral properties of individuals as essential for managing uncertainty and making resilient decisions during a shock (Lengnick-Hall *et al.*, 2011) (*agility*). Even more, individual decision-makers are responsible for implementing rapid decision-making processes and “fast learning”, which allows the firm to adapt routines to new environmental conditions (Conz and Magnani, 2020) (*flexibility*).

Taken together, these contributions have broadened our understanding of resilience from a static form of organizational stability rooted in organizational resources to a processual construct in the hands of firm leaders who influence corporate strategic adaptation and temporal orientation, assuming critical decisions under pressure. However, although much has been said on organizational-level determinants, the influence of the strategic actors who have the power to shape strategic responses and recovery trajectories is still underexplored. This is particularly true concerning time to recovery and how it can serve as a key element of resilience when managed by strategic leaders.

2.2 The role of CEO in shaping corporate resilience

“While serving in the position, CEOs make decisions and, thereby, affect the fates and fortunes of their firms” (Darouichi *et al.*, 2021, p. 662). According to upper echelons theory (UET, hereafter) (Hambrick and Mason, 1984), organizational outcomes are substantially influenced by the characteristics, experiences and interpretations of top executives. This theoretical lens posits that strategic choices are the result of decision-makers’ bounded rationality, which is influenced by their individual characteristics, such as demographic traits, career experiences

and psychological attributes (Hambrick, 2007; Carpenter *et al.*, 2004). In the context of corporate resilience, UET helps to understand how top executives affect a firm's ability to anticipate, absorb and adapt to external shocks (Williams *et al.*, 2017). Moving forward from the predominant view of resilience conceptualized as an organizational-level capability, UET suggests that corporate resilience partly originates in the cognitive and behavioral orientations of leaders who interpret and respond to environmental changes, making this theoretical lens particularly suitable for examining how executive-level characteristics affect corporate resilience-related behaviors.

Alongside this conversation, a recent body of literature explores how CEO's cognitive and behavioral characteristics influence corporate resilience (Sajko *et al.*, 2021). For instance, narcissism and overconfidence are considered to play a dual role in resilience-related mechanisms: highly self-enhancing CEOs tend to embrace bold and rapid strategic moves that may accelerate recovery, yet their predisposition toward excessive risk can amplify vulnerability when the shock occurs (Buyl *et al.*, 2019; Malmendier and Tate, 2005). Other experience-based traits, such as a background in the military, influence risk preferences and are also shown to have a double-edged influence on corporate resilience, as conservative pre-crisis decision-making may reduce risk exposure but inhibit the ability to react (Wang *et al.*, 2025).

However, not all the executive characteristics are equally informative. Although most of the existing research that connects CEO's characteristics with corporate resilience concentrates on psychological traits such as narcissism, overconfidence or locus of control (e.g. Buyl *et al.*, 2019; Malmendier and Tate, 2005; Sajko *et al.*, 2021), these traits are not always able to fully capture the temporal dimension that underpins the resilience processes. CEO tenure, on the other hand, represents one of the definitional dimensions of executive influence that includes temporality and reflects the accumulation of knowledge, cognitive embeddedness and evolving strategic preferences (Hambrick, 2007; Henderson *et al.*, 2006). Long-tenured CEOs benefit from in-depth organizational knowledge and usually establish routinized processes that support stability and shock anticipation, yet such embeddedness may also translate into rigidity and path dependence (Finkelstein and Hambrick, 1990; Miller, 1991). Conversely, shorter-tenured CEOs may be more prone to embrace change and disruption but lack the contextual insights necessary for effective responses. As such, tenure and its multifaceted meaning become a critical lens to study how firms weigh continuity and adaptation across different phases of disruption.

Complementing this, CEO risk-taking propensity directly influences how firms engage with unexpected events. Strategic responses to shocks inherently involve trade-offs between preserving resources and pursuing recovery opportunities. CEOs with higher risk tolerance may encourage immediate and proactive actions that accelerate recovery but increase the organizational risk and exposure to failure. On the other hand, more risk-averse CEOs may prioritize stability, which may translate into rigidity (Li and Tang, 2010; Sanders and Hambrick, 2007; Chatterjee and Hambrick, 2011). This makes risk-taking not merely an individual trait but a crucial mechanism to take into account when resilience is enacted.

Together, CEO tenure and risk-taking capture, respectively, the temporal dimension and the risk orientation of executive decision-making, which are necessary to fully understand how firms anticipate, react and adapt to external shocks. By focusing on these characteristics, this study builds on broad upper echelons arguments and isolates the executive-level mechanisms most directly relevant to resilience dynamics.

3. Hypotheses development

3.1 CEO tenure and corporate resilience

CEO tenure, defined as the length of time a CEO holds or remains in office (Hambrick and Fukutomi, 1991; Simsek, 2007), represents a critical temporal dimension that highlights the duration of a leader's service in his/her role. Since the seminal paper by Hambrick and Mason (1984), tenure has been recognized as a key and observable characteristic that predicts both the

“givens and behaviors” of CEOs during their time in office. In detail, a large body of research has demonstrated that CEO tenure is closely linked to the accumulation of knowledge, skills and expertise, suggesting that tenure reflects a deepening of experience over time. That is, CEO tenure represents firm-specific experience, emphasizing the CEO’s growing familiarity and understanding of the organization (e.g. [Islam and Zein, 2020](#)). In this light, considering tenure and its behavioral aspects as a linear path might offer a partial view of how the CEO impacts firm outcomes.

Building on the upper echelon framework ([Hambrick and Mason, 1984](#)), [Hambrick and Fukutomi \(1991\)](#) proposed a dynamic model describing how CEO tenure influences firm outcomes. They identified five “seasons” [1] of tenure – *response to mandate, experimentation, selection of an enduring theme, convergence* and *dysfunction* – each reflecting different levels of task knowledge, commitment, power and openness to information. Early stages foster learning, skill development and legitimacy building, whereas later stages tend to reduce adaptability and protect the achieved *status quo*. Consequently, the link between CEO tenure and firm performance often follows an inverted U-shaped pattern ([Finkelstein et al., 2009](#)). Building on this, there are ample opportunities to integrate the literature on corporate resilience, as a specific firm outcome, by examining how the CEO’s tenure affects the firm’s ability to re-establish stability after distress situations. It is therefore crucial to consider how the CEO’s accumulated experience serves as a key driver of agility and flexibility, enabling the firm to implement more effective strategies and respond more quickly to crises. In other words, the shorter the response time to shocks, the greater the firm’s resilience.

In the early years of a CEO’s tenure, despite a general commitment to exploratory behaviors and strategic flexibility ([Chen et al., 2019](#)), limited firm-specific knowledge and experience may hinder the ability to make effective and timely decisions in response to crises ([Chen, 2013](#)). The lack of deep understanding of the organization’s internal dynamics and external environment constrains decision quality and slows down adaptive responses, thereby weakening corporate resilience in the sense that it inhibits the ability to undertake strategic actions and responses to recovery. Over time, as CEOs accumulate human capital, expertise and a deeper understanding of the firm and its environment, their capacity to make informed strategic decisions improves ([Graham et al., 2015](#)). This accumulation of experience and firm-specific knowledge enhances the CEO’s ability to think critically ([Graf-Vlachy et al., 2020](#)) and thus, to recognize threats, coordinate rapid responses and foster organizational adaptation, thereby strengthening corporate resilience. However, as tenure advances, CEOs may experience cognitive entrenchment and increasing rigidity ([Boeker, 1997](#)). Their strategic perspectives tend to narrow as they rely on previously successful routines and develop a stronger commitment to the *status quo* ([McClelland et al., 2010](#)), which can erode responsiveness and adaptability in turbulent environments.

These arguments suggest that CEO tenure may have a nonlinear relationship with corporate resilience. Corporate resilience tends to be lower in the early years, as the CEO’s accumulated experience has yet to be fully developed, resulting in a longer time to recovery after a crisis. It then increases during mid-stage tenure, as accumulated experience and expertise enable more informed strategic decisions and shorter recovery times. Finally, corporate resilience declines again for longer-tenured CEOs, as cognitive rigidity and strategic inertia emerge, lengthening the time to recovery. Importantly, these patterns reflect the fact that a CEO’s ability to respond effectively to challenges directly influences how quickly the organization can return to its pre-crisis state. In other words, higher corporate resilience capability corresponds to shorter time-to-recovery, while lower corporate resilience capability translates into longer recovery periods. Therefore, we propose:

- H1. There exists a U-shaped relationship between CEO tenure and time to recovery, whereby at medium levels of CEO tenure, time to recovery is at its minimum point and thus corporate resilience is at its maximum.

3.2 The moderating effect of risk-taking

Building on this line of thought, strategic decisions that foster corporate resilience arise from the decision-making power of the CEOs. Specifically, they depend on how CEOs interpret risks and opportunities in uncertain situations (March and Shapira, 1987). According to the UET perspective, CEOs' risk-taking behavior relies on the executive orientation (Burkhard *et al.*, 2023), a set of traits that blend psychological traits with experiences (Tian and Wu, 2025). Previous studies have explored various factors influencing CEOs' risk-taking decisions, such as goal setting and outcome expectations (e.g. Lewellyn and Muller-Kahle, 2012; Burkhard *et al.*, 2023). These determinants are embedded within the dynamics of tenure. Indeed, still building on Hambrick and Fukutomi's (1991) framework, literature suggests that CEOs' willingness to engage in behaviors with uncertain outcomes varies along their tenure. That is, CEO's risk-taking propensity evolves as a function of the knowledge, involvement and experience accumulated while serving in the role (Cirillo *et al.*, 2021). This suggests a direct link between tenure and risk-taking behavior (Resick *et al.*, 2023). On the one hand, long-tenured CEOs own a substantial share of their human capital and wealth tied to the firm they lead (Dunbar *et al.*, 2020): this influences the magnitude and nature of the decisions they make (Hambrick and Mason, 1984). On the other hand, the firm's overall risk profile mirrors the CEO's risk preferences, since the CEO guides decisions enacted on behalf of the company (Gómez-Mejía *et al.*, 2019).

Considering that under the upper-echelon theoretical umbrella, CEOs' risk-taking constitutes an essential component of business decision-making, it becomes even more critical in times of distress (Barker and Duhaime, 1997). When a firm faces shocks, restoring stability and performance stands as a priority (Williams *et al.*, 2017), and risky decisions may offer paths to recovery that could otherwise be missed. CEO risk-taking behavior reflects the ability and, above all, the rapidity to pursue such opportunities and commit resources under uncertainty (Bromiley *et al.*, 2015). Consequently, a CEO's higher risk propensity can translate into faster responses to shocks, enabling the firm to re-establish stability in a shorter length of time. In other words, greater risk-taking ability fosters corporate resilience as it shortens the time required for the firm to exit the shock, while lower risk-taking may prolong the time to recovery, reducing corporate resilience capability.

However, although tenure captures the CEOs' accumulated knowledge and attachment to the business, risk-taking reflects a distinct behavioral trait that shapes how such accumulated characteristics are translated into strategic action under uncertainty. In this context, risk-taking influences the effects of tenure by affecting the timing and decisiveness with which CEOs act during different stages of their tenure. Specifically, higher risk-taking propensity is expected to attenuate the differences in time to recovery associated with tenure by making both early- and late-tenure CEOs act more promptly and decisively in response to shocks. Vice versa, when risk-taking is low, differences related to tenure become more pronounced, as early-tenure CEOs may be more hesitant due to limited firm-specific knowledge, and long-tenured CEOs may be more conservative due to heightened loss aversion. Thus, we expect that risk-taking propensity will weaken the U-shaped relationship between tenure and time to recovery by diminishing the relative advantage associated with different tenure stages. We therefore argue that the interaction between tenure and risk-taking may critically impact a firm's resilience, namely:

- H2.* The U-shaped relationship between CEO tenure and time to recovery is negatively moderated by CEOs' risk-taking.

4. Method

4.1 Data and sample

The hypotheses are tested on a large sample of Italian listed companies. Specifically, we examined the whole non-financial firms listed on the Euronext Milan (EXM) market segment

of the Milan Stock Exchange over the period 2013–2023. Stemming from prior research, Italy represents a distinctive institutional and economic context that has been recognized as a fertile ground for examining firms' corporate resilience (e.g. Santoro *et al.*, 2021; Cutrini and Ninivaggi, 2024) and turnover strategies (e.g. Dallocchio *et al.*, 2022). Moreover, the Italian corporate environment is typically characterized by relatively long CEO tenures (e.g. Minichilli *et al.*, 2010; Brunello *et al.*, 2003), which makes it particularly suitable for analyzing the effects of managerial continuity and risk-taking propensity on firm outcomes.

Our sample selection started with 2,596 firm-year observations, representative of the entire population of listed firms in the EXM market segment in the investigated period. Following previous studies (e.g. Cirillo *et al.*, 2021; Simsek, 2007), we excluded financial and insurance companies (ATECO 64–68, 614 firm-year observations), which have different structures according to specific regulations, and companies with missing data (239 firm-year observations). This gave us 1,743 firm-year observations before checking for a financial crisis occurring. Indeed, since our focus is on corporate resilience in terms of recovery time – defined as the length of time to recovery reflecting the firm's ability over time to recover after entering financial distress – we restricted the sample to those firm-year observations in which companies not only faced distress (Altman Z-score <1.81 – see paragraph 4.2 about corporate resilience details) but subsequently recovered. Applying this criterion narrows the sample to 573 firm-year observations. Since some companies entered and others exited the stock market during this period, the dataset results in an unbalanced panel, frequently used to mitigate potential selection and survival bias (Carpenter and Petersen, 2002).

Data were obtained by integrating multiple sources. Financial data were drawn from AIDA, the Italian branch of Bureau van Dijk European Databases. Corporate governance information was hand-collected from companies' published Governance Reports, ownership information reported by the CONSOB (Italian Commission for the Stock Exchange), and the firm's personal website.

4.2 Variables and measures

Dependent variable. Stemming from previous studies about corporate resilience, to operationalize this concept, it is measured considering the time to recovery from a crisis (e.g. DesJardine *et al.*, 2019; Ullah *et al.*, 2022). Specifically, our dependent variable, time to recovery (*TIME_TO_RECOVERY*), reflects the ability of firms to recover over time from episodes of financial distress. Distress events are identified when a firm's Altman Z-score falls below the commonly used threshold, indicating heightened bankruptcy risk (1.81 [2]; Gómez-Mejía *et al.*, 2022). We used the formula of Altman's Z score for listed firms (Altman, 1968):

$$0.012x_1 + 0.014x_2 + 0.033x_3 + 0.006x_4 + 0.999x_5$$

where x_1 is the ratio of net working capital with respect to total assets, x_2 is the ratio of retained earnings to total assets, x_3 is the ratio of EBIT to total assets, x_4 is the ratio of market value of equity to total liabilities and x_5 is the ratio of total sales with respect to total assets.

For each distress episode, we defined recovery as the return of the Z-score above at least the 1.81 threshold. We then computed the time to recovery as the duration (in years) between the year of onset of distress and the first year of recovery [3].

Independent variable. The main independent variable, CEO tenure, enabled us to fully inquire into CEO's entrenchment (Darouichi *et al.*, 2021), capturing her/his short and/or long incumbency, which can, in turn, have significant implications for corporate resilience. CEO tenure is, therefore, operationalized as the number of years a CEO has been in office (Simsek, 2007). It entered the model both linearly (*CEO_TENURE*) and squared (*SQ_CEO_TENURE*) to capture nonlinear effects (e.g. Cambrea *et al.*, 2022). The squared value is calculated on the value centered on the mean to avoid introducing multicollinearity in the model (Cirillo *et al.*, 2021).

Moderating variable. The moderator of our analysis is CEO risk-taking (*RISK_TAKING*). Consistent with prior behavioral agency research, risk-taking reflects the risk behavior undertaken by the CEO on behalf of the firm (Gómez-Mejía *et al.*, 2019). It stands as a latent variable coming from a factor analysis (single factor) based on three variables that have been positively associated with firm risk (Benischke *et al.*, 2019): long-term debt, capital (CAPEX) and research and development (R&D) expenditures registered by the firms at the end of the reporting year (Devers *et al.*, 2008; Martin *et al.*, 2013). Specifically, factor analysis shows that the single factor explains 40.1% of the total variance. The factor loadings, reported in Table 1, are 0.73 for long-term debt, 0.75 for capital expenditures and 0.32 for R&D expenditures.

To reduce the multicollinearity problem, we mean-centered the variables, both the independent variables and the moderating one, before computing the interaction terms (Aiken and West, 1991).

We defined the interaction variables as:

$$\text{INTER1} = \text{CEO_TENURE} * \text{RISK_TAKING}$$

$$\text{INTER2} = \text{SQ_CEO_TENURE} * \text{RISK_TAKING}$$

Control variables. Following previous research (e.g. Croci *et al.*, 2024; Honjo and Kato, 2022; Cirillo *et al.*, 2021; Simsek, 2007), we control for variables at the firm, board and individual level.

At the firm level, we controlled for firm age (*AGE*), size (*SIZE*), leverage (*LEV*) and return on assets (*ROA*). Age is calculated as the number of years from the firm’s foundation (Honjo and Kato, 2022). Size is measured as the logarithm of the sales (Honjo and Kato, 2022). Both the age and the size of the firm have often been considered as antecedents of risk, as well as of recovery from crises (Cho *et al.*, 2018; Cirillo *et al.*, 2021), since accumulated experience, routines and resources may be related to the number of years in business and firm complexity.

Leverage is the ratio of debt over equity, capturing the firm’s financial risk exposure (Ko *et al.*, 2015). High leverage may exacerbate financial fragility and delay recovery from distress; however, moderate leverage can also impose financial discipline, potentially promoting corporate resilience (George and Hwang, 2010).

Return on assets, the ratio of operating income to total assets (Weis and Klarner, 2022), is a driver of survivability for a company, as it explains how profitable the set of assets of a company is for generating revenues (Carretero-Gómez *et al.*, 2023), enhancing the firm’s ability to recover from distress.

At the board level, we introduced control for board size (*BOARD_SIZE*) and independence (*INDEP_BOARD*) (Croci *et al.*, 2024). Board size is the logarithm of the number of directors. Board independence is operationalized as the proportion of independent directors over the total number of board members. Both can affect corporate resilience outcomes, influencing the board’s ability to monitor management and provide strategic advice (García-Ramos and Díaz, 2021).

Table 1. Rotated factor loadings and communalities

Variable	Factor1	Communalities
LONG_TERM_DEBT	0.728	0.529
CAPEX	0.754	0.569
R&D	0.321	0.103
Eigenvalue	1.204	

Note(s): The values in italic highlight the significance of the variables of interest

Source(s): Authors’ own work

We included individual-level controls, considering the specific role of the CEO: CEO duality (*CEO_DUALITY*), founder (*CEO_FOUNDER*), ownership (*CEO_OWEN*), age (*CEO_AGE*) and turnover (*CEO_TURNOVER*). All these characteristics affect, indeed, the CEO's decision-making and power balance, and in turn the implications for corporate resilience. CEO duality is a dummy variable equal to one if the CEO also occupies the chairperson role, zero otherwise (Crocì *et al.*, 2024). The role concentration enhances strategic coherence but weakens board oversight (Krause, 2017). CEO founder is another dummy variable equal to one if the CEO was also the founder of the firm, zero otherwise (Allgood and Farrell, 2000). It implies emotional attachment, long-term orientation and firm-specific knowledge (Deb and Wiklund, 2017). CEO ownership is the percentage of ownership held by the CEO and represents the alignment of her/his managerial and shareholder interests (Kim and Lu, 2011). CEO age accounts for the number of CEO's years (Crocì *et al.*, 2024). It influences CEO's risk preferences, strategic vision and openness to change (Osei Bonsu *et al.*, 2024). CEO turnover is a dummy variable equal to one when there is a change of CEO in a year during the period of financial distress, zero otherwise (González *et al.*, 2015). Indeed, it has been shown that a change in CEO leadership affects both strategic changes and firm performance (Schepker *et al.*, 2017; Hughes *et al.*, 2010), which could have some implications for corporate recovery.

Finally, the model included both industry and year dummies to control for industry peculiarities and unobserved time heterogeneity, respectively. These controls are important because they may affect CEO decision processes and risk-taking opportunities (Cirillo *et al.*, 2021).

4.3 Empirical model

Our study conceptualizes corporate resilience as a firm's ability not only to recover after experiencing financial distress but also with respect to the timing of such recovery. Ordinary least squares (OLS) models appear unsuitable in this context for several reasons. First, the complex distribution of the survival function (Cox and Oakes, 1984): OLS assumes normally distributed and homoscedastic residuals, assumptions that are typically violated in survival contexts where the distribution of survival times is highly skewed (Kiefer, 1988). Second, duration outcomes are often subject to right censoring, which OLS cannot properly account for, therefore producing biased estimates. Finally, duration processes are inherently non-linear, since the probability of recovery changes over time and depends on the hazard rate rather than on the expected duration itself (Wooldridge, 2010). Similarly, static models such as logit or probit can only identify whether a recovery event occurs, but not the timing of such an event. As a result, they cannot capture the duration of interest – namely, both the occurrence of financial distress and subsequent recovery, as well as the time it takes for firms to exit distress. Consequently, we adopted the Cox Proportional Hazards model (Cox, 1972), which estimates the effect of covariates on the likelihood of recovery at a given time t . This approach not only accounts for the specific time window in which recovery events occur – during the observation period ending in 2023 – but also properly manages censored observations, thereby reducing the risk of sampling bias (Sui and Baum, 2014). Moreover, it is extensively used in prior research on Italian firms with similar survival and duration-based approaches, attesting a methodological tradition of this context (e.g. Brunelli *et al.*, 2024; Giovannetti *et al.*, 2011).

That is, in our setting, corporate resilience in terms of time to recovery is modeled through the survival function, where the hazard rate represents the conditional probability that a firm exits distress (i.e. achieves recovery) at a particular point in time, given that it has remained in distress up to that moment. Specifically:

$$\text{Hazard}_{it} = H_t * \exp(\beta X_i) \quad (1)$$

where H_t is the baseline hazard at time t . X_i denotes the vector of independent variables that may influence corporate resilience (i.e. CEO tenure, CEO risk-taking and control variables). β

is the vector of regression coefficients (which shows the change in the hazard for a unit increase in the independent variable). This formulation captures both the occurrence and timing of recovery, thus linking financial distress episodes, recovery dynamics and time-to-recovery into a unified corporate resilience framework.

5. Findings

5.1 Empirical results

Table 2 provides descriptive statistics, including means and standard deviations, of our main variables, excluding interactions. CEOs in our sample tend to have relatively long tenures, averaging around 11 years (*CEO_TENURE*), which may imply stability in leadership positions. Still at the CEO level, nearly a quarter of CEOs combine the roles of CEO and board chair (*CEO_DUALITY*, 23.9%), and one in five are founders (*CEO_FOUNDER*, 20.4%), which could strengthen their influence over strategic decisions. CEO ownership is modest, attesting at 11.4% on average (*CEO_OWN*), while the average age of the CEO is close to 57 years (*CEO_AGE*), reflecting experienced leadership profiles. Moreover, the CEO changes in about 15% of firm-year observations (*CEO_TURNOVER*). The proxy for CEO risk-taking (*RISK_TAKING*) has a mean value of 0.059, suggesting, on average, that CEO adopt a rather conservative risk profile.

Table 3 shows the results of the Cox Proportional Hazard analysis. Specifically, for each model, the first column reports regression results (i.e. coefficients and standard errors in parentheses), and the second column displays hazard ratios [4]. To construct a robust survival model exploring the potential influence of CEO tenure on corporate resilience and the moderating role of risk-taking, we initially performed the regression only using the control variables. Our findings in Model 1 reveal that the overall model is significant, thereby strengthening confidence in the analysis. On this basis, to test the first hypothesis, Model 2 adds the linear term of *CEO_TENURE*. Results show that the association is negative and statistically significant ($\beta = -0.018, p < 0.10$).

Then, Model 3 introduces the squared value of the variable, *SQ_CEO_TENURE*, to investigate whether there is a curvilinear effect with *TIME_TO_RECOVERY*. Findings show that the regression coefficient of *CEO_TENURE* is negative and statistically significant ($\beta = -0.039, p < 0.01$), whereas the quadratic coefficient for *SQ_CEO_TENURE* is positive and statistically significant ($\beta = 0.002, p < 0.01$). Therefore, our analysis supports the existence of a U-shaped relationship between CEO tenure and time to recovery, confirming our first hypothesis. The curve is plotted in Figure 1.

Model 4 introduces the moderating variable *RISK_TAKING*, whose coefficient is positive but not statistically significant. To test our moderation hypothesis, in Model 5, we added the interaction terms between CEO tenure and risk-taking (*INTER_1* and *INTER_2*). The statistical significance of the interaction terms reveals a negative moderation effect. Specifically, the first interaction coefficient reduces the curvature of the U-shaped, thereby maintaining the concavity of the relationship (*CEO_TENURE*: $\beta = -0.038, p < 0.01$; *INTER_1*: $\beta = 0.007, p < 0.05$). The second interaction coefficient, being negative, ultimately reverses the curvature, indicating that the moderating variable substantially alters the functional form of the relationship (*SQ_CEO_TENURE*: $\beta = 0.002, p < 0.01$; *INTER_2*: $\beta = -0.001, p < 0.01$). This suggests that the relation between CEO tenure and time to recovery is negatively moderated by the level of CEO risk-taking, supporting the second hypothesis. Figure 2 shows the moderating effect of risk-taking.

5.2 Specificities and additional analyses

This section presents the specific checks and additional analyses conducted to increase the reliability of our findings. To minimize potential bias in the regression models, we employed standard errors with a robust variance estimator for significance testing, as these are valid

Table 2. Descriptive and correlation matrix

Variable	Mean	Std. Dev	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) CEO_TENURE	11.035	10.066	1.000													
(2) SQ_CEO_TENURE	101.581	165.437	0.696*	1.000												
(3) RISK_TAKING	0.059	1.306	-0.163*	-0.051	1.000											
(4) AGE	45.194	37.134	-0.131*	0.013	0.186*	1.000										
(5) SIZE	10.706	2.245	0.087*	0.093*	0.282*	-0.134*	1.000									
(6) LEV	1.030	3.284	-0.022	-0.034	0.130*	-0.082	0.127*	1.000								
(7) ROA	-0.415	12.598	0.133*	0.053	0.060	-0.002	0.236*	-0.029	1.000							
(8) BOARD_SIZE	2.178	0.316	0.107*	0.121*	0.195*	0.037	0.274*	-0.022	0.182*	1.000						
(9) INDEP_BOARD	0.482	0.172	-0.250*	-0.194*	0.272*	0.089*	0.201*	0.081	0.150*	0.092*	1.000					
(10) CEO_DUALITY	0.239	0.427	0.287*	0.168*	-0.108*	-0.070	-0.055	-0.005	-0.052	-0.262*	-0.160*	1.000				
(11) CEO_FOUNDER	0.204	0.403	0.323*	0.162*	-0.103*	-0.205*	-0.155*	0.038	-0.034	-0.060	-0.166*	0.427*	1.000			
(12) CEO_OWN	0.114	0.206	0.329*	0.162*	-0.079	-0.225*	-0.005	-0.030	0.064	-0.035	-0.154*	0.454*	0.468*	1.000		
(13) CEO_AGE	56.946	9.038	0.498*	0.340*	0.003	0.064	0.080	-0.020	0.071	0.201*	-0.025	0.272*	0.242*	0.025	1.000	
(14) CEO_TURNOVER	0.150	0.357	-0.171*	0.041	0.047	0.104*	-0.014	-0.035	-0.071	0.023	0.111*	-0.052	-0.055	-0.081	-0.072	1.000

Note(s): $N = 573$, $p < 0.05$

Source(s): Authors' own work

Table 3. Results

Y = TIME_TO_RECOVERY										
	Model 1 (1)	(2)	Model 2 (3)	(4)	Model 3 (5)	(6)	Model 4 (7)	(8)	Model 5 (9)	(10)
CEO_TENURE (a)			−0.0178* (0.012)	0.982	−0.039*** (0.013)	0.962	−0.038*** (0.014)	0.962	−0.038*** (0.014)	0.963
SQ_CEO_TENURE (b)					0.002*** (0.001)	1.002	0.002*** (0.001)	1.002	0.002*** (0.001)	1.002
RISK_TAKING (c)							0.0171 (0.050)	1.017	0.184** (0.072)	1.202
INTER_1 (a*c)									0.007** (0.003)	1.007
INTER_2 (b*c)									−0.001*** (0.000)	0.998
AGE	0.002 (0.003)	1.002	0.002 (0.003)	1.002	0.002 (0.003)	1.002	0.002 (0.003)	1.002	0.002 (0.003)	1.002
SIZE	0.023 (0.038)	1.023	0.025 (0.037)	1.025	0.027 (0.036)	1.028	0.025 (0.038)	1.024	0.024 (0.038)	1.024
LEV	−0.001 (0.015)	0.999	0.002 (0.015)	1.002	0.002 (0.015)	1.002	0.002 (0.015)	1.001	0.000 (0.014)	1.000
ROA	−0.007 (0.006)	0.993	−0.005 (0.006)	0.995	−0.003 (0.006)	0.997	−0.003 (0.006)	0.997	−0.003 (0.006)	0.997
BOARD_SIZE	0.214 (0.324)	1.239	0.254 (0.334)	1.289	0.250 (0.363)	1.284	0.240 (0.366)	1.271	0.212 (0.365)	1.236
INDEP_BOARD	0.263 (0.579)	1.301	0.088 (0.543)	1.092	0.077 (0.539)	1.080	0.035 (0.567)	1.036	0.029 (0.561)	1.029
CEO_DUALITY	0.022 (0.233)	1.022	0.017 (0.234)	1.017	0.040 (0.231)	1.040	0.038 (0.230)	1.039	0.046 (0.230)	1.047
CEO_FOUNDER	0.273 (0.283)	1.313	0.321 (0.280)	1.378	0.319 (0.292)	1.376	0.322 (0.292)	1.379	0.322 (0.293)	1.379
CEO_OWEN	−0.720 (0.576)	0.487	−0.536 (0.549)	0.585	−0.410 (0.539)	0.664	−0.416 (0.538)	0.660	−0.431 (0.539)	0.649

(continued)

Table 3. Continued

Y = TIME_TO_RECOVERY										
	Model 1 (1)	(2)	Model 2 (3)	(4)	Model 3 (5)	(6)	Model 4 (7)	(8)	Model 5 (9)	(10)
CEO_AGE	−0.010 (0.009)	0.990	−0.004 (0.009)	0.996	−0.004 (0.009)	0.996	−0.004 (0.009)	0.996	−0.004 (0.009)	0.996
CEO_TURNOVER	0.140 (0.113)	1.151	0.098 (0.114)	1.102	−0.029 (0.086)	0.971	−0.028 (0.086)	0.972	−0.005 (0.087)	0.994
Year fixed effects	Yes		Yes		Yes		Yes		Yes	
Industry fixed effects	Yes		Yes		Yes		Yes		Yes	
N	573		573		573		573		573	
Log pseudolikelihood	−3153.910		−3149.788		−3141.315		−3141.210		−3139.935	
χ^2	105.16***		107.30***		179.39***		178.32***		191.00***	
Mean VIF	1.28		1.36		1.53		1.34		1.97	
Note(s): For each model, the first column reports coefficient and standard errors in parentheses, calculated with robust variance estimator (Lin and Wei, 1989), the second column displays hazard ratios. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$										
Source(s): Authors' own work										

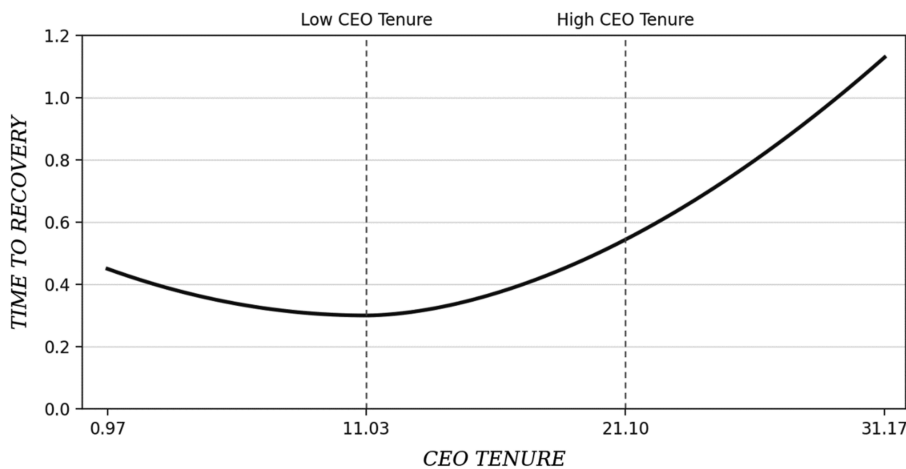


Figure 1. U-Shaped relationship between CEO tenure and time to recovery. Source: Authors’ own work

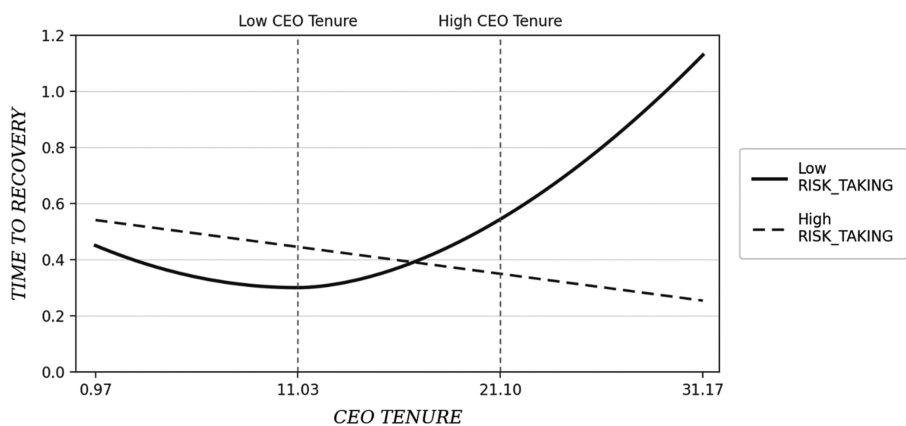


Figure 2. Moderating effect of CEO risk-taking. Source: Authors’ own work

under any assumption of homoscedasticity (Greene, 2011). Moreover, considering acceptable levels of correlation between all the variables employed (as shown in Table 2), we also computed the variance inflation factor (VIF) to exclude potential multicollinearity problems. We concluded that multicollinearity was not a concern for our empirical analysis since all values fall below any common threshold (e.g. 5 or 10 – see Table 3 for the mean VIF) (Hair et al., 2010; Kennedy, 2008).

We also addressed an important methodological concern, considering that the sign and statistical significance of the coefficients alone are not sufficient to establish the presence of a U-shaped relationship (Lind and Mehlum, 2010). Following the procedure suggested by Haans et al. (2016), we conducted a U-shaped test by examining whether the slope is sufficiently steep at both tails of the data distribution and whether the turning point lies within the observed range (Haans et al., 2016; Sasabuchi, 1980). The results, showed in Table 4, confirm that the inflexion point is statistically significant and occurs at 11 years of CEO tenure, which falls within the data range.

Table 4. Test of the U-shaped relationship between CEO tenure and time to recovery

	β	Std. err	t-value	p-value
Slope at lower bound (tenure = 0 years)	−0.077	0.024	−3.24	0.001***
Slope at upper bound (tenure = 32 years)	+0.114	0.047	+2.41	0.008***
Turning point	11			
95% CI for turning point (years)	[3.85; 16.71]			
Observed data range of CEO tenure (years)	[0; 32]			
Overall test of U-shape			+2.41	0.008***
Turning point test			+3.14	0.002***

Note(s): The U-shape is tested following the three-step procedure recommended by [Haans et al. \(2016\)](#): (i) the slope at the lower bound of the observed CEO-tenure range is negative and statistically significant; (ii) the slope at the upper bound is positive and statistically significant; and (iii) the estimated turning point (≈ 11 years) lies well within the observed data range [0; 32]. Together, these three conditions confirm a genuine U-shaped relationship. The 95% confidence interval for the turning point is computed via the delta method (*nlcom* in Stata) Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Source(s): Authors' own work

Considering the specificities of our regression model, we performed the test of proportional-hazards (PH) assumption using Schoenfeld residuals ([Grambsch and Therneau, 1994](#)) to ensure that the estimated effects of our covariates remain constant over time – a requirement of the Cox model. The global test ($\chi^2 = 13.54$, $df = 15$, $p = 0.561$) indicated no violation of the PH assumption, and all covariates showed stable effects. These results provide confidence that the Cox model specification is appropriate for our analysis.

6. Discussion

As uncertainty permeates today's business environment, firms are exposed to multiple endogenous and exogenous shocks ([Cavallo et al., 2024](#)). Internally, firms deal with challenges such as poor strategic choices made by managers, investments with risky payoffs, organizational inertia, lack of effective leadership and ineffective organizational structure. Externally, firms' survivability and profitability in the long term may be threatened by events such as pandemic emergencies (COVID-19), wars and conflicts (Ukraine–Russia, Israel–Palestine, USA–Iran), excessive duties and global financial collapses (subprime mortgage crisis). In this context, resilience emerges as a crucial concept ([Korber and McNaughton, 2018](#)). Since crises are almost inevitable at some point in the firm's life cycle, understanding the main drivers of recovery ability is valuable for practitioners, policy makers and academics. Specifically, we focus on corporate resilience as the ability to recover from financial distress by considering the time needed by a firm to recover from a distressed situation and to reach a safe financial zone. We assess resilience dynamically, moving beyond merely coping with negative and unexpected situations, and pose under scrutiny the temporal aspect of recovery, which is a significant characteristic of resilience. Literature emphasizes the importance of speed in strategic decisions – the time needed to formulate and implement a response – for achieving superior performance and navigating uncertain environments ([Chen and Hambrick, 1995](#); [Kim et al., 2009](#)).

According to UET, we examine corporate resilience from a micro-level (individual) perspective. The impact of the CEO, as the primary decision-maker, is evaluated. Fundamentally, corporate resilience involves two concepts: time and risk ([Ortiz-de-Mandojana and Bansal, 2016](#)). Both are integral to our investigation of CEO-level drivers of resilience.

First, we consider CEO tenure, as the duration a CEO remains in the role. CEO tenure is a well-established concept within the UET framework, based on the assumption that over

time, a CEO makes different decisions influencing firm outcomes, shaped by their evolving understanding of the firm, power dynamics over the board and managers, commitment and personal motivations (Hambrick and Fukutomi, 1991; Miller, 1991). We relax the notion of a monotonic impact of CEO tenure on resilience, proposing a curvilinear relationship between tenure and recovery time. The shortest recovery times – greatest resilience – are observed in the middle of a CEO's tenure, when they have gained specific knowledge of firm dynamics and industry patterns, demonstrate greater commitment to the firm's success and are able to effectively govern decision-making (Darouichi *et al.*, 2021).

This curvilinearity aligns with existing UET literature. Research in this field suggests that during the initial stages of their tenure, CEOs are highly focused on impressing stakeholders, legitimizing their new role, and gaining control over the board and management. This preoccupation can hinder effective and timely decision-making, which is crucial for recovering from financial distress and building resilience. As their tenure progresses, CEOs may become stagnant and slow to adapt to environmental changes, losing touch with external factors and ignoring demands for strategic adjustments.

Applying the dynamism of CEO tenure to resilience strategies emphasizes the importance of adapting strategy to the external environment. Even with established legitimacy, power and firm knowledge, CEOs must be able to swiftly adjust organizational actions in response to changing circumstances in order to achieve recovery. This highlights the CEO's role in aligning internal resources and competencies with external market needs, where tenure significantly impacts strategic orchestration.

Second, the risk-taking propensity – the ability and, crucially, the proactivity to pursue opportunities and allocate resources under uncertainty (Bromiley *et al.*, 2015) – is considered. This propensity influences the relationship between CEO tenure and resilience, showing that greater risk-taking can shorten recovery times. However, it is important to exercise caution when interpreting this finding, since our results don't suggest that CEO risk-taking is univocally beneficial in conditions of distress. On the one hand, risk-taking appears to support resilience by enabling timely, opportunity-oriented and strategically consistent behaviors that help the firm exit financial distress more rapidly. On the other hand, CEOs with higher risk propensity may be more willing to accelerate the organization's recovery by reallocating resources, pursuing turnaround initiatives and committing to strategic renewal under uncertainty. In such scenarios, bold recovery strategies may translate into excessive leverage, overinvestment, escalation of commitment to failing courses of action or overly aggressive turnaround decisions that increase firm fragility rather than reduce it. For this reason, the beneficial effect of CEO risk-taking is likely to depend on several factors which might act as boundary conditions, including the severity of the crisis, the availability of resources, the firm's debt capacity and board monitoring freedom.

The specific governance context of this study significantly impacts our discussion. The Italian capital market is characterized by long-tenured CEOs, low CEO turnover and a notable presence of founder CEOs; all these factors can influence corporate resilience. Long average tenures mean that newly appointed CEOs require more time to gain organizational legitimacy and acquire proper knowledge. In contrast, CEOs in the later stages of their tenure tend to become more conservative, as they are inclined to retain their leadership roles for longer periods. Consequently, in governance contexts with stable CEO leadership, resilience often manifests with a prolonged recovery time.

The low rate of CEO turnover indicates that the introduction of new CEOs does not enhance recovery capability, which is supported by empirical evidence showing that CEO turnover (*CEO_TURNOVER*) is not statistically significant in our case.

Furthermore, having a founder as CEO generally brings a natural entrepreneurial risk-taking orientation throughout their tenure, which directly affects the time required for recovery.

In line with earlier research indicating that CEO changes are not always advantageous (Hughes *et al.*, 2010), our findings suggest that when a firm is facing a distressed situation, hiring a new leader may lead to suboptimal outcomes. Therefore, it is important to consider the time the current CEO has already spent in the position, as well as their risk-taking propensity, in addition to their potential capabilities, when evaluating their ability to lead crisis recovery and build resilience.

6.1 Contributions

With these premises in mind, we offer several contributions across different research fields. First, the study contributes to the resilience literature by shifting attention toward the temporal nature of recovery. As clearly demonstrated by healthcare studies, the timing of leaders' responses to crises greatly influences how organizations manage adversity and determines whether they survive or fail (Förster *et al.*, 2023). Thus, organizational leaders' (CEO) behaviors are critical not only for whether a firm can recover but also for how quickly it occurs. The dimension of temporality can therefore differentiate the most successful CEOs, who are defined by their ability to drive firms to recover from a crisis in a shorter period. This point is crucial because scholars highlight that the longer a firm remains in distress, the higher its likelihood of bankruptcy (Zhou *et al.*, 2022; Li *et al.*, 2021). In other words, timely strategic actions led by CEOs are essential for ensuring recovery and long-term survival. This temporal lens aligns closely with a process-based understanding of resilience, conceptualized as time to recovery from financial distress. In doing so, this study moves forward from the traditional understanding of resilience as rooted primarily in organizational resources and capabilities, empirically demonstrating that the pace of recovery is systematically influenced by who leads the organization.

Second, our study also enriches UET by theorizing CEO tenure as a dynamic and nonlinear determinant of resilience. Although CEO tenure has been linked to various firm outcomes (Abatecola and Cristofaro, 2020; Darouichi *et al.*, 2021), it has previously been associated mainly with distressed situations or bankruptcy (Evans *et al.*, 2014). Insights from this research suggest that the duration of a CEO's tenure is a valuable factor to examine when assessing a firm's recovery capacity. By demonstrating a U-shaped relationship between tenure and time to recovery, the paper extends UET, highlighting the temporal imprint of CEOs on organizational adaptation. In this way, the study positions time to recovery as a strategically relevant outcome shaped by the evolving cognitive orientation of the CEO across tenure phases.

Third, we contribute to the literature on risk-taking (Lewellyn and Muller-Kahle, 2012; Burkhard *et al.*, 2023), which has typically not considered how risk preferences condition the relationship between executive experience and recovery. By revealing that risk-taking alters the relationship between CEO tenure and resilience, the paper advances the theoretical understanding of risk propensity as a behavioral mechanism that either accelerates or slows down the translation of expertise and knowledge into adaptive behaviors. It thereby bridges individual-level behavioral agency with resilience theory, suggesting that risk-taking is not only a strategic posture but also a catalyst for temporal adaptation when organizations are dealing with uncertainty. Importantly, these findings position risk-taking as a central dimension in enabling leaders to convert accumulated knowledge into recovery-oriented practices.

Our study also offers implications for practitioners. Shareholders and governing bodies should recognize the role of the CEO in fostering recovery after financial distress and understand that the time spent in office is a key factor for corporate resilience. This indicates that newly appointed leaders should receive targeted support through organizational recovery plans or dedicated committees, as they may not yet be fully capable of unlocking their potential due to incomplete knowledge of firm dynamics. Conversely, when CEOs serve for too long, governance should promote strategic actions focused on resilience to prevent risks such as

cognitive entrenchment and decision-making rigidity. Additionally, the results of the moderating effect suggest that CEOs' risk propensity may act as a catalyst for resilience but only under specific conditions. Risk-oriented strategic behaviors can enhance faster recovery when they are selective, financially sustainable and aligned with the organization's resources. However, risk-taking is not univocally beneficial, especially in conditions of distress, where excessive leverage, overinvestment or escalation of commitment may further undermine the firm. This highlights the need to include recovery strategies within a risk management approach, where CEOs can act decisively while governance mechanisms ensure that such actions do not hamper the firm's fragility.

6.2 Limitations and future research directions

Several limitations of this study warrant discussion. First, our focus on listed firms represents only a small portion of the global economy. Since non-resilient firms also impose societal costs – such as declines in employment – it would be valuable to gain a clearer understanding of how CEO tenure affects resilience in the private sector. Literature already addresses differences between listed and non-listed firms (Buzby, 1975), so this line of research could provide a useful complement. Second, we analyze the financial aspect of resilience – recovery from financial distress measured by Altman Z-score – without considering the underlying causes. We cannot exclude the possibility that different strategic actions and recovery times result from endogenous or exogenous shocks, as CEOs respond differently to those shocks (Bennedsen *et al.*, 2007; Sajko *et al.*, 2021). Third, as is typical of single-country studies, the results should be generalized cautiously. Resilience patterns vary across countries (Briguglio, 2016), raising the question of how country effects influence corporate resilience. Future research could explore this within the UET framework at the micro-level, as we have done here.

Notes

1. In the first season, “*response to mandate*”, CEOs aim to meet, implicitly or explicitly, the expectations of the management or their predecessor. The following phase, “*experimentation*”, is marked by intensive learning as CEOs work to set the overarching direction for their leadership period. In the third phase, “*selection of an enduring theme*”, CEOs find and consolidate their style and become committed and attached to the status quo. During the fourth phase, “*convergence*”, CEOs implement gradual actions aimed at strengthening the approach they have adopted. Finally, in the “*dysfunction*” phase, CEOs exhibit two contrasting tendencies: they reach the peak of their authority while simultaneously showing signs of disengagement (Hambrick and Fukutomi, 1991).
2. We followed the generally accepted interpretation of Altman Z-scores which indicates that three are the cut-off points: Z-scores below 1.81 indicate financial distress, Z-scores between 1.81 and 2.67 (included) represent the “grey” zone and Z-scores higher than 2.67 indicate the absence of financial distress (Altman, 1968; Altman and Hotchkiss, 1993).
3. Example case for resilience measure in terms of time to recovery: Between 2013 and 2016, the company *Alfa* maintained a solid financial position, with Altman Z-scores of 2.45 in 2013, 2.38 in 2014, 2.31 in 2015 and 2.28 in 2016. In 2017, however, *Alfa*'s score declined to 2.05. The situation worsened in 2018, when the Z-score fell to 1.72, below the critical threshold of 1.81, thus marking the onset of financial distress. In 2019, the score dropped further to 1.60. The company began to improve gradually in 2020, when the Z-score rose to 1.90; this meant *Alfa* was out of the immediate bankruptcy danger zone. In 2021, the score increased to 2.10. The full recovery materialized in 2022, when the Z-score climbed to 2.35. That is, in this hypothetical case, distress began in 2018, recovery was achieved in 2020 and the time to recovery was therefore 2 years.
4. In this manuscript, regression estimates are derived within a Cox proportional hazards framework. This means that they refer specifically to the instantaneous hazard of the recovery event, rather than its duration. For easier interpretation and in alignment with the theoretical focus of the study, we discuss the results in terms of the implied time to recovery. This is the key quantity of interest and is represented in Figures 1 and 2.

References

- Abatecola, G. and Cristofaro, M. (2020), "Hambrick and Mason's 'upper echelons theory': evolution and open avenues", *Journal of Management History*, Vol. 26 No. 1, pp. 116-136, doi: [10.1108/JMH-02-2018-0016](https://doi.org/10.1108/JMH-02-2018-0016).
- Accenture (2023), "Reinventing for resilience: a ceo's guide", available at: <https://www.accenture.com/us-en/insights/strategy/reinventing-resilience>
- Acquaah, M., Amoako-Gyampah, K. and Jayaram, J. (2011), "Resilience in family and nonfamily firms: an examination of the relationships between manufacturing strategy, competitive strategy and firm performance", *International Journal of Production Research*, Vol. 49 No. 18, pp. 5527-5544, doi: [10.1080/00207543.2011.563834](https://doi.org/10.1080/00207543.2011.563834).
- Ahmed, M.U., Kristal, M.M. and Pagell, M. (2014), "Impact of operational and marketing capabilities on firm performance: evidence from economic growth and downturns", *International Journal of Production Economics*, Vol. 154, pp. 59-71, doi: [10.1016/j.ijpe.2014.03.025](https://doi.org/10.1016/j.ijpe.2014.03.025).
- Aiken, L.S. and West, S.G. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Sage.
- Akgün, A.E. and Keskin, H. (2014), "Organisational resilience capacity and firm product innovativeness and performance", *International Journal of Production Research*, Vol. 52 No. 23, pp. 6918-6937, doi: [10.1080/00207543.2014.910624](https://doi.org/10.1080/00207543.2014.910624).
- Allgood, S. and Farrell, K.A. (2000), "The effect of CEO tenure on the relation between firm performance and turnover", *Journal of Financial Research*, Vol. 23 No. 3, pp. 373-390, doi: [10.1111/j.1475-6803.2000.tb00748.x](https://doi.org/10.1111/j.1475-6803.2000.tb00748.x).
- Altman, E. (1968), "Financial ratio, discriminant analysis and the prediction of corporate bankruptcy", *The Journal of Finance*, Vol. 23 No. 4, pp. 589-609, doi: [10.1111/j.1540-6261.1968.tb00843.x](https://doi.org/10.1111/j.1540-6261.1968.tb00843.x).
- Altman, E.I. and Hotchkiss, E. (1993), *Corporate Financial Distress and Bankruptcy*, John Wiley & Sons, pp. 105-110.
- Ambulkar, S., Blackhurst, J. and Grawe, S. (2015), "Firm's resilience to supply chain disruptions: scale development and empirical examination", *Journal of Operations Management*, Vol. 33 No. 1, pp. 111-122, doi: [10.1016/j.jom.2014.11.002](https://doi.org/10.1016/j.jom.2014.11.002).
- Ayala, J.C. and Manzano, G. (2014), "The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis", *Journal of Economic Psychology*, Vol. 42, pp. 126-135, doi: [10.1016/j.joep.2014.02.004](https://doi.org/10.1016/j.joep.2014.02.004).
- Barker, V.L. and Duhaime, I.M. (1997), "Strategic change in the turnaround process: theory and empirical evidence", *Strategic Management Journal*, Vol. 18 No. 1, pp. 13-38, doi: [10.1002/\(SICI\)1097-0266\(199701\)18:1%3C13::AID-SMJ843%3E3.0.CO;2-X](https://doi.org/10.1002/(SICI)1097-0266(199701)18:1%3C13::AID-SMJ843%3E3.0.CO;2-X).
- Benischke, M.H., Martin, G.P. and Glaser, L. (2019), "CEO equity risk bearing and strategic risk taking: the moderating effect of CEO personality", *Strategic Management Journal*, Vol. 40 No. 1, pp. 153-177, doi: [10.1002/smj.2974](https://doi.org/10.1002/smj.2974).
- Bennedsen, M., Perez-Gonzalez, F. and Wolfenzon, D. (2007), "Do CEOs matter?", No. 13-2007.
- Bhamra, R., Dani, S. and Burnard, K. (2011), "Resilience: the concept, a literature review and future directions", *International Journal of Production Research*, Vol. 49 No. 18, pp. 5375-5393, doi: [10.1080/00207543.2011.563826](https://doi.org/10.1080/00207543.2011.563826).
- Boeker, W. (1997), "Strategic change: the influence of managerial characteristics and organizational growth", *Academy of Management Journal*, Vol. 40 No. 1, pp. 152-170, doi: [10.5465/257024](https://doi.org/10.5465/257024).
- Bogodistov, Y. and Wohlgemuth, V. (2017), "Enterprise risk management: a capability-based perspective", *The Journal of Risk Finance*, Vol. 18 No. 3, pp. 234-251, doi: [10.1108/JRF-10-2016-0131](https://doi.org/10.1108/JRF-10-2016-0131).
- Boston Consulting Group (2025), "Balancing cost and resilience: the new supply chain challenge", available at: <https://www.bcg.com/publications/2025/cost-resilience-new-supply-chain-challenge>
- Brewton, K.E., Danes, S.M., Stafford, K. and Haynes, G.W. (2010), "Determinants of rural and urban family firm resilience", *Journal of Family Business Strategy*, Vol. 1 No. 3, pp. 155-166, doi: [10.1016/j.jfbs.2010.08.003](https://doi.org/10.1016/j.jfbs.2010.08.003).

- Briguglio, L.P. (2016), "Exposure to external shocks and economic resilience of countries: evidence from global indicators", *Journal of Economic Studies*, Vol. 43 No. 6, pp. 1057-1078, doi: [10.1108/JES-12-2014-0203](https://doi.org/10.1108/JES-12-2014-0203).
- Bromiley, P., McShane, M., Nair, A. and Rustambekov, E. (2015), "Enterprise risk management: review, critique, and research directions", *Long Range Planning*, Vol. 48 No. 4, pp. 265-276, doi: [10.1016/j.lrp.2014.07.005](https://doi.org/10.1016/j.lrp.2014.07.005).
- Brunelli, S., Vena, L., Sciascia, S. and Naldi, L. (2024), "Does family power drive the size transition of entrepreneurial family firms? A study on the growth of Italian manufacturing firms", *Journal of Small Business and Enterprise Development*, Vol. 31 No. 6, pp. 1175-1200, doi: [10.1108/JSBED-09-2023-0452](https://doi.org/10.1108/JSBED-09-2023-0452).
- Brunello, G., Graziano, C. and Parigi, B.M. (2003), "CEO turnover in insider-dominated boards: the Italian case", *Journal of Banking and Finance*, Vol. 27 No. 6, pp. 1027-1051, doi: [10.1016/S0378-4266\(02\)00244-3](https://doi.org/10.1016/S0378-4266(02)00244-3).
- Burkhard, B., Sirén, C., van Essen, M., Grichnik, D. and Shepherd, D.A. (2023), "Nothing ventured, nothing gained: a meta-analysis of CEO overconfidence, strategic risk taking, and performance", *Journal of Management*, Vol. 49 No. 8, pp. 2629-2666, doi: [10.1177/01492063221110203](https://doi.org/10.1177/01492063221110203).
- Buyl, T., Boone, C. and Wade, J.B. (2019), "CEO narcissism, risk-taking, and resilience: an empirical analysis in US commercial banks", *Journal of Management*, Vol. 45 No. 4, pp. 1372-1400, doi: [10.1177/0149206317699521](https://doi.org/10.1177/0149206317699521).
- Buzby, S.L. (1975), "Company size, listed versus unlisted stocks, and the extent of financial disclosure", *Journal of Accounting Research*, Vol. 13 No. 1, pp. 16-37, doi: [10.2307/2490647](https://doi.org/10.2307/2490647).
- Cambrea, D.R., Ponomareva, Y., Pittino, D. and Minichilli, A. (2022), "Strings attached: socioemotional wealth mixed gambles in the cash management choices of family firms", *Journal of Family Business Strategy*, Vol. 13 No. 3, pp. 100466, doi: [10.1016/j.jfbs.2021.100466](https://doi.org/10.1016/j.jfbs.2021.100466).
- Carmeli, A. and Markman, G.D. (2011), "Capture, governance, and resilience: strategy implications from the history of Rome", *Strategic Management Journal*, Vol. 32 No. 3, pp. 322-341, doi: [10.1002/smj.880](https://doi.org/10.1002/smj.880).
- Carpenter, R.E. and Petersen, B.C. (2002), "Is the growth of small firms constrained by internal finance?", *The Review of Economics and Statistics*, Vol. 84 No. 2, pp. 298-309, doi: [10.1162/003465302317411541](https://doi.org/10.1162/003465302317411541).
- Carpenter, M.A., Geletkanycz, M.A. and Sanders, W.G. (2004), "Upper echelons research revisited: antecedents, elements, and consequences of top management team composition", *Journal of Management*, Vol. 30 No. 6, pp. 749-778, doi: [10.1016/j.jm.2004.06.001](https://doi.org/10.1016/j.jm.2004.06.001).
- Carretero-Gómez, J.M., Forteza, F.J. and Estudillo, B. (2023), "Linking occupational accidents and construction firm survival", *Journal of Safety Research*, Vol. 85, pp. 485-491, doi: [10.1016/j.jsr.2023.05.002](https://doi.org/10.1016/j.jsr.2023.05.002).
- Cavallo, A., Lippi, F. and Miyahara, K. (2024), "Large shocks travel fast", *The American Economic Review: Insights*, Vol. 6 No. 4, pp. 558-574, doi: [10.1257/aeri.20230454](https://doi.org/10.1257/aeri.20230454).
- Chatterjee, A. and Hambrick, D.C. (2011), "Executive personality, capability cues, and risk taking: how narcissistic CEOs react to their successes and stumbles", *Administrative Science Quarterly*, Vol. 56 No. 2, pp. 202-237, doi: [10.1177/0001839211427534](https://doi.org/10.1177/0001839211427534).
- Chen, H.L. (2013), "CEO tenure and R&D investment: the moderating effect of board capital", *The Journal of Applied Behavioral Science*, Vol. 49 No. 4, pp. 437-459, doi: [10.1177/0021886313485129](https://doi.org/10.1177/0021886313485129).
- Chen, M.J. and Hambrick, D.C. (1995), "Speed, stealth, and selective attack: how small firms differ from large firms in competitive behavior", *Academy of Management Journal*, Vol. 38 No. 2, pp. 453-482, doi: [10.2307/256688](https://doi.org/10.2307/256688).
- Chen, W.T., Zhou, G.S. and Zhu, X.K. (2019), "CEO tenure and corporate social responsibility performance", *Journal of Business Research*, Vol. 95, pp. 292-302, doi: [10.1016/j.jbusres.2018.08.018](https://doi.org/10.1016/j.jbusres.2018.08.018).

-
- Cho, J., Miller, D. and Lee, J. (2018), "Too much of a good thing: family involvement and the survival of listed Korean firms", *Journal of Family Business Strategy*, Vol. 9 No. 4, pp. 223-237, doi: [10.1016/j.jfbs.2018.10.001](https://doi.org/10.1016/j.jfbs.2018.10.001).
- Cirillo, A., Pennacchio, L., Carillo, M.R. and Romano, M. (2021), "The antecedents of entrepreneurial risk-taking in private family firms: CEO seasons and contingency factors", *Small Business Economics*, Vol. 56 No. 4, pp. 1571-1590, doi: [10.1007/s11187-019-00279-x](https://doi.org/10.1007/s11187-019-00279-x).
- Conz, E. and Magnani, G. (2020), "A dynamic perspective on the resilience of firms: a systematic literature review and a framework for future research", *European Management Journal*, Vol. 38 No. 3, pp. 400-412, doi: [10.1016/j.emj.2019.12.004](https://doi.org/10.1016/j.emj.2019.12.004).
- Cox, D.R. (1972), "Regression models and life-tables", *Journal of the Royal Statistical Society: Series B*, Vol. 34 No. 2, pp. 187-202, doi: [10.1111/j.2517-6161.1972.tb00899.x](https://doi.org/10.1111/j.2517-6161.1972.tb00899.x).
- Cox, D.R. and Oakes, D. (1984), *Analysis of Survival Data*, Chapman & Hall, London.
- Croci, E., Hertig, G., Khoja, L. and Lan, L.L. (2024), "Board characteristics and firm resilience: evidence from disruptive events", *Corporate Governance: An International Review*, Vol. 32 No. 1, pp. 2-32, doi: [10.1111/corg.12518](https://doi.org/10.1111/corg.12518).
- Cutrini, E. and Ninivaggi, F. (2024), "Pandemic crisis and firm survival: evidence from the Italian manufacturing industry", *Journal of Industrial and Business Economics*, Vol. 51 No. 2, pp. 265-297, doi: [10.1007/s40812-024-00309-0](https://doi.org/10.1007/s40812-024-00309-0).
- Dalocchio, M., Caputo, A., Tron, A. and Colantoni, F. (2022), "It's a matter of time! CEO turnover and corporate turnarounds in Italy", *Journal of Management and Organization*, Vol. 31 No. 4, pp. 1-21, doi: [10.1017/jmo.2022.83](https://doi.org/10.1017/jmo.2022.83).
- Darouichi, A., Kunisch, S., Menz, M. and Cannella, A.A., Jr (2021), "CEO tenure: an integrative review and pathways for future research", *Corporate Governance: An International Review*, Vol. 29 No. 6, pp. 661-683, doi: [10.1111/corg.12396](https://doi.org/10.1111/corg.12396).
- Deb, P. and Wiklund, J. (2017), "The effects of CEO founder status and stock ownership on entrepreneurial orientation in small firms", *Journal of Small Business Management*, Vol. 55 No. 1, pp. 32-55, doi: [10.1111/jsbm.12231](https://doi.org/10.1111/jsbm.12231).
- DesJardine, M., Bansal, P. and Yang, Y. (2019), "Bouncing back: building resilience through social and environmental practices in the context of the 2008 global financial crisis", *Journal of Management*, Vol. 45 No. 4, pp. 1434-1460, doi: [10.1177/0149206317708854](https://doi.org/10.1177/0149206317708854).
- Devers, C.E., McNamara, G., Wiseman, R.M. and Arrfelt, M. (2008), "Moving closer to the action: examining compensation design effects on firm risk", *Organization Science*, Vol. 19 No. 4, pp. 548-566, doi: [10.1287/orsc.1070.0317](https://doi.org/10.1287/orsc.1070.0317).
- Duchek, S. (2020), "Organizational resilience: a capability-based conceptualization", *Business Research*, Vol. 13 No. 1, pp. 215-246, doi: [10.1007/s40685-019-0085-7](https://doi.org/10.1007/s40685-019-0085-7).
- Dunbar, C., Li, Z.F. and Shi, Y. (2020), "CEO risk-taking incentives and corporate social responsibility", *Journal of Corporate Finance*, Vol. 64, 101714, doi: [10.1016/j.jcorpfin.2020.101714](https://doi.org/10.1016/j.jcorpfin.2020.101714).
- Evans, I.I.I.J.H., Luo, S. and Nagarajan, N.J. (2014), "CEO turnover, financial distress, and contractual innovations", *The Accounting Review*, Vol. 89 No. 3, pp. 959-990, doi: [10.2308/accr-50688](https://doi.org/10.2308/accr-50688).
- Finkelstein, S. and Hambrick, D.C. (1990), "Top-management-team tenure and organizational outcomes: the moderating role of managerial discretion", *Administrative Science Quarterly*, Vol. 35 No. 3, pp. 484-503, doi: [10.2307/2393314](https://doi.org/10.2307/2393314).
- Finkelstein, S., Hambrick, D.C. and Cannella, A.A. (2009), *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*, Oxford University Press.
- Förster, C., Füreder, N. and Hertelendy, A. (2023), "Why time matters when it comes to resilience: how the duration of crisis affects resilience of healthcare and public health leaders", *Public Health*, Vol. 215, pp. 39-41, doi: [10.1016/j.puhe.2022.11.024](https://doi.org/10.1016/j.puhe.2022.11.024).
- García-Ramos, R. and Díaz, B.D. (2021), "Board of directors structure and firm financial performance: a qualitative comparative analysis", *Long Range Planning*, Vol. 54 No. 6, 102017, doi: [10.1016/j.lrp.2020.102017](https://doi.org/10.1016/j.lrp.2020.102017).

- George, T.J. and Hwang, C.-Y. (2010), "A resolution of the distress risk and leverage puzzles in the cross section of stock returns", *Journal of Financial Economics*, Vol. 96 No. 1, pp. 56-79.
- Giovannetti, G., Ricchiuti, G. and Velucchi, M. (2011), "Size, innovation and internationalization: a survival analysis of Italian firms", *Applied Economics*, Vol. 43 No. 12, pp. 1511-1520, doi: [10.1080/00036840802600566](https://doi.org/10.1080/00036840802600566).
- Gómez-Mejia, L.R., Neacsu, I. and Martin, G. (2019), "CEO risk-taking and socioemotional wealth: the behavioral agency model, family control, and CEO option wealth", *Journal of Management*, Vol. 45 No. 4, pp. 1713-1738, doi: [10.1177/0149206317723711](https://doi.org/10.1177/0149206317723711).
- Gómez-Mejia, L.R., Chirico, F., Martin, G. and Baù, M. (2022), "Best among the worst or worst among the best? Socioemotional wealth and risk-performance returns for family and non-family firms under financial distress", *Entrepreneurship Theory and Practice*, Vol. 47 No. 4, pp. 1031-1058, doi: [10.1177/10422587211057420](https://doi.org/10.1177/10422587211057420).
- González, M., Guzmán, A., Pombo, C. and Trujillo, M.A. (2015), "The role of family involvement on CEO turnover: evidence from Colombian family firms", *Corporate Governance: An International Review*, Vol. 23 No. 3, pp. 266-284, doi: [10.1111/corg.12083](https://doi.org/10.1111/corg.12083).
- Graf-Vlachy, L., Bundy, J. and Hambrick, D.C. (2020), "Effects of an advancing tenure on CEO cognitive complexity", *Organization Science*, Vol. 31 No. 4, pp. 797-1051, doi: [10.1287/orsc.2019.1336](https://doi.org/10.1287/orsc.2019.1336).
- Graham, J.R., Harvey, C.R. and Puri, M. (2015), "Capital allocation and delegation of decision-making authority within firms", *Journal of Financial Economics*, Vol. 115 No. 3, pp. 449-470, doi: [10.1016/j.jfineco.2014.10.011](https://doi.org/10.1016/j.jfineco.2014.10.011).
- Grambsch, P.M. and Therneau, T.M. (1994), "Proportional hazards tests and diagnostics based on weighted residuals", *Biometrika*, Vol. 81 No. 3, pp. 515-526, doi: [10.1093/biomet/81.3.515](https://doi.org/10.1093/biomet/81.3.515).
- Greene, W.H. (2011), *Econometric Analysis*, Pearson.
- Haans, R.F., Pieters, C. and He, Z.L. (2016), "Thinking about U: theorizing and testing U-and inverted U-shaped relationships in strategy research", *Strategic Management Journal*, Vol. 37 No. 7, pp. 1177-1195, doi: [10.1002/smj.2399](https://doi.org/10.1002/smj.2399).
- Hair, H.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (2010), *Multivariate Data Analysis*, Prentice Hall, Upper Saddle River, NJ.
- Hambrick, D.C. (2007), "Upper echelons theory: an update", *Academy of Management Review*, Vol. 32 No. 2, pp. 334-343, doi: [10.5465/amr.2007.24345254](https://doi.org/10.5465/amr.2007.24345254).
- Hambrick, D.C. and Fukutomi, G.D. (1991), "The seasons of a ceo's tenure", *Academy of Management Review*, Vol. 16 No. 4, pp. 719-742, doi: [10.5465/amr.1991.4279621](https://doi.org/10.5465/amr.1991.4279621).
- Hambrick, D.C. and Mason, P.A. (1984), "Upper echelons: the organization as a reflection of its top managers", *Academy of Management Review*, Vol. 9 No. 2, pp. 193-206, doi: [10.5465/amr.1984.4277628](https://doi.org/10.5465/amr.1984.4277628).
- Henderson, A.D., Miller, D. and Hambrick, D.C. (2006), "How quickly do CEOs become obsolete? Industry dynamism, CEO tenure, and company performance", *Strategic Management Journal*, Vol. 27 No. 5, pp. 447-460, doi: [10.1002/smj.524](https://doi.org/10.1002/smj.524).
- Hillmann, J. and Guenther, E. (2021), "Organizational resilience: a valuable construct for management research?", *International Journal of Management Reviews*, Vol. 23 No. 1, pp. 7-44, doi: [10.1111/ijmr.12239](https://doi.org/10.1111/ijmr.12239).
- Honjo, Y. and Kato, M. (2022), "Are founder-CEOs resilient to crises? The impact of founder-CEO succession on new firm survival", *International Small Business Journal*, Vol. 40 No. 2, pp. 205-235, doi: [10.1177/02662426211050794](https://doi.org/10.1177/02662426211050794).
- Hughes, M., Hughes, P., Mellahi, K. and Gueramat, C. (2010), "Short term versus long term impact of managers: evidence from the football industry", *British Journal of Management*, Vol. 21 No. 2, pp. 571-589, doi: [10.1111/j.1467-8551.2009.00668.x](https://doi.org/10.1111/j.1467-8551.2009.00668.x).
- Islam, E. and Zein, J. (2020), "Inventor CEOs", *Journal of Financial Economics*, Vol. 135 No. 2, pp. 505-527, doi: [10.1016/j.jfineco.2019.06.009](https://doi.org/10.1016/j.jfineco.2019.06.009).

-
- Jaaron, A. and Backhouse, C.J. (2014), "Building antifragility in service organisations: going beyond resilience", *International Journal of Services and Operations Management*, Vol. 19 No. 4, pp. 491-513, doi: [10.1504/IJSOM.2014.065671](https://doi.org/10.1504/IJSOM.2014.065671).
- Joussen, T.P., Kanbach, D.K. and Kraus, S. (2025), "Enabling strategic change toward resilience: a systematic review from a dynamic capabilities perspective", *Strategic Change*, Vol. 34 No. 3, pp. 373-405, doi: [10.1002/jsc.2626](https://doi.org/10.1002/jsc.2626).
- Kennedy, P. (2008), *A Guide to Econometrics*, 6th ed., Wiley-Blackwell.
- Kiefer, N.M. (1988), "Economic duration data and hazard functions", *Journal of Economic Literature*, Vol. 26 No. 2, pp. 646-679, available at: <https://www.jstor.org/stable/2726365>
- Kim, E.H. and Lu, Y. (2011), "CEO ownership, external governance, and risk-taking", *Journal of Financial Economics*, Vol. 102 No. 2, pp. 272-292, doi: [10.1016/j.jfineco.2011.07.002](https://doi.org/10.1016/j.jfineco.2011.07.002).
- Kim, Y. and Cannella, A.A. Jr (2008), "Toward a social capital theory of director selection", *Corporate Governance: An International Review*, Vol. 16 No. 4, pp. 282-293, doi: [10.1111/j.1467-8683.2008.00693.x](https://doi.org/10.1111/j.1467-8683.2008.00693.x).
- Kim, B., Burns, M.L. and Prescott, J.E. (2009), "The strategic role of the board: the impact of board structure on top management team strategic action capability", *Corporate Governance: An International Review*, Vol. 17 No. 6, pp. 728-743, doi: [10.1111/j.1467-8683.2009.00775.x](https://doi.org/10.1111/j.1467-8683.2009.00775.x).
- Ko, H.C., Wang, L.H. and Lin, D. (2015), "CEO traits, corporate performance, and financial leverage", *International Journal of Economics and Finance*, Vol. 7 No. 1, pp. 68-86, doi: [10.5539/ijef.v7n1p68](https://doi.org/10.5539/ijef.v7n1p68).
- Korber, S. and McNaughton, R.B. (2018), "Resilience and entrepreneurship: a systematic literature review", *International Journal of Entrepreneurial Behavior and Research*, Vol. 24 No. 7, pp. 1129-1154, doi: [10.1108/IJEBR-10-2016-0356](https://doi.org/10.1108/IJEBR-10-2016-0356).
- Krause, R. (2017), "Being the CEO'S boss: an examination of board chair orientations", *Strategic Management Journal*, Vol. 38 No. 3, pp. 697-713, doi: [10.1002/smj.2500](https://doi.org/10.1002/smj.2500).
- Lengnick-Hall, M.L. and Lengnick-Hall, C.A. (2005), "HR's role in building relationship networks", *Managing Knowledge: An Essential Reader*, Vol. 17 No. 4, pp. 299-63, doi: [10.5465/ame.2003.11851841](https://doi.org/10.5465/ame.2003.11851841).
- Lengnick-Hall, C.A., Beck, T.E. and Lengnick-Hall, M.L. (2011), "Developing a capacity for organizational resilience through strategic human resource management", *Human Resource Management Review*, Vol. 21 No. 3, pp. 243-255, doi: [10.1016/j.hrmr.2010.07.001](https://doi.org/10.1016/j.hrmr.2010.07.001).
- Lewellyn, K.B. and Muller-Kahle, M.I. (2012), "CEO power and risk taking: evidence from the subprime lending industry", *Corporate Governance: An International Review*, Vol. 20 No. 3, pp. 289-307, doi: [10.1111/j.1467-8683.2011.00903.x](https://doi.org/10.1111/j.1467-8683.2011.00903.x).
- Li, J. and Tang, Y.I. (2010), "CEO hubris and firm risk taking in China: the moderating role of managerial discretion", *Academy of Management Journal*, Vol. 53 No. 1, pp. 45-68, doi: [10.5465/amj.2010.48036912](https://doi.org/10.5465/amj.2010.48036912).
- Li, C., Coates, G., Johnson, N. and McGuinness, M. (2015), "Designing an agent-based model of SMEs to assess flood response strategies and resilience", *International Journal of Social, Education, Economics and Management Engineering*, Vol. 9 No. 1, pp. 7-12.
- Li, Z., Crook, J., Andreeva, G. and Tang, Y. (2021), "Predicting the risk of financial distress using corporate governance measures", *Pacific-Basin Finance Journal*, Vol. 68, 101334, doi: [10.1016/j.pacfin.2020.101334](https://doi.org/10.1016/j.pacfin.2020.101334).
- Lin, D.Y. and Wei, L.J. (1989), "The robust inference for the cox proportional hazards model", *Journal of the American Statistical Association*, Vol. 84 No. 408, pp. 1074-1078, doi: [10.1080/01621459.1989.10478874](https://doi.org/10.1080/01621459.1989.10478874).
- Lin, N. (2002), *Social Capital: a Theory of Social Structure and Action*, Cambridge University Press.
- Lind, J.T. and Mehlum, H. (2010), "With or without U? The appropriate test for a U-shaped relationship", *Oxford Bulletin of Economics and Statistics*, Vol. 72 No. 1, pp. 109-118, doi: [10.1111/j.1468-0084.2009.00569.x](https://doi.org/10.1111/j.1468-0084.2009.00569.x).

- Linnenluecke, M.K. (2017), "Resilience in business and management research: a review of influential publications and a research agenda", *International Journal of Management Reviews*, Vol. 19 No. 1, pp. 4-30, doi: [10.1111/ijmr.12076](https://doi.org/10.1111/ijmr.12076).
- Malmendier, U. and Tate, G. (2005), "CEO overconfidence and corporate investment", *The Journal of Finance*, Vol. 60 No. 6, pp. 2661-2700, doi: [10.1111/j.1540-6261.2005.00813](https://doi.org/10.1111/j.1540-6261.2005.00813).
- March, J.G. and Shapira, Z. (1987), "Managerial perspectives on risk and risk taking", *Management Science*, Vol. 33 No. 11, pp. 1404-1418, doi: [10.1287/mnsc.33.11.1404](https://doi.org/10.1287/mnsc.33.11.1404).
- Martin, G.P., Gómez-Mejía, L.R. and Wiseman, R.M. (2013), "Executive stock options as mixed gambles: re-Visiting the behavioral agency model", *Academy of Management Journal*, Vol. 56 No. 2, pp. 451-472, doi: [10.5465/amj.2010.0967](https://doi.org/10.5465/amj.2010.0967).
- McClelland, P.L., Xin, L. and Barker, V.L. (2010), "CEO commitment to the status quo: replication and extension using content analysis", *Journal of Management*, Vol. 36 No. 5, pp. 1251-1277, doi: [10.1177/0149206309345019](https://doi.org/10.1177/0149206309345019).
- McKinsey & Company (2023), "Resilience during uncertainty: what industrial leaders must know", available at: <https://www.mckinsey.com/industries/industrials-and-electronics/our-insights/resilience-during-uncertainty-what-industrial-leaders-must-know>
- Meyer, A.D. (1982), "Adapting to environmental jolts", *Administrative Science Quarterly*, Vol. 27 No. 4, pp. 515-537, doi: [10.2307/2392528](https://doi.org/10.2307/2392528).
- Miller, D. (1991), "Stale in the saddle: CEO tenure and the match between organization and environment", *Management Science*, Vol. 37 No. 1, pp. 34-52, doi: [10.1287/mnsc.37.1.34](https://doi.org/10.1287/mnsc.37.1.34).
- Minichilli, A., Corbetta, G. and MacMillan, I.C. (2010), "Top management teams in family-controlled companies: 'familiness', 'faultlines', and their impact on financial performance", *Journal of Management Studies*, Vol. 47 No. 2, pp. 205-222, doi: [10.1111/j.1467-6486.2009.00888.x](https://doi.org/10.1111/j.1467-6486.2009.00888.x).
- Nautiyal, S. and Pathak, P. (2024), "Resilience through the lens of entrepreneurship: a bibliometric analysis and network mapping of the emerging research field", *International Journal of Organizational Analysis*, Vol. 32 No. 3, pp. 522-544, doi: [10.1108/IJOA-12-2022-3540](https://doi.org/10.1108/IJOA-12-2022-3540).
- Ortiz-de-Mandojana, N. and Bansal, P. (2016), "The long-term benefits of organizational resilience through sustainable business practices", *Strategic Management Journal*, Vol. 37 No. 8, pp. 1615-1631, doi: [10.1002/smj.2410](https://doi.org/10.1002/smj.2410).
- Osei Bonsu, C., Liu, C. and Yawson, A. (2024), "The impact of CEO attributes on corporate decision-making and outcomes: a review and an agenda for future research", *International Journal of Managerial Finance*, Vol. 20 No. 2, pp. 503-545, doi: [10.1108/IJMF-02-2023-0092](https://doi.org/10.1108/IJMF-02-2023-0092).
- Pal, R., Westerlind, R. and Torstensson, H. (2014), "Exploring the resilience development process by implementing the crisis strategic planning framework: a Swedish textile SME perspective", *International Journal of Decision Sciences, Risk and Management*, Vol. 5 No. 1, pp. 1-34, doi: [10.1504/IJDSRM.2013.057529](https://doi.org/10.1504/IJDSRM.2013.057529).
- Resick, C.J., Nadkarni, S., Chu, J., Chen, J., Lien, W.C., Margolis, J.A. and Shao, P. (2023), "I did it my way: CEO core self-evaluations and the environmental contingencies on firm risk-taking strategies", *Journal of Management Studies*, Vol. 60 No. 5, pp. 1236-1272, doi: [10.1111/joms.12872](https://doi.org/10.1111/joms.12872).
- Sajko, M., Boone, C. and Buyl, T. (2021), "CEO greed, corporate social responsibility, and organizational resilience to systemic shocks", *Journal of Management*, Vol. 47 No. 4, pp. 957-992, doi: [10.1177/0149206320902528](https://doi.org/10.1177/0149206320902528).
- Salvato, C., Sargiacomo, M., Amore, M.D. and Minichilli, A. (2020), "Natural disasters as a source of entrepreneurial opportunity: family business resilience after an earthquake", *Strategic Entrepreneurship Journal*, Vol. 14 No. 4, pp. 594-615, doi: [10.1002/sej.1368](https://doi.org/10.1002/sej.1368).
- Sanders, W.G. and Hambrick, D.C. (2007), "Swinging for the fences: the effects of CEO stock options on company risk taking and performance", *Academy of Management Journal*, Vol. 50 No. 5, pp. 1055-1078, doi: [10.5465/amj.2007.27156438](https://doi.org/10.5465/amj.2007.27156438).

- Santoro, G., Messeni-Petruzzelli, A. and Del Giudice, M. (2021), "Searching for resilience: the impact of employee-level and entrepreneur-level resilience on firm performance in small family firms", *Small Business Economics*, Vol. 57 No. 1, pp. 455-471, doi: [10.1007/s11187-020-00319-x](https://doi.org/10.1007/s11187-020-00319-x).
- Sasabuchi, S. (1980), "A test of a multivariate normal mean with composite hypotheses determined by linear inequalities", *Biometrika*, Vol. 67 No. 2, pp. 429-439, doi: [10.1093/biomet/67.2.429](https://doi.org/10.1093/biomet/67.2.429).
- Schepker, D.J., Kim, Y., Patel, P.C., Thatcher, M.B.T. and Campion, M.C. (2017), "CEO succession, strategic change, and post-succession performance: a meta-analysis", *The Leadership Quarterly*, Vol. 28 No. 6, pp. 701-720, doi: [10.1016/j.leafqua.2017.03.001](https://doi.org/10.1016/j.leafqua.2017.03.001).
- Schoenherr, T., Griffith, D.A. and Chandra, A. (2014), "Intangible capital, knowledge and new product development competence in supply chains: process, interaction and contingency effects among SMEs", *International Journal of Production Research*, Vol. 52 No. 16, pp. 4916-4929, doi: [10.1080/00207543.2014.894258](https://doi.org/10.1080/00207543.2014.894258).
- Sheffi, Y. and Rice, J.B., Jr. (2005), "A supply chain view of the resilient enterprise", *MIT Sloan Management Review*, Vol. 47 No. 1, pp. 41-48.
- Simsek, Z. (2007), "CEO tenure and organizational performance: an intervening model", *Strategic Management Journal*, Vol. 28 No. 6, pp. 653-662, doi: [10.1002/smj.599](https://doi.org/10.1002/smj.599).
- Sui, S. and Baum, M. (2014), "Internationalization strategy, firm resources and the survival of SMEs in the export market", *Journal of International Business Studies*, Vol. 45 No. 7, pp. 821-841, doi: [10.1057/jibs.2014.11](https://doi.org/10.1057/jibs.2014.11).
- Teece, D., Peteraf, M. and Leih, S. (2016), "Dynamic capabilities and organizational agility: risk, uncertainty, and strategy in the innovation economy", *California Management Review*, Vol. 58 No. 4, pp. 13-35, doi: [10.1525/cmr.2016.58.4.13](https://doi.org/10.1525/cmr.2016.58.4.13).
- Tian, X. and Wu, L. (2025), "How does CEO cognitive style and board characteristics impact strategic risk-taking?", *Corporate Governance: An International Review*, Vol. 33 No. 6, pp. 1437-1471, doi: [10.1111/corg.12654](https://doi.org/10.1111/corg.12654).
- Tracey, N. and French, E. (2017), "Influence your firm's resilience through its reputation: results won't happen overnight but they will happen", *Corporate Reputation Review*, Vol. 20 No. 1, pp. 57-75, doi: [10.1057/s41299-017-0014-7](https://doi.org/10.1057/s41299-017-0014-7).
- Ullah, M., Zahid, M., Rizvi, S.M.A.E.R., Qureshi, Q.G.M. and Ali, F. (2022), "Do green supply chain management practices improve organizational resilience during the COVID-19 crisis? A survival analysis of global firms", *Economics Letters*, Vol. 219, 110802, doi: [10.1016/j.econlet.2022.110802](https://doi.org/10.1016/j.econlet.2022.110802).
- Van Der Vegt, G.S., Essens, P., Wahlström, M. and George, G. (2015), "Managing risk and resilience", *Academy of Management Journal*, Vol. 58 No. 4, pp. 971-980, doi: [10.5465/amj.2015.4004](https://doi.org/10.5465/amj.2015.4004).
- van Essen, M., Strike, V.M., Carney, M. and Sapp, S. (2015), "The resilient family firm: stakeholder outcomes and institutional effects", *Corporate Governance: An International Review*, Vol. 23 No. 3, pp. 167-183, doi: [10.1111/corg.12087](https://doi.org/10.1111/corg.12087).
- Walumbwa, F.O., Maidique, M.A. and Atamanik, C. (2014), "Decision-making in a crisis: what every leader needs to know", *Organizational Dynamics*, Vol. 43 No. 4, pp. 284-293, doi: [10.1016/j.orgdyn.2014.09.005](https://doi.org/10.1016/j.orgdyn.2014.09.005).
- Wang, X., Zhang, Z. and Jia, M. (2025), "Taming the black swan: CEO with military experience and organizational resilience", *Asia Pacific Journal of Management*, Vol. 42 No. 2, pp. 803-859, doi: [10.1007/s10490-023-09941-1](https://doi.org/10.1007/s10490-023-09941-1).
- Weis, M. and Klarner, P. (2022), "A CEO'S future temporal depth and organizational resilience", *Schmalenbach Journal of Business Research*, Vol. 74 No. 4, pp. 659-693, doi: [10.1007/s41471-022-00145-9](https://doi.org/10.1007/s41471-022-00145-9).
- Williams, T.A., Gruber, D.A., Sutcliffe, K.M., Shepherd, D.A. and Zhao, E.Y. (2017), "Organizational response to adversity: fusing crisis management and resilience research streams", *The Academy of Management Annals*, Vol. 11 No. 2, pp. 733-769, doi: [10.5465/annals.2015.0134](https://doi.org/10.5465/annals.2015.0134).
- Wooldridge, J.M. (2010), "Econometric analysis of cross section and panel data".

- Yao, N., Wei, J., Zhu, W. and Bondar, A. (2019), "The quicker, the better? The antecedents and consequences of response timing strategy in the aftermath of a corporate crisis", *Baltic Journal of Management*, Vol. 14 No. 1, pp. 19-38, doi: [10.1108/BJM-06-2017-0185](https://doi.org/10.1108/BJM-06-2017-0185).
- Zhou, F., Fu, L., Li, Z. and Xu, J. (2022), "The recurrence of financial distress: a survival analysis", *International Journal of Forecasting*, Vol. 38 No. 3, pp. 1100-1115, doi: [10.1016/j.ijforecast.2021.12.005](https://doi.org/10.1016/j.ijforecast.2021.12.005).
- Zighan, S., Abualqumboz, M., Dwaikat, N. and Alkalha, Z. (2022), "The role of entrepreneurial orientation in developing SMEs resilience capabilities throughout COVID-19", *The International Journal of Entrepreneurship and Innovation*, Vol. 23 No. 4, pp. 227-239, doi: [10.1177/14657503211046849](https://doi.org/10.1177/14657503211046849).
-

Corresponding author

Maria Angela Manzi can be contacted at: mariaangela.manzi@unina.it