In-Press at the Journal of Management

# The Background on Executive Background: An Integrative Review

Joanna T. Campbell University of Cincinnati

Hansin Bilgili Kansas State University

**Craig Crossland** University of Notre Dame

**Bina Ajay** Sam Houston State University

*Acknowledgements:* We are sincerely grateful to *JOM* Editor-in-Chief Brian Connelly and two anonymous reviewers for their thoughtful, constructive, and detailed guidance throughout the review process. We also thank Aaron Hill and Ryan Krause for their valuable feedback at earlier stages of our project.

*Corresponding author:* Joanna T. Campbell, 3354 Carl H. Lindner Hall, Cincinnati, OH 45221 *Email:* <u>campb2j8@ucmail.uc.edu</u>

Supplemental material for this article is available at <u>http://xxx.sagepub.com/supplemental</u>

### ABSTRACT

This study reviews several decades of research on the topic of executive background, defined here as the total of an executive's "experience, knowledge, and education." We consider work from both management and non-management sources, and from both macro and micro sources within management. Our review of 216 published empirical articles is structured around a series of widely-studied executive background characteristics and categories, including tenure, functional background, knowledge and education, outsider/insider status, other professional experiences, and experiences outside the workplace. This narrative review is underpinned and informed by an inductively-derived framework comprised of five key dimensions that represent distinct ways in which specific experiences can be conceptualized: visibility, timing, frequency, discreteness, and agency. We conclude our narrative review with a quantitative, bibliometric analysis illustrating some of the key patterns within the most recent work in this domain. Finally, we use the insights arising from our review to provide a set of theoretical and methodological recommendations for future work in this area.

*Keywords:* background; experience; strategic leadership; upper echelons; executive; CEO; TMT; characteristics; bibliometric

### THE BACKGROUND ON EXECUTIVE BACKGROUND: AN INTEGRATIVE REVIEW

"The many personal characteristics that helped contribute to good performance in these GM jobs were developed over the entire period of these people's lives: during their childhood years, through their formal education, and in their early careers. As such, the basic behavioral style of the typical GM had deep roots..." – *The General Managers* (Kotter, 1982)

Social science researchers from a range of disciplines have had an ongoing fascination with how key dimensions of an individual's background – their professional histories, career paths, educational experiences, and personal environments - relate to their actions and behavior (e.g., Pampel & Hunter, 2012; Sullivan & Baruch, 2009). In the field of management, this work has often focused on the experiences of senior corporate executives, who are widely seen as critical, causal influences on the direction of the firms they lead (Finkelstein, Hambrick, & Cannella, 2009; Powell, Lovallo, & Fox, 2011). More than sixty years ago, Dearborn and Simon (1958) explored the idea that executives would selectively perceive a complex stimulus through the lens of their own functional identities, speculating that "the more complex or ambiguous the stimulus, the more the perception is determined by what is already 'in' the subject" (1958: 140). Several decades later, Hambrick and Mason's (1984) foundational account of upper echelons theory – the idea that the firm is a reflection of its top managers, for good or for ill – highlighted a series of representative experiences that were predicted to influence executive behavior, such as formal education, events within the organization, and socioeconomic roots (Hambrick & Mason, 1984). At first gradually, and then rapidly over the last 10-15 years, we have seen a steady increase in work on the topic of executive background, with a proliferation of new background experiences, contexts, outcomes, and theories, which suggests that now is an excellent time to pause, reassess, and take stock of this literature.

Although there exists some complementarity across studies and there are obvious patterns within the myriad collection of findings, this rapid surge in new work has led to an increasingly fragmented literature, making it difficult to develop a clear, comprehensive understanding of how executive background matters and even what its most relevant dimensions are. Yet, this fragmentation also brings opportunity. The expansion of the executive background literature, and the associated greater breadth and scope of published work, has made it easier now to step back and identify both areas where we see plentiful amounts of work but also the important research questions and approaches that are being overlooked. To take a simple example, scholars have overwhelmingly focused on more observable, quantifiable background characteristics at the expense of more hidden, deep-level characteristics. While "looking for the keys under the lamppost" (cf. Capelle-Blancard & Monjon, 2012) is endemic in academic research, we believe that making this challenge explicit in this domain helps to open up opportunities for creative scholarship, especially in light of the findings from other fields on the differential impact of surface- and deep-level characteristics (e.g., Harrison, Price, Gavin, & Florey, 2002). We explore this issue and a range of other new opportunities in our review.

Prior related work in this area falls into three separate categories. First, several reviews have explored the strategic leadership literature more generally (e.g., Busenbark, Krause, Boivie, & Graffin, 2016; Neely, Lovelace, Cowen, & Hiller, 2020) or have focused on specific topics that are sometimes included in studies of executive background, such as Wowak, Gomez-Mejia, and Steinbach's (2017) review of executive rewards, Bromiley and Rau's (2016) review of the Chief Executive Officer (CEO)-Top Management Team (TMT) interface literature, Menz's (2012) review of functional members of the TMT (e.g., Chief Operating Officers (COOs), Chief Marketing Officers (CMOs)), and Darouichi, Kunisch, Menz, and Cannella's (2021) recent

review of the CEO tenure literature. Second, other authors have reviewed specific theories that are relevant to executive background research, such as Marquis and Tilcsik's (2013) and Simsek, Heavy, and Fox's (2015) reviews of imprinting theory and Li's (2013) review of social capital in leadership. Finally, several studies have provided meta-analytic evidence of the relationships between certain leader-level demographic characteristics and firm-level outcomes (Bell, Villado, Lukasik, Belau, & Briggs, 2011; Wang, Holmes, Oh, & Zhu, 2016).

Our review builds upon and extends this prior work in several ways. First, we believe that our review is the first to provide a comprehensive synthesis of the conceptual and empirical breadth of research on the multifaceted topic of executive background across the management and non-management (accounting and finance) literatures. Second, we develop and apply an inductively-derived framework comprised of five key conceptual dimensions—visibility, timing, frequency, discreteness, and agency-to summarize, interpret, and assess existing work. This framework allows us to both identify generalizable insights and suggest opportunities for future work across a wide range of sub-domains within this literature. Third, our unique scope and domain (executive background) allows us to take advantage of the cross-topic synergies offered by considering the full range of background experiences and theoretical underpinnings, while also avoiding the challenges of adopting too broad a span of interest. As such, we were able to identify multiple theoretical distinctions that cut across the different background characteristics examined in prior literature and propose future research that would more fully explore each of these distinctions. Finally, we complement our narrative review with a quantitative, bibliometric analysis of the most recent literature in our sample, which provides us with an additional lens through which to examine how management and non-management scholars are currently approaching this topic. Through this, we identify the theoretical and empirical disciplinary

divides that currently exist and propose future work on executive background that could benefit from greater integration. These complementary lenses help us illustrate how work on the topic of executive background can best be categorized, evaluated, and built upon.

# **STATE OF THE FIELD**

The scope of our narrative review covered empirical research published in high-impact academic journals in the accounting, finance, and management disciplines in the period between 1960 and 2020, inclusive. Consistent with standard practice in the strategic leadership literature, we treat "executives" in this review as comprising CEOs and non-CEO senior leaders who are instrumental to an organization's strategic decision-making process (often defined as those occupying positions of Vice President or above, including all executives with "Chief" in the title (Finkelstein et al., 2009)). We adopt a general definition of "background" taken from the Merriam-Webster dictionary: "the total of a person's experience, knowledge, and education."

We began with a series of keywords related to the topic and definition of executive background, which we selected based on recent and historical reviews of the strategic leadership and governance literature (e.g., Carpenter, Geletkanycz, & Sanders, 2004; Finkelstein et al., 2009; Hambrick & Wowak, 2021) and iterative discussion among the authors. See the Online Appendix and Table A1 for additional details. This first screen resulted in an initial sample of 528 articles. We downloaded the meta-data for these articles from Web of Science and examined their abstracts to exclude studies not directly related to the topic. We also excluded research that strictly focused on a) leaders of family firms or entrepreneurial ventures, and b) directors only, as well as any studies where the construct-specific keywords (e.g., tenure) were used as control variables only. This process narrowed our sample to a final total of 216 articles.

Table 1 provides an overview of our sample and the evolution of research on executive

background. Around four-fifths of the sample (178 articles) came from management outlets, while the remaining fifth (38 articles) came from non-management outlets. The most well-represented journals were: *Strategic Management Journal* (61 articles), *Academy of Management Journal* (31 articles), *Journal of Management* (21 articles), and *Journal of Financial Economics* (19 articles). As shown clearly in Table 1, scholarly interest in this topic has continued to grow over time and is on an upward trajectory (Figure A1 in the <u>Online Appendix</u> provides further detail on the trends). Research on executive background has steadily broadened in scope in terms of the range of predictor variables, outcome variables, and theories employed. In the most recent decade, we have witnessed a more rapid increase in the number and scope of articles, with a larger proportion of articles from non-management outlets.

-----

Insert Table 1 about here

\_\_\_\_\_

We now move to a comprehensive review of executive background research by characteristic. We start with the most widely-studied background characteristics – tenure, functional background, knowledge and education, and outsider status – and then discuss work examining executives' other assorted professional experiences, followed by executives' experiences in extra-work contexts. These characteristics and categories were derived from our in-depth literature review. The author team coded each article and its basic properties (e.g., independent variables, dependent variables, findings), including all the forms of executive background represented in each paper. Tenure (50% of articles), functional background (30%), knowledge and education (24%), and outsider status (17%) were the most-studied distinct dimensions of background, so we discuss each one of these individually in a separate section.

For the two miscellaneous categories, we combine our discussion of the remaining dimensions of executive background research. We conclude our review with a section focusing on the content and structure of the most recent executive background research (2017–2020).

In the sections below, we review the executive background literature with several goals in mind. First, we aim to provide a detailed summary of the core findings, debates, consistencies, and/or contradictions in the relevant sub-domain of the literature. Second, at the end of each section, we include an "implications and opportunities" section, where we contextualize the summarized literature and provide suggestions for future research. Finally, for each section, we also identify some of the underlying tendencies and patterns inherent in existing work that may not necessarily be obvious when reading individual studies. As part of this, we developed a broader conceptual framework, which emerged through the process of coding and synthesizing the studies in our sample. This guiding and organizing framework (see Figure 1) comprises five distinct dimensions, along with illustrative labels for the two ends and a mid-point of each dimension. These dimensions represent distinct ways in which a specific experience could be conceptualized. Visibility refers to the ease with which a given experience is observable by outsiders; *timing* refers to when an experience occurs; *frequency* refers to how often an experience occurs; discreteness refers to how many meaningful categories are relevant for a given experience; while *agency* refers to how much influence an individual has over whether to engage in a given experience.

\_\_\_\_\_

Insert Figure 1 about here

We believe that these conceptual dimensions are useful for uncovering some of the less-

obvious patterns within executive background research. For instance, if we map many of the background characteristics discussed in our review according to the dimension of visibility (see Figure 2), we see that there is a strong tendency for researchers to focus more on concrete, easily-observable, quantifiable characteristics, and focus less on deeper, hard-to-measure, more hidden characteristics. Thus, as appropriate, we return to the dimensions in this organizing framework and the ideas behind them through the course of our review.

-----

Insert Figure 2 about here

## Tenure

Tenure refers to the length of time that an individual has held a particular professional role. One striking finding emerging from our review was scholars' heavy, ongoing focus on executive tenure as a background variable of interest (see Darouichi et al., 2021). In our sample of 216 studies, around half (107) included tenure as either an independent variable, moderator, or dependent variable. Conceptually, much of the research on the effects of executive tenure has equated increasing tenure with cognitive and behavioral outcomes reflecting greater rigidity, inertia, risk-aversion, and perseverance.

For instance, Miller (1991) found that firms with long-tenured CEOs were less likely to match their strategies and structures with their environments; Finkelstein and Hambrick (1990) linked greater executive tenure with strategic persistence, strategic conformity, and performance conformity; while Guthrie, Grimm, and Smith (1991) showed that executives tended to have shorter tenures in deregulated (versus regulated) environments. Among other outcomes, greater executive tenure has been associated with: decreased product line experimentation (Miller & Shamsie, 2001), persistence with existing multimarket relationships (Stephan, Murmann, Boeker, & Goodstein, 2003), stronger commitment to the status quo (McClelland, Liang, & Barker, 2010), lower likelihood of initiating strategic change (Weng & Lin, 2014), and less voluntary disclosure of environmental information (Lewis, Walls, & Dowell, 2014). In line with this logic, incoming CEOs tend to have shorter organizational tenure in high-growth and high-differentiation industries (Datta & Rajagopalan, 1998), firms are more likely to create "strategic noise" when announcing an incoming CEO with less experience (Graffin, Carpenter, & Boivie, 2011), and we tend to see longer-tenured top management teams in more stable environments (Keck & Tushman, 1993).

One notable exception to this general trend is a recent study by Graf-Vlachy, Bundy, and Hambrick (2020). Introducing a novel measure of CEO cognitive complexity based on language patterns derived from conference call data, these authors showed a steady, consistent *increase* in CEO cognitive complexity over time as a function of tenure. Thus, although not all studies of executive tenure assume a simple monotonic relationship between tenure and cognitive inelasticity (see Boeker (1997b) and Tihanyi, Ellstrand, Daily, and Dalton (2000) for additional examples), and we see some support for the idea that the impact of tenure may depend on the specific issue being studied (e.g., Hambrick, Geletkanycz, & Fredrickson, 1993), meta-analytic evidence supports a general negative relationship between CEO tenure and the extent and magnitude of strategic actions (Wang et al., 2016).

While scholars have continued to study the main effects of CEO tenure (e.g., Graf-Vlachy et al., 2020), later work addressing executive tenure as a variable of interest has tended to do so as part of more complex conceptual models. For example, Blagoeva, Mom, Jansen, and George (2020) examined the moderating influence of CEO power – of which CEO tenure was a component – on the relationship between inconsistent feedback and firm-level R&D search, while Ke, Li, Ling, and Zhang (2019) showed that the relationship between intra-TMT social connections and management forecast accuracy was stronger during the early (shared) tenure of the TMT. Similarly, scholars have tended to move from a general consideration of the overall length of executive tenure (firm, industry, career) to specific analyses of the many different forms and components of tenure. Other authors have looked at how executives' learning and performance are affected by how the characteristics of their tenures have changed over time. For example, Aktas, De Bodt, and Roll (2013) found that firms demonstrated learning gains through repetitive acquisitions, and especially in the context of CEO continuity.

The literature also identifies a range of potential benefits of executive tenure, especially to the individual, and at times to the organization. Hambrick and D'Aveni (1992) found that TMT tenure was negatively associated with the likelihood of bankruptcy; Davidson, Worrell, and Cheng (1990) showed that markets tended to respond more positively to new appointees with greater seniority; and Bergh (2001) found that acquisition outcome success was greater when the organizational tenure of retained target-firm executives was high. Similarly, Gomulya and Boeker (2014) found that firms experiencing more severe accounting restatements tended to name successor CEOs with prior CEO experience.

Other work, building on the assumed link between CEO tenure and entrenchment/power, offers evidence of self-dealing, expropriation, or other agency-related effects. For example, performance-pay sensitivity is weaker with high CEO tenure (Hill & Phan, 1991), the negative impact of say-on-pay legislation on CEO compensation growth is concentrated in firms with high CEO tenure (Correa & Lel, 2016), and CEO entrenchment (partly driven by long tenure) is associated with around 2% more shareholder value destruction when a firm hires a highly

ineffective CEO (Taylor, 2010). However, compelling evidence for a general overall relationship between tenure and performance remains elusive (e.g., Henderson, Miller, & Hambrick, 2006).

**Tenure as a dependent variable.** Tenure also continues to be of interest as a dependent variable to both management and non-management scholars. The articles we reviewed generally focused on a single executive such as the CEO or Chief Financial Officer (CFO). For example, Guthrie and colleagues (1991) found that, following deregulation, executives in the U.S. railroad industry had on average fewer years of both industry and company service. Among the articles that examined a single executive, one group of studies focused on factors or conditions that potentially led to a shorter tenure through voluntary turnover. For instance, Buchholtz and Ribbens (1994) found that the relatedness between the acquirer and target firms had a positive relationship with the CEO's departure. Many scholars, however, focused on forced turnover, with some looking at TMT and board dynamics as catalysts for such turnover or subsequent succession. As one example, Shen and Cannella (2002a) found that power dynamics within a TMT led to dismissal of the CEO followed by inside succession: in the early years of the CEO's tenure, when the CEO was an outsider, when more non-CEO inside directors were on the board, and when there was greater non-CEO stock ownership. Other researchers have looked at the role of other stakeholders such as creditors and venture capitalists in forced turnover decisions. For instance, Eckbo, Thorburn, and Wang (2016) found that in the event of a bankruptcy filing, creditors may exert pressure that results in CEO removal. Akins, De Angelis, and Gaulin (2020), on the other hand, found that change of management restrictions in loan contracts gave creditors power over managerial retention and that this actually reduced the likelihood of forced CEO turnover.

Some studies focused on the executive's actions as the catalyst for forced turnover. For

example, Hazarika, Karpoff, and Nahata (2012) argued that boards act proactively when CEOs engage in earnings management, and consistent with this idea showed that earnings management predicted both the likelihood and the speed of forced CEO turnover. Lastly, a few scholars specifically examined gender differences, and the findings point to female CEOs having shorter tenures compared to their male counterparts. Glass and Cook (2016) found that women were more likely than men to be promoted to high-risk strategic situations and that they tended to experience shorter tenures as a result of not having requisite support and authority. Wang, Holmes, Devine, and Bishoff's (2018) meta-analysis of CEO gender differences in careers also supported this finding—women had lower personal career success compared to men, which manifested, among other things, in having shorter tenures.

**Tenure as a moderator.** In addition to investigating tenure as a dependent variable, management scholars have also examined CEO tenure and TMT tenure as moderators. Some have considered how tenure moderates the relationships between executive incentives and executive behavior. For example, Zhang, Bartol, Smith, Pfarrer, and Khanin (2008) found that tenure weakened the positive relationship between out-of-money options and earnings manipulation behavior, and strengthened the negative relationship between stock ownership and such manipulation behavior. Others have investigated the influence of tenure on the relationships among executive/TMT characteristics, behaviors, and firm outcomes. For instance, Ling, Simsek, Lubatkin, and Veiga (2008) showed that the relationship between transformational leadership and firm performance was more positive in the case of longer-tenured CEOs. Wowak, Mannor, Arrfelt, and McNamara (2016) found that the impact of CEO charisma on strategic dynamism was weaker in the case of longer-tenured CEOs, who were less willing to experiment. Takacs Haynes, Campbell, and Hitt (2017) showed that, while CEO greed had a negative relationship with total shareholder return, CEO tenure weakened this relationship, arguably because CEOs became more invested in the firm over time.

Implications and opportunities. Of all the dimensions of executive background examined in our review, we saw the most diversity with what advancing tenure represents in terms of its cognitive and behavioral outcomes. These outcomes ranged from negative (e.g., rigidity, lower cognitive complexity) to positive (e.g., firm-specific experience, organizational identification), with little reconciliation as to how these may combine, supplement, complement, or balance out. In addition, research that examines tenure as an independent variable tends to either implicitly or explicitly assume that executives have full discretion over its duration—most prominent among them is the stream of work that views tenure as entrenchment. Research that examines tenure as a dependent variable, on the other hand, often focuses on the less discretionary aspect of it and seeks to understand under what conditions executives may be more or less likely to be forced out. This underscores the need to better understand and account for the "partial agency" aspect of tenure, in that executives certainly have some agency and discretion, but are also subject to the whims of the board of directors, shareholders, and other stakeholders.

We also see considerable scope for further work on CEO tenure as both a context and a more complex, non-linear influence. For instance, in their conceptual paper, Hambrick and Fukutomi (1991) proposed that CEO tenure follows five discernible "seasons": response to mandate, experimentation, selection of a theme, convergence, and dysfunction. Through this, they proposed a more dynamic perspective on a CEO's career and highlighted its nonlinear nature. These authors argued that the CEO's paradigm—"of how the environment behaves, what options are available, and how the organization should be run" (1991: 721)—is based on the CEO's schema and repertoire, both of which are closely related to personal background.

According to their theory, the schema reflects the existing knowledge structure (including beliefs and preconceptions) and results from family, cultural, and business experiences, formal education, and "incidental observations." The repertoire is defined as the CEO's toolkit, or "personal resources for conducting their jobs," which are derived partly from prior experiences and partly from innate personal ability. The CEO's commitment to their paradigm is argued to vary across their tenure in the position—in essence, tenure is argued to moderate various aspects of a CEO's background but in a non-linear fashion. While we did find studies where tenure was used as a moderator, the studies included in our review tended to limit their examinations to simple, two-way linear interactions. Moreover, where a direct effect of tenure was examined (i.e., in the majority of studies on executive tenure), the researchers also most often tested the linear effects of tenure, with some notable exceptions (e.g., Graf-Vlachy et al., 2020). As such, we encourage future researchers to conceptualize both tenure and its effects in a more nuanced, punctuated, and non-linear fashion.

#### **Functional Background**

Functional background refers to the corporate fields and disciplines within which a senior executive has worked during their career, such as marketing, operations, finance, and research and development. Different functions are sometimes aggregated in terms of throughput orientation (e.g., operations, accounting), output orientation (e.g., sales, marketing), and peripheral functions (e.g., legal counsel). Increasingly, scholars are beginning to recognize that a varied general management background represents a distinct category (e.g., Kish-Gephart & Campbell, 2015; Mueller, Georgakakis, Greve, Peck, & Ruigrok, 2021). Some executives (e.g., CFOs, CMOs) continue to operate within a primarily functional orientation even while serving in senior roles, while others, such as division presidents and CEOs, have shifted mostly to general management. Further, the composition of TMTs in terms of functional background has changed over time. For example, Guadalupe, Li, and Wulf (2014) found that TMTs in the U.S. changed substantially between the 1980s and 2010s, both increasing in absolute size and the proportion of functional managers (versus general managers).

One of the earliest studies of executive functional background (Dearborn & Simon, 1958), introduced the simplest and most powerful idea in this domain—that executives view external phenomena through the lens of their functional backgrounds. When considering an ambiguous case description, executives in this study tended to assign the most important problem to their own primary functional area. In turn, much of the subsequent work on this topic has similarly assumed that, via mechanisms such as motivated reasoning or cognition (Higgins & Molden, 2003; Kunda, 1990), selection preferences (Zajac & Westphal, 1996), experiential learning (Musteen, Barker, & Baeten, 2006), and cognitive inertia (Buyl, Boone, & Matthyssens, 2011), executives with experience in a particular functional domain are predisposed to view their options, opportunities, constraints, and challenges through the lens of that functional domain (cf. (Hambrick & Mason, 1984)). Thus, executives' backgrounds are likely to influence their decisions as well as their perceived fit with a given role.

**Characteristics.** Accordingly, much of the empirical work on executive functional background has adopted what might be called the "characteristics view" of functional background – whereby executives' past experiences have a direct causal link with present strategic choices and behavior. For instance, CEO throughput functional background is negatively associated with firm advertising intensity (Rajagopalan & Datta, 1996), CEOs with marketing/engineering backgrounds spend more on R&D (Barker & Mueller, 2002), TMT throughput orientation is positively linked with managerial innovation (Heyden, Sidhu, &

Volberda, 2018), and TMT patent law experience is positively associated with firm-level patenting performance (Somaya, Williamson, & Zhang, 2007). Further, CEOs with technical backgrounds direct their firms toward new markets (Boeker, 1997a), certain types of executive backgrounds are associated with more sophisticated forms of ingratiatory behavior toward key stakeholders (Stern & Westphal, 2010), firms are more likely to have designated COOs when their CEOs have less operations experience (Hambrick & Cannella, 2004), and executives evaluate potential opportunities arising from alliances differently depending on their level of technical work experience (Tyler & Steensma, 1998).

In a similar vein, CFOs tend to weigh financial factors more heavily than vice presidents when evaluating complex strategic situations (Melone, 1994), while firms with financial expert CEOs are less likely to delegate financial decisions to their CFOs (Graham, Harvey, & Puri, 2015), use less CFO incentive-based compensation (Gore, Matsunaga, & Yeung, 2011), and hold less cash, take on more debt, and make more share repurchases (Custódio & Metzger, 2014). While findings such as these are not necessarily surprising [albeit see Chattopadhyay, Glick, Miller, and Huber (1999) for some countervailing evidence], they are logical extensions of the general thesis that an executive's functional background is a critical reflection of how they view their professional world (Hambrick & Mason, 1984).

**Contingency.** Relatedly, other authors have adopted a "contingency view" of functional background, whereby the specific skills and experiences arising from a particular functional background are assumed to be especially appropriate for certain organizations, industries, contexts, and circumstances. For instance, executives in deregulated environments are more likely to have marketing backgrounds (Guthrie et al., 1991), high-R&D firms tend to hire CEOs with technical backgrounds (Datta & Guthrie, 1994), CEOs of high-interdependence firms had

greater core functional experience (Michel & Hambrick, 1992), a firm's vulnerability to takeovers is influenced by their CEO's level of financial experience (Davis & Stout, 1992), and IPO-related investor decisions are influenced by the role experience of a firm's Chief Scientific Officer (Higgins & Gulati, 2006).

This type of contingency, when it occurs, seems to be beneficial for both firms and their senior executives (Roth, 1995). For example, Beal and Yasai-Ardekani (2000) found that a match between managerial functional experience and firm strategic requirements was linked with stronger overall performance. Carpenter and Wade (2002) showed that non-TMT executives with high-fit functional backgrounds received greater cash compensation. Finally, Pan (2017) found that stronger executive-firm matching (such as executives with conglomerate experience in a diversified firm, or executives with technical expertise in a high-R&D firm) was associated with both higher stock returns and higher executive compensation.

Heterogeneity. A third sub-group of studies addressing executive functional background adopts a "heterogeneity view," which focuses on the collective implication of the heterogeneity of functional backgrounds coincident within a decision-making body, especially the TMT. While this perspective also draws from upper echelons and information processing theories, in that organizations are reflections of their individual executives' background-driven cognitions, the core conceptual mechanisms at play are typically social identity (Hogg & Terry, 2000), homophily (Cannella, Park, & Lee, 2008), ingroup-outgroup discontinuity (Hewstone, Rubin, & Willis, 2002), conflict (Wildschut & Insko, 2007), and cognitive comprehensiveness (Wiersema & Bantel, 1992). Much of this body of work is predicated on the assumption that background/experiential heterogeneity is manifested in cognitive heterogeneity, although see Kilduff, Anglemar, and Mehra (2000) for contrasting evidence. Work in this domain provides evidence that greater levels of functional heterogeneity within decision-making teams are associated with distinct processes and outcomes. First, more heterogeneous backgrounds are often related to less intra-group harmony and more conflict. For instance, TMT functional diversity is associated with greater cognitive and affective conflict when institutional support is weaker (Qian, Cao, & Takeuchi, 2013). Further, TMT heterogeneity has been linked with slower actions and lower likelihood of competitive responses, but also actions and responses of greater magnitude (Hambrick, Cho, & Chen, 1996).

At the same time, a range of authors have found support for the broader claim that heterogeneous teams are often *more* effective. Boone and Hendriks (2009) found that functional background diversity was positively related to performance when decision-making was decentralized, information exchange was accurate, and team behavior was collaborative. Similarly, Carpenter (2002) found a significant positive impact of TMT heterogeneity on overall performance when firm internationalization was high and TMT tenure was low. Related work has explored the implications of intra-TMT informational faultlines, or "alignments based on task-relevant attributes such as education, functional background, and tenure" (Cooper, Patel, & Thatcher, 2014: 633). The strength of TMT faultlines has been linked with greater strategic change (Richard, Wu, Markoczy, & Chung, 2019) and stronger performance in some situations, including high CEO-TMT socio-demographic similarity (Georgakakis, Greve, & Ruigrok, 2017) and low-dynamism, high-complexity, and high-munificence contexts (Cooper et al., 2014).

**Breadth.** Finally, a smaller group of studies adopts what might be called the "breadth view" of functional background. These studies provide evidence that executives' breadth of functional experience *per se*, rather than the specific experiences accrued, also has an important effect. For instance, scholars have shown that overall functional diversity, or the total number of

functions within which an executive has worked (Geletkanycz & Black, 2001), and the existence of career experiences beyond the focal firm and industry (Hambrick et al., 1993), are negatively associated with an executive's commitment to the status quo. Further, the variety of an executive's functional experiences has been linked with the range of criteria used in evaluating acquisition targets (Hitt & Tyler, 1991).

Crossland, Zyung, Hiller, and Hambrick (2014: 652-653) found that CEO career variety-defined as "the array of distinct professional and institutional experiences an executive has had prior to becoming CEO"- was positively associated with firm-level strategic dynamism and distinctiveness. Career breadth has also been positively linked with the likelihood of exploring opportunities with new firms (Cappelli & Hamori, 2014). The breadth view of functional background is also evident in work on executive "generalism versus specialism," most of which considers the implications for executives themselves. For instance, Custódio, Ferreira, and Matos (2013) found evidence for an overall positive relationship between CEO generalism and compensation, while Mueller and colleagues (2021) proposed an inverted-U-shaped relationship between career generalism and initial compensation for new executive hires. Ertimur, Rawson, Rogers, and Zechman (2018) showed that when faced with non-compete constraints, specialists were more likely to experience an employment gap than generalists; but the gap lengths did not vary based on generalist versus specialist skill sets. Li and Patel (2019) found that the negative relationship between CEO generalist experience and firm performance was weakened by CEO tenure, while Schmid and Mitterreiter (2021) argued for a negative link between CEO career variety and board tenure.

**Implications and opportunities.** Although researchers have examined executive functional background from a range of different perspectives over the years, much of this work

continues to conform to Dearborn and Simon's (1958) foundational idea that an executive's functional background is an important lens through which they view the world, and thereby serves as a valid proxy for a broad amalgam of mindsets, preferences, ideologies, and lived experiences. "Characteristics"-based work shows that executives behave in ways consistent with their functional background, "contingency"-based work shows that executive-firm matching is linked with functional background, while "heterogeneity"-based work shows that functional background. The main exception we see is the set of more recent, "breadth"-based studies, such as those addressing generalism versus specialism, where scholars have focused more on the implications of the sum of distinct experiences, rather than specific, defined experiences.

Two additional underlying assumptions we observed in most of this research are those of observability and equality. First, by observability, we mean that functional background is treated as representing a clear, unambiguous, and non-manipulatable signal sent by executives and received by organizations. We are aware of little or no work that adopts or even allows for the premise that some executives may be systematically manipulating or misrepresenting how their functional backgrounds are perceived by outsiders in order to benefit professionally. At an even more fundamental level, research tends to assume that the aspect of an executive's background will be straightforward to identify, interpret, and evaluate by all stakeholders.

Second, by equality, we mean that researchers do not tend to assume an implicit hierarchy, status-based or otherwise, of the different functional backgrounds, and quality of functional background *per se* rarely seems to be taken into consideration. An obvious contrast is the literature on executive background related to education, discussed below, where we see some emphasis on the socially-constructed perceptions of quality and prestige of education (e.g., Ivy League credentials). The assumption in the functional background research is that, all else equal, a marketing background is not necessarily 'better' or 'worse' than an operations background, but is a predictor of subsequent fit and effectiveness based on the nature of the role. In addition, perhaps more importantly, there is very little distinction within various types of background considered, unlike educational credentials. Thus, functional background is treated very much as an observable, mostly categorical characteristic (see Figure 1). We believe that future work may benefit from relaxing these assumptions. The first step towards this could be to try to conceptualize and measure functional background in a more fine-grained manner—for instance, experience acquired at larger, higher status firms and longer in duration is likely qualitatively different from that acquired at a small firm for a short period of time.

### **Knowledge and Education**

Most studies in our review that focused on the knowledge domain did so from the perspective of formal education, which is perhaps not surprising given the difficulties inherent in measuring knowledge as a construct. Education was included in around a quarter of studies in our sample, although it often appeared alongside other indicators of background and/or was included as a control variable. Studies in this domain focused on the implications for firm value, implications for firm strategy, executive-firm matching, as well as the outcomes associated with various education types and levels for the executives themselves.

**Firm value.** Executive educational background has been linked with various indicators of firm value or success. Davidson et al. (1990) found that, in an executive succession context, markets responded more positively to more highly educated appointees. Guthrie and colleagues (1991) showed that executives tended to be more educated in a deregulated environment. Miller, Xu, and Mehrotra (2015) argued that highly-trained human capital represents a rent-sustaining

resource and found that CEOs with Ivy League backgrounds led firms with higher valuations; this effect was even stronger for younger CEOs and those earlier in their careers.

**Firm strategy.** Education has also been linked with variance in firm actions. Wiersema and Bantel (1992) showed that average TMT tenure, average educational level, academic specialization in science and engineering, and academic specialization heterogeneity were positively related to strategic change. Geletkanycz and Black (2001) examined the influence of educational and functional experience on commitment to status quo; educational experience did not have a significant relationship. Barker and Mueller (2002) showed that greater R&D spending was linked with advanced science-related degrees. Finally, Lewis et al. (2014) examined the relationship between CEO education (MBA and law degrees) and disclosure of voluntary environmental information, showing a positive relationship in the case of MBA degrees and a negative relationship in the case of law degrees.

Some of this work has focused on the implications of executive educational background for risk-taking, rationality, and agentic behavior. For example, Kish-Gephart and Campbell (2015) showed that elite education moderated the relationship between lower class background and risk-taking, implying that CEOs from lower social classes were more risk-averse. Geng, Yoshikawa, and Colpan (2016) examined the question of when Japanese firms with foreign ownership were more likely to adopt stock-option pay for top executives, finding that elite education was a predictor of adoption. In a similar vein, Jung and Shin (2019) examined the impact of changes in graduate business education on changes in corporate diversification and found that the rise of financial economic and agency theoretic logic in MBA education led to CEOs refraining from diversification.

Executive-firm matching. Similar to work on other background characteristics, some

research on knowledge and education has adopted a contingency perspective. For instance, Datta and Guthrie (1994), when studying organizational predictors of CEO successors, found that high-R&D firms tended to hire CEOs with technical backgrounds and more education. Gomulya and Boeker (2014) studied CEO succession events following financial restatements (a reputation-damaging event); among other findings, they showed that firms with more severe restatements tended to name successor CEOs with more elite education. Francis, Hasan, John, and Waisman (2016) found a positive relationship between the size of the city where a firm is headquartered and its median total and equity-based CEO compensation as well as CEO educational attainment (i.e., CEO elite education and CEO graduate education), suggesting that more able CEOs sort into big cities.

**Executive-level outcomes.** Finally, studies have also investigated the direct implications of executive education for executives themselves. For example, Judge, Boudreau, and Bretz (1994) examined job attitudes of male executives and found that education was positively related to job satisfaction, while Judge, Cable, Boudreau, and Bretz (1995) found that possessing a graduate degree, an Ivy League degree, or a law degree was positively related to cash compensation, but not the number of promotions; having a business or engineering degree was unrelated to either outcome. In a German setting, Fiss (2006) showed that CEO-chair education differences predicted CEO compensation, especially when the CEO and chair shared a similar education specialization. Also in the domain of compensation, Datta and Iskandar-Datta (2014) found that generalist CFOs (operationalized via elite MBAs) received greater compensation than accounting CFOs and CFOs with non-MBA masters degrees, while Falato, Li, and Milbourn (2015) found that CEOs with more elite education were paid more, and Schepker and Barker (2018) showed that elite education mitigated the stigmatizing effect of dismissal. Taking a

longitudinal perspective, Frydman (2019) explored the trends in the market for top managers from 1936 to 2003 and found that general business education took the place of technical education after the 1960s, with positive effects on executive pay, inequality, and mobility.

Implications and opportunities. Theory related to educational impact can be traced back to Becker (1964), who outlined how a person's distribution of earnings can be attributed in part to their accumulation of human capital, including higher education, over the lifespan. In line with this core premise, the studies in our sample provide evidence of ample rewards from education to executives themselves, including better compensation and mobility outcomes. Some work tends to focus on elite education, which is often treated as an indicator of status in the managerial elite and a sign of access to elite networks, in addition to being a reflection of superior knowledge resources. Further, studies in this domain provide strong evidence of a link between higher education in general and higher firm valuations. Research has shown that education can yield returns to firms through better executive-firm matching, in line with a contingency view of education. For instance, higher education may be more necessary in some industry settings, and certain academic tracks and specializations have been linked with distinct strategic outcomes (e.g., science degrees with greater R&D spending). In sum, studies on education use it as an observable indicator of knowledge (as well as status and prestige in the case of elite education) and a personal, discretionary investment. The focus is predominantly on pre-role entry accumulation of education. We are not aware of studies that attempted to isolate the influence of executive education after joining the TMT. Educational experiences are typically conceptualized as one-time and either dichotomous or categorical.

Human capital as defined in capital theory can affect both objective earnings and 'psychic income,' or subjective well-being. In line with this, higher education has been linked with higher job satisfaction (e.g., Judge et al., 1994). We believe that taking this insight further and integrating the research on education with the literature on executive job demands, which are defined as "the degree to which a given executive experiences his or her job as difficult or challenging" (Hambrick, Finkelstein, & Mooney, 2005: 472), could lead to new insights. If human capital positively influences subjective well-being, it should ultimately lead to lower perceived job demands, or superior job fit. Higher mobility and better prospects on the executive labor market also point to lower pressure to stay in any particular position, which would presumably also lower job demands by increasing other options and alternatives. In addition, we see opportunities for future research to examine executive knowledge acquisition after taking on a top executive role to complement the overwhelming focus on pre-role entry knowledge. This may take the form of formal education (degrees, certificates) but also knowledge gain through more informal means, such as external board appointments. Corporate governance research typically (and justifiably) views external board appointments as conveyors of status, but they also represent important arenas for knowledge transfer—research on board interlocks and diffusion of practices represents one good starting point for such an extension.

### **Outsider Status**

We found that outsider status was also of significant research interest, with most studies approaching it from either an upper echelons theory or agency theory angle. Similar to work on executive knowledge and education, the line of work on outsider status addresses the implications of outsiderness for firm value, the implications for firm strategy, executive-firm matching, and the outcomes of outsiderness for executives.

**Firm value.** A number of studies concentrated on market reactions to new CEO appointments and other performance implications of internal versus external successors,

generally documenting the advantages of insider appointments. For example, Davidson et al. (1990) found that the stock market responded more positively to insiders, while Shen and Cannella (2002b) showed that outsider succession was negatively associated with post-succession ROA. Adding greater nuance, Zhang and Qu (2016) examined over 3,000 CEO successions in the Chinese context and found that CEO succession associated with a gender change (i.e., a male succeeded by a female and vice versa) had a negative effect on post-succession firm performance but this relationship held only in the case of outside successions. Expanding the focus to other executives, Williams, Chen, and Agarwal (2017) looked at the level of experience of outsiders and showed that "external rookies" (hired from outside the firm and new to the TMT level) contributed to higher firm growth compared to internal rookies. Finally, Intintoli, Serfling, and Shaikh (2017) showed that outside CEO appointments led to greater losses in supplier sales.

**Firm strategy.** A separate sub-stream of work has sought to understand how the strategic decisions of outside hires differ from those of insider successors. Boeker (1997a) showed that hiring outsiders increased the likelihood that the firm entered product markets that the executive's prior firm also competed in. Brochet, Faurel, and McVay (2011) found that hiring an outsider CEO increased the likelihood of a firm providing earnings guidance. Cummings and Knott (2018) argued that outside CEO hires should lead to a drop in R&D productivity, presumably because outsiders lack the necessary technological expertise, and their results aligned with this prediction and reasoning. Zhu, Hu, and Shen (2020) considered the role of board experience and showed that insider CEOs with more experience on the focal firm's board made fewer strategic changes, but those with greater experience on boards of other firms made more strategic changes.

**Executive-firm matching.** Related work has examined the question of when outsiders are preferred vis-à-vis insiders. For instance, Datta and Guthrie (1994) found that lower growth and profits led to the selection of outside CEOs, while Shen and Cannella (2002b) showed that outsiders were more likely to be dismissed and replaced with insiders, especially early in their tenures. Zhang and Rajagopalan (2003) found that intra-industry succession (i.e., outside the firm but inside the industry) was positively related to the proportion of larger or similarly-sized firms in the industry, industry strategic homogeneity, and the firm's level of strategic conformity. Naveen (2006) documented that relay successions (i.e., internal hires) were more likely when the firm was larger, operated in a more heterogeneous industry, and was more diversified, all of which increased the need for succession planning.

**Executive-level outcomes.** Finally, some studies took an executive labor market angle and focused on outcomes of outsiderness for the incoming CEOs. For instance, Gilson and Vetsuypens (1993) found that external successors were paid more than their predecessors. Harris and Helfat (1997) similarly showed that external successors were paid more than internal successors, especially when they had generic skills rather than industry-specific ones (i.e., when they were hired from outside of the focal firm's industry). Somewhat contrary to this, Sturman, Walsh, and Cheramie (2008) found that executives who moved to more similar firms—based on SIC code similarity—received greater salary increases, presumably due to greater human capital specificity. Deng and Gao (2013) examined the influence of geographic location on CEO pay and found that executives hired into less attractive locations (higher crime, more polluted, etc.) received higher compensation than those hired into more attractive/livable locations, especially when they were hired from outside the firm. Drawing on executive job demands literature, Chen (2015) looked at new CEO hires in a turnaround context and found that they received higher pay

than those hired into non-turnaround situations; this effect was even stronger for external hires.

**Implications and opportunities.** Outsider status is clearly an observable dimension – in fact, the most observable and easily discernible one among the ones reviewed here. It also has discretionary and non-discretionary elements, in that, although the executive has to willingly accept a new position as an outsider, most research taking a matching angle suggests that firms exhibit a preference for either insiders or outsiders based on firm circumstances at the time of the CEO search. Some research concentrates on the impact of outsiderness just prior to assuming a CEO post (e.g., shareholder reactions, incoming executive negotiating power, etc.), while other studies focus on the role of outsiderness in the firm's strategic position after the CEO takes over (e.g., strategic change, R&D, entering new product markets, etc.). This background dimension is typically examined in a clear-cut, one-time, and dichotomous manner, although some studies examined number of years spent in other industries in an attempt to make this construct more fine-grained.

We see an interesting avenue for research taking a more nuanced, agency-theoretic angle on outsider status. In theory, the misalignment of interests between owners and managers can lead executives to pursue their own private interests at the shareholders' expense (Eisenhardt, 1989). Although executive background is not central to the theory, background is relevant as it relates to its implications for adverse selection, managerial power, and the agency conflict. For instance, viewed through an agency lens, longer tenure in a CEO role is typically assumed to reflect increased managerial power and entrenchment. Interestingly, however, studies in this domain typically do not view inside successors as entrenched or especially powerful – if anything, the focus is on the informational upside and benefits of inside/relay successions. It may be interesting to explore the more "hidden" aspects of outsider and insider status, pushing back on it as an inherently observable dimension—recognizing that not all insiders are created equal.

## **Other Professional Experiences**

Scholars in management, finance, and accounting have also sought to understand how other dimensions of work experience affect firms and executives themselves. Examples of these dimensions include industry experience, conglomerate experience, experience with acquisitions, and international experience, all of which are reviewed in more detail below. Individual studies have also examined the role of other, more atypical discrete experiences and dimensions, such as CEO experience with reorientations (Keck & Tushman, 1993), CEO new venture experience (Sapienza & Gupta, 1994), founder status (Ling et al., 2008), founding team experience breadth (Mannor, Matta, Block, Steinbach, & Davis, 2019), CEO experience with board diversity (Zhu & Shen, 2016), experience of being rejected for a top job (Brands & Fernandez-Mateo, 2017), preentry experience in a startup context (Furr, 2019), and the CEO's hands-on experience as an inventor (Islam & Zein, 2020).

Work experience - general. Scholars have examined multiple aspects of past work experience, reflecting a broad variety of ways through which it can affect organizational outcomes. For example, Kor and Misangyi (2008) showed a negative relationship between managers' and outside directors' industry experience, consistent with the idea of "industry experience supplementing" (as a specific type of resource provision). Sundaramurthy, Pukthuanthong, and Kor (2014) found that, post IPO, accumulated public firm board experiences of the CEO and the board had positive synergistic effects. Karim and Williams (2012) showed that executives manifested their past structural experiences in their current strategic behavior. Zhu and Chen (2015) found that narcissistic CEOs were more strongly influenced by strategies at other firms they observed through board service compared to other CEOs, and this effect was amplified by CEO power. Finally, several authors in this sub-domain have examined topics related to our earlier discussion of generalism versus specialism. For instance, Dragoni, Oh, Vankatwyk, and Tesluk (2011) introduced the idea of "accumulation of work experience," which they linked with executives' strategic thinking competency.

**International experience.** A substantial stream of research has examined the role of international experience. Findings in this area are rather consistent, and show that firms with international expansion goals are likely to hire—and benefit from—executives with international experience. Roth (1995) found that CEO international experience had a stronger (positive) impact on firm performance in cases of high firm international dependence. Sambharya (1996) showed that international experience of TMT members was reflected in firm-level international involvement. Spreitzer, McCall, and Mahoney (1997) developed an instrument to predict the ability of a CEO to learn from international experience; their results suggested that prior international experience was linked with expectations of success. Tihanyi et al. (2000) examined the influence of TMT characteristics on firm international diversification, and linked international expansion with greater TMT international experience. Carpenter, Sanders, and Gregersen (2001) found that CEO international experience was positively linked with overall performance, and this was stronger in firms with broader global strategic postures. CEOs with more international experience were also paid more. Carpenter, Pollock, and Leary (2003) showed that the relationship between TMT stock ownership and firm internationalization was stronger when TMTs and outside directors had international experience. More recently, Rickley (2019) examined the relationships between institutional distance and the executive international experience, showing a positive association between political and economic distance and the duration, number, and variety of international experiences of subsidiary executives.

**Experience with acquisitions.** A handful of studies have explored executive background as it relates to acquisitions. Billett and Qian (2008) documented findings consistent with the idea that CEO acquisition experience fuels self-attribution bias and leads to overconfidence. Aktas and colleagues (2013) adopted a more positive angle, showing that firms demonstrated learning gains through repetitive acquisitions, especially under CEO continuity, while CEO changes seemed to stall that learning process. Nadolska and Barkema (2014) found that heterogeneous TMTs were better learners; they acquired less but benefited more from that experience. Finally, Harford and Schonlau (2013) found that experience with acquisitions was more influential than ability when it came to subsequent board seat offers. Large acquisitions were associated with higher numbers of subsequent board seats for acquiring CEOs, target CEOs, and directors.

Implications and opportunities. Experiences in this category are overwhelmingly of the observable nature and are reflected in the executive's work history. Scholars assume that the experiences are largely discretionary and they typically examine those from the perspective of pre-entry experiences that shape the executive's predispositions and toolkit. In line with human capital theory, research shows that more experience makes the manager "better"— this applies to both research focused on experience accumulation/breadth and research focused on more specific types of human capital and experiences (e.g., international experience, experience with acquisitions). Accordingly, there is some emphasis on executive—firm matching in line with a contingency view of human capital, and the benefits to the firm of hiring executives with prior experiences that would allow the firm to more effectively pursue its strategy, such as international expansion or firm growth via acquisitions. The experiences in this category are typically conceptualized as cumulative but measured in both dichotomous and continuous (i.e., number of years) fashion.

One research opportunity we see in this domain is for researchers to challenge the idea of career experiences being fully discretionary. Scholars on the micro side of management studying careers have been interested in how background affects career choices and decisions. Social cognitive career theory (Lent, Brown, & Hackett, 1994) posits that self-efficacy and outcome expectations influence interest, followed by intentions/goals, activity selection, and ultimately goal fulfillment and skill development. Self-efficacy is said to be partly driven by domain-relevant past experiences, which are filtered through various cognitive screens (e.g., negative affect) that either help encourage or discourage future pursuit of career-related performance attainment. As such, the general expectation is that past experience will lead to further accumulation of similar experiences (through which experience becomes self-reinforcing). In addition, differential access to opportunities, social and institutional supports, and socialization gives rise to gender and racial/ethnic differences in career interests and pursuits; these support structures also moderate the relationship between career interests and goals (Lent et al., 1994).

These insights have interesting implications for research on the underrepresentation of women and ethnic minorities within the upper echelons of organizations, since the reason commonly cited by organizations is a low supply of sufficiently experienced minority executives. The "Lean In" movement and its younger (dare we say more hip?) "Girl boss" derivative, which gained momentum almost a decade ago, put the pressure on women to break the ranks of middle and top management by "taking a seat at the table" and "hacking" the system. However, over the last couple of years, the media has at times gleefully watched it crumble amid multiple departures of prominent "girl bosses" synonymous with the movement (such as Emily Weiss at Glossier). For example, Goodkind (2022, para. 3 and 6) noted, "The movement became popular, even as critics derided it as surface-level and ignorant of systemic

prejudice. [...] Now the recent resignation of Sheryl Sandberg, longtime chief operating officer of Facebook parent company Meta Platforms and creator of the Lean In movement, closes the door on an era of workplace feminism that put the onus of beating institutional bias on individual women." Since all evidence points to the fact that the persistent under-representation of women and ethnic minorities in the upper ranks of organizations is *both* a supply *and* a demand issue, we hope that future research can take into account the less discretionary nature of valuable work experiences and systemic barriers to "leaning in" into account.

#### **Experiences and Background beyond the Work Context**

Since executives do not gain knowledge and experience just through their work domain, executive background research also considers the non-work experiences that shape executive values, cognition, and behaviors. Formative early life experiences such as exposure to disasters, growing up during specific periods (e.g., Great Depression), and growing up in a particular social class have attracted scholarly attention. In addition, scholars have examined the impact of more individualized experiences in adulthood such as being a part of the military, becoming a father, and losing someone.

**Early life experiences.** Studies in this sub-stream have tended to focus on the lasting effects of extreme events and a person's social class background. For example, Malmendier, Tate, and Yan (2011) found that CEOs who grew up during the Great Depression were averse to debt. However, Bernile, Bhagwat, and Rau (2017) argued and found that CEOs who had been exposed to moderate fatalities as a result of a natural disaster were likely to be more risk-seeking compared with those who had not had such exposure. In one of the early works on the topic of background, Porter (1965) examined socio-economic origin and found positive relationships with indicators of executive career success. Stern and Westphal (2010) found that subtle forms of

flattery and opinion conformity were successful tactics for directors aiming at obtaining board seats, and that those with a background in politics, law, or sales or an upper-class background were more successful at engaging in such behaviors. Kish-Gephart and Campbell (2015) showed that CEOs from lower and upper social class origins engaged in more strategic risk-taking than CEOs from middle class backgrounds.

**Military experience.** Malmendier et al. (2011) argued that military experience, especially combat exposure, induced aggressiveness and risk-taking. In turn, firms led by CEOs with military exposure were more leveraged. Contrary to these findings, Benmelech and Frydman (2015) studied the relationship between military experience of CEOs and their decisions, financial policies, and corporate outcomes, and their results showed that such experience was associated with more conservative policies – *lower* leverage and lower incidence of fraud. In line with these findings, Koch-Bayram and Wernicke (2018) also found that CEOs with a military background were less likely to engage in financial misconduct.

**Other experiences.** Lastly, a small number of studies have examined the impact of salient, meaningful experiences outside an executive's day-to-day work environment. For instance, Dahl, Dezso, and Ross (2012) explored how the transition to fatherhood affected the pay policies the CEO initiated post the transition, presumably through an influence on their values, and found that CEOs paid their employees less generously after fathering a child, arguably prompted by a desire to garner more resources for their own families. Chen, Crossland, and Huang (2020) found evidence that CEO mortality salience, proxied by the death of a director at the same firm, was linked with firm-level corporate social responsibility. Davidson, Dey, and Smith (2015) showed that executives' prior legal infractions (e.g., DUI) predicted corporate fraud, while Kolasinski and Li (2013) showed that personal trading losses helped overconfident

CEOs make better decisions related to acquisitions.

**Implications and opportunities.** The background experiences examined in this category vary across multiple dimensions, which can perhaps be expected given their broad "beyond work" categorization. This category is smaller than others in terms of volume of studies, but the majority of the work is recent, suggesting that this sub-stream is gaining some attention. The experiences span from less observable (childhood experiences, personal traumatic events) to more easily discernible (military experience, fatherhood). It is interesting to speculate about which experiences executives may be more willing to share publicly, or even privately. Positive events and experiences (e.g., fatherhood) will likely be shared more willingly/frequently than traumatic and negative experiences (e.g., traumatic events and loss experienced during military service, sudden death of a loved extended family member, or a concerning health diagnosis). The experiences here also span the discretionary/non-discretionary spectrum, from chosen individual paths (e.g., military) to collective events that affect up to millions of individuals (e.g., economic depression or regional disasters). Research is also divided in its focus on historical/formative events, pre-entry, and post assuming the top executive role. The predominant focus is on onetime experiences, which tend to be operationalized in a dichotomous or categorical manner.

We see ample opportunities for research in this area to craft a more complete picture of how past and current experiences outside the work context shape executive values, cognitions, and behaviors and thereby going beyond examining isolated, one-time experiences and personal background dimensions. For instance, scholars building on imprinting theory (Stinchcombe, 1965) tend to focus on the idea that "characteristics of an entity shaped during a sensitive moment of its existence can persist for decades, in spite of subsequent environmental changes" (Simsek et al., 2015: 289). During so-called 'sensitive periods' ["when an organism exhibits heightened susceptibility to environmental influences" (Marquis & Tilcsik, 2013: 198)], people begin to reflect the features of the environment, and this tendency persists over time. Importantly to us, individuals can carry with them *multiple* imprints "that are layered upon one another, with the traces of old layers surviving despite subsequent sensitive periods" (Marquis & Tilcsik, 2013: 197). In this view, cognition is said to be 'an interplay of the past and the present' – past experiences do not determine behavioral responses but do influence behavioral tendencies. As such, future research should aim to weave key personal experiences that likely create imprints (e.g., childhood, traumatic events, etc.) and examine their interplay with career and professional experiences in a more continuous and cumulative manner.

# **BIBLIOMETRIC ANALYSIS**

In this final section, we move from consideration of individual background characteristics and categories across our full sample to a tighter focus on just those studies published most recently (under a quarter of our entire sample). This allows us to conduct a more targeted examination of how scholars are currently thinking about this topic and what the current state of executive background research looks like. In order to do this most concretely, and to complement our narrative review of the overall sample, we used the R programming language and statistical analysis software to conduct an automated/computer-assisted bibliometric review of the most recent four-year period in our sample (2017 to 2020 inclusive; 48 articles). Specifically, we included a bibliometric coupling analysis, cluster analysis, and a pairwise connection plot (Aria & Cuccurullo, 2017; Wickham et al., 2019; Pedersen, 2020). See the <u>Online Appendix</u> for a more detailed description of our approach and methodology.

## **Bibliometric Coupling Analysis**

Bibliographic coupling occurs when two publications have references in common to

other published work (Zupic & Čater, 2015). A bibliometric coupling analysis therefore helps to provide a visual map of systematic relationships among articles, based on the assumption that authors who examine similar research questions or use similar theoretical or methodological orientations are more likely to draw on similar references. We can thus conceive co-citation (coupling) relationships as networks and apply graph theory methods to delineate the underlying structure of a set of articles. See Figure 3 for the network structure of our recent sub-sample. There are two main clusters in this network. Cluster 1 (in the bottom-right of Figure 3) is represented by 28 round nodes. More than half of the articles in this cluster were published in Strategic Management Journal (32%) and Journal of Management (29%). Cluster 2 (in the topleft of Figure 3) is represented by 20 triangle nodes and is mainly comprised of publications from Management Science (35%), Journal of Finance (20%), and Journal of Financial Economics (20%). More than 50% of the *Management Science* articles located in Cluster 2 had a first author affiliated with either accounting or finance disciplines. The number of within-community relationships in Figure 3 was 430(70%), and the number of cross-community relationships was 186 (30%). The obvious implication from the graph is that current executive background research remains bifurcated on management/non-management lines. We elaborate on this observation below.

------

Insert Figure 3 about here

\_\_\_\_\_

## **Cluster Analysis**

To further examine the research themes and configuration of each of the clusters in Figure 3, we conducted additional computer-assisted analyses and qualitatively assessed the metadata (e.g., abstract, title, author keywords) of the publications identified in these clusters. Cluster 1 is a largely homogeneous community of articles published mostly in management journals. The most frequently occurring keywords in this cluster were: chief executive officer, upper echelon, top management team, firm performance, CEO tenure, social capital, and gender. An example of high inter-study equivalence is Georgakakis et al. (2017) and Richard et al. (2019), with both studies focusing on the firm-level impact of TMT faultlines.

Cluster 2 is less homogeneous but is predominantly comprised of articles published in *Management Science* and in finance and accounting outlets. The most frequently occurring keywords in this cluster were: corporate governance, executive compensation, executive labor market, human capital, CEO turnover, innovation, and R&D, which is consistent with the issues frequently explored in corporate governance and agency theory research. An example of high inter-study equivalence in this cluster is Custódio, Ferreira, and Matos (2019) and Chemmanur, Kong, Krishnan, and Yu (2019), with both studies focusing on the relationship between executive human capital and firm innovation. The ratio of within-cluster ties to cross-cluster ties was higher in Cluster 1 and lower in Cluster 2, in line with the different levels of homogeneity across clusters.

#### **Pairwise Connection Plot**

An alternative way to illustrate some of the relationships within this sub-sample of articles is to look at how key themes in executive background research co-vary. Figure 4 depicts a pairwise connection plot of the most frequently observed keywords in our sub-sample. For this plot, we first developed a pairwise list of keywords and counted the number of times they appeared together. We used author-entered keywords when available and supplemented articles that had no keyword information with keywords that were generated automatically by Web of Science, which uses an algorithm that extracts keywords from titles of referenced articles (i.e., the keyword plus field). As expected, we observe domain keywords such as chief executive (CEO), board of directors, and top management team to be central to the network in Figure 4. We also see echoes of the two-cluster structure in Figure 3. The left-hand side of Figure 4 consists of keywords (e.g., compensation, turnover, fraud, human capital, R&D, innovation) that are more characteristic of agency theory, corporate governance, and/or human capital domains, whereas the right-hand side of the figure consists of keywords (e.g., social capital, gender, managerial cognition, strategic leadership) that are more characteristic of upper echelons theory and strategic leadership.

In summary, our bibliometric analysis provides both qualitative and quantitative evidence of a silo effect, whereby distinct disciplines build new knowledge mainly based on past knowledge created within the domain and overlook similar knowledge developed elsewhere. This analysis suggests a clear opportunity for greater integration and synthesis across management and non-management fields, an issue we return to in the discussion below.

\_\_\_\_\_

Insert Figure 4 about here

\_\_\_\_\_

**DISCUSSION AND DIRECTIONS** 

Scholars continue to be fascinated with the broad question of how the idiosyncratic elements of an individual's background and experiences – ongoing and occasional, recent and historical, forced and voluntary – manifest in terms of important individual-level and organization-level outcomes, sometimes many years beyond the experience itself. Our review illustrates that executive background research is on the rise, both inside and outside management. In the last 10-15 years, especially, we have witnessed a rapid increase in studies on this topic and a proliferation of approaches, variables, contexts, and theoretical architectures. In our review, we examined and synthesized an overall sample of 216 articles from high-impact academic outlets in management, finance, and accounting. We began by focusing on several specific, highly-studied executive background characteristics – tenure, functional background, education and knowledge, outsiderness – and then considered a wide range of miscellaneous other professional and non-professional experiences. We concluded with a bibliometric analysis of the most recent work in this field. In each section of our review, we have offered ideas and suggestions for future work in that specific area within executive background research. We now step back and consider the topic of executive background research more globally, including how it is currently structured, a range of more general future research directions, as well as most pressing—in our view—methodological challenges and opportunities in this area.

## **Research Domain Macro-structure**

Our bibliometric review of the most recent work in our field shows clearly that management and non-management scholars not only tend to publish in different journals but also largely do not "talk with" (or even at) one another. Scholars in finance rely primarily on human capital and agency theory lenses to study background. While these lenses are also utilized by management scholars, they also uniquely apply upper echelons theory and imprinting to the study of background. As Figure 1 and the "implications and opportunities" sections above aim to illustrate, we see a lot of value in the counterfactual approach to examining the individual dimensions of background. By this, we mean that researchers should aim to identify ways to problematize prior work by taking a different view of a particular background characteristic than extant research (e.g., cumulative as opposed to one-time experiences). Such problematization could also come from integration of the different theoretical lenses.

For example, each approach prominent in this literature carries a different implicit assumption regarding executive discretion, or the extent to which a given element of an executive's background is ultimately a function of the executive's own choice (see Figure 1). For instance, upper echelons research often considers the impact of high-profile, longer-term, multiyear experiences, such as educational choices, which can be partly or heavily influenced by executives themselves. In contrast, imprinting research often considers more abrupt, exogenous, shorter-term experiences such as recessions or natural disasters, which are outside the control of individuals. Research based on agency theory also often assumes less executive discretion with the caveat that executives may have some influence in setting the initial terms of their contracts and can become entrenched in their positions. This assumption has implications not just for causal inference in the study itself but also for the specific types of experiences, contexts, and environments that are best studied by a particular approach.

One possible opportunity for theoretical integration here arises from the consideration of the role of the situation (prominent in the upper echelons model; Hambrick & Mason, 1984). Social psychology research contrasts strong and weak situations (Mischel, 1977), with strong situations being those where formal or informal rules/norms exert substantial pressure for conformity, and weak situations being those where there is little such pressure or even guidance. Because strong situations leave little room for interpretation regarding appropriate ways to act, dispositional differences are assumed to matter more in weak situations. Our review suggests that this work often overlooks the simultaneous influence of disposition and experience, thereby missing contexts where both are important. Approaches integrating trait activation theory (Tett & Burnett, 2003; Tett & Guterman, 2000)—concerned with expression of individual dispositions when exposed to situational cues—may be especially useful to consider in this instance. We can envision situations where formative experiences and the values developed through those play a bigger role in guiding behavior and corporate policies (e.g., corporate social investments and initiatives; attitudes towards work-from-home and hybrid work configurations, etc.) as well as those where later, work-related experiences should be more pertinent (e.g., M&A decisions, market expansion, etc.)

# **Future Research Directions**

Moving beyond the general call for greater theoretical integration and more consideration being given to the role of the context/situation, we now offer a number of specific research directions and provocations that we hope inspire future scholars to ask different types of questions.

**Role of luck.** Some studies take a contingency or matching approach to executive background. In the executive-matching studies we reviewed—most prominent in the functional background and education sub-streams of work—there is an implicit assumption that firms specifically search for executives with certain background characteristics that align with their needs, with the expectation that such alignment would eventually lead to beneficial outcomes. However, this approach does not account for the role of luck, both in terms of getting the person the firm needs and in terms of getting the desired outcomes once this person is hired. As anyone who has ever searched for a life partner knows, there is a fair amount of serendipity and luck involved in creating what seems like a natural match after the fact. This analogy led us to ask: "What role does luck play in creating executive-firm matches?"

Prior research on the role of luck in management has suggested that evaluating prior experiences of executives could be subject to misattributions (Liu & De Rond, 2016).

Specifically, when these executives have been associated with extreme successes, such success may be misattributed to their skill instead of luck, which could have played a (sometimes significant) role. For example, an executive may have been involved with successful product introductions, but the success may be largely due to being at the right place (i.e., market) at the right time (e.g., sudden change in taste as a result of recent trends among a particular demographic group). Further, when there are failures in the executives' past, the executive may have been blamed for situations that were beyond their control. As such, the executives' skills and capabilities reflected by their background "matching" a given context may be overestimated or underestimated. Consequently, firms may hire someone whom they believe is qualified for the job but may not be so, or, alternatively, they may skip over someone who seems to be underqualified but may in fact be the appropriate match. Once the executive is hired, luck may again play a role in the outcomes that the executive is expected to generate. Prior work has emphasized the role of randomness in organizational phenomena (Henderson, Raynor, & Ahmed, 2012) and suggested that, irrespective of planning and intent, outcomes could be random as a result of factors such as external events, inaccuracy of forecasts, and unforeseeable competition (e.g., the executive's estimate of what competitors would do may vary widely from what they actually do).

Given the potential impact of luck at the selection and the post-selection stages, future studies of executive-matching could benefit from trying to isolate the role of luck not only in the performance of executives, but in creating the matches. One option might be to compare executives hired through a matching process with others who are not (e.g., interim executive who had to take over in the event of sudden death/departure of the predecessor). Another could be a greater use of models that help establish a baseline of outcomes that are possible as a result of random chance (Henderson et al., 2012; Denrell, Fang, & Zhao, 2013).

**Obsolescence of functional background.** We also thought it would be interesting to view functional background research in light of several recent trends in corporate governance and society, which led us to ask a provocative question: "Is the entire idea of functional background becoming increasingly irrelevant?" Most of the current work in this area assumes, understandably enough, that business functions represent a stable, reliable, internally-consistent structure for categorizing the majority of corporate activity. However, just as industry boundaries, structures, and characteristics have blurred over time (Nicholls-Nixon & Jasinski, 1995; Withers, Ireland, Miller, Harrison, & Boss, 2018), powerful trends such as the rise of artificial intelligence, the increased complexity of many business problems, and the need for cross-functional integration (e.g., Verganti, Vendraminelli, & Iansiti, 2020) suggest that the historical view of functional borders within organizations may be becoming obsolete. In turn, we are seeing a growing proliferation of titles in the C-Suite (such as Chief Sustainability Officer) that relate to but transcend functional categories (Alvarez & Svejenova, 2022).

If functions are becoming more nebulous and the category itself is breaking down, does this suggest a move toward a more *granular* or a more *global* conception of background? We can see arguments for both directions, and a number of different opportunities for future work. On the one hand, decision makers might increasingly look to match on specific, concrete, one-off experiences. For instance, board members might be less interested in a marketing background generally and more interested in evidence that an individual has overseen a targeted, multinational digital marketing campaign. If so, this suggests that executive-firm matching may increasingly occur at a sub-functional level. Alternatively, board members and other stakeholders might instead gravitate toward a supra-functional locus of fit. For instance, titles such as Chief Sustainability Officer may end up becoming disproportionately valuable (compared to, say, Chief Marketing Officer) because they provide a stronger signal of an executive's ability to lead and enact change in areas of true cross-functional importance and complexity. In summary, one of the most interesting takeaways we see when looking at work on functional background is that future work may play a critical role in redefining this entire category of research.

The CEO's background and the "next chapter." For many executives, the apex of all career accomplishments is the position of the chief executive officer. That raises an important question for those who wield the power and prestige of the CEO position at some point in their careers: 'what comes next?' Research and practice have shown that the completion of a CEO's tenure is not necessarily the end of their careers, but the beginning of a new chapter in their professional lives. How the CEOs' experience while in office, and especially in their final years, subsequently affects their post-tenure choices represents a major extension for executive background research. Existing work in this area suggests that there are different behavioral patterns throughout one's tenure (Hambrick & Fukutomi, 1991; Joshi, Hambrick, & Kang, 2021), archetypes of end-of-career narratives (Vough, Bataille, Noh, & Lee, 2015), and retirement pathways (Bilgili, Campbell, O'Leary-Kelly, Ellstrand, & Johnson, 2020). How and to what extent the position of the CEO equips the executive for a wide array of post-retirement career opportunities (e.g., public board service, public/political office, media appearances/journalism, venture capital partnership) is open to new theoretical and empirical developments. The upper echelons literature is predicated on the assumption that CEOs matter, and post-CEO career extensions represent another important domain where 'the CEO effect' in the economy and the society at large can be quantified and examined.

For instance, the last half-decade witnessed arguably the most consequential post-CEO

career extension in recent history when a family firm CEO became the president of the United States. This does not seem to be an isolated incident, as other CEOs have flirted with either the idea of a gubernatorial or presidential run and/or coming back from retirement (e.g., Meg Whitman, Herman Cain, Carly Fiorina, Steve Forbes, Ross Perot, Mitt Romney, Howard Schultz, Mike Bloomberg). More importantly, hundreds of active/retired CEOs serve as directors of large, multinational companies, remaining in positions of power and influence for a long period (Spencer Stuart, 2021). In turn, scholars may look to investigate which aspects of the CEO's mindset and experience – particularly those that are crystalized during their tenures as top executives - fit with post-CEO career extensions that demand serving the needs of a diverse group of stakeholders. Under what circumstances CEOs are more/less likely to be successful in doing so remains an interesting research direction. This line of work will be particularly important given the increasing attractiveness of active or retired CEOs as new board members and their desire to remain in the limelight with enhanced longevity. This is an area where integrating work at the intersection of management and non-management research is likely to be highly valuable given the numerous intrinsic (e.g., identity) and extrinsic (e.g., prestige) incentives that underscore post-career opportunities of retiring/inactive CEOs.

A relational approach to executive background and knowledge. As the executive interface literature recognizes, executives do not operate in a vacuum; instead, they often work in collaboration with other executives. Executive interfaces, defined as "the interdependent social situations in which the attributes, aspirations, and/or activities of strategic leaders and/or salient stakeholders come into contact with and influence each other" (Simsek, Heavey, & Fox, 2018: 283) could be a useful framework for exploring how various types and aspects of background intersect and interact. Although empirical work on interfaces is substantial (for reviews, see

Georgakakis, Heyden, Oehmichen, & Ekanayake, 2022; Simsek et al., 2018), theory surrounding executive interfaces is underdeveloped at the moment. In an interactive environment such as the TMT, we expect the between-person fit of executives' career experiences and background to have important personal and professional implications. For instance, a chief executive with a doctoral degree in biotechnology may seem like a good fit for a pharmaceutical firm. Yet, such an appointment may be redundant if the team has an executive with similar qualification in biotechnology, and even introduce dysfunctional within-team competition. The line of work that examines executive fit at a more granular level than general assessments of team-level heterogeneity/homogeneity, such as in CEO–COO (Hambrick & Cannella, 2004) or CEO–CFO (Shi, Zhang, & Hoskisson, 2019) pairs, represents a good starting point for this proposed relational approach to executive background.

As discussed in our review, the vast majority of studies on knowledge examine it as formal education – both type and level (e.g., possessing an MBA, law, or PhD degree). Other research is primarily focused on the role of elite education. In this line of work, education is often viewed as a signifier of status and the privileges it affords. The knowledge that education provides is commonly seen as secondary, and sometimes even incidental (e.g., in the case of elite education). While there is a lot of diversity in how knowledge is defined, and some scholars view it as synonymous with information – "differences in views of knowledge can be characterized by their positions on three interrelated attributes: (a) whether knowledge is explicit, (b) where knowledge resides, and (c) how knowledge is enacted" (Barley, Treem, & Kuhn, 2018: 280). Explicit knowledge can be codified through symbols and language, while tacit knowledge is applied in action but difficult to articulate and thus share; importantly, this implies that "knowledge can be viewed as residing both *within* and *beyond* individuals" (Barley et al., 2018: p. 280; emphasis added). Knowledge thus differs in important ways from other types of background in that it can move from one individual to another. We see ample opportunities for work in this area, specifically in terms of knowledge accumulation and transfer that can result at the interfaces.

Between- and within-background variation. Another important implicit assumption of the literature on executive background is that professional development ends once the executive has reached the top position. This assumption may seem reasonable at first glance as boards make appointment/promotion decisions largely based on 'background' and 'experiences' that have been accumulated prior to assuming the top executive position. However, it is unrealistic to assume that knowledge accumulation—or any form of human capital development—ends once the executive has reached their desired position in the TMT. At a minimum, executive education programs or business roundtables are interfaces that offer new knowledge to CEOs while they are still on the job. For instance, Wharton's CEO Academy suggests that it "brings together the world's most well-respected chief executives to share what worked while leading their companies through major change and what they would have done differently" (CEO Academy, n.d.). Professional development opportunities such as these can potentially help explain further why executives with seemingly identical experiences or background exhibit career paths and behaviors that deviate from those of their peers.

Relatedly, almost the entire body of work considered in this review implicitly assumes that executives who have the same background will behave in more/less consistent ways. A core premise of upper echelons theory is that executives develop unique lenses that shape how they view/interpret things in unique ways, in theory, which suggests that two executives with identical backgrounds (e.g., elite MBA education, long work experience as a vice president of operations, middle class background) would thus be expected to exhibit identical or highly similar behavioral patterns. By relaxing the assumption that a background of specific type (e.g., functional background in operations management) is likely to predict an outcome of specific type (e.g., tendency to define strategic problems in operations management terms), researchers may be able to develop new insights into how similar experiences shape executives' worlds differently, and more importantly, predict variance in subsequent choices/behaviors. We expect this type of problematization and theorizing, whereby the same background variable is modeled to cause non-equifinal outcomes, to expand the boundaries of background research with additional explanatory and predictive power. We encourage researchers to not only theorize new mechanisms with which career experiences and aspects of personal/professional background influence behaviors/actions differently, but also empirically distinguish and account for different types of variance in executive background (e.g., within and between) for more comprehensive analyses. An examination of systematic variation within experiences is likely to be particularly helpful in advancing work that focuses on the implications of more distal, social/situational circumstances of executives, such as exposure to natural disasters (Bernile et al., 2017). We discuss these empirical advances further in the section below.

## **Methodological Considerations and Recommendations**

Over time, as the executive background literature has progressed to include a greater variety of theoretical approaches, we have concomitantly seen the progression to more complex empirical models. However, studies to date almost exclusively rely on variable-centered, reductionist approaches—typically, some form of regression analysis. This form of analysis is not problematic *per se* and can lead to important insights. Specifically, regression analysis can tell us how a variable is related to the outcome of interest all else equal—once all the other

variables that are included in the model are accounted for. Regression analysis is thus well suited to uncovering average effects. Yet, researchers are beginning to recognize that this approach can be principally flawed when it comes to analyzing people, since important variance between individuals cannot be easily controlled for in real-world settings. Individual characteristics often fall into predictable patterns. Accordingly, person-centered approaches assume that predictors of interest (e.g., different types of background) may be related and co-occur, forming important interdependencies in the data that would be obscured in a traditional, variable-centered approach. As such, a person-centered methodological lens has emerged as an alternative to a variable-centered lens (Gabriel, Campbell, Djurdjevic, Johnson, & Rosen, 2018). As noted by Gabriel et al. (2018: 878): "the goal of a person-centered approach is to identify individuals who express certain profiles, or constellations, of characteristics and ascertain whether and how antecedents and outcomes diverge across these different clusters of individuals (Wang & Hanges, 2011)."

Two methods of analysis aligned with a person-centered methodological lens have emerged in recent years. Micro organizational scholarship tends to rely on latent profile analysis (LPA), while macro scholarship has gravitated towards qualitative comparative analysis (QCA), and particularly its fuzzy set form (i.e., fsQCA). The first of these, LPA assumes that there is latent heterogeneity within a given sample, which is modeled using a set of profile indicators to uncover profiles—or subpopulations—that naturally exist within the data. The resultant profiles help illustrate theoretically and practically how certain characteristics (e.g., experiences) coexist. Importantly to us, the profiles can vary *in level* but also *in kind*. The goal of the researcher is to extract theoretically meaningful and empirically supported profiles for further analysis. For example, Bennett, Gabriel, Calderwood, Dahling, and Trougakos' (2016) LPA study on work recovery helped establish that employees can experience multiple different forms of recovery simultaneously. We think this type of approach may be helpful to scholars seeking to understand how various types of background combine; such background profiles can then be related to individual-level and firm-level outcomes.

The second methodological approach mentioned above, fsQCA, has gained steam in recent years on the macro side (for a review, see Misangyi, Greckhamer, Furnari, Fiss, Crilly, and Aguilera (2017)). fsQCA is rooted in a different methodological tradition (case analysis) and Boolean algebra. fsQCA relies on necessity and sufficiency analyses to uncover configurations of constructs (e.g., different types of background) that underlie outcomes of interest (e.g., strategic risk taking). The advantage of fsQCA over LPA in terms of its utility is that unlike LPA, which often requires hundreds of observations, fsQCA can be performed on smaller samples (N<50); however, it is very flexible and can also be applied to large samples (i.e., multiple hundreds or even thousands of observations). This flexibility may be especially important when considering that collecting data on top executives, especially beyond those housed in large databases, can be challenging. fsQCA is often considered a middle ground between quantitative and qualitative approaches, and is especially suited to analyzing complexity. As a configurational method, it presupposes conjunction, meaning that elements (e.g., types of background and experience) cannot be understood in isolation and are considered as a whole, making it well-suited to the study of executives as people, rather than a collection of independent and chiefly unrelated variables. For instance, Dwivedi and colleagues (Dwivedi, Joshi, and Misangyi, 2018) illustrate in a succession context how the characteristics of predecessors (tenure/founder status, duality, presence on board) combine with successor characteristics (insider status, duality, whether they inherited poor performance) to predict the success of new female CEOs.

While we see the promise in applying fsQCA to a range of research questions and topics related to executive background, it may be especially suited to studies grounded in imprinting theory, which we found was surprisingly under-utilized in extant work. As noted earlier, imprinting theory (Higgins, 2005; Stinchcombe, 1965) allows for the possibility that individuals carry with them multiple "*layers of imprints*, reflecting not the cumulative total of the historical conditions they experienced, nor just the stamp of the founding environment, but rather the imprints of the environments in which they operated during a small number of sensitive periods" (Marquis & Tilcsik, 2013: 221; *emphasis* in original). This view implies a "superposition of imprints" (Marquis & Tilcsik, 2013: 223). In line with this, imprints should not be considered in isolation and instead treated—and modeled—as a complex and interdependent whole.

For example, researchers might consider using a schema like Figure 2 to construct a configurational guiding theoretical framework to examine executive background influences on strategic risk-taking. The elements of the configurational model could include measures of the types of background found to influence risk taking as so-called 'causal conditions' representing layers of imprints (e.g., disaster exposure in early life, military experience, narrow industry experience, insider status, and long tenure) as well as a handful of other key personal characteristics shown to matter in extant research (e.g., female gender, overconfidence). Such a model could show not just how a single type of experience influences risk-taking, but the many ways dimensions of experience/background and personal characteristics combine to create profiles of "risk takers" (and vice versa – the "conservatives.") Accordingly, we highly encourage future research to take a configurational, person-centered approach to studying executive background.

#### Conclusion

We opened this review with John Kotter's (1982) salutary quote about the subterranean roots of executive behavioral styles. These comments remain as relevant today as they were four decades ago. If our findings could be boiled down to a single sentence, it is probably this: to understand executive behavior in the present, it is sometimes necessary to go deep into the past. Executives, like all of us, are multi-faceted amalgams of a whole host of prior experiences – personal and professional, historical and recent, occasional and ongoing, intentional and serendipitous. Taken as a whole, the literature on executive background has made laudable progress in developing a more robust understanding of executives' experiences and how these ultimately manifest in the present. At the same time, though, the findings of our review behoove us to also issue a respectful challenge to authors. If real progress is to be made in this domain in the future, greater daring may be needed. In general, we call for a more holistic approach to studying executive background that accounts for its complex, configurational nature and considers the multiple layers of executive experiences both inside and outside the workplace. We especially urge scholars to think carefully about whether and how their chosen research questions, conceptual approaches, and methodologies can help them-and our field-move a bit further away from the light shining down from the lamppost. To paraphrase one of the great leaders from science fiction, Captain Kirk: go boldly where no one has gone before. After all, there is a lot to discover in the dark.

#### REFERENCES

(\* denotes that the paper was included in the narrative review sample)
\*Akins, B., De Angelis, D., & Gaulin, M. 2020. Debt contracting on management. *The Journal of Finance*, 75: 2095–2137.

- \*Aktas, N., De Bodt, E., & Roll, R. 2013. Learning from repetitive acquisitions: Evidence from the time between deals. *Journal of Financial Economics*, 108: 99–117.
- Alvarez, J. L., & Svejenova, S. 2022. *The changing C-Suite: Executive power in transformation*. New York, NY: Oxford University Press.
- \*Anderson, R. W., Bustamante, M. C., Guibaud, S., & Zervos, M. 2018. Agency, firm growth, and managerial turnover. *The Journal of Finance*, 73: 419–464.
- Aria, M., & Cuccurullo, C. 2017. bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11: 959–975.
- \*Athanassiou, N., & Nigh, D. 1999. The impact of U.S. company internationalization on top management team advice networks: A tacit knowledge perspective. *Strategic Management Journal*, 20: 83–92.
- \*Barker, V. L., & Mueller, G. C. 2002. CEO characteristics and firm R&D spending. *Management Science*, 48: 782–801.
- Barley, W. C., Treem, J. W., & Kuhn, T. 2018. Valuing multiple trajectories of knowledge: A critical review and agenda for knowledge management research. *The Academy of Management Annals*, 12: 278–317.
- \*Beal, R. M., & Yasai-Ardekani, M. 2000. Performance implications of aligning CEO functional experiences with competitive strategies. *Journal of Management*, 26: 733–762.
- Becker, G. S. 1964. *Human capital: A theoretical and empirical analysis with special reference to education*. National Bureau of Economic Research.
- \*Bednar, M. K. 2012. Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism. *Academy of Management Journal*, 55: 131–150.
- Bell, S. T., Villado, A. J., Lukasik, M. A., Belau, L., & Briggs, A. L. 2011. Getting specific

- about demographic diversity variable and team performance relationships: A meta-analysis. *Journal of Management*, 37: 709–743.
- \*Benmelech, E., & Frydman, C. 2015. Military CEOs. *Journal of Financial Economics*, 117: 43–59.
- Bennett, A. A., Gabriel, A. S., Calderwood, C., Dahling, J. J., & Trougakos, J. P. 2016. Better together? Examining profiles of employee recovery experiences. *Journal of Applied Psychology*, 101: 1635–1654.
- \*Bergh, D. D. 2001. Executive retention and acquisition outcomes: A test of opposing views on the influence of organizational tenure. *Journal of Management*, 27: 603–622.
- \*Bermiss, Y. S., & Murmann, J. P. 2015. Who matters more? The impact of functional background and top executive mobility on firm survival. *Strategic Management Journal*, 36: 1697–1716.
- \*Bernile, G., Bhagwat, V., & Rau, P. R. 2017. What doesn't kill you will only make you more risk-loving: Early-life disasters and CEO behavior. *The Journal of Finance*, 72: 167–206.
- \*Bigley, G. A., & Wiersema, M. F. 2002. New CEOs and corporate strategic refocusing: How experience as heir apparent influences the use of power. *Administrative Science Quarterly*, 47: 707–727.
- Bilgili, H., Campbell, J. T., O'Leary-Kelly, A., Ellstrand, A. E., & Johnson, J. L. 2020. The final countdown: Regulatory focus and the phases of CEO retirement. *Academy of Management Review*, 45: 58–84.
- \*Bilimoria, D., & Piderit, S. K. 1994. Board committee membership: Effects of sex-based bias. Academy of Management Journal, 37: 1453–1477.
- \*Billett, M. T., & Qian, Y. 2008. Are overconfident CEOs born or made? Evidence of self-

attribution bias from frequent acquirers. Management Science, 54: 1037–1051.

- \*Blagoeva, R., Mom, T. J. M., Jansen, J. J. P., & George, G. 2020. Problem-solving or selfenhancement? A power perspective on how ceos affect R&D search in the face of inconsistent feedback. *Academy of Management Journal*, 63: 332–355.
- \*Boeker, W. 1997a. Executive migration and strategic change: The effect of top manager movement on product-market entry. *Administrative Science Quarterly*, 42: 213–236.
- \*Boeker, W. 1997b. Strategic change: The influence of managerial characteristics and organizational growth. *Academy of Management Journal*, 40: 152–170.
- \*Bonet, R., Cappelli, P., & Hamori, M. 2020. Gender differences in speed of advancement: An empirical examination of top executives in the Fortune 100 firms. *Strategic Management Journal*, 41: 708–737.
- \*Boone, C., & Hendriks, W. 2009. Top management team diversity and firm performance: Moderators of functional-background and locus-of-control diversity. *Management Science*, 55: 165–180.
- \*Brady, G. F., Fulmer, R. M., & Helmich, D. L. 1982. Planning executive succession: The effect of recruitment source and organizational problems on anticipated tenure. *Strategic Management Journal*, 3: 269–275.
- \*Brands, R. A., & Fernandez-Mateo, I. 2017. Leaning out: How negative recruitment experiences shape women's decisions to compete for executive roles. *Administrative Science Quarterly*, 62: 405–442.
- \*Brochet, F., Faurel, L., & McVay, S. 2011. Manager-specific effects on earnings guidance: An analysis of top executive turnovers. *Journal of Accounting Research*, 49: 1123–1162.

Bromiley, P., & Rau, D. 2016. Social, behavioral, and cognitive influences on upper echelons

during strategy process: A literature review. Journal of Management, 42: 174-202.

- \*Buchholtz, A. K., & Ribbens, B. A. 1994. Role of chief executive officers in takeover resistance: Effects of CEO incentives and individual characteristics. *Academy of Management Journal*, 37: 554–579.
- \*Buchholtz, A. K., Ribbens, B. A., & Houle, I. T. 2003. The role of human capital in postacquisition CEO departure. *Academy of Management Journal*, 46: 506–514.
- \*Burt, R. S., Hogarth, R. M., & Michaud, C. 2000. The social capital of French and American managers. *Organization Science*, 11: 123–147.
- Busenbark, J. R., Krause, R., Boivie, S., & Graffin, S. D. 2016. Toward a configurational perspective on the CEO: A review and synthesis of the management literature. *Journal of Management*, 42: 234–268.
- Buyl, T., Boone, C., & Matthyssens, P. 2011. Upper echelons research and managerial cognition. *Strategic Organization*, 9: 240–246.
- \*Cannella, A. A., Park, J.-H., & Lee, H.-U. 2008. Top management team functional background diversity and firm performance: Examining the roles of team member colocation and environmental uncertainty. *Academy of Management Journal*, 51: 768–784.
- \*Cao, Q., Simsek, Z., & Jansen, J. J. P. 2015. CEO social capital and entrepreneurial orientation of the firm. *Journal of Management*, 41: 1957–1981.
- Capelle-Blancard, G., & Monjon, S. 2012. Trends in the literature on socially responsible investment: looking for the keys under the lamppost. *Business Ethics, the Environment & Responsibility*, 21: 239-250.
- \*Cappelli, P., & Hamori, M. 2014. Understanding executive job search. *Organization Science*, 25: 1511–1529.

- \*Carpenter, M. A. 2002. The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, 23: 275–284.
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. 2004. Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30: 749–778.
- \*Carpenter, M. A., Pollock, T. G., & Leary, M. M. 2003. Testing a model of reasoned risktaking: Governance, the experience of principals and agents, and global strategy in hightechnology IPO firms. *Strategic Management Journal*, 24: 803–820.
- \*Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. 2001. Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 44: 493–511.
- \*Carpenter, M. A., & Wade, J. B. 2002. Microlevel opportunity structures as determinants of non-CEO executive pay. *Academy of Management Journal*, 45: 1085–1103.
- \*Chahine, S., & Zhang, Y. 2020. Change gears before speeding up: The roles of chief executive officer human capital and venture capitalist monitoring in chief executive officer change before initial public offering. *Strategic Management Journal*, 41: 1653-1681.
- \*Chattopadhyay, P., Glick, W. H., Miller, C. C., & Huber, G. P. 1999. Determinants of executive beliefs: Comparing functional conditioning and social influence. *Strategic Management Journal*, 20: 763–790.
- \*Chemmanur, T. J., Cheng, Y., & Zhang, T. 2013. Human capital, capital structure, and employee pay: An empirical analysis. *Journal of Financial Economics*, 110: 478–502.
- \*Chemmanur, T. J., Kong, L., Krishnan, K., & Yu, Q. 2019. Top management human capital,

inventor mobility, and corporate innovation. *Journal of Financial and Quantitative Analysis*, 54: 2383–2422.

- \*Chen, G. 2015. Initial compensation of new CEOs hired in turnaround situations. *Strategic Management Journal*, 36: 1895–1917.
- \*Chen, G., Crossland, C., & Huang, S. 2020. That could have been me: Director deaths, CEO mortality salience, and corporate prosocial behavior. *Management Science*, 66: 3142–3161.
- \*Chidambaran, N. K., & Prabhala, N. R. 2003. Executive stock option repricing, internal governance mechanisms, and management turnover. *Journal of Financial Economics*, 69: 153–189.
- \*Cline, B. N., Walkling, R. A., & Yore, A. S. 2018. The consequences of managerial indiscretions: Sex, lies, and firm value. *Journal of Financial Economics*, 127: 389–415.
- \*Coles, J. W., McWilliams, V. B., & Sen, N. 2001. An examination of the relationship of governance mechanisms to performance. *Journal of Management*, 27: 23–50.
- \*Conti, A., & Graham, S. J. H. 2020. Valuable choices: Prominent venture capitalists' influence on startup CEO replacements. *Management Science*, 66: 1325–1350.
- \*Cooper, D., Patel, P. C., & Thatcher, S. M. B. 2014. It depends: Environmental context and the effects of faultlines on top management team performance. *Organization Science*, 25: 633–652.
- \*Correa, R., & Lel, U. 2016. Say on pay laws, executive compensation, pay slice, and firm valuation around the world. *Journal of Financial Economics*, 122: 500–520.
- \*Crossland, C., Zyung, J., Hiller, N. J., & Hambrick, D. C. 2014. CEO career variety: Effects on firm-level strategic and social novelty. *Academy of Management Journal*, 57: 652–674.
- \*Cummings, T., & Knott, A. M. 2018. Outside CEOs and innovation. Strategic Management

Journal, 39: 2095–2119.

- \*Custódio, C., Ferreira, M. A., & Matos, P. 2013. Generalists versus specialists: Lifetime work experience and chief executive officer pay. *Journal of Financial Economics*, 108: 471–492.
- \*Custódio, C., Ferreira, M. A., & Matos, P. 2019. Do general managerial skills spur innovation? *Management Science*, 65: 459–476.
- \*Custódio, C., & Metzger, D. 2014. Financial expert CEOs: CEO's work experience and firm's financial policies. *Journal of Financial Economics*, 114: 125–154.
- \*D'Aveni, R. A. 1990. Top managerial prestige and organizational bankruptcy. *Organization Science*, 1: 121–142.
- \*D'Aveni, R. A., & Kesner, I. F. 1993. Top managerial prestige, power and tender offer response: A study of elite social networks and target firm cooperation during takeovers. *Organization Science*, 4: 123–151.
- \*Dahl, M. S., Dezso, C. L., & Ross, D. G. 2012. Fatherhood and managerial style: How a male CEO'S children affect the wages of his employees. *Administrative Science Quarterly*, 57: 669–693.
- \*Daily, C. M., Certo, S. T., & Dalton, D. R. 2000. International experience in the executive suite: The path to prosperity? *Strategic Management Journal*, 21: 515–523.
- Darouichi, A., Kunisch, S., Menz, M., & Cannella, A. A. 2021. CEO tenure: An integrative review and pathways for future research. *Corporate Governance: An International Review*, 29: 661–683.
- \*Datta, D. K., & Guthrie, J. P. 1994. Executive succession: Organizational antecedents of CEO characteristics. *Strategic Management Journal*, 15: 569–577.
- \*Datta, D. K., & Rajagopalan, N. 1998. Industry structure and CEO characteristics: An empirical

study of succession events. Strategic Management Journal, 19: 833-852.

- \*Datta, S., & Iskandar-Datta, M. 2014. Upper-echelon executive human capital and compensation: Generalist vs specialist skills. *Strategic Management Journal*, 35: 1853–1866.
- \*Davidson, R., Dey, A., & Smith, A. 2015. Executives' "off-the-job" behavior, corporate culture, and financial reporting risk. *Journal of Financial Economics*, 117: 5–28.
- \*Davidson, W. N., Worrell, D. L., & Cheng, L. 1990. Key executive succession and stockholder wealth: The influence of successors origin, position, and age. *Journal of Management*, 16: 647–664.
- \*Davis, G. F., & Stout, S. K. 1992. Organization theory and the market for corporate control: A dynamic analysis of the characteristics of large takeover targets, 1980-1990. *Administrative Science Quarterly*, 37: 605–633.
- Dearborn, D. C., & Simon, H. A. 1958. Selective perception: A note on the departmental identifications of executives. *Sociometry*, 21: 140–144.
- \*Deng, X., & Gao, H. 2013. Nonmonetary benefits, quality of life, and executive compensation. *Journal of Financial and Quantitative Analysis*, 48: 197–218.
- Denrell, J., Fang, C., & Zhao, Z. 2013. Inferring superior capabilities from sustained superior performance: A Bayesian analysis. *Strategic Management Journal*, 34: 182–196.
- \*Dragoni, L., Oh, I.-S., Vankatwyk, P., & Tesluk, P. E. 2011. Developing executive leaders: The relative contribution of cognitive ability, personality, and the accumulation of work experience in predicting strategic thinking competency. *Personnel Psychology*, 64: 829–864.
- Dwivedi, P., Joshi, A., & Misangyi, V. F. 2018. Gender-inclusive gatekeeping: How (mostly male) predecessors influence the success of female CEOs. *Academy of Management Journal*, 61: 379–404.

- \*Eckbo, B. E., Thorburn, K. S., & Wang, W. 2016. How costly is corporate bankruptcy for the CEO? *Journal of Financial Economics*, 121: 210–229.
- Eisenhardt, K. M. 1989. Agency theory: An assessment and review. Academy of Management Review, 14: 57–74.
- \*Elenkov, D. S., Judge, W., & Wright, P. 2005. Strategic leadership and executive innovation influence: an international multi-cluster comparative study. *Strategic Management Journal*, 26: 665–682.
- \*Ertimur, Y., Rawson, C., Rogers, J. L., & Zechman, S. L. C. 2018. Bridging the gap: Evidence from externally hired CEOs. *Journal of Accounting Research*, 56: 521–579.
- \*Falato, A., Li, D., & Milbourn, T. 2015. Which skills matter in the market for CEOs? Evidence from pay for CEO credentials. *Management Science*, 61: 2845–2869.
- \*Faulkender, M., & Yang, J. 2010. Inside the black box: The role and composition of compensation peer groups☆. *Journal of Financial Economics*, 96: 257–270.
- \*Feldman, E. R. 2014. Legacy divestitures: Motives and implications. *Organization Science*, 25: 815–832.
- \*Field, L. C., Souther, M. E., & Yore, A. S. 2020. At the table but can not break through the glass ceiling:Board leadership positions elude diverse directors. *Journal of Financial Economics*, 137: 787–814.
- \*Filatotchev, I., & Bishop, K. 2002. Board composition, share ownership, and "underpricing" of U.K. IPO firms. *Strategic Management Journal*, 23: 941–955.
- \*Finkelstein, S., & Hambrick, D. C. 1990. Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35: 484–503.

- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. 2009. Strategic Leadership: Theory and research on executives, top management teams, and boards. New York, NY: Oxford University Press.
- \*Fischer, H. M., & Pollock, T. G. 2004. Effects of social capital and power on surviving transformational change: The case of initial public offerings. *Academy of Management Journal*, 47: 463–481.
- \*Fiss, P. C. 2006. Social influence effects and managerial compensation evidence from Germany. *Strategic Management Journal*, 27: 1013–1031.
- \*Fitzsimmons, T.W., & Callan, V. J. 2016. CEO selection: A capital perspective. *Leadership Quarterly*, 27: 765-787.
- \*Francis, B. B., Hasan, I., John, K., & Waisman, M. 2016. Urban agglomeration and CEO compensation. *Journal of Financial and Quantitative Analysis*, 51: 1925–1953.
- \*Fredrickson, J. W., Davis-Blake, A., & Sanders, G. 2010. Sharing the wealth: Social comparisons and pay dispersion in the CEO'S top team. *Strategic Management Journal*, 31: 1031–1053.
- \*Frydman, C. 2019. Rising through the ranks: The evolution of the market for corporate executives, 1936–2003. *Management Science*, 65: 4951–4979.
- \*Fulmer, I. S. 2009. The elephant in the room: Labor market influences on CEO compensation. *Personnel Psychology*, 62: 659–695.
- \*Furr, N. R. 2019. Product adaptation during new industry emergence: The role of start-up team preentry experience. *Organization Science*, 30: 1076–1096.
- Gabriel, A. S., Campbell, J. T., Djurdjevic, E., Johnson, R. E., & Rosen, C. C. 2018. Fuzzy profiles: Comparing and contrasting latent profile analysis and fuzzy set qualitative

comparative analysis for person-centered research. *Organizational Research Methods*, 21: 877–904.

- \*Geletkanycz, M. A., & Black, S. S. 2001. Bound by the past? Experience-based effects on commitment to the strategic status quo. *Journal of Management*, 27: 3–21.
- \*Geng, X., Yoshikawa, T., & Colpan, A. M. 2016. Leveraging foreign institutional logic in the adoption of stock option pay among Japanese firms. *Strategic Management Journal*, 37: 1472–1492.
- \*Georgakakis, D., Greve, P., & Ruigrok, W. 2017. Top management team faultlines and firm performance: Examining the CEO-TMT interface. *Leadership Quarterly*, 28: 741–758.
- Georgakakis, D., Heyden, M. L. M., Oehmichen, J. D. R., & Ekanayake, U. I. K. 2022. Four decades of CEO–TMT interface research: A review inspired by role theory. *The Leadership Quarterly*, 33: 101354.
- \*Gilson, S. C., & Vetsuypens, M. R. 1993. CEO compensation in financially distressed firms: An empirical analysis. *The Journal of Finance*, 48: 425–458.
- \*Glass, C., & Cook, A. 2016. Leading at the top: Understanding women's challenges above the glass ceiling. *Leadership Quarterly*, 27: 51–63.
- \*Gomulya, D., & Boeker, W. 2014. How firms respond to financial restatement: CEO successors and external reactions. *Academy of Management Journal*, 57: 1759–1785.
- Goodkind, N. Sheryl Sandberg's Meta departure is the death knell for Lean In. CNN Business, <a href="https://www.cnn.com/2022/06/09/economy/lean-in-sandberg-meta/index.html">https://www.cnn.com/2022/06/09/economy/lean-in-sandberg-meta/index.html</a> Accessed on June 30, 2022.
- \*Gore, A. K., Matsunaga, S., & Yeung, E. P. 2011. The role of technical expertise in firm governance structure: Evidence from chief financial officer contractual incentives. *Strategic*

Management Journal, 32: 771–786.

- \*Graf-Vlachy, L., Bundy, J., & Hambrick, D. C. 2020. Effects of an advancing tenure on CEO cognitive complexity. *Organization Science*, 31: 936–959.
- \*Graffin, S. D., Boivie, S., & Carpenter, M. A. 2013. Examining CEO succession and the role of heuristics in early-stage CEO evaluation. *Strategic Management Journal*, 34: 383–403.
- \*Graffin, S. D., Carpenter, M. A., & Boivie, S. 2011. What's all that (strategic) noise?
  Anticipatory impression management in CEO succession. *Strategic Management Journal*, 32: 748–770.
- \*Graham, J. R., Harvey, C. R., & Puri, M. 2015. Capital allocation and delegation of decisionmaking authority within firms. *Journal of Financial Economics*, 115: 449–470.
- \*Graham, J. R., Kim, H., & Leary, M. 2020. CEO-board dynamics. *Journal of Financial Economics*, 137: 612–636.
- \*Guadalupe, M., Li, H., & Wulf, J. 2014. Who lives in the c-suite organizational structure and the division of labor in top management. *Management Science*, 60: 824–844.
- \*Gupta, A., Briscoe, F., & Hambrick, D. C. 2017. Red, blue, and purple firms: Organizational political ideology and corporate social responsibility. *Strategic Management Journal*, 38: 1018–1040.
- \*Guthrie, J. P., Grimm, C. M., & Smith, K. G. 1991. Environmental change and management staffing: An empirical study. *Journal of Management*, 17: 735–748.
- \*Hambrick, D. C., & Cannella, A. A. 2004. CEOs who have COOs: Contingency analysis of an unexplored structural form. *Strategic Management Journal*, 25: 959–979.
- \*Hambrick, D. C., Cho, T. S., & Chen, M.-J. 1996. The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41: 659–684.

- \*Hambrick, D. C., & D'Aveni, R. A. 1992. Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38: 1445–1466.
- Hambrick, D. C., Finkelstein, S., & Mooney, A. C. 2005. Executive job demands: New insights for explaining strategic decisions and leader behaviors. *Academy of Management Review*, 30: 472–491.
- Hambrick, D. C., & Fukutomi, G. D. S. 1991. The seasons of a CEO's tenure. Academy of Management Review, 16: 719–742.
- \*Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. 1993. Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal*, 14: 401– 418.
- Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9: 193–206.
- Hambrick, D. C., & Wowak, A. J. 2021. Strategic leadership. In I. M. Duhaime, M. A. Hitt, & M. A. Lyles (Eds), *Strategic management: State of the field and its future*: 337–353. New York, NY: Oxford University Press.
- \*Han, S., & Ravid, S. A. 2020. Star turnover and the value of human capital—Evidence from broadway shows. *Management Science*, 66: 958–978.
- \*Harford, J., & Schonlau, R. J. 2013. Does the director labor market offer ex post settling-up for CEOs? The case of acquisitions. *Journal of Financial Economics*, 110: 18–36.
- \*Harris, D., & Helfat, C. 1997. Specificity of CEO human capital and compensation. *Strategic Management Journal*, 18: 895–920.
- Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. 2002. Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group

functioning. Academy of Management Journal, 45: 1029-1045.

- \*Hazarika, S., Karpoff, J. M., & Nahata, R. 2012. Internal corporate governance, CEO turnover, and earnings management. *Journal of Financial Economics*, 104: 44–69.
- \*Henderson, A. D., Miller, D., & Hambrick, D. C. 2006. How quickly do CEOs become obsolete? Industry dynamism, CEO tenure, and company performance. *Strategic Management Journal*, 27: 447–460.
- Henderson, A. D., Raynor, M. E., & Ahmed, M. 2012. How long must a firm be great to rule out chance? Benchmarking sustained superior performance without being fooled by randomness. *Strategic Management Journal*, 33: 387–406.
- \*Hernandez, E., & Kulchina, E. 2020. Immigrants and foreign firm performance. *Organization Science*, 31: 797–820.
- Hewstone, M., Rubin, M., & Willis, H. 2002. Intergroup bias. *Annual Review of Psychology*, 53: 575–604.
- \*Heyden, M. L. M., Kavadis, N., & Neuman, Q. 2017. External corporate governance and strategic investment behaviors of target CEOs. *Journal of Management*, 43: 2065–2089.
- \*Heyden, M. L. M., Sidhu, J. S., & Volberda, H. W. 2018. The conjoint influence of top and middle management characteristics on management innovation. *Journal of Management*, 44: 1505–1529.
- Higgins, E. T., & Molden, D. C. 2003. How strategies for making judgments and decisions affect cognition: Motivated cognition revisited. In G. V. Bodenhausen & A. J. Lambert (Eds.), *Foundations of Social Cognition: A Festschrift in Honor of Robert S. Wyer, Jr*: 211–235.
  Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.

Higgins, M. C. 2005. Career imprints: Creating leaders across an industry. San Francisco, CA:

Jossey-Bass.

- \*Higgins, M. C., & Gulati, R. 2003. Getting off to a good start: The effects of upper echelon affiliations on underwriter prestige. *Organization Science*, 14: 244–263.
- \*Higgins, M. C., & Gulati, R. 2006. Stacking the deck: The effects of top management backgrounds on investor decisions. *Strategic Management Journal*, 27: 1–25.
- \*Hill, C. W. L., & Phan, P. 1991. CEO tenure as a determinant of CEO pay. *Academy of Management Journal*, 34: 707–717.
- Hitt, M. A., & Tyler, B. B. 1991. Strategic decision models: Integrating different perspectives. *Strategic Management Journal*, 12: 327–351.
- Hogg, M. A., & Terry, D. J. 2000. Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25: 121–140.
- \*Hou, W., Priem, R. L., & Goranova, M. 2017. Does one size fit all? Investigating pay–future performance relationships over the "seasons" of CEO tenure. *Journal of Management*, 43: 864–891.
- \*Iliev, P., & Vitanova, S. 2019. The effect of the say-on-pay vote in the United States. *Management Science*, 65: 4505–4521.
- \*Intintoli, V. J., Serfling, M., & Shaikh, S. 2017. CEO turnovers and disruptions in customer– supplier relationships. *Journal of Financial and Quantitative Analysis*, 52: 2565–2610.
- \*Islam, E., & Zein, J. 2020. Inventor CEOs. Journal of Financial Economics, 135: 505–527.
- \*Jiang, F., Qian, Y., & Yonker, S. E. 2019. Hometown biased acquisitions. *Journal of Financial and Quantitative Analysis*, 54: 2017–2051.
- \*Johnson, R. A., Hoskisson, R. E., & Hitt, M. A. 1993. Board of director involvement in restructuring: The effects of board versus managerial controls and characteristics. *Strategic*

Management Journal, 14: 33–50.

- Joshi, A., Hambrick, D.C., & Kang, J. 2021. The generativity mindsets of chief executive officers: A new perspective on succession outcomes. *Academy of Management Review*, 46: 385–405.
- \*Judge, T. A., Boudreau, J. W., & Bretz, R. D. 1994. Job and life attitudes of male executives. *Journal of Applied Psychology*, 79: 767–782.
- \*Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D. 1995. An empirical investigation of the predictors of executive career success. *Personnel Psychology*, 48: 485–519.
- \*Judge, W. Q., & Dobbins, G. H. 1995. Antecedents and effects of outside director's awareness of CEO decision style. *Journal of Management*, 21: 43–64.
- \*Jung, J., & Shin, T. 2019. Learning not to diversify: The transformation of graduate business education and the decline of diversifying acquisitions. *Administrative Science Quarterly*, 64: 337–369.
- \*Karaevli, A. 2007. Performance consequences of new CEO 'outsiderness': Moderating effects of pre- and post-succession contexts. *Strategic Management Journal*, 28: 681-706.
- \*Karim, S., & Williams, C. 2012. Structural knowledge: How executive experience with structural composition affects intrafirm mobility and unit reconfiguration. *Strategic Management Journal*, 33: 681–709.
- \*Ke, R., Li, M., Ling, Z., & Zhang, Y. 2019. Social connections within executive teams and management forecasts. *Management Science*, 65: 439–457.
- \*Keck, S. L., & Tushman, M. L. 1993. Environmental and organizational context and executive team structure. *Academy of Management Journal*, 36: 1314–1344.

\*Khanna, V., Kim, E. H., & Lu, Y. 2015. CEO connectedness and corporate fraud. The Journal

of Finance, 70: 1203–1252.

- \*Kilduff, M., Angelmar, R., & Mehra, A. 2000. Top management-team diversity and firm performance: Examining the role of cognitions. *Organization Science*, 11: 21–34.
- \*Kish-Gephart, J. J., & Campbell, J. T. 2015. You don't forget your roots: The influence of CEO social class background on strategic risk taking. *Academy of Management Journal*, 58: 1614– 1636.
- \*Koch-Bayram, I. F., & Wernicke, G. 2018. Drilled to obey? Ex-military CEOs and financial misconduct. *Strategic Management Journal*, 39: 2943–2964.
- \*Kolasinski, A. C., & Li, X. 2013. Can strong boards and trading their own firm's stock help CEOs make better decisions? Evidence from acquisitions by overconfident CEOs. *Journal of Financial and Quantitative Analysis*, 48: 1173–1206.
- \*Kor, Y. Y. 2003. Experience-based top management team competence and sustained growth. *Organization Science*, 14: 707–719.
- \*Kor, Y. Y. 2006. Direct and interaction effects of top management team and board compositions on R&D investment strategy. *Strategic Management Journal*, 27: 1081–1099.
- \*Kor, Y. Y., & Misangyi, V. F. 2008. Outside directors' industry-specific experience and firms' liability of newness. *Strategic Management Journal*, 29: 1345–1355.

Kotter, J. P. 1982. The general managers. New York, NY: Free Press

- \*Krishnan, H. A., Miller, A., & Judge, W. Q. 1997. Diversification and top management team complementarity: Is performance improved by merging similar or dissimilar teams? *Strategic Management Journal*, 18: 361–374.
- Kunda, Z. 1990. The case for motivated reasoning. *Psychological Bulletin*, 108: 480–498.

- \*Lee, P.M., & James, E.H. 2007. She'-E-Os: Gender effects and investor reactions to the announcements of top executive appointments. *Strategic Management Journal*, 28: 227-241.
- Lent, R. W., Brown, S. D., & Hackett, G. 1994. Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45: 79–122.
- \*Lewis, B. W., Walls, J. L., & Dowell, G. W. S. 2014. Difference in degrees: CEO characteristics and firm environmental disclosure. *Strategic Management Journal*, 35: 712– 722.
- Li, M. 2013. Social network and social capital in leadership and management research: A review of causal methods. *The Leadership Quarterly*, 24: 638–665.
- \*Li, M., & Patel, P. C. 2019. Jack of all, master of all? CEO generalist experience and firm performance. *Leadership Quarterly*, 30: 320–334.
- \*Ling, Y., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. 2008. The impact of transformational CEOs on the performance of small- to medium-sized firms: Does organizational context matter? *Journal of Applied Psychology*, 93: 923–934.
- \*Ling, Y., Wei, L., Klimoski, R. J., & Wu, L. 2015. Benefiting from CEO's empowerment of TMTs: Does CEO–TMT dissimilarity matter? *The Leadership Quarterly*, 26: 1066–1079.
- Liu, C., & de Rond, M. 2016. Good night, and good luck: Perspectives on luck in management scholarship. *The Academy of Management Annals*, 10: 409–451.
- \*Luo, X., Kanuri, V. K., & Andrews, M. 2014. How does CEO tenure matter? The mediating role of firm-employee and firm-customer relationships. *Strategic Management Journal*, 35: 492–511.
- \*Lyness, K. S., & Thompson, D. E. 1997. Above the glass ceiling? A comparison of matched

samples of female and male executives. Journal of Applied Psychology, 82: 359–375.

- \*Mackey, A., Molloy, J. C., & Morris, S. S. 2014. Scarce human capital in managerial labor markets. *Journal of Management*, 40: 399–421.
- \*Mallette, P., & Fowler, K. L. 1992. Effects of board composition and stock ownership on the adoption of "poison pills." *Academy of Management Journal*, 35: 1010–1035.
- \*Malmendier, U., Tate, G., & Yan, J. 2011. Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies. *The Journal of Finance*, 66: 1687–1733.
- \*Mannor, M. J., Matta, F. K., Block, E. S., Steinbach, A. L., & Davis, J. H. 2019. A liability of breadth? The conflicting influences of experiential breadth on perceptions of founding teams. *Journal of Management*, 45: 1540–1568.
- \*Marinovic, I., & Varas, F. 2019. CEO horizon, optimal pay duration, and the escalation of short-termism. *The Journal of Finance*, 74: 2011–2053.
- Marquis, C., & Tilcsik, A. 2013. Imprinting: Toward a multilevel theory. *The Academy of Management Annals*, 7: 195–245.
- \*McClelland, P. L., Liang, X., & Barker, V. L. 2010. CEO commitment to the status quo: Replication and extension using content analysis. *Journal of Management*, 36: 1251–1277.
- \*McDougall, P. P., Covin, J. G., Robinson, R. B., & Herron, L. 1994. The effects of industry growth and strategic breadth on new venture performance and strategy content. *Strategic Management Journal*, 15: 537–554.
- \*Melone, N. P. 1994. Reasoning in the executive suite: The influence of role/experience-based expertise on decision processes of corporate executives. *Organization Science*, 5: 438–455.
- Menz, M. 2012. Functional top management team members: A review, synthesis, and research

agenda. Journal of Management, 38: 45-80.

- \*Messersmith, J. G., Lee, J.-Y., Guthrie, J. P., & Ji, Y.-Y. 2014. Turnover at the top: Executive team departures and firm performance. *Organization Science*, 25: 776–793.
- \*Michel, J. G., & Hambrick, D. C. 1992. Diversification posture and top management team characteristics. *Academy of Management Journal*, 35: 9–37.
- \*Miller, D. 1991. Stale in the saddle: CEO tenure and the match between organization and environment. *Management Science*, 37: 34–52.
- \*Miller, D., & Shamsie, J. 2001. Learning across the life cycle: Experimentation and performance among the Hollywood studio heads. *Strategic Management Journal*, 22: 725– 745.
- \*Miller, D., Xu, X., & Mehrotra, V. 2015. When is human capital a valuable resource? The performance effects of Ivy league selection among celebrated CEOs. *Strategic Management Journal*, 36: 930–944.
- Misangyi, V. F., Greckhamer, T., Furnari, S., Fiss, P. C., Crilly, D., & Aguilera, R. 2017. Embracing causal complexity: The emergence of a neo-configurational perspective. *Journal of Management*, 43: 255–282.
- Mischel, W. 1977. On the future of personality measurement. *American Psychologist*, 32: 246–254.
- \*Mizruchi, M. S., & Stearns, L. B. 1994. A longitudinal study of borrowing by large American corporations. *Administrative Science Quarterly*, 39: 118–140.
- \*Mooney, C. H., Semadeni, M., & Kesner, I. F. 2017. The selection of an interim CEO. *Journal of Management*, 43: 455–475.
- \*Mueller, P. E. M., Georgakakis, D., Greve, P., Peck, S., & Ruigrok, W. 2021. The curse of

extremes: Generalist career experience and CEO initial compensation. *Journal of Management* 47: 1977-2007.

- \*Muller-Kahle, M. I., & Schiehll, E. 2013. Gaining the ultimate power edge: Women in the dual role of CEO and Chair. *Leadership Quarterly*, 24: 666–679.
- Musteen, M., Barker, V. L., & Baeten, V. L. 2006. CEO attributes associated with attitude toward change: The direct and moderating effects of CEO tenure. *Journal of Business Research*, 59: 604–612.
- \*Nadolska, A., & Barkema, H. G. 2014. Good learners: How top management teams affect the success and frequency of acquisitions. *Strategic Management Journal*, 35: 1483–1507.
- \*Naveen, L. 2006. Organizational complexity and succession planning. *Journal of Financial and Quantitative Analysis*, 41: 661–683.
- \*Ndofor, H. A., Priem, R. L., Rathburn, J. A., & Dhir, A. K. 2009. What does the new boss think?. How new leaders' cognitive communities and recent "top-job" success affect organizational change and performance. *Leadership Quarterly*, 20: 799–813.
- Neely, B. H., Lovelace, J. B., Cowen, A. P., & Hiller, N. J. 2020. Metacritiques of upper echelons theory: Verdicts and recommendations for future research. *Journal of Management*, 46: 1029–1062.
- Nicholls-Nixon, C.L., & Jasinski, D. 1995. The blurring of industry boundaries: An explanatory model applied to telecommunications, *Industrial and Corporate Change*, 4: 755–768
- \*Ocasio, W., & Kim, H. 1999. The circulation of corporate control: Selection of functional backgrounds of new CEOs in large U.S. manufacturing firms, 1981-1992. *Administrative Science Quarterly*, 44: 532–562.

Pampel, F. C., & Hunter, L. M. 2012. Cohort change, diffusion, and support for environmental

spending in the United States. American Journal of Sociology, 118: 420-448.

- \*Pan, Y. 2017. The determinants and impact of executive-firm matches. *Management Science*, 63: 185–200.
- Pedersen, T. L. 2020. tidygraph: A Tidy API for Graph Manipulation. R package version 1.2.0. Retrieved from https://CRAN.R-project.org/package=tidygraph
- \*Peters, F. S., & Wagner, A. F. 2014. The executive turnover risk premium. *The Journal of Finance*, 69: 1529–1563.
- \*Porter, A. 1965. Validity of socioeconomic origin as a predictor of executive success. *Journal of Applied Psychology*, 49: 11–13.
- Powell, T.C., Lovallo, D., & Fox, C.R. 2011. Behavioral strategy. Strategic Management Journal, 32: 1369-1386.
- \*Priem, R. L. 1994. Executive judgment, organizational congruence, and firm performance. *Organization Science*, 5: 421–437.
- \*Priem, R. L., & Rosenstein, J. 2000. Is organization theory obvious to practitioners? A test of one established theory. *Organization Science*, 11: 509–524.
- \*Qian, C., Cao, Q., & Takeuchi, R. 2013. Top management team functional diversity and organizational innovation in China: The moderating effects of environment. *Strategic Management Journal*, 34: 110–120.
- \*Rajagopalan, N., & Datta, D. K. 1996. CEO characteristics: Does industry matter? *Academy of Management Journal*, 39: 197–215.
- \*Richard, O. C., Wu, J., Markoczy, L. A., & Chung, Y. 2019. Top management team demographic-faultline strength and strategic change: What role does environmental dynamism play? *Strategic Management Journal*, 40: 987–1009.

- \*Rickley, M. 2019. Cultural generalists and cultural specialists: Examining international experience portfolios of subsidiary executives in multinational firms. *Journal of Management*, 45: 384–416.
- \*Rosenstein, S., & Wyatt, J. G. 1997. Inside directors, board effectiveness, and shareholder wealth. *Journal of Financial Economics*, 44: 229–250.
- \*Roth, K. 1995. Managing international interdependence: CEO characteristics in resource-based framework. *Academy of Management Journal*, 38: 200–231.
- \*Salancik, G. R., & Pfeffer, J. 1980. Effects of ownership and performance on executive tenure in U.S. corporations. *Academy of Management Journal*, 23: 653–664.
- \*Sambharya, R. B. 1996. Foreign experience of top management teams and international diversification strategies of U.S. multinational corporations. *Strategic Management Journal*, 17: 739–746.
- \*Sapienza, H. J., & Gupta, A. K. 1994. Impact of agency risks and task uncertainty on venture capitalist-CEO interaction. *Academy of Management Journal*, 37: 1618–1632.
- \*Schepker, D. J., & Barker, V. L. 2018. How stigmatized are dismissed chief executives? The role of character questioning causal accounts and executive capital in dismissed CEO reemployment. *Strategic Management Journal*, 39: 2566–2586.
- Schmid, S., & Mitterreiter, S. 2021. Top managers' career variety and time to the top. *European Management Review*, 18: 476–499.
- \*Shen, W., & Cannella, A. A. 2002a. Power dynamics within top management and their impacts on CEO dismissal followed by inside succession. *Academy of Management Journal*, 45: 1195–1206.
- \*Shen, W., & Cannella, A. A. 2002b. Revisiting the performance consequences of CEO

succession: The impacts of successor type, postsuccession senior executive turnover, and departing CEO tenure. *Academy of Management Journal*, 45: 717–733.

- \*Simsek, Z. 2007. CEO tenure and organizational performance: an intervening model. *Strategic Management Journal*, 28: 653–662.
- Simsek, Z., Fox, B. C., & Heavey, C. 2015. "What's past is prologue." *Journal of Management*, 41: 288–317.
- Simsek, Z., Heavey, C., & Fox, B. C. 2018. Interfaces of strategic leaders: A conceptual framework, review, and research agenda. *Journal of Management*, 44: 280–324.
- \*Singh, H., & Harianto, F. 1989. Top management tenure, corporate ownership structure and the magnitude of golden parachutes. *Strategic Management Journal*, 10: 143–156.
- \*Somaya, D., Williamson, I. O., & Zhang, X. 2007. Combining patent law expertise with R&D for patenting performance. *Organization Science*, 18: 922–937.
- Spencer Stuart, 2021. <u>https://www.spencerstuart.com/-/media/2021/october/ssbi2021/us-spencer-</u> stuart-board-index-2021.pdf. Accessed on July 25, 2022.
- \*Spreitzer, G. M., McCall, M. W., & Mahoney, J. D. 1997. Early identification of international executive potential. *Journal of Applied Psychology*, 82: 6–29.
- \*Stephan, J., Murmann, J. P., Boeker, W., & Goodstein, J. 2003. Bringing managers into theories of multimarket competition: CEOs and the determinants of market entry. *Organization Science*, 14: 403–421.
- \*Stern, I., & Westphal, J. D. 2010. Stealthy footsteps to the boardroom: Executives' backgrounds, sophisticated interpersonal influence behavior, and board appointments. *Administrative Science Quarterly*, 55: 278–319.

Stinchcombe, A. L. 1965. Social structure and organizations. In J. G. March (Ed.), Handbook of

organization:142–193. Chicago, IL: Rand-McNally.

- \*Strebulaev, I. A., & Yang, B. 2013. The mystery of zero-leverage firms. *Journal of Financial Economics*, 109: 1–23.
- \*Sturman, M. C., Walsh, K., & Cheramie, R. A. 2008. The value of human capital specificity versus transferability. *Journal of Management*, 34: 290–316.
- Sullivan, S. E., & Baruch, Y. 2009. Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management*, 35: 1542–1571.
- \*Sundaramurthy, C., Pukthuanthong, K., & Kor, Y. 2014. Positive and negative synergies between the CEO's and the corporate board's human and social capital: A study of biotechnology firms. *Strategic Management Journal*, 35: 845–868.
- \*Sutcliffe, K. M. 1994. What executives notice: Accurate perceptions in top management teams. *Academy of Management Journal*, 37: 1360–1378.
- \*Takacs Haynes, K., Campbell, J. T., & Hitt, M. A. 2017. When more is not enough: Executive greed and its influence on shareholder wealth. *Journal of Management*, 43: 555–584.
- \*Taylor, L. A. 2010. Why are CEOs rarely fired? Evidence from structural estimation. *The Journal of Finance*, 65: 2051–2087.
- Tett, R. P., & Burnett, D. D. 2003. A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88: 500–517.
- Tett, R. P., & Guterman, H. A. 2000. Situation trait relevance, trait expression, and crosssituational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, 34: 397–423.
- \*Tihanyi, L., Ellstrand, A. E., Daily, C. M., & Dalton, D. R. 2000. Composition of the top management team and firm international diversification. *Journal of Management*, 26: 1157–

- \*Tyler, B. B., & Steensma, H. K. 1998. The effects of executives' experiences and perceptions on their assessment of potential technological alliances. *Strategic Management Journal*, 19: 939–965.
- \*Van den Steen, E. 2018. Strategy and the strategist: How it matters who develops the strategy. *Management Science*, 64: 4533–4551.
- \*Vanriper, P. P., & Unwalla, D. D. 1965. Military careers at the executive level. *Administrative Science Quarterly*, 9: 421–436.
- Verganti, R., Vendraminelli, L. & Iansiti, M. 2020. Innovation and design in the age of artificial intelligence. *Journal of Product Innovation Management*, 37: 212-227.
- Vough, H.C., Bataille, C.D., Noh, S.C., & Lee, M.D. 2015. Going off script: How managers make sense of the ending of their careers. *Journal of Management Studies*, 52: 414-440.
- \*Wang, G., Holmes, R. M., Devine, R. A., & Bishoff, J. 2018. CEO gender differences in careers and the moderating role of country culture: A meta-analytic investigation. *Organizational Behavior and Human Decision Processes*, 148(April): 30–53.
- \*Wang, G., Holmes, R. M., Oh, I.-S., & Zhu, W. 2016. Do CEOs matter to firm strategic actions and firm performance? A meta-analytic investigation based on upper echelons theory. *Personnel Psychology*, 69: 775–862.
- \*Wang, H., Zhao, S., & He, J. 2016. Increase in takeover protection and firm knowledge accumulation strategy. *Strategic Management Journal*, 37: 2393–2412.
- Wang, M., & Hanges, P. J. 2011. Latent class procedures: Applications to organizational research. Organizational Research Methods, 14: 24–31.
- \*Wang, X. 2010. Increased disclosure requirements and corporate governance decisions:

Evidence from chief financial officers in the pre- and post-Sarbanes-Oxley periods. *Journal* of Accounting Research, 48: 885–920.

- \*Weng, D. H., & Lin, Z. 2014. Beyond CEO Tenure. Journal of Management, 40: 2009–2032.
- \*Westphal, J. D., & Fredrickson, J. W. 2001. Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy. *Strategic Management Journal*, 22: 1113–1137.
- \*Westphal, J. D., & Stern, I. 2006. The other pathway to the boardroom: Interpersonal influence behavior as a substitute for elite credentials and majority status in obtaining board appointments. *Administrative Science Quarterly*, 51: 169–204.
- Wickham, H., Averick, M., Bryan, J., Chang, W., McGowan, L., François, R., Grolemund, G., Hayes, A., Henry, L., Hester, J., Kuhn, M., Pedersen, T.L., Miller, E., Milton Bache, S.M., Müller, K., Ooms, J., Robinson, D., Seidel, D.P, Spinu, V., Takahashi, K., Vaughan, D., Wilke, C., Woo, K., & Yutani, H. 2019. Welcome to the Tidyverse. *Journal of Open Source Software*, 4(43): 1686, https://doi.org/10.21105/joss.01686
- \*Wiersema, M. F., & Bantel, K. A. 1992. Top management team demography and corporate strategic change. *Academy of Management Journal*, 35: 91–121.
- \*Wiersema, M. F., & Bird, A. 1993. Organizational demography in Japanese firms: Group heterogeneity, individual dissimilarity, and top management team turnover. Academy of Management Journal, 36: 996–1025.
- \*Wiersema, M. F., Nishimura, Y., & Suzuki, K. 2018. Executive succession: The importance of social capital in CEO appointments. *Strategic Management Journal*, 39: 1473–1495.
- Wildschut, T., & Insko, C. A. 2007. Explanations of interindividual intergroup discontinuity: A review of the evidence. *European Review of Social Psychology*, 18: 175–211.

- \*Williams, C., Chen, P., & Agarwal, R. 2017. Rookies and seasoned recruits: How experience in different levels, firms, and industries shapes strategic renewal in top management. *Strategic Management Journal*, 38: 1391–1415.
- Withers, M.C., Ireland, R.D., Miller, D., Harrison, J.S., and Boss, D.S., 2018: Competitive landscape shifts: The influence of strategic entrepreneurship on shifts in market commonality. *Academy of Management Review*, 43: 349–370.
- Wowak, A. J., Gomez-Mejia, L. R., & Steinbach, A. L. 2017. Inducements and motives at the top: A holistic perspective on the drivers of executive behavior. *The Academy of Management Annals*, 11, 669-702.
- \*Wowak, A. J., Hambrick, D. C., & Henderson, A. D. 2011. Do CEOs encounter within-tenure settling Up? A multiperiod perspective on executive pay and dismissal. *Academy of Management Journal*, 54: 719–739.
- \*Wowak, A. J., Mannor, M. J., Arrfelt, M., & McNamara, G. 2016. Earthquake or glacier? How CEO charisma manifests in firm strategy over time. *Strategic Management Journal*, 37: 586– 603.
- \*Wowak, A. J., Mannor, M. J., & Wowak, K. D. 2015. Throwing caution to the wind: The effect of CEO stock option pay on the incidence of product safety problems. *Strategic Management Journal*, 36: 1082–1092.
- \*Wu, S., Levitas, E., & Priem, R. L. 2005. CEO tenure and company invention under differing levels of technological dynamism. *Academy of Management Journal*, 48: 859–873.
- Zajac, E. J., & Westphal, J. D. 1996. Who shall succeed? How CEO/board preferences and power affect the choice of new CEOs. *Academy of Management Journal*, 39: 64–90.
- \*Zhang, X., Bartol, K. M., Smith, K. G., Pfarrer, M. D., & Khanin, D. M. 2008. CEOs on the

edge: Earnings manipulation and stock-based incentive misalignment. *Academy of Management Journal*, 51: 241–258.

- \*Zhang, Y. 2008. Information asymmetry and the dismissal of newly appointed CEOs: An empirical investigation. *Strategic Management Journal*, 29: 859-872.
- \*Zhang, Y., & Qu, H. 2016. The impact of CEO succession with gender change on firm performance and successor early departure: Evidence from China's publicly listed companies in 1997–2010. *Academy of Management Journal*, 59: 1845–1868.
- \*Zhang, Y., & Rajagopalan, N. 2003. Explaining new CEO origin: Firm versus industry antecedents. *Academy of Management Journal*, 46: 327–338.
- \*Zhang, Y., & Rajagopalan, N. 2010. Once an outsider, always an outsider? CEO origin, strategic change, and firm performance. *Strategic Management Journal*, 31: 334-346.
- \*Zhang, Y., & Wiersema, M. F. 2009. Stock market reaction to CEO certification: The signaling role of CEO background. *Strategic Management Journal*, 30: 693–710.
- \*Zhu, D. H., & Chen, G. 2015. CEO narcissism and the impact of prior board experience on corporate strategy. *Administrative Science Quarterly*, 60: 31–65.
- \*Zhu, D. H., & Shen, W. 2016. Why do some outside successions fare better than others? The role of outside CEOs' prior experience with board diversity. *Strategic Management Journal*, 37: 2695–2708.
- \*Zhu, Q., Hu, S., & Shen, W. 2020. Why do some insider CEOs make more strategic changes than others? The impact of prior board experience on new CEO insiderness. *Strategic Management Journal*, 41: 1933–1951.
- Zupic, I., & Čater, T. 2015. Bibliometric methods in management and organization. *Organizational Research Methods*, 18: 429–472.

### Table 1

# Evolution of Research on Executive Background

	1960-1989	1990-1999	2000-2009	2010-2020
Number of studies	5	45	51	115
reviewed	All in management	Management – 43	Management – 49	Management – 81
		Finance – 2	Finance – 2	Accounting – 3
				Finance – 31
Number of	1 (5 articles)	1 (20 articles)	1 (29 articles)	1 (72 articles)
background		2 (11 articles)	2 (15 articles)	2 (23 articles)
variables examined		3+ (14 articles)	3+(7  articles)	3+ (20 articles)
Types of	Tenure, insider-	Age, tenure, education,	Age, tenure, education, functional	Age, tenure, education, functional
background	outsider status,	functional background,	background, insider-outsider status,	background, insider-outsider status,
variables	socio-economic	insider-outsider status,	nationality, international experience,	military experience, early life
	origin	international experience,	past strategic/work/TMT role	experiences (disaster, social class),
		industry experience, new	experience, heir apparent experience,	non-work experiences (fatherhood),
		venture experience,	experience with acquisitions, general	industry experience, prior role
		experience with	management experience	experience, conglomerate experience,
		reorientations		general management experience
Role of	Predictor (3 articles	Predictor, dependent variable	Predictor, moderator, dependent	Predictor, moderator, dependent
background	were correlational		variable	variable
variables	studies)			
Dependent	Individual-level	Individual-level	Individual-level	Individual-level
variables examined	Golden parachute	Compensation, job	Compensation, departure, dismissal,	Compensation, dismissal, turnover,
	size, compensation,	satisfaction, beliefs, tenure	succession, tenure	employment gaps, job search
	policy making	TMT-level	TMT-level	TMT-level
	authority, level in	Advice network diversity,	Cognitive diversity	Functional diversity, size
	organization	tenure, tenure and functional	Firm-level	Firm-level
		heterogeneity, turnover	Firm entry, internationalization,	Learning gains, strategic dynamism,
		Firm-level	retention/divestiture, change in	nonconformity, acquisitions, R&D and
		Stock market reactions,	strategy, earnings manipulation	innovation, strategic risk-taking,
		performance, bankruptcy,	* Some articles included both	market valuation, fraud
		international diversification,	individual and firm-level dependent	* Increase in the number of articles
		change in strategy	variables	that included individual/TMT and
				firm-level variables

	1960-1989	1990-1999	2000-2009	2010-2020
Theories used and	Agency	Upper echelons	Upper echelons	Upper echelons
representative	(Singh & Harianto,	(Sambharya, 1996; Wiersema	(Bigley & Wiersema, 2002; Kor &	(Dahl et al., 2012;Weng & Lin, 2014)
articles	1989)	& Bantel, 1992)	Misangyi, 2008)	Agency
		Agency	Agency	(Graffin et al., 2011; Koch-Bayram &
		(Buchholtz & Ribbens, 1994;	(Carpenter et al., 2003; Zhang et al.,	Wernicke, 2018)
		Rosenstein & Wyatt, 1997)	2008)	Contingency
		Contingency	Contingency	(Guadalupe et al., 2014;
		(Miller, 1991; Priem, 1994)	(Beal & Yasai-Ardekani, 2000;	Sundaramurthy et al., 2014)
		Information processing	Hambrick & Cannella, 2004)	Human capital
		(Roth, 1995; Sutcliffe, 1994)	Human capital	(Karim & Williams, 2012; Mueller et
		Personality	(Buchholtz, Ribbens, & Houle, 2003;	al., 2021)
		(Judge et al., 1994; Judge et	Sturman et al., 2008)	Imprinting
		al., 1995)	<b>Resource-based view</b>	(Kish-Gephart & Campbell, 2015)
		Other theories used	(Bergh, 2001; Somaya et al., 2007)	Learning
		Social identity (Lyness &	Other theories used	(Aktas et al., 2013; Nadolska &
		Thompson, 1997), Signaling	Leadership (Ling et al., 2008),	Barkema, 2014)
		(D'Aveni, 1990),	Network (Burt, Hogarth, & Michaud,	Signaling
		Institutional (Keck &	2000), Learning (Kor, 2003)	(Gomulya & Boeker, 2014; Graffin et
		Tushman, 1993)		al., 2013)
				Social identity
				(Cooper et al., 2014; Glass & Cook,
				2016)
				Other theories used
				Resource-based view (Mackey,
				Molloy, & Morris, 2014), Behavioral
				theory of the firm (Blagoeva et al.,
				2020), Wage indexation (Custódio et
				al., 2019)

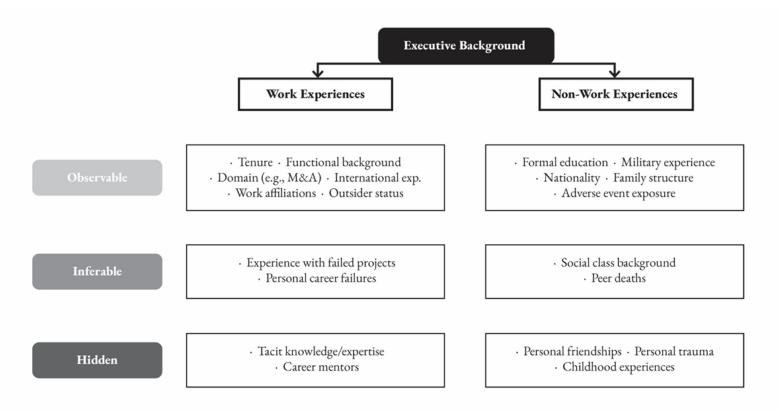
# Figure 1

Conceptual Framework for Examining Executive Background Characteristics

Visibility	Hidden <del>&lt;</del>	Inferable	Observable
Timing	Historical <b>K</b>	Pre-role entry	In-role
Frequency	One-time ←	Episodic	Cumulative
Discreteness	Dichotomous <b>4</b>	Categorical	Continuous
Agency	Involuntary <b>&lt;</b>	Partial influence	Discretionary

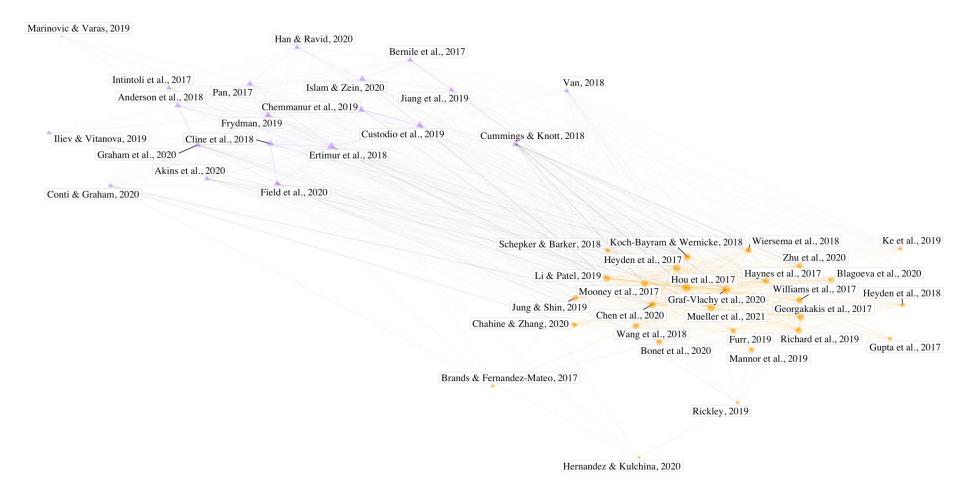
Figure 2

#### Executive Background Research Categorized by Visibility



#### Figure 3

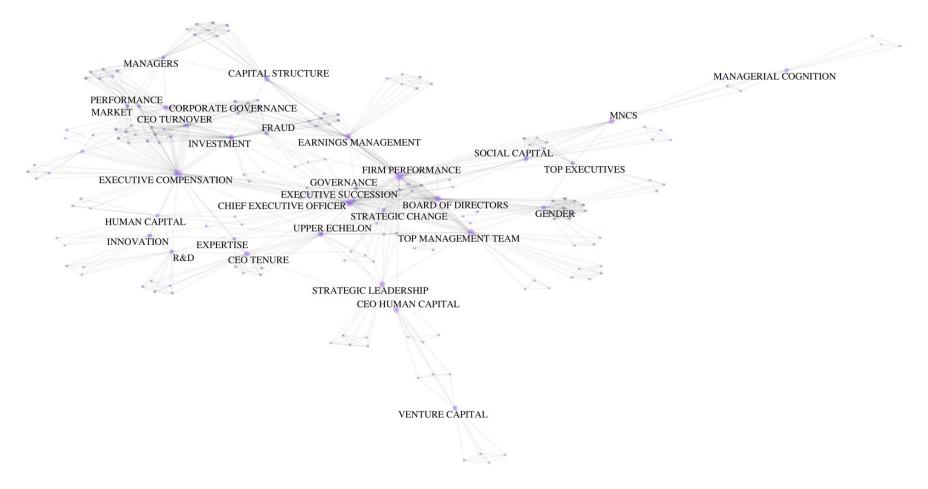
### A Plot of the Complete Bibliometric Coupling Graph for the Period from 2017 to 2020 (inclusive)



**Note:** Cluster membership is represented by distinct shapes. Node sizes are determined based on degree centrality (i.e., the extent to which a node connects to other nodes in the graph). We changed some node coordinates slightly to avoid overlap among node labels.



### A Plot of the Pairwise Connections of the Frequently Observed Keywords



Note: For visual clarity, we plotted labels only for the relatively more 'connected' nodes by setting up a betweenness centrality threshold.