

Resource-Based Theory and the Value Creation Framework

Jay B. Barney 
University of Utah

David J. Ketchen, Jr. 
Auburn University

Mike Wright
(Late of) Imperial College

This article explains how viewing resource-based theory within Brandenburger and Stuart's value creation framework adds clarity to the theory as a whole and to its essential elements including the definition of its dependent variables, its approach to value creation, and its approach to the appropriation of economic value. Building on this foundation, the article addresses several questions about resource-based theory: Is it a theory or a view? Is resource-based theory tautological? Is resource-based theory static? How important are stakeholders within resource-based theory? Does resource-based theory constitute a theory of the firm? Does resource-based theory acknowledge industry structure's role in explaining firm performance? Does resource-based theory incorporate uncertainty? Does resource-based theory have strong managerial implications? In accomplishing these tasks, the article sets the stage for the further evolution and application of resource-based theory.

Keywords: *resource-based view; resource-based theory; value creation; dynamic capabilities; decision making*

It would be deeply dishonest to suggest that when the 1991 *Journal of Management* Special Research Forum on resource-based theory was published, that it would have been possible to anticipate how this set of ideas would evolve and affect research traditions in the

Acknowledgments: We are grateful for comments from Marvin Lieberman and Ty Mackey on earlier versions of this article.

*Corresponding author: Jay B. Barney, Eccles School of Business, University of Utah, 1731 E. Campus Center Drive, GARFF3367, Salt Lake City, UT 84112, USA.
E-mail: ketchda@auburn.edu*

field of management and beyond. The ambitions of the special issue authors were more modest: to examine some of the implications of a nascent theory of superior firm performance that depended on resources and capabilities being heterogeneously distributed across firms. That this set of ideas would have an impact on everything from the study of strategic human capital (Gerhart & Feng, 2021; Ployhart, 2021; Shaw, 2021) to entrepreneurship (Zahra, 2021) was beyond imagining.

However, as the preceding collection of essays suggests, one reasonable critique of resource-based work since 1991 is that its implications for a variety of research traditions in management, as well as in other academic disciplines, have not been as fully developed as they could have been. Certainly, as Burt and Soda (2021) point out, there are obvious links between resource-based theory and network theory that have not been fully worked out. This is also true for resource-based theory and the competitive dynamics literature (Chen, Michel, & Lin, 2021), the organization theory literature (Davis & DeWitt, 2021; Greve, 2021), various research literatures in organizational behavior (e.g., Gibson, Gibson, & Webster, 2021), and so forth. Outside of management, it is likely that resource-based theory has underdeveloped implications for finance, accounting (Barney, 2020), marketing (Barney, 2014), and supply chain management (Barney, 2012; Craighead, Ketchen, & Darby, 2020), among others.

These research opportunities suggest that resource-based theory—in some form at least—is likely to have a robust intellectual future. The diversity of these opportunities also suggests that not only may resource-based theory have an impact in this broad set of scholarly endeavors, but that these endeavors may have an impact on resource-based theory. However, before setting off on these new intellectual adventures, it might be wise to pause and take stock of what resource-based theory is—and is not—as well as the status of a variety of questions about resource-based theory.

What Is Resource-Based Theory?

For a set of ideas that has been applied in so many different ways by so many different scholars in so many different research traditions, sticking a “stake in the ground” by identifying what resource-based theory “is” seems bold, to say the least.¹ So rather than trying to reconcile all the different ways that this set of ideas have been applied, the essential elements of the theory as they have evolved in Barney (1986a), Barney (1991), and Barney (2018) are described. Some of the other close variants of the theory such as dynamic capabilities theory (Teece, Pisano, & Shuen, 1997) are also discussed.

Resource-Based Theory's Dependent Variables

Historically, the fundamental purpose of the field of strategic management was to attempt to explain why some firms outperform others (Porter, 1980). Resource-based theory was firmly embedded in this research tradition. But the word “performance” turned out to be deeply ambiguous, both conceptually and empirically (Peteraf & Barney, 2003). For example, some authors evaluated a firm’s performance relative to its cost of capital (Porter, 1980: 3), others relative to the accounting performance of industry rivals (Fisher & McGowan, 1983), and still others relative to the performance a firm would generate in a perfectly competitive market (Mahoney & Pandian, 1992; Mahoney & Qian, 2013). While these and other definitions of performance were related, they were not the same either theoretically or empirically.

Given these ambiguities, some authors argued that “performance” in strategic management research should be replaced with the concept of “competitive advantage” (Porter, 1985). But “competitive advantage” had its own ambiguities (Lieberman, 2021). Some scholars used the term “competitive advantage” to refer to *ex ante* causes of superior firm performance. For example, a firm that has certain kinds of resources and capabilities or operates in certain kinds of industries can have a competitive advantage that, in turn, can lead to superior performance (Barney, 1991). Others used the term to refer to *ex post* firm financial outcomes—a firm that generates more net income than its competitors has a competitive advantage—and were agnostic as to the cause or causes of this competitive advantage (Barney & Mackey, 2018; Peteraf & Barney, 2003).²

Moreover, as shown by the full title of Porter’s (1985) book *Competitive Advantage: Creating and Sustaining Superior Performance*, the study of competitive advantage, and especially *ex post* definitions of competitive advantage, necessarily involved discussions of “superior performance” and thus inherited all the traditional ambiguities of that term.

Adding “sustained” to the concept of “competitive advantage” (e.g., Barney, 1991; Porter, 1985) did not address any of these ambiguities. Indeed, it added yet another—how long did a competitive advantage have to last in order for it to be “sustained”? Porter (1985) did not specify any particular length of time a competitive advantage must last in order to be “sustained” and instead focused on the attributes of a firm’s value chain that made its competitive advantage more or less “sustainable.” Barney (1991) proposed an equilibrium model of sustained competitive advantage wherein a firm has a sustained competitive advantage when potential competitors cease their efforts to imitate a successful firm’s resources and capabilities. But this equilibrium definition did not necessarily imply a specific time frame.

Much of this conceptual confusion can be addressed by adopting Brandenburger and Stuart’s (1996) value creation and appropriation framework. Derived from an application of dynamic game theory, this framework has come to dominate discussions of performance, competitive advantage, and sustained competitive advantage in the strategic management field. It is applied here to become more precise about the dependent variable in resource-based theory.

Within the Brandenburger and Stuart (1996) framework, a firm generates economic value when there is a positive difference between the willingness of its customers to pay for its products or services and the total cost of producing those products or services. Firms conceive of and implement strategies to either increase customer willingness to pay for a product or service and/or reduce the costs of producing that product or service by assembling resources and capabilities from a variety of stakeholders (Barney, 2018). The part of the economic value created by this effort appropriated by a firm is called economic profit; the part of this value appropriated by stakeholders who provided the resources and capabilities needed to create this economic value is called economic rent (Schoemaker, 1990; Stoelhorst, 2021).

In this context, a firm has a competitive advantage over other firms operating in approximately the same market when it creates more economic value than these other firms. This is clearly an example of an *ex post* characterization of firm performance. A firm has a sustained competitive advantage when other firms find it difficult, over time, to achieve the same level of economic value created by the focal firm. Resource-based theory has specific hypotheses that suggest why it is sometimes difficult for one firm to achieve the same high levels of economic value created by another firm, even when those firms are operating in approximately the same markets or industries.

Resource-Based Theory's Model of Economic Value Creation

Resource-based theory begins by supposing that *firms* are *bundles* of *resources* and *capabilities*. Each italicized word in this sentence requires some unpacking. The word *firm* can mean a wide variety of things—everything from an accounting entity identifiable for tax purposes, to a legal entity for allocating legal liability, to an economic entity for economizing on transactions costs (Williamson, 1975, 1985), to a social entity that helps give its members purpose and a sense of belonging (Kogut & Zander, 1996).

Within resource-based theory, a *firm* is a strategic entity—a social structure that exists as a more or less efficient mechanism for creating and allocating economic value as defined above. This characterization of a firm does not necessarily contradict other characterizations. Thus, transaction cost minimization may be important in how economic value is created and appropriated, incomplete contracts may be important in how economic value is allocated to stakeholders, and so forth (Barney, 2018). However, as a strategic management theory, resource-based theory is keenly focused on both how economic value is created and allocated and on the role that firms can play in this process. The theory is agnostic regarding other ways of characterizing a firm—except to the extent that these other characterizations have implications for the creation and appropriation of economic value.

The word *bundle* suggests that the resources and capabilities that constitute a firm are somehow *related to each other* and that they are *held together* in some way. What *related to each other* means will be discussed shortly. With regard to *being held together* in some way, resource-based theory is, again, somewhat agnostic with respect to the actual mechanism that binds an array of resources and capabilities together. One could take a contractual view and suggest that bundles of resources that constitute a firm are held together in a nexus of contracts (Jensen & Meckling, 1976). Or one could adopt a more managerial view and suggest that it is organization itself—including authority structures, policies, practices, and culture (Cyert & March, 1963; Scott, 2013)—that holds these resources and capabilities together. Of course, organizations can be thought of as a special type of contract (Jensen & Meckling, 1976) and contracts can be thought of as one example of an organization (Rousseau, 1989).

Whether it is contracts or organization, or some other mechanism that keeps bundles of resources and capabilities together, the ability of these mechanisms to hold a bundle of resources together—at least in a market economy—depends on those who control these resources and capabilities being willing to join in such a bundle and remain joined. That is, the decision to join and remain part of a bundle of resources is, at its core, voluntary.

In particular, absent fiat, individuals or groups that control resources and capabilities will only join a bundle of resources and capabilities and remain associated with this bundle when the inducements associated with doing so are greater than the contributions required to do so. Here, resource-based theory adopts the language of March and Simon (1958)—a language that is consistent with the assumption that some actors, some of the time, will attempt to maximize their wealth when making decisions about joining and continuing with a bundle of resources, but is also consistent with the idea that some actors, some of the time, may have interests besides wealth maximization in making these decisions.

Resource-based theory extends March and Simon's (1958) notion of how bundles of resources and capabilities are held together in at least two ways. First, the theory assumes that those who control resources and capabilities will make them available to a bundle not only because there is a positive difference between inducements and contributions but also

because the difference between inducements and contributions for this bundle is larger than the difference between the inducements and contributions that actors could realize from joining any other bundle—or at least, any other bundle of which they are currently aware.

Second, resource-based theory identifies a particular situation where inducements can be greater than contributions and where this difference can be larger than what would be the case with other bundles of resources (Barney, 2018). This situation exists when those that control resources and capabilities are induced to make co-specialized investments in the resources and capabilities that are in a particular bundle of resources and capabilities. Resources and capabilities are co-specialized when they are most productive when used together and lose much of their productive value if used separately to produce independent products or services (Milgrom & Roberts, 1990). Co-specialization is the way that, according to resource-based theory, resources and capabilities in a bundle are related to each other in a way that creates economic value (Teece, Rumelt, Dosi, & Winter, 1994).

For example, research capabilities can sometimes generate innovative technological ideas. Development capabilities can sometimes introduce new technologies to a market. However, when operating together, research and development capabilities will generally create more economic value than research or development capabilities operating independently. This is especially the case if researchers and developers learn how to cooperate, adjust the operations to exploit cooperative opportunities, and make other investments that are specific to each other (Milgrom & Roberts, 1990). In this sense, actors are co-specialized when they make specific investments in each other.³

Of course, realizing this kind of co-specialization among resources and capabilities typically requires effort on the part of those that control these resources and capabilities—their time, energy, and commitment. Such effort constitutes an investment on the part of these actors. In this setting, an important question becomes, “Why would those who control resources and capabilities be willing to make co-specialized investments in others who control resources and capabilities?”⁴

The answer, at least within March and Simon’s (1958) inducements and contributions framework, is that these actors can gain more by making co-specialized investments in each other compared to *not* making such investments and compared to making co-specialized investments with others who control different resources and capabilities. Those that control resources and capabilities will be induced to continue, and even renew, their co-specialized investments in a bundle as long as other co-specialization opportunities that create the same, or even more, inducements do not emerge.

Thus, using language from Barney (1991), co-specialized investments among resources and capabilities are *valuable* when there is a positive difference between the inducements created by, and contributions required for, such investments. The potential inducements for actors to make co-specialized investments in these settings increase when such co-specialization creates economic value by either increasing the willingness of customers to pay for products or services or reducing the costs of producing those products or services. This potential is realized when some of the economic value created by co-specialization is appropriated by these actors.

Of course, actors may have the opportunity to invest in several different bundles of resources. How do they choose where to invest? In general, actors will be attracted to make co-specialized investments in bundles where they anticipate they will be able to appropriate the most economic value from doing so. This may be because co-specializing their particular

resource will generate the most economic value in a bundle compared with other bundles or that the total economic value created by a particular bundle is greater than any alternative bundles in which an actor can invest. In either case, using language from Barney (1991), to attract actors to make co-specialized resources and capabilities investments, not only must this co-specialization be valuable (in the sense of increasing customer willingness to pay or decreasing costs), it must also be *rare* (in the sense that an actor anticipates appropriating more economic value from this particular bundle than any other bundles in which she could invest).

Of course, if other bundles of resources could alter the way they are creating economic value to duplicate the same level of value creation as this bundle, then those managing this bundle would not be able to induce those that control these resources and capabilities to continue to make co-specialized investments in it. However—again, using the language of Barney (1991)—to the extent that the conditions under which actors are able to generate higher levels of economic value through the co-specialization of their resources and capabilities in a particular bundle are *costly to imitate*, then these value creating bundles will continue to offer a unique inducement versus contribution opportunity to these actors. And to the extent that these contexts are *nonsubstitutable*, in the sense that alternative and no more costly settings cannot generate the same value from co-specialization, then these bundles will also be able to continue to attract value creating co-specialized investments from these actors.

Of course, an important question becomes, “When will these situations—where co-specialized investments of resources and capabilities are valuable and rare—also be costly to imitate and nonsubstitutable?” Resource-based theory suggests that this is most likely when these situations are socially complex (Barney, 1986a), path dependent (Arthur, 1989), or causally ambiguous (Reed & DeFillippi, 1990).

Sometimes managers and entrepreneurs can play an important role in assembling bundles of resources and capabilities that have the potential to create economic value from co-specialization. They often begin this effort with a hypothesis about what resources and capabilities need to be combined to realize value-creating co-specialization (Felin & Zenger, 2009). However, as these hypotheses are tested by generating product or services to sell into a market, they will often have to be revised. This is because these managers or entrepreneurs may have had incorrect hypotheses about when co-specialization among a certain set of resources and capabilities will generate economic value, making revision of their hypotheses necessary. In this incremental and iterative way, experiments with changing bundles of co-specialized resources and capabilities (Shelef, Wuebker, & Barney, 2021) may reveal a set of co-specialized resources and capabilities that can actually generate economic value in a particular market (Alvarez & Barney, 2007; Alvarez, Barney, & Anderson, 2013).⁵ If this process is rare and socially complex, path dependent, or causally ambiguous, this bundle can be a source of sustained competitive advantage.

Because some managers or entrepreneurs can be essential in the development of a value creating co-specialized bundle of resources and capabilities, it is reasonable to think of managerial or entrepreneurial capabilities as being part of this bundle rather than separate from it. This is important because being part of a co-specialized bundle is what gives those that control a resource or capability the expectation that they will be able to appropriate at least some of the economic value the co-specialization creates (Barney, 2018). Indeed, in the absence of the inducements needed to attract these managerial/entrepreneurial capabilities, it seems unlikely that managers or entrepreneurs would be willing to make specialized investments in creating co-specialized bundles of resources and capabilities in the first place.

Table 1
Economic Value, Profits, and Rents in Acquiring Access to
New Resources and Capabilities

Potential Acquirers of Firm I's Resource or Capability	Firm I's Economic Rent	Potential Acquirer's Economic Profit	Total Economic Value Created by Potential Transaction
Firm A – potential for \$15,000 gain	\$2,000 + ϵ	\$3,000 – ϵ	\$5,000
Firm B – potential for \$12,000 gain	<\$2,000	<\$2,000	\$2,000
Firm C – potential for \$12,000 gain	<\$2,000	<\$2,000	\$2,000
Firm D – potential for \$12,000 gain	<\$2,000	<\$2,000	\$2,000

Note. If the resources and capabilities that Firm A uses to generate \$5,000 in economic value after acquiring access to Firm I's resource or capability are costly to imitate and nonsubstitutable, then (1) total economic value created in this transaction is \$5,000 (\$15,000 – \$10,000), (2) Firm A gains access to Firm I's resources and capabilities at a price of \$12,000 + ϵ (slightly greater than the price Firms B, C, and D would be willing to pay for this access), (3) Firm A appropriates an economic profit of \$3,000 – ϵ (\$15,000 – [\$12,000 + ϵ]), and (4) Firm I appropriates an economic rent of \$2,000 + ϵ (\$15,000 – [\$3,000 + ϵ]). This analysis also assumes that all these firms are seeking to maximize their performance and all are equally skilled in bargaining.

Moreover, this approach suggests that managerial and entrepreneurial capabilities that are specialized to the creation of co-specialization of particular resources and capabilities are more likely to be a source of economic value than generic managerial and entrepreneurial capabilities. This also suggests that it will often be the case that not all managers and entrepreneurs associated with a particular bundle of resources and capabilities are essential for creating economic value through co-specialization in this bundle and thus that not all managers and entrepreneurs will be able to appropriate some of the economic value that such co-specialization might create (Barney, 2018).

The final italicized words in the first sentence of this section (i.e., “Resource-based theory begins by supposing that *firms are bundles of resources and capabilities*”) that deserve further discussion are *resources and capabilities*. Some authors have tried to distinguish between resources and capabilities, but these distinctions do not usually hold under close examination (Leiblein, 2011). Thus, resources and capabilities, in resource-based theory, are generally treated as interchangeable synonyms and are defined as the tangible and intangible assets that are used by managers or entrepreneurs to conceive of and implement their strategies. A strategy, in turn, is a manager or entrepreneur's theory about how co-specialization among a particular set of resources and capabilities can enable the creation of economic value (Barney, 2018) by increasing a customer's willingness to pay or by reducing costs (Brandenburger & Stuart, 1996).

Resource-Based Theory's Model of Profit Appropriation

Resource-based theory's model of profit appropriation is relatively straightforward in the case of a single firm gaining access to a new resource or capability with the potential to generate economic value through co-specialization (Barney, 1986b, 1989). Consider the setting presented in Table 1: Several firms (A, B, C, and D) are interested in acquiring access to a resource or capability currently controlled by Firm I. This resource or capability is worth, say, \$10,000 in its current use. However, Firms B, C, and D each believe that

co-specialization with this resource or capability, once access to it is realized, will generate \$2,000 in extra economic value, compared to how it is being used currently. However, Firm A believes that it can create \$5,000 worth of extra value if it gains access to this resource or capability. Using the co-specialization language introduced above, Firms B, C, and D believe that co-specialization between the resource or capability and their own resources and capabilities will generate \$2,000 of new economic value, while Firm A believes that such co-specialization will create \$5,000 of new economic value if it gains access.

Acquiring access to this resource and capability for any of these firms is *valuable* because any of them can generate positive economic value from doing so. However, only Firm A's acquisition of this access is *rare*. If Firms B, C, and D cannot replicate the economic value that Firm A can create—that is, if the resources that Firm A controls that enables it to create this extra economic value are *costly to imitate* and *nonsubstitutable* because they are socially complex, path dependent, or causally ambiguous—then Firm A will be able to acquire access to Firm I's resource or capability and will be able to appropriate at least some of the economic value that such access will create.

In particular, the price at which Firm A will acquire access to the resource or capability in this example will be its value as it is currently used in Firm I (\$10,000) plus the value of the next highest valued use of this resource ($\$2,000 + \epsilon$). The economic value created by this transaction (\$5,000) appropriated by Firm I (an economic rent) is $\$2,000 + \epsilon$. The economic value created by this transaction appropriated by Firm A (an economic profit) is $\$3,000 - \epsilon$.

Thus, the ability of a firm to appropriate economic profits from acquiring access to new resources and capabilities depends, in the first place, on co-specialization between the resources and capabilities of the firms involved in this transaction that creates economic value. However, to be a source of potential economic profits to the firm acquiring access to these resources and capabilities, this firm's resources and capabilities used to create this economic value must be *rare*—that is, there must be a positive difference between the economic value (through co-specialization) created by this firm's acquisition of access to these resources and capabilities and the next highest valued use of these resources and capabilities. Finally, to be able to appropriate this economic value, this firm's resources and capabilities must also be both *inimitable* and *nonsubstitutable*. If an acquiring firm's resources and capabilities are *imitable* and/or *substitutable*, then other firms could duplicate this firm's resources and capabilities, the economic value created in this setting would no longer be *rare*, and while the acquisition of access to these resources and capabilities may create economic value, that value would be appropriated as an economic rent to the firm from whom access to these resources was being acquired.

Value appropriation when economic value is created by co-specialization among a bundle of resources or capabilities has some similarities to the single resource and capability case. However, value creation through co-specialization among several resource and capability providers creates several unique theoretical and practical challenges. For example, *ex ante*, it can be difficult to anticipate how much of the economic value created by a co-specialized bundle of resources and capabilities will be due to the specific investments in this bundle made by a particular actor. Thus, pricing these specific investments, *ex ante*, can be challenging, especially when the economic value that might be created by co-specialized resources and capabilities cannot itself be precisely known.

Moreover, these challenges continue even after a bundle of co-specialized resources and capabilities does, in fact, generate economic value. Because the marginal contribution of each of these resources and capabilities to the economic value created by a bundle cannot be accurately estimated, *ex post*, allocating value created to actors in a fair and accurate way can be very difficult.

Indeed, Alchian and Demsetz (1972) argue that an inability to estimate the marginal contribution of individual actors to value creation when there is a high level of co-specialization required to create this value can lead actors to shirk. And when actors shirk, their collective ability to generate economic value falls. These authors use this shirking problem to derive the structure of the modern corporation, wherein workers who create economic value through co-specialization hire first line managers to monitor their behavior to identify and reduce shirking, and first line managers who have a similar incentive to shirk hire second-level managers to monitor their behavior to identify and monitor shirking, and so forth, until the CEO is monitored by shareholders via the board of directors.

However, from the point of view of strategic management, the fact that there is no simple way to measure the marginal productivity of actors who have made co-specialized investments in each other creates yet another opportunity for the creation of economic value and even sustained competitive advantages. In particular, some managers or entrepreneurs may be more skilled in attracting and retaining the value creating specific investments of actors in a co-specialized bundle of resources and capabilities compared to others. These distinct skills are likely to be socially complex in nature—that is, they are likely to build on the trust, friendship, norms of fairness, and teamwork that a manager or entrepreneur is able to create among all those that have invested in a bundle (Barney & Hansen, 1994). This ability will also be likely reflected in a manager or entrepreneur's reputation and thus is likely to be path dependent in nature (Davey, 2018). And finally, for managers and entrepreneurs that do not have this skill, it is not altogether clear what they would need to do to develop it—and thus developing this skill is causally ambiguous (Conner & Prahalad, 1996). Managers or entrepreneurs with this unusual capability should be able to both enable more value creation in a co-specialized bundle of resources and capabilities and appropriate a larger share of the economic value created by such co-specialization when compared to those without these special capabilities.

Of course, there is growing interest in how economic value created by co-specialization among resources and capabilities is appropriated by those who control these resources and capabilities, *ex ante* (Amis, Barney, Mahoney, & Wang, 2020; Barney, 2018; Bridoux & Stoelhorst, Forthcoming; Stoelhorst, Forthcoming). However these issues are resolved, it is very likely that they will focus less on how *ex post* opportunism and shirking can prevent value being created by co-specialized investments—although this can certainly occur—and more on how managers and entrepreneurs can facilitate this value-creating co-specialization.

Prominent Questions About Resource-Based Theory

Of course, the fruitfulness of resource-based theory, like any theory, has been questioned over the years. Spirited collegial debate fuels scholarly progress and should be welcomed. Some of the prominent questions about resource-based theory reflect the specific trajectory

of how this set of ideas developed across five decades. Others reflect different authors' theoretical and empirical preferences. Eight questions are discussed here.

Is It a Theory or a View?

The label "resource-based view" was coined by Birger Wernerfelt in his 1984 *Strategic Management Journal* article. And "view" was the appropriate title of this set of ideas in this article because the article's primary purpose was to show that competition in "resource" markets was a theoretical companion to competition in "product" markets—that is, it is possible to analyze competitive advantage from the point of view of a firm operating in its product markets or from the point of view of a firm operating in its resource markets.

Much of the theoretical development since Wernerfelt (1984) acknowledges that competitive advantage can be understood from the perspective of these two markets (Barney, 1991). These developments go on to suggest that the dynamics within these markets, and how they are linked, is important in understanding how resources in factor markets can be combined to generate competitive advantages in product markets (Barney, 1986b).

So, is this set of ideas now a "theory" or is it still a "view"? Of course, the answer to this question depends entirely on one's definition of the terms "view" and "theory." Some observers believe that one of the greatest assets of this set of ideas is that it is not a theory but is a view—in the sense that it is a paradigmatic set of assumptions and conclusions that informs middle-range theories (Merton & Merton, 1968) that are examined in a wide variety of empirical contexts (Whetten, 1989). Others believe that it is clearly a theory, because it has suggested a wide variety of specific hypotheses that have been, and continue to be, tested. Moreover, it stacks up well to the criteria for theory offered in prominent discussions of theorizing such as Bacharach (1989), Sutton and Staw (1995), and Dubin (1978).

In the end, the answer to this question is largely semantic rather than substantive. From a practical standpoint, the term "resource-based view" and its abbreviation "RBV" are so established that they seem destined to endure regardless of any compelling argument that the term theory would be more fitting. And to wryly paraphrase a famous Englishman, a rose by any other name still smells as sweet.

Is Resource-Based Theory Tautological?

In their widely cited article, Priem and Butler (2001) argue that resource-based thinking is tautological. In doing so, they ignore the parts of Barney (1991) that have the clearest empirical implications—that firms with a competitive advantage will be able to sustain that advantage when the resources and capabilities they possess are socially complex, path dependent, or causally ambiguous. This logic suggests that firms that are able to generate more economic value than their direct competitors and do so with resources and capabilities that are socially complex, path dependent, and/or causally ambiguous will be able to maintain this value-creation advantage longer than firms that have a value-creating advantage that is not based on socially complex, path dependent, and/or causally ambiguous resources and capabilities.⁶

That said, any theory can be rendered tautological by ignoring some or all of its logic. For example, Coase's (1937; 1995) observation that the reason that firms exist must be because

they have advantages over markets is, by itself, tautological.⁷ Williamson (1975) solved this tautology problem by identifying the attributes of transactions that would lead to firms being a more efficient form of governance than markets. The notion that economic actors maximize their utility in making decisions can be rendered tautological (Cropanzano, Goldman, & Folger, 2005; Holley, 1999) because even the most altruistic acts can be interpreted in utility-maximizing terms. Utility maximization is only nontautological when specific utility functions, functions that identify at least some decisions that are not utility maximizing, are proposed and their implications examined. And resource-based theory can be rendered tautological by observing a set of financially successful firms and then suggesting that whatever these firms have in common must be a source of sustained competitive advantage.

None of this is to suggest that—early in the development of a set of ideas—tautological reasoning cannot be very useful. Coase's tautology earned him a Nobel Prize in economics and created a substantial literature on the theory of the firm (Holmstrom, 1989). Game theory, as initially developed by Von Neumann and Morgenstern (1953), was largely tautological. Yet it led to a broad range of theoretical and empirical developments in economics (Tirole, 1988) that includes, among others, the value creation and appropriation framework used in this article (Brandenburger & Stuart, 1996). However, to go beyond tautology, theories must add constraints that enable the development of specific hypotheses that can then be tested—constraints like social complexity, path dependence, and causal ambiguity.

In the end, Priem and Butler's (2001) fundamental problem is that they confused the creation of economic value with sustained competitive advantages. Granted, the definition of value in Barney (1991) was not as careful and specific as the definitions of value and sustained competitive advantage derived from the Brandenburger and Stuart (1996) framework in this article. And as described above, the definition of competitive advantage provided in Barney (1991) can cause ambiguity. However, given the differences between the creation of economic value and sustained competitive advantage described here, and given the predicted relationship between the social complexity, path dependence, and causal ambiguity of a firm's resources and capabilities and how long it can maintain a competitive advantage in value creation, whatever hint of tautology that might have been in Barney (1991) has been eliminated.⁸

Is Resource-Based Theory Static?

Resource-based theory's initial emphasis on equilibrium arguments has led many scholars to argue that it is a static theory.⁹ That has led to an interest in dynamic capability theory (Barreto, 2010; Eisenhardt & Martin, 2000)—an extension of resource-based theory that is sometimes touted as adding a dynamic element to a static theory.

Rather than arguing that dynamic capability theory is a dynamic substitute for resource-based theory, a more accurate view is that dynamic capability theory is a special case of resource-based theory. A dynamic capability is a "firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece et al., 1997: 516). There is little doubt that this ability—the ability to change one's abilities—is likely to enable the firm to increase the willingness of its customers to pay or the ability of the firm to reduce its costs, especially in fast-changing competitive environments and especially when compared to firms that cannot change their abilities in the same way. That is, in

some—but certainly not all—settings, possessing a dynamic capability has the potential to create economic value for a firm.

However, for dynamic capabilities to be a source of competitive advantage, other firms operating in this same environment must not have this same dynamic capability. That is, it must be rare. If this dynamic capability is not rare, then firms trying to assemble a dynamically changing bundle of resources and capabilities will have no inducements and contributions advantage over other firms with the same dynamic capabilities. Moreover, even if these dynamic capabilities are rare, if they are not costly to imitate and nonsubstitutable, then firms without dynamic capabilities will be able to duplicate their effects at low cost, and a firm with dynamic capabilities will not have any advantages.

Put differently, dynamic capabilities are capabilities that are dynamic. As such, their ability to generate economic value, competitive advantage, and sustained competitive advantage depend on having the same attributes as other kinds of capabilities—that is, they must be valuable, rare, costly to imitate, and nonsubstitutable. They are valuable to the extent that reconfiguring a firm's resources and capabilities enables a firm to increase willingness of its customers to pay and/or the ability of the firm to reduce its costs. They are rare to the extent that few competing firms possess similar capabilities. And they are costly to imitate and nonsubstitutable to the extent that they are socially complex, path dependent, or causally ambiguous in nature.

None of this suggests that dynamic capabilities are not an important research area in the field of strategic management. Indeed, the ability to change one's abilities in the face of a rapidly changing environment is clearly a significant phenomenon. However, to be an explanation of competitive advantage in the creation and appropriation of economic value, dynamic capabilities must have the exact same attributes as any other resources and capabilities. Thus, instead of just describing the nature and attributes of dynamic capabilities, research on dynamic capabilities must also focus on when these capabilities are likely to be rare, costly to imitate, and nonsubstitutable.

The call for a more dynamic version of resource-based theory reflects a widespread misunderstanding about the role of equilibrium analysis in economics and economically oriented theories in strategic management. Many of these theories do not identify equilibria based on an assertion that economic and social systems actually exist in equilibrium.¹⁰ Rather, these theories identify equilibria in order to study system dynamics—that is, how these systems are likely to change over time, absent exogenous shocks. Equilibrium analysis is thus one way to study how economic and social systems are likely to evolve and change.

Certainly, this is the role of equilibrium analysis in resource-based theory. To state that a firm has a sustained competitive advantage is only to observe that, absent exogenous shocks (e.g., a change in consumer preferences, a change in government policy, a change in technology), firms without the resources and capabilities needed to create economic value in this setting will find it challenging to develop the resources and capabilities needed to do so. It is not to assert that these firms will always have such advantages (Barney, 1991). Competitors may develop the required resources or capabilities, despite their costs. Or competitors may develop substitute resources or capabilities at lower cost. Or competitors may be a source of exogenous shocks themselves.

Rather, the objective of identifying a sustained competitive advantage is only to identify a reference point against which competing firms must evaluate their own strategic actions. That is, by identifying a firm with a sustained competitive advantage, resource-based theory

can make predictions about what competing firms will do to try to overcome, or not, competitive disadvantages.

How Important Are Stakeholders Within Resource-based Theory?

Repositioning resource-based theory into the Brandenburger and Stuart (1996) willingness to pay and cost of production framework makes it fairly clear that resource-based theory can easily accommodate stakeholders. Indeed, the actors that control resources and capabilities that decide whether or not to make co-specific investments with the resources and capabilities controlled by other actors are, in fact, stakeholders.

But resource-based theory says more about stakeholders than just that they are potentially important sources of resources and capabilities for a firm. For example, resource-based logic suggests that firms that behave as if their shareholders are their only residual claimant will not be able to attract the kinds of resources and capabilities needed to generate economic value (Barney, 2018). This is because assuming that only shareholders can have a residual claim on the economic value created by a firm implies that this firm treats all its other stakeholders as fixed claimants. And as Williamson (1975, 1985) suggests, stakeholders with fixed claim contracts are generally unwilling to make economic value-generating resources available to a firm because such contracts do not allow a stakeholder to share in the economic rents such resources and capabilities can help create.

Thus, in order for resource-based theory's model of economic value appropriation to be logically consistent with its model of economic value creation, its model of appropriation must acknowledge that a firm has residual claimants beyond shareholders (Barney, 2018). However, this conclusion does not suggest that all of a firm's nonowner stakeholders have a claim on a firm as residual claimants. Indeed, the theory suggests that stakeholders that make resources and capabilities available to a firm that are not part of the process of creating superior economic value do not have such a claim. These stakeholders, instead, provide resources and capabilities that are a source only of competitive parity (e.g., cement, electricity) and will be appropriately treated as fixed claimants.¹¹

In this context, resource-based theory suggests that recent announcements by various groups of executives that the purpose of their firm is not profit maximization but rather to satisfy the interests of all their stakeholders do not have much meaning. Given that a firm's fixed claimants will often have very different interests in how they would like to see a firm managed compared to its residual claimants, fully satisfying the interest of both these sets of stakeholders seems likely to be difficult. For example, fixed claimants would generally prefer a firm to be risk averse because they receive compensation only if a firm continues to survive and receive no financial gains should a firm generate competitive advantages from engaging in more risky behavior. On the other hand, residual claimants would generally prefer a firm to be more risk seeking precisely because they share in any extra economic value that might be created by engaging in risky behavior.

One solution to this problem—apparently supported by at least some stakeholder theorists (Harrison, Barney, Freeman, & Phillips, 2019)—is to treat all of a firm's stakeholders as if they were residual claimants. But at least some stakeholders are likely to prefer the economic flexibility associated with being a fixed claimant—because they can work with any company

that requires access to their generic resources and capabilities—compared to becoming residual claimants in a particular firm.

Does Resource-Based Theory Constitute a Theory of the Firm?

Conner's (1991) influential paper suggests that resource-based logic may ultimately be a source of a new theory of the firm. Conner and Prahalad (1996), and many others, have followed up on this speculation and have suggested the outlines of such a theory of the firm. These theorists have tried to use resource-based logic to answer the two fundamental questions that any theory of the firm must answer: What is the purpose of a firm, and what determines a firm's scale and scope (Holmstrom, 1989)?

It is clear why a theory of the firm is important in economics. Given how efficient markets are in allocating resources through prices, why would any exchange ever be organized through an administrative apparatus as "clunky" as a firm (Coase, 1995)? However, the introduction of stakeholders and co-specialization among resources and capabilities in a value-creating bundle into resource-based theory raises the question about how important a theory of the firm is in strategic management.

In particular, rather than explaining the existence of a firm, strategic management theory seems likely to be most interested in explaining the organization of the creation and appropriation of economic value. Certainly, this can happen in firms, but it also can happen through joint ventures (Kogut, 1988), in eco-systems (Jacobides, Cennamo, & Gawer, 2018), and in other collaborative settings such as franchising (Gillis, Combs, & Ketchen, 2014). Thus, in strategic management, the theory of the firm is only a special case of a broader theory of the organization of economic value's creation and appropriation.

Addressing this broader theoretical question of how economic value creation and appropriation are organized will further distinguish the field of strategic management from other approaches to studying firms. For example, transaction cost theory takes the gains from trade as given and then seeks to identify the most efficient means of governing this trade (Crook, Combs, Ketchen, & Aguinis, 2013; Williamson, 1975). A theory of the firm within the strategic management field should recognize that the economic value that can be created in a transaction is at least partly endogenous to how this transaction is governed. It should also recognize that these transactions can be managed in a wide variety of ways—not just in either markets or hierarchies—and that these alternative forms of governance may be stable over time.

Put differently, asking whether or not resource-based theory can be a theory of the firm is, in some sense, the wrong question. The right question—from the point of view of the field of strategic management—is: Can resource-based theory become a theory of the organization of the creation and appropriation of economic value? This will be an interesting future direction of this theoretical work.

Does Resource-Based Theory Acknowledge Industry Structure's Role in Explaining Firm Performance?

As noted above, resource-based theory originally was developed as an alternative to explanations of superior firm performance that focused on industry structure (e.g., Porter, 1980).

While industry structure is not a key player within resource-based theory—the two operate at different levels of analysis—the theory acknowledges that industry structure matters. This logically segues into questions about which level of analysis matters the most in explaining heterogeneity in firm performance—the firm or the industry.

Over the years, a substantial literature has grown examining whether firm-level factors or industry structure have the largest association with firm performance. Overall, this literature shows that in most industries, firm-level effects on firm performance are larger than industry-level effects on firm performance (McGahan & Porter, 1997; Short, Ketchen, Palmer, & Hult, 2007). However, this is not always the case. For example, when a firm is operating in a monopoly or tightly cooperating oligopoly, industry effects are larger than firm effects (McGahan & Porter, 1997). This is not surprising, because in these industry settings, the consolidated structure of the industry sets the stage for the possibility of superior performance and firm strategies must focus on creating (perhaps through consolidation) and maintaining (through erecting barriers to entry—Bain, 1956) oligopoly and monopoly in these industries.

However, the fact that industry structure can sometimes have a larger impact on firm performance than firm-level resources and capabilities does not necessarily suggest that firm strategies designed to create monopolies and/or closely cooperating oligopolies will always generate high levels of firm performance. In particular, if a firm that is trying to create a monopoly or closely cooperating oligopoly does not possess an unusual set of resources and capabilities to do so, competition among firms trying to create this monopoly or oligopoly may emerge, and any economic profits these firms could have obtained from creating these industry structures will be competed away. Thus, economic returns to efforts to create a monopoly or oligopoly may not be large, even if—absent competition in developing these industry structures—firms in these industry settings may have enjoyed superior performance.

Does Resource-Based Theory Incorporate Uncertainty?

Recently, there has been growing interest in the role of uncertainty in understanding how firms behave and perform (Alvarez & Porac, 2020). Resource-based theory recognized the importance of uncertainty in understanding sources of superior firm performance from almost the beginning (Barney, 1986a; Rumelt & Wensley, 1981). In particular, the kind of uncertainty traditionally incorporated into resource-based theory was not the behavioral uncertainty of transactions cost economics (i.e., when actors cannot anticipate whether or not another actor will behave opportunistically, given the chance) but uncertainty about the market value of a firm's resources and capabilities, more akin to Knight's (1921) use of the term.

Given the existence of this type of uncertainty, it will often be the case that a firm's financial success may be attributable, at least in part, to good luck and good fortune. In the same way, a firm's lack of financial success may often be attributed, at least in part, to its bad luck and bad fortune. It does not logically follow, however, that the strategic choices made by firms to enhance their performance are irrelevant in understanding their performance. While luck can be important in explaining a firm's performance, it is usually not the only reason a firm performs as it does.

Moreover, given that a firm is “lucky” or “unlucky,” how it responds to its situation can have a significant performance effect. For example, lucky firms can find ways to exploit their luck that generates even higher levels of performance than might otherwise be the case. Unlucky firms, on the other hand, can recognize their situation and stop trying to imitate the strategies that a lucky firm has been able to implement. Rather, unlucky firms can focus their efforts on finding or creating alternative paths to superior performance, paths that exploit valuable, rare, and costly to imitate resources and capabilities they do control or could develop at low cost.

Does Resource-Based Theory Have Strong Managerial Implications?

At its core, strategic management always has been and remains an applied field. That is, strategic management scholars generally prefer to develop and rigorously test theories that explain why some firms outperform others that have practical implications for managers. From the perspective of strategic management, providing explanation is good, but providing explanation with prescription is better.

Resource-based theory is very aligned with this prescriptive objective. However, the theory also recognizes constraints in how much any theory can be used to derive managerial prescriptions to improve firm performance. These constraints turn on how valuable, rare, and costly to imitate these prescriptions are. For example, resource-based theory can be used by poor performing firms to achieve competitive parity. This can be done by these poor performing firms closely studying the sources of success of higher performing firms and then by imitating all the resources and capabilities of these successful firms that are imitable.

Also, resource-based theory can be used by poor performing firms to identify alternative ways of generating economic value. In these settings, poor performing firms can recognize that they cannot imitate or substitute for a successful firm’s resources and capabilities, at least in a way that would generate economic profits for this firm. To gain such levels of performance, these firms must identify their own rare and costly to imitate resources and capabilities and find ways for these resources and capabilities to generate higher than current levels of economic value.

This leads to resource-based theory’s last implication for managers: Resource-based theory can be used by firms that have the potential for superior performance to fully realize this potential. This is done by these firms identifying the rare and costly to imitate resources and capabilities they already control and then finding ways to use these resources and capabilities to enhance their ability to create economic value. If these resources and capabilities are rare and costly to imitate, then the economic value created by exploiting them will be a source of sustained competitive advantage.

Despite these merits, resource-based theory has some important limitations in its implications for management practice. In particular, resource-based theory cannot be used to enable firms that do not already have the potential to generate superior performance to gain such performance. Such prescriptions would violate the “rules for riches” constraint in economics. This constraint suggests that if a way to generate high levels of performance could be applied by *any* person or firm, that the application of this process would


result in a highly competitive market within which no person or firm would obtain superior performance. Indeed, the only person that gets “rich” from a “rules for riches” is the person selling the “rule” to others.

Conclusion

Clearly, resource-based theory has come a long way over the last 30 years. And as the essays in this special issue show, it still has a long way to go over the next 30 years. By linking resource-based logic to Brandenburger and Stuart’s (1996) value creation and appropriation model, this paper suggests an approach to extending the theory in some interesting and powerful ways. Moreover, these extensions address many of the questions that have been asked about resource-based theory since it was first introduced.

ORCID iDs

Jay B. Barney  <https://orcid.org/0000-0003-0875-6702>

David J. Ketchen, Jr.  <https://orcid.org/0000-0001-9861-9781>

Notes

1. Compare, for example, the differences between “high” and “low” church resource-based theory identified by Levinthal (1995) and Gavetti and Levinthal (2004).

2. As Barney and Mackey (2018) suggest, a “competitive advantage” that is defined in an *ex ante* way is more appropriately called a “comparative advantage” because it compares the advantages and disadvantages of different firms in generating financial performance. *Ex post* definitions of “competitive advantage” are agnostic regarding the cause or causes of a firm’s financial performance. Theoretically, *ex post* definitions have the advantage of not confounding defining what superior firm performance is with explaining how superior firm performance is caused (Peteraf & Barney, 2003) and are very much in the spirit of Brandenburger and Stuart (1996).

3. Note that to realize co-specialization, those that control resources and capabilities need not be co-located within the boundary of a firm. This observation is discussed in more detail below.

4. In fact, there is substantial literature that suggests—absent governance protections—these kinds of co-specialized investments will often be avoided (Klein, Crawford, & Alchian, 1978). These issues will also be discussed later in this paper.

5. Of course, at any time these managers/entrepreneurs may choose to abandon the effort to develop new hypotheses about how a bundle of co-specialized resources and capabilities may generate economic profits.

6. Granted, measuring these variables can be challenging. But the tautology claim is that resource-based theory is, in principle, tautological. The assertion here is that, in principle, it has testable empirical implications and thus is not tautological.

7. Indeed, Coase (1992) acknowledged this tautology.

8. Meta-analyses of tests of resource-based theory by Crook, Ketchen, Combs, and Todd (2008) and D’Oria, Crook, Ketchen, Sirmon, and Wright (2021) suggest that while many of these tests are consistent with the theory, some are not. This would be an unlikely outcome if resource-based theory was, in principle, tautological. Looking to the future, now that meta-analysts have empirically established the RBT’s merits, they can and should shift their attention to more specific questions involving resources and capabilities.

9. This is certainly the case of “low church” resource-based theory (Levinthal, 1995).

10. Although some economic models sometimes seem to imply that these equilibria can, and even should, exist in real life, that is not the way that equilibrium analysis is used in resource-based theory.

11. This, of course, does not justify unfairly exploiting these fixed claimants in any way.

References

- Alchian, A. A., & Demsetz, H. 1972. Production, information costs, and economic organization. *The American Economic Review*, 62: 777-795.
- Alvarez, S. A., & Barney, J. B. 2007. Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1: 11-26.
- Alvarez, S. A., Barney, J. B., & Anderson, P. 2013. Forming and exploiting opportunities: The implications of discovery and creation processes for entrepreneurial and organizational research. *Organization Science*, 24: 301-317.
- Alvarez, S. A., & Porac, J. 2020. Imagination, indeterminacy, and managerial choice at the limit of knowledge. *Academy of Management Review*, 45: 735-744.
- Amis, J., Barney, J. B., Mahoney, J., & Wang, H. 2020. Why we need a theory of stakeholder governance—and why this is a hard problem. *Academy of Management Review*, 45: 499-503.
- Arthur, W. B. 1989. Competing technologies, increasing returns, and lock-in by historical events. *Economic Journal*, 99: 116-131.
- Bacharach, S. B. 1989. Organizational theories: Some criteria for evaluation. *Academy of Management Review*, 14: 496-515.
- Bain, J. S. 1956. *Barriers to new competition*. Cambridge, MA: Harvard.
- Barney, J. B. 1986a. Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review*, 11: 656-665.
- Barney, J. B. 1986b. Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32: 1231-1241.
- Barney, J. B. 1989. Asset stocks and sustained competitive advantage: A comment. *Management Science*, 35: 1511-1513.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.
- Barney, J. B. 2012. Purchasing, supply chain management and sustained competitive advantage: The relevance of resource-based theory. *Journal of Supply Chain Management*, 48: 3-6.
- Barney, J. B. 2014. How marketing scholars might help address issues in resource-based theory. *Journal of the Academy of Marketing Science*, 42: 24-26.
- Barney, J. B. 2018. Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. *Strategic Management Journal*, 39: 3305-3325.
- Barney, J. B. 2020. Measuring firm performance in a way that is consistent with strategic management theory. *Academy of Management Discoveries*, 6: 5-7.
- Barney, J. B., & Hansen, M. H. 1994. Trustworthiness as a source of competitive advantage. *Strategic Management Journal*, 15: 175-190.
- Barney, J. B., & Mackey, A. 2018. Monopoly profits, efficiency profits, and teaching strategic management. *Academy of Management Learning & Education*, 17: 359-373.
- Barreto, I. 2010. Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management*, 36: 256-280.
- Brandenburger, A. M., & Stuart, H. W. 1996. Value-based business strategy. *Journal of Economics & Management Strategy*, 5: 5-24.
- Bridoux, F., & Stoelhorst, J. W. Forthcoming. Stakeholder governance: Solving the collective action problems in joint value creation. *Academy of Management Review*. Advance online publication. doi:10.5465/amr.2019.0441
- Burt, R. S., & Soda, G. 2021. Network capabilities: Brokerage as a bridge between network theory and the resource-based view of the firm. *Journal of Management*, 47.
- Chen, M.-J., Michel, J. G., & Lin, W. 2021. Worlds apart? Connecting competitive dynamics and the resource-based view of the firm. *Journal of Management*, 47.
- Coase, R. H. 1937. The nature of the firm. *Economica*, 4: 386-405.
- Coase, R. H. 1992. The institutional structure of production. *American Economic Review*, 82: 713-719.
- Coase, R. H. 1995. The nature of the firm. In S. Estrin & A. Marin (Eds.), *Essential readings in economics*. London: Palgrave.
- Conner, K. R. 1991. A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management*, 17: 121-154.

- Conner, K. R., & Prahalad, C. K. 1996. A resource-based theory of the firm: Knowledge versus opportunism. *Organization Science*, 7: 477-501.
- Craighead, C. W., Ketchen, D. J., & Darby, J. L. 2020. Pandemics and supply chain management research: Toward a theoretical toolbox. *Decision Sciences*, 51: 838-866.
- Crook, T. R., Combs, J. G., Ketchen, D. J., & Aguinis, H. 2013. Organizing around transaction costs: What have we learned and where do we go from here? *Academy of Management Perspectives*, 27: 63-79.
- Crook, T. R., Ketchen, D. J., Combs, J. G., & Todd, S. 2008. Strategic resources and performance: A meta-analysis. *Strategic Management Journal*, 29: 1141-1154.
- Cropanzano, R., Goldman, B., & Folger, R. 2005. Self-interest: Defining and understanding human nature. *Journal of Organizational Behavior*, 26: 985-991.
- Cyert, R., & March, J. 1963. *A behavioral theory of the firm*. New York, NY: Wiley-Blackwell.
- Davey, L. 2018. How to earn a reputation as a fair manager. *Harvard Business Review*.
- Davis, G. F., & DeWitt, T. 2021. Organization theory and the resource-based view of the firm: The great divide. *Journal of Management*, 47.
- D'Oria, L., Crook, T. R., Ketchen, D. J., Sirmon, D., & Wright, M. In press. The evolution of resource-based inquiry: A review and meta-analytic integration of the strategic resources-actions-performance pathway. *Journal of Management*, 47: 1383-1429. doi:10.1177/0149206321994182
- Dubin, R. 1978. *Theory building*. New York, NY: Free Press.
- Eisenhardt, K. M., & Martin, J. A. 2000. Dynamic capabilities: What are they? *Strategic Management Journal*, 21: 1105-1121.
- Felin, T., & Zenger, T. R. 2009. Entrepreneurs as theorists: On the origins of collective beliefs and novel strategies. *Strategic Entrepreneurship Journal*, 3: 127-146.
- Fisher, F., & McGowan, J. 1983. On the misuse of accounting rates of return to infer monopoly profits. *American Economic Review*, 73: 82-97.
- Gavetti, G., & Levinthal, D. 2004. The strategy field from the perspective of *Management Science*. *Management Science*, 50: 1309-1318.
- Gerhart, B., & Feng, J. 2021. The resource-based view of the firm, human resources, and human capital: Progress and prospects. *Journal of Management*, 47.
- Gibson, C. B., Gibson, S. C., & Webster, Q. 2021. Expanding our resources: Including community in the resource-based view of the firm. *Journal of Management*, 47.
- Gillis, W. E., Combs, J. G., & Ketchen, D. J. 2014. Using resource-based theory to help explain plural form franchising. *Entrepreneurship Theory and Practice*, 38: 449-472.
- Greve, H. R. 2021. The resource-based view and learning theory: Overlaps, differences, and a shared future. *Journal of Management*, 47.
- Harrison, J., Barney, J. B., Freeman, E., & Phillips, R. (Eds.) 2019. *The Cambridge handbook of stakeholder theory*. Cambridge, UK: Cambridge University Press.
- Holley, D. M. 1999. *Self-interest and beyond*. St. Paul, MN: Paragon House.
- Holmstrom, B. 1989. Agency costs and innovation. *Journal of Economic Behavior & Organization*, 12: 305-327.
- Jacobides, M. G., Cennamo, C., & Gawer, A. 2018. Towards a theory of ecosystems. *Strategic Management Journal*, 39: 2255-2276.
- Jensen, M. C., & Meckling, W. 1976. Theory of the firm: Managerial behavior, agency costs and capital structure. *Journal of Financial Economics*, 3: 305-360.
- Klein, B., Crawford, R. G., & Alchian, A. A. 1978. Vertical integration, appropriable rents, and the competitive contracting process. *The Journal of Law and Economics*, 21: 297-326.
- Knight, F. 1921. *Risk, uncertainty, and profit*. New York, NY: Houghton Mifflin.
- Kogut, B. 1988. Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9: 319-332.
- Kogut, B., & Zander, U. 1996. What firms do? Coordination, identity, and learning. *Organization Science*, 7: 502-518.
- Leiblein, M. 2011. What do resource and capability-based theories propose? *Journal of Management*, 37: 909-932.
- Levinthal, D. 1995. Strategic management and the explanation of diversity. In C. Montgomery (Ed.), *Evolutionary and resource-based approaches to strategy*. Boston, MA: Kluwer.
- Lieberman, M. 2021. Is competitive advantage intellectually sustainable? *Strategic Management Review*, 2: 29-46.
- Mahoney, J., & Pandian, J. 1992. The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13: 363-380.

- Mahoney, J., & Qian, L. 2013. Market frictions as building blocks of an organizational economic approach to strategic management. *Strategic Management Journal*, 34: 1019-1041.
- March, J. G., & Simon, H. A. 1958. *Organizations*. New York, NY: Wiley.
- McGahan, A. M., & Porter, M. E. 1997. How much does industry matter, really? *Strategic Management Journal*, 18: 15-30.
- Merton, R. K., & Merton, R. C. 1968. *Social theory and social structure*. New York, NY: Simon and Schuster.
- Milgrom, P., & Roberts, J. 1990. *Economics, organization, and management*. Englewood Cliffs, NJ: Prentice Hall.
- Peteraf, M., & Barney, J. B. 2003. Unraveling the resource-based tangle. *Managerial and Decision Economics*, 24: 309-324.
- Ployhart, R. E. 2021. Resources for what? The importance of understanding performance in the resource-based view and human capital resource literatures. *Journal of Management*, 47.
- Porter, M. E. 1980. *Competitive strategy: Techniques for analyzing industries and competitors*. New York, NY: Free Press.
- Porter, M. E. 1985. *Competitive advantage: Creating and sustaining superior performance*. New York, NY: Free Press.
- Priem, R. L., & Butler, J. E. 2001. Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review*, 26: 22-40.
- Reed, R., & DeFillippi, R. J. 1990. Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review*, 15: 88-102.
- Rousseau, D. 1989. Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2: 121-139.
- Rumelt, R. P., & Wensley, R. 1981. In search of the market share effect. *Academy of Management Proceedings*, 1: 2-6.
- Schoemaker, P. J. 1990. Strategy, complexity, and economic rent. *Management Science*, 36: 1178-1192.
- Scott, W. R. 2013. *Institutions and organizations* (4th ed.). New York, NY: Sage.
- Shaw, J. D. 2021. The resource-based view and its use in strategic human resource management research: The elegant and inglorious. *Journal of Management*, 47.
- Shelf, O., Wuebker, R., & Barney, J. B. 2021. *Heisenberg effects from experiments on business ideas*. Working paper, Department of Entrepreneurship and Strategy, The University of Utah, Salt Lake City, UT.
- Short, J. C., Ketchen, D. J., Palmer, T., & Hult, G. T. 2007. Firm, strategic group, and industry influences on performance. *Strategic Management Journal*, 28: 147-167.
- Stoelhorst, J. Forthcoming. Value, rent, and profit. *Strategic Management Journal*, 47.
- Sutton, R. I., & Staw, B. M. 1995. What theory is not. *Administrative Science Quarterly*, 40: 371-384.
- Teece, D. J. 1986. Profiting from technological innovation: Implications for integration, collaboration, licensing, and public policy. *Research Policy*, 15: 285-305.
- Teece, D. J., Pisano, G., & Shuen, A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18: 509-533.
- Teece, D. J., Rumelt, R., Dosi, G., & Winter, S. 1994. Understanding corporate coherence: Theory and evidence. *Journal of Economic Behavior and Organization*, 23: 1-30.
- Tirole, J. 1988. *The theory of industrial organization*. Cambridge, MA: MIT Press.
- Von Neumann, J., & Morgenstern, O. 1953. *Theory of games and economic behavior*. Princeton, NJ: Princeton University Press.
- Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal*, 5: 171-180.
- Whetten, D. A. 1989. What constitutes a theoretical contribution? *Academy of Management Review*, 14: 490-495.
- Williamson, O. E. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York, NY: Macmillan.
- Williamson, O. E. 1985. *The economic institutions of capitalism*. New York, NY: Free Press.
- Zahra, S. A. 2021. The resource-based view, resourcefulness and resource management in startup firms: A proposed research agenda. *Journal of Management*, 47.