

Marquette University

e-Publications@Marquette

Management Faculty Research and
Publications

Management, Department of

9-2019

Board Committees in Corporate Governance: A Cross-Disciplinary Review and Agenda for the Future

Kalin Kolev

Marquette University, kalin.kolev@marquette.edu

David B. Wangrow

Marquette University, david.wangrow@marquette.edu

Vincent L. Barker III

University of Kansas

Donald J. Schepker

University of South Carolina

Follow this and additional works at: https://epublications.marquette.edu/mgmt_fac



Part of the [Business Commons](#)

Recommended Citation

Kolev, Kalin; Wangrow, David B.; Barker, Vincent L. III; and Schepker, Donald J., "Board Committees in Corporate Governance: A Cross-Disciplinary Review and Agenda for the Future" (2019). *Management Faculty Research and Publications*. 368.

https://epublications.marquette.edu/mgmt_fac/368

Marquette University

e-Publications@Marquette

Management Faculty Research and Publications/College of Business Administration

This paper is NOT THE PUBLISHED VERSION.

Access the published version via the link in the citation below.

Journal of Management Studies, Vol. 56, No. 6 (September 2019): 1138-1193. [DOI](#). This article is © Wiley and permission has been granted for this version to appear in [e-Publications@Marquette](#). Wiley does not grant permission for this article to be further copied/distributed or hosted elsewhere without express permission from Wiley.

Board Committees in Corporate Governance: A Cross-Disciplinary Review and Agenda for the Future

Kalin D. Kolev

Department of Management, College of Business Administration, Marquette University, Milwaukee, WI

David B. Wangrow

Marquette University, Milwaukee, WI

Vincent L. Barker III

University of Kansas

Donald J. Schepker

University of South Carolina

Abstract

The importance of board committees – specialized subgroups that exist to perform many of the board's most critical functions, such as setting executive compensation, identifying potential board members, and overseeing financial reporting – has grown over time due to increased legal requirements and

greater complexity of the environment in which firms operate. This has resulted in a large body of work examining board committees across the accounting, finance, and management disciplines. However, this research has developed rather independently within each discipline, preventing scholars and practitioners from developing a comprehensive understanding of board committees. To address this issue, we conduct a comprehensive review of the literature that: 1) summarizes and synthesizes antecedents and outcomes associated with board committees in publicly-traded firms in English common law countries; and 2) offers a critical analysis of existing research, providing recommendations for advancements and new directions in board committee research.

Introduction

Boards of directors are an integral part of a firm's governance system; monitoring and advising management (Jensen and Meckling, **1976**) and providing access to resources for firm adaptation (Hillman and Dalziel, **2003**; Pfeffer and Salancik, **1978**). Not surprisingly, prior research places substantial attention on understanding what makes boards effective, including their composition, leadership structure, decision processes, and dynamics (Dalton et al., **1998**; Johnson et al., **2013**; Krause et al., **2013**; Withers et al., **2012**). While these studies inform our understanding of the entire board, it is the specialized subgroups – *the board's committees* – that exist to manage details associated with its most critical functions, such as setting executive compensation, identifying new members, and overseeing financial reporting.

Findings on the relationship between board structural characteristics and firm performance have been inconclusive (e.g., Dalton et al., **1998, 2003**; Johnson et al., **2013**). Additionally, boards have been criticized for failing to perform their fiduciary duties due to limited knowledge of firm intricacies, coordination and cohesion issues among directors, and social loafing among board members (Boivie et al., **2016**). This has led some scholars to focus on board committees as the potential source for solving the inherent deficiencies of the full corporate board. Prior research has identified important features of committees that allow them to more diligently and comprehensively monitor and advise firm executives and thus contribute to firm outcomes. In particular, by being smaller, meeting more frequently, and drawing on the specialized expertise and abilities of their members, board committees can execute tasks with greater efficiency and expediency (Kesner, **1988**). In addition, due to their well-defined purpose and clear expectations, it is suggested that board committees face greater scrutiny from various stakeholders, which reduces individual free-riding and encourages more effective implementation of their duties (Chen and Wu, **2016**; Klein, **2002a**).

The importance of board committees has grown over time due to increased legal requirements and growing complexity of the business environment. Significantly greater demands are placed on board members' time and attention, as evidenced by a nearly 50 per cent increase in committees' activities and meetings across S&P 1500 firms over the last 15 years (Adams et al., **2015**). A long-established precept in organization theory is that firms develop specialized structures to handle complexity (Lawrence and Lorsch, **1967**). For example, the multitude of transactions in which executives engage makes overseeing their activities more difficult, requiring the board to devise, approve and implement more intricate compensation contracts. Specialized committees, such as the compensation committee, enable boards to handle this complexity through subgroup-focused responsibility and expertise, while also limiting the demands placed on individual directors. Therefore, the specialized expertise of board committees is critical to the board's ability to reach effective decisions and fulfil its fiduciary duties.

However, the nature of committees and their specialized focus is likely to lead to dynamics substantively different from those of the full board and may also create potential problems for both firm governance and adaptation to changing circumstances. Appointment to a major board committee represents higher status and importance for any director (Zhu et al., 2014). Status differences may be associated with greater director power. Hence, committees may represent a greater power nexus within the overall board of directors. Because board committees are smaller than the overall board, power is vested in a small number of directors for managing the specific issues within a committee's domain. While research on boards of directors overall suggests that smaller groups of directors will act more quickly (Goodstein et al., 1994), smaller groups are less likely to have a diversity of perspectives. Thus, if important board committees, such as the nominating committee, are dominated by a smaller, homogenous group of directors, the resource dependence role of the board (e.g., Hillman and Dalziel, 2003; Pfeffer and Salancik, 1978) could be compromised by a misalignment of firm resource needs with director capabilities and social capital. Thus, the vesting of certain board powers in a smaller subset of directors has the potential to both facilitate and impede the effectiveness of the board.

As a result, research focused on board committee composition, dynamics, and impact on organizational outcomes is growing, particularly in the disciplines of accounting, finance, and management. This is illustrated in Table 1, which highlights the dramatic increase in studies examining board committees since 2001. However, board committee research has generally developed independently within these disciplines and the rich insights from each have remained confined to their respective fields. Additionally, due to substantial changes in governance, study samples and research questions prior to 2001 may not reflect recent governance practices. The lack of a systematic and integrative review of the literature prevents scholars and practitioners from developing a comprehensive understanding of what we know, don't know, and should know about board committees. To address this gap, we conduct a multidisciplinary review of board committee research, which aims to provide several contributions. First, we offer a summary of existing management, finance and accounting research on board committees and synthesize the main findings. In doing so, we outline and assess the main antecedents of board committees and the key outcomes that board committees influence. Second, we identify weaknesses and gaps in prior research that have prevented a more detailed understanding of board committees. In particular, we posit that our understanding of how committees operate is rather limited because scholars have extensively relied on committee structural characteristics. Instead, we suggest that a greater focus on social and human capital of committee members, for example, may further enhance our understanding of how committees operate in today's governance environment. Lastly, we focus on several underexplored areas and offer recommendations for moving board committee research forward in a manner more tightly integrated within the broader field of corporate governance.

Table 1. Studies examining board committees (from this literature review) by year

Year	Studies
Before 1990	5
1990 to 1995	4
1996 to 2000	16
2001 to 2005	32
2006 to 2010	40
2011 to 2015	39
2016 to 2018	6

Our paper is organized as follows. First, we outline and define key board committees and their roles. Second, we detail our review criteria and categorize our review of antecedents and outcomes of board committees. Based on our findings from reviewing existing research, we then identify opportunities for future research to advance and expand our understanding of board committees' role in corporate governance.

Review of the Board Committee Literature

Board Committees Defined

Board committees exist for distinct purposes and are subgroups of directors currently sitting on a corporation's board. Table 2 outlines the purpose, composition requirements and typical functions of the three most common board committees for public firms in English common law countries, such as the United States, the United Kingdom, Canada, and Australia: audit, compensation, and nominating/governance committees.¹

Table 2. Requirements and responsibilities of board committees in public firms

Committee	Membership requirements*	Purpose	Typical functions
Audit Required: USA Required of large firms: UK, Canada and Australia	Independent outside directors, one member must be a financial expert.	Oversee financial reporting and disclosure.	<ul style="list-style-type: none"> • Hire, manage and, if necessary, change auditor. • Oversee financial reporting and accounting. • Acquire other resources and expertise necessary for financial reporting and disclosure. • Monitor the effectiveness of internal audit and management controls. • Monitor corporate governance, regulatory compliance, and risk management.
Compensation Required: USA Required of large firms: Australia Comply or Explain: UK and Canada**	Independent outside directors.	Recommend to the board compensation structures of executives and board members.	<ul style="list-style-type: none"> • Determine the terms of engagement and compensation for the CEO and other senior executives. • Oversee stock option packages and understand their effect on overall compensation. • Operate long term, performance-related pay plans for executives.
Nominating / Governance Required: USA Comply or Explain: UK, Canada and Australia	Fully independent outside directors (NYSE), majority of independent directors (NASDAQ).	Seek and recommend new board members.	<ul style="list-style-type: none"> • Find candidates with proper credentials that can also work with current board chairman and members. • Assess each director's performance, including meeting attendance and impact of other directorships. • Make recommendations on re-election. • Recommend board members for committee memberships.
Other non-required committees (e.g.,	None	Varies	<ul style="list-style-type: none"> • Functions are specific to the charter of the non-required committee.

Executive, Strategy, Finance, Environmental, CSR)			<ul style="list-style-type: none"> • Often associated with focus on a specific problem and / or signaling commitment to concerns of shareholders and other external stakeholders.
---	--	--	--

Sources: Calkoen (2017), Chen and Wu (2016), Laux and Laux (2009), Tricker (2015), Withers et al. (2012)

* USA member requirements are stated. UK, Canada and Australia have similar but not identical requirements.

** Comply or explain means committee existence or composition is strongly recommended by governance codes for firms. Deviations from board committee recommendations (i.e., non-compliance) must be explained in public securities filings.

In the United States, certain committees have become required by law or stock exchange rules in the last several decades. For example, the Sarbanes–Oxley Act of 2002 (hereafter referred to as SOX) required all US-based publicly-traded firms to have an audit committee. Later, the two main US stock exchanges (NYSE and NASDAQ) enacted requirements that all listed firms' boards have compensation and nominating committees. Because countries with institutions based in common law tend to have strong property rights and investor protections, the major stock exchanges in Australia, Canada and the United Kingdom now require, at least for large firms, the existence of audit committees (Calkoen, **2017**; Tricker, **2015**). Relatedly, governance codes in these countries strongly recommend that large public firms have compensation and nominating committees whereby firms must file yearly governance documents that either attest to the existence of these committees or explain why the firm does not need the committee (i.e., this is commonly referred to as the 'comply or explain' rule in the UK). In practice, large public firms in the UK tend to comply with the governance code. Indeed, 90 per cent of FTSE 350 firms have both compensation and nominating committees (Calkoen, **2017**). Compliance also tends to be very high in Canada and Australia for large firms.²

Firms' boards may also have additional committees specifically focused on areas such as strategic planning, the environment, or corporate social responsibility (CSR) that are not required by law but may reflect firm strategy, industry norms or a board's response to an issue or event. Boards continue to add committees, with over 75 per cent of S&P 500 firms having at least one committee beyond those required and 41 per cent having at least two additional committees as of 2016 (Ernst and Young Center for Board Matters, **2018**).

Method for Identifying Board Committee Studies

Following a process similar to previous highly-cited high quality reviews (see Halebian et al., **2009**), we executed five steps to control our review's scope and ensure that our coverage of relevant studies was logical and comprehensive. First, we focused on quantitative, empirical research of board committees in the accounting, finance and management literatures. Second, given space limitations and the substantial volume of board committee research, we limited our review to articles that had been published in leading journals or were among the 100 most relevant published articles for each keyword in an electronic keyword search (to be described shortly). The number of articles included in our literature review tables from each journal, along with abbreviations for the journal titles, are shown in Appendix I. Third, due to significant variations in regulations and corporate governance across countries (Donaldson and Davis, **1994**; Tricker, **2015**), we only included studies of board committees for firms in the US, UK, Canada and Australia. As discussed previously, such countries have strong investor protections and have been at the forefront of the board committee movement. Other countries, such as Germany, have two-tiered boards, while some have weak director independence rules, and emerging economies still have developing corporate governance regimes (Aguilera, **2005**). As such, our selected studies represent economies where the board committee paradigm is the most developed, with the three main committees either required or heavily emphasized by legal or institutional requirements, especially for large firms.

Within the constraints of the first three steps, in our fourth step we used Google Scholar to search for keywords: *board committee*, *subcommittee*, *audit committee*, *nominating committee*, and *compensation committee*. This process yielded over 700 articles. Fifth, each article was reviewed to determine if it was relevant for this review. Many articles were eliminated because they did not specifically operationalize

influences from or facets of one or more board committees, such as existence, composition, function, behaviour, or outcomes. Additionally, similar to previous reviews of board research (see Johnson et al., 2013), studies that examined not-for-profit boards were eliminated. Subsequently, our review process identified 142 articles for inclusion; 57 from management, 42 from finance, and 43 from accounting journals. Of the 142 articles, 83 examined audit committees, 59 studied compensation committees and 39 focused on nominating/governance committees. Other committees examined include: environmental (6 studies), executive (4), public affairs (2), CSR (2), and strategic planning (2). Committees relating to public policy, ethics, finance, or technology were each explored in one study.

After identifying the 142 articles, we then coded and categorized the articles. Primary variables and key findings were coded, enabling each article to first be placed into one of three categories: antecedents of board committees, outcomes associated with board committees, and non-required committees. Each article was then further grouped by its major topic within those three categories (e.g., executive compensation as an outcome). Thus, we report the 142 articles in seven literature review tables. Within each table, we then further sub-categorized the articles by the focal topic of the study (e.g., committee composition for studies examining executive compensation). We also tried to identify the major theoretical frame used in the article. We were conservative in identifying the theoretical framework and only labelled it for a study in the tables if the authors clearly stated their theoretical background. As will be seen in the tables, some studies lack a theoretical frame as the authors took a more phenomenological focused approach in their study. The results from categorizing the articles are illustrated in Figure 1 and form the basis for the following discussions of the antecedents and outcomes of board committees.



Figure 1 Overview of board committee research

Antecedents of Board Committees³

A major research area has been the antecedents of board committees. Studies in this area examine questions such as: Why does the committee exist? What factors affect committee composition and independence? What factors influence committee practices (e.g., frequency of meetings)? Below, we discuss the following antecedents emphasized in prior research: legal requirements and institutional pressures, governance characteristics, director human capital and interlocks, director demography, and CEO behaviour (see Table 3).

Table 3. Antecedents of board committee existence and characteristics

Authors, Year; Journal	Theoretical frame	Type	Key findings (<i>Country</i> , if not solely United States; <i>e</i> , if endogeneity was addressed in methods)
<i>Legal requirements and institutional pressure</i>			
Armstrong, Core, and Guay, 2014; JFE		A	Firms required to increase audit committee independence had a greater decrease in information asymmetry. (<i>e</i>)
Arthaud-Day, Certo, Dalton, and Dalton, 2006; AMJ	RD, Agency, Institutional	A	Audit committee member turnover was 70% more likely following restatements. Stock market reaction to restatements and external prompting for restatements were not found to increase the likelihood of audit committee member turnover.
Cheng, Huang, Li, and Lobo, 2010; JFE	Agency	A	Institutional lead plaintiff leads to greater independence of the audit committee. (<i>e</i>)
Del Guercio, Seery, and Woitdtke, 2008; JFE		C	54 activist campaigns identified in which the proponent requests one or more specific and measurable actions, such as removing the CEO from the compensation committee.
Duchin, Matsusaka and Ozbas, 2010; JFE		A, C, N	From 1998 to 2005, percentage of independent directors rose on audit committees from 81 to 95% on audit committees, 72 to 92% on nominating committees, and 85 to 94% on compensation committees. (<i>e</i>)
Ertimur, Ferri, and Maber, 2012; JFE		A, C	Audit committee members penalized via fewer votes when up for re-election when backdating has occurred, but less than compensation committee members. For firms involved in backdating, significant penalties (votes withheld when up for re-election) accrued to compensation committee members, particularly those who served during backdating period.
Linck, Netter, and Yang, 2008; RFS		A, N	After SOX, audit and nominating committee members met more often, some firms increased audit committee chair and member compensation, and director turnover increased substantially – particularly for audit committee members.
Laing and Weir, 1999; MD		All	U.K. firms, especially larger ones, followed the Cadbury Committee's recommendation that they employ a board committee structure, but there is little evidence that this positively impacted firm performance. (United Kingdom)
Srinivasan, 2005; JAR	Efficient labour markets, Agency	A	High risk of turnover for audit committee members when there are severe income-decreasing restatements. The relationship was weaker for income-increasing restatements.
Valenti, 2008; JBE	Agency, RD	A, N	SOX was positively related to audit committee members who were CPAs or CFOs, but negatively related to CEO membership on nominating committees.

<i>Governance characteristics</i>			
Anderson and Reeb, 2004; ASQ	Agency, Stewardship	N	Founding-family presence on the nominating committee is negatively associated with the proportion of directors that are independent. (e)
Cohen, Frazzini, and Malloy, 2012; MS	Agency	N	Firms with overly sympathetic (i.e., cheerleader) directors have 29% fewer independent nominating committee directors, are 30% less likely to be majority independent, and more likely to have CEO serve on the nominating committee. (e)
Huang, Lobo, and Zhou, 2009; CGIR	Substitution	G	Firms with a larger, more independent and more active board, higher agency costs, and past occurrence of class-action lawsuits are more likely to voluntarily form a governance committee. Governance committees constrain managerial opportunism by reducing aggressive financial reporting. (e)
Liao and Hsu, 2013; CGIR		A, C	Common membership among compensation and audit committee is more likely in firms with weak corporate governance and lacking financial and committee resources. Firms with common membership have poorer earnings quality and weaker pay-performance sensitivity. (e)
Shivdasani and Yermack, 1999; JOF	Bargaining power theory of director selection	N	Firms appoint fewer independent outside directors and more directors with potential conflicts of interest when CEO serves on the nominating committee or no nominating committee exists. CEO involvement with director selections negatively moderates the relationship of independent director announcements with stock price reactions. (e)
Vafeas, 1999; JFE	Contracting, Agency	All	U.K. firms with a greater number of committees have more board meetings. No relationship found for the number of committees with firm value. (United Kingdom, e)
<i>Director human capital and interlocks</i>			
Boivie, Graffin, and Pollock, 2012; AMJ	Self-determination	A, C	Serving as chair of the audit committee reduces the likelihood of a director exiting the board by 29%, but serving as compensation committee chair increases the likelihood of a director exiting the firm by 23%.
Cai, Garner, and Walkling, 2009; JOF		A, C, G	Directors serving on the audit, compensation and governance committees receive fewer retention votes. Compensation committee members receive fewer votes when the CEO receives higher abnormal compensation. Fewer votes for governance committee members increase the likelihood of poison pill removal. Governance committee member vote distribution influences the likelihood of declassification. (e)

Erkens and Bonner, 2012; TAR		A, N	Firm status (i.e., larger, better connected, more admired) is negatively related to the probability of naming an accounting financial expert to the audit committee. Social status is lower for accounting financial experts on board than other directors.
Ferris, Jagannathan, and Pritchard, 2003; JOF	Agency	A, C	Directors with more than two appointments participate in more committee meetings, have more committee memberships, and chair more committees than directors with one or two directorships.
Field, Lowry, and Mkrтчyan, 2013; JFE	Director Human Capital	A, N	Director busyness is positively related to serving on the audit and nominating committees. (e)
Kesner, 1988; AMJ	Agency, RD	A, C, N, G, Ex	Board members that are outsiders, have business-related functional experience and have served longer on the board are positively associated with major committee membership. Gender was not related to major board committee membership.
Masulis and Mobbs, 2014; JFE		A, C, N	Major committee membership is associated with significantly fewer absences. Sitting on more prestigious boards is positively related to being a member of the audit or compensation committee. (e)
<i>Director demography</i>			
Bilimoria and Piderit, 1994; AMJ	Experience- and gender-based biased views	C, Ex, PA	Men were preferred for membership on compensation and executive committees, while women were preferred for public affairs committees.
Canyon and Mallin, 1997; CGIR		A, C, N	While there are few women on the boards of UK firms, their membership on key board committees is even lower. (United Kingdom, e)
Peterson and Philpot, 2007; JBE	RD	All	Women more likely to sit on public-affairs committee and less likely to sit on executive committee. No relationship found between gender and sitting on nominating, compensation, finance and audit committees.
Zhu, Shen, and Hillman, 2014; ASQ	SC, Re-categorization	A, C, N, G, Ex	Similarity to committee members positively related to likelihood of being appointed as major committee member or chair. Incumbents' prior experience with demographically different directors is positively related to likelihood of being appointed chair of a major committee.
<i>CEO behavior</i>			
Jones, Li, and Cannella, 2015; JOM	Institutional	N, G	CEOs more powerful than the board are more likely to avoid adoption of a governance committee. Firms with a nominating committee adopted governance committees faster. Prior service on any committee positively related to serving on inaugural governance committee. (e)

Stern and Westphal, 2010; ASQ	Interpersonal attraction, SN	N	Increased likelihood of manager or outside director receiving a board appointment when they exhibit ingratiating behaviour towards a CEO or director on the nominating committee.
Westphal and Bednar, 2008; ASQ	Interpersonal Influence, Social Influence	N	CEO ingratiating behaviour and persuasion attempts are negatively related to creation of a nominating committee. CEO persuasion attempts with institutional investors negatively moderate the relationship between institutional ownership and the creation of independent nominating committee. (<i>e</i>)

For Theoretical Frame: (RD) Resource Dependence Theory, (SC) Social Comparison Theory, (SN) Social Networking Theory.

Type indicates which committees were examined in the study: (A) Audit, (C) Compensation, (Ex) Executive, (G) Governance, (N) Nominating, (PA) Public Affairs.

Legal requirements and institutional pressure

A major driver of committee composition has been the mandatory legal requirements for greater diligence by committee members. In the US, SOX was the major catalyst for increased committee independence (i.e., reducing the number of insiders or affiliated directors), as audit, nominating and compensation committee independence rose to 92 per cent or more between 1998 and 2005 (Duchin et al., **2010**).⁴ SOX has also encouraged more frequent meetings of audit and nominating committees, discouraged CEO membership on the nominating committee, and led to greater director turnover, especially for audit committee members, whose annual departure rate increased by over four per cent between 2001 and 2004 (Linck et al., **2008**; Valenti, **2008**).

Stakeholder pressure also has increased committees' monitoring capabilities. For example, Cheng et al. (**2010**) show that when an institutional investor is a lead plaintiff in a lawsuit against a firm, the firm's audit committee independence improves by over four per cent two years after the lawsuit was filed. Similarly, the existence of activist campaigns, such as 'just vote no' campaigns designed to withhold votes toward the election of directors, has encouraged firms to remove the CEO from the compensation committee (Del Guercio et al., **2008**).

Violation of legal requirements and established institutional norms, such as involvement in questionable activities, has been commonly examined as an antecedent to committee membership and composition. For example, Arthaud-Day et al. (**2006**) find that following financial restatements, audit committees face a 70 per cent increase in the likelihood of member turnover. Similarly, Srinivasan (**2005**) provides evidence that restatements for at least five quarters increase the likelihood of audit committee member removal by 10 per cent. Relatedly, when stock option backdating scandals occur, compensation and audit committee members are penalized by receiving fewer re-election votes and are more likely to step down (Ertimur et al., **2012**). For instance, compensation committee members during the backdating period received 10 per cent fewer re-election votes compared to a two to three per cent penalty for other directors. Since such violations undermine a firm's legitimacy, the firm undertakes aggressive efforts to disassociate itself from the guilty actors and restore its credibility among stakeholders (Suchman, **1995**). As a result, severe penalties accrue to committee members who are tasked with, but fail to ensure, compliance to existing norms and regulations.

Governance characteristics

Another important committee antecedent is the quality of the firm's governance. Anderson and Reeb (**2004**), for instance, found that power wielded by founding-family members influenced nominating committee membership and, subsequently, board membership. Firms with weaker governance arrangements, such as the presence of overly sympathetic (i.e., cheerleader) directors, had, on average, 29 per cent fewer independent nominating committee members (Cohen et al., **2012**). Similarly, weak governance systems have been associated with common membership among compensation and audit committees (Liao and Hsu, **2013**). In contrast, strong-governance firms – those with more independent and active boards – are more likely to voluntarily form a governance committee (Huang et al., **2009**).

Director human capital and interlocks

Many studies have used a human capital lens to examine how directors' characteristics impact their membership on, and overall composition of, various committees. Viewing multiple directorships as evidence of a director's quality (e.g., Fama and Jensen, **1983**), Masulis and Mobbs (**2014**) found that directors who sit on multiple boards are more likely to obtain additional committee memberships and

chair a major committee. Those arguments are confirmed by Field et al. (2013), who provide evidence that busy directors (i.e., those sitting on three or more boards) have greater experience, qualifications and network connections, increasing their chances of serving on audit and nominating committees by 20 and 40 per cent, respectively. Kesner (1988) shows that characteristics indicating director competence and expertise in setting and overseeing the implementation of firm strategies, such as being an outsider, having business-related functional experience and serving longer on the board, are positively related to major committee membership. Similarly, Boivie et al. (2012) provide evidence that audit committee chairs are 29 per cent less likely to exit the firm, suggesting that firms take steps to retain the knowledge and experience associated with committees leaders.

Director demography

An emphasis in research on director demography has been the inclusion of female directors on board committees. Studies point to the existence of bias against female directors, suggesting little has changed from earlier findings that posit 'women are not window dressing but do not hold important positions on the boards of large corporations' (Kesner, 1988, p. 80). For example, after controlling for directors' experience, scholars have found that women are less likely to be appointed to committees responsible for key governance functions of US firms (Bilimoria and Piderit, 1994; Peterson and Philpot, 2007). Conyon and Mallin (1997) found a similar bias against women being appointed to key committees in UK firms, with women comprising only 2.49 per cent of board memberships in FTSE350 firms and only half of female directors serving on major committees. These findings suggest that there is a continued prevalence of deeply held stereotypes against female board members, as evidenced by women having career experience valuable to the board but perceived as lacking the experience necessary to serve on key committees (Heilman et al., 1989; Hillman et al., 2002).

In a different vein, Zhu et al. (2014) find that directors who are similar to other directors along certain demographic characteristics are more likely to be accepted as both members and chairs of major board committees. While these studies inform our understanding of committee composition, further exploration is needed. Specifically, examining if and how age, racial and functional background diversity are associated with the composition and effectiveness of board committees may increase our understanding of committee membership and function, as well as the degree to which boards embrace diversity. Additionally, as prior research has found that a firm's links to other firms with female directors is positively related to female board members (Hillman et al., 2007), extending this research to the committee level may offer a greater understanding of the causes and degree of bias against female and other minority directors.

CEO behavior

The ways in which CEOs influence committee formation have also been examined. Westphal and Bednar (2008) showed that CEOs' use of ingratiating behaviour and persuasion towards representatives of institutional investors helped prevent the formation of an independent nominating committee. Jones et al. (2015) offer empirical support for the argument that powerful CEOs are more likely to avoid or defy the adoption of a governance committee; a 20 per cent increase in CEO power relative to the board was associated with a 60 per cent decrease in adoption of a governance committee. While such power for CEOs is restricted to some degree by legal requirements, it still plays an important role in new director nomination and committee formation. Further research is encouraged to help understand how CEOs

influence committee formation and composition, as well as new research that examines how power is developed and wielded within committees and in their interaction with CEOs.

Outcomes of Board Committees ⁵

An extensive body of research has examined the outcomes of board committees, seeking to explain how board committees' existence, independence, composition and turnover influence important outcomes, including firm performance and value, executive compensation, financial misconduct and inappropriate behaviour, and accounting practices. It is important to acknowledge that while board committees might be instrumental in affecting the above outcomes, the full board also impacts those outcomes by ratifying committee decisions, although the extent to which authority is held and exercised at the board or committee level is largely unknown (see Tables 4-9).

Firm performance and value

A substantial volume of prior research has focused on how committee independence influences firm performance. Drawing on agency theory logic (Jensen and Meckling, 1976), scholars have argued that committee independence is critical for protecting shareholders' interests because it allows for objective assessment of firm strategies and constrains CEO opportunistic behaviour. Research on audit committee independence generally finds a positive relationship between independence and performance. For example, Aggarwal and colleagues in two studies found a positive impact from audit committee independence on firm value and market return (Aggarwal et al., 2008, 2011). Relatedly, the presence of expert independent audit committee members positively influences firm performance (Chan and Li, 2008), and the market positively receives announcements of financial experts joining audit committees (Davidson et al., 2004; DeFond et al., 2005). Nguyen and Nielsen (2010) further illustrate the focus on and importance of committee member independence by showing that the death of an independent audit committee member is associated with a two per cent abnormal drop in stock price. Notably, however, Klein (2002b) reported a negative association between audit committee independence and financial performance.

Somewhat contrarily, studies examining the effects of nominating and compensation committee independence on firm performance have produced rather ambiguous results. Some studies report that when these two committees are independent, firms exhibit higher performance (Grove et al., 2011; Hoechle et al., 2012) and are more likely to avoid bankruptcy (Platt and Platt, 2012). Yet, other studies find a positive relationship between insiders on the nominating committee and market return, suggesting the importance of management participation in director selection (e.g., Callahan et al., 2003). In particular, Klein (1998) provides evidence that a more independent compensation committee results in lower productivity from the firm's long-term assets. Similarly, Faleye (2007) found nominating committee independence was associated with a 12 to 14 per cent lower market return. The equivocal pattern of findings for nominating and compensation committees suggests that committee independence may have positive benefits for some firms, while imposing burdens on others. However, these equivocal results may also be driven by reliance on datasets from different eras. In addition, the mixed results across different committee types should serve as caution against claims that independence is the panacea for reducing agency costs when examining the monitoring function of board committees.

Beyond the effects of committee independence, prior research also provides evidence regarding committees' attention to their tasks and firm performance. Falato et al. (2014) found that a busy

director who serves on another board in which that firm incurs the death of the CEO or board member was associated with a 1.37 per cent decrease in stock price, while Dey (2008) found that an effective audit committee (e.g., fully independent, meets more often, has a financial expert) increases financial return for all levels of agency conflicts. No relationship has been found for committee gender and racial diversity with firm performance (Carter et al., 2010).

Executive compensation

As with firm performance, most studies have utilized agency theory to investigate relationships between committee characteristics and oversight of executive compensation. Consistent with agency theory, some studies find that strong committee governance constrains managerial attempts to capture larger and potentially unmerited financial compensation. For example, blockholders sitting on the compensation committee has been found to be associated with decreases in total CEO compensation and increases in equity incentives (Conyon and He, 2004). Similarly, Cyert et al. (2002) report that doubling compensation committee members' stock ownership results in about a four per cent reduction in predicted CEO contingent compensation and about a five per cent reduction in predicted CEO equity compensation, while Sun and Cahan (2009) show that CEO cash compensation is more tightly linked to accounting earnings for compensation committees with higher quality.⁶

Committee member independence has also been a point of emphasis in studies of compensation committees in non-US firms, with studies finding that independence positively moderates the relationships of non-proxy-based activism, involving verbal steps taken by activist shareholders (e.g., statements to the media), with Canadian CEO contingent compensation (Chowdhury and Wang, 2009) and U.K. top management pay with firm performance (Conyon and Peck, 1998). In contrast, the absence of diligent committee monitoring allows CEOs to extract greater pay. For example, CEOs enjoy bonuses relative to merger deal sizes that are approximately 100 per cent greater when they sit on the nominating committee (Grinstein and Hribar, 2004), and approximately 30 per cent greater total compensation when audit committee members are linked to, and socially dependent on, the CEO (Hwang and Kim, 2009). In line with those findings, Stathopolous et al. (2004) provide evidence that total pay for UK CEOs, via issuance of in-the-money stock options, increases when they sit on the compensation committee.

However, some research offers findings which do not support agency theory arguments. Chhaochharia and Grinstein (2009) fail to find evidence that compensation and nominating committee independence are related to CEO compensation. Moreover, Guthrie et al. (2012) found that two outliers in Chhaochharia and Grinstein's study (Apple and Fossil) biased their study and, after accounting for outliers, find that requirements for compensation committee independence lead to increases in US CEO total pay; findings consistent with those of Masulis et al. (2012) who report a positive relationship between foreign independent directors on the compensation committee and CEO pay. Finally, the presence of 'captured' board members on the compensation committee was found to not be associated with greater changes in CEO compensation and total CEO compensation (Daily et al., 1998). Captured board members are directors who are affiliated with the firm (i.e., personal or professional relationships with the firm or its executives) or are interdependent (i.e., appointed after the CEO started in his or her position). Such findings that conflict with agency theory arguments suggest that directors serving on powerful committees, regardless of whether they are independent, may prioritize their obligation to shareholders (Daily, 1996; Daily et al., 1998) or that an optimal contracting perspective, in which higher

CEO compensation reflects the market price for greater managerial quality, supersedes agency theory in some contexts (Masulis et al., **2012**).

Overall, our review of compensation committee influence reveals support for agency theory predictions of CEO compensation is rather mixed. This is likely why scholars use other theoretical frameworks with agency theory. In particular, recent work argues that committees' monitoring can be enhanced when members have sufficient knowledge and expertise. Building theory on knowledge transfer and exchange, Brandes et al. (**2016**) examined how linking 'pin' directors (i.e., directors serving on the audit and compensation committees) are associated with reduced CEO compensation. In a study focusing on other top executives, Gore et al. (**2011**) find support for the presence of a finance committee or a CEO with a financial background leading to lower incentive-based pay for the chief financial officer, arguing that this supported relationship is evidence that financial expertise is an important component of effective monitoring.

Moving away from agency theory, scholars have attempted to provide alternative explanations of how and why board committees impact executive compensation. Young and Buchholtz (**2002**) employ social identity theory and the similarity-attraction paradigm to argue that CEOs are treated more favourably when they are demographically similar to the compensation committee. The authors find that CEO pay is more closely tied to firm performance when compensation committee members' tenure is more dissimilar to the CEO's tenure. Belliveau et al. (**1996**) also examine similarity, but focus on social status differences between CEOs and their compensation committee chairs. Consistent with the position that social status affects influence and dependence among individuals, the study indicates that a CEO with higher relative social status than the compensation committee chair receives greater compensation. Alternatively, a compensation committee chair with higher social status than the CEO constrains CEO pay.

A nascent, but growing research stream focuses on the effects of CEO and compensation committee members' political beliefs on compensation. Using political psychology and upper echelon perspectives, Gupta and Wowak (**2017**) found that politically conservative compensation committees, in which their members have donated more often, over a longer period of time and in greater amounts to the Republican party in the US, were positively associated with total CEO pay and greater rewards for strong financial performance. On the other hand, Chin and Semadeni (**2017**) found that politically liberal CEOs and compensation committees, who prioritize both egalitarianism and equality, are associated with greater pay equality among non-CEO executives. These two studies are examples of how established management theory can be integrated with social constructs to offer new and relevant insights into corporate governance.

Finally, research has examined the criteria compensation committees use to determine executive compensation. In their test of which of two theories better explain CEO compensation, O'Reilly et al. (**1988**) found no support for a tournament theory argument in which CEO pay is greater when a firm has more vice presidents. However, the authors found support for a model developed from social comparisons and suggested this finding indicates that compensation committee members' judgments on CEO pay are anchored by their own pay. Relatedly, scholars have argued that compensation committees may consider the regulatory environment (Perry and Zenner, **2001**), anticipated market rates (Ezzamel and Watson, **2002**), and compensation across unrelated firms (Faulkender and Yang, **2010**) to determine CEO pay at their own firms.

Misconduct and inappropriate behaviour

Common types of questionable firm behaviour include earnings management, fraud/crime, and stock option manipulation. While financial reporting requires judgment, firms have techniques to create unjustifiably positive views of earnings, such as taking abnormal accruals. Research, however, has consistently shown that stronger monitoring by committees, measured as having a majority of independent directors serving on at least two of the three major committees, reduces abnormal accruals⁷ (Faleye et al., **2011**). For example, Klein (**2002a**) found that audit committee independence was negatively associated with abnormal accruals. Badolato et al. (**2014**) examined audit committees' status (i.e., career advancement, achievement and prestige) relative to management and financial expertise, finding that both were positively associated with lower abnormal accruals and reduced accounting irregularities. Bedard et al. (**2004**) had similar findings, but also found that excluding audit committee members from receiving stock options reduced aggressive earnings management. Additionally, Bruynseels and Cardinaels (**2013**) considered social network ties from friendships and advice networks between audit committee members and CEOs, finding that friendship ties were positively associated with earnings management, as well as auditors reporting internal control weaknesses and going-concerns. Finally, audit committee independence and legal expertise have been found to enhance the quality of financial reporting and reduce the likelihood of restatement (Abbott et al., **2004**; Krishnan et al., **2011**).

In a study of firms committing white collar crime, Schnatterly (**2003**) found that actions associated with strong governance (i.e., audit committee independence, more frequent meetings) did not impact the likelihood of a first criminal event but did impact the likelihood of subsequent criminal activity. Uzun et al. (**2004**) reported similar findings, but their study further suggested that the percentage of grey directors (i.e., outside directors having some non-board affiliation with the firm) on major committees was positively associated with fraud. Interestingly, while studies of fraud remain common today, we identified no committee studies in which crime is operationalized as criminal charges against firms following the 2002 passage of SOX in the US.

The manipulation of stock option pricing is another behaviour that has received attention. Bebchuk et al. (**2010**) examined the opportunistic granting of stock options and found the existence of an independent compensation committee did not influence opportunistic stock option grants, but the presence of a large blockholder on an independent compensation committee reduced opportunistic grant timing by 71 per cent. Blockholders on the compensation committee, as well as an outsider as compensation committee chair, were also negatively associated with the likelihood of stock option repricing (Callaghan et al., **2004**). However, directors serving on the compensation and nominating committee profited more from buying and selling their firm's stock than directors serving on the audit or other committees (Cao et al., **2014**), suggesting information asymmetries may exist even among directors on the same board.

Overall, our review of prior work revealed that greater expertise and stronger diligence at the committee level, especially in the audit committee, are appropriate mechanisms for preventing or reducing managerial misconduct. However, we were surprised that little attention has been paid to committee member misconduct and how board committees restore trust following fraud and other types of inappropriate behaviour. Farber's (**2005**) results suggest that firms recovering from fraud have more frequent audit committee meetings, while Chan et al. (**2012**) found that audit committee size was positively associated with adopting clawback provisions (i.e., compensation recovery provisions that allow the firm to recoup compensation from its executives involved in accounting improprieties). Yet, no

research was identified that examined changes in nominating or compensation committee membership or function when firms were attempting to recover from trust violations.

Accounting practices

Research primarily from the accounting field has also examined how audit committee diligence and quality impact accounting practices. For example, financial reporting quality, measured as fewer restatements and discretionary accruals, was improved by the audit committee having greater legal and accounting expertise (Krishnan et al., **2011**), as well as a greater number of accounting and industry experts (Cohen et al., **2013**). Similarly, fully independent and active audit committees were associated with a reduced likelihood of restatements and larger recognition of loan loss provisions (Abbott et al., **2004**; Leventis et al., **2013**). Indeed, in pre-IPO firms the mere presence of an audit committee can reduce accruals (Venkataraman et al., **2008**). Finally, effective audit committees help managers make more accurate earnings forecasts that result in positive market reactions (Karamanou and Vafeas, **2005**).

Other firm-level outcomes

The relationship of committee composition with other firm outcomes has also received attention. Gomulya and Boeker (**2016**) studied CEO replacement following a financial restatement and found a positive relationship between replacing an audit committee member and the likelihood of CEO replacement, suggesting that multiple actors could receive blame for financial misconduct. In addition, Zhang (**2008**) found that the likelihood of a new CEO's dismissal was reduced by the presence of an independent nominating committee when the CEO was hired, and further reduced when nominating committee members had fewer other directorships. Guo and Masulis (**2015**) found that nominating committee independence resulted in more effective CEO monitoring and discipline. In line with those findings, Anderson et al. (**2004**) reported that firms with larger and independent audit committees have lower costs of debt financing (i.e., they obtain debt more cheaply). Further, research has indicated that greater committee independence can limit firm involvement in value-decreasing acquisitions (Faleye et al., **2011**; Fracassi and Tate, **2012**). Indeed, the relationship of major board committee independence with outcomes such as leadership, structural change and more effective financing provides strong support for the beneficial role of independence for major board committees. Comparing these results with the equivocal findings on the link between board committee independence and firm performance suggests that performance may be less controllable by board committees than more proximal drivers of performance.

Less traditional committees

A small number of studies examined the function and outcomes of other less traditional committees which have yielded valuable insights into firms' priorities and actions. The presence of a strategic planning committee was found to be related to executives participation in strategic planning (Henke, **1986**) and a lesser likelihood of focusing on short-term financial outcomes at the expense of long-term initiatives (Beekun et al., **1998**). The presence of an environmental committee was found to increase transparency related to environmental issues (Peters and Romi, **2014**), improve a firm's environmental performance (Walls et al., **2012**), and reduce industry fines (Davidson and Worrell, **2001**). While these studies provide insights regarding the presence and actions of less common committees, further research examining the roles and impact of such committees is needed. Firms and their boards may be pre-dispositioned to prioritize certain issues (e.g., strategic planning, environmental) and, thus, the presence of a committee may only be a related outcome. Additionally, external stakeholders,

analysts and media may emphasize that specific domains require firm attention following a reputation damaging event (e.g., environmental violation), resulting in a committee being formed that may or may not have the necessary intentions and discretion to prioritize actions over other firm initiatives. Studies examining the actions and outcomes of firms adding such committees following poor performance in the associated domain may yield valuable insights into how such committees affect executive behavior, stakeholder perceptions of the firm, and firm outcomes.

Cross-Disciplinary Comparison

One advantage of a cross-disciplinary approach to reviewing board committee research is capturing a sizeable breadth of the literature, as well as differences in theoretical and empirical specifications. As noted previously, committee research has accumulated in isolation across the management, finance and accounting disciplines. However, one similarity across disciplines is the relative dominance of agency theory as a theoretical framework (see Tables 4 through 9).

Table 4. Outcomes: Firm performance and value

Authors, Year; Journal	Theoretical frame	Type	Key findings (<i>Country</i>, if not solely United States; <i>e</i>, if endogeneity was addressed in methods)
<i>Committee independence affecting firm performance and value</i>			
Aggarwal, Erel, Ferreira, and Matos, 2011; JFE	Agency	A	Audit committee independence is positively related to firm performance. (<i>Canada, United Kingdom, United States, Australia; e</i>)
Aggarwal, Erel, Stulz and Williamson, 2008; RFS		A	Audit committee independence is associated with higher firm value. (<i>Canada, United Kingdom, United States, Australia, e</i>)
Callahan, Millar, and Schulman, 2003; JCF	Bargaining power theory of director selection	N	CEO and other insider membership on nominating committee is positively related to market return. Number of nominating committee meetings is negatively related to market return. Delegating nominating responsibility to another committee with CEO involvement is positively related to market return. Percentage of outside CEOs on nominating committee is negatively related to market return.
Chan and Li, 2008; CGIR	Agency	A	Presence of expert, independent directors on the audit committee enhances firm value. (<i>e</i>)
Chhaochharia and Grinstein, 2007; JOF		A, C, N	With new rules for committee independence, firms with fewer independent committees have higher abnormal stock returns. Effect greatest for medium/large firms, with less abnormal returns for small firms without independence, suggesting independence requirements impose significant costs on small firms.
Daily, 1996; SMJ	Agency, RD	A	Affiliated directors on the audit committee are positively related to pre-packaged bankruptcy filings and negatively related to time spent in reorganization.
Faleye, 2007; JFE	Agency	N	Nominating committee independence negatively related to firm value, positively related to director turnover, and positively moderates impact of shareholder wealth changes on CEO compensation. (<i>e</i>)
Grove, Patelli, Victoravich, and Xu, 2011; CGIR	Agency	A, C	Weak evidence of a negative association of affiliated committees with financial performance in the period leading to the financial crisis. (<i>e</i>)
Hoehle, Schmid, Walter, and Yermack, 2012; JFE	Agency	N	An independent nominating committee is negatively related to excess firm value and positively related to cumulative abnormal returns from a diversifying acquisition. Diversified firms are less likely to have an independent nominating committee. (<i>e</i>)

Klein, 1998; JLE	Agency, FR	C	Percentage of outside directors on the compensation committee is negatively related to productivity. The market reacts positively to the announcement of an increased percentage of outside directors on the compensation committee. (e)
Klein, 2002b; TAR	Agency, TCE	A	Audit committee independence is positively related to board size and independence and negatively related to firm growth and financial performance. (e)
Nguyen and Nielsen, 2010; JFE	Agency	A, N	The death of an independent member of the audit or nominating committee is negatively associated with abnormal negative returns. (e)
Platt and Platt, 2012; JBR	Agency, RD, Stewardship	A, C, N	Major committee's size and percentage of independent directors positively related and percentage of grey directors on the audit and compensation committee negatively related to firm avoiding bankruptcy.
<i>Director expertise affecting firm performance and value</i>			
Davidson, Xie, and Xu, 2004; JAPP	Agency	A	Newly announced audit committee members with experience in financial oversight, employed by a CPA firm, or working as an audit consultant are positively associated with cumulative abnormal returns.
DeFond, Hann, and Hu, 2005; JAR		A	Naming an accounting financial expert to the audit committee is positively related to market reaction; this relationship is positively moderated by strong governance.
<i>Interlocks affecting firm performance and value</i>			
Fich and Shivdasani, 2007; JFE		A	Investor reactions at interlocked firms are more negative if a director being sued serves on the interlocked firm's audit committee. Outside directors are more likely to lose other board appointments when the outside director sits on the audit committee of the interlocked firm.
Kang, 2008; AMJ	Signalling, Attribution	A, G	Reputational penalties, measured as cumulative abnormal returns, are associated with interlocked board members serving as audit chair of an accused or associated firm and for an interlocked board member being the governance committee chair of the associated, but not the accused, firm.
<i>Committee characteristics/composition affecting firm performance and value</i>			

Carter, D'Souza, Simkins, and Simpson (2010); CGIR	RD, Human Capital, Agency	A, C, N	No significant relationship found between the gender or ethnic diversity of important board committees and financial performance for a sample of major US corporations. (e)
Dey, 2008; JAR	Agency	A	Audit committee effectiveness is positively related to the level of agency conflicts and to financial and market performance for all levels of agency within firms. (e)
Fich, Cai, and Tran, 2011; JFE	Agency	C	A busy compensation committee leads to more rent extraction in target firms. CEOs of target firms get more options and shareholders suffer more value loss. (e)
Falato, Kadyrzhanova, and Lel, 2014; JFE	Agency	A, C, N	CEO or a director's death at firm A makes other interlocked directors on major committees of firm B busier and this results in lower cumulative abnormal returns. Results are stronger for the audit committee. (e)
Faleye, Hoitash, and Hoitash, 2011; JFE	Agency	A, C, N	Independent directors serving on at least 2 of the 3 monitoring committees improve board's monitoring quality (e.g., increased sensitivity of turnover to firm performance, less discretionary accruals, reduced excess compensation). Yet, improved monitoring jeopardizes board advising quality and results in lower acquisition performance and lower innovation. In firms with high advising needs, weaknesses in board advising outweigh the benefits of intense monitoring and lead to reduction in firm value. (e)
Gerety, Hoi, and Robin, 2001; FM	Agency	N	Relationship of stock market reaction to proposals of incentive plans for board members is negatively moderated by the CEO being on or the firm not having a nominating committee.
Yermack, 1997; JOF		C	Firms receive lower cumulative abnormal returns following option awards when the compensation committee includes a non-executive board chair or an outside blockholder. CEOs can change the timing of stock option grants by influencing the timing of the compensation meeting.

For Theoretical Frame: (FR) Free Rider, (RD) Resource Dependence Theory, (TCE) Transaction Cost Economics.

Type indicates which committees were examined in the study: (A) Audit, (C) Compensation, (G) Governance, (N) Nominating.

Table 5. Outcomes: Executive compensation

Authors, Year; Journal	Theoretical frame	Type	Key findings (Country, if not solely United States; e, if endogeneity was addressed in methods)
------------------------	-------------------	------	---

<i>Committee independence</i>			
Capezio, Shields, and O'Donnell, 2011; JMS	Agency, MP, Behavioural Agency	C	Non-executive members on Australian firms' compensation committees positively associated with non-incentive CEO pay, but no relationship found between compensation committee independence and CEO incentive pay and total pay. (Australia, e)
Chhaochharia and Grinstein, 2009; JOF		C, N	Following the passage of SOX, firms previously noncompliant with new requirements have a 17% reduction in compensation associated with board independence. No effect found for nominating and compensation committee independence with CEO compensation. (e)
Chowdhury and Wang, 2009; JOM	Saliency, Agency	C	Compensation committee independence positively moderates the relationship of non-proxy-based activism with the portion of Canadian CEOs' compensation that is contingent. No significant interaction found for compensation committee independence and proxy-based activism. (Canada)
Canyon and Peck, 1998; AMJ		C, N	Outside directors on the remuneration committee of UK firms positively influenced the relationship of top management pay with corporate performance. Outside directors on the nominating committee did not influence the pay-for-performance relationship. (United Kingdom)
Daily, Johnson, Ellstrand, and Dalton, 1998; AMJ	Agency, SC, Institutional, Stewardship	C	Affiliated or interdependent directors were not found to change the level, or the mix of types, of compensation.
Ferrell, Liang, and Renneboog, 2016; JFE	Agency	C	For worldwide firms, including non-investment trust firms in the FTSE250, independent compensation committee negatively related to CEO total compensation. Excessive CEO pay negatively related to corporate social responsibility. (Canada, United Kingdom, United States, Australia, e)
Focke, Maug, and Niessen-Ruenzi, 2017; JFE		C	The effect of a firm's prestige on CEO compensation is stronger in firms with independent compensation committees. (e)
Guthrie, Sokolowsky, and Wan, 2012; JOF		C, N	Requirements for compensation committee independence increased CEO and non-CEO executive compensation.
Hwang and Kim, 2009; JFE	Agency	A	CEOs whose audit committees are conventionally independent, but socially linked to the CEO, receive larger bonuses than equivalent CEOs whose audit committees are conventionally and socially independent.

Main and Johnston, 1993; ABR	Agency, Anchoring	C	Presence of a compensation committee in UK firms positively associated with CEO pay, but not associated with the incentive structure of pay. (<i>United Kingdom</i>)
Masulis, Wang and Xie, 2012; JAE	Agency	A, C	Foreign independent directors on audit committees are positively associated with restatements. Foreign independent director on compensation committee are associated with higher CEO compensation and a lower percentage of equity-based CEO compensation. (<i>e</i>)
<i>Committee composition</i>			
Belliveau, O'Reilly, and Wade, 1996; AMJ	sc, sn	C	Compensation committee chair status associated with reduced CEO compensation. CEOs with higher social status than the compensation committee chair receive 16% higher pay. CEOs paired with a low-status compensation committee chair receive higher pay than CEOs paired with a high-status chairs.
Brandes, Dharwadkar, and Suh, 2016; SMJ	Agency, UE	A, C	Member overlap among compensation and audit committees suppresses total compensation and is positively associated with salary, but not equity, as a proportion of total compensation. Committee overlap negatively associated with total compensation and positively associated with CEO salary. Committee overlap has a stronger negative effect on total and equity based compensation when less conservative accounting practices are followed. (<i>e</i>)
Canyon and He, 2004; JMAR	Agency, MP, SOC	C	Venture capitalists on compensation committee and committee member pay negatively associated and blockholders positively associated with equity incentives. Compensation committee member pay positively associated with CEO compensation. No support for managerial power model determinants with CEO compensation and equity.
Grinstein and Hribar, 2004; JFE	Agency, MP	N	CEO on the nominating committee associated with greater CEO bonus pay. (<i>e</i>)
Stathopoulos, Espenlaub, and Walker, 2004; JMAR	Agency, MP, Perceived Cost	C	Other executives on UK compensation committees negatively associated with non-executive salary plus bonus and positively associated with non-executive total pay. CEO or only non-executives on compensation committee positively associated with CEO total pay. CEO on compensation committee negatively associated with other executives' long term pay. (<i>United Kingdom</i>)
Young and Buchholtz, 2002; JMI	Agency, Stewardship, Social Identity	C	Age dissimilarity between compensation committee members and the CEO positively related to CEO total compensation change. Relationship negatively moderated by firm performance. Firm performance positively moderates relationship between tenure dissimilarity and change in total CEO compensation.
<i>Political orientation</i>			

Chin and Semadeni, 2017; SMJ	UE	C	The liberalism of the compensation committee strengthens the positive relationship between CEO liberalism and TMT horizontal pay equality. (e)
Gupta and Wowak, 2017; ASQ	Agency, UE	C	Compensation committee political conservatism is positively related to CEO pay. Financial performance positively moderates the relationship of compensation committee conservatism and CEO pay. (e)
<i>Committee characteristics</i>			
Cyert, Kang, and Kumar, 2002; MS	Agency, MP, Options	C	Compensation committee members' stock ownership in company negatively related to CEO base salary, equity compensation, and discretionary compensation. Compensation committee members' stock ownership negatively associated with CEO discretionary compensation in small, but not large, firms.
Persons, 2006; JBE		C	No reduction in compensation for firms with fraud or lawsuits if there is a larger compensation committee. Compensation committee characteristics not associated with CEO dismissal if there is fraud or lawsuit.
Sun and Cahan, 2009; CGIR	Agency	C	CEO current compensation more positively associated with accounting earnings when firms have higher compensation committee quality. Positive effect of compensation committee quality on the association between CEO current compensation and accounting earnings is less in high growth or loss-making firms. (e)
Tosi and Gomez-Mejia, 1989; ASQ	Agency	C	Monitoring of CEO pay is positively related to compensation committee influence in both management and owner controlled firms.
<i>Committee anchoring</i>			
Adut, Cready, and Lopez, 2003; TAR		C	Compensation committees intervene to modify the firm's net income used to determine CEO compensation when there are reported restructurings; The extent of the intervention is dependent on the frequency of the restructurings and CEO tenure.
Bizjak, Lemmon, and Naveen, 2008; JFE		C	Boards use various criteria (e.g., referencing peer firms, firm size, relative performance) to determine CEO compensation structure.
Ezzamel and Watson, 2002; JMS	Equity, SC	C	UK compensation committees adjust CEO pay in line with anticipated market rates, rather than being consistent with pay changes for other committee members. (United Kingdom)
Faulkender and Yang, 2010; JFE		C	Compensation committees seem to endorse compensation peer groups that include unrelated firms, possibly because such firms would potentially ratchet up the level of pay for the CEOs
Fich, Starks, and Yore, 2014; JFE	Agency	C	Deal-making firms' boards are significantly less likely than non-deal-making boards to cite financial performance measures as justification for increasing CEO pay and to

			mention growth as a rationale for compensation decisions. However, deal-making boards are more likely to rely upon measures of CEO non-financial performance to justify pay raises. (<i>e</i>)
O'Reilly, Main, and Crystal, 1988; ASQ	SC, Anchoring, Tournament	C	Strong support for social comparison and anchoring theories, with compensation committee member pay associated with CEO compensation. No support for tournament theory in predicting CEO compensation.
Perry and Zenner, 2001; JFE		C	Compensation committees consider the regulatory environment when making CEO compensation decisions.

For Theoretical Frame: (MP) Managerial Power Theory, (SC) Social Comparison Theory, (SN) Social Networking Theory, (SOC) Standard Optimal Contracting Theory, (UE) Upper Echelons Theory.

Type indicates which committees were examined in the study: (A) Audit, (C) Compensation, (N) Nominating.

Table 6. Outcomes: Misconduct and inappropriate behavior

Authors, Year; Journal	Theoretical frame	Type	Key findings (<i>Country</i> , if not solely United States; <i>e</i> , if endogeneity was addressed in methods)
<i>Committee independence</i>			
Bebchuk, Grinstein, and Peyer, 2010; JOF		C	An independent compensation committee alone does not reduce likelihood of the receipt of lucky stock option grants. However, the presence of at least one large blockholder on an independent compensation committee reduces the likelihood of opportunistic timing of option grants by 71%.
Bedard, Chtourou, and Courteau, 2004; AJPT	Agency	A	Financial expertise constrain aggressive earnings management. Strong negative relationship for audit committee member independence with excluding stock options from compensation and aggressive earnings management. No relationship found for audit committee activity and earnings management. (<i>e</i>)
Brochet and Srinivasan, 2014; JFE		A	Independent directors on the audit committee have a greater likelihood of being named a defendant in a class action lawsuit than directors not on the audit committee. (<i>e</i>)
Bruynseels and Cardinaels, 2013; TAR	Agency, SN	A	Audit committees with friendship-related social network ties to the CEO purchase fewer audit services, engage in more earnings management, and are less likely to issue going-concern opinions or report internal control weaknesses. Social ties between audit committee members and CEOs that were formed from advice networks do not influence the quality of audit committee oversight. (<i>e</i>)
Callaghan, Saly, and Subramaniam, 2004; JOF		C	Percentage of insiders on compensation committee negatively related to option repricing and is a more important predictor than percentage of insiders on the full board or insider

			stock ownership. Presence of a blockholder on the compensation committee reduces likelihood of repricing, while the presence of a nonexecutive chairman on the compensation committee increases likelihood of repricing.
Carcello and Neal, 2000; TAR	Agency	A	A greater percentage of affiliated directors on the audit committee reduces the likelihood of the firm's auditor issuing a going-concern report.
Felo, 2001; JBE	Agency	C	Ratio of insiders on compensation committee positively related to firm not having an ethics program.
Klein, 2002a; TAR	Agency	A	Audit committees with less than 50% independent directors associated with larger adjusted abnormal accruals. Movement to a minority-independent audit committee associated with large increases in adjusted abnormal accruals. (e)
Krishnan, 2005; TAR	Agency	A	Audit committee independence and financial expertise on the audit committee negatively associated with internal control problems.
Larcker, Richardson, and Tuna, 2007; TAR		A	No relationships between affiliated directors on the audit committee and number of audit committee meetings with abnormal accruals, earnings restatements, and future performance. (e)
Schnatterly, 2003; SMJ	Agency	A	Greater levels of audit committee independence and meetings are not related to the likelihood of a first crime, but may help prevent subsequent crimes.
Uzun, Szewczyk, and Varma, 2004; FAJ	Agency	A, C, N	The presence of an audit committee was negatively associated with fraud, but presence of a compensation committee and grey directors on major committees was positively associated with fraud.
<i>Committee composition</i>			
Beasley, 1996; TAR	Agency	A	Outside director ratio associated with lower financial statement fraud. Audit committee presence (pre-SOX) and its interaction with the ratio of outside directors not associated with financial statement fraud.
Cao, Dhaliwal, Li, and Yang, 2014; MS	SN	A, C, N	Directors on the nominating or compensation committee receive higher than average returns from stock purchases than other directors, while there is no such advantage for directors on the audit committee. (e)
DeFond and Jiambalvo, 1991; TAR		A	Presence of an audit committee (pre-SOX) negatively associated with overstated earnings.
Naiker and Sharma, 2009; TAR	Revolving Door	A	Former audit partners on the audit committee, regardless of affiliation with the firm's current auditor, are negatively related to the reporting of internal control deficiencies. (e)
<i>Committee characteristics</i>			
Ndofor, Wesley, and Priem, 2015; JOM	Agency, Complexity	A	The relationship of industry and firm complexity with fraudulent reporting is negatively moderated by more stringent audit committee monitoring. (e)

Badolato, Donelson, and Ege, 2014; JAE	Agency	A	Audit committees with higher status and financial expertise are associated with lower accounting irregularities and abnormal accruals. (<i>e</i>)
Chan, Chen, Chen, and Yu, 2012; JAE		A	There is a positive relationship between audit committee size and clawback adoption.
Farber, 2005; TAR	Agency	A	Fraudulent firms associated with fewer audit committee meetings and financial experts on audit committee. Firms adjusting governance to findings of fraud have more audit committee meetings.
Keune and Johnstone, 2012; TAR	ED, ARP	A	Negative relationship found for audit committees with greater financial expertise with likelihood of waiving material misstatements.

For Theoretical Frame: (ARP) Auditor Reputation Protection, (ED) Economic Dependence, (SN) Social Networking Theory.

Type indicates which committees were examined in the study: (A) Audit, (C) Compensation, (N) Nominating.

Table 7. Outcomes: Accounting practices

Authors, Year; Journal	Theoretical frame	Type	Key findings (<i>Country</i> , if not solely United States; <i>e</i> , if endogeneity was addressed in methods)
<i>Committee independence</i>			
Abbott et al., 2004; AJPT		A	Likelihood of restatement is less for firms with fully independent and more active audit committees who include a financial expert. (<i>e</i>)
Abbott et al., 2003; AJPT		A	Audit committee independence and inclusion of financial expertise are positively associated with audit fees. (<i>e</i>)
Carcello and Neal, 2003; TAR	Agency	A	Audit committee independence, governance expertise and member stock ownership positively related retaining an auditor after issuance of an unfavourable report. Auditor dismissal positively related to subsequent audit committee member turnover.
Karamanou and Vafeas, 2005; JAR	Agency	A	Managers in firms with more effective audit committee structures (e.g., higher ratio of independent members, larger size, more frequent meetings, and higher ratio of financial experts) more likely to make or update earnings forecasts. Forecasts in firms with more effective audit committee structures likely to have less precise, but more accurate forecasts, and more likely to result in a positive market reaction.
<i>Committee composition</i>			

Cohen et al., 2013; TAR	RD	A	Audit committees with more members who are both accounting and industry experts perform better than audit committees with just accounting experts, or, in some cases, audit committees with only financial supervisory expertise. (e)
Gaynor et al., 2006; TAR	Agency	A	Audit committee members more likely to have joint provision preferences similar to investors if audit quality improves and more reluctant than investors to recommend joint provisions when public disclosures are required.
Hoitash et al., 2009; TAR	Agency	A	Number of audit committee meetings, but not audit committee size, positively associated with material weaknesses disclosed. (e)
Knapp, 1987; TAR	Exchange	A	Audit committee members more likely to support auditors, instead of management, during audit disputes. Audit committee member less likely to support the auditor when disputes were not related to technical standards or when the firm is in a strong financial position.
Naiker et al. 2012; TAR		A	Former audit firm partners, regardless of affiliation, on the audit committee reduce non-audit services purchased from the auditor.
Venkataraman, et al. 2008; TAR		A	In pre-IPO situations, the presence of an audit committee is negatively associated with accruals.
<i>Committee characteristics</i>			
Abbott et al. , 2007; TAR		A	Firms with effective audit committees less likely to outsource routine internal auditing to an external auditor, while no such relationship was found for outsourcing non-routine audit activity.
Agoglia et al 2011; TAR		A	The relationship between the CFO applying a more precise standard with the likelihood of aggressive financial reporting was negatively moderated by audit committee strength.
Beck and Maudlin, 2014; TAR	Power, Agency	A	More powerful audit committees were associated with smaller audit fee reductions, while more powerful CFOs were associated with larger audit fee reductions. (e)
Engel et al. 2010; JAE	Agency, Managerial Productivity	A	Audit committee members' total compensation and cash retainers were positively associated with the demand for monitoring. (e)
Kalbers and Fogarty, 1998; JMI	Agency, Institutional	A	Level of inside director ownership negatively associated with audit committee legitimacy. Outside directors on the board positively associated with audit committee legitimacy.
Krishna et al., 2011; TAR	Agency	A	Legal expertise on audit committee positively related to financial reporting quality. Positive effects of legal expertise combined with accounting expertise on the audit committee are greater after SOX. (e)

Leventis et al., 2013; CGIR		A	Banks with effective board and audit committee governance structures recognize larger loan loss provisions on nonperforming loans compared to banks with ineffective governance structures. <i>(e)</i>
Magilk et al., 2009; TAR	Agency	A	Audit committee members prefer aggressive financial reporting when compensated with current stock and overly conservative reporting when compensated with future stock. Audit committee members with no stock-based compensation are the most objective.
Seabright et al., 1992; AMJ	SE	A	Tenure of the relationships between audit committee members and auditor is negatively associated with the likelihood that the firm switches auditors.

For Theoretical Frame: (RD) Resource Dependence Theory, (SE) Social Exchange Theory

Type indicates which committees were examined in the study: (A) Audit.

Table 8. Outcomes: Other firm-level outcomes

Authors, Year; Journal	Theoretical frame	Type	Key findings (Country, if not solely United States; e, if endogeneity was addressed in methods)
Anderson et al., 2004; JAE	Agency	A	Audit committee independence is associated with lower cost of debt financing. Audit committee size and number of audit committee meetings are negatively associated with debt yield spreads. <i>(e)</i>
Cheng, 2004; TAR	Agency	C	CEOs may opportunistically reduce R&D spending when they approach retirement or their firm faces a small earnings decline. Compensation committees make changes in CEO option compensation to prevent opportunistic reductions in R&D spending. <i>(e)</i>
Gomulya and Boeker., 2016; SMJ		A	Replacement of audit committee members leads to higher probability of CEO replacement. <i>(e)</i>
Guo and Masulis, 2015; RFS		N	Noncompliant firms forced to raise board independence or adopt a fully independent nominating committee significantly increase their forced CEO turnover sensitivity to performance relative to compliant firms. Effect of nominating committee independence stronger when CEO was previously on the committee. Board and nominating committee independence associated with more effective CEO monitoring and discipline. <i>(e)</i>
Ng and Tan, 2003; TAR	Behavioral Negotiating, Exchange	A	The availability of guidance from the audit committee has a stronger effect on the potential for not meeting analysts' expectations when the audit committee is not effective.
Stevenson and Radin, 2009; JMS	Agency, Social Capital, SN	A, C	Serving on the compensation committee associated with greater influence on overall board decision-making. No relationship found for audit committee membership with influence.

Zhang, 2008; SMJ	Information Asymmetry	N	Presence of an independent nominating committee at the time of succession reduces the likelihood of new CEO dismissal. When outside directors have fewer external directorships, the likelihood of new CEO dismissal is lower in firms with a nominating committee.
------------------	-----------------------	---	---

For Theoretical Frame: (SN) Social Networking Theory.

Type indicates which committees were examined in the study: (A) Audit, (C) Compensation, (N) Nominating.

Table 9. Findings related to less traditional committees

Authors, Year; Journal	Theoretical frame	Type	Key findings (<i>Country</i> , if not solely United States; <i>e</i> , if endogeneity was addressed in methods)
<i>Environmental and corporate social responsibility issues</i>			
Berrone and Gomez-Mejia, 2009; AMJ	Institutional, Agency	E	Firms with an environmental committee do not reward CEOs with environmental strategies more than CEOs without environmental strategies. (<i>e</i>)
Davidson and Worrell, 2001; B&S	Institutional, Configurational	E	Presence of an environmental committee positively associated with reduced industry fines. Companies in 'dirtier' industries are less likely to have an environmental board committee.
Eccles et al., 2014; MS	Stakeholder	E	High sustainability companies are more likely to form board committees on sustainability
McKendall et al., 1999; IJOA		CSR, E, Eth, PP	The presence of an ethics, public policy, or corporate social responsibility committee is not related to environmental violations.
Peters and Romi, 2014; JBE	Stakeholder, Legitimacy	A, E	For environmental committees, presence, size, number of meetings and expertise of its members positively associated with likelihood of a greenhouse gas disclosure. Committee size associated with lower transparency. Overlap of board members serving on the audit and environmental committees positively associated with likelihood of greenhouse gas disclosure. (<i>e</i>)
Walls et al., 2012; SMJ	Agency, Stakeholder	CSR, E	Presence of an environmental committee is positively related to environmental performance.
<i>Presence of non-required committees</i>			
Beekun et al., 1998; JOM	Agency	SP	The presence of a strategic planning committee is negatively related to emphasis on financial outcomes in CEO evaluation. (<i>e</i>)

Gore et al., 2011; SMJ	Agency	F	Presence of a finance committee is negatively associated with annual CFO equity incentives and the proportion of compensation comprised of equity. (e)
Henke, 1986; JBS		SP	Presence of a strategic planning committee correlates with management participation and breadth of involvement in strategic planning activities.
Premuroso and Bhattacharya, 2007; CGIR		T	Firms' corporate governance ratings and performance (ROA, ROE, margin) are positively related to voluntary decisions to form technology committees.
<i>Outcomes from non-required committees</i>			
Fracassi and Tate, 2012; JOF		Ex, PA	Connected directors more likely to serve on the executive committee. Merger and acquisition activity more frequent when executive committee contains connected directors. Firm value decreases more from connectivity of executive committee members than from connectivity of board members. (e)

Type indicates which committees were examined in the study: (A) Audit, (Ex) Executive, (CSR) Corporate Social Responsibility, (E) Environmental, (Eth) Ethics, (F) Finance, (PA) Public Affairs, (PP) Public Policy (SP) Strategic Planning, (T) Technology.

However, the use of other theoretical perspectives has varied widely across disciplines. In our review, we found that management has taken the most diverse approach, with agency theory being the chosen framework in approximately 35 per cent of the studies reviewed in which a theoretical frame was identified. Institutional theory and, relatedly, social networking theory have been used by management scholars, especially when examining committee existence and membership. Resource dependence has also been used in management studies, but to a lesser extent in recent years. Additionally, management scholars have used a variety of other behavioural theoretical lenses, including social comparison theory and economic perspectives such as human capital theory.

Finance, in contrast, is even more heavily focused on agency theory; around 75 per cent of board committee studies in finance stating a theoretical frame used agency theory. Some studies have drawn heavily from other economic perspectives (e.g., contracting, bargaining power, human capital theory). Still, finance scholars examining board committees tend to cluster work around basic economic ideas with little influence from organization theory (e.g., resource dependence, institutional theory) or behavioural decision-making frameworks (e.g., equity theory, social comparison theory).

Accounting scholars fall somewhere between management and finance scholars, with agency theory being used in a little more than 60 per cent of the studies of board committees that stated a theoretical framework. While accounting scholars have primarily used other economics-based theories in addition to agency theory, important accounting studies of board committees have been published using resource dependence and social networking theory, as well as several other behavioural decision-making approaches.

In terms of antecedents and outcomes of board committees, accounting scholars dominate published research on audit committees and how accounting practices are affected by board committee composition and characteristics, but have shown little interest in how committee members are selected. Management and finance scholars have shown a substantial and fairly equal focus on firm performance and executive compensation as major outcomes influenced by board committee characteristics. All three disciplines have been interested in examining how board committees may affect misconduct or illegal actions by firm managers.

An Agenda for Future Research on Board Committees

Based on our review of board committee research, we identified several areas in which existing research can be extended or enhanced by using new theoretical perspectives or methodological approaches. In this section, we provide recommendations by outlining three broad areas for moving board committee research forward: *revisiting established topics with different approaches and theories*, *studying underexplored areas*, and *methodological improvements*. An overview of this recommended research agenda is provided in Figure 2. We first begin by discussing some of the most promising areas for theoretical enhancement, such as examining the role of director human and social capital and diversity and dynamics among committee members. While these approaches have been applied at the level of the entire board, they are scarce in board committee research.

Agenda for Future Board Committee Research

Revisiting Established Topics with Different Approaches and Theories

- Director Human Capital and Social Capital
- Diversity and Dynamics
 - Among Committee Members
 - Across Contexts
 - Involving Faultlines
- Theoretical Perspectives
 - Resource Dependence
 - Network Theory
 - Group Processes

Studying Underexplored Areas

- Additional Predictors of Committee Composition
 - Firm Strategic Direction
 - Resource Requirements
 - Social Capital
 - Director Turnover
- Less Traditional Committees (e.g., CSR, Environmental, Finance)
- Committee Interactions with
 - Other Committees
 - The Board
- Influence of Relationships and Affiliations on Independence
- Power
 - Committee Chairs
 - Between Directors and CEO

Employing Methodological Improvements

- Endogeneity
- Measuring Committee Independence
- Alternative Data Sources

Figure 2 Agenda for future board committee research

Revisiting Established Topics with Different Approaches and Theories

Director human and social capital

Board level research illustrates the importance of directors' human capital (i.e., knowledge, skills and experience; Becker, **1994**) and social capital (i.e., personal networks with associated reciprocity; Lin, **2017**), though it can be difficult to distinguish between human and social capital (Haynes and Hillman, **2010**). Research suggests that to perform its monitoring and resource provisioning functions appropriately, directors must have the necessary combination of human and social capital (Hillman and Dalziel, **2003**; Withers et al., **2012**). While these influences are important at the board level (e.g., Johnson et al., **2013**), committees exist for distinct purposes and directors' human and social capital associated with those purposes may serve an even more essential role. However, the value of such capital to a committee is likely to be bounded by the nature of committees' tasks. For instance, the audit committee requires extensive monitoring by directors to maintain the independence of the external auditor and examine financial statement accuracy (Carcello et al., **2011**). Thus, a director's accounting skills and financial reporting expertise, combined with prior experience working for or with an external auditor, contribute to the quality of monitoring by the audit committee. However, other aspects of

human and social capital (e.g., experience in mergers and acquisitions) may be valuable to the board, but would be of little value to the audit committee.

As such, an avenue for future research is to explore whether director human and social capital transfers to all committees conditioned on the nature of the committee's purpose. Given the primary monitoring role played by the audit committee, human capital should have a stronger influence on its effectiveness (Carcello et al., **2011**), something recognized by capital markets when directors with accounting expertise are appointed (Davidson et al., **2004**). At the same time, social capital, particularly ties to executives within the firm, may dampen audit committee effectiveness by making directors more sympathetic to management and reducing the quality of oversight. Social capital, however, may be of utmost importance to nominating committees, where directors are tasked with finding high quality future directors and recruiting them to the board (Eminet and Guedri, **2010**). In the middle, the compensation committee's focus on executive compensation and, in many cases, executive succession planning, may leverage both human and social capital. On the one hand, the compensation committee is tasked with limiting managerial opportunism through rent-seeking, requiring social capital, experience, and other facets of human capital to identify such behaviour. At the same time, social comparison theory suggests that social capital might lead to increases in CEO compensation (Belliveau et al., **1996**).

As a whole, the value of director capital is likely to be reflected differently at the committee level than it is at the board level. When monitoring or advice are necessary, human capital is likely to take a prominent role. When the focus is placed on resource provisioning or accessing external parties, social capital is likely to be more important. Research can examine whether committees perform better based on the accumulated capital brought by directors and whether this capital matches the requirements of the committee, as well as the specific types of capital that influence the committee's effectiveness in accomplishing its purpose.

One final important aspect of committee functioning is the relevance of a director's human or social capital to the committee. Compared to employed executives, retired executives bring a wealth of knowledge to boards that is more readily available (Platt and Platt, **2012**). As such, retired executives may serve in a more meaningful manner by being available for counsel. This experience, however, is only valuable to the extent that it is relevant in the firm's context. While retired executives may be more involved, their contributions may be based on obsolete knowledge or relationships. For instance, such directors on the compensation committee may make incomplete social comparisons (see Belliveau et al., **1996**). Research could examine the effect of retired executive directors on committee performance, particularly when potentially obsolete human or social capital could influence committee effectiveness. Of course, scholars examining this question should acknowledge that retired executives serving as board members have more available time to serve on committees compared to other board members.

Diversity and dynamics among committee members and across contexts

In our review, we show that an oft-studied aspect of board composition is the degree of diversity or dissimilarity among board members along different dimensions, such as gender, race, or functional background. At the level of the entire board, scholars have found that different types of director diversity may constrain strategic change (Goodstein et al., **1994**; Tasheva and Hillman, in press), but also increase firm value (Carter et al., **2003**) and performance (Erhardt et al., **2003**).

Management research, however, illustrates that differences among directors can become problematic when they create faultlines between factions due to social categorization processes which yield conflict and cause disruptions through the creation of schisms among directors (Veltrop et al., **2015**). Faultlines exist when there are categorizations, primarily based on demographics, which might lead directors to group themselves into smaller subgroups. While faultline research is nascent at the board level, we believe it has important implications at the committee level for two reasons. First, the effects of faultlines on group performance may be exacerbated within smaller groups like board committees. Strong faultlines require homogeneity within subgroups (Lau and Murnighan, **1998**), which is unlikely across multiple attributes in larger groups (Hart and Van Vugt, **2006**). Second, board committees are more deeply focused on specific topics, requiring greater attention and discussion on contentious issues. Deep divides are more likely to breed conflict, which is also enhanced by faultlines (Thatcher and Patel, **2012**). This does not indicate the entire board is immune to conflict, but rather suggests that such contentious issues (e.g., dismissing a CEO) are less likely to arise on a routine basis.

Exploring committee faultlines is potentially illuminating, since it can highlight mechanisms through which director diversity may not translate to performance. Boards may not consider director characteristics, traits and experience when determining committee membership, creating faultlines in committees. Given that faultlines often lead to conflict and reduced task satisfaction (Thatcher and Patel, **2012**), committee faultlines may lead to member turnover or disengagement in activities particularly critical for the organization, hampering committee effectiveness. Research might also explore how committee composition changes influence potential faultline shifts and, subsequently, committee effectiveness. New committee members can be brought on to break up existing subgroups, replace a departed subgroup member, or reinforce existing subgroups (Thatcher and Patel, **2012**). Changes in committee membership may have a significant influence on the working relationships among committee members going forward. As boards increase diversity, it is important to understand how diversity's effects might be leveraged differently at the committee level.

Relatedly, recently published theory associated with boards and corporate governance has predicted that diversity across individuals (i.e., team diversity) and the ranges of diversity within individuals (i.e., personal diversity) may be the missing link when attempting to understand the how diversity influences team outcomes (Tasheva and Hillman, in press). Such arguments suggest that team diversity may be overstated if the overlap of non-dominant backgrounds or network ties among team members is not considered (Zhu et al., **2014**). However, Tasheva and Hillman theorize that, within boards, team and personal diversity may act as substitutes or complements to one another, and that the need for collaboration to fulfil tasks determines whether they act as such. Integrated with or independent from a study of faultlines in board committees, examining team and personal diversity not only at the board level, but also at the committee level may bring an entirely new perspective of when and where diversity provides the most value.

Infusion of new theoretical perspectives

As noted earlier, our review shows committee level research has drawn heavily on agency theory (70 out of 142 studies), with most research emphasizing independence and diligent monitoring. Since director responsibilities have expanded over time, we believe board committee research needs more extensive application of other management theories, including resource dependence, upper echelons, and institutional and network theories, to gain a more detailed picture of a committee's role in

governance. Indeed, the virtual disappearance of insiders on most boards over the last two decades calls into question how to examine independence from an agency theory approach (more on this point later).

Board-level research integrating multiple theoretical perspectives has been the catalyst for developing new board-level theories (e.g., Aguilera et al., **2018**; Hambrick et al., **2015**), as well as serving as the foundation for new findings associated with board membership and the board's monitoring and resource provisioning functions (e.g., Hillman and Dalziel, **2003**; Hillman et al., **2008**). Integrating management theories with agency theory may provide a better understanding of the rationale for appointing certain directors to committees and how those committees help firms adapt to their environment. For example, are directors more likely to become committee members due to their monitoring and counselling skills (resource dependence theory), friendship ties to existing directors (network theory), or individual characteristics (upper echelons perspective)? Furthermore, we envision scholars utilizing network theory to examine whether committee members use their network status to gain power and how that power translates into committee decisions. Are higher-status committee members likely to exercise their power across all committee decisions or selectively dominate key committee decisions? Do high status directors influence board appointments, thus further enabling a small network of corporate elites?

As we have argued in the previous pages, we believe that future progress will come through theories that either complement or compete with agency theory approaches to board committees. Within resource dependence theory, examining the human and social capital of board committee members will likely yield new insights, but will also require the understanding and measurement of director experiences, expertise and social connections. Likewise, we expect group dynamics research to play a stronger role in future studies. Because board committees are relatively small in size, dysfunctional relationships between several members could have a disproportionate effect on the committee's performance of its duties.

Studying Underexplored Areas

In the following sections, we provide further suggestions for different topics to be explored within new or enhanced theoretical frameworks.

Additional predictors of board committee composition

In our review, we discuss research findings on factors influencing committee composition. While director human capital, independence, demographic characteristics and behaviour predict committee composition, we envision a greater and more diverse set of predictors. Firm strategic direction, resource requirements, and director social capital may serve as important predictors of committee membership. One research opportunity is to examine how restructuring activities, including acquisitions, mergers and divestitures, impact board committee composition. Since these activities are associated with significant structural and executive changes in the firm (Haleblian et al., **2009**), such changes may also reach board committees. For example, how likely and under what conditions are a target firm's directors invited to serve on committees in the acquiring firm? Drawing on group diversity research, we could expect that an acquiring firm's strong culture of inclusiveness (Chatman et al., **1998**; Hopkins and Hopkins, **2002**) positively impacts the addition of target firm directors to the acquiring firm's board committees. An equally important research question relates to understanding how dynamics within committees are impacted by the addition of target firm directors and how such new members are integrated. We speculate that the addition of target firm directors could initially yield relational conflict, limiting

cohesion (Horwitz and Horwitz, **2007**), but may also bring more diverse perspectives for comprehensive decision making.

In addition, we envision the application of resource dependence and network theory to examine how a director's experiences, expertise and social ties predict committee membership. For example, we speculate that current or former members of leading executive compensation consulting firms have strong credentials and are perceived as highly relevant additions to the compensation committee. Similarly, a current or former CEO who has led a successful turnaround may be a highly-sought addition for a newly formed strategic planning committee, since he or she can enhance a committee's and firm's credibility. Additionally, examining whether politicians, due to their social connections, fame and experience, are more likely to chair a firm's governance committee would be thought-provoking and valuable, as well as shedding light on whether political connections can bring valuable resources to the board and its committees within various contexts. These research opportunities can examine matches between committee functions and the skills and resources needed to perform those functions.

Haynes and Hillman (**2010**) also found positive effects from directors' cumulative human capital breadth and negative effects from cumulative human capital depth on firm outcomes. As board committees have more focused objectives, future research that extends Haynes and Hillman's work to the committee level could yield valuable insights regarding the right mix of experience, functional expertise and networking for committees to meet their objectives.

Finally, prior research has not addressed how director turnover influences committee composition. Given committees' small size, the turnover of one member not only changes a committee's configuration, but may also alter committee dynamics and functioning. For example, if an audit committee member retires from the board, general and firm-specific financial knowledge may be lost and the power dynamics within the audit committee may be dramatically changed. In such cases, does the board prioritize hiring a replacement with similar functional background and experience, a similar demographic background, a close relationship with the remaining audit committee members, or a replacement who brings a different skillset and unique expertise and experience? In a broader sense, research is needed to understand the influence of the nominating committee and its members on the demographics, skills and experience of new board and committee members.

Focus on less traditional committees

As our review revealed, the bulk of research has been centred on the three major committees, as only 11 of the 142 articles examined less traditional committees. Greater attention can be given to less traditional committees, examining why they exist and the degree to which they influence various processes and firm outcomes. Given the rising importance of CSR and increases in shareholder activism, we envision a positive relationship between CSR-related shareholder proposals and the formation of CSR committees. Furthermore, this relationship should be stronger when shareholder activists have greater experience with prior campaigns and when firms exhibit, or the media reports them as having, CSR violations.

Changes in societal norms or perceptions could be an important driver for the emergence of less traditional committees. For example, recent revelations of sexual misconduct and harassment might force firms to create committees responsible for the implementation and enforcement of equal treatment and protection of employees. We speculate that the announcement of such committees

would be perceived positively by the market only when their purpose is not perceived by stakeholders as impression management.

Board-level factors are also likely to impact the emergence and purpose of less traditional committees. Using a finance committee as an example, it would be interesting to test the following competing hypotheses: the presence of directors with financial expertise is positively associated with the formation of a finance committee and, alternatively, weak financial expertise on the board is positively associated with the formation of a financial committee. The first hypothesis argues that greater expertise in a specific function drives formalized structures associated with that function, while the latter hypothesis argues that formal structure is used to overcome functional weaknesses.

Because the vast majority of large firms in English common law countries have compensation, nominating/governance, and audit committees, less traditional committees might offer a fruitful setting for testing resource dependence versus institutional theory as a driver of committee existence. If a firm's strategy or industry creates crucial resource contingencies, specialized committees might develop from that dependence. For example, firms that use a substantial amount of clean water for operations may be more likely to have environmental board committees. In contrast to such an explanation, environmental committees may be more likely to be established when the firm's board has interlocks to other firms with environmental committees. This suggests an institutional theory explanation in which the presence of board committees is motivated by a need for legitimacy (e.g., DiMaggio and Powell, **1983**). Such research could extend to a number of less traditional board committees.

Interactions between various committees

As shown in our cross-disciplinary review, most research has examined committees in isolation and overlooked interactions between committees and their members. One way to increase focus on this topic is to draw on the idea of complementary versus substitute governance mechanisms (e.g., Misangyi and Acharya, **2014**) and examine if and when different board committees serve as substitutes or complements. For example, what is the interplay between the nominating and compensation committees and its impact on firm performance? Is it sufficient to have an independent nominating committee that is responsible for appointing the 'right' CEO and directors to guide the firm? Alternatively, an independent nominating committee may be necessary but not sufficient, with firms also needing a vigilant compensation committee that complements the nominating committee and ensures that a new CEO's compensation structure incentivizes value maximization. Furthermore, recent studies drawing on fuzzy set methodology have shown that performance is influenced simultaneously by multiple governance factors that operate as complex configurations (e.g., Misangyi and Acharya, **2014**). Applying this logic to committees, scholars need to consider committee characteristics, such as size, composition, tenure, and expertise, as a configuration when examining their association with firm performance and other outcomes.

Another important committee phenomenon is directors who simultaneously serve on multiple committees. Such common membership is characterized by complex dynamics and interactions among directors. For example, Brandes et al. (**2016**) found that directors serving simultaneously on audit and compensation committees act as important conduits for knowledge transfer between directors' monitoring and incentive alignment duties, leading to lower executive compensation. In contrast, Liao and Hsu (**2013**) find that common committee membership can make directors too busy, resulting in poorer earnings quality and reduced CEO pay-performance sensitivity. These conflicting results indicate

that further research into common membership is needed to determine whether the benefits of knowledge transfer outweigh the drawbacks of busyness (e.g., Ferris et al., **2003**). A contingency perspective might bring better understanding to this question. For example, directors of firms in industries with greater uncertainty and unpredictability could face additional cognitive pressures that might overwhelm and further distract them, reducing their ability to effectively contribute to multiple committees.

Further, the characteristics of such directors may influence their effectiveness. Retired directors may have additional time to devote to the firm, reducing problems associated with busyness. Alternatively, busyness may be a substantial problem if a director is a sitting CEO of another firm and has membership on multiple committees. Moreover, overlap might be particularly important for some critical board functions. For instance, CEO succession planning may be the purview of multiple committees: the nominating committee identifies, evaluates and hires new directors and ensures they buy into the importance of succession planning, while the compensation committee provides incentives to attract, develop and retain high potential executives. Ultimately, committees may have responsibilities geared toward accomplishing a common goal and coordinating activities among them may be critical to achieving that objective.

Finally, future research on common committee membership could focus on the degree to which committee interlocks create potentially harmful isomorphism. An influential director serving on multiple committees may compel each committee to function too similarly or frame issues and potential directions in the same manner. To the degree that committees help drive the firm forward through in-depth discussion and a focus on key issues, interlocks may reduce the firm's ability to adapt and consider alternative directions in a meaningful fashion.

Interactions of committees with the full corporate board

From our review of the literature, another area with negligible prior research is the interactions between committees and the full board. A key feature of board committees is their ability to utilize specialized knowledge and skills (Kesner, **1988**), which allows them to perform specific tasks more efficiently and effectively than the full board. Since committees play an integral and complementary role to the full board, it is important for future research to provide a deeper and more comprehensive understanding of the relationships and interactions between board committees and the full board.

Expertise and experience deserve further attention, examining the interaction of their specialized nature at the committee level and their general nature at the board level. For example, how does nominating committee expertise interact with other directors' expertise to identify director candidates? While we can expect a positive relationship between nominating committee social capital and appointing prestigious directors, we speculate that other directors' interlocks and network connections (e.g., their social capital) strengthen the relationship.

We believe it is also important to examine fit between structural characteristics, such as independence, of committees and the full board. While it is logical to expect that committee independence interacts with board independence to constrain managerial self-serving behaviour and enhance firm performance, it would be interesting to examine how committee independence and lack of board independence impact firm performance. Can committee independence compensate for the lack of overall board independence? If true, such research can offer a new understanding of the equivocal

findings on the effectiveness of board independence on firm performance (e.g., Dalton et al., **1998**). It would also be interesting to examine the interaction of additional governance mechanisms, such as equity ownership. For example, is the compensation committee's equity ownership sufficient to constrain CEO total compensation and ensure CEO pay-performance sensitivity, or does the compensation committee's equity ownership need to be paired with the full board's equity ownership for shareholder value maximization?

Finally, the nested structure of committees within corporate boards is associated with directors having multiple work-related identities (e.g., Johnson et al., **2006**). Audit committee members, for example, associate themselves with the accounting and finance professions, with the audit committee, and with the firm's board. Given that identities can shape behaviour and the salience of a particular identity is dependent on the surrounding context (Ashforth, **2000**; Hillman et al., **2008**), directors might exhibit different behaviours dependent on the role that they are currently serving. When a director is performing audit committee functions, he or she might focus on specific details regarding reporting accuracy (i.e., 'the trees'). However, in full board meetings, the same director might stress the importance of long-range planning and strategy (i.e., 'the forest'). How might these multiple identities and potential identity conflicts impact the overall effectiveness of directors and their contribution to firm value creation? Overall, we believe that utilizing multi-level analysis for committee and board research could enhance understanding their complex and multi-faceted nature and relationships.

Board committees and directors' power

Prior work has also extensively examined committees' impact on board decision-making processes and organizational outcomes. In doing so, scholars have primarily focused on the committee as a level of analysis and relied on aggregating directors' characteristics to theorize how and when committees are more likely to exercise power. While research advances our understanding of committees' role in governing the firm, it has left many unanswered questions about the power of committee members.

For example, committee chairs are likely to have greater power than other committee members, as the committee chair sets its agenda. Therefore, constructs often examined at the committee level, such as human or social capital through board interlocks, should be examined at the committee chair level. The committee chair's power may be enough to affect the firm regardless of the other members' characteristics, rendering other directors' capital moot.

Future research could study how directors' power associated with major committee membership is perceived by CEOs. Do CEOs try to limit the power of major board committee chairs and, if so, in what ways? One covert approach to undermine power is to push for the appointment of diverse and conflict-prone directors who oppose and disagree with the committee chair, inhibiting committee social integration (see O'Reilly et al., **1989**). Relatedly, what do CEOs do when they disagree with a major committee's decision? While, in some cases, CEOs may adapt to such a decision, they may also seek to control processes, not due to opportunism, but because they have better information. Additionally, if CEOs anticipate conflicts with a committee and its members, do they focus on developing relationships with committee members or do they seek ways to place similar or more supportive directors on that committee?

Furthermore, it would be interesting to examine how director turnover is affected by the power stemming from committee membership. Do directors on lower-status and voluntary committees turn

over more than directors on higher-status, mandatory committees? On one hand, higher-status committees are more visible, and their mistakes and ineffective decisions are more likely to lead to external pressure for members to resign (Arthaud-Day et al., **2006**). On the other hand, higher-status committees garner more power for members to withstand such pressure.

Addressing these questions associated with CEO and director power creates a challenge for scholars. Utilizing established board capital measures, such as functional categories (see Hillman et al., **2000**) and measuring directors' industry embeddedness, expertise and interlocks (see Haynes and Hillman, **2010**), may begin to address challenges at the committee level. Archival measures of CEO (see Finkelstein, **1992**) and director power (see Westphal and Zajac, **1995**) may also be beneficial for examining committee member power. However, if scholars are going to better understand power in committees, or how CEO power may or may not overcome a powerful committee chair, we recommend the development of new scales and interview methodologies. We endorse an updated version of scales developed by Pearce and Zahra (**1991**) that focus on ethics, process, style and effectiveness of committees. Scholars would then interview committee members during their available time when the board is meeting.

A more comprehensive view of independence

The predominance of independent boards post-SOX may have made research examining board independence somewhat obsolete (Joseph et al., **2014**). However, it has also opened up avenues for new research examining different director characteristics (Krause et al., **2013**). Indeed, the role of independence in committee composition and function is a rich topic for employing more refined predictors of committee membership with an emphasis on professional affiliations and social connections.

We found that 34 studies operationalized independence in our review, yet only 13 studies used samples that spanned pre- and post-SOX enactment in 2002, and only four studies used samples solely after SOX. Studies using samples prior to SOX often applied simpler measures of independence, such as no relationship with management (e.g., Callahan et al., **2003**) or the majority of directors on the committee having not been employed by the firm (e.g., Krishnan, **2005**). For research utilizing samples partially or fully after SOX, we see greater consideration of all types of prior and current relationships and affiliations. Bruynseels and Cardinaels (**2013**), for instance, considered social network ties between audit committee members and the CEO, finding that such ties influence the firm's financial reporting behaviour, while Hwang and Kim (**2009**) utilized an extensive array of possible social linkages between audit committee members and CEOs in a pre- and post-SOX sample, finding that CEOs receive larger bonuses when audit committees, despite being conventionally independent, are socially linked.

Future research that more extensively captures committee members' expertise and histories, with an emphasis on past personal and professional relationships, offers the opportunity to bridge social networking and social exchange theories with agency theory to offer fresh, wide-ranging insights regarding committee members meeting their fiduciary duties. Additionally, committee members' alignment with the current CEO may also influence their execution of fiduciary duties. Prior research offers evidence that directors without any formal ties to the firm may refrain from independent decision making due to social and other relational ties with the CEO (Westphal and Graebner, **2010**). We recommend future studies that consider the breadth of social dependence and how various ties and

connections (e.g., joint membership in clubs and associations, graduation from the same university cohort) influence a committee's ability to perform its duties.

We also encourage a far greater examination of board member longevity and independence. An examination of interdependence, in which directors are conventionally independent but began serving as director after the CEO started in his or her position (see Dalton et al., **1998**), may improve scholarly understanding of whether CEOs are able to choose more sympathetic directors and how those directors influence committee outcomes. Alternatively, long-serving board members may have a strong familiarity with firm strategies and operations or may have developed close relationships with firm executives and other board members. Future studies examining whether committee member longevity and ability to act independently may help scholars resolve previous ambiguous findings, such as those associated with the relationship of committee independence and CEO compensation (e.g., Faulkender and Yang, **2010**).

Only a handful of studies consider the effects of ownership among committee members on committee composition and outcomes, with research largely centred on blockholders on committees (e.g., Bebchuk et al., **2010**; Callaghan et al., **2004**; Yermack, **1997**). Future research could draw from power theories to explore whether directors with greater equity ownership are more likely to gain influence on certain committees. For instance, a director who holds more equity may be more likely to become committee chair and, thus, control the agenda. Exploratory research may even reveal which committees are thought to be most powerful given which committee seats and chairs are held by powerful directors. Further, scholars may use research on equity among directors to explore whether the equity concentration of committee members may improve monitoring among audit committee members or enhance shareholder value creation through executive compensation. Such findings may build on research by Deutsch et al. (**2011**) who identified that stock options provided to directors are more effective in encouraging firm risk than those provided to CEOs. Finally, it may be beneficial to utilize prior research on the types of institutional investors and blockholders to explore whether differences in owner preferences influence committee outcomes. For instance, the existence of a transient institutional investor on the compensation committee may result in a significantly different executive compensation arrangement than one in which a dedicated institutional investor was appointed to the committee. Such arrangements may result in greater principal-principal conflicts.

Methodological Improvements

Endogeneity

Hermalin and Weisbach (**2001**) asserted that since boards are developed by firms to address potential agency problems, studies examining boards suffer from endogeneity as the variables of interest are often endogenous. Additionally, since a director's membership on a committee is not random, the relationships between members' characteristics and various firm and board outcomes are likely to be endogenous. For example, prior research has examined how compensation committee members' diversity, pay, and social status (Belliveau et al., **1996**; Conyon and He, **2004**; Conyon and Peck, 2004) impact executive compensation. Yet, directors are appointed to the compensation committee based on their prior experiences and behaviours (e.g., Bilimoria and Piderit, **1994**; Kesner, **1988**). Not accounting for selection bias in committee membership or overlooking the impact of the full board could raise validity concerns about the effects of directors' characteristics on executive compensation. Similarly, scholars examining the formation of committees, especially less traditional ones, may face endogeneity concerns.

As shown in Tables 3 through 4, we have noted studies in which the research design accounted for endogeneity in its methodological approach. In our review, only 20 per cent of pre-2001 studies employed analytical specifications to deal with endogeneity; however, over 75 per cent of the post-2010 studies employed such methods. These findings suggest that methodological rigor today is more commonly employed by scholars and expected by leading journals. While finance scholars were the first to emphasize and address this issue, it is clear that such rigor is now considered essential in accounting and management research. Gupta and Wowak (2017), for example, utilized instrumental variables, Heckman selection models, and fixed-effects regression to address reverse causality and unobserved heterogeneity. Other scholars have used similar methods to validate that results have not been influenced by endogenous factors (e.g., Bruyneels and Cardinaels, 2013; Hoitash et al., 2009). It is imperative that scholars continue to utilize appropriate techniques to alleviate endogeneity concerns; however, we are encouraged by the increasing attention paid to methodological considerations of endogeneity.⁸

Measurement of committee independence

Research primarily operationalizes committee independence as either a continuous variable, measured as the percentage of independent committee members, or as a dichotomous variable set to 1 when a majority of members are independent (Aggarwal et al., 2011; Cohen et al., 2012) or there is an independent lead director (Cheng et al., 2010). Given changes in independence requirements following SOX (see Table 2), it is important to consider how independence is measured. Consistent with our previous recommendation for a more comprehensive view on independence, we offer four suggestions to scholars which would enable an examination of committee member independence in line with today's governance climate. First, for committees in which the traditional measure of independence can still be used, relationships should be explored using a proportional, rather than dichotomous, measure of independence. Second, alternative measures of social dependence, capturing an extensive array of connections, are needed to understand if committee members act independently. Third, the longevity of a committee member, both overall and in relationship to the CEO, should be used to consider whether the committee member is too bound to firm history or the CEO to act independently. Lastly, scholars are encouraged to develop more behaviourally-oriented measures of independence, including scales that apply survey-based methodologies.

Alternative sources of data collection

We have a limited understanding of how board committees function and this is mainly due to the exclusive reliance on archival methods for obtaining data on board committees. While we recognize that it is extremely difficult to achieve sufficient response rates or access when surveys or qualitative methodologies are employed, we reaffirm the previous call of Johnson et al. (2013) that scholars examining boards need to gain better access to executives and board members, since closer and more personal access is essential to understanding how board committees function. In particular, even limited observation of committee meetings could yield insights on how committee members interact with each other and with the broader board. There is likely to be considerable variation in the degree to which the full board is informed about the committee's work, and understanding how these interactions affect not only the committee, but also the board's knowledge and information, could be beneficial.

Conclusion

Board committee research has been a growing field. However, despite the increased attention from various disciplines, such as management, finance, and accounting, the literature on board committees has developed rather independently and with little integration. The purpose of this review was to aggregate existing board committee research, synthesize the main antecedents to committee formation and membership, and outline the key outcomes associated with board committees. Based on this review, we identified weaknesses and gaps in prior research that could be leveraged to generate new and exciting knowledge about board committees. From these findings, we proposed a series of recommendations for future research. We believe that greater focus on independence, committee members' human and social capital, committee diversity and power, and interactions between various committees could significantly enhance our understanding of board committees' role in corporate governance. We are hopeful that our review spurs new scholarship related to board committees, as this is where the real work is accomplished in boards.

Acknowledgements

We thank General Editor Don Siegel and four anonymous reviewers for their helpful comments on previous versions of the paper. All errors or oversights belong solely to the authors.

Notes

- 1 We limited our review to English common law countries because of their publicly-traded firms' extensive use of board committees and a legally-mandated focus on shareholder value maximization for public firms in these countries. Many other highly advanced economies, such as Japan and Germany, follow two-tier board structures that may provide a domain for future board committee research.
- 2 Changes introduced in 2011 require ASX 300 firms in Australia to have remuneration (i.e., compensation) committees. In general, the other English common law countries tend to have very similar governance rules on committees to the US, with public firms allowed to explain exceptions to investors and small firms exempted from enforcement.
- 3 Studies examining factors and variables impacting the formation and composition of board committees are grouped together as antecedents of board committees.
- 4 This is the first of several statements related to a study's effect size. As the results presented and discussed in some articles do not provide sufficient information to make clear practical effect size statements, this information is only provided for a subset of the studies in this review.
- 5 Studies focusing on the various results and effects associated with board committees' influence are grouped together as outcomes of board committees.
- 6 Sun and Cahan (2009) define compensation committee *quality* as members having greater shareholdings, being more senior and experienced, not being appointed by the current CEO, serving in a greater number of directorships, and not serving as CEOs at other firms.
- 7 Abnormal accruals is defined as the absolute value of discretionary accruals.
- 8 We thank an anonymous reviewer for his or her guidance regarding endogeneity in board committee research.

Appendix I. Journals Included in Literature Review Tables:

Abbreviation	Journal	Articles
--------------	---------	----------

	Accounting	
ABR	Accounting and Business Review	1
AJPT	Accounting: A Journal of Practice & Theory	4
JAE	Journal of Accounting and Economics	5
JAPP	Journal of Accounting and Public Policy	1
JAR	Journal of Accounting Research	4
JMAR	Journal of Management Accounting Research	2
TAR	The Accounting Review	26
	Total	43
	Finance	
FAJ	Financial Analysts Journal	1
FM	Financial Management	1
JCF	Journal of Corporate Finance	1
JFE	Journal of Financial Economics	25
JLE	The Journal of Law and Economics	1
JOF	Journal of Finance	10
RFS	Review of Financial Studies	3
	Total	42
	Management	
AMJ	Academy of Management Journal	10
AMR	Academy of Management Review	0
ASQ	Administrative Science Quarterly	7
B&S	Business and Society	1
CGIR	Corporate Governance: An International Review	9
IJOA	International Journal of Organizational Analysis	1
JBE	Journal of Business Ethics	5
JBR	Journal of Business Research	1
JBS	Journal of Business Strategy	1
JIBS	Journal of International Business Studies	0
JMI	Journal of Management Inquiry	2
JMS	Journal of Management Studies	3
JOM	Journal of Management	4
MD	Management Decision	1
MS	Management Science	4
OS	Organization Science	0
SMJ	Strategic Management Journal	8
	Total	57

References

- Abbott, L. J., Parker, S. and Peters, G. F. (2004). 'Audit committee characteristics and restatements'. *Auditing: A Journal of Practice & Theory*, **23**, 69– 87.
- Abbott, L. J., Parker, S., Peters, G. F. and Raghunandan, K. (2003). 'The association between audit committee characteristics and audit fees'. *Auditing: A Journal of Practice & Theory*, **22**, 17– 32.

- Abbott, L. J., Parker, S., Peters, G. F. and Rama, D. V. (2007). 'Corporate governance, audit quality, and the Sarbanes-Oxley Act: Evidence from internal audit outsourcing'. *The Accounting Review*, **82**, 803– 35.
- Adams, R. B., Rangunathan, V. and Tumarkin, R. (2015). *Death by Committee? An Analysis of Delegation in Corporate Boards*. An Analysis of Delegation in Corporate Boards (30 October 2015).
- Adut, D., Cready, W. H. and Lopez, T. J. (2003). 'Restructuring charges and CEO cash compensation: A reexamination'. *The Accounting Review*, **78**, 169– 92.
- Aggarwal, R., Erel, I., Ferreira, M. and Matos, P. (2011). 'Does governance travel around the world? Evidence from institutional investors'. *Journal of Financial Economics*, **100**, 154– 81.
- Aggarwal, R., Erel, I., Stulz, R. and Williamson, R. (2008). 'Differences in governance practices between US and foreign firms: Measurement, causes, and consequences'. *The Review of Financial Studies*, **22**, 3131– 69.
- Agoglia, C. P., Doupnik, T. S. and Tsakumis, G. T. (2011). 'Principles-based versus rules-based accounting standards: The influence of standard precision and audit committee strength on financial reporting decisions'. *The Accounting Review*, **86**, 747– 77.
- Aguilera, R. V. (2005). 'Corporate governance and director accountability: An institutional comparative perspective'. *British Journal of Management*, **16**, S39– S53.
- Aguilera, R. V., Judge, W. Q. and Terjesen, S. A. (2018). 'Corporate governance deviance'. *Academy of Management Review*, **43**, 87– 109.
- Anderson, R. C. and Reeb, D. M. (2004). 'Board composition: Balancing family influence in S&P 500 firms'. *Administrative Science Quarterly*, **49**, 209– 37.
- Anderson, R. C., Mansi, S. A. and Reeb, D. M. (2004). 'Board characteristics, accounting report integrity, and the cost of debt'. *Journal of Accounting and Economics*, **37**, 315– 42.
- Armstrong, C. S., Core, J. E. and Guay, W. R. (2014). 'Do independent directors cause improvements in firm transparency?'. *Journal of Financial Economics*, **113**, 383– 403.
- Arthaud-Day, M. L., Certo, S. T., Dalton, C. M. and Dalton, D. R. (2006). 'A changing of the guard: Executive and director turnover following corporate financial restatements'. *Academy of Management Journal*, **49**, 1119– 36.
- Ashforth, B. (2000). *Role Transitions in Organizational Life. An Identity-Based Perspective*. New York: Routledge.
- Badolato, P. G., Donelson, D. C. and Ege, M. (2014). 'Audit committee financial expertise and earnings management: The role of status'. *Journal of Accounting and Economics*, **58**, 208– 30.
- Beasley, M. S. (1996). 'An empirical analysis of the relation between the board of director composition and financial statement fraud'. *The Accounting Review*, **71**, 443– 65.
- Bebchuk, L. A., Grinstein, Y. and Peyer, U. (2010). 'Lucky CEOs and lucky directors'. *The Journal of Finance*, **65**, 2363– 401.
- Beck, M. J. and Mauldin, E. G. (2014). 'Who's really in charge? Audit committee versus CFO power and audit fees'. *The Accounting Review*, **89**, 2057– 85.
- Becker, G. S. (1994). 'Human capital revisited'. In Becker, G. S. (Ed.), *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*, 3rd edition. Chicago, IL: The University of Chicago Press, 15– 28.
- Bedard, J., Chtourou, S. M. and Courteau, L. (2004). 'The effect of audit committee expertise, independence, and activity on aggressive earnings management'. *Auditing: A Journal of Practice & Theory*, **23**, 13– 35.
- Beekun, R. I., Stedham, Y. and Young, G. J. (1998). 'Board characteristics, managerial controls and corporate strategy: A study of US hospitals'. *Journal of Management*, **24**, 3– 19.
- Belliveau, M. A., O'Reilly, C. A. III and Wade, J. B. (1996). 'Social capital at the top: Effects of social similarity and status on CEO compensation'. *Academy of Management Journal*, **39**, 1568– 93.

- Berrone, P. and Gomez-Mejia, L. R. (2009). 'Environmental performance and executive compensation: An integrated agency-institutional perspective'. *Academy of Management Journal*, **52**, 103– 26.
- Bilimoria, D. and Piderit, S. K. (1994). 'Board committee membership: Effects of sex-based bias'. *Academy of Management Journal*, **37**, 1453– 77.
- Bizjak, J. M., Lemmon, M. L. and Naveen, L. (2008). 'Does the use of peer groups contribute to higher pay and less efficient compensation?'. *Journal of Financial Economics*, **90**, 152– 68.
- Boivie, S., Bednar, M. K., Aguilera, R. V. and Andrus, J. L. (2016). 'Are boards designed to fail? The implausibility of effective board monitoring'. *Academy of Management Annals*, **10**, 319– 407.
- Boivie, S., Graffin, S. D. and Pollock, T. G. (2012). 'Time for me to fly: Predicting director exit at large firms'. *Academy of Management Journal*, **55**, 1334– 59.
- Brandes, P., Dharwadkar, R. and Suh, S. (2016). 'I know something you don't know!: The role of linking pin directors in monitoring and incentive alignment'. *Strategic Management Journal*, **37**, 964– 81.
- Brochet, F. and Srinivasan, S. (2014). 'Accountability of independent directors: Evidence from firms subject to securities litigation'. *Journal of Financial Economics*, **111**, 430– 49.
- Bruynseels, L. and Cardinaels, E. (2013). 'The audit committee: Management watchdog or personal friend of the CEO?'. *The Accounting Review*, **89**, 113– 45.
- Cai, J., Garner, J. L. and Walkling, R. A. (2009). 'Electing directors'. *The Journal of Finance*, **64**, 2389– 421.
- Calkoen, W. E. (2017). *The Corporate Governance Review*. London: Law Business Research, Limited.
- Callaghan, S. R., Saly, P. J. and Subramaniam, C. (2004). 'The timing of option repricing'. *The Journal of Finance*, **59**, 1651– 76.
- Callahan, W. T., Millar, J. A. and Schulman, C. (2003). 'An analysis of the effect of management participation in director selection on the long-term performance of the firm'. *Journal of Corporate Finance*, **9**, 169– 81.
- Cao, Y., Dhaliwal, D., Li, Z. and Yang, Y. G. (2014). 'Are all independent directors equally informed? Evidence based on their trading returns and social networks'. *Management Science*, **61**, 795– 813.
- Capezio, A., Shields, J. and O'Donnell, M. (2011). 'Too good to be true: Board structural independence as a moderator of CEO pay-for-firm-performance'. *Journal of Management Studies*, **48**, 487– 513.
- Carcello, J. V. and Neal, T. L. (2000). 'Audit committee composition and auditor reporting'. *The Accounting Review*, **75**, 453– 67.
- Carcello, J. V. and Neal, T. L. (2003). 'Audit committee characteristics and auditor dismissals following "new" going-concern reports'. *The Accounting Review*, **78**, 95– 117.
- Carcello, J. V., Hermanson, D. R. and Ye, Z. (2011). 'Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions'. *Auditing: A Journal of Practice & Theory*, **30**, 1– 31.
- Carter, D. A., D'Souza, F., Simkins, B. J. and Simpson, W. G. (2010). 'The gender and ethnic diversity of US boards and board committees and firm financial performance'. *Corporate Governance: An International Review*, **18**, 396– 414.
- Carter, D. A., Simkins, B. J. and Simpson, W. G. (2003). 'Corporate governance, board diversity, and firm value'. *Financial Review*, **38**, 33– 53.
- Chan, K. C. and Li, J. (2008). 'Audit committee and firm value: Evidence on outside top executives as expert-independent directors'. *Corporate Governance: An International Review*, **16**, 16– 31.
- Chan, L. H., Chen, K. C., Chen, T.-Y. and Yu, Y. (2012). 'The effects of firm-initiated clawback provisions on earnings quality and auditor behavior'. *Journal of Accounting and Economics*, **54**, 180– 96.
- Chatman, J. A., Polzer, J. T., Barsade, S. G. and Neale, M. A. (1998). 'Being different yet feeling similar: The influence of demographic composition and organizational culture on work processes and outcomes'. *Administrative Science Quarterly*, **43**, 749– 80.

- Chen, K. D. and Wu, A. (2016). *The Structure of Board Committees*. Boston, MA: Harvard Business School.
- Cheng, S. (2004). 'R&D expenditures and CEO compensation'. *The Accounting Review*, **79**, 305– 28.
- Cheng, C. A., Huang, H. H., Li, Y. and Lobo, G. (2010). 'Institutional monitoring through shareholder litigation'. *Journal of Financial Economics*, **95**, 356– 83.
- Chhaochharia, V. and Grinstein, Y. (2007). 'Corporate governance and firm value: The impact of the 2002 governance rules'. *The Journal of Finance*, **62**, 1789– 825.
- Chhaochharia, V. and Grinstein, Y. (2009). 'CEO compensation and board structure'. *The Journal of Finance*, **64**, 231– 61.
- Chin, M. and Semadeni, M. (2017). 'CEO political ideologies and pay egalitarianism within top management teams'. *Strategic Management Journal*, **38**, 1608– 25.
- Chowdhury, S. D. and Wang, E. Z. (2009). 'Institutional activism types and CEO compensation: A time-series analysis of large Canadian corporations'. *Journal of Management*, **35**, 5– 36.
- Cohen, L., Frazzini, A. and Malloy, C. J. (2012). 'Hiring cheerleaders: Board appointments of "independent" directors'. *Management Science*, **58**, 1039– 58.
- Cohen, J. R., Hoitash, U., Krishnamoorthy, G. and Wright, A. M. (2013). 'The effect of audit committee industry expertise on monitoring the financial reporting process'. *The Accounting Review*, **89**, 243– 73.
- Conyon, M. J. and He, L. (2004). 'Compensation committees and CEO compensation incentives in US entrepreneurial firms'. *Journal of Management Accounting Research*, **16**, 35– 56.
- Conyon, M. J. and Mallin, C. (1997). 'Women in the boardroom: Evidence from large UK companies'. *Corporate Governance: An International Review*, **5**, 112– 7.
- Conyon, M. J. and Peck, S. I. (1998). 'Board control, remuneration committees, and top management compensation'. *Academy of Management Journal*, **41**, 146– 57.
- Cyert, R. M., Kang, S.-H. and Kumar, P. (2002). 'Corporate governance, takeovers, and top-management compensation: Theory and evidence'. *Management Science*, **48**, 453– 69.
- Daily, C. M. (1996). 'Governance patterns in bankruptcy reorganizations'. *Strategic Management Journal*, **17**, 355– 75.
- Daily, C. M., Johnson, J. L., Ellstrand, A. E. and Dalton, D. R. (1998). 'Compensation committee composition as a determinant of CEO compensation'. *Academy of Management Journal*, **41**, 209– 20.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E. and Johnson, J. L. (1998). 'Meta-analytic reviews of board composition, leadership structure, and financial performance'. *Strategic Management Journal*, **19**, 269– 90.
- Dalton, D. R., Daily, C. M., Certo, S. T. and Roengpitya, R. (2003). 'Meta-analyses of financial performance and equity: Fusion or confusion?'. *Academy of Management Journal*, **46**, 13– 26.
- Davidson, W. N. III and Worrell, D. L. (2001). 'Regulatory pressure and environmental management infrastructure and practices'. *Business & Society*, **40**, 315– 42.
- Davidson, W. N. III, Xie, B. and Xu, W. (2004). 'Market reaction to voluntary announcements of audit committee appointments: The effect of financial expertise'. *Journal of Accounting and Public Policy*, **23**, 279– 93.
- DeFond, M. L. and Jiambalvo, J. (1991). 'Incidence and circumstances of accounting errors'. *The Accounting Review*, **66**, 643– 55.
- DeFond, M. L., Hann, R. N. and Hu, X. (2005). 'Does the market value financial expertise on audit committees of boards of directors?'. *Journal of Accounting Research*, **43**, 153– 93.
- Deutsch, Y., Keil, T. and Laamanen, T. (2011). 'A dual agency view of board compensation: The joint effects of outside director and CEO stock options on firm risk'. *Strategic Management Journal*, **32**, 212– 27.

- Dey, A. (2008). 'Corporate governance and agency conflicts'. *Journal of Accounting Research*, **46**, 1143– 81.
- DiMaggio, P. and Powell, W. W. (1983). 'The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields'. *American Sociological Review*, **48**, 147– 60.
- Donaldson, L. and Davis, J. H. (1994). 'Boards and company performance—research challenges the conventional wisdom'. *Corporate Governance: An International Review*, **2**, 151– 60.
- Duchin, R., Matsusaka, J. G. and Ozbas, O. (2010). 'When are outside directors effective?'. *Journal of Financial Economics*, **96**, 195– 214.
- Eccles, R. G., Ioannou, I. and Serafeim, G. (2014). 'The impact of corporate sustainability on organizational processes and performance'. *Management Science*, **60**, 2835– 57.
- Eminet, A. and Guedri, Z. (2010). 'The role of nominating committees and director reputation in shaping the labor market for directors: An empirical assessment'. *Corporate Governance: An International Review*, **18**, 557– 74.
- Engel, E., Hayes, R. M. and Wang, X. (2010). 'Audit committee compensation and the demand for monitoring of the financial reporting process'. *Journal of Accounting and Economics*, **49**, 136– 54.
- Erhardt, N. L., Werbel, J. D. and Shrader, C. B. (2003). 'Board of director diversity and firm financial performance'. *Corporate Governance: An International Review*, **11**, 102– 11.
- Erkens, D. H. and Bonner, S. E. (2012). 'The role of firm status in appointments of accounting financial experts to audit committees'. *The Accounting Review*, **88**, 107– 36.
- Ernst and Young Center for Board Matters. (2018). *A Fresh Look at Board Committees*. Available at [https://www.ey.com/Publication/vwLUAssets/ey-cbm-a-fresh-look-at-board-committees/\\$FILE/ey-cbm-a-fresh-look-at-board-committees.pdf](https://www.ey.com/Publication/vwLUAssets/ey-cbm-a-fresh-look-at-board-committees/$FILE/ey-cbm-a-fresh-look-at-board-committees.pdf) (accessed 17 March 2019).
- Ertimur, Y., Ferri, F. and Maber, D. A. (2012). 'Reputation penalties for poor monitoring of executive pay: Evidence from option backdating'. *Journal of Financial Economics*, **104**, 118– 44.
- Ezzamel, M. and Watson, R. (2002). 'Pay comparability across and within UK boards: An empirical analysis of the cash pay awards to CEOs and other board members'. *Journal of Management Studies*, **39**, 207– 32.
- Falato, A., Kadyrzhanova, D. and Lel, U. (2014). 'Distracted directors: Does board busyness hurt shareholder value?'. *Journal of Financial Economics*, **113**, 404– 26.
- Faleye, O. (2007). 'Classified boards, firm value, and managerial entrenchment'. *Journal of Financial Economics*, **83**, 501– 29.
- Faleye, O., Hoitash, R. and Hoitash, U. (2011). 'The costs of intense board monitoring'. *Journal of Financial Economics*, **101**, 160– 81.
- Fama, E. F. and Jensen, M. C. (1983). 'Separation of ownership and control'. *The Journal of Law and Economics*, **26**, 301– 25.
- Farber, D. B. (2005). 'Restoring trust after fraud: Does corporate governance matter?'. *The Accounting Review*, **80**, 539– 61.
- Faulkender, M. and Yang, J. (2010). 'Inside the black box: The role and composition of compensation peer groups'. *Journal of Financial Economics*, **96**, 257– 70.
- Felo, A. J. (2001). 'Ethics programs, board involvement, and potential conflicts of interest in corporate governance'. *Journal of Business Ethics*, **32**, 205– 18.
- Ferrell, A., Liang, H. and Renneboog, L. (2016). 'Socially responsible firms'. *Journal of Financial Economics*, **122**, 585– 606.
- Ferris, S. P., Jagannathan, M. and Pritchard, A. C. (2003). 'Too busy to mind the business? Monitoring by directors with multiple board appointments'. *The Journal of Finance*, **58**, 1087– 111.
- Fich, E. M. and Shivdasani, A. (2007). 'Financial fraud, director reputation, and shareholder wealth'. *Journal of Financial Economics*, **86**, 306– 36.

- Fich, E. M., Cai, J. and Tran, A. L. (2011). 'Stock option grants to target CEOs during private merger negotiations'. *Journal of Financial Economics*, **101**, 413– 30.
- Fich, E. M., Starks, L. T. and Yore, A. S. (2014). 'CEO deal-making activities and compensation'. *Journal of Financial Economics*, **114**, 471– 92.
- Field, L., Lowry, M. and Mkrtchyan, A. (2013). 'Are busy boards detrimental?'. *Journal of Financial Economics*, **109**, 63– 82.
- Finkelstein, S. (1992). 'Power in top management teams: Dimensions, measurement, and validation'. *Academy of Management Journal*, **35**, 505– 38.
- Focke, F., Maug, E. and Niessen-Ruenzi, A. (2017). 'The impact of firm prestige on executive compensation'. *Journal of Financial Economics*, **123**, 313– 36.
- Fracassi, C. and Tate, G. (2012). 'External networking and internal firm governance'. *The Journal of Finance*, **67**, 153– 94.
- Gaynor, L. M., McDaniel, L. S. and Neal, T. L. (2006). 'The effects of joint provision and disclosure of nonaudit services on audit committee members' decisions and investors' preferences'. *The Accounting Review*, **81**, 873– 9.
- Gerety, M., Hoi, C. K. and Robin, A. (2001). 'Do shareholders benefit from the adoption of incentive pay for directors?'. *Financial Management*, **30**, 45– 61.
- Gomulya, D. and Boeker, W. (2016). 'Reassessing board member allegiance: CEO replacement following financial misconduct'. *Strategic Management Journal*, **37**, 1898– 918.
- Goodstein, J., Gautam, K. and Boeker, W. (1994). 'The effects of board size and diversity on strategic change'. *Strategic Management Journal*, **15**, 241– 50.
- Gore, A. K., Matsunaga, S. and Yeung, P. E. (2011). 'The role of technical expertise in firm governance structure: Evidence from chief financial officer contractual incentives'. *Strategic Management Journal*, **32**, 771– 86.
- Grinstein, Y. and Hribar, P. (2004). 'CEO compensation and incentives: Evidence from M&A bonuses'. *Journal of Financial Economics*, **73**, 119– 43.
- Grove, H., Patelli, L., Victoravich, L. M. and Xu, P. T. (2011). 'Corporate governance and performance in the wake of the financial crisis: Evidence from US commercial banks'. *Corporate Governance: An International Review*, **19**, 418– 36.
- Del Guercio, D., Seery, L. and Woidtke, T. (2008). 'Do boards pay attention when institutional investor activists "just vote no"?'. *Journal of Financial Economics*, **90**, 84– 103.
- Guo, L. and Masulis, R. W. (2015). 'Board structure and monitoring: New evidence from CEO turnovers'. *Review of Financial Studies*, **28**, 2770– 811.
- Gupta, A. and Wowak, A. J. (2017). 'The elephant (or donkey) in the boardroom how board political ideology affects CEO pay'. *Administrative Science Quarterly*, **62**, 1– 30.
- Guthrie, K., Sokolowsky, J. and Wan, K. M. (2012). 'CEO compensation and board structure revisited'. *The Journal of Finance*, **67**, 1149– 68.
- Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A. and Davison, R. B. (2009). 'Taking stock of what we know about mergers and acquisitions: A review and research agenda'. *Journal of Management*, **35**, 469– 502.
- Hambrick, D. C., Misangyi, V. F. and Park, C. A. (2015). 'The quad model for identifying a corporate director's potential for effective monitoring: Toward a new theory of board sufficiency'. *Academy of Management Review*, **40**, 323– 44.
- Hart, C. M. and Van Vugt, M. (2006). 'From fault line to group fission: Understanding membership changes in small groups'. *Personality and Social Psychology Bulletin*, **32**, 392– 404.
- Haynes, K. T. and Hillman, A. (2010). 'The effect of board capital and CEO power on strategic change'. *Strategic Management Journal*, **31**, 1145– 63.

- Heilman, M. E., Block, C. J., Martell, R. F. and Simon, M. C. (1989). 'Has anything changed? Current characterizations of men, women, and managers'. *Journal of Applied Psychology*, **74**, 935– 42.
- Henke, J. W. Jr (1986). 'Involving the board of directors in strategic planning'. *Journal of Business Strategy*, **7**, 87– 95.
- Hermalin, B. E. and Weisbach, M. S. (2001). *Boards of directors as an endogenously determined institution: A survey of the economic literature*. National Bureau of Economic Research. Available at <https://0-www-nber-org.libus.csd.mu.edu/papers/w8161> (accessed 15 February 2019).
- Hillman, A. J. and Dalziel, T. (2003). 'Boards of directors and firm performance: Integrating agency and resource dependence perspectives'. *Academy of Management Review*, **28**, 383– 96.
- Hillman, A. J., Cannella, A. A. Jr and Paetzold, R. L. (2000). 'The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change'. *Journal of Management Studies*, **37**, 235– 56.
- Hillman, A. J., Cannella, A. A. Jr and Harris, I. C. (2002). 'Women and racial minorities in the boardroom: How do directors differ?'. *Journal of Management*, **28**, 747– 63.
- Hillman, A. J., Shropshire, C. and Cannella, A. A. Jr (2007). 'Organizational predictors of women on corporate boards'. *Academy of Management Journal*, **50**, 941– 52.
- Hillman, A. J., Nicholson, G. and Shropshire, C. (2008). 'Directors' multiple identities, identification, and board monitoring and resource provision'. *Organization Science*, **19**, 441– 56.
- Hoechle, D., Schmid, M., Walter, I. and Yermack, D. (2012). 'How much of the diversification discount can be explained by poor corporate governance?'. *Journal of Financial Economics*, **103**, 41– 60.
- Hoitash, U., Hoitash, R. and Bedard, J. C. (2009). 'Corporate governance and internal control over financial reporting: A comparison of regulatory regimes'. *The Accounting Review*, **84**, 839– 67.
- Hopkins, W. E. and Hopkins, S. A. (2002). 'Effects of cultural recomposition on group interaction processes'. *Academy of Management Review*, **27**, 541– 53.
- Horwitz, S. K. and Horwitz, I. B. (2007). 'The effects of team diversity on team outcomes: A meta-analytic review of team demography'. *Journal of Management*, **33**, 987– 1015.
- Huang, H., Lobo, G. J. and Zhou, J. (2009). 'Determinants and accounting consequences of forming a governance committee: Evidence from the United States'. *Corporate Governance: An International Review*, **17**, 710– 27.
- Hwang, B.-H. and Kim, S. (2009). 'It pays to have friends'. *Journal of Financial Economics*, **93**, 138– 58.
- Jensen, M. C. and Meckling, W. H. (1976). 'Theory of the firm: Managerial behavior, agency costs and ownership structure'. *Journal of Financial Economics*, **3**, 305– 60.
- Johnson, M. D., Morgeson, F. P., Ilgen, D. R., Meyer, C. J. and Lloyd, J. W. (2006). 'Multiple professional identities: Examining differences in identification across work-related targets'. *Journal of Applied Psychology*, **91**, 498– 506.
- Johnson, S. G., Schnatterly, K. and Hill, A. D. (2013). 'Board composition beyond independence: Social capital, human capital, and demographics'. *Journal of Management*, **39**, 232– 62.
- Jones, C. D., Li, M. and Cannella, A. A. Jr (2015). 'Responses to a governance mandate: The adoption of governance committees by NYSE firms'. *Journal of Management*, **41**, 1873– 97.
- Joseph, J., Ocasio, W. and McDonnell, M. H. (2014). 'The structural elaboration of board independence: Executive power, institutional logics, and the adoption of CEO-only board structures in US corporate governance'. *Academy of Management Journal*, **57**, 1834– 58.
- Kalbers, L. P. and Fogarty, T. J. (1998). 'Organizational and economic explanations of audit committee oversight'. *Journal of Managerial Issues*, **10**, 129– 50.
- Kang, E. (2008). 'Director interlocks and spillover effects of reputational penalties from financial reporting fraud'. *Academy of Management Journal*, **51**, 537– 55.

- Karamanou, I. and Vafeas, N. (2005). 'The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis'. *Journal of Accounting Research*, **43**, 453– 86.
- Kesner, I. F. (1988). 'Directors' characteristics and committee membership: An investigation of type, occupation, tenure, and gender'. *Academy of Management Journal*, **31**, 66– 84.
- Keune, M. B. and Johnstone, K. M. (2012). 'Materiality judgments and the resolution of detected misstatements: The role of managers, auditors, and audit committees'. *The Accounting Review*, **87**, 1641– 77.
- Klein, A. (1998). 'Firm performance and board committee structure'. *The Journal of Law and Economics*, **41**, 275– 304.
- Klein, A. (2002a). 'Audit committee, board of director characteristics, and earnings management'. *Journal of Accounting and Economics*, **33**, 375– 400.
- Klein, A. (2002b). 'Economic determinants of audit committee independence'. *The Accounting Review*, **77**, 435– 52.
- Knapp, M. C. (1987). 'An empirical study of audit committee support for auditors involved in technical disputes with client management'. *The Accounting Review*, **62**, 578– 88.
- Krause, R., Semadeni, M. and Cannella, A. A. Jr (2013). 'External COO/presidents as expert directors: A new look at the service role of boards'. *Strategic Management Journal*, **34**, 1628– 41.
- Krishnan, J. (2005). 'Audit committee quality and internal control: An empirical analysis'. *The Accounting Review*, **80**, 649– 75.
- Krishnan, J., Wen, Y. and Zhao, W. (2011). 'Legal expertise on corporate audit committees and financial reporting quality'. *The Accounting Review*, **86**, 2099– 130.
- Laing, D. and Weir, C. M. (1999). 'Governance structures, size and corporate performance in UK firms'. *Management Decision*, **37**, 457– 64.
- Larcker, D. F., Richardson, S. A. and Tuna, I. (2007). 'Corporate governance, accounting outcomes, and organizational performance'. *The Accounting Review*, **82**, 963– 1008.
- Lau, D. C. and Murnighan, J. K. (1998). 'Demographic diversity and faultlines: The compositional dynamics of organizational groups'. *Academy of Management Review*, **23**, 325– 40.
- Laux, C. and Laux, V. (2009). 'Board committees, CEO compensation, and earnings management'. *The Accounting Review*, **84**, 869– 91.
- Lawrence, P. R. and Lorsch, J. W. (1967). 'Differentiation and integration in complex organizations'. *Administrative Science Quarterly*, **12**, 1– 47.
- Leventis, S., Dimitropoulos, P. and Owusu-Ansah, S. (2013). 'Corporate governance and accounting conservatism: Evidence from the banking industry'. *Corporate Governance: An International Review*, **21**, 264– 86.
- Liao, C. H. and Hsu, A. W. H. (2013). 'Common membership and effective corporate governance: Evidence from audit and compensation committees'. *Corporate Governance: An International Review*, **21**, 79– 92.
- Lin, N. (2017). 'Building a network theory of social capital'. In N. Lin, K. Cook and R. S. Burt (Eds), *Social Capital: Theory and Research*. New York: Routledge, 3– 28.
- Linck, J. S., Netter, J. M. and Yang, T. (2008). 'The determinants of board structure'. *Journal of Financial Economics*, **87**, 308– 28.
- Magilke, M. J., Mayhew, B. W. and Pike, J. E. (2009). 'Are independent audit committee members objective? Experimental evidence'. *The Accounting Review*, **84**, 1959– 81.
- Main, B. G. and Johnston, J. (1993). 'Remuneration committees and corporate governance'. *Accounting and Business Research*, **23**, 351– 62.
- Masulis, R. W. and Mobbs, S. (2014). 'Independent director incentives: Where do talented directors spend their limited time and energy?'. *Journal of Financial Economics*, **111**, 406– 29.

- Masulis, R. W., Wang, C. and Xie, F. (2012). 'Globalizing the boardroom-The effects of foreign directors on corporate governance and firm performance'. *Journal of Accounting and Economics*, **53**, 527– 54.
- McKendall, M., Sánchez, C. and Sicilian, P. (1999). 'Corporate governance and corporate illegality: The effects of board structure on environmental violations'. *The International Journal of Organizational Analysis*, **7**, 201– 23.
- Misangyi, V. F. and Acharya, A. G. (2014). 'Substitutes or complements? A configurational examination of corporate governance mechanisms'. *Academy of Management Journal*, **57**, 1681– 705.
- Naiker, V. and Sharma, D. S. (2009). 'Former audit partners on the audit committee and internal control deficiencies'. *The Accounting Review*, **84**, 559– 87.
- Naiker, V., Sharma, D. S. and Sharma, V. D. (2012). 'Do former audit firm partners on audit committees procure greater nonaudit services from the auditor?'. *The Accounting Review*, **88**, 297– 326.
- Ndofor, H. A., Wesley, C. and Priem, R. L. (2015). 'Providing CEOs with opportunities to cheat: The effects of complexity-based information asymmetries on financial reporting fraud'. *Journal of Management*, **41**, 1774– 97.
- Ng, T. B.-P. and Tan, H.-T. (2003). 'Effects of authoritative guidance availability and audit committee effectiveness on auditors' judgments in an auditor-client negotiation context'. *The Accounting Review*, **78**, 801– 18.
- Nguyen, B. D. and Nielsen, K. M. (2010). 'The value of independent directors: Evidence from sudden deaths'. *Journal of Financial Economics*, **98**, 550– 67.
- O'Reilly, C. A. III, Main, B. G. and Crystal, G. S. (1988). 'CEO compensation as tournament and social comparison: A tale of two theories'. *Administrative Science Quarterly*, **33**, 257– 74.
- O'Reilly, C. A. III, Caldwell, D. F. and Barnett, W. P. (1989). 'Work group demography, social integration, and turnover'. *Administrative Science Quarterly*, **34**, 21– 37.
- Pearce, J. A. and Zahra, S. A. (1991). 'The relative power of CEOs and boards of directors: Associations with corporate performance'. *Strategic Management Journal*, **12**, 135– 53.
- Perry, T. and Zenner, M. (2001). 'Pay for performance? Government regulation and the structure of compensation contracts'. *Journal of Financial Economics*, **62**, 453– 88.
- Persons, O. S. (2006). 'The effects of fraud and lawsuit revelation on US executive turnover and compensation'. *Journal of Business Ethics*, **64**, 405– 19.
- Peters, G. F. and Romi, A. M. (2014). 'Does the voluntary adoption of corporate governance mechanisms improve environmental risk disclosures? Evidence from greenhouse gas emission accounting'. *Journal of Business Ethics*, **125**, 637– 66.
- Peterson, C. A. and Philpot, J. (2007). 'Women's roles on US Fortune 500 boards: Director expertise and committee memberships'. *Journal of Business Ethics*, **72**, 177– 96.
- Pfeffer, J. and Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.
- Platt, H. and Platt, M. (2012). 'Corporate board attributes and bankruptcy'. *Journal of Business Research*, **65**, 1139– 43.
- Premuroso, R. F. and Bhattacharya, S. (2007). 'Is there a relationship between firm performance, corporate governance, and a firm's decision to form a technology committee?'. *Corporate Governance: An International Review*, **15**, 1260– 76.
- Schnatterly, K. (2003). 'Increasing firm value through detection and prevention of white-collar crime'. *Strategic Management Journal*, **24**, 587– 614.
- Seabright, M. A., Levinthal, D. A. and Fichman, M. (1992). 'Role of individual attachments in the dissolution of interorganizational relationships'. *Academy of Management Journal*, **35**, 122– 60.
- Shivdasani, A. and Yermack, D. (1999). 'CEO involvement in the selection of new board members: An empirical analysis'. *The Journal of Finance*, **54**, 1829– 53.

- Srinivasan, S. (2005). 'Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members'. *Journal of Accounting Research*, **43**, 291– 334.
- Stathopoulos, K., Espenlaub, S. and Walker, M. (2004). 'UK executive compensation practices: New economy versus old economy'. *Journal of Management Accounting Research*, **16**, 57– 92.
- Stern, I. and Westphal, J. D. (2010). 'Stealthy footsteps to the boardroom: Executives' backgrounds, sophisticated interpersonal influence behavior, and board appointments'. *Administrative Science Quarterly*, **55**, 278– 319.
- Stevenson, W. B. and Radin, R. F. (2009). 'Social capital and social influence on the board of directors'. *Journal of Management Studies*, **46**, 16– 44.
- Suchman, M. C. (1995). 'Managing legitimacy: Strategic and institutional approaches'. *Academy of Management Review*, **20**, 571– 610.
- Sun, J. and Cahan, S. (2009). 'The effect of compensation committee quality on the association between CEO cash compensation and accounting performance'. *Corporate Governance: An International Review*, **17**, 193– 207.
- Tasheva, S. N. and Hillman, A. (in press). 'Integrating diversity at different levels: Multi-level human capital, social capital, and demographic diversity and their implications for team effectiveness'. *Academy of Management Review*, <https://doi-org.libus.csd.mu.edu/10.5465/amr.2015.0396>.
- Thatcher, S. M. and Patel, P. C. (2012). 'Group faultlines: A review, integration, and guide to future research'. *Journal of Management*, **38**, 969– 1009.
- Tosi, H. L. Jr and Gomez-Mejia, L. R. (1989). 'The decoupling of CEO pay and performance: An agency theory perspective'. *Administrative Science Quarterly*, **34**, 169– 89.
- Tricker, R. I. (2015). *Corporate Governance: Principles, Policies, and Practices*. Oxford: Oxford University Press.
- Uzun, H., Szewczyk, S. H. and Varma, R. (2004). 'Board composition and corporate fraud'. *Financial Analysts Journal*, **60**, 33– 43.
- Vafeas, N. (1999). 'Board meeting frequency and firm performance'. *Journal of Financial Economics*, **53**, 113– 42.
- Valenti, A. (2008). 'The Sarbanes-Oxley Act of 2002: Has it brought about changes in the boards of large US corporations?'. *Journal of Business Ethics*, **81**, 401– 12.
- Veltrop, D. B., Hermes, N., Postma, T. J. and Haan, J. (2015). 'A tale of two factions: Why and when factional demographic faultlines hurt board performance'. *Corporate Governance: An International Review*, **23**, 145– 60.
- Venkataraman, R., Weber, J. P. and Willenborg, M. (2008). 'Litigation risk, audit quality, and audit fees: Evidence from initial public offerings'. *The Accounting Review*, **83**, 1315– 45.
- Walls, J. L., Berrone, P. and Phan, P. H. (2012). 'Corporate governance and environmental performance: Is there really a link?'. *Strategic Management Journal*, **33**, 885– 913.
- Westphal, J. D. and Bednar, M. K. (2008). 'The pacification of institutional investors'. *Administrative Science Quarterly*, **53**, 29– 72.
- Westphal, J. D. and Graebner, M. E. (2010). 'A matter of appearances: How corporate leaders manage the impressions of financial analysts about the conduct of their boards'. *Academy of Management Journal*, **53**, 15– 44.
- Westphal, J. D. and Zajac, E. J. (1995). 'Who shall govern? CEO/board power, demographic similarity, and new director selection'. *Administrative Science Quarterly*, **40**, 60– 83.
- Withers, M. C., Hillman, A. J. and Cannella, A. A. Jr (2012). 'A multidisciplinary review of the director selection literature'. *Journal of Management*, **38**, 243– 77.

- Yermack, D. (1997). 'Good timing: CEO stock option awards and company news announcements'. *The Journal of Finance*, **52**, 449– 76.
- Young, M. N. and Buchholtz, A. K. (2002). 'Firm performance and CEO pay: Relational demography as a moderator'. *Journal of Managerial Issues*, **14**, 296– 313.
- Zhang, Y. (2008). 'Information asymmetry and the dismissal of newly appointed CEOs: An empirical investigation'. *Strategic Management Journal*, **29**, 859– 72.
- Zhu, D. H., Shen, W. and Hillman, A. J. (2014). 'Recategorization into the in-group: The appointment of demographically different new directors and their subsequent positions on corporate boards'. *Administrative Science Quarterly*, **59**, 240– 70.