



International Journal of Business Governance and Ethics

ISSN online: 1741-802X - ISSN print: 1477-9048

<https://www.inderscience.com/ijbge>

Social ties, group dynamics, and executive compensation: an integrative two-stage framework

Won-Yong Oh, Rami Jung, Young Kyun Chang

DOI: [10.1504/IJBGE.2022.10051375](https://doi.org/10.1504/IJBGE.2022.10051375)

Article History:

Received:	18 April 2021
Accepted:	24 July 2022
Published online:	30 November 2023

Social ties, group dynamics, and executive compensation: an integrative two-stage framework

Won-Yong Oh

Lee Business School,
University of Nevada, Las Vegas,
4505 S Maryland Pkwy,
Las Vegas, NV 89154, USA
Email: wonyong.oh@unlv.edu

Rami Jung*

Department of Business Management,
Hansung University,
Samseongyo-ro 16-gill, Seongbuk-gu,
Seoul, South Korea
Email: rami_jung@hansung.ac.kr
*Corresponding author

Young Kyun Chang

Sogang Business School,
Sogang University,
35 Baekbeom-ro, Mapo-gu,
Seoul 04107, South Korea
Email: changy@sogang.ac.kr

Abstract: While the effect of top executives' social networks on their compensations has received substantial scholarly attention, little effort has been made to integrate segmented views to offer more complete understanding of this effect. In this paper, we propose an integrative two-stage model by taking both economic and socio-political views into account. We theorise that some characteristics of top executive's outside social ties are positively related to firm performance, and those relationships are conditioned by external and internal strategic contexts, such as environmental uncertainty, strategic relevance, and tie strength. We also theorise that firm performance leads to executives' compensations, but this linkage is moderated by the socio-political dynamics among executives (within-group dynamics) as well as between executives and a board of directors (between-group dynamics) inside the firm. Based on our integrative framework, this paper provides the comprehensive understanding of how executives' compensations are determined and highlights the importance of executive's social ties and their implications.

Keywords: social ties; executive compensation; strategic contexts; economic view; socio-political view.

Reference to this paper should be made as follows: Oh, W.-Y., Jung, R. and Chang, Y.K. (2024) 'Social ties, group dynamics, and executive compensation: an integrative two-stage framework', *Int. J. Business Governance and Ethics*, Vol. 18, No. 1, pp.45–63.

Biographical notes: Won-Yong Oh is an Associate Professor and Lee Professor of Strategy at the Lee Business School, University of Nevada, Las Vegas in the USA. Previously, he was a faculty member at the Haskayne School of Business, University of Calgary in Canada and held a visiting position at the Faculty of Management, University of Warsaw in Poland. His research focus lies primarily in three areas: corporate governance, strategic leadership (CEO and top management team), and corporate social responsibility (CSR).

Rami Jung is a Postdoctoral Research Fellow in the Sustainable Business Ethics Research Institute (SBERI) at Sogang University in Korea. Her research interest includes corporate social responsibility and strategic management. She has published several papers in *Journal of Business Research*, *Korean Journal of Business Ethics*, *Journal of CEO and Management Studies* and so on.

Young Kyun Chang is currently a Professor of Management and serves a Managing Director of the Sustainable Business Ethics Research Institute (SBERI) at Sogang University in Korea. His research interest includes business ethics and corporate social responsibility. His published works have appeared in journals, including *Journal of Applied Psychology*, *Journal of Management*, *Journal of Business Ethics*, *Journal of Business Research*, and so on.

1 Introduction

Over the past decades, the topic of executive compensation has received substantial attention from both academic journals and the media, leading to a significant amount of scholarly research (e.g., Bebhuk et al., 2002; Carberry and Zajac, 2021; Cook et al., 2019; Wang et al., 2017). Previous research on executive compensation (e.g., Van Essen et al., 2015) has explored various industry- and firm-level factors that may explain the variation in executive compensation. This study focuses on executives' social capital by integrating two existing distinctive perspectives: the *economic* (e.g., Harris and Helfat, 1997) and *socio-political* views (e.g., van Essen et al., 2015).

Specifically, we propose a two-stage model illustrating how executives' social ties influence firm performance, and subsequently the levels of their compensation. In the first stage, based on the economic perspective, we propose that executives' external social ties (e.g., outside directorship) lead to improved firm performance. The economic perspective (Ciscel and Carroll, 1980) focuses on the skills, expertise, and resources executives contribute to the firm (e.g., Geletkanycz et al., 2001), arguing that such contributions are likely to be reflected in executives' compensation. While many of the previous studies (e.g., Harris and Helfat, 1997; Peng et al., 2015) emphasised the role of executives' human capital in determining their compensation, this paper mainly addresses the effect of executives' social capital. Past studies (e.g., Carpenter and Westphal, 2001; Eisenhardt and Schoonhoven, 1996; Geletkanycz et al., 2001; Oh and Barker, 2018) have

increasingly shown that executives' external ties play an important role in shaping a firm's strategy and organisational outcomes.

In the second stage, we take a socio-political view (e.g., Boyd et al., 2011; Flickinger et al., 2016), focusing specifically on the relationship between firm performance and executive compensation. In this process, we propose that between-group dynamics (i.e., executives vs. board) and within-group dynamics (i.e., among executives) both play a role inside the firm. On the one hand, since improved firm performance, led by the executives, is evaluated by the board of directors, social dynamics between executives and the board matter in determining executive compensation (Cook et al., 2019; O'Reilly and Main, 2010; Zhu, 2014). For example, board members who are close to some executives may overestimate their contributions to the firm's performance, granting them more compensation than what they actually deserve (e.g., Oxelheim and Clarkson, 2015). On the other hand, although a board is positioned to determine the level of an executive's compensation, the relative power among executives influences the level of compensation for each executive. For example, since powerful executives (e.g., CEOs) are often more favorable towards other executives who are loyal or close to them, they may exercise their power to differentiate the level of compensation among executives.

As such, the first stage (i.e., economic perspective) is related to executives' external social ties and the second stage (i.e., socio-political perspective) is related to internal social ties within the firm. Taking both perspectives into consideration, this paper's main questions are: "do executives' social ties affect their compensation by enhancing firm performance?" and "what are the determining mechanisms of executives' compensation and under what conditions do social ties play a role in this compensation-setting process?". By answering these questions, our study makes a theoretical contribution and highlights practical implications. From a theoretical viewpoint, our two-stage model combines economic and socio-political views to offer a complete understanding of the role of executives' social ties in determining their compensation. In addition, our model proposes that some strategic contextual factors play moderating roles in the compensation-setting process. From a practical standpoint, this study sheds additional light on how executives should seek, develop, and maintain external social ties, as well as why firms can benefit from executives' social ties. Furthermore, our model suggests that boards should be cautious in designing executives' compensation by taking both the executive's social capital and the firm's strategic context into account.

2 Theoretical background

2.1 Theoretical perspectives on executive compensation

In the literature on executive compensation, there are two theoretical perspectives (e.g., Geletkanycz et al., 2001; Peng et al., 2015): *an economic perspective* and *a socio-political perspective*.

The economic approach depicts a rational economic exchange between a firm and its executives. This approach typically tries to show that executive compensation depends upon the executives' resource contributions to the firm (e.g., Geletkanycz et al., 2001). Barney (1991) defined organisational resources as the strengths the firm can utilise to effectively formulate and implement its strategies. While often overlooked, top managers can be regarded as an important organisational resource (Penrose, 1959). Researchers

from an ‘upper echelons’ view suggest that top executives have a significant impact on a firm’s decisions, strategies, and outcomes (Cannella et al., 2008). Specifically, executives’ social ties play a significant role in shaping a firm’s strategic decisions and subsequent organisational outcomes (Cao et al., 2015). Thus, based on the economic perspective, we argue that executives’ external social ties would serve as a means to enhance firm performance.

This perspective implies that executives’ external social ties are strategically beneficial to the firm (e.g., Geletkanycz et al., 2001; Khan and Mauldin, 2021), which ultimately influences the level of executive compensation. In other words, an executive’s managerial talent based on social capital may be priced in the managerial labour market. Specifically, an executive’s external social ties, such as outside directorships, are beneficial to firms since they convey strategic value. Executives’ external connections can allow them to seek out other qualified individuals for advice, examine other organisations’ practices for dealing with managerial problems, and access to resources to which their own organisations may not have (McDonald and Westphal, 2003; Oh and Barker, 2018).

The socio-political perspective presumes that executive compensation depends upon a behavioural, social, and political process (e.g., Ji and Oh, 2014) performed by a group of people in the upper echelons of a firm. In particular, the socio-political process is the result of between-group dynamics (i.e., executives and the board) and within-group dynamics (i.e., among executives). A board’s compensation committee has the specific task of setting executive compensation, and the social dynamics of this committee are related to an individual’s social networks (Ibarra and Andrews, 1993). In fact, the relationship between boards of directors and management has long been a subject of research (e.g., Oxelheim and Clarkson, 2015). Even though board members have a fiduciary duty to check top executives’ activities, this monitoring mechanism could be diminished, if the executives have abilities to undermine the board’s monitoring (Flickinger et al., 2016). A socio-political perspective assumes that executive compensation is influenced by the social dynamics of small groups, primarily the relationship between executives and board of directors, and particularly its compensation committee (i.e., executive-board dynamics). In addition, although the board determines the level of executive compensation, the relative power among executives influences the compensation-setting process, since not all executives have the same level of power and influence (e.g., Ke et al., 2021). For example, more powerful executives (e.g., CEOs) may be willing to exercise their power to differentiate between their executives’ level of compensation depending upon how favorable they feel toward the individual executives (i.e., executive-executive dynamics).

In essence, the first stage (i.e., economic perspective) is related to executives’ external social ties (e.g., external directorship) and the second stage (i.e., socio-political view) is related to internal social ties. Taking both perspectives together, we propose an integrative model of the executive compensation-setting process:

- a executives’ external social ties contribute to firm performance (based on the economic perspective)
- b executives’ contributions are internally assessed and reflected in their compensation (based on the socio-political perspective).

Table 1 summarises the comparison of the economic and social-political perspectives.

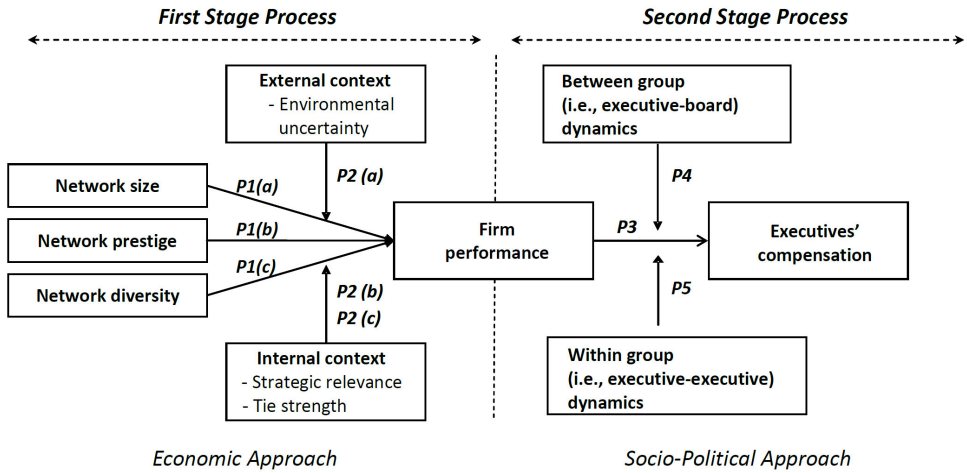
Table 1 Comparison of two research perspectives on executive compensation

	<i>Economic approach</i>	<i>Socio-political approach</i>
Mechanism through which ties affect compensation	<ul style="list-style-type: none"> Value contribution 	<ul style="list-style-type: none"> Rent seeking
Process	<ul style="list-style-type: none"> Economic evaluation Contribution to firm performance 	<ul style="list-style-type: none"> Political bargaining Board control
Assumptions	<ul style="list-style-type: none"> Compensation determined largely by the executive's actual contributions Assumes effective board monitoring Contributions from the executive's network can be objectively measured and evaluated 	<ul style="list-style-type: none"> Compensation determined by a small number of people (e.g., compensation committee) Assumes limited board monitoring Executive's influence over board composition and the compensation-setting process
Perspective	<ul style="list-style-type: none"> Macro view: Firm performance heterogeneity (more focus on 'inter-organisation'; relationships between executives and other organisations) 	<ul style="list-style-type: none"> Micro view: Socio-political dynamics at the upper echelons (more focus on 'intra-organisation'; relationships within executives and between executives and board of directors)

3 Two-stage model of executive compensation

In this paper, we propose an integrative two-stage model to predict the relationship between executives' social ties and their compensation. While these two stages are conceptually distinctive, the economic and socio-political processes need to be integrated. First, the executives' compensation does not merely represent the outcome of their external social capital that contributes to firm performance. The executives may seek to maximise their compensation by capitalising on their 'internal' social capital. By integrating the roles of both external and internal social capital, the hidden mechanism of executives' compensation could be better understood. Second, the existing literature assumes that executives' compensation is a 'number-based' decision made by economic calculation of contribution to firm performance (Geletkanycz et al., 2001; Geletkanycz and Boyd, 2011; Stuart and Sorenson, 2007). However, our paper further proposes that executives' compensation is a 'people-based' decision. The executives' internal social ties may serve as a social and political tool that has a strong influence on the people around them. This is a distinctive mechanism from economic considerations. By integrating economic and socio-political views, the intricate black box of executives' compensation could also be better examined. Taken together, any single process alone does not solely determine executive compensation. The integrative two-stage model we propose is illustrated in Figure 1.

Figure 1 The two-stage model: executive ties, group dynamics and compensation



3.1 The first stage: executives' external social ties and firm performance

Previous studies (e.g., Geletkanycz et al., 2001; Khan and Mauldin, 2021; Stuart and Sorenson, 2007) showed evidence of the strategic value of executives' external social ties. It has been recognised that executives' external social networks are beneficial to firm performance, since they can:

- a reduce uncertainty
- b provide strategic information
- c establish legitimacy and status.

First, executives' social ties (e.g., external directorships, memberships in trade associations, and prior work experience at other firms) help to reduce the uncertainty in terms of external resource dependency (e.g., Pfeffer and Salancik, 1978). Furthermore, past research (e.g., Geletkanycz et al., 2001; Khan and Mauldin, 2021) found that executives' social ties contribute to firm performance, since they often lead to inter-organisational imitation, which is a common response when a firm faces uncertainty. Firms often experience a high level of uncertainty in managerial decisions, and therefore seek to mitigate the negative impact by looking for cues from other firms' decisions (Kraatz, 1998; Oh and Barker, 2018). As such, external social ties assist the executives in understanding how other organisations choose to cope with uncertainty and can reduce risks stemming from uncertainty (Ahn, 2022).

Second, executives' social ties contribute to firm performance by providing strategic information and opportunities. Executives scan for changes in the external environment through their various social ties. Thus, executives' ties expose them to various institutional logics and serve as conduits for exchanges of information between connected organisations (Blanco-Alcántara et al., 2019; Sullivan and Tang, 2013). As a result, executives' external ties are useful in enhancing their access to critical information, insights, and opportunities. They are particularly important because they help a firm's

strategy development for effectively dealing with external contingencies (Geletkanycz and Hambrick, 1997).

Specifically, past studies (Baer, 2010; Dokko et al., 2014) have focused on the boundary-spanning roles of social ties. Dokko and colleagues (2014) found that social ties spur creative ideas, exposing an individual to a wide range of knowledge and skills. Similarly, Baer (2010) argued that interaction with diverse contacts contributes to generating creativity. Furthermore, executives' external ties can be helpful in attracting alliance partners (e.g., Eisenhardt and Schoonhoven, 1996), thus creating new strategic opportunities. As such, executives' social ties provide strategic information and insights, and thus they are helpful in capturing new business opportunities.

Finally, executives' social ties contribute to firm performance by providing legitimacy and status benefits (Certo et al., 2001; Galaskiewicz, 1985). Executives' past work experience, service on other firms' boards, and key positions in trade associations, may signal managerial quality (Spence, 1974). For example, executives who are asked to serve on other firm's board of directors are regarded as having legitimacy within the industry. Empirical findings also support the legitimacy and status benefits of an executive's social ties. D'Aveni and Kesner (1993) found that executives with high-status personal and organisational contacts also will be perceived as credible and attractive, because prestige plays a role as a signal that executives are likely to possess valuable resources. Bucheli and Salvaj (2018) also found that creating political ties in foreign markets is an effective way of legitimising a firm's operations. Likewise, Prashantham and colleagues (2019) argued that network connectivity can be a process of legitimacy building in emerging economies. Given this description, executives' social ties provide legitimacy and status benefits, which are an important factor in improving firm performance.

In sum, executives' external social networks (e.g., ties to other organisations, serving as an external director on other firms' boards, and participating in trade associations) have important strategic value, which contributes to the improvement in firm performance. Therefore, we propose that the executives' social ties are positively associated with firm performance.

Proposition 1 Executives' social networks will be positively associated with firm performance by reducing uncertainty, providing strategic opportunities, and establishing legitimacy.

Executives' social networks are proposed to have positive effects on firm performance. We elaborate further on this proposition by focusing on three key characteristics of executives' social networks: *network size*, *prestige* and *diversity*.

3.1.1 Network size

Network size, the number of contacts executives have with external firms or individuals, is a key variable from the social network perspective (e.g., Lin et al., 2001; Podolny and Baron, 1997). The value of social networks often depends on how many organisations or individuals with whom the executive can interact. Thus, the more contacts executives have, the more individuals and organisations that can be used as sources of advice in the future. Podolny and Baron (1997) found that having a greater number of ties is advantageous for acquiring information and resources.

Having more contacts (other things being equal) indicates that executives are more likely to receive diverse and non-redundant information (Ter Wal et al., 2016; Burt, 1997). Moreover, having a greater number of contacts with other organisations provides experience in understanding how different companies cope with problems in different manners, and may allow the executives to draw from a wider range of potential solutions to managerial problems. For example, greater involvement in trade associations may provide better insights into how the market and industry move. As such, executives who have a greater number of social ties are likely to contribute more to the firm's performance by capitalising on more information and insights.

Proposition 1a The size of executives' social networks will be positively associated with firm performance.

3.1.2 Network prestige

The prestige and status of the individuals and organisations in the executive's network increases the network's value in terms of providing greater informational and access utility (Oehmichen et al., 2017). In addition, executives with high-status personal and organisational contacts will be perceived as credible and attractive because prestige serves as a 'signal' that executives hold valuable resources (D'Aveni and Kesner, 1993; Pollock et al., 2010). For example, Jensen et al. (2021) show that executives who are affiliated with high-status managers are more likely to benefit from social capital because these social relationships serve as signals of managerial abilities.

As such, executives' social ties with other prestigious organisations may indicate their overall capabilities, and thus lead to a firm's economic value creation (Khoury et al., 2013). For example, serving on the board of directors of a prestigious firm can make an executive stand out as a valuable person who has important knowledge and skills, as well as influence in the marketplace. Therefore, executives with prestigious networks are likely to contribute to firm performance by helping the firm establish legitimacy in the industry and marketplace, and provide greater access to strategic informational resources (e.g., Khoury et al., 2013; Pollock et al., 2010).

Proposition 1b The prestige of executives' social networks will be positively associated with firm performance.

3.1.3 Network diversity

Network diversity is another factor that could have a positive impact on firm performance. Diverse networks have benefits in terms of information accessibility, since the information from networks will be less redundant (Burt, 1992). Heterogeneous networks lead to enhanced learning capabilities because they can generate useful strategic information and knowledge from a greater variety of perspectives (Eagle et al., 2010). Thus, the diversity of executives' networks contributes to firm performance, given that this diversity can enhance productivity, improve learning capability, generate new insights, and broaden firms' perspectives.

The empirical findings support the the assertion that the diversity of an executive's social ties has a positive impact on organisational outcomes. For instance, network diversity is related to R&D productivity (Reagans and Zuckerman, 2001) and knowledge absorption (Reagans and McEvily, 2003). Similarly, Rodan and Galunic (2004) reported

that heterogeneous knowledge in social networks is positively associated with overall managerial performance, particularly innovation-related outcomes. As such, executives' diverse social ties are likely to contribute to firm performance.

Proposition 1c The diversity of executives' social networks will be positively associated with firm performance.

3.2 *The contingent role of strategic contexts*

The relationship between the characteristics of executives' social ties and firm performance is not simple. A key principle of the strategic management literature is that the effectiveness of strategy implementation depends on a firm's strategic context (Barney and Zajac, 1994; Belderbos et al., 2019), which is often referred to as strategic contingency theory. This view argues that a single set of organisational resources and capabilities may have varying – rather than uniform – utilities in different contextual settings. As such, this view suggests that executives' social networks are more useful under certain circumstances and contexts (e.g., Carpenter and Westphal, 2001).

In this paper, we ask three important questions to understand these specific contexts: *when will the firm need more external insights? Is the information from external ties sufficiently relevant for use in the firm? Are the ties between executives and external individuals and organisations close enough to communicate useful, relevant information?* In order to answer these questions, this paper considers several strategic contexts: *environmental uncertainty, strategic relevance and strength of ties.*

3.2.1 *Environmental uncertainty*

Since the effectiveness of organisational resources is contingent on environmental context (e.g., Barney and Zajac, 1994; Belderbos et al., 2019), it is important for a firm to match its strategic resources with environmental conditions, such as environmental uncertainty. An uncertain environment is characterised by the extent to which a firm's competitive environment is dynamic, unpredictable, and prone to strategic change (Huber and McDaniel, 1986). Because of its volatile characteristics (Duncan, 1972), environmental uncertainty places substantial information-processing demands on managers (Carpenter and Fredrickson, 2001; Henderson and Fredrickson, 1996). As such, environmental uncertainty is an important factor that executives should consider when making strategic decisions (Chang et al., 2021; Duncan, 1972).

Under environmental uncertainty, organisational success relies on managerial ability to develop new strategic alternatives to ensure that firms fit in with its environmental conditions (Belderbos et al., 2019; Halebian and Finkelstein, 1993). In contrast, firms in stable environmental conditions tend to focus on the implementation of existing strategies (i.e., managerial commitment to the status quo) rather than on the identification of new strategic insights. In such stable environments, the strategic value of executives' social ties could be less significant.

Given this description, the strategic value of new information and perspectives from external ties is more salient under conditions of environmental uncertainty, when the acquisition of new information and insights through external social ties is more important. Under such environmental conditions, firms are likely to pursue informational benefits to identify new strategies to fit changing environmental conditions. In particular,

Cao and colleagues (2015) argued that external social ties become more important when a firm faces unstable environment, because effective managerial decisions necessitate up-to-date information and critical resources. Given their bounded rationality (Simon, 1972), executives are not capable of identifying all potential strategic options. Access to ideas and insights from other organisations can help provide executives with several potential strategic alternatives firms could pursue. Therefore, environmental uncertainty will positively moderate the relationship between executives' social ties and firm performance, such that the effects of social ties on firm performance are greater in situations where environmental uncertainty is high.

Proposition 2a Environmental uncertainty will positively moderate the effect of executives' social ties on firm performance.

3.2.2 *Strategic relevance*

A second question is whether the information gained from social ties can provide a firm strategically relevant information and access. Past studies on social ties have emphasised the importance of the 'substantive context' of ties (Nohria, 1992; Pettigrew, 1992). The value of the social ties is determined not only by the ties themselves, but also by the firm's strategic context; that is, the degree to which such ties are aligned with the firm's strategic needs (Carpenter and Westphal, 2001). Accordingly, the strategic value of external ties is more salient when the insights and perspectives from executives' external ties are more relevant to the firm's strategic context.

For example, Cohen and colleagues (2008) found that shared education networks (e.g., classmates from one's MBA program) are useful in transferring information in the stock market between fund managers and corporate board members. Oh and Barker (2018) also found that an executive's outside directorships matter in the focal firm's R&D investment decisions. These findings suggest that social ties are an important mechanism in certain contexts (i.e., information flow in the stock market) and for specific managerial decisions (i.e., R&D investment), and thus, the strategic relevance of social ties matters. If information that can be accessed through a strategic tie provides little relevance the needs of the focal firm, the executives' social ties may not add significant value to the firm. As such, strategic relevance can play a contingent role in the relationship between executives' social ties and firm performance.

Proposition 2b Strategic relevance will positively moderate the effect of executives' social ties on firm performance.

3.2.3 *Tie strength*

In general, information that is beneficial to a firm's strategic orientation and its decision-making processes is often highly complex, and not easy to transfer between organisations (Azagra-Caro et al., 2017). Thus, the information needed to reorient a firm's strategic direction requires more transferring activity between information givers and takers, thus 'strong ties' are more appropriate. Tie strength (e.g., weak vs. strong ties) refers to the closeness of the relationship (Granovetter, 1982) between executives and external parties.

Many studies have shown that strong ties may thus be a better way of transferring knowledge from one context to another (Ghoshal et al., 1994; Uzzi, 1997). These

findings are consistent with the trust literature (e.g., Dirks and Ferrin, 2001) that trusting relationships facilitate knowledge exchange. When there is trust between parties, people are more inclined to exchange information and knowledge (Andrews and Delahaye, 2000). Strong ties based on trusting relationships may improve knowledge transfer between parties. Empirically, Levin and Cross (2004) found that trust plays a mediating role in the knowledge transfer between parties with social ties. Given this description, the exchange of information between executives and their social ties that have strategically relevant information will be more effective when their relationship is characterised as having a significant level of trust.

Proposition 2c Tie strength will positively moderate the effect of executives' social ties on firm performance.

3.3 The second stage: firm performance and executive compensation

In the second stage, we try to theorise how firm performance leads to executives' compensation by taking a socio-political view of the compensation-setting process within the firm (Flickinger et al., 2016; Hoi et al., 2019). In particular, we propose two distinctive group dynamics within the firm: *executive-board (between-group)* and *executive-executive (within-group) dynamics*.

3.3.1 Firm performance and executive compensation

As noted previously, an economic approach assumes that executives' compensation levels are influenced by the value of the economic contributions (i.e., firm performance) made by executives (e.g., Khan and Mauldin, 2021). The executives' external social networks can contribute to the firm performance by reducing the level of uncertainty (Pfeffer and Salancik, 1978), accessing information and opportunities (Burt, 1992), and providing status benefits and organisational legitimacy (Galaskiewicz, 1985).

Thus, executives' external ties are strategically valuable to firms. As such, the value of such ties is likely to be reflected in the executives' compensation level (Geletkanycz et al., 2001). That is especially the case when board members, particularly the board's compensation committee members, recognise the value of executive's social ties (e.g., Chen et al., 2020). Because social ties reside with the individual executive, the value of such ties is usually reflected in the executive labor market. Furthermore, this value is not easily transferred or traded from executives to other people or to the firm (Burt, 1992), so these external ties may be regarded as valuable resources from a resource-based view (Barney, 1991). Therefore, executives will be compensated based on the firm's performance, to which they contribute through the strategic value of their social ties to the organisation.

Proposition 3 Executives' contributions to firm performance through their social ties will be positively associated with their level of compensation.

The socio-political perspective (e.g., Boyd et al., 2011; Flickinger et al., 2016) presumes that executive compensation depends upon a behavioral, social, and political process performed by a group of people in the upper echelons of a firm, rather than merely on an economic logic. In particular, a board's compensation committee has the specific task of setting executive compensation, and the social dynamics of this committee are related to

an individual's social networks (Ibarra and Andrews, 1993). This paper focuses on two distinctive social dynamics within the firm: executive-board (between-group) and executive-executive (within-group) dynamics.

3.3.2 Executive-board (between-group) dynamics

According to the socio-political approach (e.g., Kemp, 2006; Song and Wan, 2019), executives may exercise power over the board of directors, and when they do, the board of directors may not be powerful enough to control executives' compensation. When executives have greater power over the board members or assign board members who are more favorable to them, those board members are likely to over-estimate the economic value of the executive's contributions. Therefore, firms seek to address the agency problem by structuring their boards of directors to ensure sufficient monitoring (Beatty and Zajac, 1994). Empirically, Conyon and Peck (1998) found that firm performance and top executive's pay are more aligned when board composition is more independent, such as when boards and compensation committees are more outsider-dominated.

The socio-political approach argues that non-economic factors are important determinants of executives' compensation. This is because executives may be able to extract rents from the board of directors, given their relative position of power in comparison to the board members (Hoi et al., 2019; Song and Wan, 2019). Thus, executives may be able to use their internal network to pack the board of directors and compensation committee with members who are favorable to them, thereby increasing their compensation. In such cases, the effectiveness of boards may be diminished due to their dependence on the executives and their proclivity for passivity, especially when they do not have substantial shareholdings (Bebchuk et al., 2002). In this process, executive-board dynamics (Garg and Eisenhardt, 2017; Graham et al., 2020) play a significant role by allowing or restraining executives' rent-seeking behaviors.

Proposition 4 The relationship between firm performance and executive compensation will be moderated by executive-board dynamics, such that ineffective boards may allow executives to engage in rent-seeking behaviours (i.e., over-compensation).

3.3.3 Executive-executive (within-group) dynamics

Although executive-board dynamics play a role in determining the levels of executive compensation, the relative power among executives also matters. For example, among executives, CEOs are often the most powerful members of their executive teams (Smith et al., 2006), so they may play a major role in determining the level of compensation for other executives. According to agency theory (Eisenhardt, 1989), powerful executives (e.g., executives with CEO position, executives with significant shareholdings) may be more favourable towards certain executives who are loyal or close to them. In such cases, executives with power are not only likely to increase their own salary level, but they are also likely to differentiate between other executives in terms of their compensation, depending on their favourability towards those executives. By doing so, powerful executives try to build an inner circle or dominant coalition within the executive team (e.g., Carpenter and Sanders, 2002), and as a result, create within-group socio-political dynamics in the compensation-setting process. Given this description, we argue that

powerful executives may over-compensate themselves and/or a particular group of executives, but under-compensate the rest.

Proposition 5 The relationship between firm performance and executive compensation will be moderated by the executive-executive dynamics, such that executives with organisational power are likely to be compensated more than other executives.

4 Discussion

Over the past decades, executive compensation has attracted scholarly attention from various disciplines, such as financial economics, finance, accounting, and strategic management. In this paper, we propose a two-stage model to illustrate the compensation-determination mechanism based on the assumption that executives' external social ties can provide economic value to the firm (i.e., firm performance); in turn, the value will be reflected in his or her compensation. At the same time, executive compensation is also an outcome of the internal socio-political process of between-group and within-group dynamics. In this regard, this study sheds additional light on the research stream that explores how executives' compensation is determined, specifically focusing on the executives' social networks and strategic context. Thus, this paper focuses on 'who executives know' (i.e., social capital) rather than simply 'who executives are' (i.e., human capital).

4.1 Theoretical contributions and practical implications

4.1.1 Theoretical contributions

This paper makes several theoretical contributions. First, it tries to connect two distinctive research streams with a two-stage framework: the economic and socio-political perspectives of the effect of executives' social ties on compensation. According to the economic view, executives should be evaluated and compensated fairly based on the economic value created by their networks. However, as the socio-political view suggests, executives' contributions to the firm are evaluated by the board of directors. In this process, executives may be over-compensated or under-compensated depending on their relationships with the board (i.e., between group dynamics) and the dynamics within the executive team (i.e., within group dynamics). Thus, this evaluation process shows how socio-political factors can have an influence on executives' pay. Therefore, this paper informs us that executives' compensation can be better understood when the two perspectives are taken into consideration simultaneously, as they describe both the external (i.e., the first stage: economic perspective) and the internal (i.e., the second stage: socio-political perspective) mechanisms. Relying on a single perspective when analysing executive compensation settings may lead to incomplete understanding.

Second, our model addresses the roles of not only social ties, but also strategic contexts. Executives' social ties will help to reduce uncertainty, provide strategic information and insights, and establish legitimacy and status. Such ties can be made and leveraged through social relationships with other executives and provide valuable information to the firm that it might not otherwise be able to obtain. As such, an executive's value can extend far beyond his or her own personal abilities, skills, and

experiences, but can also include the value of information and access that can be gathered from others in the executive's social network.

This paper also identifies and examines the role of a number of contingent factors affecting this relationship between social ties and economic value contribution:

- a environmental uncertainty
- b strategic relevance
- c the strength of ties that are based on a trusting relationship.

In uncertain environments, firms with access to more information may be able to make more well-informed decisions. Strategically relevant ties provide better information for future decision making and should lead to greater value creation. Also, strong ties based on trusting relationships could facilitate information transfer. All of those strategic contingencies can strengthen the way executives' social ties contribute to the firm performance. This paper provides insights regarding the roles of social ties and under what conditions those ties may influence the value contribution to a firm.

Third, this paper sheds additional light on the research on corporate governance, particularly boards of directors, compensation committees, and executive compensation. The economic view suggests that executives can gain additional compensation by economically contributing to a firm with a large and diverse set of contacts that would reduce uncertainty and provide strategic information to the firm. Such value contributions should lead to better firm performance. At the same time, the socio-political view suggests that executives try to seek rent through political schemes, such as packing the board of directors. Thus, it is important for corporate governance research to recognise the complexity of the compensation-setting processes, and thus firms should establish a board structure and compensation scheme that can lead to an alignment of interests between shareholders and executives.

4.1.2 Practical implications

This paper also provides some insights for practitioners. First of all, the executives' social ties are relevant and important for the job to which they are appointed. Therefore, executives should constantly re-evaluate the value of their networks to ensure that they have built ties in areas which are the most strategically relevant. Also, they can develop additional social ties that can be useful for strategic decisions. This paper specifically suggests that executives should develop stronger ties, which can foster greater use of information sharing among individuals. Strong ties among stakeholders (e.g., suppliers, customers, and focal firms) may even lead to future strategic endeavours that are beneficial for all stakeholders involved.

Furthermore, this paper has important implications for boards of directors and C-suite executives who involved in internal group dynamics. In addition to individual talent (i.e., human capital), boards should consider the prospective executives' social ties (i.e., social capital) when they evaluate the candidates. Furthermore, given that executives may engage in rent-seeking behaviours, board should be vigilant in evaluating their value contribution and determining their compensation. Likewise, top managers may benefit from mutual monitoring and coordination in the executive suite (Li, 2014) by distributing responsibility, power, and information appropriately. Improving the dynamics within-

and between- groups by mutual monitoring and coordination may lead to effective compensation decisions as well as better executive decisions.

Lastly, while socio-political processes are unavoidable in the organisation, executives should be mindful that their compensation setting process may be a yardstick that indicates how fairly resources are distributed in their organisations. If socio-political influence goes too far, executives may face distrust, opposition, and even uncooperative actions from organisational members. As such, executives need to use their social and political power with a great caution.

4.2 Limitations and future studies

Despite its theoretical and practical implications, this study is not without limitations. First, while this paper focuses on the key characteristics of social ties, not all network characteristics (e.g., density, structural holes) are fully examined. A more detailed analysis of network structure could be an opportunity for future research. Second, we did not take into full account the individual differences in executives' ability to utilise their social ties. For example, our model assumes that once executives have acquired social ties, they are able to utilise them to add value to the firm. Individual differences in executives' characteristics may impact their ability to leverage their networks to create additional value. Third, some ties may actually have a negative impact on value creation (i.e., if the ties are value-destroying). For instance, past research has shown how board interlocks can lead to a diffusion of inappropriate practices such as stock options backdating (Bizjak et al., 2009). Thus, future studies need to examine some possible negative aspects of executive's social ties and their impact on compensation.

5 Conclusions

As firms become increasingly interconnected, executives' social ties become a significant factor in strategic leadership. Our two-stage model provides a more complete view of how executives' social ties can contribute to improved firm performance, taking into consideration the firm's strategic context and consequently, the influence on the executives' compensation. In conclusion, the model suggests that executive compensation is an outcome of both economic and socio-political processes. Thus, this two-stage model adds new insights into the role of executives' social ties and their implications for executive compensation.

References

- Ahn, Y. (2022) 'A socio-cognitive model of sustainability performance: Linking CEO career experience, social ties, and attention breadth', *Journal of Business Ethics*, Vol. 175, pp.303–321.
- Andrews, K.M. and Delahaye, B.L. (2000) 'Influences on knowledge processes in organizational learning: The psychosocial filter', *Journal of Management Studies*, Vol. 37, No. 6, pp.797–810.
- Azagra-Caro, J.M., Barberá-Tomás, D., Edwards-Schachter, M. and Tur, E.M. (2017) 'Dynamic interactions between university-industry knowledge transfer channels: a case study of the most highly cited academic patent', *Research Policy*, Vol. 46, No. 2, pp.463–474.

- Baer, M. (2010) 'The strength-of-weak-ties perspective on creativity: a comprehensive examination and extension', *Journal of Applied Psychology*, Vol. 95, No. 3, pp.592–601.
- Barney, J. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*, Vol. 17, No. 1, pp.99–120.
- Barney, J. and Zajac, E. (1994) 'Competitive organizational behavior: toward an organizationally-based theory of competitive advantage', *Strategic Management Journal*, Vol. 15, No. S1, pp.5–9.
- Beatty, R.P. and Zajac, E.J. (1994) 'Managerial incentives, monitoring, and risk bearing: a study of executive compensation, ownership, and board structure in initial public offerings', *Administrative Science Quarterly*, Vol. 39, No. 2, pp.313–335.
- Bebchuk, L., Fried, J. and Walker, D. (2002) 'Managerial power and rent extraction in the design of executive compensation', *University of Chicago Law Review*, Vol. 69, No. 3, pp.751–846.
- Belderbos, R., Tong, T.W. and Wu, S. (2019) 'Multinational investment and the value of growth options: Alignment of incremental strategy to environmental uncertainty', *Strategic Management Journal*, Vol. 40, No. 1, pp.127–152.
- Bizjak, J., Lemmon, M. and Whitby, R. (2009) 'Option backdating and board interlocks', *Review of Financial Studies*, Vol. 22, No. 11, pp.4821–4847.
- Blanco-Alcántara, D., Díez-Esteban, J.M. and Romero-Merino, M.E. (2019) 'Board networks as a source of intellectual capital for companies', *Management Decision*, Vol. 57, No. 10, pp.2653–2671.
- Boyd, B.K., Haynes, K.T. and Zona, F. (2011) 'Dimensions of CEO-board relations', *Journal of Management Studies*, Vol. 48, No. 8, pp.1892–1923.
- Bucheli, M. and Salvaj, E. (2018) 'Political connections, the liability of foreignness, and legitimacy: A business historical analysis of multinationals' strategies in Chile', *Global Strategy Journal*, Vol. 8, No. 3, pp.399–420.
- Burt, R.S. (1992) *Structural Holes*, Harvard University Press, Cambridge, MA.
- Burt, R.S. (1997) 'The contingent value of social capital', *Administrative Science Quarterly*, Vol. 42, No. 2, pp.339–365.
- Cannella, B., Finkelstein, S. and Hambrick, D.C. (2008) *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*, Oxford University Press, New York, NY.
- Cao, Q., Simsek, Z. and Jansen, J.J. (2015) 'CEO social capital and entrepreneurial orientation of the firm: Bonding and bridging effects', *Journal of Management*, Vol. 41, No. 7, pp.1957–1981.
- Carberry, E.J. and Zajac, E.J., (2021) 'Unpacking the dynamics of a contested practice: the case of executive compensation and the shareholder value orientation in the USA', *Socio-Economic Review*, Vol. 19, No. 1, pp.157–187.
- Carpenter, M.A. and Fredrickson, J.W. (2001) 'Top management teams, global strategic posture, and the moderating role of uncertainty', *Academy of Management Journal*, Vol. 44, No. 3, pp.533–545.
- Carpenter, M.A. and Sanders, W.G. (2002) 'Top management team compensation: the missing link between CEO pay and firm performance?', *Strategic Management Journal*, Vol. 23, No. 4, pp.367–375.
- Carpenter, M.A. and Westphal, J.D. (2001) 'The strategic context of external network ties: examining the impact of director appointments on board involvement in strategic decision making', *Academy of Management Journal*, Vol. 44, No. 4, pp.639–660.
- Certo, S.T., Daily, C.M. and Dalton, D.R. (2001) 'Signaling firm value through board structure: an investigation of initial public offerings', *Entrepreneurship Theory and Practice*, Vol. 26, No. 2, pp.33–50.
- Chang, Y.K., Lee, S. and Oh, W.Y. (2021) 'The impact of CEOs' regulatory focus on CSR: the strengthening effects of industry-level dynamism and firm-level volatility', *European Journal of International Management*, Vol. 15, No. 4, pp. 511–538.

- Chen, Z., Keefe, M.O.C. and Watts, J.K. (2020) 'Board of director compensation in China: it pays to be connected', *Pacific-Basin Finance Journal*, Vol. 63, p.101394.
- Ciscel, D.H. and Carroll, T.M. (1980) 'The determinants of executive salaries: an econometric survey', *The Review of Economics and Statistics*, Vol. 62, No. 1, pp.7–13.
- Cohen, L., Frazzini, A. and Malloy, C. (2008) 'The small world of investing: board connections and mutual fund returns', *Journal of Political Economy*, Vol. 116, No. 5, pp.951–979.
- Canyon, M.J. and Peck, S.I. (1998) 'Board control, remuneration committees, and top management compensation', *Academy of Management Journal*, Vol. 41, No. 2, pp.146–157.
- Cook, A., Ingersoll, A.R. and Glass, C. (2019) 'Gender gaps at the top: does board composition affect executive compensation?', *Human Relations*, Vol. 72, No. 8, pp.1292–1314.
- D'Aveni, R.A. and Kesner, I.F. (1993) 'Top managerial prestige, power and tender offer response: A study of elite social networks and target firm cooperation during takeovers', *Organization Science*, Vol. 4, No. 2, pp.123–151.
- Dirks, K.T. and Ferrin, D.L. (2001) 'The role of trust in organizational settings', *Organization Science*, Vol. 12, No. 4, pp.450–467.
- Dokko, G., Kane, A.A. and Tortoriello, M. (2014) 'One of us or one of my friends: how social identity and tie strength shape the creative generativity of boundary-spanning ties', *Organization Studies*, Vol. 35, No. 5, pp.703–726.
- Duncan, R. (1972) 'Characteristics of organizational environments and perceived environmental uncertainty', *Administrative Science Quarterly*, Vol. 17, No. 3, pp.313–327.
- Eagle, N., Macy, M. and Claxton, R. (2010). 'Network diversity and economic development'. *Science*, Vol. 328, No. 5981, pp.1029–1031.
- Eisenhardt, K.M. (1989) 'Agency theory: An assessment and review', *Academy of Management Review*, Vol. 14, No. 1, pp.57–74.
- Eisenhardt, K.M. and Schoonhoven, C.B. (1996) 'Resource-based view of strategic alliance formation: strategic and social effects in entrepreneurial firms', *Organizational Science*, Vol. 7, No. 2, pp.136–150.
- Flickinger, M., Wrage, M., Tuschke, A. and Bresser, R. (2016) 'How CEOs protect themselves against dismissal: a social status perspective', *Strategic Management Journal*, Vol. 37, No. 6, pp.1107–1117.
- Galaskiewicz, J. (1985) 'Interorganizational relations', *Annual Review of Sociology*, Vol. 11, No. 1, pp.281–304.
- Garg, S. and Eisenhardt, K.M. (2017) 'Unpacking the CEO–board relationship: how strategy making happens in entrepreneurial firms', *Academy of Management Journal*, Vol. 60, No. 5, pp.1828–1858.
- Geletkanycz, M. A. and Boyd, B. K. (2011) 'CEO outside directorships and firm performance: a reconciliation of agency and embeddedness views', *Academy of Management Journal*, Vol. 54, No. 2, pp.335–352.
- Geletkanycz, M.A., Boyd, B.K. and Finkelstein, S. (2001) 'The strategic value of CEO external directorate networks: implications for CEO compensation', *Strategic Management Journal*, Vol. 22, No. 9, pp.889–898.
- Geletkanycz, M.A. and Hambrick, D.C. (1997) 'The external ties of top executives: Implications for strategic choice and performance', *Administrative Science Quarterly*, Vol. 42, No. 4, pp.654–681.
- Ghoshal, S., Korine, H. and Szulanski, G. (1994) 'Interunit communication in multinational corporations', *Management Science*, Vol. 40, No. 1, pp.96–110.
- Graham, J.R., Kim, H. and Leary, M. (2020) 'CEO-board dynamics', *Journal of Financial Economics*, Vol. 137, No. 3, pp.612–636.
- Granovetter, M. (1982) 'The strength of weak ties: A network theory revisited', in Marsden, P.V. and Lin, N. (Eds.): *Social Structure and Network Analysis*, pp.105–130, Sage, Beverly Hills, CA.

- Haleblian, J. and Finkelstein, S. (1993) 'Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion', *Academy of Management Journal*, Vol. 36, No. 4, pp.844–863.
- Harris, D. and Helfat, C. (1997) 'Specificity of CEO human capital and compensation', *Strategic Management Journal*, Vol. 18, No. 11, pp.895–920.
- Henderson A.D. and Fredrickson J.W. (1996) 'Information-processing demands as a determinant of CEO compensation', *Academy of Management Journal*, Vol. 39, No. 3, pp.575–606.
- Hoi, C.K.S., Wu, Q. and Zhang, H. (2019) 'Does social capital mitigate agency problems? Evidence from chief executive officer (CEO) compensation', *Journal of Financial Economics*, Vol. 133, No. 2, pp.498–519.
- Huber, G. and McDaniel, R. (1986) 'The decision making paradigm of organizational design', *Management Science*, Vol. 32, No. 5, pp.572–589.
- Ibarra, H. and Andrews, S. (1993) 'Power, social influence, and sense making: effects of network centrality and proximity on employee perceptions', *Administrative Science Quarterly*, Vol. 38, No. 2, pp.277–303.
- Jensen, M., Twardawski, T. and Younes, N. (2021) 'The paradox of awards: how status ripples affect who benefits from CEO awards', *Organization Science*, Vol. 33, No. 3, pp.946–968.
- Ji, Y.Y. and Oh, W.Y. (2014) 'An integrative model of diffusion and adaptation of executive pay dispersion', *Journal of Managerial Issues*, Vol. 26, No. 1, pp.70–85.
- Ke, B., Mao, X., Wang, B. and Zuo, L. (2021) 'Top management team power in China: measurement and validation', *Management Science*, Vol. 67, No. 10, pp.6602–6627.
- Kemp, S. (2006) 'In the driver's seat or rubber stamp?', *Management Decision*, Vol. 44, No. 1, pp.56–73.
- Khan, S. and Mauldin, E. (2021) 'Benefit or burden? A comparison of CFO and CEO outside directorships', *Journal of Business Finance & Accounting*, Vol. 48, Nos. 7–8, pp.1175–1214.
- Khoury, T.A., Junkunc, M. and Deeds, D.L. (2013) 'The social construction of legitimacy through signaling social capital: Exploring the conditional value of alliances and underwriters at IPO', *Entrepreneurship Theory and Practice*, Vol. 37, No. 3, pp.569–601.
- Kraatz, M.S. (1998) 'Learning by association? Interorganizational networks and adaptation to environmental change', *Academy of Management Journal*, Vol. 41, No. 6, pp.621–643.
- Levin, D.Z. and Cross, R. (2004) 'The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer', *Management Science*, Vol. 50, No. 11, pp.1477–1490.
- Li, Z.F. (2014) 'Mutual monitoring and corporate governance'. *Journal of Banking & Finance*, Vol.45, pp.255–269.
- Lin, N., Cook, K.S. and Burt, R.S. (2001) *Social Capital: Theory and Research*, Cambridge University Press, Cambridge, UK.
- McDonald, M.L. and Westphal, J.D. (2003) 'Getting by with the advice of their friends: CEOs' advice networks and firms' strategic responses to poor performance', *Administrative Science Quarterly*, Vol. 48, No. 1, pp.1–32.
- Nohria, N. (1992) 'Introduction: Is a network perspective a useful way of studying organizations?', in Nohria, N. and Eccles, R. (Eds.): *Network and Organizations: Structure, Form, and Action*, pp.1–22, Harvard Business School Press, Boston, MA.
- Oehmichen, J., Braun, D., Wolff, M. and Yoshikawa, T. (2017) 'When elites forget their duties: the double-edged sword of prestigious directors on boards', *Journal of Management Studies*, Vol. 54, No. 7, pp.1050–1078.
- Oh, W.Y. and Barker III, V.L. (2018) 'Not all ties are equal: CEO outside directorships and strategic imitation in R&D investment', *Journal of Management*, Vol. 44, No. 4, pp.1312–1337.
- O'Reilly III, C.A. and Main, B.G. (2010) 'Economic and psychological perspectives on CEO compensation: a review and synthesis', *Industrial and Corporate Change*, Vol. 19, No. 3, pp.675–712.

- Oxelheim, L. and Clarkson, K. (2015) 'Cronyism and the determinants of chairman compensation', *Journal of Business Ethics*, Vol. 131, No. 1, pp.69–87.
- Peng, M.W., Sun, S.L. and Markóczy, L. (2015) 'Human capital and CEO compensation during institutional transitions', *Journal of Management Studies*, Vol. 52, No. 1, pp.117–147.
- Penrose, E.T. (1959) *The Theory of the Growth of the Firm*, Wiley, New York, NY.
- Pettigrew, A. (1992) 'On studying managerial elites', *Strategic Management Journal*, Vol. 11, No. S2, pp.469–478.
- Pfeffer, J. and Salancik, G.R. (1978) *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York, NY.
- Podolny, J.M. and Baron, J.N. (1997) 'Resources and relationships: social networks and mobility in the workplace', *American Sociological Review*, Vol. 62, No. 5, pp.673–693.
- Pollock, T.G., Chen, G., Jackson, E.M. and Hambrick, D.C. (2010) 'How much prestige is enough? Assessing the value of multiple types of high-status affiliates for young firms', *Journal of Business Venturing*, Vol. 25, No. 1, pp.6–23.
- Prashantham, S., Kumar, K. and Bhattacharyya, S. (2019) 'International new ventures from emerging economies: Network connectivity and legitimacy building', *Management and Organization Review*, Vol. 15, No. 3, pp.615–641.
- Reagans, R. and McEvily, B. (2003) 'Network structure and knowledge transfer: the effects of cohesion and range', *Administrative Science Quarterly*, Vol. 48, No. 2, pp.240–267.
- Reagans, R. and Zuckerman, E.W. (2001) 'Networks, diversity, and productivity: The social capital of corporate R&D teams', *Organization Science*, Vol. 12, No. 4, pp.502–517.
- Rodan, S. and Galunic, C. (2004) 'More than network structure: how knowledge heterogeneity influences managerial performance and innovativeness', *Strategic Management Journal*, Vol. 25, No. 6, pp.541–562.
- Simon, H.A. (1972) 'Theories of bounded rationality', *Decision and Organization*, Vol. 1, No. 1, pp.161–176.
- Smith, A., Houghton, S.M., Hood, J.N. and Ryman, J.A. (2006) 'Power relationships among top managers: does top management team power distribution matter for organizational performance?', *Journal of Business Research*, Vol. 59, No. 5, pp.622–629.
- Song, W.L. and Wan, K.M. (2019) 'Does CEO compensation reflect managerial ability or managerial power? Evidence from the compensation of powerful CEOs', *Journal of Corporate Finance*, Vol. 56, No. 2, pp.1–14.
- Spence, A.M. (1974) *Market Signaling*, Harvard University Press, Cambridge, MA.
- Stuart, T.E. and Sorenson, O. (2007) 'Strategic networks and entrepreneurial ventures', *Strategic Entrepreneurship Journal*, Vol. 1, Nos. 3–4, pp.211–227.
- Sullivan, B. and Tang, Y. (2013) 'Which signal to rely on? The impact of the quality of board interlocks and inventive capabilities on research and development alliance formation under uncertainty', *Strategic Organization*, Vol. 11, No. 4, pp.364–388.
- Ter Wal, A.L., Alexy, O., Block, J. and Sandner, P.G. (2016) 'The best of both worlds: the benefits of open-specialized and closed-diverse syndication networks for new ventures' success', *Administrative Science Quarterly*, Vol. 61, No. 3, pp.393–432.
- Uzzi, B. (1997) 'Social structure and competition in interfirm networks: the paradox of embeddedness', *Administrative Science Quarterly*, Vol. 42, No. 1, pp.35–67.
- Van Essen, M., Otten, J. and Carberry, E.J. (2015) 'Assessing managerial power theory: a meta-analytic approach to understanding the determinants of CEO compensation', *Journal of Management*, Vol. 41, No. 1, pp.164–202.
- Wang, H., Zhao, S. and Chen, G. (2017) 'Firm-specific knowledge assets and employment arrangements: Evidence from CEO compensation design and CEO dismissal', *Strategic Management Journal*, Vol. 38, No. 9, pp.1875–1894.
- Zhu, D.H. (2014) 'Group polarization in board decisions about CEO compensation', *Organization Science*, Vol. 25, No. 2, pp.552–571.