Advancing the Human Capital Perspective on Value Creation
by Joining Capabilities and Governance Approaches

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Abstract

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.

Keywords: Firm-specific human capital, capabilities, governance
A promising approach for the advancement of 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 the current paper 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 co-specialized 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) document 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).1

We anticipate that more fully joining the capabilities and governance approaches will continue to be a large undertaking in the evolving “science of organization” (Barnard, 1938: 290). The current paper focuses on a specific problem within the capabilities-governance nexus.

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1 Supplementing the intuitive connection between capabilities and governance, research contributions can be made through the analytical modeling of these connections (Milgrom & Roberts, 1990; 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.
(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).

It has been recognized within the capabilities approach for some time now (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) place 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 the under-estimation of the strategic value of firm-specific human capital stems from a lack of understanding of 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 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 allocating 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 type of such knowledge 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: 709) explains 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 since it enables managers to envision a superior productive opportunity set for the firm (Foss et al. 2008; Kor, Mahoney, & Michael, 2007).

A second form of knowledge embedded in firm-specific human capital is the experiential knowledge of the people employed in the firm, specifically, their abilities, limitations, and
idiosyncratic habits, which impact 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 the co-workers (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 upon 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 through the hiring of 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 co-specialized 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 sub-optimal 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 these two firms, and the gap between 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). For adjustment of the newly hired people, 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) find 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 mid-size/small firms; companies with different culture). Kor and Leblebici (2005: 982) state that: “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, i.e., 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; i.e., 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 the years 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, co-specialized 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 Under-investment in Firm-Specific Human Capital

Firm-specific investments in general --- and for the purposes of the current paper, firm-specific human capital investments in particular --- are, by definition, unique, and may also be valuable, inimitable (e.g., via isolating mechanisms) and non-substitutable (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 co-developed and co-specialized 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 co-specialized, 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. ² This quasi rent can only be generated in the home environment; however, what a critical question to ask is 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

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² Campbell, Coff, and Kryscynski (2012), and others in the current issue, make the case that because of the neglect of signaling effects, the approvable quasi-rents from firm-specific human capital might be over-estimated. 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.
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 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, there is the risk of an under-investment by employees 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 co-product (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 an employee (or a manager) engages in, there will be some variation (or a range) in terms of how much generic skills versus firm-specific skills will be produced (Kor & Mesko, 2013). At least some of the employees will be cognizant of this tradeoff and will have some choice in how much time and energy they invest in assignments that are mostly of a firm-specific nature (and less transferable).

The under-investment 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 and non-monetary 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 under-investment in firm-specific human
capital by attenuating inefficient appropriation and inefficient investment (Wang & Barney, 2006; Williamson, 1996).³

The Urgency about Connecting Capabilities and Governance Approaches

Why Now? Because the capabilities and governance literatures have primarily developed separately, they remain as disconnected research domains. A reasonable question is what has changed to make this separate approach 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 joining capabilities and governance approaches is needed is because 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 impacted by firm-specific human capital (Wang & Barney, 2006; Williamson, 1996).³

³ 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).
1996). Human capital and technology firms, whose main resources are key employees with firm-specific (technological) knowledge, challenge early theories of the firm, where economically valuable firm-specific human resources are 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 lessened 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). Individuals investing in recruitment, building teams, and mentoring of junior and new employees contribute to 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) matter to continuity of such investments throughout the organization. Likewise, it is important to provide rewards and safeguards for employees and 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.

The current paper maintains that because of the changing nature of the firm, our 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 the 1840-1960 period (Chandler, 1962, 1977) where firms possess general-purpose assets that are 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), where several contract contingencies are unknown and/or unknowable and thus unspecified in advance, and in many cases, written contracts do not exist but 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;
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 co-built with the stakeholders.

The current paper focuses on the stakeholder of employees as key residual claimants when firm-specific human capital is involved. Here we emphasize that firm-specific human capital development is a co-production: it is 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 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). However, there are potential benefits of moving towards the stakeholder view, and it is warranted to hold open the possibility that the inefficiencies that flow from shareholder primacy may turn out to be worse than the increased agency costs that may occur using a stakeholder approach. For one, reduced value contributions from insufficiently safeguarded

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4 The seminal work of the stakeholder view is Freeman (1984). Stakeholders in this tradition are defined broadly as all persons and groups who contribute to the wealth-creating potential of the firm and are its potential beneficiaries and/or those who voluntarily or involuntarily become exposed to risk from the activities of the firm (Post, Preston, & Sachs, 2002).

5 Roe submits 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: 2065).
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 a tunnel vision, producing unintended negative consequences, including corporate liabilities or tarnished firm reputation. Instead, firm governance can be defined as a set of contracts shaping the \textit{ex post} bargaining over the joint output of firm-specific (human capital) investments (Osterloh & Frey, 2006; Zingales, 2000), with the insight that unless employees’ \textit{ex post} bargaining positions are protected, employees will under-invest in firm-specific investments (Wang & Barney, 2006).\textsuperscript{6}

Stakeholder governance can create economic value (Grandori, 2004; Sachs & Ruhli, 2011). Consider a firm with the \textit{reputation} for honoring the implicit contract of not expropriating “quasi-rents” that have been generated by employees investing in firm-specific human capital (Klein, \textit{et al.} 1978). Relying on such a non-tradeable reputation (Dierickx & Cool, 1989), the employees may be willing to make firm-specific human capital investments that are greater than they would have in the marketplace, where complete explicit contracting is not feasible. If such firm-specific investments are economically valuable and cannot be elicited by explicit contracting, then the firm’s non-tradeable reputation for delivering on implicit contracts adds economic value and represents an organizational asset (Coff, 1999).

\textsuperscript{6} Some scholars defend shareholder governance even under incomplete and implicit contracting arguing that shareholders have less 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 is likely to be inadequate contractual safeguards for those other than the shareholders (Simon, 1947; Williamson, 1975). We also note that while shareholders can effectively eliminate idiosyncratic risk by holding a diversified portfolio of stocks, employees typically have this value invested in one firm (Cornell & Shapiro, 1987).
Challenges of Following a Stakeholder Approach to Firm-Specific Human Capital

At least two major challenges face managers in attempting to build and maintain a reputation for fair treatment of stakeholders in an implicit contract (Bosse, Phillips, & Harrison, 2009). First, the senior managers of the firm are subject to periodic shareholder vote, so that a future management team that does not share the current management stakeholder philosophy (protecting firm-specific human capital development) may replace the current team. Second, managers who currently embrace the stakeholder focus may reconsider their approach if the firm faces financial difficulties; for example, an expedient way for the firm to endure an economic downturn may be to renege on promises embedded in previous implicit contracts.7

Thus, even if a management team embraces the stakeholder approach, firms (and their stakeholders) are subject to ‘time inconsistency’ problems (Shleifer & Summers, 1988), where 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, hostile takeovers can be a means of reneging on implicit contracts and a breach of trust (Shleifer & Summers, 1988). In particular, hostile takeovers sometimes result in the takeover firms terminating defined benefit pension funds mid-stream to enable economic transfers from employees to shareholders (Pontiff, Shleifer, & Weisbach, 1990). Economic efficiency losses will occur because employees who anticipate opportunistic behavior will be reluctant to enter

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7 This situation happened to Starbucks Corporation 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 to the investor to 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
into implicit contracts with the firm. 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), consider that numerous corporate stakeholders may make firm-specific investments and that a “mediating hierarchy solution” (i.e., the firm) requires team members to relinquish important property rights --- including property rights over the team’s joint output and inputs such as firm-specific human capital --- to a legal entity created by the act of incorporation. Thus, corporate resources are not “owned” by shareholders but by the corporation itself (Clark, 1985). In this perspective, corporate law protects the whole corporate coalition rather than a single group of stakeholders. 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) insightfully join: property rights theory (Rajan & Zingales, 1998); transaction costs theory with special attention to asset specificity (Williamson, 1985); and measurement theory with special attention to ascertaining individual productivity within team production (Alchian & Demsetz, 1972). In business circumstances where it is impossible to draft complete contracts that deter shirking and opportunistic rent seeking among various corporate
“team-members,” it can be comparatively efficient to substitute the (mediating-hierarchy) institutional solution of the law of public corporations.

Within the corporation, a mediating hierarchy exercises decision control rights over these resources. This hierarchy has responsibilities to: coordinate the activities of team members, allocate the resulting output, and mediate disputes among team members. At the peak of this mediating hierarchy is a board of (non-stakeholder) directors that has decision control rights (i.e., authority) over the use of corporate resources. This theory is consistent with the legal protection afforded to board members to be independent of the team members and to act as trustees to do what is best for the corporation. In fact, an independent board of directors is one of the most important characteristics distinguishing public corporation from other forms of enterprise (Blair & Stout, 1999; Clark, 1985). Such independence is essential as co-investors who make substantial sunk cost investments need mutual lock in (Kaufman & Englander, 2005; Rajan & Zingales, 1998) and thus voluntarily choose to place decision control rights into the hands of a board of directors who have neither the economic motive nor an easy opportunity to profit by withdrawing resources from the corporation. 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.

In this mediating hierarchy model of the modern corporation, the firm is frequently not so much a “nexus of contracts,” but rather is more like a “nexus of firm-specific investments” embedded in an incomplete and implicit contracting world (Blair & Stout, 1999; Lan & Heracleous, 2010). Members who voluntarily enter into the mediating hierarchy agree not to specific terms or outcomes --- as in a traditional contact --- but to participation in a process of
internal goal setting and dispute resolution. Indeed, one of the important characteristics of effective (mediating) hierarchy is that it assumes and effectively discharges certain *quasi-judicial functions* (Williamson, 1975: 30).

Within the stakeholder approach, employees may establish themselves as influential stakeholders who contribute to problem solving, conflict resolution, and quality improvement (Kochan & Rubenstein, 2000). In terms of the role of the board of directors, in addition to the board’s dual functions of (i) streamlining information-gathering and decision-making, and (ii) 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) propose that: (a) the greater the percentage of firm-specific human capital vis-à-vis financial capital, the greater the percentage of insider (employee) representation on the board of directors; (b) those inside directors would be elected by and responsible for those employees of the firm making firm-specific knowledge investments, and (c) a neutral person should Chair the board to oversee other directors’ contributions to the firm’s collective good, and to make sure that board members refrain from economic rent seeking (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 the problem of under-investment in such capital (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, co-specialized 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 willingness of the 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 put in place (monetary to non-monetary incentives; those addressing basic or complex needs of employees; those that are merit-based or universally available).

Some of the research questions in this domain may include: How do different groups of employees respond to various incentives? For example, how much value do employees put in 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. Incentives 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)’s 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 may work in U.S. and other corporate environments. Employee representation on the board can be achieved through inclusion of a senior human resources executive on the board. There is some indication that the chief human resources (HR) executive is already an active participant in board meetings 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 promoting and protecting investments in firm-specific human capital. It inquires: How can board structure and board process attenuate the problem of under-investment in firm-specific human capital? Such inquiry leads to the broader research question about the consequences of embracing a stakeholder governance view. A compelling research question would ask: how much more agency loss would there be when using stakeholder governance rather than shareholder governance (Tirole, 2006)? Can the extra agency costs of the stakeholder approach still be better when the under-investment in firm-specific human capital is large? Should firms with low firm-specific investments use the shareholder governance model, and firms with high firm-specific investments consider the stakeholder model?

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 to 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). What kinds of background attributes, life experiences, and defining professional experiences shape managers’ orientation towards human capital development? What are some of the collective team features and experiences that prepare managers to subscribe to a stakeholder approach? For example, Kor (2006) finds that entrepreneurial firms opt for higher levels of R&D investment intensity (which
is also subject to under-investment) when the 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.⁸

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 view 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 under-investment in firm-specific human capital.

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⁸ 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). Human resource management, organization behavior, and related literatures can be particularly resourceful in advancing these aspects of human capital research.
References


