Entry

Director Interlocks: Information Transfer in Board Networks

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Definition: Director interlocks occur when a board member or an executive of a firm sits on the board of directors of another firm. As an essential social network application in the business world, interlocking directorates are documented to be non-trivial from the 1930s and continue to gain popularity thereafter. Corporate information and business practices can be transferred to another firm through an interlocking director sitting on both companies’ boards. Such information dissemination leads to changes in an interlocking firm’s decision-making processes. Existing business research attempts to decipher the underlying reasons why board interlocks become prevalent, how and what information is being transferred through this channel, and the intended or unintended consequences to firm strategic, governance, financing, and accounting practices. We first introduce theoretical research on board interlocks in management and then follow up with empirical evidence in finance and accounting. Since extant studies have not reached a consensus on various consequences of board interlocks, we contribute to the literature by summarizing the findings from multi-business disciplines, discussing their advantages and disadvantages, and calling for more research on the topic.

Keywords: board interlocks; interlocking directorates; social networks; information transfer; information dissemination; information contagion

1. Introduction

As an essential social network application in the business world, director interlocks occur when a board member or an executive of a firm sits on the board of directors of another firm [1,2]. Network theories suggest that social ties facilitate the diffusion of information [3]. Board interlocks, as a form of low-cost channel for information transfer, have been documented to be associated with the diffusion of firm operating, governance, financing, and accounting practices. Interlocking firms benefit from the information transferred and expertise shared through board networks in terms of reduced environmental uncertainties [4], better governance, and anti-takeover defenses [5,6].

However, because the interlocked directors are likely less independent than outside directors who are not linked to other boards [7], director interlocks are sometimes viewed as less effective in governing and, thus, suboptimal in performing the board monitoring role. In addition, the information transfer channel could also exacerbate the dissemination of non-value-added practices at the expense of shareholders. Consistent with this view, studies show that board interlocks lead to reduced voluntary disclosure [8], dissemination of earnings manipulations [9], higher levels of tax avoidance [10], and suboptimal executive compensation schemes [7,11]. Collectively, while the benefits of director interlocks are salient, it is nonetheless exigent to study the costs and adverse consequences associated with such ties.

Initially explored in the regime of strategic management studies, scholars propose multiple models that attempt to explain why such interfirm networks gained popularity among firms despite debates about possible negative consequences and the legitimacy of board interlocks. More recent finance and accounting applications provide further evidence of costs and benefits associated with director interlocks. Specifically, finance studies explore...
director interlocks as a meaningful mechanism in corporate governance practices such as anti-takeover defenses, merger and acquisition activities, and executive compensation, whereas the accounting literature provides insights into how director interlocks affect firms' financial reporting, auditing, and tax avoidance activities.

2. Director Interlocks in Management

Earlier studies in management view interlocking directorates as a cooptive device [1]. Empirical evidence shows that larger firms, capital-intensive firms, and firms with diffuse interest groups tend to have more interlocking directors [1]. In addition, board interlocks are found to have an effect on corporate strategies such as diversification [12]. To understand the incentives and consequences of director interlocks, the management literature proposes multiple consolidated models: the management control model, the reciprocity model, the finance control model, and the class hegemony model [13]. Although different in many assumptions, these models are not mutually exclusive but indicative of the predominant patterns of interfirm director networks and the attempts to understand why board interlocks exist. As researchers are still disentangling the nuances of director interlocks, a single model can hardly tell a complete story of board interlocks. Nevertheless, to some extent, the models can enhance our understanding of why board interlocks are prevalent. We discuss the conceptual framework of each model, followed by its limitations.

2.1. The Management Control Model

In the management control model, directors are assumed to be less potent than executives: Under this representative perspective regarding interlocking directorates, the managers make essential business decisions with the board set up “for advice, criticism, prestige, and to a minor extent for business contacts” [14] (p. 174). In the presence of diversified shareholders [15], managers can sometimes use the votes under their control and exert significant influence on the appointments of board members. Consistent with this view, given that directors play a passive role, director interlocks have limited effects on corporate governance. Closely representing this model, Zhu and Chen find that interlocks between CEOs and other board members play a pivotal role in shaping firm strategies [16]. Specifically, relative to other board members, narcissistic CEOs are more likely to be influenced by the strategies that they are familiar with. This effect is further accentuated by CEO interlocks. In addition, Cannella and Jones find that family firms are more likely to be interlocked with other family firms, except for those lone founder firms [17]. As illustrated by these studies, interlocking behaviors are intertwined with management styles, corporate strategies, and corporate cultures.

It is worth noting that the management control model recognizes the importance of director interlocks to a limited extent. Although it recognizes the importance of manager power over the board, it is inconsistent with the substantial evidence of the existence and patterns of director interlocks: If managers, on average, had control over the board of directors, then interlocking directorates would have limited impacts on corporates. However, contrary to this hypothetical prediction, scholars have found that board interlocks have substantial influences on different aspects of those interlocked firms. Moreover, recognizing the board of directors as meaningful monitors, studies contradict the “passive” view in the management control model by confirming that the board of directors is powerful, at least to a certain extent.

2.2. The Reciprocity Model

Interfirm reciprocity occurs when two or more firms cooperate with one another for mutual benefits [14]. A common observation in director interlocks is when the CEO (or director) of company A serves as a director on the board of company B, and the CEO (or director) of company B serves on company A’s board. One out of seven companies was engaged in CEO reciprocity with another firm in 1991, according to a study that uses a sample of the Forbes magazine’s largest 500 U.S. companies [18]. This number is even higher.
in Latin American countries. According to a survey in 2011, about 30% of companies have CEO reciprocity interlock in Columbia [19]. Proponents of the reciprocity model posit that firms rationally choose to interlock because they believe they can gain equitable benefits from such arrangements in the form of vertical coordination, horizontal coordination, knowledge and expertise exchange, and the reputation of interlocking directors. As a result, such interlock arrangements help mitigate environmental uncertainties [4].

This model relies on the assumption that firms make rational choices in interlocking after cost and benefit considerations. However, agency problems and conflicts of interest within firms may cause deviations from such rationality in interlock choices, especially when there are concerns surrounding the legitimacy of board interlocks. The reciprocal arrangement between two firms’ boards can harm the firm’s reputation as well as the shareholders’ value. Moreover, the reciprocity model does not unentangle firms’ cost and benefit considerations from directors’ own incentives. For example, directors can diverge from their fiduciary duties because they do not fully internalize shareholder preferences.

2.3. The Finance Control Model

Earlier studies from the 1960s to 1980s find that firms sometimes appoint board members with affiliations to major banks [14]. These interlocks formed with financial institutions are considered a vehicle to obtain resources. Advocates of the finance control model argue that firms appoint bankers as independent directors to acquire assurance of capital to some extent. On the other end of the linkage, financial firms benefit from such arrangements, which facilitate closer monitoring of their investments or even enable them to use their economic power to maneuver firms towards policies that require large borrowings.

However, this model has received limited empirical support based on findings from more recent studies. Financial institutions might benefit from director interlocks in a homogenous manner just as other firms, given that the exposure to environmental uncertainty is lowered [4]. However, due to the complexity associated with incentives for board interlocks, the financial control model likely cannot paint a complete picture of the subject matter. Since banks can exert effective control via other channels, such as stock ownership [20], it may be difficult to observe board interlocks motivated by financial control.

2.4. The Class Hegemony Model

Social scientists analyze director interlocks from the perspective of socioeconomics. These scholars posit that upper-class elites tend to have diversified holdings, and the common interest among such social class calls for assurance that all companies adhere to the unwritten rules. Director interlocks are viewed as a powerful vehicle for upper-class elites to concentrate the directorships of firms in fewer hands to maintain and promote the interests of their own and their allies. Consistent with upper-class elites’ financial interests, interlocking directorates can not only enhance information sharing within these interlocked firms but also disseminate internal control and monitoring practices across the network.

The class hegemony theory highlights heterogeneity in interlock processes and directs inquiries to investigate individual characteristics of interlocking directors. In response, researchers take a closer look at the relationship between interlocking individuals, their social networks, and idiosyncratic firm features. They find that “the corporate elite is a small world” [21] (p. 303). In addition, using European data, Heemskerk finds that interlocking directorates in European firms facilitate a European community for business [22]. Nevertheless, the class hegemony model does not fully incorporate the positive effects of interlocks on individual firms. Furthermore, the class hegemony model may be difficult to carry out, especially when effective corporate governance mechanisms and shareholder activism are in place.

3. Director Interlocks in Finance

Sociocognitive theories posit that board networks impact directors’ possession of strategic knowledge and perspectives to monitor and advise managers in firms’ strategic
decision-making processes [23]. For example, Fahlenbrach documents positive market returns when firms appoint CEOs of other firms as outside directors [24]. The authors interpret the results as the capital market’s favorable reaction to the value brought by outside CEO directors. Following this notion, the finance literature primarily focuses on director interlocks’ economic and strategic consequences. Evidence documents interlocking boards’ effects on various aspects of anti-takeover mechanisms, such as poison pills and golden parachutes [5,25]. Other studies investigate the dissemination of merger and acquisition activities through board networks [26]. In addition, studies suggest that the effect of interlocking boards on executive compensation schemes is significant and that certain compensation practices (e.g., clawback provisions) are disseminated among firms interlocked through their compensation committees [27].

3.1. Anti-Takeover, Governance, and Agency Conflicts

Theoretical studies suggest that information transfer through interlocking boards facilitates effective monitoring and efficient resource allocation [6]. Scholars in the finance regime empirically test director interlocks and their implications regarding governance practices and find inconsistent results in general.

On the one hand, board interlocks likely transfer governance practices and enforce corporate governance in interlocking firms. For example, Davis and Greve investigated the spread of hostile takeover defending practices in the 1980s among U.S. firms and found that board networks determine the adoption speed and the adaptation patterns of this strategy [5,25]. In addition, Andrikopoulos et al. find evidence in the shipping industry that board interlocks help alleviate agency conflicts [28]. The authors observe a decrease in agency costs within firms with more intensive board interlocks.

On the other hand, whether interlocking directorates are consistently associated with better governance is questionable. For example, using Italian firms as their sample, Zona et al. find that the effect of board interlocks on subsequent firm performance is conditional on the firms’ relative resources, power imbalance, CEO ownership, and ownership concentration [29]. This study not only brings more complications in the consequences of board interlocks, but it also calls for more studies using data from different regimes.

To conclude, these studies corroborate with earlier literature that interlocking directors act as conduits for interfirm information transfers and influence firms’ strategic decision-making in the corporate finance regime.

3.2. Merger and Acquisition (M&A)

Haunschild finds that firm managers are influenced by merger activities of other firms, where they have served as board members, and view those activities as models to imitate [26]. Specifically, the number of tied-to firms’ M&As is positively associated with focal firms’ M&As. This association exists in both vertical and horizontal M&As. In addition, director interlocks are shown to have a significant association with the likelihood of being targeted by private equity transactions [30]. Both of these studies contribute to the understanding of how social networks impact firm merger and acquisition activities.

3.3. Executive Compensation

The dissemination of practices is also present in firm executive compensation schemes. For example, the design of executive compensation packages exhibits similarity among interlocked firms [31] in terms of the proportions of option compensations. In addition, Hallock finds that CEOs in firms interlocked through reciprocating CEOs earn significantly higher compensation [32]. Other studies corroborate this possible suboptimal compensation arrangement by documenting subsequent deterioration in firm performance [7] and lower pay-performance sensitivity of CEOs’ compensation contracts [11]. Consistent with the notion that director interlocks can sometimes hurt shareholder value (e.g., suboptimal executive compensation schemes), controversial practice (i.e., employee option backdating) is also disseminated amongst interlocked firms. Bizjak et al. provide empirical evidence
that firms engage in more option backdating practices if they are interlocked with another firm that also has such practices [33].

Despite possible suboptimal compensation schemes, other governance mechanisms in incentive provisions can also be disseminated through board networks. For example, Addy et al. study interlocks in board compensation committees and document the increased likelihood of clawbacks when the committee is interlocked with other firms where a clawback provision is in place [27].

4. Director Interlocks in Accounting

Board interlocks act as important mechanisms for disseminating information among interlocked firms, including structures, strategies, systems, and processes. As accounting information plays a central role in valuation and governance, accounting scholars have extensively investigated the implications of board interlock on accounting practices, covering financial accounting, tax, and auditing research.

4.1. Financial Reporting and Earnings Management

Theoretical research on social influence suggests that various mechanisms promote the spread of information and behaviors via social networks because directors may learn from their colleagues about preferred actions [34]. Interlocked directors observe the financial reporting behaviors of other companies. As earnings management behavior is unlikely to be publicized by firms or their directors, if interlocked directors observe such behavior in other companies, they are likely to perceive such behavior as less costly but beneficial. The social network allows directors to communicate earning management strategies with other directors, facilitating the quiet contagion of earnings management behavior through interlocked directors. In addition, interlocking directors who take leading positions in board committees (e.g., audit committee chairs) have a stronger effect on the diffusion of financial reporting behaviors, as less informed individuals tend to imitate informed individuals.

Consistent with this argument, Chiu et al. investigate board interlocks and their influence on earnings management [35]. The authors find that firms are more likely to engage in earnings management if their directors are interlocked with firms that manage earnings. This contagion effect is more pronounced if the interlocked directors take leadership or accounting-related positions, such as CEOs, board chairs, and audit committee members. Similarly, Dharwadkar et al. find that audit committee interlocks facilitate firms’ transition from accrual-based to real earnings management, which suggests that information dissemination may be responsible for such a quick transition post-Sarbanes-Oxley Act [36]. Since then, accounting researchers have documented a significant effect that interlocked directors exert on financial accounting practices. Cai et al. find that firms are more likely to stop quarterly earnings guidance if they share directors with previous guidance stoppers [8]. Dharwadkar et al. find that the initiation of audit committee interlock leads to similar behavior in reporting special items, a specific channel through which firms may manage their earnings [37]. In 2022, Karim et al. also found that interlocked directors significantly influence various financial reporting properties, such as conservatism and timeliness [38].

4.2. Tax Planning and Tax Avoidance

Like financial reporting activities, tax avoidance requires professional knowledge of tax regulations and tax-saving strategies. Interlocked directors may learn specific tax-saving strategies from other firms, facilitating the tax avoidance of focal firms. The effect of board interlock hence extends beyond financial reporting. Researchers document the significant impact of board interlock on tax avoidance activities. In 2011, Brown showed that firms tend to adopt corporate-owned life insurance as a tax avoidance tool if their directors are linked to firms with such practices [39]. In 2014, Brown and Drake extended previous research by focusing on the overall tax avoidance outcomes [10]. They document a significantly lower effective tax rate if firms share directors with other low-tax firms. In addition, the effect of board interlock on tax avoidance is more pronounced when interlocked firms are more
similar (proxied as industry members), when interlocked directors are executive directors, and when firms share the same auditors.

4.3. Auditing

As the audit committee is responsible for appointing external auditors, interlocked directors also substantially affect the auditing practices. The research on board interlock and audit behavior dates back to the 1980s. Davison et al. investigate the relationship between board interlock and auditor selection [40]. The authors find a significant relationship between the number of interlocked directors in a company and the likelihood of these interlocked companies sharing the same auditor. However, not until recently did scholars begin to re-examine the effect of board interlock on other auditing behaviors. Because earnings management diffuses through board interlock, auditors may perceive higher risk when interlocked firms are involved in financial fraud. Consistent with this argument, Ivanova and Prencipe find that auditors charge higher fees for firms whose directors are interlocked with a firm that conducted financial fraud [41]. This effect could last for at least two years after disclosing the financial scandal. Similarly, using the Danish sample, Johansen and Pettersson also found a positive association between non-executive directors’ network ties and audit fee premiums, providing international evidence on the auditing implications of interlocking directorates [42].

Except for the auditing service, Shi et al. investigated the non-audit service and its relationship with board interlock [9]. They find that firms with interlocked audit committee members exhibit similar non-audit service purchases, substantially impairing audit quality and future performance. They also find that this relationship is stronger during the pre-SOX period than the post-SOX period.

5. Conclusions and Prospects

Interlocking directorates act as important conduits for interfirm information transfer and influence a wide range of corporate strategies. The extant literature in strategic management, finance, and accounting provides insights into why firms are motivated, how information is transferred, and the consequences of such interlock arrangements.

However, empirical researchers must address concerns in drawing causal inferences in these inquiries, as endogeneity problems may be salient because firms could make similar choices of board members and business policies [30]. Aside from omitted variables and simultaneity in the empirical models, reverse causality could also be an alternative explanation for statistical significance. As such, aside from using empirical techniques such as a change in board interlocks (i.e., formation and cessation of interlocks and information flow [37]) and exogenous regulatory changes (e.g., the 2011 corporate governance reform in Italy that aims to boost investor confidence by limiting director interlocks [43]), we advocate more inquiries of the subject matter that utilize diverse research methodologies. Survey studies, focus groups, experimental studies, and field studies that corroborate with empirical results would provide additional and possibly more direct insights into further understanding of director interlocks.

In addition to adopting diverse research methodologies, we suggest that researchers use data from different countries and explore distinct institutional features and regulations associated with these regimes. For example, board interlocks may exhibit different features in countries with diverse cultural backgrounds. Furthermore, how interlocking directorates impact business practices could also be conditional on distinct cultural characteristics (e.g., individualism versus collectivism). Aside from social or cultural perspectives, the determinants and consequences of interlocking directors likely also differ between emerging and established markets. International and country-level studies that explore these dimensions could further advance our understanding of board interlocks.

To the best of our knowledge, our manuscript is the first review paper that considers board interlock research in several business disciplines. Since extant empirical studies have not reached a consensus on various consequences of board interlocks, we contribute to
the literature by summarizing the research findings from multiple disciplines, discussing their advantages and disadvantages, and calling for more research on the topic. While scholars in specific disciplines may focus on a particular aspect of board interlocks, we provide readers with a comprehensive framework to unlock the board interlock literature. Nevertheless, this entry has limitations because it covers only management, finance, and accounting and does not consider board interlock studies beyond these disciplines.

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