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When the Former CEO Acts as Board Chair: Does This Matter to Debt Policy and Risk of Default?

This paper scrutinizes the interconnections between debt capital raising, firm risk of default, and the presence of a former CEO who now serves as a board chairperson, referred to as the Chair-Former-CEO (CFC). Employing a sample of the largest non-financial firms within the US S&P 100 from 2002 to 2018, our results reveal that, when compared to their non-CFC counterparts, CFCs exhibit a greater propensity for opting for lower debt finance-raising strategies and are linked to a reduced firm risk of default. The CFC brings forth human and social capital that can enhance the board's capacity to monitor and guide incumbent CEOs, thereby fostering a more effective governance mechanism. This, in turn, will lead to a reduction in agency-related costs and an improvement in the firm's risk position. Additionally, we have uncovered an underlying mechanism through which this association takes place. The CFC prefers to pursue a low-risk financing mix strategy directly tied to a lower likelihood of default. The findings of this paper challenge established corporate governance codes, such as those in the US and the UK, which advocate for constraints on the internal promotion of CEOs to the Chair role. In contrast to these recommendations, our study suggests advantages to consolidating these roles, particularly for the intensity of monitoring, the firm's risk-taking behavior, and its financial policies. This alignment with the research on CEO duality, which has yielded mixed results, challenges the traditional wisdom of segregating the roles of CEO and board Chair.

Key words: Chair-Former-CEO; Debt financing; Default risk.

A central aspect of corporate governance revolves around the relationship between two key figures: the Chairman (or Chair) and the Chief Executive Officer (CEO). However, studies on this are scant, especially when the former CEO stays on as the Board Chair or the Chair who formerly served as the CEO of the same firm. This study examines the effects of the Chair-Former-CEO

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(CFC hereafter) on the debt financing pattern and corporate default risk and the mediating impacts of such debt financing decisions. CFC refers to the 'Chair held CEO position in the firm prior to becoming Chair' (Veprauskaitė and Adams, 2013, p. 233), so the non-CFC does not have that experience before becoming Chair. Specifically, our study compares and contrasts the differential roles of the CFC versus the non-CFC on decision-making efficiency and examines to what extent the presence of the CFC affects the firm's debt financing mix strategy and insolvency position. It contributes significantly to existing knowledge related to the Chair and CEO roles and the relationship between them. Our current understanding in the financial field is only limited to other aspects of the Chair–CEO association, such as Chair–CEO duality (e.g., Pathan, 2009; Dey *et al*., 2011), Chair–CEO age differences (e.g., Goergen *et al*., 2015; Zhou *et al*., 2019; Zhu *et al*., 2021), and the 'chemistry' between the Chair and the CEO, such as sense-making and deep friendship (philos) (Kakabadse *et al*., 2010). However, there are no studies on the performance of the CFC; hence, our research is novel and of interest to academics and corporate professionals.

Leadership theorists emphasize the critical relationship between the Chair and the CEO, as senior leaders guide their organizations. They occupy the apex of the company's hierarchy, a position that signifies a pivotal power source, aligning with the principles of the upper echelons theory (refer to Hambrick and Mason, 1984). This authority bestows upon them the ability to make decisions regarding incentives and consequences within their organizations, including hiring and terminating senior executives and establishing strategic and operational standards (as discussed by Knights and Willmott, 1992). The interaction between the Chair and the CEO is observable by all board directors and management team members, and it significantly influences the culture of these immediate groups.

We contend that when the Chair has been internally promoted from the CEO role or has prior experience as the CEO within the same firm, these circumstances can profoundly impact the relationship between the Chair and the new CEO. Furthermore, we argue that even when there is a change in senior management roles (e.g., the CEO transitioning to the Chair role and directors or staff moving into the CEO position), it inevitably alters their relationship dynamics. Notably, the influence of an ex-CEO who becomes Chair remains distinctive. This argument finds support in our data, which illustrates that more than half of the sampled firms have promoted their CEOs to the position of Chair. If this relationship is cultivated positively, it can serve as an invaluable source of knowledge and judgement for both the CEO and the Chair. We chose the top US 100 largest firms listed in S&P100 because this sample by sales shows the largest proportion of CEO transitions during 2019 (i.e., 25%) and represented about 67% and 54% of the market capitalization of the S&P500 and US equity markets as of December 2020, respectively. In this study, we find that about 60% of predecessor CEOs were promoted to the Chair, which is higher than that (39%) in Quigley and Hambrick's (2012) study.

Continuity among predecessors may impose constraints on the latitude afforded to new CEOs in effecting changes. The impacts of CEO succession might exhibit a level of attenuation, as these effects could be perceived as a means to disrupt inertia or as a realignment mechanism, a notion articulated in extant literature (Quigley and Hambrick, 2012; Nguyen and Lee, 2023). We posit that the enduring influence of predecessors inclines them towards favouring the strategies and policies they have previously set in motion, especially given their current role in overseeing and monitoring their successors. Consequently, Chairs elevated from CEO positions are occasionally characterized as 'shadow emperors', a term introduced by McGeehan in 2003. They may assume roles characterized by constraint and surveillance regarding any contemplated changes or decisions made by the CEOs who succeed them, leading to heightened vigilance by the Chair concerning the risk-taking behavior and financial decisions of the new CEOs who replace their predecessors.

Our research contributes to a body of literature in different ways. First, our study adds to the literature that primarily focuses on governance, capital structure choices (i.e., debt financing), and corporate policies (e.g., Agrawal and Mandelker, 1987; Coles *et al*., 2006; Munir *et al*., 2017; Alzoubi, 2018; Freund *et al*., 2018; Kieschnick and Moussawi, 2018; Liedong and Rajwani, 2018; Cline *et al*., 2020). To the best of our knowledge, we are the first to provide direct evidence of a significant association between the CFC and debt-financing decisions (one of the central decisions in corporate finance). In doing so, we empirically examine how the CFC affects debt financing policy. This is mainly motivated by the empirical evidence (e.g., Strebulaev and Yang, 2013; Kieschnick and Moussawi, 2018; Liedong and Rajwani, 2018) on the significant relationship between corporate governance and capital structure choices (e.g., debt financing). Studies on debt financing sources emphasize their critical influences on a firm's economic situation, investments, and capital structure (Faulkender and Petersen, 2006; Chava and Purnanandam, 2011). Towards the end of their careers as CEOs, some of them stay on as board members or even board Chairs of their current company. For this to work, they should possess the ideal background (e.g., professional experience such as industry and company experience; required vital competencies such as strategic abilities and leadership skills; and information related to personality and potential) and genuinely identify with the new Chair role within the same firm. Hillman and Dalziel (2003) associate dependence theory with the service function of boards, positing that board capital underpins both board monitoring and service-related activities. The service function involves 'advising the CEO and top managers on administrative and other managerial matters and actively initiating and formulating strategy', as expounded by Johnson *et al*. (1996, p. 411). Considering that a promoted Chair typically possesses a deeper understanding of the organization's business intricacies and is better equipped to grasp its tacit knowledge repository, an integrated perspective that amalgamates agency theory and resource-dependence viewpoints implies that the role of a promoted Chair can exert a substantial influence in augmenting board monitoring and advising the CEO. This, in turn, is likely to reduce the CEO's

proclivity for risk-taking and encourage a more cautious approach towards high-risk debt financing.

Second, we complement the literature on corporate governance concerning the firm's risk of default (e.g., Pathan, 2009; Akbar *et al*., 2017; Ali *et al*., 2018; Zhou *et al*., 2019). Prior evidence regarding such a link is mixed. For example, Pathan (2009) finds that strong boards of directors in banks positively affect firm insolvency risk, while CEO power has a negative effect. Ali *et al*. (2018) find that better-governed firms are related to a lower level of default risk. Such an association is more intensified in firms with higher growth opportunities. Previous research considers corporate governance in general terms or other specific factors but not the CFC like our study. In particular, firms with the presence of CFC tend to exhibit a lower insolvency risk strategy. In the same vein and in line with the arguments of Burt (2001), the former CEO who was immediately promoted or later appointed to the Chair position level in large companies is likely to possess human and social capabilities and several years of experience preceding their promotion. The board of directors may have made this internal promotion and appointment decision if the former CEO had a strong performance during their CEO tenure. Jayaraman *et al*. (2015) find evidence of the high market valuation towards the CEO's internal promotion, as this shows the board's vote of confidence in the CEO's ability. It may be associated with protecting the firm's current resource base and its sustainability (Tian *et al*., 2011). As such, internal promotion helps to reduce the risk that the CEO will leave the firm and increase shareholder value (Jayaraman *et al*., 2015).

Third, we are among the first to consider the mediating factor of debt financing policy, an underlying channel through which the governance aspects, for example, CFC in our paper, can affect a firm's bankruptcy risk (these will form our first two mosaics). Prior evidence mainly shows the direct effects of governance and default risk or moderating relationships through interaction terms. Fourth, our research contributes to the limited number of studies on Chair characteristics as well as the Chair–CEO relation (e.g., Roberts and Stiles, 1999; Kakabadse *et al*., 2010; Dey *et al*., 2011; Krause and Semadeni, 2013; Waelchli and Zeller, 2013; Goergen *et al*., 2015; Ghannam *et al*., 2019; Zhou *et al*., 2019; Zhu *et al*., 2021). Existing evidence typically emphasizes the effects of CEO and board chair roles, the separation between top senior positions, age dissimilarity, and the chemistry factor in the Chair–CEO relationship. Therefore, we establish the third mosaic by showing the association between capital structure choices via debt financing levels and firm default riskiness. We then merge this new mosaic with the first two to form the interconnected relationship between three variables, that is, the CFC, debt financing levels, and firm default risk, through the fourth mosaic. Accordingly, as mentioned earlier, our third contribution is to explore the underlying channel through which the CFC affects default risk.

Finally, we contribute to the literature on CEO succession (e.g., Quigley and Hambrick, 2012; Dedman, 2016). These studies do not focus on the

interrelationships between the CFC, financing policies, and default risk, but our study complements theirs by identifying a vital underlying channel—capital structure choices—through which the CFC reduces the firm's likelihood of default. Our results align with our argument that the Chair who previously served as the CEO of the same firm can reduce agency costs within organizations, which motivates a lower debt financing strategy, which is ultimately linked to lower bankruptcy risk.

We employ Baron and Kenny's (1986) four-step mediation model, which helps to explore the (full or partial) mediating effects of debt financing decisions on the relationship between the CFC and default risk. Each step represents each mosaic above. We employ traditional pooled ordinary least squares (OLS) regression with robust standard errors and the generalized method of moments (GMM) dynamic panel data method with two-step system analyses capturing endogeneity issues related to corporate governance aspects.

Through four-step model investigations, we find some novel results. First, we find a negative and significant association between CFC and debt financing decisions, implying that if the Chair has previously served as the CEO, their firms tend to exhibit lower debt financing levels. Second, we also find that CFC tends to mitigate firm insolvency risk. Third, confirming the traditional trade-off and credit supply shock theories, we further prove that firms with lower debt levels exhibit lower default risk. These three findings, through the first three steps of our mediation model, have proven their statistically significant pathway, suggesting that there may exist a mediating influence of debt financing strategies on the relationship between the CFC and corporate insolvency risk.

Our study has significant policy implications for the governance of board composition, particularly concerning the internal promotion of CEOs to the Chair role post-tenure. Specifically, our findings, which underscore the favourable influence of CFC appointments on monitoring intensity, firm risk-taking behavior, and financial policies, underscore the notion that corporate governance is not a one-size-fits-all domain. These outcomes directly challenge some recommendations emanating from corporate governance codes in the US and other jurisdictions, including the UK, which advocate for constraints on internal promotions, particularly for CEOs. Recently, many US firms have adopted a model of separating the CEO and Chairman roles, bringing them more in line with their counterparts in the UK and Europe. For example, the percentage of S&P 500-listed firms with a clear distinction between the Chair and CEO roles in 2018 (2017, 2016) was 55.4% (52.3%, 48.6%) (ISS Analytics, 2019). Hence, our study lends indirect support to this evolving corporate governance policy, and implies that an extended perspective endorsing the separation of these senior roles should be considered in tandem with internal promotions. The research landscape on CEO duality, where an individual holds both the CEO and board Chair positions (as explored by Krause *et al.*, 2014), has yielded mixed results concerning its impact on firm performance, as indicated in the works of Boyd (1995), Elsayed (2007), Finkelstein and D'Aveni (1994), and Gove *et al.* (2017). These findings challenge the conventional wisdom based on agency theory and corporate governance codes that

advocate segregating these roles. Our study aligns with this challenge. Agency theory traditionally hypothesizes (e.g., see Krause and Semadeni, 2013) that firms with a combined CEO and board Chair role would underperform compared to those with separate roles. However, proponents of the 'unity of command perspective', exemplified by Finkelstein and D'Aveni (1994), argue the opposite. Boyd's (1995) research further deviates from the conventional corporate governance trend of role separation, suggesting that the agency duality model might be misleading. Similarly, Elsayed (2007) finds that the board leadership structure has no direct impact on corporate performance, with the effect of CEO duality varying according to industry type and firm performance, offering partial support for agency theory. These nuances underscore the complexity and variability of the impact of CEO duality on firm outcomes, and our study aligns with this nuanced perspective.

THEORIES AND HYPOTHESES

Theories

The intensity of agency conflicts and their associated costs is directly proportional to information asymmetries between management (insiders) and outside investors (Pandey *et al.*, 2023). In the broader context of corporate finance and governance, pecking order and agency theories are related concepts but address different aspects of corporate behavior and decision-making. The pecking order theory, frequently used to explain organizational finance behavior, proposes that organizations have a hierarchy or 'pecking order' of preferred financing sources, which they will prioritize in a specific sequence when obtaining finances. According to Myers and Majluf (1984) and Myers (1984), a firm would use internal fund financing, such as retained earnings, before considering external sources, then debt financing, and finally equity financing as a last resort because investors consider equity riskier than debt and expect a higher return on equity than debt (Oino and Ukaegbu, 2015).

The pecking order theory is based on asymmetric information problems between managers and outsiders; because managers are more knowledgeable about organizational prospects than outside investors, managers may forgo them when confronted with new and valuable investment opportunities if external financing is required (Alves *et al.*, 2015). Myers and Majluf (1984) emphasize the role of information asymmetry and market signals in influencing a firm's choice of financing sources, arguing that firms with higher information asymmetries between managers and outside investors, as well as insufficient financial slack, may be unable to take advantage of profitable investment opportunities. According to Myers (1984), more pronounced information asymmetries, which are influenced by corporate governance characteristics (via the presence of the CFC in this study), have implications for the firm's choice

of equity or debt as a source of external finance and, thus, for the firm's cost of capital and capital structure (Pandey *et al.*, 2023).

According to the pecking order theory, a CFC may prefer lower debt financing strategies because they know the potential negative signals associated with external debt. They may favour a low-risk financing mix strategy because it is directly related to a lower default likelihood, which helps protect the company's financial stability. This preference is driven by the desire to manage information asymmetry and maintain investor confidence. The genesis of agency theory is about the relationship between principals (shareholders) and agents (managers) and how governance is necessitated to incentivize specific behaviors in listed companies while controlling opportunistic behaviors (Jensen and Meckling, 1976; Eisenhardt, 1989). Agency theory emphasizes the board of directors' monitoring role. It represents the board as a control mechanism intended to deal with the conflict of interests between the shareholders of a firm and the managers entrusted with the organization's day-to-day functioning (Forbes and Milliken, 1999). Scholars view managers as self-interested actors and assert that the board can balance agency conflicts, independently monitor management, reduce agency costs, evaluate management's performance in addressing strategic challenges facing an organization, and protect the invested capital (Fama and Jensen, 1983). Agency scholars argue that aligning the board's incentives with those of shareholders will better monitor management (Fama, 1980). Among these incentives are those related to CEO performance: their concerns about post-retirement board service, potentially mitigating agency problems between managers and shareholders (Brickley *et al.*, 1999).

One issue of debate is that agency theorists have not considered the explicit role of heterogeneous board abilities to improve a board's monitoring function (Hillman and Dalziel, 2003). As the organization's decision-maker, an effective board of directors will have a sound balance of well-chosen, competent directors with the firm-specific knowledge, experience, skills, and expertise essential for effective corporate governance to meet the complexity of the challenges of a rapidly changing global marketplace (Harper, 2007). Boards also exercise independent control and serve as strategic consultants to top managers (Carpenter and Westphal, 2001).

While agency theory emphasizes managerial opportunism, agency costs, the board's incentives, and its role as a control mechanism, resource dependence theory focuses on resources as essential drivers of firms' performance and dismisses incentives that might promote the resources provided to the firm (Hillman and Dalziel, 2003). Resource dependence theorists view the board as a supplier of strategic resources such as advice, connections with the external environment, counsel, expertise, and information provision rather than management monitoring (Pfeffer and Salancik, 1978). They suggest that resources provide legitimacy, knowledge, and expertise and help reduce dependency between the organization and external contingencies, decrease

uncertainty, lower transaction costs,[1] and eventually contribute to organizational survival (Hillman and Dalziel, 2003). In practice, boards of directors serve two critical roles for organizations: monitoring or control and providing resources (or strategy and service; Zahra and Pearce, 1989; Johnson *et al*., 1996), and therefore combining agency and resource dependence perspectives is essential (Hillman and Dalziel, 2003).

Drawing on the amalgam between agency theory and resource dependence theory, Hillman and Dalziel (2003) suggest that board capital (i.e., ability) is a strategic resource that positively affects the board's effectiveness in monitoring and resource provision functions, and studying one role without the other is inadequate. That is, 'board capital and incentives are related to board functioning and firm performance' (p. 393). They indicate that boards controlled by insiders might be less effective at monitoring but more effective at providing resources; however, boards with proper experience and expertise may be more capable of providing resources and monitoring. According to Hillman and Dalziel (2003), board capital is the sum of an individual director's human and social capital. Human capital proposes that investment in specific human resources (talent, context-specific knowledge, industry-specific experience, skills, reputation, and expertise embedded within a director and developed through day-to-day job-related experience) leads to improved performance and increased shareholder value.

Social or relational capital is the set of resources existing in relations between board members and senior executives, staff, other firms, and stakeholders (Lussier and Achua, 2016). It includes the valuable information available to the board through the internal and external network of social connections and public–private relationships possessed by a director (Burt, 1997; Nahapiet and Ghoshal, 1998; Hillman and Dalziel, 2003; Kroll *et al*., 2008; Kor and Sundaramurthy, 2009; Tian *et al*., 2011). Notably, former CEOs have social capital, with a range of resources that may be accessed for the organization's good and contribute to better performance (Wertheimer, 2013). They can use social capital to resolve conflicts, encourage better communication, and advocate a solid commitment to the organization (Lussier and Achua, 2016). Carpenter and Westphal (2001) conclude that boards with directors who have functional backgrounds and external network ties to strategically related organizations improve the board's monitoring function and provide better advice and counsel, thereby contributing to the strategic decision-making process.

The board Chair, as the senior leader of the organization, is responsible for serving the organization's interests and needs, taking calculated risks, addressing the

[1] Advocates of transaction cost economics (Williamson, 1975, 1981), a theory that focuses on the role of transaction costs in shaping the organization and its governance structures, 'share many agency theory's assumptions but concentrate on the boundaries between contracting parties rather than the contracts per se' (Jones, 1995, p. 410). Transaction costs, which may include legal fees and due diligence, arise due to the necessity to negotiate with creditors, oversee debt covenants, and enforce contracts essential for combining resources and utilizing them efficiently (Jones, 1995). These costs can be substantial in complex corporate situations, such as raising external financing. Monitoring structures require scarce resources and lead to higher transaction costs (Williamson, 1981). In light of these transaction cost considerations, social capital (such as the CFC's knowledge about the firm's financial health) is supposed to reduce such costs.

challenges and opportunities that lie ahead, and leading the board in the oversight, generative and strategic thinking, and support critical to effective corporate governance (Wertheimer, 2013). The CFC, a former CEO promoted to the Chair position in the same organization, will have a more influential role on the board due to their established relationships and will therefore exercise greater control over the current CEO's decisions (Veprauskaitė and Adams, 2013). The CFC arrangement addresses the institutional reality that an outgoing CEO becomes the board Chair in the same organization (Kanadlı *et al.*, 2020). Prior literature concludes that newly appointed CEOs have a distinct ability to formulate strategic change in their organizations (see Nakauchi and Wiersema, 2015). Quigley and Hambrick (2012) suggest that the retention of a former CEO impedes their successor's discretion, hence impeding the new CEO's ability to make strategic changes or deliver performance that differs from pre-succession levels. They speculate that 'predecessor retention will tend to occur if the board welcomes the former CEO's continued influence; conversely, predecessor departure will tend to occur when the board believes there is a need for change or when the predecessor's regime has been somehow repudiated' (p. 835).

On the other hand, managers promoted to senior positions in large organizations have human and social capabilities and many years of experience prior to their promotion (Burt, 2001). Internal promotion made by a board with high human and social capital levels (i.e., a distinct set of skills and proper incentives) is likely based on the CEO's strong performance, is perceived as the board's vote of confidence in the CEO's ability, and is highly regarded by the stock market (Jayaraman *et al.*, 2015). It is linked to protecting the organization's current resource base and sustaining its strategic stability (Tian *et al.*, 2011). Delaying promotion increases the risk that the CEO will move to another firm and may also be detrimental to shareholder value (Jayaraman *et al.*, 2015). Brickley *et al.* (1999) show that many CEOs remain active in their retirement years, serving on boards. They argue that the potential for promotion and acquisition of additional decision rights within the organization can provide more performance incentives for CEOs to create firm value and maximize shareholders' returns. They find that many CEOs who leave the firm at age 64–66 continue to serve as Chair and that low-performing CEOs are less likely to hold board seats after they leave office. Jayaraman *et al.* (2015) propose that CEOs may have incentives to increase firm risk and investment to boost their promotion chances, suggesting that organizations are expected to reduce risk following CEO promotion. Dedman (2016) examines the UK Corporate Governance Code's recommendation that a CEO should not become Chair of the same firms because this practice, drawn from an agency theory-based perspective, would harm firm performance. Analysing a sample of 225 CEO routine departure events from 1996–2007, she reveals that allowing the CEO to remain as Chair did not cause any damage to accounting or stock market performance. She also concludes that firms were more likely to retain CEOs of better-performing firms before the reform. Keeping good CEOs explains why asset divestiture is less likely when the ex-CEO becomes Chair (Dedman, 2016).

To recap, we adopt the agency and resource dependence theories[2] to formulate our expectations regarding the impact of the CFC on a firm's capital structure, its default risk, and their interrelationships by arguing for the importance of the social and human capital that former CEOs can bring to their firms even after retirement.

Hypotheses

As discussed, both the agency and resource dependence theories provide complementary perspectives that help explain why the CFC might influence debt financing decisions and contribute to lower default risk levels. Board members will benefit from the former CEO's experience and wisdom. The CFC, via their prior experience of being the former CEO of the same firm, brings the human and social capital (obtained from firm/industry experience, expertise, knowledge, reputation, skills, a vast network of relationships, ties, and external contingencies) to improve the board's ability to perform its two critical roles: monitoring, and providing advice and counsel to top managers. Their functional and career backgrounds, distinguished skills, years of experience, access to better quality information, and professional opinions contribute to effective board governance. Based on these axioms, we now develop specific hypotheses for how the CFC, compared to their non-CFC counterparts, may associate with debt financing decisions differently and contribute to lower default risk levels.

Debt (or equity) financing in the corporate governance literature (e.g., Mande *et al.*, 2012) generally shows that better-governed firms are more likely to exhibit lower levels of debt financing due to mitigation of agency costs between managers

[2] While the former CEO, now the board Chair, often brings a wealth of institutional knowledge and experience, which can be valuable in providing strategic guidance and insights, there can also be unintended consequences. The close relationship and history between the former CEO and the current management team can create a sense of loyalty and camaraderie, potentially shielding management from rigorous board scrutiny. Notably, in addition to the agency and resource dependence theories, other theories applied to corporate governance matters and research at the board level include managerial hegemony theory (Parker, 2018). Mallette and Fowler (1992) view managerial hegemony and agency theories as competing yet complementary viewpoints on board governance. Managerial hegemony theory (e.g., Mallette and Fowler, 1992) suggests that management dominates boards, rendering it an ineffective governance mechanism, and views boards as 'weak and ineffectual in providing managerial oversight and representing shareholder interests, and that boards act merely as ceremonial rubber stamps' (p. 1014). Boards are passive mechanisms that are loyal to the managers who select them, lack knowledge about the firm, and depend on top executives for information (Coles *et al.*, 2001; Hutchinson and Gul, 2004). Resource dependence theory also emphasizes the importance of acquiring, managing, and strategically utilizing resources to enhance organizational sustainability, adaptability, and innovation, which might rely on renewing or refreshing resources. One could argue that opting for internal succession limits the potential benefits of accessing external resources. However, the focus of this paper is not on renewing or refreshing resources or issues of power. It is worth noting, though, that when a CEO takes on the role of Chair within an organization, it can result in a situation where the CEO has more control over decision-making, potentially limiting the opportunities available to shareholders and reducing the CEO's accountability for their actions. In this context, it can be a concern for shareholders who want a balance of power and oversight within the organization. We thank the reviewers for drawing our attention to these theoretical alternative arguments.

and investors in these firms (see Jensen and Meckling, 1976; Berger *et al.*, 1997). In this study, we also argue that a reduction in agency conflicts effected by high-quality governance caused by the presence of the Chair, who previously served as the CEO of the same firm, is likely to reduce the tendency of firms to use debt financing. As noted earlier, CEOs who stay on as board Chair of their current company should possess the proper background (e.g., professional experience such as industry and company experience; vital competencies such as strategic abilities and leadership skills; and information related to personality and potential) and truly identify with the new Chair role within the same firm. We argue that the former CEO promoted or appointed to the Chair role tends to be willing and resolved to leave operational management behind, delegate critical decisions, and better monitor and supervise the CEO, enhancing the quality of governance. This is also in line with our expectations that these former CEOs will possess the right human and social capital that would benefit the firm, and hence, we predict a negative effect of the CFC on debt financing.

We also examine whether the CFC has any imapct on firm default risk. Previous studies (e.g., Bhojraj and Sengupta, 2003; Ashbaugh-Skaife *et al.*, 2016) find significant evidence of a positive influence of corporate governance effectiveness on firm survival propensity. In other words, they find a lower default risk in better-governed firms because these firms enjoy lower agency costs and better monitoring of managerial performance. In relation to this evidence and theoretical explanations in our context of the CFC, we argue that former CEOs who were promoted (or appointed) to the Chair position in large firms tend to possess human and social capabilities as well as several years of experience preceding their promotion. Hence, consistent with the resource dependence hypothesis (Hillman and Dalziel, 2003), we hypothesize that the CFC will significantly negatively affect their firm's default risk. Hence, our first two hypotheses are:

H1: Firms with a CFC exhibit lower debt financing levels.
H2: Firms with a CFC exhibit lower default risk.

Prior research (e.g., Chiu *et al.*, 2017) finds a significant and positive link between corporate debt financing and firm default risk, which can be justified by the traditional trade-off theory[3] (e.g., Myers, 1984; Myers and Majluf, 1984) and the credit supply shock theory[4] (Gorton, 2010). This motivates us to extend our direct analyses to the connections between three factors, that is, the CFC, debt

[3] The trade-off theory of capital structure suggests that managers seek an optimal capital structure that maximizes firm value. Any divergence in leverage from the optimal capital structure can diminish a firm's value, but firms can restore the balance of their leverage when the benefits of adjustment exceed the costs (Nguyen *et al.*, 2021).

[4] The credit supply shock theory examines how financial contracting links with lending-channel effects and focuses on the influence of credit supply shocks on credit availability and borrowers' and lenders' behavior (Liberti and Sturgess, 2018). Corporations that primarily raise funds from credit markets face challenges. For example, the 2007–2010 financial crisis affected all credit channels (Chiu *et al.*, 2018).

financing, and default risk. That is, the significant relationship between the CFC and debt financing (mosaic 1) as well as firm default risk (mosaic 2) and the link between debt financing and default risk (mosaic 3) propose a mediating effect of debt financing policy on the CFC on the risk of firm insolvency. The expected directions for these relations lead us to predict that the CFC tends to reduce firm default risk by lowering debt financing policy. We thus set the final hypothesis related to the mediation effect as follows:

H3: Firms with a CFC exhibit lower default risk through a lower level of debt financing.

RESEARCH DESIGN

Data Collection and Sample

We extracted all our data, including corporate governance and financial variables, from different sources, including Compustat and DataStream. We initially obtained a list of all US-listed firms in the S&P100 for the period from 2002 to 2018. We excluded from the primary resources in our sample any firms that had less than three consecutive years of data available and other firms with unavailable data. We also omitted financial firms because of their differences in agency problems, complications, operations, and products and services. This sample selection procedure produced an ultimate sample, including an unbalanced panel of 86 non-financial firms drawn from 18 main composite industrial sectors between 2002 and 2018, resulting in 1,265 firm-year observations in total. All accounting and financial variables refer to end-of-accounting and tax-year figures. Corporate governance data are yearly data that relate to the firm's accounting year. Our sampled firms have about 60% of their ex-CEOs promoted to the Chair position, hence serving the main purpose of this study.

Empirical Models and Methodology

We investigate the effects of the CFC on debt financing levels and Altman default risk through two baseline models. To examine this empirical link, we utilize both traditional pooled ordinary least squares (OLS) regression with robust standard errors and the generalized method of moments (GMM) dynamic panel data method (Arellano and Bond, 1991; Trinh *et al.*, 2020a, 2020b, 2020c; Trinh *et al.*, 2021a, 2021b) with two-step system analyses. Both approaches have been widely employed in corporate governance and financial research (e.g., Conyon and Peck, 1998; Veprauskaitė and Adams, 2013). The latter (GMM) is estimated by considering dynamic partial load adjustments in financial debt levels and Altman default risk over time. It captures variable simultaneity and, hence,

controls for endogeneity phenomena arising in corporate governance variables, given that these variables are expected to be affected by both debt financing and risk levels. In addition, it is possible to have innate differences in the quality or effectiveness of board directors amongst companies, creating unobserved heterogeneity problems, which the GMM will also address. Our OLS equations are represented by:

$$Debt/TA_{it} = \{ChairFormerCEO_{it}, \theta_{it}\} + u_{it}$$
$$Altman\_ZScore_{it} = \{ChairFormerCEO_{it}, \theta_{it}\} + u_{it}$$

While the GMM estimations are:

$$Debt/TA_{it} = \{Debt/TA_{it-1}, ChairFormerCEO_{it}, \theta_{it}\} + u_{it}$$
$$Altman\_ZScore_{it} = \{Altman\_ZScore_{it-1}, ChairFormerCEO_{it}, \theta_{it}\} + u_{it}$$

where subscript i denotes the i^{th} firm (i = 1, … 86), subscript t denotes the t^{th} firm (t = 2002, … 2018). $Debt/TA_{it}$ represents {Debt/TA} and $Altman\_ZScore_{it}$ represents {$Altman\_ZScore$}. $ChairFormerCEO_{it}$ represents {$ChairFormerCEO$} and θ_{it} is a vector of control variables. These factors will be defined later in this section of the paper. u_{it}(disturbance term) is the two-way error component model ($u_{it} = \lambda_{it} + \nu_{it}$) including year effects (λ_{it}) and the remainder disturbance (ν_{it}).

We further employ Baron and Kenny's (1986) four-step mediation model to examine the mediating effects of debt financing on the impact of CFC and default risk. The four-step models using OLS are as follows:

Step 1: *Chair-Former-CEO* on debt financing levels
$Debt/TA_{it} = \{ChairFormerCEO_{it}, \theta_{it}\} + u_{it}$

Step 2: Debt financing levels on firm Altman default risk
$Altman\_ZScore_{it} = \{Debt/TA_{it}, \theta_{it}\} + u_{it}$

Step 3: *Chair-Former-CEO* on firm Altman default risk
$Altman\_ZScore_{it} = \{ChairFormerCEO_{it}, \theta_{it}\} + u_{it}$

Step 4: *Chair-Former-CEO* and debt financing on firm Altman default risk
$Altman\_ZScore_{it} = \{ChairFormerCEO_{it}, Debt/TA_{it}, \theta_{it}\} + u_{it}$

Similarly, the four-step GMM models are also used.[5] Employing a four-step mediating model requires the key variables of interest, including $ChairFormerCEO_{it}$ and $Debt/TA_{it}$, to be statistically significant. More importantly, in the fourth step, we can withdraw a conclusion for a full mediating effect of debt financing decision if the impact of $ChairFormerCEO_{it}$ becomes insignificant after we control for $Debt/TA_{it}$in the same model. Yet, if the effect of

[5] For brevity, we do not present the GMM equations, which will be given upon request.

$ChairFormerCEO_{it}$ remains significant with a weaker magnitude, this implies a partial mediating influence of debt financing strategy.

Variable Measurements

Debt financing levels We measure a firm's debt financing decision using three different proxies: total debt to total assets (*Debt/TA*), total long-term debt to total assets (*LTDebt/TA*), and total short-term debt to total assets (*STDebt/TA*). First, we employ a ratio of total debt (including both long-term and short-term debt) to total assets to examine how *Chair-Former-CEO* affects total debt financing levels used by the firm. *Debt/TA* is measured by the sum of long-term and short-term debt divided by total assets at the end of the year. Second, we next use the ratio of long-term debt to total assets (*LTDebt/TA*), which is calculated as long-term debt financing scaled by total assets. For this measure, we only look at long-term debt, which shows the firm's long-term solvency situation. Third, we further use the short-term to total debt ratio (*STDebt/TA*), which is computed as the short-term debt divided by total assets. In contrast to *LTDebt/TA, STDebt/TA* measures the firm's short-term solvency position. By using these three alternative measurements for debt financing decisions, we can assess the influences of *Chair-Former-CEO* on such policy more fully.

Altman default risk We employ classic Z-score models for public firms constructed by Altman (1968). The final discrimination function utilized in our research is presented below:

$$Altman\_Z(i) = \sum_{n=1}^{5} (0.012X_1, 0.014X_2, 0.033X_3, 0.006X_4, 0.999X_5)$$

where $Altman\_Z(i)$ is the overall index of the classic Altman Z-score measuring firm default risk. Higher values of this index imply a lower default risk (or, lower bankruptcy risk, lower insolvency risk). If $Altman_Z(i)$is lower than 1.8, the firm seems to be on its way to default. If it is higher than 3.0, it is unlikely that the firm will go into bankruptcy. If the index's score falls within the range of 1.8 and 3.0, the firm enters into a grey area. X_1 is measured by working capital over total assets (*WC/TA*); X_2 is measured by retained earnings over total assets (*RE/TA*); X_3 is measured by earnings before interest and taxes over total assets (*EBIT/TA*); X_4 is measured by market value of equity (market capitalization) over book value of total liabilities (*MV/TL*); and X_5 is measured by total sales over total assets (*SALES/TA*). Note that we use the natural logarithm form of $Altman\_Z(i)$ (i.e., *LnAZscore*).

Chair-Former-CEO

The term 'Chair-Former-CEO' (or Chair-Ex-CEO) was previously used in Veprauskaitė and Adams' (2013) study. We follow them to define this variable as a dummy variable, which takes value one if the Chair has previously served as CEO of the firm (or, the 'Chair held a CEO position in the firm prior to becoming Chair' (Veprauskaitė and Adams, 2013, p. 233), and zero otherwise. This is consistent with the definition of this variable from *DataStream*, which takes the value one if the Chair was CEO in previous years and zero if the Chair was never the CEO of the firm or is currently also the CEO. We argue that the Chair has main responsibilities in managing and supervising firm board matters (Krause and Semadeni, 2013). One can sensibly predict that, other things being equal, a Chair who has been promoted from CEO in the same company is likely to have greater power and influence on the board of directors as a result of their relationships with other board members while they were serving as CEO. This is in line with arguments in Fan *et al*. (2021), who show that friendship ties and social network connections can increase one's influence on another. Hence, the Chair could have higher controlling impacts on the current CEO's decisions. In this study, we contend that this CFC could affect the firm's default risk through their influence on debt financing decisions made by a CEO. Specifically, as discussed in the hypothesis section, we expect that the presence of a CFC prevents a CEO from having a higher debt financing policy, which in turn reduces the firm's bankruptcy risk.

Control variables Our empirical models include some control variables that are expected to affect firm debt financing policy and default risk (e.g., Guest, 2008; Trinh *et al*., 2020a). We first include board size, estimated by the natural logarithm of the number of executive and non-executive directors serving on the board of directors (*Ln (Bsize)*). We argue that larger boards (with more directors) tend to have better monitoring capability and an additional pool of business expertise that may mitigate CEO decision-making autonomy (Conyon and Peck, 1998; Guest, 2008). We also add board independence (*%Ind*) and CEO duality (*Dual*) to the models. *%Ind* is measured by the percentage of independent directors on the board, and *Dual* is a dummy variable taking the value one if the Chair and CEO are the same person, and zero otherwise. These are important variables to include because they have been shown to correlate with board leadership structure (Finkelstein and D'Aveni, 1994; Krause and Semadeni, 2013). Additional corporate governance variables include board gender diversity (i.e., *%Male*: the percentage of male directors on the board), board expertise diversity such as professional experience and skills (i.e., *%PrExpSkill*: the percentage of directors with professional experience and skills), and industrial and financial experience (i.e., *%IndorFin*: the percentage of directors owning several industrial and financial experiences). Furthermore, we also include firm-specific variables such as growth opportunities (i.e., *Capex/TA*: capital expenditure scaled by total assets), firm size (i.e., *LnTA*: the natural logarithm of total assets), dividend policy (i.e., *Div/NI*: cash dividend divided by net income), sales per share (i.e., *Sale/Share*: total sales

(or revenue) divided by the total number of shares)[6], and firm market value of equity (i.e., *Ln(Marcap)*: the natural logarithm of market capitalization).

EMPIRICAL RESULTS

Descriptive Statistics and Correlation Matrix

Table 1a reports the descriptive statistics of all dependent, explanatory, and control variables employed in this research, including the means, median, standard deviations, and minimum–maximum range. All definitions and measurements of these factors are presented in Appendix 1. Overall, the mean of debt financing levels (*Debt/TA*) is under 60% (i.e., 58.2%), while its median equals 57.6%. Indeed, the mean and median of debt financing measured by long-term debt over total assets (*LTDebt/TA*) are 35.5% and 32%, respectively, which are higher than those of debt financing measured by short-term debt over total assets (*STDebt/TA*: 22.6% and 21.6%, respectively). Furthermore, we find that, on average, the Altman Z-score in the natural logarithm form (*LnAZscore*) of US-listed industrial firms is 1.089, with a relatively large standard deviation of 0.885. The mean value for *Chair-Former-CEO* is 0.574 (median = 1), implying that in 57.4% of firm-year observations, the Chair has been promoted from CEO in the same firm. This reveals that most CEOs in US firms were promoted to the Chair in their careers.

We also report Table 1b on the distribution of CFC by years and periods. The table shows that the percentage of CFCs (43.55%) was lower than that of non-CFCs (56.45%) at the start of our sample period in 2002 and lasted until 2007 (47.46% vs. 52.54%, respectively). However, during the global financial crisis (2008–2009), that result was reversed (50.96% vs. 49.04%, respectively) and clearer after the crisis (i.e., free-crisis period 2010–2018: 65.17% vs. 34.83%). This implies that more CFCs have been appointed since the turmoil of 2008 to date.

Table 1a also indicates that the mean (median) of board size (*Ln (Bsize)*), board independence (*%Ind*), and CEO–Chair duality (*Dual*) is 2.453 (2.458), 80.9% (84.6%), and 0.811 (1). In addition, we find that, on average, 70.7% of directors serving on the US-listed firms' boards are males (median = 74.5%); hence, there are 29.3% female directors. We also find that 62.2% (46.6%) of directors possess professional experience and skills (industrial or financial expertise). In terms of firm-

[6] The sales per share ratio is a key financial metric for investors and financial analysts, as it reveals a firm's efficiency in generating revenue per outstanding share. A higher sales per share figure indicates the company's ability to generate more revenue per unit of ownership, typically viewed positively by investors.

TABLE 1A

DESCRIPTIVE STATISTICS

Variables	N	Mean	Median	Standard deviation	Min.	Max.
Debt/TA	1,265	0.582	0.576	0.209	0.064	1.680
LTDebt/TA	1,265	0.355	0.320	0.211	–0.125	1.144
STDebt/TA	1,265	0.226	0.216	0.125	0	0.672
LnAZscore	1,265	1.089	1.118	0.885	–1.84706	4.473
Chair-Former-CEO	1,265	0.574	1	0.495	0	1
Ln (Bsize)	1,265	2.453	2.485	0.191	0	3.045
%Ind	1,265	0.809	0.846	0.167	0	1
Dual	1,265	0.811	1	0.392	0	1
%Male	1,265	0.707	0.745	0.210	0	0.999
%PrExpSkill	1,265	0.622	0.626	0.143	0.0001	0.724
%IndorFin	1,265	0.466	0.455	0.247	0	1
Capex/TA	1,265	4.858	3.7	3.863	0	25.640
LnTA	1,265	17.578	17.544	1.112	13.40575	20.497
Div/NI	1,265	0.286	0.261	0.252	0	0.9973
Sale/Share	1,265	39.804	23.651	43.936	0.546	360.783
Ln(Marcap)	1,264	17.980	17.970	0.925	14.412	20.582

This table reports the descriptive statistics of all the variables used in our empirical models. Definitions of all variables are presented in Appendix 1.

TABLE 1B

DISTRIBUTION OF CFC BY YEARS AND PERIODS

	2002		2003–2007		2008–2009		2010–2018	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Chair-Former-CEO	27	43.55	168	47.46	80	50.96	451	65.17
Non-Chair-Former-CEO	35	56.45	186	52.54	77	49.04	241	34.83
Total	62	100	354	100	157	100	692	100

specific variables, the mean of *Capex/TA* is 4.858 (median = 3.7), that of *LnTA* is 17.578 (median = 17.544), that of *Sale/Share* is 39.804 (median = 23.651), and that of *Ln(Marcap)* is 17.980 (median = 17.970). Finally, on average, US-listed firms paid 28.6% dividends over their earnings (*Div/NI*) (median = 26.1%).

Table 2 reports the Pearson correlation matrix of all independent variables. We find no high correlations between the variables; hence, our models have no severe multicollinearity problems.

The Effect of the CFC on Firm Debt Financing Decisions

To test for the first hypothesis, we perform the OLS regression with robust standard errors, together with the GMM. Table 3 reports the results for the effect

TABLE 2

CORRELATION MATRIX

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. *Chair-Former-CEO*	1											
2. *Ln (Bsize)*	0.107*	1										
3. *%Ind*	0.141*	0.075*	1									
4. *Dual*	0.560*	0.120*	0.131*	1								
5. *%Male*	0.112*	0.116*	0.067	0.115*	1							
6. *%PrExpSkill*	0.016	–0.071	0.228*	0.029	–0.009	1						
7. *%IndorFin*	–0.012	–0.172*	0.161*	–0.077*	–0.028	0.174*	1					
8. *Capex/TA*	–0.161*	0.022	–0.055	–0.051	–0.037	–0.037	–0.087*	1				
9. *LnTA*	0.096*	0.404*	0.115*	0.104*	0.160*	–0.036	–0.052	–0.039	1			
10. *Div/NI*	0.077*	0.292*	0.154*	0.143*	0.138*	0.001	–0.150*	–0.078*	0.291*	1		
11. *Sale/Share*	–0.035	0.098*	0.053	–0.085*	0.003	0.009	–0.001	0.150*	0.205*	–0.058	1	
12. *Ln(Marcap)*	0.095*	0.253*	0.076*	0.038	0.277*	–0.065	–0.037	0.011	0.686*	0.196*	0.091*	1

This table reports the Pearson correlation matrix among independent variables employed in our empirical models. * denotes significance at the 5% level. Definitions of all variables are presented in Appendix 1.

TABLE 3

EFFECT OF CFC ON FIRM DEBT FINANCING DECISION

	Panel A: OLS zero-year lag of independent variable			**Panel B: OLS one-year lag of independent variable**			**Panel C: GMM regression results**		
Variables	(1) *Debt/TA*	(2) *LTDebt/TA*	(3) *STDebt/TA*	(4) *Debt/TA*	(5) *LTDebt/TA*	(6) *STDebt/TA*	(7) *Debt/TA*	(8) *LTDebt/TA*	(9) *STDebt/TA*
Chair-Former-CEO	–0.035***	–0.018*	–0.017**	–0.025**	–0.007	–0.018**	–0.015**	–0.008	–0.008*
	(0.007)	(0.099)	(0.042)	(0.046)	(0.529)	(0.029)	(0.023)	(0.330)	(0.058)
Ln (Bsize)	–0.046	–0.070**	0.024	–0.064*	–0.086***	0.022	–0.071**	–0.032	–0.020
	(0.220)	(0.034)	(0.254)	(0.071)	(0.006)	(0.304)	(0.025)	(0.300)	(0.340)
%Ind	0.020	–0.005	0.025	0.014	–0.006	0.021	–0.004	–0.015	–0.001
	(0.618)	(0.893)	(0.248)	(0.709)	(0.840)	(0.355)	(0.846)	(0.448)	(0.949)
Dual	0.074***	0.074***	0.001	0.062***	0.059***	0.004	0.008	0.009	–0.005
	(0.000)	(0.000)	(0.948)	(0.000)	(0.000)	(0.740)	(0.393)	(0.409)	(0.470)
%Male	–0.009	–0.040*	0.032*	–0.016	–0.041*	0.026	–0.031	–0.027*	0.007
	(0.736)	(0.093)	(0.057)	(0.533)	(0.079)	(0.135)	(0.116)	(0.094)	(0.442)
%PrExpSkill	0.056*	0.035	0.021	0.042	0.023	0.019	0.016	0.023	–0.003
	(0.068)	(0.178)	(0.256)	(0.158)	(0.356)	(0.291)	(0.428)	(0.150)	(0.767)
%IndorFin	–0.067***	–0.015	–0.052***	–0.073***	–0.020	–0.052***	0.002	0.012	–0.013
	(0.002)	(0.483)	(0.000)	(0.001)	(0.342)	(0.000)	(0.870)	(0.274)	(0.136)
Capex/TA	–0.010***	–0.005***	–0.005***	–0.010***	–0.005***	–0.005***	–0.001	–0.001	–0.001*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.183)	(0.397)	(0.080)
LnTA	0.087***	0.141***	–0.054***	0.086***	0.141***	–0.055***	0.017***	0.029***	–0.007
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.000)	(0.121)
Div/NI	0.187***	0.131***	0.055***	0.206***	0.143***	0.064***	0.012	0.013	0.004
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.256)	(0.229)	(0.634)
Sale/Share	0.001***	–0.000*	0.001***	0.001***	–0.000**	0.001***	0.000	–0.000	0.000**
	(0.000)	(0.057)	(0.000)	(0.000)	(0.049)	(0.000)	(0.313)	(0.263)	(0.015)
Ln(Marcap)	–0.108***	–0.147***	0.038***	–0.101***	–0.141***	0.040***	–0.014**	–0.025***	0.006
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.018)	(0.002)	(0.119)
Constant	1.024***	0.612***	0.411***	0.943***	0.560***	0.383***	0.000	0.133	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(.)	(0.184)	(.)

(Continues)

TABLE 3

CONTINUED

Variables	Panel A: OLS zero-year lag of independent variable			Panel B: OLS one-year lag of independent variable			Panel C: GMM regression results		
	(1) *Debt/TA*	(2) *LTDebt/TA*	(3) *STDebt/TA*	(4) *Debt/TA*	(5) *LTDebt/TA*	(6) *STDebt/TA*	(7) *Debt/TA*	(8) *LTDebt/TA*	(9) *STDebt/TA*
L.Debt/TA							0.861***		
							(0.000)		
L.LTDebt/TA								0.801***	
								(0.000)	
L.STDebt/TA									0.828***
									(0.000)
Year-fixed effects/dimension	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-effects/dimension	No	No	No	No	No	No	Yes	Yes	Yes
Observations	1,264	1,264	1,264	1,178	1,178	1,178	1,179	1,179	1,179
R^2	0.348	0.441	0.215	0.366	0.442	0.221			
F-test/Wald chi^2	30.55***	40.23***	9.64***	30.29***	41.54***	9.97***	83,099***	5,485***	19,518***
AR (1) (p-value)							0.000	0.000	0.000
AR (2) (p-value)							0.841	0.978	0.298
Hansen test (p-value)							0.505	0.510	0.599

This table reports regression results for the effect of CFC on firm debt financing decisions employing OLS without lagged values of independent variables (Panel A), OLS with one-year lagged values of independent variables (Panel B), and GMM (Panel C). ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Definitions of all variables are presented in Appendix 1.

of the CFC on debt financing decisions. While Panels A and B present the OLS method without and with lagged values, Panel C presents GMM results that treat potential endogeneity problems.

As Table 3 (Panel A: Models 1–3) shows, our results strongly confirm Hypothesis 1 for the full sample of US-listed firms for total debt financing (*Debt/TA*: Coef. = –0.035; *p*-value = 0.007 < 0.01), long-term debt (*LTDebt/TA*: Coef. = –0.018; *p*-value = 0.099 < 0.1), and short-term debt (*STDebt/TA*: Coef. = –0.017; *p*-value = 0.042 < 0.05). This negative and significant effect of the CFC on debt financing decisions suggests that firms with a Chairman who has previously served as CEO are likely to exhibit lower debt financing levels. Our finding provides evidence supporting agency and resource dependence theories. We justify this result by arguing that the presence of the CFC helps to reduce agency costs within firms through improved governance quality, which in turn reduces the tendency of firms to use risky debt financing policies (Jensen and Meckling, 1976; Berger *et al*., 1997). Given that the pecking order hypothesis (Myers and Majluf, 1984) relies on the logic that sources of debt will be preferable to those of equity due to the large effects of information asymmetry on equity but not debt financing. Hence, better-governed firms (through the presence of the CFC in our study) tend to prefer to rely less on debt financing.

Similar findings are shown in Panel B (Models 4–6) and Panel C (Models 7–9) when using alternative approaches, including OLS with lagged values of independent variables and GMM; however, coefficients for long-term debt financing are insignificant. For GMM, to test for the validity of instrument variables (IVs), we also conducted the Hansen test with the null hypothesis that IVs are valid in the sense that they are not related to the error in the first-different equation. In all three models for GMM (7–9), we do not reject the hypothesis, implying that the chosen IVs are valid. In addition, we also performed the tests for serial correlation, whereby if the errors are related to each other over time, the GMM estimators in the dynamic regression models might be inconsistent. Specifically, Arrellano-Bond tests for first-order (AR(1)) and second-order (AR(2)) serial correlation of the differenced residuals (see Arrellano and Bond, 1991) reveal no evidence for serial correlations (AR(1) < 0.01 and AR(2) > 0.1).

The signs of our control variables are consistent with those found in prior literature related to debt financing policy or capital structure. Typically, we find a positive relationship between Chair–CEO duality (*Dual*) and *Debt/TA*, which suggests that a separation of Chair and CEO discourages the firms from raising more debts, driven by the long-term debt. Board size (*Ln (Bsize)*) has a significantly negative influence on long-term debt financing (*LTDebt/TA*). The higher proportion of males on the board is related to a lower proportion of long-term debt but a higher percentage of short-term debt. This implies that male directors have a preference for using short-term debt over long-term debt. In addition, we find that firms with more directors with industrial or financial expertise are linked to lower debt financing, which is driven by short-term debt.

Furthermore, firms with more growth opportunities (*Capex/TA*) and higher market capitalization (*Ln(Marcap*) tend to use a lower level of debt financing. However, those firms with higher market value prefer to employ short-term debt. Moreover, we find that larger firms (*LnTA*) exhibit higher debt financing, particularly long-term debt, but lower short-term debt. Firms with a higher cash dividend payout (*Div/NI*) are more likely to increase their usage of debt over equity. Finally, firms with a higher sale-to-share ratio (*Sale/Share*) are associated with a higher percentage of debt driven by short-term debt while having a significant link to lower long-term debt levels.

The Effect of the Chair-Former-CEO on Firm Default Risk

We next examine our second hypothesis, indicating that the presence of the CFC tends to mitigate firm insolvency risk. To do so, we also utilize the same methods that have been employed for testing the first hypothesis, including OLS without lagged values (Table 4: Panel A), OLS with lagged values (Table 4: Panel B), and GMM (Table 4: Panel C). We find a positive and significant effect of *Chair-Former-CEO* on the likelihood of firm survival, evident in the significant and positive coefficient of *LnAZscore* across all Models 1 (Panel A: Coef. = 0.080; p-value = 0.002 < 0.01), 2 (Panel B: Coef. = 0.053; p-value = 0.088 < 0.10), and 3 (Panel C: Coef. = 0.096; p-value = 0.028 < 0.05). These results provide evidence supporting Hypothesis 2. For GMM results, we find that the AR(1) p-value is less than 0.01 while the p-values of the AR(2) and Hansen tests are greater than 0.1. This implies that there is no evidence for serial correlations and that our IVs are valid. This result is consistent with previous studies in the corporate governance field, such as those by Bhojraj and Sengupta (2003) and Ashbaugh-Skaife *et al.* (2006), indicating that firm governance effectiveness has a positive and significant role in reducing a firm's default risk. It also supports the resource dependence hypothesis (Hillman and Dalziel, 2003), that is, that the former CEO who is promoted to the Chair position in large firms tends to possess human and social capabilities as well as several years of experience preceding their promotion.

Turning to the control variables, we find consistent results with previous studies on firm default risk. For example, we find a negative effect of board independence (*%Ind*) on the default risk measure, implying that a higher proportion of independent directors increases the firm's risk of bankruptcy. This is in line with Trinh *et al.*'s (2020a) study. In addition, we find that if the Chair and CEO are the same person, their firm's default risk appears to be higher. This may be due to the increased power of the Chair/CEO, which might foster their more risky behavior. We further find that a higher percentage of male directors on the board (*%Male*) and more directors possessing industrial or financial expertise (*%IndorFin*) are significantly related to a higher *LnAZscore* or lower bankruptcy risk. For firm-specific controls, we find that more growth opportunities (higher *Capex/TA*), a higher sales ratio (*Sale/Share*), and a higher market value (*Ln(Marcap)*) are likely to improve the insolvency position. These are evidenced by the significant and

TABLE 4

EFFECT OF CFC ON FIRM DEFAULT RISK

	Panel A: OLS zero-year lag of independent variable	**Panel B: OLS one-year lag of independent variable**	**Panel C: GMM regression results**
Variables	(1) *LnAZscore*	(2) *LnAZscore*	(3) *LnAZscore*
Chair-Former-CEO	0.080***	0.053*	0.096**
	(0.002)	(0.088)	(0.028)
Ln (Bsize)	–0.017	0.030	–0.052
	(0.796)	(0.705)	(0.799)
%Ind	–0.166**	–0.162*	0.257
	(0.041)	(0.074)	(0.315)
Dual	–0.118***	–0.093**	–0.226***
	(0.000)	(0.016)	(0.002)
%Male	0.179***	0.221***	0.079
	(0.001)	(0.000)	(0.505)
%PrExpSkill	–0.055	–0.063	–0.443
	(0.456)	(0.459)	(0.172)
%IndorFin	0.151***	0.155***	0.047
	(0.001)	(0.006)	(0.727)
Capex/TA	0.022***	0.019***	–0.000
	(0.000)	(0.000)	(0.955)
LnTA	–0.953***	–0.923***	–0.551***
	(0.000)	(0.000)	(0.000)
Div/NI	–0.275***	–0.278***	–0.047
	(0.000)	(0.000)	(0.127)
Sale/Share	0.002***	0.002***	0.001***
	(0.000)	(0.000)	(0.001)
Ln(Marcap)	0.942***	0.865***	0.551***
	(0.000)	(0.000)	(0.000)
Constant	0.877***	1.720***	0.395
	(0.001)	(0.000)	(0.536)
L.LnAZscore			0.464***
			(0.000)
Year-fixed effects/dimension	Yes	Yes	Yes
Firm-effects/dimension	No	No	Yes
Observations	1,264	1,178	1,179
R^2	0.848	0.798	
F-test/Wald chi^2	121.76***	94.02***	4,228***
AR (1) (*p*-value)			0.000
AR (2) (*p*-value)			0.904
Hansen test (*p*-value)			0.717

This table reports regression results for the effect of CFC on firm default riskiness employing OLS without lagged values of independent variables (Panel A), OLS with one-year lagged values of independent variables (Panel B), and GMM (Panel C). ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Definitions of all variables are presented in Appendix 1.

positive coefficients of these variables on the *LnAZscore*. Finally, we also explore that larger firms (*LnTA*) and firms paying more dividends (*Div/NI*) exhibit a higher default risk than smaller firms and those that pay fewer dividends.

The Underlying Channel

The two previous sections contained two pieces of evidence whereby firms with the CFC (i.e., a Chair who previously served as the CEO of the same firm) exhibit (1) lower debt financing levels (a less risky financing choice) and (2) lower default risk or a better solvency position. In this section, we continue arranging and integrating these two key mosaics into a single, unified framework by investigating whether firms with a CFC have lower bankruptcy risk by way of their lower debt financing policies. Table 5 reports OLS (Panel A), OLS with one-year lagged values of independent variables (Panel B), and GMM (Panel C) regression results for Baron and Kenny's (1986) four-step mediation model.

In step 1 (Panel A: Model 1, Panel B: Model 5, and Panel C: Model 9), we regress *Debt/TA* on *Chair-Former-CEO* to examine the indirect impacts of the CFC on debt financing strategies. Results show that firms with a CFC demonstrate a significant concave association with the firm's debt levels. This finding has been thoroughly discussed above. We next conduct the second step of the four-step mediation model and report these results in Panel A (Model 2), Panel B (Model 6), and Panel C (Model 10). Indeed, we examine the effect of debt financing policy (*Debt/TA*) on the firm's default risk (*LnAZscore*) and find a negative and significant relationship between these variables (Model 2: Coef. = –1.331; *p*-value = 0.000 < 0.01, Model 6: Coef. = –1.276; *p*-value = 0.000 < 0.01, and Model 10: Coef. = –1.828; *p*-value = 0.000 < 0.01). This suggests that higher debt financing levels lead to higher default risk, possibly because of greater periodic payment obligations, including interest, putting downward pressure on the corporate financial budget.

In the third step, we test the direct impact of the *Chair-Former-CEO* on corporate default risk (*LnAZscore*), which is expected to be mediated. This result is presented in Panel A (Model 3), Panel B (Model 7), and Panel C (Model 11), and is confirmed above. Specifically, we find that firms with the CFC exhibit lower default risk. These first three steps in the mediation model have proven their statistically significant pathway, which reveals a potential mediating influence of debt financing strategies on the relationship between the CFC and corporate insolvency risk.

In the last step of mediation analysis (step 4: Panel A, Model 4, Panel B, Model 8, and Panel C, Model 12), we explore the effects of both the *Chair-Former-CEO* and *Debt/TA* on the firm's distance to bankruptcy (*LnAZscore*) to determine if the mediating impact is full or partial. We find an inconclusive result that shows a partial mediating effect (see Model 4) when using OLS and a full mediating effect when using OLS with one-year lagged values (see Model 8) as well as GMM (see Model 12). Indeed, three models show that the impact of *Debt/TA* on *LnAZscore* is still statistically negative (Model 4: Coef. = –1.325; *p*-value = 0.000 < 0.01, Model 8: Coef. = –1.274; *p*-value = 0.000 < 0.01, and Model 12: Coef. = –1.019; *p*-value = 0.000 < 0.01), while the impacts of *Chair-Former-CEO* are reduced (Model 4: Coef. = 0.034; *p*-value = 0.077 < 0.1) or lose their significance (Model 8: Coef. = 0.010; *p*-value = 0.692 > 0.1; Model 12: Coef. = –0.045; *p*-value = 0.249 > 0.1). This signifies either the partial or full mediating effect of firm

TABLE 5

FOUR-STEP MEDIATING EXAMINATION: EFFECT OF CHAIR-FORMER-CEO ON FIRMS' DEFAULT RISK THROUGH THEIR DEBT FINANCING.

	Panel A: OLS Regressions 0-year lag of independent variable				**Panel B: OLS Regressions 1-year lag of independent variable**				**Panel C: GMM regressions**			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	Step 1 *Debt/TA*	Step 2 *LnAZscore*	Step 3 *LnAZscore*	Step 4 *LnAZscore*	Step 1 *Debt/TA*	Step 2 *LnAZscore*	Step 3 *LnAZscore*	Step 4 *LnAZscore*	Step 1 *Debt/TA*	Step 2 *LnAZscore*	Step 3 *LnAZscore*	Step 4 *LnAZscore*
Chair-Former-CEO	-0.035***		0.080***	0.034*	-0.025**		0.053*	0.010	-0.015**		0.096**	-0.045
	(0.007)		(0.002)	(0.077)	(0.046)		(0.088)	(0.692)	(0.023)		(0.028)	(0.249)
Debt/TA		-1.331***		-1.325***		-1.276***		-1.274***		-1.828***		-1.019***
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)
Ln (Bsize)	-0.046	-0.074	-0.017	-0.078*	-0.064*	-0.051	0.030	-0.052	-0.071**	-0.061	-0.052	0.060
	(0.220)	(0.116)	(0.796)	(0.097)	(0.071)	(0.427)	(0.705)	(0.415)	(0.025)	(0.642)	(0.799)	(0.628)
%Ind	0.020	-0.141**	-0.166**	-0.139**	0.014	-0.157**	-0.162*	-0.156**	-0.004	-0.009	0.257	0.170
	(0.618)	(0.022)	(0.041)	(0.024)	(0.709)	(0.041)	(0.074)	(0.042)	(0.846)	(0.894)	(0.315)	(0.388)
Dual	0.074***	0.005	-0.118***	-0.019	0.062***	0.010	-0.093**	0.002	0.008	-0.028	-0.226***	-0.117**
	(0.000)	(0.779)	(0.000)	(0.415)	(0.000)	(0.718)	(0.016)	(0.946)	(0.393)	(0.362)	(0.002)	(0.034)
%Male	-0.009	0.172***	0.179***	0.168***	-0.016	0.215***	0.221***	0.214***	-0.031	0.032	0.079	0.009
	(0.736)	(0.000)	(0.001)	(0.000)	(0.533)	(0.000)	(0.000)	(0.000)	(0.116)	(0.568)	(0.505)	(0.910)
%PrExpSkill	0.056*	0.021	-0.055	0.019	0.042	0.006	-0.063	0.006	0.016	0.008	-0.443	-0.139
	(0.068)	(0.686)	(0.456)	(0.710)	(0.158)	(0.923)	(0.459)	(0.930)	(0.428)	(0.810)	(0.172)	(0.544)
%IndorFin	-0.067***	0.060*	0.151***	0.062*	-0.073***	0.071	0.155***	0.072	0.002	0.046*	0.047	0.074
	(0.002)	(0.081)	(0.001)	(0.071)	(0.001)	(0.124)	(0.006)	(0.120)	(0.870)	(0.069)	(0.727)	(0.585)
Capex/TA	-0.010***	0.008***	0.022***	0.009***	-0.010***	0.006**	0.019***	0.007**	-0.001	-0.003	-0.000	-0.004
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.047)	(0.000)	(0.046)	(0.183)	(0.532)	(0.955)	(0.249)
LnTA	0.087***	-0.838***	-0.953***	-0.838***	0.086***	-0.805***	-0.923***	-0.805***	0.017***	-0.723***	-0.551***	-0.634***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.000)	(0.000)	(0.000)
Div/NI	0.187***	-0.030	-0.275***	-0.028	0.206***	-0.029	-0.278***	-0.028	0.012	0.104**	-0.047	0.053*
	(0.000)	(0.436)	(0.000)	(0.468)	(0.000)	(0.558)	(0.000)	(0.567)	(0.256)	(0.032)	(0.127)	(0.063)
Sale/Share	0.001***	0.003***	0.002***	0.003***	0.001***	0.003***	0.002***	0.003***	0.000	0.003***	0.001***	0.002***

(Continues)

TABLE 5

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	Panel A: OLS Regressions 0-year lag of independent variable				Panel B: OLS Regressions 1-year lag of independent variable				Panel C: GMM regressions			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	Step 1 *Debt/TA*	Step 2 *LnAZscore*	Step 3 *LnAZscore*	Step 4 *LnAZscore*	Step 1 *Debt/TA*	Step 2 *LnAZscore*	Step 3 *LnAZscore*	Step 4 *LnAZscore*	Step 1 *Debt/TA*	Step 2 *LnAZscore*	Step 3 *LnAZscore*	Step 4 *LnAZscore*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.313)	(0.000)	(0.001)	(0.000)
Ln(Marcap)	-0.108***	0.797***	0.942***	0.798***	-0.101***	0.720***	0.865***	0.721***	-0.014**	0.688***	0.551***	0.596***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.018)	(0.000)	(0.000)	(0.000)
Constant	1.024***	2.240***	0.877***	2.234***	0.943***	3.061***	1.720***	3.059***	0.000	2.289***	0.395	0.000
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(.)	(0.000)	(0.536)	(.)
L.Debt/TA									0.861***			
									(0.000)			
L.LnAZcore										0.116**	0.464***	0.289***
										(0.048)	(0.000)	(0.000)
Year-fixed effects/dimension	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-effects/dimension	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Observations	1,264	1,264	1,264	1,264	1,178	1,178	1,178	1,178	1,179	1,179	1,179	1,179
Number of firms	86	86	86	86	86	86	86	86	86	86	86	86
R-squared	0.348	0.912	0.848	0.912	0.366	0.857	0.798	0.857				
F-test/Wald Chi 2	30.55***	197.77***	121.76***	192.20***	30.29***	117.57***	94.02***	114.92***	83099***	4071***	4228***	15258***
AR (1) (p-value)									0.000	0.005	0.000	0.000
AR (2) (p-value)									0.841	0.639	0.904	0.957
Hansen test (p-value)									0.505	0.126	0.717	0.997

This table reports the *four-step* mediation regression results for the effect of debt financing decisions on the relationship between Chair-former-CEO and firm default riskiness employing OLS without lagged values of independent variables (Panel A), OLS with one-year lagged values of independent variables (Panel B), and GMM approach (Panel C). ***p<0.01, **p<0.05, *p<0.1. Definitions of all variables are presented in Appendix 1.

debt financing strategies. Nevertheless, we can argue that the significance level of *Chair-Former-CEO* in Model 4 has been substantially mitigated; hence, we can draw a *general* conclusion for the full mediating effect of debt financing choices. In particular, we find that the CFC lowers the firm's default risk substantially through their lower debt financing decisions.

Our results are robust across all alternative methods, including OLS with a zero-year lag of independent variables and OLS with a one-year lag of independent variables and GMM, which solve the potential issue of endogeneity (i.e., reverse causality, omitted-variables bias, and measurement error in the repressor), given that all validity tests for GMM are conducted and confirmed.

Alternative Measures for Default Risk

As mentioned earlier, the Altman Z-score is composed of five factors, including working capital over total assets (*WC/TA*), retained earnings over total assets (*RE/TA*), earnings before interest and taxes over total assets (*EBIT/TA*), the market value of equity (market capitalization) over the book value of total liabilities (*MV/TL*), and total sales over total assets (*SALES/TA*). Therefore, we believe it is worth testing each element of the Z-score individually to see how the CFC affects firm risk. To do so, we present these OLS regression results in Table 6 (Panels A to E). Panels A, B, C, D, and E report the regression findings for *WC/TA, RE/TA, EBIT/TA, MV/TL, and SALES/TA*, respectively. We find a positive and significant relationship between the CFC and firm working capital (*WC/TA*) and negative and significant links between the CFC and retained earnings ratio (*RE/TA*) as well as sales-to-assets ratio (*SALES/TA*). Our results imply that firms with a CFC exhibit a safer working capital position, more dividend payouts (lower retained earnings), but fewer sales. Regarding the four-step mediation effect, we find that *WC/TA* drives our main result as reported in Table 6. Indeed, the CFC is related to lower working capital (lower insolvency) risk by way of lower debt financing decisions. Furthermore, we also find a lower sale-to-assets ratio of firms with the CFC through lower debt levels, given that a firm with more debt exhibits more sales (*SALES/TA*).

High-risk versus Low-risk Firms

Similar to the above, we further conduct OLS regression testing for the four-step mediating models by comparing high-risk and low-risk firms. The cut-off to classify these two types of firms is the mean (average) of default risk (i.e., *LnAZscore*: 1.089). Any firms with a higher *LnAZscore* than the cut-off are classified as low-risk businesses. Otherwise, firms showing a lower *LnAZscore* than their average are classified as high-risk. We report these results in Table 7 (Panels A and B), showing the mediation effect findings for high- and low-risk firms, respectively. While Panel B shows similar results to those reported in our main Table 5, step 1 of Panel A fails to satisfy the requirement of the four-step mediation model, that is, it shows an insignificant result for the association between the CFC and firm leverage policy. Our findings affirm the more prominent mediating role of debt financing policies

TABLE 6

FOUR-STEP MEDIATING EXAMINATION: TESTING FOR COMPOSITIONS OF ALTMAN Z-SCORE

	Panel A: Working capital to total assets			**Panel B: Retained earnings to total assets**			**Panel C: EBIT to total assets**			**Panel D: Market value to liabilities**			**Panel E: Sales to total assets**		
Variables	(1) Step 2 *WC/TA*	(2) Step 3 *WC/TA*	(3) Step 4 *WC/TA*	(4) Step 2 *RE/TA*	(5) Step 3 *RE/TA*	(6) Step 4 *RE/TA*	(7) Step 2 *EBIT/TA*	(8) Step 3 *EBIT/TA*	(9) Step 4 *EBIT/TA*	(10) Step 2 *MV/TL*	(11) Step 3 *MV/TL*	(12) Step 4 *MV/TL*	(13) Step 2 *SALES/TA*	(14) Step 3 *SALES/TA*	(15) Step 4 *SALES/TA*
ChairExCEO		0.028***	0.017*		–0.001*	–0.001*		–0.001	–0.001		0.390	–0.115		–0.056*	–0.043
		(0.004)	(0.058)		(0.099)	(0.074)		(0.729)	(0.815)		(0.574)	(0.865)		(0.066)	(0.150)
DebtTA	–0.331***		–0.328***	–0.001		–0.002	0.010		0.009	–14.467***		–14.487***	0.388***		0.380***
	(0.000)		(0.000)	(0.482)		(0.381)	(0.298)		(0.303)	(0.000)		(0.000)	(0.000)		(0.000)
LnBsize	–0.078***	–0.065***	–0.080***	–0.006***	–0.006***	–0.006***	0.008	0.007	0.008	–1.756	–1.073	–1.743	–0.029	–0.042	–0.024
	(0.001)	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)	(0.356)	(0.387)	(0.352)	(0.187)	(0.442)	(0.183)	(0.702)	(0.593)	(0.752)
Bindep	–0.072***	–0.077***	–0.071***	–0.005***	–0.006***	–0.005***	0.019**	0.019**	0.019**	–4.676***	–4.975***	–4.684***	–0.109	–0.105	–0.112
	(0.004)	(0.004)	(0.005)	(0.010)	(0.008)	(0.009)	(0.013)	(0.012)	(0.013)	(0.003)	(0.004)	(0.003)	(0.261)	(0.294)	(0.249)
Dual	0.029***	–0.008	0.017	–0.000	0.000	0.001	–0.004	–0.003	–0.003	1.007	0.012	1.092	–0.125***	–0.065	–0.094**
	(0.005)	(0.536)	(0.178)	(0.559)	(0.629)	(0.518)	(0.207)	(0.483)	(0.370)	(0.253)	(0.992)	(0.371)	(0.001)	(0.137)	(0.033)
Bgender	–0.022	–0.022	–0.025	–0.001	–0.001	–0.001	–0.003	–0.003	–0.003	–1.159	–1.019	–1.145	0.278***	0.280***	0.283***
	(0.197)	(0.253)	(0.159)	(0.630)	(0.705)	(0.703)	(0.549)	(0.547)	(0.559)	(0.600)	(0.643)	(0.597)	(0.000)	(0.000)	(0.000)
PrExpSkill	0.071***	0.052**	0.071***	0.004**	0.004**	0.004***	–0.002	–0.001	–0.002	2.577	1.772	2.583	–0.151	–0.127	–0.148
	(0.001)	(0.031)	(0.001)	(0.010)	(0.011)	(0.009)	(0.774)	(0.841)	(0.778)	(0.187)	(0.407)	(0.185)	(0.145)	(0.235)	(0.157)
IndorFin	0.055***	0.078***	0.055***	0.002	0.002	0.002	0.005	0.004	0.005	5.986***	6.955***	5.980***	–0.212***	–0.240***	–0.214***
	(0.001)	(0.000)	(0.001)	(0.204)	(0.211)	(0.217)	(0.329)	(0.395)	(0.333)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
CapexTA	–0.004***	–0.001	–0.004***	0.000	0.000	0.000	–0.000	–0.000	–0.000	0.553***	0.694***	0.551***	0.022***	0.017***	0.021***
	(0.001)	(0.472)	(0.001)	(0.203)	(0.157)	(0.295)	(0.278)	(0.180)	(0.275)	(0.007)	(0.001)	(0.007)	(0.000)	(0.000)	(0.000)
LnTA	–0.074***	–0.103***	–0.074***	–0.004***	–0.004***	–0.004***	–0.047***	–0.046***	–0.047***	–4.628***	–5.888***	–4.628***	–0.310***	–0.277***	–0.310***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Divearnings	–0.061***	–0.121***	–0.060***	–0.003***	–0.004***	–0.003***	0.027***	0.028***	0.027***	–2.483***	–5.196***	–2.490***	0.132***	0.200***	0.129***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.003)
Saleshare	–0.000***	–0.001***	–0.000***	–0.000**	–0.000***	–0.000**	–0.000*	–0.000	–0.000*	–0.016***	–0.028***	–0.016***	0.008***	0.008***	0.008***
	(0.000)	(0.000)	(0.000)	(0.040)	(0.004)	(0.035)	(0.069)	(0.118)	(0.069)	(0.003)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)
LnMarcap	0.058***	0.094***	0.058***	–0.002***	–0.002***	–0.002***	0.053***	0.052***	0.053***	5.078***	6.643***	5.075***	0.184***	0.142***	0.183***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.778***	0.438***	0.774***	0.124***	0.123***	0.124***	–0.080***	–0.071**	–0.080***	5.166	-9.642	5.190	2.607***	3.005***	2.615***

(Continues)

TABLE 6

CONTINUED

Variables	Panel A: Working capital to total assets			Panel B: Retained earnings to total assets			Panel C: EBIT to total assets			Panel D: Market value to liabilities			Panel E: Sales to total assets		
	(1) Step 2 *WC/TA*	(2) Step 3 *WC/TA*	(3) Step 4 *WC/TA*	(4) Step 2 *RE/TA*	(5) Step 3 *RE/TA*	(6) Step 4 *RE/TA*	(7) Step 2 *EBIT/TA*	(8) Step 3 *EBIT/TA*	(9) Step 4 *EBIT/TA*	(10) Step 2 *MV/TL*	(11) Step 3 *MV/TL*	(12) Step 4 *MV/TL*	(13) Step 2 *SALES/TA*	(14) Step 3 *SALES/TA*	(15) Step 4 *SALES/TA*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	(0.014)	(0.005)	(0.364)	(0.100)	(0.363)	(0.000)	(0.000)	(0.000)
Year-fixed effects/dimension	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,264	1,264	1,264	1,202	1,202	1,202	1,252	1,252	1,252	1,264	1,264	1,264	1,264	1,264	1,264
R^2	0.503	0.404	0.505	0.430	0.431	0.432	0.492	0.491	0.492	0.402	0.358	0.402	0.517	0.506	0.518
F-test	30.39***	22.78***	29.96***				26.61***	26.38***	25.69***	11.53***	9.67***	11.16***	25.56***	24.46***	25.28***

This table reports the sensitivity tests for the four-step mediating examination results by using five compositions of the default risk measure (i.e., Altman Z-score). Specifically, we replaced the dependent variable by employing working capital to total assets (*WC/TA*), retained earnings to total assets (*RE/TA*), EBIT to total assets (*EBIT/TA*), market value to liabilities (*MV/TL*), and sales to total assets (*SALES/TA*). *p*-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Definitions of all variables are presented in Appendix 1.

within low-risk firms led by CFCs, in contrast to their counterparts in high-risk firms. CFCs in low-risk firms exhibit a higher propensity for embracing low-risk strategies as they endeavour to uphold their established legacy, which they acquired when assuming the role of CEO. However, this outcome is observed to be statistically insignificant within the sub-sample of high-risk firms with CFCs. In such instances, it is plausible that CFCs in these companies opt to refrain from reducing leverage to maintain crucial financial performance metrics, such as profitability, during their tenure. This strategic approach is designed to avert any discontent among shareholders and investors. Nevertheless, it is imperative to acknowledge that the absence of this specific strategy does not imply that CFCs abstain from employing alternative mechanisms to mitigate corporate risk levels. This, in itself, elicits fresh research inquiries for future studies.

ROBUSTNESS CHECKS

Endogeneity: Three-stage Least Squares

To reduce the potential issue of endogeneity arising from simultaneity bias (if any), we employ the structural three-stage least squares (3SLS) technique by endogenizing board size and board independence variables based on current studies on board structure (e.g., Linck *et al.*, 2008; Mollah and Zaman, 2015). Table 8 reports these findings. Despite variations in significance levels, we still find consistent results in Tables 3 and 4. Specifically, we find that the coefficients for *Chair-Former-CEO* are the same as the reported results employing OLS and GMM approaches. Therefore, we interpret these 3SLS regression results in the same way as the OLS and GMM findings. Overall, *Chair-Former-CEO* has a negative effect on firm debt financing and a positive impact on firm default risk. In terms of mediation, firms with a CFC exhibit lower default risk via a lower debt financing decision. In other words, all of our tests of robustness demonstrate that the impacts of the CFC on firm debt financing decisions and risk of default, as well as the mediating effects of firm debt financing decisions, are similar to the main results presented in Tables 2–5 even after capturing endogeneity issues.

Propensity Score Matching Method

Finally, we argue that the analysis of the impact of the CFC on firm debt financing decisions and firm default risk gives rise to some methodological problems, especially self-selection concerns regarding the endogeneity issue of the decision to promote the CEO to Chair. First, a comparison between firms with a CFC and their peers without a CFC tends to yield biased estimates of the impact of the CFC since the debt financing decision and insolvency position of the firms without a CFC may differ systematically from the debt financing levels and bankruptcy situation of the firms in the absence of the internal promotion policy (from CEO

TABLE 7

HIGH-RISK VS LOW-RISK FIRMS: EFFECT OF CFC ON FIRMS' DEFAULT RISK THROUGH THEIR DEBT FINANCING

	Panel A: High-risk firms				**Panel B: Low-risk firms**			
Variables	(1) Step 1 *Debt/TA*	(2) Step 2 *LnAZscore*	(3) Step 3 *LnAZscore*	(4) Step 4 *LnAZscore*	(5) Step 1 *Debt/TA*	(6) Step 2 *LnAZscore*	(7) Step 3 *LnAZscore*	(8) Step 4 *LnAZscore*
Chair-Former-CEO	–0.015		0.066**	0.051*	–0.055***		0.100***	0.019
	(0.296)		(0.043)	(0.074)	(0.009)		(0.008)	(0.406)
Debt/TA		–1.025***		–1.019***		–1.493***		–1.489***
		(0.000)		(0.000)		(0.000)		(0.000)
Ln (Bsize)	–0.008	0.141**	0.142*	0.134**	–0.130**	–0.157***	0.036	–0.158***
	(0.848)	(0.040)	(0.060)	(0.048)	(0.032)	(0.007)	(0.700)	(0.006)
%Ind	–0.061*	0.025	0.088	0.026	0.036	–0.213***	–0.263**	–0.209***
	(0.098)	(0.755)	(0.341)	(0.743)	(0.556)	(0.006)	(0.017)	(0.008)
Dual	0.067***	0.001	–0.107**	–0.039	0.063***	–0.005	–0.111***	–0.018
	(0.001)	(0.974)	(0.012)	(0.329)	(0.003)	(0.802)	(0.008)	(0.492)
%Male	–0.059**	0.209***	0.263***	0.203***	0.038	0.080*	0.021	0.078*
	(0.031)	(0.001)	(0.000)	(0.001)	(0.326)	(0.056)	(0.760)	(0.064)
%PrExpSkill	0.019	0.013	–0.005	0.014	0.069	0.018	–0.087	0.016
	(0.573)	(0.820)	(0.943)	(0.795)	(0.121)	(0.794)	(0.414)	(0.816)
%IndorFin	0.008	–0.036	–0.030	–0.022	–0.126***	–0.003	0.182***	–0.005
	(0.795)	(0.537)	(0.656)	(0.693)	(0.000)	(0.935)	(0.003)	(0.889)
Capex/TA	–0.009***	–0.009**	0.001	–0.009**	–0.008***	0.014***	0.027***	0.014***
	(0.000)	(0.013)	(0.879)	(0.016)	(0.000)	(0.000)	(0.000)	(0.000)
LnTA	0.088***	–0.728***	–0.816***	–0.726***	–0.022	–0.870***	–0.837***	–0.869***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.172)	(0.000)	(0.000)	(0.000)
Div/NI	0.068***	–0.015	–0.077*	–0.007	0.376***	0.064	–0.496***	0.063
	(0.004)	(0.743)	(0.089)	(0.871)	(0.000)	(0.152)	(0.000)	(0.157)
Sale/Share	0.001***	0.005***	0.004***	0.005***	0.001***	0.002***	0.000	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.512)	(0.000)
Ln(Marcap)	–0.088***	0.669***	0.758***	0.669***	–0.015	0.848***	0.871***	0.848***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.360)	(0.000)	(0.000)	(0.000)
Constant	0.683***	1.673***	0.981***	1.677***	1.310***	2.256***	0.297	2.247***
	(0.000)	(0.000)	(0.005)	(0.000)	(0.000)	(0.000)	(0.382)	(0.000)

(Continues)

TABLE 7

CONTINUED

Variables	Panel A: High-risk firms				Panel B: Low-risk firms			
	(1) Step 1 *Debt/TA*	(2) Step 2 *LnAZscore*	(3) Step 3 *LnAZscore*	(4) Step 4 *LnAZscore*	(5) Step 1 *Debt/TA*	(6) Step 2 *LnAZscore*	(7) Step 3 *LnAZscore*	(8) Step 4 *LnAZscore*
Year-fixed effects/dimension	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-effects/dimension	No	No	No	No	No	No	No	No
Observations	603	603	603	603	661	661	661	661
R^2	0.258	0.810	0.764	0.811	0.303	0.879	0.678	0.879
F-test	11.48***	52.82***	36.03***	51.88***	10.66***	82.84***	30.91***	80.43***

This table reports the sensitivity tests for the four-step mediating examination results by comparing high-risk and low-risk firms using the cut-off of the mean of *LnAZscore*. Panel A presents the results for high-risk firms and Panel B reports the results for low-risk firms. *p*-values in parentheses. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Definitions of all variables are presented in Appendix 1.

TABLE 8

THREE-STAGE LEAST SQUARES: EFFECT OF CFC ON FIRMS' DEFAULT RISK THROUGH THEIR DEBT FINANCING

Variables	(1) Step 1 *Debt/TA*	(2) Step 2 *LnAZscore*	(3) Step 3 *LnAZscore*	(4) Step 4 *LnAZscore*
Chair-Former-CEO	–0.060***		0.181***	0.123***
	(0.001)		(0.000)	(0.001)
Debt/TA		–1.303***		–0.991***
		(0.000)		(0.000)
Ln (Bsize)	0.807**	–2.935***	–3.623***	–2.985***
	(0.014)	(0.000)	(0.000)	(0.000)
%Ind	0.187*	–0.389*	–0.817***	–0.606***
	(0.068)	(0.064)	(0.004)	(0.003)
Dual	0.084***	0.004	–0.122**	–0.030
	(0.000)	(0.917)	(0.015)	(0.428)
%Male	–0.010	0.177***	0.190***	0.191***
	(0.636)	(0.000)	(0.000)	(0.000)
%PrExpSkill	0.103**	0.026	–0.163	–0.058
	(0.025)	(0.791)	(0.192)	(0.541)
%IndorFin	–0.055*	0.019	0.070	0.011
	(0.061)	(0.753)	(0.368)	(0.846)
Capex/TA	–0.007***	0.011***	0.020***	0.012***
	(0.000)	(0.000)	(0.000)	(0.000)
LnTA	0.057***	–0.656***	–0.722***	–0.700***
	(0.008)	(0.000)	(0.000)	(0.000)
Div/NI	0.181***	0.049	–0.168	0.034
	(0.000)	(0.617)	(0.202)	(0.721)
Sale/Share	0.000***	0.003***	0.002***	0.003***
	(0.000)	(0.000)	(0.000)	(0.000)
Ln(Marcap)	–0.052***	0.630***	0.704***	0.679***
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	–1.705***	9.234***	10.467***	9.240***
	(0.002)	(0.000)	(0.000)	(0.000)
Year/industry fixed effects	Yes	Yes	Yes	Yes
Observations	1,264	1,264	1,264	1,264
R^2	0.228	0.620	0.366	0.604
F-test/Wald Chi 2	776***	3,219***	2,153***	3,479***

This table reports the robustness tests for the four-step mediating examination results by employing the three-stage least squares analysis. Definitions of all variables are presented in Appendix 1. *p*-values in parentheses ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

to Chair). Consequently, if we find that firms with a CFC exhibit lower debt financing levels and default risk on average than their peers without a CFC, the difference could be because of the impact of the implementation of a promotion policy or differences in firms' characteristics before promoting the CEO to the role of Chair. Second, if we consider only firms with a CFC, this may reduce the possibility of a hypothetical benchmark, that is, the debt financing levels and default risk that the firms would have had if they had not promoted the CEO to

the role of Chair. Moreover, the observed changes in debt financing levels and insolvency risk could be caused by shocks influencing all firms equally.

This study, therefore, attempts to address those self-selection concerns regarding the potential endogeneity issues of the promotion to Chair from the CEO position (*Chair-Former-CEO*) by utilizing a PSM method. PSM has become one of the most popular nonparametric methods for examining causal impacts, and it has been widely employed in corporate governance and policy impact analyses (e.g., Casu *et al.*, 2013; Trinh *et al.*, 2020b). We applied this approach by assuming that the treatment group includes firms with a CFC, while the control group includes firms without a CFC. We implement this technique by following three steps. First, we estimate propensity scores (PS) for the treatment and control groups. Second, we match treated units with non-treated ones. Third, we estimate the average CFC effects.

Moving onto the first step of the PSM approach, we estimate the PS using a probit regression of a binary factor, taking a value of one for firms with a CFC and zero otherwise. The main aim of this step is not to predict the treatment,

FIGURE 1A

DEBT/TA AS DEPENDENT VARIABLE: UNMATCHED VERSUS MATCHED SAMPLE—PROPENSITY SCORE

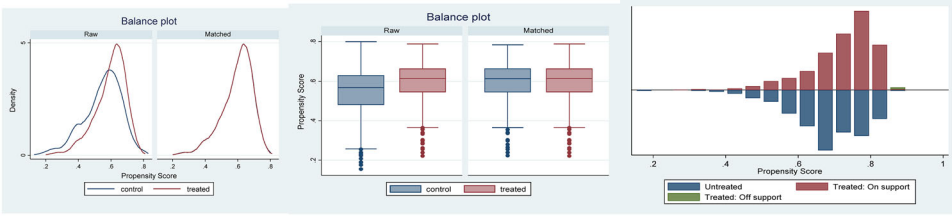

FIGURE 1B

LNAZSCORE AS DEPENDENT VARIABLE: UNMATCHED VERSUS MATCHED SAMPLE—PROPENSITY SCORE

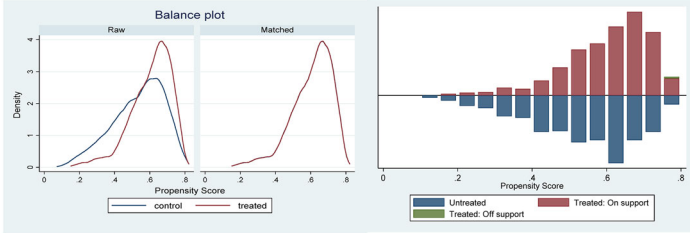

TABLE 9

PROPENSITY SCORE MATCHING ESTIMATION: CFC, DEBT FINANCING, AND FIRMS' DEFAULT RISK

Dependent variables: *Debt/TA* and *LnAZscore*

Panel A: Average treatment effects with nearest-neighbour matching method

	Treated	Control	Δ	S.E.	*t*-stat
1: Dependent variable: *Debt/TA*					
1:1 matching without replacement					
Unmatched	0.598	0.606	–0.008	0.015	–0.55
Matched	0.574	0.606	–0.032*	0.018	–1.78
1:1 matching with replacement					
Unmatched	0.598	0.606	–0.008***	0.015	–0.55
Matched	0.598	0.658	–0.060***	0.020	–3.04
Nearest neighbour ($n = 2$)					
Unmatched	0.598	0.606	–0.008***	0.015	–0.55
Matched	0.598	0.641	–0.043***	0.018	–2.43
Nearest neighbour ($n = 3$)					
Unmatched	0.598	0.606	–0.008***	0.015	–0.55
Matched	0.598	0.640	–0.042***	0.017	–2.50
2: Dependent variable: *LnAZscore*					
1:1 matching without replacement					
Unmatched	1.040	1.114	–0.074	0.049	–1.52
Matched	1.163	1.114	0.050	0.053	0.93
1:1 matching with replacement					
Unmatched	1.040	1.114	–0.074	0.049	–1.52
Matched	1.042	0.912	0.129**	0.073	1.78
Nearest neighbour ($n = 2$)					
Unmatched	1.040	1.114	–0.074	0.049	–1.52
Matched	1.042	0.927	0.116**	0.063	1.84
Nearest neighbour ($n = 3$)					
Unmatched	1.040	1.114	–0.074	0.049	–1.52
Matched	1.042	0.958	0.084*	0.058	1.43

Panel B: Average treatment effect on the treated with 1:1 nearest-neighbour matching and bootstrapping of standard errors

3: Dependent variable: *Debt/TA*

No. of treated obs.	**Replications**	**Observed (Δ)**	**Bias**	**S.E.**	***t*-stat**
721	100	–0.059**	0.008	0.017	–3.441
721	1,000	–0.059**	0.012	0.018	–3.276
721	10,000	–0.059**	0.011	0.018	–3.304

4: Dependent variable: *LnAZscore*

No. of treated obs.	**Replications**	**Observed (Δ)**	**Bias**	**S.E.**	***t*-stat**
721	100	0.135*	–0.030	0.074	1.984
721	1,000	0.135*	–0.021	0.068	1.980
721	10,000	0.135*	–0.018	0.070	1.947

Panel C: Regressions on matched samples

5: Dependent variable: *Debt/TA*

Independent variables	(1) 1:1 matching without replacement	(2) 1:1 matching with replacement	(3) Nearest neighbour ($n = 2$)	(4) Nearest neighbour ($n = 3$)

(Continues)

TABLE 9

CONTINUED

Panel C: Regressions on matched samples				
Chair-Former-CEO	–0.034**	–0.038***	–0.029***	–0.028**
	(0.037)	(0.000)	(0.011)	(0.011)
Controls	Yes	Yes	Yes	Yes
Constant	0.831***	0.752***	0.830***	0.822***
	(0.000)	(0.000)	(0.000)	(0.000)
Adjusted R^2	0.249	0.335	0.297	0.295
Observations	588	1,432	983	1,000
6: Dependent variable: *LnAZscore*				

Panel C: Regressions on matched samples				
	(1)	(2)	(3)	(4)
Independent variables	1:1 matching without replacement	1:1 matching with replacement	Nearest neighbour ($n = 2$)	Nearest neighbour ($n = 3$)
Chair-Former-CEO	0.063*	0.075**	0.092***	0.079**
	(0.058)	(0.015)	(0.006)	(0.016)
Controls	Yes	Yes	Yes	Yes
Constant	0.330***	0.149	0.164	0.194*
	(0.001)	(0.161)	(0.160)	(0.086)
Adjusted R^2	0.605	0.600	0.608	0.605
Observations	1,062	1,436	1,153	1,199

This table reports PSM results for the average treatment effects (*ATE*) and the average treatment effect on the treated (*ATT*) with 1:1 nearest-neighbour matching and bootstrapping of standard errors. The *ATE* and *ATT* of *Chair-Former-CEO* on debt financing levels as well as default risk (Δ) is calculated as the difference between the mean changes of firms with the presence of the CFC ('Treated' column) and that of matched firms without the presence of the CFC ('Non-treated' column). *p*-values in parentheses. *t*-statistics based on standard errors in final column. ***$p < 0.01$, **$p < 0.05$, *$p < 0.01$.

'but to balance all the covariates between the two groups' (Casu *et al.*, 2013, p. 1637; see also Caliendo and Kopeinig, 2008). After obtaining the estimated PS, we continue matching firms with a CFC with firms without a CFC. We employ four different nearest-neighbour matching methods, which include (1) 1:1 matching without replacement, (2) 1:1 matching with replacement, (3) nearest neighbour ($n = 2$) with replacement, and (4) nearest neighbour ($n = 3$) with replacement. We verify this matching quality by plotting the distribution of the PS for firms with and without a CFC before and after matching (see Figure 1).

The results for the univariate tests are reported in Table 9 (Panels A, columns (1) and (2)), and those for average treatment effects on the treated estimation with bootstrapping of standard errors (i.e., 100, 1000, 10000 replications) are presented in Table 9 (Panel B, columns (3) and (4)). We find that firm debt financing levels (and default risk) are lower for firms with a CFC (treatment

group) than their peers without a CFC (control group). These findings are consistent across all four matching techniques. In the final step, we conduct multivariate regressions on the treated sample, and the results are reported in Table 9 (Panel C, columns (5) and (6)), which indicates a negative (positive) and significant association between the CFC and *Debt/TA* (*LnAZscore*) across all models ((1)–(4)). This implies that for the treated sample, firms with a CFC exhibit lower debt financing levels and lower insolvency risk. These findings confirm the main one reported in previous sections and provide robust support for the main hypotheses.

Finally, it is worth noting that we have done further robustness checks, such as splitting the sample between large and small firms as well as high- and low-leveraged firms. We detect some signals of a partial mediating effect of debt-financing decisions for high-levered firms' subsample, and we find that the mediating influence of debt-financing decisions on the relationship between the CFC and risk of bankruptcy, found in Table 5, is driven by larger firms. For parsimony and given the consistency of our findings, we do not report these tables.

DISCUSSIONS AND CONCLUDING REMARKS

The internal promotion of a CEO to the Chair role within an organization can be considered an occasion for strategic realignment (Pfeffer and Salancik, 1978). We argue that the continuing presence of the predecessor CEO as board Chair will likely increase the monitoring effectiveness of the new CEO and management team, leading to lower agency costs and, in turn, affecting firm financial policies and riskiness.[7] Our primary concern in this study has therefore been to present an empirical analysis of the association between the CFC (i.e., the Chair who previously served as the CEO of the same firm) and corporate capital structure choices (i.e., debt financing decisions) as well as firm default risk. We also emphasize the mediating effect of debt financing on the link between the CFC and the risk of insolvency. To do so, we employ several methods (e.g., OLS, GMM, 3SLS, and PSM) using Baron and Kenny's (1986) four-step mediation model.

Based on a sample of the largest US non-financial firms listed in the S&P 100, our initial findings indicate that the CFC exerts a negative influence on debt financing decisions, implying that firms with a CFC tend to prefer lower

[7] However, as previously discussed, from a power perspective, one could argue that promoting a CEO to the Chair role within the organization may likely lead to increased agency costs. A practical approach to mitigating these concerns involves the implementation of various strategies. These include appointing independent board members and ensuring that the board comprises a diverse and highly competent group with a broad range of skills and experiences. Such measures enhance decision-making processes and reduce the risk of undue influence by the Chair. Consequently, an organization can alleviate concerns associated with the internal promotion of a CEO to the Chair role and establish a governance structure that fosters accountability, transparency, and effective leadership. We thank the reviewers for drawing our attention to this point.

debt financing over equity. This observation aligns with various corporate finance theories, including agency theory, pecking order theory, and transaction cost economics. Furthermore, our study reveals a decrease in default risk within firms that have a CFC, a phenomenon attributable to reduced agency costs and the enhanced monitoring quality facilitated by the Chair over the new CEO and other managerial personnel. This finding is also consistent with the principles of resource dependence theory. Intriguingly, our results also demonstrate that US firms with lower debt levels exhibit a corresponding decrease in default risk, offering corroborating evidence for the traditional trade-off theory and the credit supply shock theory. Most notably, our contribution to the existing body of research lies in our exploration of the underlying mechanism by which the CFC impacts default risk. In essence, the CFC's association with decreased default risk is mediated through a lower level of debt financing.

Our findings provide some empirical evidence supporting internal policies regarding the promotion of the CEO to the role of Chair (or others) after they end their tenure. We indeed have found a beneficial role of the CFC in reducing the firm's riskiness; hence, we believe that one size does not fit all when the US and other countries recommend limiting internal promotion, particularly for a CEO. We, therefore, underline an essential role of internal promotion in enhancing the effectiveness of the policy related to the separation between the Chair and CEO positions within US companies. However, our study can be improved through an experimental research design, for example, to observe how financial policies and risk-taking behavior change after the CEO is promoted to the role of Chair. In addition, future studies can include the CFC variable in their models as one of the significant determinants of financial policy and firm riskiness. They can also explore the effects of the CFC on different corporate outcomes such as earnings management, corporate social responsibility, performance and valuation of different samples in terms of industries and sectors (e.g., banks), countries (e.g., regions, global, other countries), and time periods (e.g., COVID-19 pandemic, financial crisis).

We acknowledge that there might be a difference in the relationship if the CEO is internally promoted or externally recruited. Unfortunately, we do not have sufficient data for this to be tested. Therefore, we call for future research exploring this in-depth story. Last but not least, our findings call for further research to investigate other underlying channels through which the CFC can affect firm performance and risk.

Finally, our paper has important policy implications for regulation on the composition of the board of directors, concerning the internal promotion of CEOs to the Chair role after they end their tenure. Specifically, our findings on the beneficial effect of the CFC on monitoring intensity and, in turn, firm risk-taking behavior and financial policies suggest one size does not fit all when it comes to corporate governance. These results directly contrast with some recommendations from the US and other countries' corporate governance codes (e.g., the UK) to limit internal promotion, particularly for a CEO. In recent years, an increasing number of firms have employed a separate CEO and Chair for large US firms.

This brings US firms more in line with their UK and European counterparts.[8] For example, the percentage of S&P500-listed firms with separation between the Chair and CEO roles in 2018 (2017, 2016) was 55.4% (52.3%, 48.6%) (ISS Analytics, 2019). Therefore, our study becomes more valuable by indirectly supporting this corporate governance policy. An extended assertion is that the separation between those two senior roles should accompany internal promotion support.

As previously discussed in this paper, research on CEO duality has yielded diverse outcomes regarding its influence on firm performance. These findings challenge the established tenets of agency theory and corporate governance codes, which advocate the separation of these roles. In this context, our study aligns with these challenges. Agency theory has traditionally posited that firms with a combined CEO and board Chair role may underperform in comparison to those with distinct roles. However, proponents of the 'unity of command perspective', as argued by Finkelstein and D'Aveni (1994), present an opposing viewpoint. Future research initiatives can extend the existing literature by investigating the roles of CFCs in firms that underperformed their respective sectors at the time of CFC appointment, in contrast to those appointed in high-performing firms. Additionally, studies can explore how firms respond to challenges posed by activist shareholders.

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APPENDIX 1
VARIABLE DEFINITIONS AND MEASUREMENTS

Variable	Abbreviations	Definition/Measurement
Debt financing	*Debt/TA*	Total debt to total assets
Long-term debt financing	*LTDebt/TA*	Total long-term debt to total assets
Short-term debt financing	*STDebt/TA*	Total short-term debt to total assets
Default risk	*LnAZscore*	Overall index of classic Altman Z-score measuring firm default risk. Higher values of this index imply lower default risk
Chair-Former-CEO	*Chair-Former-CEO*	Dummy variable taking the value one if the Chair has previously served as CEO of the firm
Board size	*Ln (Bsize)*	Natural logarithm of the number of directors serving on the board of directors
Board independence	*%Ind*	Percentage of independent directors on the board, which is estimated by the number of independent directors divided by total number of directors on the board
CEO duality	*Dual*	Dummy variable taking the value one if the Chair and CEO is the same person and zero otherwise
Board gender diversity	*%Male*	Percentage of male directors on board
Board professional experience and skills	*%PrExpSkill*	Percentage of directors with professional experience and skills
Board industrial and financial experience	*%IndorFin*	Percentage of directors owning several industrial and financial experience
Capital expenditure	*Capex/TA*	Capital expenditure scaled by total assets
Firm size	*LnTA*	Natural logarithm of total assets
Dividend to earnings	*Div/NI*	Cash dividend divided by net income
Sale per share	*Sale/Share*	Total sales divided by number of shares
Firm market capitalization	*Ln(Marcap)*	Natural logarithm of market capitalization calculated by stock price multiplied by number of shares outstanding