OWNERSHIP COMPETENCE

Nicolai Foss
Copenhagen Business School

Peter Klein
Baylor University

Lasse Lien
Norwegian Business School

Thomas Zellweger
University of St. Gallen

Todd Zenger
University of Utah

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Research summary

Ownership is fundamental to firm strategy, organization, and governance. Standard ownership concepts—mainly derived from agency and incomplete contracting theories—focus on its incentive effects. However, these concepts and theories neglect ownership's role as an instrument to match judgment about resource use and governance with the firm's evolving environment under uncertainty. We develop the concept of ownership competence—the skill with which ownership is used as an instrument to create value—and decompose it into matching competence (*what* to own), governance competence (*how* to own), and timing competence (*when* to own). We describe how property rights of use, appropriation, and transfer relate to the three ownership competences and show how our theory offers a fresh perspective into the role of ownership for value generation.

Managerial summary

Business owners own with different levels of competence, and differences in ownership competence matter for value creation. We argue that ownership competence consists of competence about *what* to own (matching competence), competence about *how* to own (governance competence), and competence about *when* to own (timing competence). We clarify the role played by each of the three competences for value creation. We also show how the importance of ownership competence for value creation alters depending on ownership concentration, life cycle effects, uncertainty of the environment, and the efficiency of resource markets. With our paper we prepare the ground for a fuller understanding of the strategic role of owners for value creation.

Key words: ownership, assets, theory of the firm, economic value creation

INTRODUCTION

Strategy scholars have long recognized ownership as a vehicle for creating economic value (Barney, 1986; Denrell, Fang, & Winter, 2003; Dierickx & Cool, 1989). Typically, the role ascribed to ownership is that it shapes the incentives of those engaged in value creation. For instance, agency theory suggests that granting ownership to those who otherwise exercise only delegated control over resources creates high-powered incentives for effort that mitigate moral hazard (Amihud & Lev, 1999; Daily, Dalton, & Rajagopalan, 2003; Jensen & Meckling, 1976; Rajan, 2012; Shleifer & Vishny, 1997). In addition, incomplete contracting theory argues that granting such ownership provides incentives to invest in assets and resources and circumvents opportunistic bargaining or holdup (Hart, 1995; Klein, Crawford, & Alchian, 1978; Williamson, 1985).

However, ownership has another less emphasized, but more obvious economic function. Ownership implies irrevocable control over resources, which may be particularly valuable when coordinating resources under uncertainty (Coase, 1937; Foss & Klein, 2012). In particular, owners gain residual control rights over resources—rights to decide resource use in conditions not specified by prior agreement (Hart, 1995). This control afforded by ownership allows owners to deploy resources in novel ways: acquiring and selling resources, investing in them, or recombining them according to the owners' unique, idiosyncratic, and ultimately inalienable beliefs about paths to value creation.

Building on the notion that ownership affords control in resource deployment, we develop the argument that ownership can be exercised with greater or lesser *competence* and that this matters to value creation. The dominant incentive view of ownership ignores such variation in competence and misses the fact that competence may be imperfect and differently distributed across owners (Foss & Lien, 2010). The incentive view of ownership implicitly assumes actors are homogeneous, and there-

fore ownership simply motivates and shapes behavior. For example, incomplete contracting theory assumes that whichever decision-maker plays the ownership role will exercise this role efficiently by managing and investing in assets in ways that maximize economic value (e.g., Hart, 1995: ch. 2). But, in actuality, strategies for creating maximum value, including the governance arrangements that support such paths, are not widely, commonly and correctly understood (Denrell et al., 2003). For this reason, matching assets to individuals who can create most value with them (i.e., the efficient owners) is not automatic, and assets routinely end up in the hands of less efficient owners. We argue that changing who owns resources may have a far greater influence on value creation than changing the concentration of that ownership. Consider the extraordinary value composed by granting Steve Jobs and Apple's other owners licensed control of resources composed at Xerox or of transferring ownership of real estate on the outskirts of small towns into the hands of Sam Walton's Wal-Mart. Such differences in outcome are hard to assign to a simple shift in incentives that accompanies these ownership changes.

Following Alchian's (1961: 63) suggestion that "people differ in their talents as owners," we propose that resource owners vary in the skill with which they deploy resources under their control towards economic value creation. Research at the intersection of corporate governance and entrepreneurial finance on "smart money" (Lungeanu & Zajac, 2016; Sorensen, 2007), descriptions of "active ownership" (Carlsson, 2003; Jensen, 1989), studies of family businesses (Bennedsen, Nielsen, Perez-Gonzalez, & Wolfenzon, 2007), and comparative analyses of ownership types (Hansmann, 2000) all suggest that some individuals or groups are better at owning than others. While this prior literature acknowledges some variance in ownership competence, it fails to explore its foundations and its substantial theoretical implications.

In this article, we lay out the foundations and implications of a competence view of ownership. We begin by distinguishing the three ownership rights central to classical property rights theory,

namely the right to use, the right to appropriate rents from and the right to transfer resources (Alchian, 1961; Foss & Foss, 2005; Kim & Mahoney, 2005; Libecap, 1986) that lead to the identification of three novel competencies: "*matching competence*," "*governance competence*," and "*timing competence*," respectively. Exercising *ownership competence* is then the combined execution of these three competences towards value creation.

MEANINGS OF OWNERSHIP: INCENTIVES, CONTROL, COMPETENCE

The Different Meanings of Ownership

What is "ownership"? In economics and law the definitions of ownership and closely related notions such as "possession," "property," and "property rights" are highly contested (e.g., Bell & Parchomovsky, 2004; Demsetz, 1988; Underkuffler & Underkuffler, 2003). In general, ownership is conceived as a bundle of rights, the most important being possession, exclusion, and control. However, these are ambiguous terms. For instance, what is "control" exactly, and how much control must be possessed by an individual to qualify as "owner"? And, are all three necessary for ownership? Most social science and legal scholars seem to agree, however, with Oliver Wendell Holmes's (1881: 246) famous statement on the essence of ownership: "Within the limits prescribed by policy, the owner is allowed to exercise his natural powers over the subject matter uninterfered with, and is more or less protected in excluding other people from such interference." Thus, Holmes (1881) proposes that discretion in the use of assets and the right to exclude non-owners are key to the definition of ownership.

Apart from law, the most systematic analyses of ownership exist in economics. Specifically, three streams of thought in economics seek to define ownership and explore its consequences, namely, agency theory, incomplete contract theory, and property rights economics; see Table 1. All implicitly or explicitly focus on ownership as vehicle to reshape incentives in the pursuit of value creation.

Agency theory—a theory widely used in management research to explore ownership phenomena (Boyd & Solarino, 2016)—associates ownership primarily with rights to derive residual income (i.e., profit) from an asset, and makes predictions about the effectiveness of remedies, such as incentive and monitoring systems, required to overcome diverging interests between owners and managers of assets. It propagates an incentive-based view of ownership and predicts that individuals choose ownership arrangements that maximize jointly created value, given such constraints as asymmetric information and costly monitoring (Jensen & Meckling, 1976). Agency theory generally proffers that granting managers ownership stakes or residual *income* rights will improve the incentives of managers to engage in value creating efforts.

Incomplete contracting theory emphasizes the "residual rights of control" tied to ownership, meaning the right to make decisions over assets in situations not addressed by contract (Grossman & Hart, 1986; Hart, 1995). Here parties to a contract know the efficient level or form of investment, but incentives may be structured such that efficient investments are not chosen. Particular focus is placed on the challenge of soliciting investments complementary and specific to an asset owned by another party, thereby creating a holdup problem (Williamson, 1985). In this theory, changes in ownership are made in order to create incentives that facilitate optimal investments. A central conclusion is that the surplus in a team effort is maximized when ownership of assets is allocated to the party that makes the most important investments (Hansmann, 2000; Hart, 1995; Kim & Mahoney, 2002).

Finally, property rights economics is centrally focused on the multidimensional nature of ownership (Alchian, 1961; Barzel, 1997; Coase, 1960; Libecap, 1989). In particular, the theory highlights the distinction between rights to exercise choices over goods and services (use rights), the rights to derive income from these choices (value appropriation rights), and the right to transfer these rights (transfer rights) (Alchian, 1961). At the heart of the economic notion of a property right is effective control

(Barzel, 1997), and whether that control is exercised by controlling access to a resource, deriving income from it, or selling it. Individuals who exercise such control over assets are the asset owners.

Problematizing the traditional views of ownership

A prominent theme running across all three theories is the idea that ownership is simply a tool that, when deployed correctly, aligns *incentives* among parties and leads to high economic value creation. In agency theory, more concentrated ownership leads to fewer agency problems and higher levels of value creation (Demsetz & Lehn, 1985). In incomplete contracting theory, ownership provides incentives to optimally invest in resources and should therefore be allocated to the party who will make investments that matter most for value creation. In property rights theory, an actor's rights to a resource shape incentives to use it well, for instance, encouraging investment in maintaining the resource (Barzel, 1997). The common idea is that by allocating ownership "correctly"—in accord with the respective theoretical predictions—and thereby getting the incentives right, value creation will be maximized (subject to the various constraints the parties face).[1]

Our primary concern with the incentive view of ownership is its limited appreciation for ownership's strategic role in shaping both how resources are accessed and the resource bundles that are formed in pursuit of economic value (Penrose, 1959). Owners and potential owners hold divergent theories about the optimal paths to value creation and the role that assets may play in this process (Felin & Zenger, 2017). Which theory is empowered through ownership profoundly shapes outcomes. For example, Thomsen and Pedersen (2000) find that for the largest European companies, owner identity had an impact on firm outcomes, over and above ownership concentration. They not only find that firms

[1] Another challenge with incentive perspectives on ownership is that they largely derive, particularly the agency theory version, from a conception of a firm with widely dispersed ownership (cf. Jensen & Meckling, 1976). But, the vast majority of firms exhibit concentrated ownership structures. Most are sole proprietorships, where owners have full control over their firms, have large fractions of their wealth invested in their firms, and are actively involved in day-to-day management. Incentive alignment is not really the central challenge.

vary in their profit goals, dividends, capital structure, and growth, but that these depend on whether a founding family, banks, institutional investors, other nonfinancial companies or governments have ownership and control. Different owners follow different paths to value creation and appropriation.

The fundamental problem that stymies an appreciation of the strategic role of ownership is that our dominant theories of ownership implicitly assume cognitively homogenous actors. Accordingly, these ownership theories pay little attention to the importance of owners' idiosyncratic cognition or cognitive frames (Kaplan, 2008; Walsh, 1995), specifically their beliefs about whether to own assets, for what purposes, and precisely how the assets should be deployed towards value creation. Such divergent beliefs reflect an owner's judgment (Foss & Klein, 2012) or her theories about value creating resource configurations (Benner & Zenger, 2016; Felin & Zenger, 2009). These remain essential for value creation even though the owner can delegate particular decision rights to others (members of the board, top managers; Castanias & Helfat, 1991; Sirmon & Hitt, 2009) by partitioning use rights (Alchian, 1961). Still, the owner cannot fully delegate the right to ultimately determine for what purpose an asset will be used, what rights to it will be delegated and to whom, and if and when ownership should change (Baker, Gibbons, & Murphy, 2001). These rights are reserved for the owner *per se*—and ensure that the owner has ultimate control to steer asset uses in ways that support the owner's envisioned path to value creation (Schulze & Zellweger, 2020).

Against this background it is interesting to observe that the venture capital literature is replete with arguments that assign owners a more strategic, value-creating role. For example, Sorensen (2007) finds that the two essential aspects of what he calls "smart money" are "influence," which means that experienced VCs add value by reconfiguring a firm's resource portfolio, and "sorting," which implies that experienced venture capitalists invest in better companies. Baum and Silverman (2004) make a similar argument, suggesting that venture capitalists are particularly good "coaches" and "scouts." That

is, VCs are particularly skilled at injecting sound business judgment into ventures and at picking ventures with value appreciation potential (Hellmann & Puri, 2000). Sorensen (2007: 2725) also finds persistence in VCs returns, which he concludes reflects "heterogeneity in the skills of these investors" (see also Kaplan & Schoar, 2005). The performance variance that such owners generate thereby seems to reflect both the owners' innate ability as well as accumulated experience (Gompers, Ishii, & Metrick, 2003; Lafontaine & Shaw, 2016; Rosenstein, Bruno, Bygrave, & Taylor, 1993). In this way, the strategic role of ownership is underdeveloped, which is an important limitation as we move beyond the context of atomistic make-or-buy decisions to the level of firms or industries. An improved understanding of firm boundary decisions, and by extension ownership, requires theorizing that is "more strategic and concerned with broader outcomes such as growth and value creation" (Santos & Eisenhardt, 2005: 492). We agree and submit that an expansion of our understanding of ownership to also include the competence with which ownership is exercised will improve our understanding of value creation.

OWNERSHIP COMPETENCE

In light of the shortcomings outlined above, we advance a competence perspective of ownership that combines arguments found in the managerial capabilities (e.g., Argyres, 1996; Castanias & Helfat, 1991; Helfat & Peteraf, 2015; Sirmon, Hitt, & Ireland, 2007), property rights (Barzel, 1997; Libecap, 1986), and entrepreneurship literatures (Felin & Zenger, 2017; Foss & Klein, 2012). We argue that owners vary in the competence with which they exercise property rights over the resources they own such that firm-level value creation varies with owner competence.

Key assumptions of the ownership competence perspective

We first assume that owners seek to create value under conditions of Knightian uncertainty and vast complexity, where not only outcomes, but also the set of possible resources and strategies to achieve those outcomes, are not known *ex ante* (Kerr, Nanda, & Rhodes-Kropf, 2014; Knight, 1921).

Owners, like entrepreneurs, exercise judgment under uncertainty, projecting beliefs about means, ends, and the causal relations between resources and ends onto reality (Van den Steen, 2010, 2017). The owner's theories about the paths to value creation, including what to own and how to own, differ markedly across actors (Felin & Zenger, 2009; Hacking, 1983). Sometimes the owner's judgment, that is, his theory of value creation (Foss & Klein, 2012), proves valuable, sometimes it does not. In fact, ownership affords the control that is of particular value when acting under uncertainty. Absent uncertainty, ownership itself is unnecessary, as an actor can simply contractually compose the required control over assets, and obtain the foreseen returns.

Second, strategic factor markets for judgment are "closed," as the costs of articulating judgment in such a way that it can be objectively assessed by the market are prohibitive (Benner & Zenger, 2016; Foss & Klein, 2012). Because of the vast complexity stemming from the myriad resource combinations conceivable, the uncertainty about the correct price of resources (Denrell et al., 2003), different priors regarding future events and dynamics (LeRoy & Singell Jr, 1987), and different learning (Levitt & March, 1988), resource owners will often hold widely divergent theories—differing beliefs and cognitive models (Gavetti & Levinthal, 2000) about the most valuable paths to value creation. The idiosyncrasy of these theories will make it difficult to communicate them in ways that convince others of their superiority, rendering vast inefficiency in any form of market for these beliefs or theories (Benner & Zenger, 2016). The problem is not merely a lack of skills in persuasion. Rather, beliefs, theories and judgment are often quite idiosyncratic. Moreover, the most useful theories of value are likely to be unique in their underlying logic or judgment, as it is uniqueness that permits those possessing them to see value that others cannot (Felin & Zenger, 2017). However, the uniqueness of a theory also renders its value more difficult to convey or to persuade others of (Litov, Moreton, & Zenger, 2012).

Third, the only sure path to test one's judgment and capture the value that is eventually created is for the actor to assume ownership of the resources. Given problems of idiosyncrasy, persuasion, and market frictions, only by assuming (controlling) ownership, does an individual gain the control necessary to compose the value conceived, circumvent the disbelief held by others, and thus seek to prove herself right about the superiority of her judgment. Indeed, scholars have often pointed to ownership arrangements and changes in those arrangements as crucial to industrial dynamics and economic growth, because they precipitate entry and exit and other forms of asset reallocation (e.g., Chandler, 1962; Shleifer & Vishny, 1997). Ownership allows new firms to replace poorly performing old ones and facilitates movement of assets toward firms with higher productivity or value for customers (Foster, Haltiwanger, & Krizan, 2001). Ownership permits the crafting of complementarities from pooling, sharing, and otherwise combining resources that would be costly to obtain *via* contracting between independent firms (Argyres & Zenger, 2012) or *via* internal accumulation processes (Dierickx & Cool, 1989). Ownership changes allow resources to be bundled and re-bundled rather quickly, which reduces what would otherwise constitute a serious factor market constraint on value creation.

Fourth and finally, functions of ownership reach beyond rights to income to encompass use and transfer rights (Libecap, 1986). When assuming asset ownership, owners retain rights to transfer assets to other owners, to liquidate assets, and even abuse assets, which grants owners the right to change course, to learn from prior resource deployments, and flexibly alter the resource mix. This is of importance when a theory of value creation has to be altered, eventually outright rejected, or alternatively, a buyer proposes a price for a resource that is beyond the use value the resource has for the current owner (Denrell et al., 2003; Hacking, 1983). Ownership thus also conveys the right to make the final assessment of the quality of the judgment. Therefore, a multi-faceted perspective of ownership is required, one that accommodates ideas of residual income, residual control, and transfer rights.

Towards a competence perspective of ownership

Armed with these assumptions, we propose that variation in economic value creation can be partly explained by heterogeneous levels of owner competence in exercising property rights over resources that owners choose to assemble and control. Our thinking concurs with Alchian's (1961: 63) observation that "people differ in their talents as owners" and that this "[o]wnership ability includes attitude toward risk bearing, knowledge of different people's productive abilities, foresight, and, of course, judgment."[2] Our theorizing about ownership competence is based on classic property rights theory (Alchian, 1961; Barzel, 1997; Coase, 1960; Kim & Mahoney, 2002). Classic property rights theory maintains that whenever an individual owns a resource, he retains (1) the *right to use* the resource, (2) the *right to appropriate* the returns from using the resource, and (3) the *right to transfer* these rights (Libecap, 1986; Mahoney & Kor, 2015). We argue that owners vary in the competences with which they deploy the right to use, the right to appropriate, and the right to transfer. We call these competences *matching competence* (knowing *what* to own), (2) *governance competence* (knowing *how* to own), and (3) *timing competence* (knowing *when* to own), respectively. We thus define ownership competence as the skills with which asset owners exercise matching, governance, and timing competence (Castanias & Helfat, 1991; Helfat & Peteraf, 2015). Ownership competence generates economic value *via* superior skill about what to own, how to own, and when to own[3] (see Figure 1 and Table 2).

Before we unpack the three dimensions of ownership competence, an example may shed light on the central underpinnings of our reasoning. Assume an individual actor foresees good potential to

[2] In the context of comparative political systems, Pelikan (1993) offers a similar argument and suggests that since ownership competence (a concept that he likely first coined) cannot be assessed and allocated by a central governing body (e.g., a central planning bureau), the selection and matching processes of free markets are required to efficiently allocate such competence.

[3] In accordance with work on managerial skills (Castanias & Helfat, 1991 & 2001), ownership skills refer to the innate and learned abilities, expertise and knowledge. We use the terms "skill" and "competence" interchangeably (Danneels, 2016).

start a taxi business in her neighborhood and concludes that her own car is unsuited for that purpose. She thus decides to secure a loan and buy a car to be used for the purpose of her venture (*What* to own). When starting out, the owner faces the choice between driving the car herself and letting someone else drive it. When letting a chauffeur drive the car, the owner will have to monitor the chauffeur, and decide how to split between her and the chauffeur the income that is eventually generated (*How* to own). In the end, the owner may conclude that it is best to transfer ownership to a competing taxi firm that sees more value in her taxi business than the owner sees herself (*When* to own). Note that the role of the manager (in this case the chauffeur) is distinct from the role of the owner. The manager / chauffeur is the person running the taxi business, and will thus deal with the immediate operations of the business (Bloom & Van Reenen, 2007), and will exercise derived judgment about how to best run the firm (Foss, Foss, & Klein, 2007). But it remains the inalienable right of the owner to determine whether there will be a taxi business in the first place, who will run its operations, how eventual profits are split, and whether it is time to pass on ownership to someone else. This stylized example illustrates the strategic role the owner retains in exercising her three property rights of use, appropriation, and transfer, and attendant ownership competences, which we explore in fuller detail next.

EXERCISING OWNERSHIP COMPETENCE: WHAT, HOW, AND WHEN TO OWN

What to own: Matching competence

Matching competence refers to an individual's capacity to foresee, judge, or theorize about valuable resource combinations that achieve some "specific and intended purpose" (Helfat & Winter, 2011: 1244) or solve a unique problem (Felin & Zenger, 2017). An actor with matching competence may envision a novel problem and a novel configuration of assets to solve it. For instance, an individual may envision the need for a taxi service that caters to mobility-impaired patrons and imagines a set of assets to address this need. Since owners hold use rights over resources, and thereby possess wide

discretion about their use, identifying the purpose or problem to solve ultimately rests with the owner and is a necessary precondition for the ensuing resource orchestration process (Castanias & Helfat, 1991; Helfat & Peteraf, 2003; Penrose, 1959). In consequence, the development and understanding of that purpose is central to integrating required resources and assembling capabilities.

Owners who score high in matching competence are thus particularly good at composing theories or mental representations (Csaszar & Levinthal, 2016; Felin & Zenger, 2009) that guide their search for and orchestration of valuable resource (re-)combinations towards achieving a valued purpose (Weber & Mayer, 2014). Therefore, matching competence requires a superior understanding of the value of the resources currently possessed, an understanding of the value of resources others possess, and a capacity to imagine the value created through alternative configurations (Bower & Gilbert, 2005). There is space for matching competence in the transfer of resources from lower to higher valued uses because under uncertainty resources are often not perfectly priced and brought to their highest valued use. In an uncertain, entrepreneurial context, investment and divestment decisions are often not made in a competitive Darwinian context, but well before an owned resource configuration can compete in the product market or have positive cash flow (Kerr et al., 2014). By deciding what to own in exercising this matching competence, the owner thus defines the boundary of the firm.

Matching competence and the related capacity to foresee valuable resource configurations is also critical for value creation because resources have multiple attributes—uses, functions, and complementarities with other resources. The array of combinations is sufficiently vast and complex to specify *ex ante,* and therefore experimentation and use are critical to assessing value (cf. Foss & Foss, 2005; Foss & Foss, 2008; Kerr et al., 2014). So are theories and judgment (Felin & Zenger, 2017; Foss & Klein, 2012). As Demsetz points out, “there is an infinity of potential rights of actions that can be owned. […] It is impossible to describe the complete set of rights that are potentially ownable”

(Demsetz, 1988: 19). Hence, matching competence provides economic actors with the capacity to simulate and conduct thought experiments about the value of alternative resource configurations, thereby overcoming "functional fixedness", defined as a mental block against using an object in a new way to solve a problem (Felin, Kauffman, Mastrogiorgio, & Mastrogiorgio, 2016), to reveal latent resource uses, and engage in out-of-the-box creative thinking (e.g., Margolis & Laurence, 2007). The aptitude to imagine a valuable future, involving not yet discovered or created attributes and uses of resources is thus central to matching competence.[4]

Matching competence is related to what the venture capital literature calls the ability to "pick winners" or to select better matched resource bundles from the many proposed (Sorensen, 2007). Owners with better matching skills see value in available resources that can be productively rearranged or recombined with the existing resource base of the owner (Baum & Silverman, 2004). They recognize assets that are "underpriced assets" in their current arrangement, precisely because they recognize more valuable alternative arrangements. Others may simply recognize owners with a superior capacity to match resources, and then co-invest with these more competent owners.[5]

The literature on private equity contracting highlights these rights to exercise matching competence (Cumming & Johan, 2013). Private equity investors typically retain rights to make decisions regarding the focus, structure, and boundaries of portfolio companies. They approve any changes in articles of incorporation or by-laws, and retain rights to approve mergers, insolvency, or spin offs, changes

[4] Foss and Klein (2012) define entrepreneurial judgement as decision-making about resource allocation under Knightian uncertainty. As Foss, Klein, and Bjørnskov (2019) point out, while the term judgement is often associated with wisdom, prudence or foresight, the judgement-based approach does not make any assumptions about the accuracy of an entrepreneur's judgement—only that the act of resource assembly under uncertainty constitutes the exercise of judgement. We can thus think of matching competence as the accuracy with which entrepreneurial judgement is exercised.

[5] For instance, Hsu (2004) finds that high-reputation VCs possess this type of capacity as they acquire start-up equity at a 10–14% discount. These VCs have what Hsu (2004: 1805) calls "extra-financial value"—a capability that is distinct from "their functionally equivalent financial capital."

in business participations, property, material sales or purchases of assets, and financing decisions. Private equity investors delegate portions of these tasks, but retain ultimate authority to revoke such delegation. Under an ownership competence perspective, it is the right to privilege their own purpose, foresight, and creativity about valuable resource (re-)configurations and the assessment of risks in these endeavors that enables the exercise of matching competence.

How to own: Governance competence

Governance competence refers to an individual's capacity to compose through effective governance and organization design an envisioned resource composition. What we call governance competence gets closest to the afore-mentioned idea of "getting the incentives right" and reflects an understanding of incentive alignment principles inherent to the governance literature discussed earlier. From that literature we know that when governance structures are appropriately matched to transactions (Williamson, 1996) performance improves (e.g., Leiblein, Reuer, & Dalsace, 2002). First, an owner must decide whether to self-compose an envisioned resource bundle or alternatively hire a manager to do so. The choice of managers rests inalienably with the owner, and crafting an effective alignment between managerial skills and the resource configuration requirements is essential to performance (Eggers & Kaplan, 2009; Tripsas & Gavetti, 2000). The owner is free to appoint herself as manager, but may also choose to appoint some other person deemed more skillful in organizationally composing the envisioned strategy. While delegating the management task may generate agency costs, the capacity to hire superior managerial skill may more than outweigh these costs. Of course, this manager selection is conducted under information asymmetries about the skill sets of outside managers and with clear market frictions in attempting to secure the optimal match (e.g., firms in rural areas may have problems finding a suitable manager). In choosing to self-manage, the owner eliminates information asymmetry (although admittedly she may not fully know her own capacity) and benefits from reduced agency

costs. However, the owner-manager may not possess the required skillset to re-configure resources, especially when considering the dynamic evolution of required skills over the lifecycle of a resource (Helfat & Peteraf, 2003; Sirmon, Hitt, Ireland, & Gilbert, 2011). Delegation is particularly common where ownership is dispersed and exercised in groups, such as in equity partnerships. To avoid the coordination costs of collective decision-making, ownership groups will typically delegate day-to-day decision authority to professional managers.

Governance competence is also concerned with skillfully managing the distribution of rents generated within firms in ways that provide value-generating incentives. Owners with governance competence will assemble incentives, controls, and delegation arrangements into value generating patterns. They will appropriately deploy behavioral and outcome-based incentive systems (Eisenhardt, 1989), and will be cognizant of motivation crowding out (Frey & Jegen, 2001), as they seek to assemble resources in ways their judgment envisions. Owners with high levels of governance skill will also craft incentives in patterns consistent with their own risk profile. Diversified owners will want managers to take risk and will thus favor high-powered outcome-based incentive contracts, whereas owners with a concentrated wealth position will want to limit risk taking with their resources (Tosi, Werner, Katz, & Gomez-Mejia, 2000). Owners with high levels of governance competence will thus minimize the costs of monitoring and bonding (Castanias & Helfat, 1991), as they pursue their theory of value creation. Concomitantly, by holding residual income rights—the right to appropriate all remaining rents after all contractually agreed payments have been made, the owner will also have to define how much of the residual will be appropriated by herself, and hence will be paid out rather than retained and reinvested.

Owners with governance competence also have the capacity to allay holdup concerns among stakeholders from whom relationship-specific investments are sought, as these actors will “look ahead,

perceive hazards, and factor these back into the contractual relation" (Williamson, 1996: 9). For instance, firm-specific investments by suppliers and employees may be desired. Owners with high levels of governance skill will shape relationships both formally and informally to encourage valuable firm-specific investments.[6] Relatedly, owners competent in governance will also understand when it is advantageous and when it is not to reallocate ownership rights by sharing ownership with key partners.

When to own: Timing competence

Timing competence refers to the skill of owners to time their investment in projects in ways that maximize value creation. It encompasses temporal decisions about when to enter and when to exit (Henriksson & Merton, 1981). While matching skills help identify what resources to combine and governance skills help govern that recombination, timing skills help identify when to secure these resources (Ivashina & Lerner, 2019). Significant evidence in the finance literature suggests that the value of resources is highly time dependent, and timing competent owners are therefore skillful in managing the timing of resource acquisition and disposal. For instance, Baker and Wurgler (2002) find that skillful boards issue equity when the market values of their firms are high, relative to book and past market values, and repurchase equity when the market values are low. Similarly, Lerner (1994: 293) concludes that "seasoned venture capitalists appear to be particularly proficient at taking companies public near market peaks." Timing skills thus include the skill to optimize what Henriksson and Merton (1981) call "market timing" or the value generated by expanding the valuation multiple between the time of acquisition and the time of sell (Harris, Jenkinson, & Kaplan, 2014). The strategic factor market intuition

[6] Conversely, exactly because they understand the limitations of contracts, competent owners should also be aware of the risks they themselves run when committing their resources to a partner in relationship-specific ways and will thus seek reassurances against holdup. Owners with high levels of governance competence should thus be skilled in drafting contracts that enhance value creation, such as by including (premature) termination agreements, and agreements that define the intellectual property developed during the collaboration (Argyres & Silverman, 2004; Mayer & Argyres, 2004).

underlying timing competence is that owners compose value in an uncertain environment through arbitrage, correctly forecasting and exploiting resource price fluctuations. Via access to idiosyncratic information, timing competence grants owners the opportunity to "beat the market" (Denrell et al., 2003: 977), avoiding the purchase of assets in boom years, while buying during bust years. Relatedly, Bushee (1998) finds that "sophisticated" owners contribute to firm value by shielding managers from the pressure to engage in myopic behaviors in the face of earnings declines.

Timing skill also takes into account that a resource's actual value may be initially hidden, and only progressively revealed, as the resource is put to its intended use (Neus & Walz, 2005). Timing skill thus includes a capacity to spread or stage asset investments with uncertain value across time. Such staging lowers the risks of imperfect market timing following a false assessment of economic cycles and asset price movements, and reduces investment risk since the deferral of the investment goes hand in hand with a progressive revelation of its true value. Risky upfront investments are reduced in size and eventual follow-on investments into that asset become less risky (Folta & Janney, 2004; Kaplan & Schoar, 2005; Weitzman, 1979). Consistent with such a signaling argument, Janney and Folta (2003) find that seasoned investors prefer a gradual investment into an asset and that this reduces the hold-up risk when investments are co-specialized (Hart & Moore, 1990; Neher, 1999).[7]

Owners with timing competence also have capacity to schedule their investments to optimize strategic flexibility. Staged investments not only limit risk, but provide strategic flexibility (Leiblein,

[7] In consequence, transfer skill should include the capacity to benefit from the particular time structure of the cash flows that an asset generates. For instance, Ljungqvist and Richardson (2003) document that the timing of actual cash outflows and inflows into assets is an important factor in understanding the performance of private equity funds. These authors find that the draw down and capital return schedules of a venture capital fund are critical to understanding the value that the funds' owners are able to generate. Acknowledging the time structure of cash flows generated by an asset also leads these authors to conclude that calculating interim internal rates of return on invested assets may be misleading given the illiquidity of many resources. A corollary of the insight that timing is a critical driver of value creation is an appreciation not only for the risk-adjusted returns to an investment but also for the time value of money so that the efficient allocation of capital is supported (Castanias & Helfat, 1991; Ivashina & Lerner, 2019).

2003; Trigeorgis & Reuer, 2017), enabling firms to balance the virtues of both commitment and flexibility in the allocation of resources. These real options confer the right, but not the obligation, to take specific action in the future. They provide strategic flexibility in the face of uncertain irreversible investments, allowing owners "to capitalize on favorable opportunities and mitigate negative shocks by proactively confronting uncertainty over time in a flexible fashion, rather than by attempting to avoid uncertainty" (Leiblein, 2003: 948) (see also Folta & O'Brien, 2004; Miller & Folta, 2002). Thus, timing-competent owners effectively use real options to optimize strategic flexibility and commitment. A timing-competent owner also possesses enough humility to recognize when another owner possesses a superior matching competence, or a superior inventory of complementary resources. This second owner should be willing to acquire the resource bundle from the current owner at a lump-sum price greater than its discounted present value to the current one. Timing-competent owners under these circumstances recognize that now is not the time to own the resources and make the trade.

Timing skills thus involve the capacity to judge whether one is (still) the "best owner" (Dobbs, Huyett, & Koller, 2009), an argument that accords with a significant stream of research suggesting that a firm's comparative capabilities play an important role in defining its boundaries (Argyres & Zenger, 2012; Jacobides & Winter, 2005; Kogut & Zander, 1992; Leiblein & Miller, 2003; Poppo & Zenger, 1998). Put differently, an owner may hold the necessary competences to effectively manage a resource portfolio for some time. However, competitive forces and technological change may make the ownership competences of the current owner relatively less valuable, eventually outdated and obsolete, so that a next owner, with advanced ownership competences, can create more value with the given resource portfolio. Timing-competent owners may thus proactively plan their ownership exit.

Distinctiveness of matching, governance and timing competence

Matching, governance, and timing competences are distinct and separable, and individual owners may possess varying levels of each. They may therefore choose to externally access owner competences that they lack. Examples abound of owners who fail to recognize the limits of or focused nature of their owner competence, such as founder-owners who use brilliant matching and initial governance competence to envision and compose a valuable business, but then stay at the helm too long (Wasserman, 2006). An owner may be strong in matching and governance competence but have difficulty knowing when to transfer ownership to someone with even better matching and governance competence. We can imagine, and in practice observe, further combinations of ownership competences. For instance, family firms often have problems in attracting and motivating talented nonfamily managers, which points at reduced levels of governance competence (Neckebrouck, Schulze, & Zellweger, 2018). Also, because of transgenerational control intentions, family firm owners tend to subjectively overvalue their firms in comparison to the market price (Zellweger, Kellermanns, Chrisman, & Chua, 2012), which suggests impaired timing competence. However, because of their unique industry knowhow and deep networks, family firms may possess high levels of matching competence (Arregle, Hitt, Sirmon, & Very, 2007). Historically, corporate raiders such as T. Boone Pickens and KKR have thrived on their timing competence by unbundling and redistributing what they believe to be inefficient corporate portfolios. Similarly, activist investors like Nelson Peltz claim superior matching competence and then seek to impose and exploit that competence by taking minority ownership positions in firms, proposing alternative judgments about the use of the firm's assets, then convincing the boards of the veracity of these judgments. Warren Buffet has been described as a remarkable exemplar of ownership competence and, while he may possess multiple types of ownership competence, he seems particularly adept at timing competence, a competence to buy, sell, and invest with remarkable timing.

Ownership competences also appear to be learnable, as owners gain experience within industries, through governing, and from repeated asset transfers (Matsusaka, 2001). Experience may deliver heightened understanding of available resources and their valuable recombination, as well as an understanding of how to improve their governance and transfer. Empirical evidence suggests that even those individuals who are systematically good at starting and owning resources, and by extension firms, get better the more firms they have started and owned (Gompers, Kovner, Lerner, & Scharfstein, 2006; Lafontaine & Shaw, 2016).

Ownership competence in context

The importance of ownership competence for value creation—to bring about optimal asset matches, effective governance, and appropriate shifts in ownership—will likely vary according to context. We explore several contextual factors below.

Ownership concentration. The value of ownership competence is contingent on the concentration or diffusion of ownership, as activist investors know well. When an owner only controls a small fraction of equity, her power to deploy ownership competence is constrained. Therefore, greater ownership concentration is not only about resolving agency problems, but also granting control to owners selected for their matching, governance, and timing competence. Getting this match wrong has important performance consequences. For instance, Feldman and Montgomery (2015: 113) find that the "presence of directors who lack top-level experience but own large shareholdings is negatively associated with firm value, and that firm value tends to rise after such directors depart from boards." In our competence perspective, the level of control/ownership retained by the owner is not the cause of value creation. What matters is the level of ownership granted to those with ownership competence (Castanias & Helfat, 1991); ownership concentration is better understood as a moderator in the relationship between

ownership competence and value creation. Specifically, high levels of ownership concentration elevate the positive impact of competent owners and dampen the negative effects of incompetent ones.

Typically, when owners are competent, their competence is best exercised by a single controlling owner, such as the firm's founder, or by a small group of owners with homogeneous vision and a controlling interest, such as a founding team. Founding teams may also hold complementary ownership skills such that matching, governance, and timing competences are all present and complementary within the team. However, exercising ownership competence in larger groups with diffuse ownership poses challenges, as collective-action problems are layered on top of the individual owner's competence. While the costs of exercising her matching, governance, and timing skills are internalized by the respective owner who exercises these skills, the benefits are shared with all other owners. This entices the owner under diffuse ownership to shirk on her owner competence (Demsetz & Lehn, 1985). A partial remedy to such collective-action problems is to allocate ownership rights to a controlling party with a strong interest in the success of the venture and with high levels of owner competence (Foss & Klein, 2018; Hansmann, 2000).

Life-cycle effects. Ownership competence also has important connections to the life cycle of an enterprise, with different competences of particular importance at different phases. At startup, matching competence is particularly valuable as new-venture success depends on assembling an initial configuration of resources that matches the entrepreneur's judgment or theory about future, uncertain value creation. As Sirmon et al. (2011: 1401) explain, "in the start-up stage, an entrepreneur concentrates on structuring the firm's resource portfolio as the foundation for subsequently bundling resources to form the capabilities on which the venture's business model will operate." Matching competence is thus crucial in the founding stage given the need to align resource orchestration with the owner's, that is the founder's, vision.

With growth, professionalization and the appointment of managers will become a prerequisite for further value creation (Hellmann & Puri, 2002; Schulze & Zellweger, 2020). Needing to delegate authority to these agents, the owner must select managers, draft monitoring and rent-sharing regimes, and protect the firm and its intellectual property against being held-up by contracting parties, such as key personnel, clients, and suppliers, which moves governance competence to the foreground.

As the firm matures, timing competence will take on an increasingly important role. Resources such as fixed assets and networks may become less valuable over time and an owner's capacity to effectively shed resources, acquire new ones, or time the sale of the entire enterprise should become particularly important. Furthering value creation may require shifting the mix of assets, and timing the exit and purchases is central to value creation in this phase (Matsusaka, 2001; Sirmon et al., 2011).

***Environmental uncertainty*.** Ownership competence is particularly valuable in turbulent, uncertain environments, as firms scramble to adapt to, as well as originate unanticipated changes. Matching competence is uniquely important under uncertainty because the optimal owner–resource matches are difficult to discern ex ante. Moreover, frequent environmental shocks make it hard to perform controlled experiments, placing extra weight on the owner's idiosyncratic capacity to imagine and judge, and diminishing the value of a rule-based, algorithmic search for optimal matches.

Uncertainty, as evidenced by highly unstable prices, rapidly changing technology, and fluctuating competitor market shares, should lead to more disagreement and differing priors regarding a theory's probability of success. As Knight (1921, p. 231) observed, under uncertainty "business decisions [. . .] deal with situations which are far too unique [. . .] for any sort of statistical tabulation to have any value for guidance. The conception of an objectively measurable probability or chance is simply inapplicable." Van den Steen (2017: 4550) observes that "fundamental uncertainty forces people to rely on

intuition and judgment, which are by definition subjective," so that personal views about a firm's optimal strategy and required resource matches should become particularly valuable, not least to enforce the optimal strategy that may be highly controversial among different observers.

Moreover, uncertainty also complicates the process of monitoring others' decisions, and thus increases the marginal value of governance competence retained by the owner. For instance, the noisier the firm's environment, the more important it is for the owner to monitor (Burkart & Panunzi, 2006), draft contracts that provide reassurances against holdup, and carefully arrange the distribution of value that is being generated. Uncertainty also makes it important to carefully adapt payout policies to support the stability and continued success of the firm.

Timing competence is important under environmental uncertainty as well because under uncertainty "there is often no way to resolve such uncertainty except by waiting for the outcome" (Van den Steen, 2017: 4550), so that temporal flexibility in the (re-)allocation of resources is of heightened value. In other words, uncertainty often proves previously effective ownership arrangements untenable, yielding greater returns to resource reallocation; from a real-options perspective, greater uncertainty makes strategic flexibility reflected in timing competence particularly valuable (Folta & O'Brien, 2004; McDonald & Siegel, 1986; Miller & Folta, 2002). In other words, the competence view should dominate the incentive view of ownership when the boundary choice about what to own and not to own takes place in an uncertain environment where efficiency is less germane (Santos & Eisenhardt, 2005).

Factor market efficiency. For matching, governance, and timing competence to create value there must be some inefficiency in markets for assets/resources, including management talent. If these factor markets are perfectly efficient, meaning that the price of any resource always reflects its value in the best conceivable use (e.g., Barney, 1986; Denrell et al., 2003), then ownership competence cannot

add value. In such an equilibrium state, resources are already in the hands of those with the highest levels of competence (Demsetz & Lehn, 1985). In other words, all resources are in their highest-valued uses, orchestrated by the owners most competent in arranging them. However, in the real world of uncertainty, high complexity, and error, ample disequilibrium allows ownership changes or newly deployed competence to generate new value. Of course, legal, regulatory, cultural, or other barriers may make the process of exercising that competence difficult. But absent various transactional hazards, such as small-numbers bargaining, entry barriers, asymmetric information, and legal or institutional restrictions on exchange (Coase, 1937, 1960; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000; Williamson, 1985), the opportunity to generate value from ownership competence disappears.

DISCUSSION

Ownership has long been of interest to strategic management research. However, discussions of ownership in our field have predominantly focused on the incentive effects of ownership. While strategy, finance scholars, and economists have focused on minimizing the agency costs of separating ownership from management, our analysis suggests that solving agency problems may be less important than minimizing efficiency losses from separating ownership and *competence*. Thus, our starting point was that extant theorizing neglects that ownership can be exercised with heterogeneous competence, and that such ownership competence is multi-dimensional. More specifically, we developed notions of competence in matching, governance, and timing, and explored their implications for value creation.

The role of ownership competence in strategic management theory

Strategic management is already rich with theories and a reasonable question is whether strategy demands the addition of ownership competence as a construct. We believe that ownership competence—the skill with which ownership is exercised to create value—already underlies the central theories of strategy and entrepreneurship, but often in ways that are implicit and unstated. Featuring the role

of competence in ownership more centrally and explicitly in theories of strategy and organization will contribute to a more comprehensive view of the strategic path to value creation.

Whether economic actors are composing value through vertical integration decisions, pursuing horizontal expansion, or choosing activities to secure competitive advantage, the underlying drivers are more similar than different. We argue that they all echo a similar theme: value is created when those who possess competence in matching resources assume ownership, those skilled at managing provide efficient governance, and those with appropriate timing control buying and selling. Elements of this overarching logic for the path to value creation are scattered across various theories in strategy. However, largely missing is a clear articulation of the role that ownership competence plays.

First, consider the positioning school as extracted from industrial organization economics and popularized by Porter (1985). This approach implicitly assumes an economic actor who envisions a valuable position to occupy and then arranges assets and activities in a way that enables the occupation of that position—that is, an actor high in what we call matching competence. Largely absent from this theory, however, is the role that ownership plays in securing this location, or a clear discussion of when ownership is necessary to compose the configuration an economic actor envisions.

Second, consider transaction cost economics (Williamson, 1985). This theory begins midstream in the value creation process. It implicitly assumes an economic actor who has already composed or conceived of a pattern of exchanges or has identified some configuration of assets and activities. The central question in this theory is then how to craft the set of incentives required to induce the desired composition or support the desired exchange. While ownership is central to this theory and the efficient construction of governance more generally, there is little discussion of the matching or timing competence possessed by the economic actors that necessarily seeds this theory and its conclusions.

Third, consider strategic factor market logic (Barney, 1986). The underlying logic of this theory is that economic actors compose value as they purchase resources at prices below their future value in use. Economic actors with superior expectations about value in a future use enjoy a clear path to value creation, as they simply purchase resources at a discount. However, absent from this theory is a clear discussion of when the focal firm needs to own the undervalued resource, rather than rent it on a long-term basis. Our reasoning suggests that a firm should seek outright ownership of these resources not only when they are underpriced, but when control rights are essential for capturing the value created by putting these resources to use under uncertainty. Moreover, the strategic factor market logic says little about the origin of the superior expectations that fuel this path to value creation. We hypothesize that these superior expectations reflect heterogeneous ownership competence among economic actors.

Similarly, in the broader resource-based logic emphasis is placed on composing unique and inimitable resources or combinations of resources (Barney, 1991). While considerable attention is placed on the attributes of these resources or resource bundles, much less is devoted to articulating when and where ownership is required to assemble these or the origin of their conception. We argue that ownership competence in matching, governance, and timing are in most instances central to the formation of unique, valuable, and inimitable resource bundles. Our approach thus complements recent work in dynamic capabilities, resource orchestration, and managerial cognition (e.g., Helfat et al., 2007; Sirmon & Hitt, 2009), all of which deal with the ability of firms or managers to create, deploy, and modify resource bundles. Ownership competence can be understood as a set of higher-level competences situated at the level of the owner, which include when to establish, restructure, or dissolve a firm; which managers to hire and fire and how to direct those managers; how resources should be financed and how those funds should be distributed; and when to hand ownership responsibilities to another party.

The recent surge of interest in management practices (Bloom & Van Reenen, 2007) and their effect on productivity and profitability also calls for a greater understanding of owners and how they create the environment within which management can add value to resources. As noted above, while some of the tasks typically reserved for the owner can be delegated to managers, the owner decides which of her rights are delegated to managers. The continuous—but often hidden—role and influence of owners can be seen from the fact that managers, and also board members, can be dismissed. Ultimately, these professionals execute derived judgment (Foss et al., 2007) on the basis of loaned authority (Baker, Gibbons, & Murphy, 1999). In turn, ownership competence is also distinct from board competence, which captures the skill to discipline and support management, which is typically rooted in previous managerial experience, financial literacy, and personal networks of board members (Johnson, Schnatterly, & Hill, 2013; Krause, Semadeni, & Withers, 2016).

Finally, consider the added value logic derived from cooperative game theory (Brandenburger & Stuart Jr, 1996). This theory highlights the portion of value that alternative economic actors contributing resources to joint production effort can individually extract. Again, there is an implicit assumption of an economic actor (or perhaps a set of economic actors) who envision and compose this valuable bundle of assets and resources. However, there is again no discussion of the role ownership plays or the origins of economic actors' conceptions of the bundle of complements that generate the value over which economic actors compete. We believe that here again matching, governance, and timing competences are critical to explaining the cooperation and competition dynamics highlighted by the added value framework.

Our broader view is that too much theoretical effort has been devoted to pitting these alternative theories of strategy against one another in a logical horserace. In large measure these theories are simply explaining different aspects or phases of economic actors' efforts to create and capture value.

However, largely absent from all of these theories is a clear understanding and explicit articulation of a central economic actor who with varying competence conceives of valuable asset and activity arrangements and composes them through effective governance. Not surprisingly, absent this central actor in the foundational theories of strategic management, strategic management courses are critiqued as "repositories of multiple frameworks that that are not tightly integrated" (Mahoney & McGahan, 2007: 86). Making ownership competence more explicit in our theories of strategy will both enable greater synthesis and promote a richer capacity to explain value creation and capture.

New predictions

Our theorizing allows us to make novel predictions about the link between ownership concentration and performance. On a very basic level, our theorizing recognizes that two distinct owners holding identical ownership stakes in what are otherwise identical companies will likely make different decisions about how to orchestrate assets and resources, reflecting differences in competence (Lungeanu & Zajac, 2016). The traditional incentive effects from ownership, associated with more or less concentrated ownership stakes, then serve to simply shape incentives of owners who differ in competence. Organizations with more competent owners benefit more from concentrated ownership, while those with less competent owners benefit less. We thus highlight ownership concentration as a moderator of the relationship between ownership competence and performance.

Our ownership competence perspective also offers new predictions about mechanisms of value destruction by owners besides poor incentives, minority shareholder expropriation, and hold-up. For example, owners may squander resources on well-intended projects that are doomed to fail, or surround themselves with poor advisors, or unwisely hold on to assets that should be sold to others. Because an owner retains the ultimate authority over assets, if an owner fails to appreciate that others know better

about how these assets should be deployed, then the owner becomes the ultimate source of inefficiencies. These inefficiencies are challenging to overcome. Unlike governance inefficiencies that can be remedied by existing owners, ownership competence problems arise from having the wrong owners. Shrewd owners recognize their incompetence and accept lump-sum payments for assets from more competent owners. Competent owners recognize their level of competence and are sufficiently self-aware (and humble) so as to voluntarily replace themselves when another owner holds higher levels of competence in deploying their assets. However, ownership incompetence often engenders persistent foregone opportunities, as current owners fail to recognize other owners' more efficient compositions.

Our framework also sheds light on the sources and consequences of inefficiency in owner-manager collaboration. What happens when competent managers work under incompetent owners? First, managers are more likely to engage in self-serving behaviors because incompetent owners are unable to detect and mitigate such behavior. Incompetent owners are thus easy targets for managerial mischief. Second, competent managers who work under an incompetent owner may withhold efforts to compose superior asset configurations because they feel such efforts will be resisted by owners. Moral hazard by managers in this case is not a consequence of opportunism as predicted by agency theory, but a consequence of frustration and demotivation enabled by low levels of ownership competence. This creates an adverse selection problem in which competent managers withhold effort and exit to find employment with more competent owners. Third, managers working for incompetent owners may seek to behave as stewards who seek to help the owner be better at owning (Miller & Sardais, 2015). This may be particularly true—and not necessarily a sign of selfless commitment by the manager—when managers fear that a change in ownership towards more competent owners will leave them worse off.

Finally, we also offer new predictions about the market for corporate control. If owners know better than managers what must be done, the market for corporate control should be about sorting owners to best qualified managers. The inefficiency should be effectively overcome because owners have both the power and competence to act in effective ways and to hire the best managers (Castanias & Helfat, 1991, 2001). The ownership competence perspective, however, also accounts for the fact that a competent owner adds value beyond replacing management. By exercising governance competence via designing appropriate governance mechanisms, the owner motivates managers and improves their performance. By exercising matching and timing competence, the owner matches managers with a more appropriate set of resources. More generally, the ownership competence perspective views the market for corporate control as a market that primarily sorts assets to their most competent owners, and not primarily a device to sort assets to their most efficient managers (by ousting incompetent managers and matching assets with more competent ones). Value creation from takeover is not only the result of improved management (Adner & Helfat, 2003), but also a consequence of improved ownership.

Future research

Our hypothesized direct effects of ownership competence on value creation are testable. Ownership competence can be measured using techniques developed for measuring other kinds of competences (see Danneels, 2016; Grant & Verona, 2015; Stadler, Helfat, & Verona, 2013). Moreover, future research may compare the relative importance of our three competences. The proposed contingency effects linked to ownership concentration, life cycle effects (see also Sirmon et al., 2011), environmental uncertainty, and factor market efficiency are worth studying. Also, our predictions about the functioning of the market for corporate control, which we suggest is primarily about sorting assets to their best owner and not the replacement of management, merit exploration.

We have said little about the antecedents of ownership competence. The evidence from serial entrepreneurs suggests that ownership competence increases with experience, and that decision frequency is a plausible overall antecedent. Many of our predictions about the allocation of ownership competence in the economy are rife for empirical testing, even without direct measures of ownership competence. With refined measures of ownership change (asset purchases and sales, corporate acquisitions and divestitures, reorganizations and restructurings), it should be possible to establish more precise relationships between turnover and economic efficiency, controlling for asset specificity and the institutional environment. Thus, there are abundant opportunities for future research to clarify how ownership competence can be measured, nurtured and taught.

Ownership competence is situated at the level of the owner, not the asset. Hence, individual owners may be good owners of some assets but not others. There is some preliminary evidence that owners who are effective entrepreneurs, are far less competent as investors into other assets, such as financial assets (Zellweger, 2017). Future research may thus clarify how ownership competence aggregates and links to the ownership of a portfolio of assets (Baert, Meuleman, Debruyne, & Wright, 2016).

Owners may of course own assets for purposes that extend beyond value creation purely for themselves or other owners. Therefore, future research may explore the assessment of ownership competence filtered through the lens of the "purpose" for which assets are held (Henderson & Serafeim, forthcoming; March & Sutton, 1997). Such research could more closely examine the role that competence in the pursuit of varying purposes might play, independent of what might be more traditional measures of performance such as growth or market value (Gimeno, Folta, Cooper, & Woo, 1997).

Conclusion

The key contribution of this article is to point to the overlooked competence dimension of ownership. We offer a typology of relevant ownership competences and theorize how these influence value

creation, given moderating factors. We stress that value is created when those who possess competence also assume ownership. Our theory not only directly relates to dominant thinking in strategy, but also extends it by making the competence dimension of ownership explicit.

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Table 1: ***Conceptualizations of ownership***

	Agency Theory	Incomplete Contracting Theory	Property Rights Economics
Representative contributions	Alchian & Demsetz (1972), Jensen & Meckling (1976), Holmstrom (1979), Fama (1980)	Grossman & Hart (1986), Hart & Moore (1990), Hart (1995) (partly building on Williamson, 1985)	Coase (1960), Alchian (1965), Demsetz (1964, 1967), Barzel (1997)
Representative use in management research	Corporate governance research (Daily, Dalton, & Rajagopalan, 2003; Dalton, Daily, Certo & Roengpitya, 2003; Dalton, Hitt, Certo, Dalton, 2007)	Boundaries of the firm issues (Chi, 1994; Foss & Klein, 2012; Lim, 2001; Santos & Eisenhardt, 2005)	Resources and firm-level value creation and appropriation (Kim & Mahoney, 2002, 2005; Foss & Foss, 2005)
Ownership	Ownership confers the right of residual claimancy, that is, the right to capture what is left once contractually stipulated factor payments have been made (i.e., profits).	Ownership confers residual decision rights, that is, the rights to make decisions regarding an asset in situations that are not described in contract.	Ownership confers the rights to use (*usus*), derive income from (*usus fructus*), and alienate (*abusus*) assets. Effective control over assets require that users are capable of excluding others' access to the owned asset if they wish to.
Function of ownership	Title to ownership is allocated so that the value creation in principal-agent relationships are maximized.	Title to ownership is allocated so that the value creation from relationships involving complementary, relation-specific investments is maximized.	Ownership internalizes externalities from the use of assets, such as spill-overs on other users, depletion of a shared resource, or insufficient contribution to public goods.

Figure 1: ***Property rights and ownership competence***

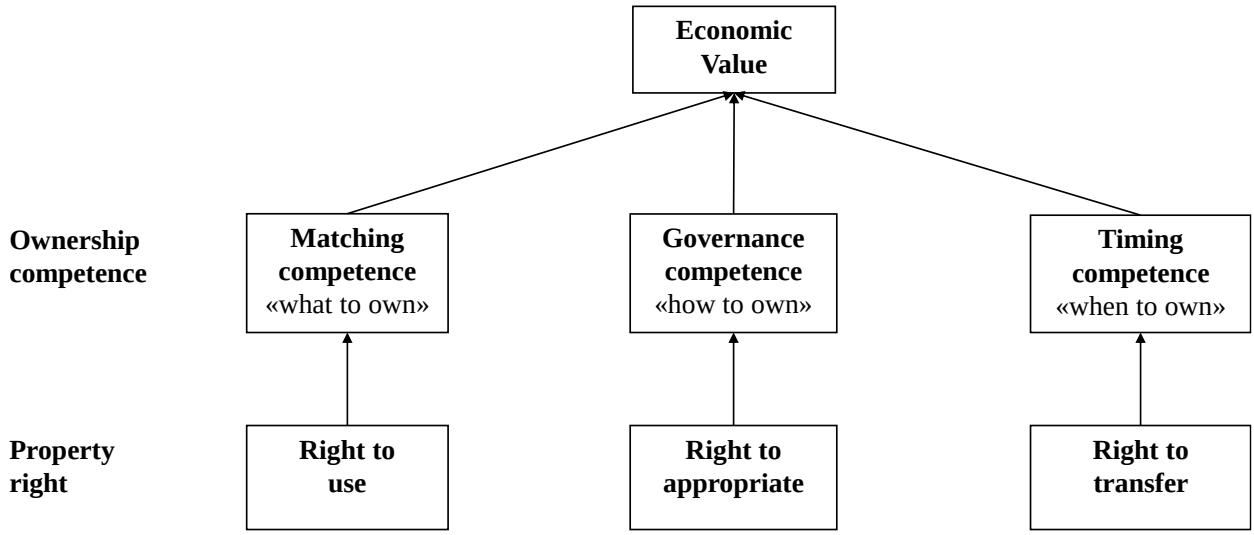

Table 2: ***Property rights and ownership competence***

Property right	**Definition of property right**	**Associated ownership competence**
Right to use	Right to freely determine the usage of an owned resource	***Matching competence: what to own*** • Definition of a valued purpose • Foresight and creativity about valuable resource (re-)configurations • Attitude towards risk bearing *The skill to foresee valuable resource combinations towards achieving a purpose.*
Right to appropriate	Right to appropriate the benefits from the deployed resource	***Governance competence: how to own*** • Manager selection • Rent sharing regime: incentive & stock ownership plans, pay out policy • Monitoring regime: budget and reporting policy *The skill to set the appropriate incentives for maximized value creation.*
Right to transfer	Right to delegate the other two rights	***Timing competence: when to own*** • Market timing: acquiring undervalued and selling overvalued resources • Staging of investments: Risk reduction and generation of strategic flexibility • Succession planning: assessing whether one is still the best owner *The skill to time investments into resources for maximized value creation.*