Governance, Competence, and Firm Boundaries: An Organizational Perspective and Theory Integration

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Abstract

Answering to the recent call for theoretical integration of transactions costs economies and resource-based view, we examine how a boundary change affects the pre-existing organizational routines in terms of organizational knowledge and truce simultaneously can further contribute to our literature. We focus on the connections between boundary choice decisions and the broader organizational design issues. We posit that anticipation of the difficulty to conduct post-acquisition integration might moderate transactions costs economies prediction on vertical integration. Moreover, our integrative model could also explain acquiring firms' decisions to conduct post-acquisition integration or to leave the acquired firms as standalone subunits, thereby shedding more light on the theoretical linkages between firm boundaries and intermediate and hybrid governance forms. This study contributes to the management literature by further exploring the deeply intertwined interactions between governance and competence. Our theoretical framework provides a more comprehensive model that explains and predicts how a firm accesses external resources and how its decision would affect its firm boundary.

Keywords: transactions costs economics, resource-based view, incentive regime

Introduction

Williamson (1999) observes that theories within the strategic management field can be categorized into governance-based and competence-based theories[1] . Whereas governance-based theories from the organizational economics tradition address firm boundary choice, alliance structure, employee contract

1) Governance-based theories include transaction costs economics, agency theory, and property right theory. Competence-based theories include resource-based view, knowledge-based view, and organizational and dynamic capabilities.

structure, and other important firm governance issues (Argyres, 2011), competence-based theories are ultimately concerned with explaining heterogeneous firm performance, which is the research question many strategy scholars believe should be the central issue of the field (ibid.).

Recently, some within the strategy field have started to call for theoretical integration of these two approaches. In particular, Foss and Foss (2004) submit that transaction costs economics could advance the resource-based view (RBV) literature by providing potential remedies to a number of weaknesses, such as RBV's inattention to the interaction between value creation and value appropriation. Relatedly, through a set of carefully constructed analytical models, Makadok (2003) shows that mitigating agency problem and improving the accuracy of managers' expectations of the future value of resources are complementary in reducing the problem of underinvestment. Therefore, Makadok (2003) maintains that future research on the genesis of competitive advantage should examine agency and governance issues along with, not apart from, competence-based issues. More recently, Argyres and Zenger (2010) go beyond Makadok's (2003) observation on complementarity between governance and competence and suggest that transaction costs and capabilities considerations are in fact so intertwined dynamically that treating them as independent and competitive explanations of firms' boundary choices is fundamentally misleading. Argyres (2011) further maintains that organizational economics can shed light on how firm capabilities are developed and sustained, and calls for examining the complex interactions between economic and noneconomic considerations.

In this paper, we aim to further explore the complex interactions by focusing on the important strategic issue of firms' boundary choices, which is traditionally addressed by explanations based on transaction costs logic. The basis of this dominant explanation is that those transactions that are vulnerable to costly opportunism should be internalized into focal firm's boundary (Williamson, 1975; 1985). However, in recent years, an emerging stream of research maintains that firms' boundary choices should be better understood as the outcome of the tension between the need to access external resources and the need to control the transactional hazards that entail (Yang, Lin, & Lin, 2010). Since the need to access external resources is driven by the logic of comparative capabilities, it was argued that factors from organizational economics and organizational capabilities considerations are fundamentally intertwined and a more nuanced theory of firms' boundary choices calls for an integrative framework (Argyres & Zenger, 2010; Qian, Agarwal, & Hoetker, 2011).

We aim to extend this research stream by adopting an explicitly organizational perspective, which maintains that firms' boundary choices can be more usefully understood as embedded within the broader managerial concerns of effectively and efficiently organizing collective productive activities. Moreover, our explicitly organizational perspective enables us to unpack the theoretical construct of organizational capability, and explicitly recognizes the its collective nature. Organizational capability is a

collective-level construct distinct from individual-level capability in that organizational capability encapsulates within it design considerations that account for the need to both coordinate and motivate a group of interacting individuals toward the collective objectives. Hence, we emphasize that organizational capability is the ability to successfully orchestrate certain team production (Alchian & Demsetz, 1972), which requires both competence and governance considerations[2)]. Thus, consistent with Kaplan and Henderson's (2005) research that seeks to bridge organizational economics and organizational theory, we put forth a definition of organizational capabilities that recognizes organizational capabilities are as much about “what should be done” (i.e., possessing the technical knowledge of how to collectively achieve organizational objectives) as they are about “what should be rewarded” (i.e., having appropriate incentive regime in place to induce individual team members toward collective actions). Importantly, since boundary change would likely expose the original organizational capabilities to disruptions on how individual members are motivated, transactions that involve transferring organizational capabilities might fundamentally alter the nature of the assets being transacted. Taken together, we maintain that a firm's boundary decision not only needs to jointly consider comparative capabilities[3)] and potential transactional costs (Argyres & Zenger, 2010), when the external asset being acquired consists of collective-level capabilities, the acquiring firm also needs to consider how the targeted asset might be fundamentally altered by bringing them into the focal firm's boundary.

This study aims to contribute to the management literature by further exploring the deeply intertwined interactions between governance and competence. Our theoretical framework incorporates organizational economics and organizational capabilities to provide a more comprehensive model that explains and predicts how a firm accesses external resources. We present our discussion in three parts.

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2) Alchian and Demsetz (1972) discuss how metering problems associated with potential shirking can be mitigated through various organizational arrangements. We interpret this observation as effective governance is a necessary condition for team production. Since organizational capability by nature involves team production, we maintain that the successful creation of organizational capability requires effective governance choice within the organization. This type of governance considerations is intra-organizational and focuses on agency issues. The governance considerations in the transaction costs literature is typically inter-organizational and focuses on transaction specific investments. Even though these two types of governance considerations operate at distinct levels of analysis, we maintain that firms' boundary choices have significant impacts on both. Thus, when the asset being transacted is a bundle of organizational capabilities, treating the asset as a conceptual black box runs the risk of neglecting the impact on governance considerations at the agency level.

3) We note that Argyres and Zenger's (2010) conceptualization of comparative capabilities is different from simple assessment of the “inherent” value of the capability considered in isolation. Instead, they emphasize that the value of a target asset should be assessed by how uniquely complementary it is with the firm's existing bundle of assets. Thus, the same asset is likely to have different values to different firms. We recognize and agree fully with their distinct conceptualization, even though we choose to apply the same label of comparative capabilities.

In the first part, we discuss the importance of adopting an explicitly organizational perspective when constructing organizational theories. In particular, we discuss how a "black box" approach that reifies collective-level constructs might create important theoretical blind spots that assume away important nuances. In the subsequent part of the paper, we discuss how a "black box" approach to the theory of organizational capabilities exposes our theories to the risks of reification. We then put forth our definition that seeks to rectify the problem. In the last part of the paper, we examine the extant theory on firms' boundary choices, and discuss how treating all assets to be transacted as standalone, discrete entities fails to account for important managerial concerns. We then put forth a set of propositions to illustrate our integrative framework. We conclude with discussion and the implications.

Theorizing at the Organizational Level

We maintain that recent contributions toward theory integration suffer from a significant weakness. Organizational capabilities, core competence, or related collective-level constructs are often treated as theoretical "black boxes," bundling routines, individual-level capabilities and competencies, and other valuable assets. In other words, organizational capability as a construct is often reified, and the distinction between *collective capabilities* and *individual capabilities* is consequently deemphasized. Zhao and Anand (2009) comment that collective activities are the *raison d'etre* of organizations, even though the collective aspect of organizational phenomena has rarely been explicitly examined. We have lost the *organizing* aspect of organizational capability. Consequently, full integration of theoretical models that contain causal mechanism cutting across multiple levels of analysis remains a significant challenge.

Similarly, within the macro organizational theory (OT) literature, some have started to express concern that macro OT has begun to parallel the neoclassical theory of the firm, in which the firm is "blackboxed" (Gavetti, Levinthal, & Ocasio, 2007). Expressing similar concern for the development of the field, Whetten (2004) observes that organizational scholars are rarely explicit about what they mean by 'organizational' in his Organization and Management Theory Division Distinguished Speaker Address presented at the 2004 Academy of Management Conference. Underlying these concerns is the recognition that a multilevel approach to organizational research that integrates variables across multiple levels of analysis may provide a scientifically valuable theoretical foundation for organizational phenomena (Roberts, Hulin, & Rousseau, 1978; Klein, Dansereau, & Hall, 1994; House, Rousseau, & Thomas-Hunt, 1995; Morgeson & Hofmann, 1999).

Interestingly, the rationales given by those OT researchers in favor of a multilevel organizational research program share striking similarities with the reasoning provided by those scholars contributing

to the emerging theme in strategy research for the search of "microfoundations." Observing that there is a general problem of lack of attention to individuals in strategy literature (Felin & Foss, 2005; Gavetti, 2005), these scholars maintain that the kind of macro or "collectivist" explanations that currently dominate strategic management literature are theoretically incomplete (Abell, Felin, & Foss, 2008). In particular, they maintain that there are no mechanisms that operate solely on the macro-level, directly connecting macro-antecedents to macro-consequences and that inter-level relations can be causal and thus theoretically meaningful (Abell, Felin, & Foss, 2008; 2010). Recognizing the limitations of the extant theories on organizational capabilities, we seek to rectify the problems with an explicitly organizational perspective.

Central question of OT. Consistent with Gavetti and coauthors' (2007) call for restoring Carnegie School's original mission and defining commitment to a decision-centric and hence internal view of organizations, this paper assumes the position that one of the central theoretical questions for organization theory is how, given boundedly rational actors, the *act of organizing* produces in the aggregate collective outcome that is greater than the sum of all the individual outputs? This question underpins much of the discussion from early contributions to organization theory, particularly Thompson's (1967) study on how to organize an organization to meet and handle uncertainty and Lawrence and Lorsch's (1967) discussion on organizational differentiation and integration.

In their review of the early OT literature, Davis and Marquis (2005) comment that March and Simon (1958) provide a superb answer to this central question consistent with the behaviorally plausible assumption of bounded rationality. Their 1958 book describes how cognitively limited individuals are able to achieve in the aggregate far greater ends through the successive decompositions of an organizational task into subtasks that are simple enough "bite-sized" mental chunks that fit individual bounded rationality and then through the artful reaggregation of all the individual outputs back into the intended collective ends. Similarly, in the review on the organizational routine literature, Mahoney comments that "the organizations that Nelson and Winter (1982) envisage are those that face a substantial co-ordination problem, typically because these organizations have many members, performing many distinct roles, who make complementary contributions to the production of a relatively small range of goods and services" (Mahoney, 2005: 192). Thus importantly, an explicit consideration of the act of organizing emphasizes organizations as *collective* entities with numerous cross-level coordinating linkages. Therefore, the set of theoretical constructs that does not explicitly capture the multilevel coordinating processes in the act of organizing is unlikely to have complete explanatory power to fully address the central question identified above.

Reification and anthropomorphism. In their theoretical discussion about the structure and function of collective constructs in the extant literature, Morgeson and Hofmann (1999) pose a series of questions highlighting a number of issues about collective phenomena that they submit have not been fully addressed:

> Is it justifiable to refer to collectives as if they possess characteristics that are inherently human? Do groups and other collective entities possess such things as "abilities," "personalities," or "memories" (LePine, Hollenbeck, Ilgen, & Hedlund, 1997; Tziner & Eden, 1985; Wash & Ungson, 1991)? Are organizations able to learn, apart from the learning of individual organizational members (Argyris & Schön, 1978; Senge, 1990)?

Morgeson and Hofmann (1999) comment that by ascribing individual attributes to collective entities, organizational scientists risk committing the fallacies of *reification* and *personification* (or *anthropomorphism*), which, they maintain, could lead to the proliferation of terms that have little scientific value. Consistent with a number of arguments put forth by organizational scholars in favor of a multilevel research program (Roberts et al., 1978; Klein et al., 1994; House et al., 1995), Morgeson and Haofmann (1999) submit that "integrating variables across multiple levels of analysis may provide a more veridical account of organizational phenomena" (1999: 249). Citing House et al. (1995) and the ambitious framework of "mesoparadigm" they put forth, they maintain that both micro and macro variables are needed in order to understand organizational phenomena. Quoting House and coauthors

social interaction is fundamental to organization-related processes … What is needed is a way of coupling theories and research at different levels into a meaningful whole. We need mechanisms that help us conceptualize *the complex relations between units at different levels of analysis* … in organizational settings (1995:86, emphasis added).

This explicit emphasis on multilevel interactions provides one possible answer to Whetten's (2004) question of what organizational scholars really mean by 'organizational.' To Morgeson and Hofmann, 'organizational' means adopting an explicitly multilevel theoretical perspective that captures the complex social interaction and relations between units across different levels of analysis. In other words, 'organizational' means there should be no "blackboxing" of collective constructs that reify or anthropormorphise organizational features. However, one could question the extent to which this explicitly multilevel perspective is necessary for all organizational theory development. Would a set of proposed causal relationships among collective constructs that fully encapsulate their internal structures and hence treated as undifferentiated entities necessarily prevent the overall casual

understanding from being ‘organizational?’ In other words, would a set of proposed casual relationships among macro-level constructs necessarily fail to contain the essence of ‘organizational’ theorizing. To fully reflect on this question, we discuss next various underlying processes of organizational theory construction and the associated methods of construct development to clearly reveal the theoretical consequences of reification and anthropomorphism.

Analogies and Metaphors in Theory Construction. Weick (1989) submit that the process of theory construction in organizational studies can be portrayed as ‘disciplined imagination.’ In particular, Weick (1989) describes various approaches to organizational theory construction using Kaplan’s (1964) distinction between knowledge growth by intention and knowledge growth by extension. Weick (1989) further comments that this contrast resembles Barlett’s (1958) distinction between interpolation and extrapolation, which suggests that there might be two distinct processes of theory building. Knowledge growth by intention is used “when a partial explanation of a whole region is made more and more adequate,” (Weick, 1989: 517) which resembles the logic of interpolation. On the other hand, knowledge growth by extension is used when “a relatively full explanation of a small region is then carried over to an explanation of adjoining regions,” (Weick, 1989: 518) which resembles the logic of extrapolation. In terms of collective construct development, we can apply Weick’s (1989) distinction of knowledge growth to examine how constructs acquire meaning and structure at the collective level.

It is important to note that theoretical constructs are nothing more than hypothetical concepts that are not directly observable (MacCorquodale & Meehl, 1948). In other words, constructs are theoretical shorthand containing the abstract features needed to explain some observed phenomena. To the extent that theories are abstractions of complex reality, the meaning and structure of theoretical constructs would reflect the very process of abstraction, or how the theory is built. When a theory construction process follows the logic of knowledge growth by intention, the theoretical constructs developed would contain rich, detailed features capturing deep meanings and reflecting the rich interrelated structural features of the observed phenomena. On the other hand, when a theory construction process follows the logic of knowledge growth by extension, the theoretical constructs employed actually originate from the said ‘small region’ with the relatively full explanation. Thus, these theoretical constructs are ‘borrowed’ based on some intuitions or informed decisions to exploit meaningful theoretical similarities between the source and target regions. Meanings and structures of the constructs employed are then ‘extrapolated’ based on the belief that explanations in the source region remain valid in the target region. For instance, the theoretical construct of organizational memory extrapolates our understandings of how an individual might recall past experience, and based on our intuition and

informed belief that organizations also recall past experiences in similar fashion, the meaning and structure of the construct of individual memory is carried over to the construct of organizational memory.

In other words, theoretical constructs developed following the logic of knowledge growth by extension are actually analogies or metaphors that encapsulate the underpinning constitutive processes and rely on some observed similarities. This assertion finds no stronger support than the way Nelson and Winter's (1982) conceptualizes their focal theoretical construct of organizational routine. In fact, besides providing numerous descriptive definitions that do discuss the underpinning constitutive processes or organizational routine, Nelson and Winter (1982) also appeal to readers' rich and direct personal experience with individual skill, and put forth an almost SAT-like analogy that individual is to skill as routine is to organization. This analogy works so well that subsequent scholars often rely solely on it when adopting the concept of organizational routine, which prompts Gavetti and coauthors (2007) to express their concern that our scholarly focus has been moved away from decision making in organizations to the semi-automatic routine execution.

Therefore, the quality of constructs developed in this manner depends largely on how well the observed relations between the source and target domain pertain to the theoretical understanding being pursued. For instance, if the theory being developed aims to explain how diversity of past experience affects organizational responses to future events, constructs developed through analogies or metaphors based on analogous individual-level constructs might be sufficiently meaningful to inform our understanding of how an organization responds to future events as a standalone entity. Our rich understandings of and direct personal experience with the concept of individual memory can be meaningfully carried over to an organizational level because the analogy is built on theoretically relevant connections between the two domains. On the other hand, if the theory being developed aims to explain how an organization is conditioned by different contextual factors that affect the accuracy of organizational memory to recall past experience, constructs developed through analogies or metaphors based on individual-level constructs are less likely to be meaningful. Our rich understandings and direct personal experience with individual memory might not find theoretically relevant connections to the organizational level. How an individual stores memory simply differs too much from how an organization stores memory.

Therefore, reification or anthropomorphism *per se* might not be as problematic as Morgeson and Hofmann (1999) suggest across all cases of organizational theory building. Matching appropriate process of construct development with the intended theoretical objective might be more important. In fact, Weick (1989) maintains that our thinking about organizations is often captured in metaphors.

> Organizations are complex, dynamic, and difficult to observe, which means that whenever we think about them, the thinking will be guided by indirect evidence and visualizations of what they may be like, often captured in metaphors. That is not to apologize for the materials used in theory building. Rather, it emphasizes that theorists depend on pictures maps, and metaphors to grasp the object of study. Theorists have no choice, but can be more deliberate in the formation of these images and more respectful of representations and efforts to improve them. Metaphors are not just catchy phrases designed to dazzle an audience. Instead, they are one of the few tools to create compact descriptions of complex phenomena (Weick, 1989: 529).

In summary, we subscribe to the position that whether an explicitly multilevel perspective is adopted in the construction of an organizational theory depends largely on what the theory intends to explain. In the context of addressing the difficulty to further integrate governance-based and competence-based theories, we maintain that an explicitly multilevel perspective could play an important enabling role. In the sections that follow, we discuss how an emphasis on the act of organizing in defining the construct of organizational capabilities could bring more nuanced integration of governance and capabilities considerations.

Organizational Capabilities

Consistent with Felin and Foss' (2005) observation that extant research in strategic management is currently dominated by "collectivist" explanations, the research literature stream on organizational capabilities is also converging on an interpretation of capabilities[4] as collective entities that directly drive organizational performance (Winter, 2003; Felin & Foss, 2005; Gavetti, 2005; Salvato, 2009). Salvato (2009) observes that in this literature stream, individual agents are increasingly placed in the

4) In fact, the construct of organizational capabilities is so reified that the qualifier 'organizational' is often dropped from usage within the strategy literature. Makadok's (2003) modeling efforts make no distinction between individual-level and collective-level capabilities, completely ignoring potential synergy created by properly coordinating a group of willing and capable individuals. The fact that with such a strong set of simplifying assumptions, Makadok (2003) still finds strong complementarity between governance and capabilities considerations to call for theoretical integration is remarkable. We submit that with the strong simplifying assumptions relaxed, and the emphasis on organizational capabilities' constitutive process of organizing or coordinating individuals introduced into the theoretical construction, governance-based and competence-based considerations would not only be strongly complementary, but also in fact theoretically inseparable. Following this reasoning, a strong distinction between individual-level and organizational-level capabilities is needed, especially in the context of boundary change. We observe that during the transfer of a collective-level asset, governance considerations are impacted at both firm level and individual level. Blackboxing organizational capabilities as standalone assets prevents the impact on agency level governance from being fully considered.

background, and their role in effecting performance advantage is largely ignored. Importantly, this "blackboxing" of a collective construct creates a theoretical blind spot on how capabilities might evolve due to individual-level processes. This theoretical blind spot manifests itself in numerous instances throughout the literature, often when the construct of organizational capabilities is either defined at a collective level as "knowledge integration" (Grant, 1996), or defined somewhat circularly as an organizational "ability," (e.g., Teece, Pisano, & Shuen, 1997) "capacity," (e.g., Helfat et al., 2007) or "competence" (e.g., Prahalad & Hamel, 1990). Even though these various definitions serve their respective theoretical purposes well, collectively, the literature stream leaves important questions unanswered.

To address this theoretical blind spot, we proffer the following definition for organization capabilities as an alternative. In particular, we follow Morgeson and Hofmann's (1999) guidelines for multilevel collective constructs such that there is an emphasis on the interaction of organizational members and that there is consideration of the constitutive processes through which the collective constructs emerge.

> DEFINITION. An organizational capability is a multilevel and cross-functional system of patterned interactions among organizational members such that they are both *motivated* and *coordinated* to apply their individual capabilities and aggregate their individual outputs to reliably attain organizational objectives.

Subsumed within this proposed definition are motivation and coordination considerations, and along with them governance-based and competence-based theories respectively. The packaging of motivation and coordination considerations in the theoretical construct is not just a definitional expedience in order to integrate governance-based and competence-based theories. It has a deeper theoretical significance as it recognizes the existential criteria for organizational capability to truly emerge. Following Makadok's (2003) observation that agency considerations and competence considerations complement one another in value creation, and added to it an explicitly organizational perspective, this paper maintains that the existence of an organizational capability is predicated upon both the successful design and execution of an incentive regime to induce organizational members to contribute and the needed coordination program to properly decompose organizational task into suitable subtasks for individual members and reaggregation of their outputs back into organizational ends. This position is consistent with Gavetti and coauthors' (2007) call for a tighter paradigmatic closure among Carnegie School's central theoretical pillars. In particular, the proposed definition specifically integrates Carnegie School's two central tenets – the role of conflicts of interest and

cooperation among organizational members and the role of specialized decision-making structures. Similarly, the proposed definition explicitly integrates Nelson and Winter's (1982) conceptualizations of routines as organizational memory and routine as truce. This definition is also consistent with Kaplan and Henderson's (2005) position that cognition and incentive are phenomenologically deeply intertwined, despite being analytically distinct concepts.

Thus, the proposed definition reflects the theoretical position that an explicitly organizational perspective on capabilities can only be achieved not only by recognizing the complementarity between governance and competence considerations as some strategy scholars recently have called for, these two set of considerations are in fact theoretically inseparable. Existing organizational capabilities can be lost if either the incentive regime or the coordination program deteriorates and fails to serve its constitutive purpose. Thus, successful motivation and coordination are both necessary but not sufficient conditions for an organization to attain a capability. As we discuss in later section, this rather self-evident observation has important theoretical implication when governance-based and competence-based theories are being fully integrated.

Firm Boundary Choice

In the following section, we outline how an explicitly organizational interpretation on organizational capabilities can provide some theoretical leverage to generate more nuanced integration of the two main streams of research literatures within strategic management.

Transaction costs economics (Williamson 1985; 1991; 1996) is one important research stream within the governance-based strategic management theories. The central argument for transaction costs economics is that firm boundary choice is determined by a transaction costs minimizing logic, which is driven by the specificity of assets involved in particular transaction. High asset specificity leads to high transactional hazard, which increases the likelihood of vertical integration to mitigate the transactional hazard. Williamson (1985) observes that different types of assets can be involved in a transaction (e.g., physical assets, human assets, dedicated assets, etc.) but maintains that regardless of asset types, asset specificity is the core mechanism that determines the level of transactional hazard, and thus the likelihood of a boundary change.

The problem with the standard theoretical prediction is that Williamson (1985; 1991; 1996) does not take into account that different types of assets might differ greatly in their organizing requirements. Physical assets are discrete, tangible, and valuable assets, whereas human assets often are bundled in an organizational setting. Except the cases that human assets refer to individual professionals working mostly in isolation, most human assets have part of their overall value embedded not just in the

individual talents but also in how they are organized to perform organizational tasks. Hence, acquisition implementation is likely to be problematic when valuable assets reside in organized interactions among individuals, increasing the difficulty to managers of the acquiring firm to evaluate and appropriate the value of acquired asset (Coff, 1997; 1999; Ranft & Lord, 2002). Consequently, disruption to how individual members are motivated or coordinated would fundamentally change the nature of the acquired organizational capability. Thus, standard transaction costs theory's neglect of the organizational nature of certain class of assets might result in biased prediction and hence problematic prescription, since moving organizationally embedded assets across firm boundary might alter the incentive regime in place in subtle ways that end up fundamentally changing the nature of the overall organizational capability (Datta, 1991). As an illustrative example, we apply the proposed definition of organizational capability and generate a set of propositions with a more nuanced consideration of how governance-based and competence-based theories can be integrated.

Acquiring External Organizational Capabilities

Transaction costs economics prescribes vertical integration to acquire external assets when using market transaction to access these external assets result in high transaction costs. Acquisition of external assets usually allows a firm to obtain valuable resources and capabilities (Ahuja & Katila, 2001; Chaudhuri & Tabrizi, 1999; Ranft & Lord, 2002). However, if the external asset sought is a particular organizational capability, it might not survive the boundary change (Pablo, 1994; Williamson, 1975). Transaction costs rationale suggests that vertical integration solves the incentive alignment problem; however, as a governance device to align incentives, vertical integration might also disrupt the existing incentive regime that constitutes the organizational capability (Datta, 1991; Wang & Zajac, 2007; Yang et al., 2010). In other words, a subtle change in the incentive regime might break the delicate truce in intraorganizational conflict (Kaplan & Henderson, 2005; Kapoor & Lim, 2007). We emphasize that the governance considerations of transaction costs economics align incentives at the collective level, but the boundary change to the target organizational capability might disrupt governance considerations at the agency level as well. Thus, the factors in strategic factor market (Barney, 1986) are not always stable after the boundary change. In particular, we submit that strategic factors that derive much of their value in organizing individuals in unique and complementary manner are particularly problematic in the context of boundary chance.

Extant transaction costs literature addresses this potential concern by calling on management to exercise selective intervention (Williamson, 1991) after vertical integration is completed. The organizational capability of integrating acquired capabilities is usually more important than the

ownership of acquired capability (Chen, Williams, & Agarwal, 2012; Grant, 1996; Ranft & Lord, 2002; Qian et al., 2011). Thus, in order to retain stability in the motivational component of organizational capability, the managers at the acquiring firm's decision to engage in post-acquisition integration is likely to be critical to post-acquisition performance. An appropriate reward structure can facilitate the post acquisition (Dosi, Levinthal, & Marengo, 2003). Although scholars have also noted that management does not always refrain from intervention (Williamson, 1996; Foss, 2003), treating organizational capability as a conceptual black box that masks the underlying attainment of truce further exacerbates management's tendency to excessively intervene. Thus, post-acquisition integration is likely to consume more time without first addressing the uniqueness of acquired firm's asset (Cui, Calantone, & Friffith, 2011). A set of propositions is put forth.

Proposition 1: The wider the gap between the pre-existing incentive regimes of the acquiring and acquired firms, more time would elapse before the acquiring firm engages in post-acquisition integration.

After acquisition, the acquiring firm may often impose its incentive regime on the acquired firm (Datta, 1991), without considering whether the pre-existing incentive regime provides a suitable mechanism to motivate individuals from the acquired firm to manage capabilities (Pablo, 1994). King et al. (2004) submit that incentive regimes are rare at the center of discussion when scholars identify antecedents that impede post-acquisition performance. As a matter of fact, individuals at the acquired firm are likely to undermine the acquisition implementation plan when their incentives greatly differ from managers' at the acquiring firm (Parvinen & Tikkanen, 2007). By the same token, the post-acquisition performance is likely to be lower when acquired and acquiring firms lack of common coordinating mechanisms (Kapoor & Lim, 2007; Meyer & Lieb-Doczy, 2003)

Proposition 2: The wider the gap between the pre-existing incentive regimes of the acquiring and acquired firms, the more post-acquisition integration is associated with a reduced performance.

Moreover, conceptualizing organizational capability with an explicit consideration of the act of organizing could also bring more nuanced transaction costs prediction. Instead of focusing exclusively on asset specificity, managers also need to consider how vertical integration might reduce the value of the acquired organizational capability. Especially, managers become aware that incomplete or inappropriate post acquisition integration may inhibit firm performance (Meyer & Lieb-Doczy, 2003). Even though the pre-existing coordination program might be relatively obvious and easier to retain, the

pre-existing incentive regime that helps achieve the needed organizational truce might be difficult to assess and protect. Kaplan and Henson (2005) highlight problems that an acquiring firm may encounter from developing a new incentive system. Without understanding that the acquisition positions them to a new market, individuals at the acquired firm may not sense the necessity of accepting the new incentive system. Also, individual at the acquiring firms may regard the new incentive system as a violation of the existing employment contract. The managers at the acquiring firm are likely to have difficulty managing the original part of the firm. Thus, individuals at acquired and acquiring firms are likely to be reluctant to accept and new incentive system because they lack full knowledge of the new system's effectiveness. The interfirm differences with respect to the incentive system are likely to help determine its firm boundary decision (Schilling & Steensma, 2002; Yang et la., 2010). The gap between the pre-existing incentive regimes of the two firms would thus negatively moderate the transaction costs prediction to vertically integrate as the managers of the acquiring firms consider the potential loss of value and the potential cost of integration. This reasoning leads us to the final proposition in the current study.

Proposition 3: All else being equal, the wider the gap between the pre-existing incentive systems of the potential acquiring and potential acquired firms, the less likely vertical integration is pursued.

Discussion and Conclusion

Organization is a complex, multilevel, and dynamic entity. As organizational scholars, we need to be conscious of the way we theorize about organization. Even though an explicitly multilevel perspective might not be needed in all cases, when the causal relationships being developed might involve disruption to the underlying constitutive processes of the collective constructs, we need to careful with the analogies and metaphors we might be subconsciously applying. The previous discussion on the organizational capabilities literature suggests that the extant research in this area might have committed the fallacy of reification, limiting the potential explanatory power of the theory produced. Bringing an explicit consideration of the underlying act of organizing back into the discussion could potentially mitigate the theoretical blind spot, as more proximal reasons for heterogeneous firm performance are explicitly considered.

Furthermore, the theoretical position of this paper is consistent with the neo-Carnegie perspective (Gavetti et al., 2007) that our field has moved too far from the decision-centric, internal view of organization. After all, the act of organizing is a fundamental feature of our civilization. Only through the act of organizing can boundedly rational actors achieve in the aggregate far greater ends than the simple sum of individual outputs. We submit that act of organizing is not only the engineering problem

of finding the right coordination program, or agency problem of finding the most efficient incentive structure. Instead, the act of organizing is a complex, multilevel interaction between these two concerns. Governance and competence considerations are not just complementary to performance outcome as Makadok (2003) demonstrates. They are also not just dynamically intertwined macro-level concerns as Argyres and Zenger illustrate (2010). They are in fact theoretically inseparable across both hierarchical and temporal dimensions.

Seeing under this new perspective, firms' boundary choice decisions are in fact embedded in the broader managerial concerns of effectively and efficiently organizing collective actions. Similar to Argyres and Zenger, we adopt the model of a manager as one "who tries to orchestrate optimal asset and activity matching and crafts governance to both enable and protect the generation of unique complementarity" (2010:24). Thus, value creation and value appropriation are not separate managerial concerns. They are in fact joint decisions that are deeply intertwined. We add on to their theoretical integration with our observation that value appropriation occurs across multiple levels. Managers not only have to worry about potential hold-up problems with external sources at the firm level, they also have to worry about value appropriation within the firm at the agency level (Coff, 1997; 1999). Therefore, an integrative theory on firms' boundary choice decisions can benefit from not only the integration of transaction costs and organizational capabilities literatures, but agency theory and managerial cognition at the individual level should also play an important role. More importantly, we suggest that the important cross-level interactions might be particularly interesting. After all, managers designing firm boundaries are essentially making decisions of an important firm-level attribute, while having to worry about how their firm-level decisions would impact the individual-level activities that ultimate generate the outputs of the firms. The content of their decision model is unlikely to be linkages between macro-antecedents and macro-consequences. Instead, the linkages they are concerned with are more likely to be micro-processes to macro-changes. A behaviorally plausible model consistent with the Carnegie School tradition should explicitly account for the cross-level linkages.

Our organizational perspective also sheds light on the connections between boundary choice decisions and the broader organizational design issues. In particular, our propositions suggest that anticipation of the difficulty to conduct post-acquisition integration might moderate transactions costs economics prediction on vertical integration. Moreover, our integrative model could also explain acquiring firms' decisions to conduct post-acquisition integration or to leave the acquired firms as standalone subunits, thereby shedding more light on the theoretical linkages between firm boundaries and intermediate and hybrid governance forms (Makadok & Coff, 2009). Argyres and Zenger's (2010) integrative framework explains how unique complementarity between Disney and Pixar leads to Disney' s decision to acquire Pixar, despite of having relatively inferior capability in animation. Our extended

framework would further explain Disney's decision to essentially leave Pixar as a standalone subsidiary, agreeing to an explicit list of guidelines for protecting Pixar's creative culture[5)]. It is not just the unique complementarity with the target capability that acquiring firm's managers need to be worried about, we submit that the potential cost required to preserve that unique complementarity also plays an important role in boundary decision.

Our integrative framework calls for an explicitly organizational perspective because we subscribe to the position that an organizational capability is likely to have a cognitive as well as an incentive dimension (Kaplan & Henderson, 2005). Unpacking the theoretical blackbox that has dominated extant literature could hold the key to exposing more nuanced understanding of firm behaviors. We believe a model that examines how a boundary change affects the pre-existing organizational routines in terms of organizational knowledge and truce simultaneously can further contribute to our literature.

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