

# S Y M P O S I U M

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## ADVANCING THE HUMAN CAPITAL PERSPECTIVE ON VALUE CREATION BY JOINING CAPABILITIES AND GOVERNANCE APPROACHES

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**This paper elaborates on how the human capital perspective on value creation can be advanced by joining the capabilities and governance approaches. Investments in firm-specific human capital can be an important pathway to building and enhancing a firm's core competencies. Thus, it is vital to build mechanisms and systems that encourage the development and safeguarding of these human capital-based capabilities. Our paper unpacks the notion of firm-specific human capital and presents a view on why this form of human capital especially matters in today's business context. We review pitfalls and shortcomings of a traditional shareholder model and its likely impacts on investments in firm-specific human capital. Finally, we discuss mechanisms by which the firm-specific human capital development process can be stimulated and protected.**

A promising way to advance the strategic management field is to consider the problem as the unit analysis (Nickerson, Silverman, & Zenger, 2007; Nickerson & Zenger, 2004). The current paper considers the following problem: *How can we advance the human capital perspective on economic value creation by joining the capabilities and governance approaches?*

The resources and (dynamic) capabilities perspective—which we will refer to as the capabilities approach—maintains that firms possessing, creating, and adapting resources and capabilities can capture and sustain competitive advantage (Barney, 1991; Penrose, 1959; Teece, Pisano, & Shuen, 1997). The governance approach maintains that higher economic performance can be achieved by investing in complementary and cospecialized assets (Helfat, 1997; Teece, 1986) and by governing them in an

economizing way (Oxley, 1997; Williamson, 1985). While some have suggested that these two approaches are complementary (Jacobides & Winter, 2005; Mahoney, 2001; Poppo & Zenger, 1998), Nickerson, Yen, and Mahoney (2012) documented that historically the capabilities and governance approaches have not been joined in a way that enables scholars and practitioners to coherently design organizations (Simon, 1996). An intuitive understanding of how firms develop and renew firm-level capabilities requires research attention to both how much firms invest and how effectively these strategic investments are *managed* and *governed* (Argyres, 1996; Kor & Mahoney, 2005; Mayer & Salomon, 2006).<sup>1</sup>

We anticipate that more fully joining the capabilities and governance approaches will continue to

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<sup>1</sup> Supplementing the intuitive connection between capabilities and governance, research contributions can be made through the analytical modeling of these connections (Milgrom & Roberts, 1992; Riordan & Williamson, 1985). The intuitive connection between firm-level capabilities and governance also holds at the individual level since the development of individual skills is influenced by governance/incentive systems.

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be a large undertaking in the evolving “science of organization” (Barnard, 1938, p. 290). This paper focuses on a specific problem within the capabilities–governance nexus (Makadok, 2003): Namely, because investments in firm-specific resources can be an important pathway to enhancing capabilities, there are increasing requirements for firms to manage and govern these capabilities effectively such that *realized* economic value creation approaches the *potential* value creation that can be achieved by firm-specific human capital (Coff, 1999; Foss & Foss, 2005; Kim & Mahoney, 2005, 2010).

For some time now within the capabilities approach it has been recognized (e.g., Mahoney & Pandian, 1992; Peteraf, 1993) that firm-specific investments can be a source of economic value creation, and Wright, Coff, and Moliterno (2014) placed the role of firm specificity in value creation as an important issue on the research agenda of strategic human capital. However, the crucial link between firm-specific human capital and the firm’s ability to build and renew its core competencies is not fully appreciated. We maintain that researchers have underestimated the strategic value of firm-specific human capital because they have overlooked the *versatility* of this notion and its far-reaching impact. In this paper, we aim to do justice to this powerful construct by providing a more comprehensive and richer discussion of it, and explain why investments in this capital are especially needed in today’s business environment. Thus, the importance of firm-specific human capital is the main thesis of our paper. In this thesis, the key insight our paper delivers is that, because firm-specific human capital is subject to appropriation hazard, employees *will not* invest in this strategic capital sufficiently if the proper incentives and safeguards are not adopted as part of the firm’s corporate governance policy. Our paper makes this case and then provides a future research agenda that can help researchers (and eventually managers) to discover which set of employee/managerial incentives and board-level safeguards can effectively promote and protect investments in firm-specific human capital.

### WHAT IS FIRM-SPECIFIC HUMAN CAPITAL?

Firm-specific human capital entails multiple types of specialized knowledge built over time through interactions among a firm’s employees; managers; constituents; and physical, technological, and knowledge-based resources. Firm-specific human capital is created and possessed by employees

who accumulate sufficient time in the firm to have meaningful learning experiences and interactions with unique firm resources and personnel while working on job assignments and socializing with others in the firm (and within the broader stakeholder domain).

A key component of firm-specific human capital is the experiential knowledge of idiosyncratic resources and capabilities of the firm (Penrose, 1959). Seasoned managers and original founders of firms are critical sources of firm-specific human capital because of their personal knowledge of the firm’s purpose and its unique bundle of resources and capabilities. Kor (2003, p. 709) explained that firm-specific knowledge “can be a crucial asset in the path-dependent development of the capabilities leading to new growth opportunities for the firm. . . . With tacit understanding of the firm’s technological knowledge bases, [managers and] founders can effectively assess the performance potential of different research and development paths and deploy the financial funds to projects in which the firm is more likely to become competitive.” When firms grow in directions and rates that are consistent with their resources and capabilities, they can capture efficiencies and deepen their knowledge bases (Kor & Leblebici, 2005; Penrose, 1959). Thus, firm-specific knowledge constitutes managers’ entrepreneurial capital because it enables them to envision a superior productive opportunity set for the firm (Foss et al., 2008; Kor, Mahoney, & Michael, 2007).

A second important component of firm-specific human capital is the experiential knowledge of the people employed in the firm, specifically their abilities, limitations, and idiosyncratic habits, which affect teamwork outcomes and collaboration (Barnard, 1938; Kor & Mahoney, 2000). When managers possess such knowledge of employees, they can effectively match employee skills to projects and employees to each other in team settings (Mahoney, 1995; Prescott & Visscher 1980). Experiential knowledge of coworkers (and managers) is also critical to an individual employee’s productivity and job satisfaction, as the knowledge of peers’ ability, integrity, and personality will affect the process and outcome of interactions and exchanges with them. In essence, team outcomes depend on the effective use of knowledge about the idiosyncrasies people bring to these exchanges.

At the same time, firms today face pressures to meet high growth expectations and diversify into new areas for growth and innovation. Consequently, firms regularly rely on externally acquired human capital by hiring seasoned employees and managers. These hiring practices have important merits

such as enabling new expertise domains to be built, achieving speedy entry into product and geographical markets, and increasing the heterogeneity of views in the organization (Kor & Leblebici, 2005). However, these hiring practices also come with costs and disadvantages. Newly hired employees and managers often cannot become fully productive in the new firm until they acquire the complementary and cospecialized knowledge of the firm's unique resources, processes, and people (Klein, Crawford, & Alchian, 1978; Peteraf, 1993). There is a loss of productivity when people move to a new firm, because the firm-specific knowledge from the previous company is only partially applicable to the current setting. An employee can suffer from suboptimal performance due to a lack of firm-specific, tacit knowledge in the new firm, and such knowledge takes time to build (Dierickx & Cool, 1989; Penrose, 1959).

The extent of the loss and duration of recovery of the productivity of human capital depends on the uniqueness of the old firm and the new firm and the gap between the two firms in resource bundles, routines and procedures, and culture. As the gap widens, it becomes difficult to transfer human skills, expertise, and experience developed in one firm to another firm (Bailey & Helfat, 2003; Rubin, 1973). The new employer may incur adjustment costs to make the externally acquired human capital productively deployable with the firm's unique resource systems (Prescott & Visscher, 1980; Slater, 1980). In some cases, employees' inherited knowledge from the original firm may clash with the new company's specific culture and operational routines, creating negative synergies and eroding their contribution potential.

When a firm relies heavily on external hiring to develop its human capital base, collective loss of productivity and disruption can be extensive. Such a hiring policy requires substantial investments by the firm in formal training and informal training (socialization) in a systematic fashion (Kor & Leblebici, 2005). To help the newly hired people adjust, managers need to invest significant time in coaching them to learn about the firm's idiosyncrasies and unlearn (or de-emphasize) conflicting knowledge and habits brought from other firms (Harris & Kor, 2013). Through mentoring by managers and regular socialization among peers, new employees are more likely to embrace and internalize the current firm's common language, values, and identity (Arrow, 1974; Grant, 1996a, 1996b; Kogut & Zander, 1996).

Consistent with the adjustment cost view, in a study of large law firms, Kor and Leblebici (2005)

found evidence of adjustment problems and a loss of productivity in externally hired lawyers. Even though the senior partners in the firm expected laterally hired seasoned lawyers to become productive soon after they arrived, the speed of adjustment depended on where lawyers worked before (e.g., large versus midsize/small firms; companies with a different culture). Of this case, Kor and Leblebici (2005, p. 982) wrote:

Sometimes laterally hired associates have "loose standards" and may have to forget their "bad habits." One partner suggested that compared to the recent law school graduates, laterally hired associates go through bigger adjustments to company culture, work principles, and width of expertise; therefore, his firm prefers internal development to lateral hiring of associates. Another partner discussed a law firm where they brought in many people laterally but later they had to dissolve the partnership because people did not get along.

A third important component of firm-specific human capital involves the experiential knowledge of the firm's stakeholders and constituents—that is, who they are, what their needs are, and how they relate and contribute to the firm. An in-depth understanding of stakeholders can be a key to the long-term survival and success of the firm, and this understanding is typically best achieved through personal experience—that is, through interactions with various stakeholders and historical knowledge of events and relationships with them. In professional service firms, for example, client-specific knowledge is one of the most important assets in the firm, as it entails not only the knowledge of the client's unique needs and preferences but also the notion of trust, which is built over time through exchanges and interactions (Gilson & Mnookin, 1985; Kor & Leblebici, 2005). Some of this knowledge and social capital is stored in institutional memory, but much of it is also embedded in ongoing relationships (Kostova & Roth, 2003; Nahapiet & Ghoshal, 1998). Without continuity and new investments in these relationships, such assets can erode in value.

Thus, three key components of firm-specific human capital are (1) the experiential knowledge of the firm's idiosyncratic resources, cospecialized capabilities, systems, and routines, (2) the collective shared knowledge of the firm's employees' (and managers') strengths and shortcomings, and the trust embedded in specific relationships and the firm's organizational culture, and (3) the explicit and tacit knowledge about the key constituents and stakeholders of the firm,

including their specific contributions, needs, and the firm's interactions with them.

### APPROPRIATION HAZARD AND UNDERINVESTMENT IN FIRM-SPECIFIC HUMAN CAPITAL

Firm-specific investments in general—and for the purposes of this paper, firm-specific human capital investments in particular—are, by definition, unique, and may also be valuable, inimitable (e.g., via isolating mechanisms), and nonsubstitutable (Barney, 1991; Rumelt, 1984). In terms of the degree of uniqueness, a useful concept that can be traced at least to Marshall (1920) is that of the *quasi-rent* of a resource, which is defined as the difference between the first-best and second-best use of the resource. The first-best use typically involves deployment of the asset (i.e., employee skills) in the “home” environment in which it was codeveloped and cospecialized with other complementary assets within the firm. The second-best use may involve deployment of this employee's human capital in a different firm or industry context where the cospecialized, unique assets of the original (home) firm are not present. For example, if an employee has developed firm-specific skills whose first-best use generates economic value of \$50 per hour in the original firm, and whose skills are valued in the next-best offer by another firm at \$30 per hour—after taking into account both the skills and signaling value of the employee's investments (Campbell, Coff, & Kryscynski, 2012)—then the potential “appropriable quasi-rent” (Klein et al., 1978) is \$20 per hour, which is the measure of the *firm-specific* component of the human capital.<sup>2</sup> This quasi-rent can be generated only in the home environment; however, it's important to ask who gets to appropriate this quasi-rent in the home environment.

Workers often have foresight concerning the *appropriation hazard* for economic rents generated from firm-specific human capital. Workers anticipate that if they invest in developing firm-specific knowledge and skills, they may not be compensated or rewarded for their investment, and when they move to a different firm, they are likely to experience

<sup>2</sup> Campbell, Coff, and Kryscynski (2012) and others in the current issue make the case that because of the neglect of signaling effects, the appropriable quasi-rents from firm-specific human capital might be overestimated. This reasoning concerns the *degree* of firm-specific human capital but does not diminish that the problem exists *in kind*, and is ultimately an empirical question requiring further inquiry.

a productivity loss (and perhaps a compensation loss) if they are more heavily invested in unique, firm-specific skills rather than generic skills that are much easier to transfer. As a result, it is possible that employees will underinvest in firm-specific human capital, which translates into a reduction in capability development and economic value creation.

Individuals' investments in firm-specific knowledge and skills will also contribute to development of some generic skills as a coproduct (Morris et al., 2010), such as project management, team building, social skills, and general task-based or functional expertise. However, among the various projects and assignments that an employee (or a manager) engages in, there will be some variation (or a range) in terms of how much generic skill versus firm-specific skill will be produced (Kor & Mesko, 2013). At least some of the employees will be cognizant of this trade-off and will have some choice in how much time and energy they invest in assignments that are mostly of a firm-specific nature (and thus less transferable).

The underinvestment problem in firm-specific human capital is likely to prevail in environments where such employee investments are expected but not systematically assessed and rewarded. Incentives supporting such investments can be in the form of monetary or nonmonetary compensation, they address both basic and complex needs of the employees (e.g., providing work safety and health care, and also personal growth opportunities), and they aim to capture both measurable and hard-to-quantify contributions. A variety of managerial and governance mechanisms (i.e., bundles of property rights allocations) can come into play to help create economic value by mitigating the potential underinvestment in firm-specific human capital by attenuating inefficient appropriation and inefficient investment (Wang & Barney, 2006; Williamson, 1996).<sup>3</sup>

### THE URGENCY OF CONNECTING CAPABILITIES AND GOVERNANCE APPROACHES

Because the capabilities and governance literatures have developed separately, they remain as disconnected research domains. It is reasonable to ask what has changed to make this separate approach

<sup>3</sup> Empirical studies corroborating the existence and importance of firm-specific human capital include Blair (1995); Groysberg and Lee (2009); Groysberg, Lee, and Nanda (2008); Helfat (1994); Huckman and Pisano, (2006); Mayer, Somaya, and Williamson (2012); Sturman, Walsh, and Cheramie (2008); Toole and Czarnitzki (2009); and Wang, He, and Mahoney (2009).

increasingly inadequate. We suggest two key reasons why joining capabilities and governance approaches is needed. First, the nature of the firm in practice is changing, with an increasing importance placed on intellectual property rights and knowledge-based resources and capabilities (Kor & Leblebici, 2005; Mayer et al., 2012; Wang et al., 2009). Such resources are fraught with market frictions (Mahoney, 2005; Mahoney & Qian, 2013). In particular, with the increasing importance of intangible resources and knowledge-based capabilities, governing effectively becomes increasingly critical due to potential property rights problems under conditions of asymmetric information and distribution conflicts, (Klein et al., 2012; Libecap, 1989). These intangible and knowledge-based assets (e.g., entrepreneurial insights of managers/employees, tacit knowledge of the firm-specific asset configurations, and shared team-specific knowledge and trust) are difficult to imitate and thus are enduring sources of competitive advantage for the firm (Kor & Mahoney, 2004; Nelson & Winter, 1982).

A second related reason why we need to join capabilities and governance approaches now is that business enterprises that historically could be understood as leveraging general-purpose physical resources to achieve economies of scale and scope (Chandler, 1990; Teece, 1986) are now increasingly affected by firm-specific human capital (Wang & Barney, 2006; Williamson, 1996). Firms whose most valuable resources are those employees with firm-specific skills and knowledge offer a different view from previous theories of the firm that assumed perfectly fungible human resources (e.g., Alchian & Demsetz, 1972). In contrast, economically valuable firm-specific human resources are viewed as co-producing with general-purpose physical resources (Hart, 1995; Lado & Wilson, 1994). Today's business realities involve employee mobility, more geographically expansive job opportunities for knowledge workers, and decreased employee loyalty and commitment. This shift is not trivial and thus requires adaptation in governance—such as developing incentives for employees (and managers) to invest in firm-specific human capital, and putting in place economic safeguards to protect individuals making such investments (Wang, He, & Mahoney, 2009; Zeitoun & Osterloh, 2012).

Examples of these mechanisms include identifying, rewarding, and protecting individuals who are willing to invest their time, energy, and careers into projects that are highly idiosyncratic to the firm due to complementarities with other firm assets. Likewise, managers and employees undertake significant risk to their

careers when they agree to work on strategically important but high-uncertainty projects that have greater failure rates (Gambardella, Panico, & Valentini, 2013). Managers investing in recruitment, building teams, and mentoring of junior and new employees contribute to the development of firm-specific team capital, but they may not get rewarded for these efforts. These activities can be rather time-consuming and may compete with one's individual work obligations and personal goals. Systematically recognizing such efforts (as part of compensation and promotion decisions) matters to continuity of such investments throughout the organization. Likewise, it is important to provide rewards and safeguards for employees and for managers working diligently to engage and protect the firm's various stakeholders. These individuals make long-term investments in relationships and build trust with stakeholders while potentially risking their own careers, because such relationships are not always welcome as they may disrupt the status quo power structure and rent generation-allocation patterns.

We maintain that because of the changing nature of the firm, theories of effective governance need to adapt as well. In particular, shareholder (principal-agent) theories of governance, which model the firm as a nexus of *explicit and complete contracts* (Alchian & Demsetz, 1972; Holmstrom, 1982; Jensen & Meckling, 1976), do not align well with today's business environment. These theories may be more suitable for modeling of firms in the Chandlerian era of 1840 through 1960 (Chandler, 1962, 1977), when firms possessed general-purpose assets that were subject to lower market frictions. When complete contracting is (more) feasible, only shareholders carry a residual risk, and therefore they should have both the residual income and residual decision rights. Thus, in the complete contracting view, the economic basis for shareholders' supremacy is more justifiable (Stout, 2002).

However, we live in a world of incomplete and implicit contracting, especially for specialized knowledge-based and relational assets (Baker, Gibbons, & Murphy, 2002; Dyer & Singh, 1998), when several contract contingencies are unknown and/or unknowable and thus unspecified in advance. In many cases, written contracts do not exist; investments take place on the basis of implicit or explicit mutual understandings. With incomplete and implicit contracts, a firm's decisions typically influence the economic payoffs and well-being of many stakeholders of the nexus, sometimes to an even greater extent than the influence on financial returns to shareholders (Zingales, 2000). A firm's decisions also

influence the willingness and ability of the stakeholders to contribute to value creation. These insights are at the heart of a stakeholder theory of the firm (Asher, Mahoney, & Mahoney, 2005; Donaldson & Preston, 1995; Mahoney, 2012).<sup>4</sup> Indeed, creditors, communities, and complex network relationships among suppliers and customers produce interdependencies that can lead to substantial residual gains and losses. Thus, governance decisions on how to engage, reward, and safeguard the contributions of stakeholders to value creation shape the economic rent generation capacity of the firm's competencies that are often cobuilt with the stakeholders.

We focus here on employees as key residual claimants when firm-specific human capital is involved. We emphasize that firm-specific human capital development is a coproduction generated through investments made both by the firm and its employees. Yet the appropriation hazard can cause employees to refrain from making such investments. Rewards and safeguards provided by the firm have the potential to encourage and shelter those individuals incurring risk by choosing to co-deploy their time, energy, and personal capital in building firm-specific assets and competencies, and in developing collective social capital and trust with the firm's internal and external stakeholders.

It has been noted that attempting to provide greater safeguards to employees may increase discretion on the part of management and increase costs of corporate decision making (Roe, 2001).<sup>5</sup> However, there are potential benefits to considering the stakeholder view in contexts where firm-specific knowledge is high, in which case it is possible that inefficiencies that can occur under shareholder wealth maximization may be greater than increased agency costs that can take place using a stakeholder approach in which managers have greater discretion (Mahoney, 2012). One disadvantage of pursuing the shareholder supremacy view is that reduced-value contributions from insufficiently

safeguarded stakeholders (e.g., employees) can result in mediocre financial returns. Even worse, promoting supremacy of one stakeholder group at the expense of all others can result in decision making with tunnel vision, producing unintended negative consequences, including corporate liabilities or tarnished firm reputation. Alternatively, firm-level governance can be viewed as a bundle of contractual property rights that affect the ex post bargaining concerning the collective value creation derived from the investments in firm-specific (human) capital (Osterloh & Frey, 2006; Zingales, 2000), with the insight that unless employees' ex post bargaining positions are protected, employees will underinvest in firm-specific investments (Wang & Barney, 2006).<sup>6</sup>

Stakeholder governance can create economic value (Grandori, 2004; Sachs & Ruhli, 2011). Consider a firm whose history is to not appropriate the economic "quasi-rents" that employees create when they develop firm-specific human capital (Klein et al., 1978). Employees may be more willing to make such firm-specific investments based on this nontradable reputation (Dierickx & Cool, 1989) vis-à-vis (incomplete) market contracting. If such firm-specific investments are economically valuable and cannot be elicited by explicit contracting, then the firm's nontradable reputation for delivering on implicit contracts adds economic value and represents an organizational asset (Coff, 1999; Mahoney 2012).

#### CHALLENGES OF FOLLOWING A STAKEHOLDER APPROACH TO FIRM-SPECIFIC HUMAN CAPITAL

From an incomplete contracting perspective, managers must deal with two major issues when seeking to develop and nurture a reputation for treating stakeholders with fairness (Bosse, Phillips, & Harrison, 2009). First, there are numerous reasons

<sup>4</sup> The seminal work of the stakeholder view is Freeman (1984). Stakeholders in this tradition are considered to be all groups and persons who contribute to the value-creating potential of the corporation and who can potentially benefit and/or those groups and persons who voluntarily or involuntarily become exposed to risk from firm-level activities (Post, Preston, & Sachs, 2002).

<sup>5</sup> Roe submitted that "a stakeholder measure of managerial accountability could leave managers so much discretion that managers could easily pursue their own agenda, one that might maximize neither shareholder, employee, consumer nor national wealth, but only their own" (2001, p. 2065).

<sup>6</sup> Some scholars defend shareholder governance even under incomplete and implicit contracting, arguing that shareholders have fewer contractual safeguards than other stakeholders (Hansmann, 1996; Jensen, 2001; Tirole, 2001). We respond by suggesting that in a world of bounded rationality, potentially opportunistic behavior, uncertainty, asset specificity, and asymmetric information, there are likely to be inadequate contractual safeguards for those other than the shareholders (Simon, 1947; Williamson, 1975). Further, while shareholders can effectively diversify their investments to mitigate their idiosyncratic risk, employees typically have one employer and positive switching costs (Cornell & Shapiro, 1987).

why top-level managers may leave the firm over time, and the future management team may neither have the reputation nor hold the stakeholder management view of protecting firm-specific human capital (Mahoney, 2012). Second, managers who have a strong stakeholder management reputation may cease to hold that approach during times of financial hardship. For example, during difficult financial times, a firm may break earlier implicit contracts with its employees (Shleifer & Summers, 1988).<sup>7</sup>

Thus, even if a management team embraces the stakeholder approach, firms (and their stakeholders) are subject to time inconsistency problems (Shleifer & Summers, 1988)—when managerial philosophy and priorities change over time because of managerial turnover or new financial/competitive challenges. An unfettered pursuit of shareholders' value maximization at those times may lead to inefficient strategic actions, such as the breach of valuable implicit contracts that encourage employees to invest in firm-specific human capital. For example, Shleifer and Summers (1988) maintained that a breach of trust via breaking implicit contracts can occur in hostile takeovers. In such cases, financial transfers from employees to shareholders can result from the termination of established defined benefit pension funds (Pontiff, Shleifer, & Weisbach, 1990). Economic efficiency losses will occur because employees who anticipate opportunistic behavior will be reluctant to enter into implicit contracts with the firm (Wang & Barney, 2006). After observing or experiencing such opportunistic firm behavior, the dominant strategy of the employees (and managers) is likely to be to minimize firm-specific projects.

Blair and Stout's (1999) team production theory of corporate law offers a cogent stakeholder paradigm to address this time inconsistency problem. Blair and Stout (1999), along the lines of Rajan and Zingales (1998), considered that numerous corporate stakeholders may make firm-specific investments and that

a "mediating hierarchy solution" via the act of incorporation requires team members in their own self-interest to surrender key property rights such as those over team inputs in firm-specific human capital as well as the team's output. Thus, the owner of the corporation's resources *is the corporation itself* (Clark, 1985). From this stakeholder approach, corporate law safeguards all stakeholders rather than a single group or subset. The board of directors is the ultimate decision-making body of the corporation, and according to U.S. public corporation law, board directors are required to act as disinterested trustees for the corporation itself. In other words, rather than maximizing short-run interests of any particular stakeholder group, the board is obliged to make decisions in the best interest of *the firm* with a long-term view, which often involves sustaining the contributions of the firm's stakeholders.

Blair and Stout (1999) usefully connected Williamson's (1985) transaction cost economics (with a particular emphasis on the construct of asset specificity), Rajan and Zingales's (1998) property rights approach, and Alchian and Demsetz's (1972) measurement theory (with special attention to ascertaining individual productivity within team production). In business situations, drafting complete contracts is typically not feasible, and to address opportunistic economic rent seeking and deter shirking among various corporate "team members," the mediating-hierarchy solution via public corporation law can be comparatively efficient in dealing with this bundle of market frictions (i.e., asset specificity, incomplete contracting, and team production problems).

At the head of the hierarchy is a board of directors that has the responsibility and authority to coordinate team members' activities and to mediate their disputes. In this approach, board members act as trustees to the corporation itself, and the independence of the board of directors is one of the hallmarks that distinguish the public corporation from other enterprise forms. Coinvestors making substantial credible commitments need "mutual lock-in" (Kaufman & Englander, 2005; Rajan & Zingales, 1998), and thus in their own self-interest voluntarily relinquish some decision control rights to the board of directors, whose responsibility is to act as trustees of the corporation itself. In contrast to Alchian and Demsetz (1972), in Blair and Stout's (1999) team production model, individuals (employees) *want to be part of a team that can share in the economic surplus generated by team production—that is, incentives and rewards for firm-specific investments.*

<sup>7</sup> This situation happened at Starbucks in the midst of the 2007 economic downturn, when Howard Schultz, the founder and chief executive officer of the firm, was pressured by one of the firm's institutional investors to cut the health care benefits of employees. The investor saw the downturn as a legitimate reason to relinquish this obligation. Howard Schultz stood his ground and did not cut employee health care benefits and even suggested that the investor sell his shares. Schultz's interview can be found at <http://hbr.org/2010/07/the-hbr-interview-we-had-to-own-the-mistakes/ar/1>

In this view of the modern corporation, Blair and Stout's (1999) mediating hierarchy model considered a "nexus of firm-specific investments" embedded in an incomplete and implicit contract (Blair & Stout, 1999, p. 275; Lan & Heracleous, 2010). The commitment of the team members is to a mediating process for setting goals and resolving disputes. The mediating hierarchy thus provides certain "quasi-judicial functions" (Williamson, 1975, p. 30).

Employees in a stakeholder approach have the opportunity to formulate problems, become involved in problem solving and quality enhancement, and resolve disputes (Kochan & Rubinstein, 2000). In terms of the role of the board of directors, in addition to the board's dual functions of (1) streamlining information gathering and decision making and (2) controlling shirking and opportunism, *its third function* is encouraging firm-specific investments in team production by mediating disputes among team members about the allocation of duties and rewards. Thus, Osterloh and Frey (2006) maintained that (1) the higher the percentage of firm-specific human capital relative to financial capital, the higher the percentage of insider (such as employee) representation on the board of directors, (2) employees making firm-specific investments would be safeguarded by those inside directors who would be elected by and responsible for those employees, and (3) a disinterested chairperson of the board would monitor the contributions of other board members for the benefit of the corporation itself (see also Fauver & Fuerst, 2006). Thus, a board of directors with employee representation serves as a potential governance mechanism for monitoring and safeguarding the overall firm-specific human capital development process.

#### **FUTURE RESEARCH AGENDA FOR HUMAN CAPITAL RESEARCHERS**

*What's next?* We need more empirical work to determine the extent of firm-specific human capital and the extent of its underinvestment (Wang & Barney, 2006). This line of research involves examining how employees' and firms' investments in firm-specific human capital can be identified and measured. We discussed three components of employee (managerial) firm-specific human capital: (1) the experiential knowledge of the firm's unique resources, cospecialized capabilities, systems, and routines, (2) the collective shared knowledge of the firm's employees' strengths and shortcomings (including the trust embedded in specific relationships),

and (3) the explicit and tacit knowledge about the key constituents and stakeholders of the firm. Thus, studies can be designed to capture different components of this construct at the individual or team levels (which can then be analyzed at multiple levels). Research can assess the stock of these knowledge bases and relational assets embedded in firm-specific human capital, or capture individuals' ongoing investments (flows) in these categories.

Likewise, we discussed the willingness of employees/managers to partake in strategically important but high-risk projects or long-term initiatives that will pay off in the long run. Engagement in such projects indicates willingness to invest in firm-specific human capital. It would be intriguing to explore the relationship between individuals' willingness to make these investments and the incentives provided by the firm. Such incentives may cover a wide range of rewards and mechanisms (monetary and nonmonetary incentives, those addressing basic and complex needs of employees, those that are merit based and universally available).

There are many possible research questions in this domain. How do different groups of employees respond to various incentives? For example, how much value do employees place on a good health care plan and work safety, and how does this vary across various blue-collar versus professional knowledge workers? How do employees respond to merit-based versus universally available employee rewards and benefits? How do firms evaluate and reward hard-to-quantify contributions to firm-specific human capital development? How do different programs and bundles of incentives affect employee identification with the firm (or unit), individual or team productivity, and turnover? What is the link between firm-specific investments in human capital (by the firm and employees) and employee identification with the firm? These are fascinating areas of research that welcome macro- and micro-organizational scholarship and collaboration. Incentive systems are likely to have flaws and imperfections due to the tacit and team-based nature of firm-specific human capital development and bounded rationality. However, research can advance our understanding of the use and effectiveness of these tools, and even result in innovation in corporate governance.

Based on Blair and Stout's (1999) stakeholder approach, we also encourage research on the merits of inside (employee) representation on the board of directors. While this is a common practice in

Germany, it is not clear how such a practice could work in the United States and other countries. Employee representation on the board can be achieved through inclusion of a senior human resources (HR) executive on the board. There is some indication that the chief HR executive is already an active participant in board meetings in some corporations, and giving this person a formal board seat may become a common practice. Alternatively, this representation can happen through elected individuals instead of an HR manager. That may bring a more direct representative voice of the employees to the boardroom, but it may create other challenges. As another option, an outside member (an HR executive or representative from an external firm) could serve on the board and be asked to bring an employee point of view to various strategic discussions in the boardroom.

Ultimately, this line of research examines ways in which boards can effectively govern the use of incentives and safeguards that promote and protect investments in firm-specific human capital. It asks how board structure and board process can attenuate the problem of underinvestment in firm-specific human capital. Such inquiry leads to a broader research question about the consequences of embracing a stakeholder governance view. An important research issue concerns the comparative agency loss of stakeholder governance vis-à-vis shareholder governance (Tirole, 2006). Should there be a matching governance alignment, with shareholder governance applying when firm-specific investments are low and stakeholder governance applying when firm-specific investments are high?

In this research domain, we see great opportunities in supplementing large sample studies with in-depth case-based research that provides insights about the economic value and social outcomes of rewarding and safeguarding firm-specific human capital investments. High-profile examples such as Costco, Google, Patagonia, Starbucks, and Zappos can help us understand how different managerial and governance practices on human capital enable these firms to achieve stellar financial returns while maintaining a cadre of highly committed and energized employees and positive social impact on stakeholder communities. Such research can be augmented with inquiry about managerial cognition and values (at individual and team levels). For example, what kinds of background attributes, life experiences, and defining professional experiences shape managers' orientation toward human capital development? What are some of the collective team

features and experiences that prepare managers to subscribe to a stakeholder approach? Kor (2006) found that entrepreneurial firms opt for higher levels of research and development (R&D) investment intensity (which is also subject to underinvestment) when managers in the firm have shared team-specific experience. Because risky investments require a sense of trust and common knowledge of the team members (Priem & Nystrom, 2014), managers with shared team-specific experience cope well with the uncertainty associated with investing in R&D (Bourgeois & Eisenhardt, 1988). This example illustrates the central message of the current paper: that the next generation of research will advance the human capital perspective on value creation by joining capabilities and governance approaches.<sup>8</sup>

In conclusion, we subscribe to the notion that investments in firm-specific human capital create an important pathway to building and enhancing a firm's core competencies. We maintain that a stakeholder approach to the governance of investments in firm-specific human capital is likely to be a synergistic, win-win methodology in the long term. We welcome empirical (quantitative and qualitative) research that can reveal consequences of alternative approaches to the issue of underinvestment in firm-specific human capital.

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<sup>8</sup> Finally, our efforts here to further join capabilities and governance approaches is a starting point for advancement, but it is not the ending point for the development of human capital (Langlois & Foss, 1999). We focused on the continuing need to facilitate human capital development through the attenuation of opportunistic behavior via governance (Williamson, 1999). Yet there are (team theory) managerial problems remaining even when economic incentives are fully aligned (Marschak & Radner, 1972). Given a world of uncertainty and bounded rationality (Knight, 1921; Simon, 1947), there are needs for astute communication to achieve convergent expectations (Agarwal, Croson, & Mahoney, 2010; Malmgren, 1961) and for diligent qualitative coordination among holders of specialized, tacit, and distributed knowledge (Polanyi, 1962; Tsoukas, 1996), in which managerial attention (Ocasio, 1997) and organizational identity also matter (Kogut & Zander, 1996). Or put differently, because of specialization and the division of labor, managerial communication and coordination are vital to moving everyone in the organization forward together. Human resource management, organization behavior, and related literatures can be particularly helpful in advancing these aspects of human capital research.

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