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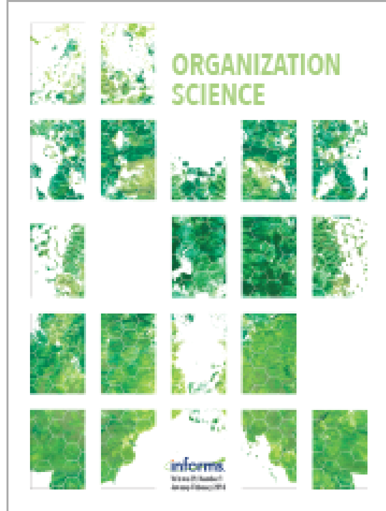

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Virtual Special Issue: The Organizational Economics of Organizational Capability Development

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Virtual Special Issue: The Organizational Economics of Organizational Capability Development

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Introduction to the Virtual Special Issue

For many strategy scholars, the central question in the field is why some firms consistently outperform others in terms of financial performance. One of the major concepts invoked to explain these differences is differential *organizational capabilities*: the ability of some organizations to perform certain activities in ways that rivals cannot. However, although many agree that persistent performance differences among firms are often because of differential organizational capabilities of some kind, how these capabilities are built, and what exactly they consistent of, remains poorly understood.[1] For example, although capabilities are often simply measured by experience, some organizations surely gain more from their experiences than others. The articles in this virtual special issue explore various ways in which economic reasoning, particularly from organizational economics (agency theory, transaction cost economics, property rights theories, contract theory, evolutionary economics, etc.) can help to shed light on the nature, development, and implications of differential organizational capabilities.

In 2012, Teppo Felin, Nicolai Foss, Todd Zenger, and I coedited a special issue of *Organization Science* entitled "Organizational Economics of Capability and Heterogeneity." Ten articles appeared in the issue, each of which examined some aspect of the relationship between organizational or institutional economics and organizational capabilities differences. The articles selected for the current virtual special issue all appeared in *Organization Science* after the publication of the 2012 special issue. To select them, I read all the abstracts of all the articles published in the journal since that issue (up to February 2020) and selected those that explicitly applied economic reasoning to understand differential organizational capabilities. (I excluded articles that did not mention or focus on organizational capabilities explicitly.) This virtual special issue therefore reflects the progress that has been made on the topic of the organizational economics of organizational capabilities in *Organization Science* since 2012.

In the introduction to the 2012 special issue, the coeditors argued that, whereas the literature on organizational economics and organizational capability largely treated theories of each as rivals for explaining firm boundary choices and persistent performance differences, they are better understood as deeply intertwined and therefore difficult to logically separate (Argyres and Zenger 2012; see also Argyres 2011). We argued that firms' choices of governance structures (e.g., firm boundaries and organization structure) help to shape the direction of capability development. For example, internal governance choices (e.g., decision-making structures and incentives) affect the kinds of opportunities a firm can recognize. As another example, investing in the development of certain kinds of capabilities may require internalizing other, uniquely complementary capabilities within the firm's boundaries to avoid holdup (Argyres and Zenger 2012). At the same time, some firms may develop superior capabilities for governing certain activities or transactions, such as alliances or other buyer-supplier relationships.

These twin themes of (1) governing capability development and (2) capabilities to govern are present in several of the articles selected for this virtual special issue. The articles by Kaul (2013) and Eapen and Krishnan (2018) pursue the first theme. The second theme can be subcategorized in terms of capabilities for internal governance on the one hand (addressed by Kapoor 2013 and Helfat and Campo-Rembado 2016) and capabilities for interorganizational governance

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on the other (addressed by Lee et al. 2015 and Quelin et al. 2019).

Kaul (2013) conceives of a firm (or an *entrepreneur*) as acquiring a set of assets or capabilities and combining them in a unique way in order to appropriate value. Such assets or capabilities may include other firms, parts of firms, accumulations of physical and/or human capital, and so on. Following Argyres and Zenger (2012), Kaul (2013) notes that if some of those capabilities are individually unique and complementary to other capabilities the firm is acquiring or developing, the owners of those capabilities will have bargaining power and be able to hold up the focal firm at some point. Anticipating this problem, the focal firm will aim to acquire the unique capability before its complementarity, and therefore the value of to the focal firm, is recognized by the capability's owner. The contribution of Kaul (2013) is to model these verbal arguments mathematically. The model allows him to identify several parameters in addition to unique complementarity that affect a firm's decision to internalize a capability, including the radicalness of the capability combination, the value of the opportunity being pursued, and the strength of the belief of the firm's leaders in that value.

As mentioned earlier, the pre-2012 literature tended to treat theories from organizational economics as competing with so-called knowledge-based theories of capabilities. The reason is that, whereas the former views the fundamental purpose of firms as mitigating opportunistic behavior, the latter views that purpose as developing social capital and routines with which to communicate and transfer the knowledge needed to develop organizational capabilities. Scholars developing these knowledge-based theories tended to deny the importance of opportunism-mitigation in the process of capability development.

Eapen and Krishnan (2018) shed light on this debate by examining survey data on licensing and joint venture agreements involving Indian firms and their foreign partners. They find that tacit knowledge was more likely to be transferred through a joint venture if asset specificity was present. This suggests that the hierarchical mechanisms available in joint ventures (but not in licensing agreements) played a role in mitigating the risk of opportunism because of asset specificity. Perhaps more importantly, Eapen and Krishnan (2018) also found that when the transferee and transferor were more similar in terms of their routines and culture, joint ventures were no less likely to be chosen for the transfer of tacit knowledge. That is, common routines and culture did not enable licensing agreements to support the transfer of tacit knowledge. The insight here is that opportunism mitigation appears necessary for transferring the kind of knowledge that is often important for capability development, whereas similarity in routines and culture alone seem insufficient.

The articles in the virtual special issue by Kapoor (2013) and Helfat and Campo-Rembado (2016) both address the second theme of governance capabilities. Indeed, both address the same specific research question: Why do some vertically integrated firms remain integrated even as their rivals specialize? Numerous industries have shown a pattern of increasing specialization (vertical de-integration) as they evolve. Kapoor (2013) used detailed data from the U.S. semiconductor industry to show that, rather than follow the general industry pattern of specialization in either circuit design or manufacturing, several of the vertically integrated firms remained integrated. Moreover, these integrated firms increasingly emphasized the pursuit of *systemic innovations*: innovations that required close coordination between circuit design and manufacturing rather than innovations that did not require such coordination. The idea is that rather than specializing, these firms chose to exploit their *integrative capabilities*—their abilities to reduce the costs of coordinating across vertically related functions—to achieve differentiation. At the same time, these integrated firms increasingly transacted with the specialized firms. Thus, Kapoor (2013) shows how integrative capabilities can affect firm boundary choices.

Helfat and Campo-Rembado (2016) use economic reasoning to address the question of why integrated firms sometimes persist in the face of industry specialization. Their explanation differs from the explanation of Kapoor (2013) (and that of Argyres and Bigelow 2010) that integrated firms are better able to sustain positions of differentiation. Helfat and Campo-Rembado (2016) show that if firms incur a large enough fixed cost to develop integrative capabilities, and if the industry in question faces sufficiently frequent waves of systemic innovation opportunities, then some firms have an incentive to remain integrated in the face of industry specialization. This incentive is present regardless of the integrated firm's choice of positioning. The insight is that by remaining integrated, the firm can take better advantage of systemic innovation opportunities when they arrive and can avoid repaying the fixed cost of developing integrative capabilities.

Kapoor (2013) and Helfat and Camp-Rembado (2016) argue that firms can develop superior (or suffer inferior) capabilities for governing their internal transactions or activities. Lee et al. (2015), on the other hand, provide evidence that firms can differ in their capabilities for governing transactions with external partners and that this has consequences for the design of strategic alliances. Building on the literature on learning to contract (Mayer and Argyres 2004), Lee et al. (2015) argue that firms with more alliance experience are

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better able to safeguard their interests in an alliance through the design of contractual provisions, as well as through noncontractual mechanisms such as monitoring activities. Therefore, such firms will be more flexible with regard to the use of equity in an alliance. A more experienced junior partner will be less likely to demand that the more senior partner provide equity, whereas a more experienced senior partner will be more willing to provide it. Lee et al. (2015) find support for these hypotheses in data on alliances in the biopharmaceutical industry.

The final article in this virtual special issue, Quelin et al. (2019), is different from the others in that it examines the relationships between national institutions and organizational capabilities. Thus, it relies less on organizational economics and more on its sister subfield of institutional economics. A major interest of institutional economics is in how well various national institutions (laws, legal systems, government agencies, etc.) protect property rights and thereby support efficient organization and economic growth. Quelin et al. (2019) study public-private partnerships in Brazil and ask what determines the fraction of activities in these partnerships that is undertaken by the private, rather than the public, partner (the *private scope*). Institutional economics would suggest that private scope will be higher when national institutions better protect private property, and Quelin et al. (2019) find support for this in their data. They also find roles for capabilities, most interestingly that greater public capabilities in managing public-private partnerships are associated with greater private scope; that is, more capable governments are better able to benefit from private sector contributions. Even more interestingly, the paper finds that public capabilities and private property protection act as substitutes in affecting private scope. That is, greater government capability can overcome the negative effects of poor property rights protection in stimulating private sector participation.

In my view, the articles in this virtual special issue demonstrate that good progress has been made on the topic of organizational economics and organizational capability in *Organization Science* since the 2012 special issue. Of course, articles on the topic have appeared in other journals as well, but *Organization Science* has been a leader. Today we better understand how organizational capabilities shape, and are shaped by, governance choices.

Yet research opportunities abound. Measuring organizational capabilities remains a challenge, although progress has been made on this front in various places in the capabilities literature (Stadler et al. 2013, Vandaie and Zaheer 2015). Another priority is to apply formal theories from organizational economics that have emerged since Williamson (1985, 1991) to understand capabilities and their development. Economic theories of communication, coordination, specialization, and authority in firms (Dessein 2002, Dessein and Santos 2006, Alonso et al. 2008, Li et al. 2017) could help to understand how firms differentially achieve the kinds of internal cooperation and coordination required to build differential organizational capabilities. Indeed, the early effort of Henderson and Cockburn (1994) to measure differential capabilities emphasized differences in formal organization structure.

However, although formal structure can be imitable, informal organization is perhaps less imitable, and may therefore be as or more important in explaining differential capabilities. Organizational economics treats informal organization as involving transactions that are governed by mutual commitments and informal incentives to uphold them (Baker et al. 2002, Levin 2003). Writing in the 2012 special issue mentioned earlier, Gibbons and Henderson (2012) suggested that firms may differ in the clarity with which the terms of relational contracts are understood by organization members may be an important determinant of capabilities development. However, whereas research using this economic approach to relational contracts is now being applied to interfirm relationships in the strategy field (Elfenbein and Zenger 2014, Argyres et al. 2020a), evidence on relational contracts inside the firm is still lacking. Moreover, there are important opportunities to develop theoretical and empirical connections between relational contracting on the one hand and differential capabilities for developing buyer-supplier relationships on the other.

A second priority is to build on recent work that combines ideas from organizational economics with sociological or behavioral considerations to explore capabilities development. For example, economists and strategy scholars have explored, in theoretical terms, how governance arrangements may be affected by certain behavioral characteristics of the relevant parties, and much progress has been made on this front. An early contribution focused on the human characteristic of impulsivity (Postrel and Rumelt 1992), whereas more recent contributions have emphasized feelings of entitlement (Hart 2008), tendencies toward social comparison (Nickerson and Zenger 2008), and sensitivity to relationship framing (Weber and Mayer 2014). Empirical research has begun to validate this kind of interdisciplinary approach (Fehr et al. 2011, Weber and Mayer 2011, Obloj and Zenger 2017, Feldman and Gartenberg 2018). However, research of this kind has yet to clearly link such mechanisms to capability development or interfirm capability differentials per se.

Yet another way to link organizational economics with noneconomic considerations is to study the interactions between governance arrangements and social

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networks in the developing of firm capability. For example, through their internal governance choices (incentives and formal authority relations), firms may be able to influence the structure of the social networks within their firms to guide capability development in some directions and away from others (Argyres et al. 2020b). Interactions between formal governance structures and informal organization remain poorly understood (McEvily et al. 2014), yet seem central to understanding capability development.

Studying the development of firm capabilities is challenging; they are difficult to observe directly, and it is difficult to ground them in individual- and group-level choices and other behaviors. Yet, many strategy scholars consider them to be fundamental to understanding persistent performance differences among firms. Although much progress has been made, many roads remain open for travel.

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Endnote

[1] This lack of common understanding is reflected in the debate between Pisano (2017) and numerous responders published in *Industrial and Corporate Change* in 2018.

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