



ESSAYS

What to Do With the Resource-Based View A Few Suggestions for What Ails the RBV That Supporters and Opponents Might Accept

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The intention of this essay is to point out the key weaknesses of the resource-based view (RBV) and provide prescriptions for curing them. The authors begin with Gibbert's (this issue) question of whether the RBV is ready for generalization and concluded generalizability is an inappropriate goal for the RBV. Furthermore, they believe that the RBV is simply not ready for generalization. They argue that the quest for generalizability is counterproductive when applied to the RBV. Generalizability is not only the least relevant of the external validity criteria but also can only be assessed after valid operationalizations for constructs are developed across different contexts, industries, samples, and so on. Because they believe that RBV researchers have yet to achieve construct validity within their empirical testing, it appears to them that the RBV is simply not ready for generalizability. Finally, when they incorporate RBV developments that have occurred since Barney such as the knowledge-based view and dynamic capabilities, many arguments by Gibbert and others are rendered obsolete.

Keywords: *resource-based view; problems; reconciliation*

Because of its large and growing base of adherents, the resource-based view (RBV) of the firm is now considered a “dominant” or guiding theory in the strategic management literature (e.g., Hoopes, Madsen, & Walker, 2003; Sirmon, Hitt, & Ireland, in press). As evidence of this, Barney's

(1991) article, which many consider to be a seminal piece in this area, has received more than 1,400 citations according to ISI's Social Sciences Citation Index.¹ Nonetheless, the RBV has come under attack as being, among other things, tautological, overly simplistic, and largely untestable (e.g., Bromiley &

Fleming, 2002; Foss, Knudsen, & Montgomery, 1995; Priem & Butler, 2001). In his essay "Generalizing About Uniqueness," Professor Gibbert (2006 [this issue]) addresses the last of these issues by developing a framework that he claims "can provide a helpful tool for making more-appropriate methodological choices for empirical work in the RBV" (p. 129). Although his efforts are certainly commendable, Professor Gibbert's prescriptions, if pursued, will not advance the RBV. Rather, they fall prey to the same traps that have impeded necessary development of the RBV and subjected it to attack by opponents and advocates alike (e.g., Foss et al., 1995).

We do acknowledge the value of Professor Gibbert's essay as it reminds us of the progress researchers have made toward understanding how firms develop enduring advantages. However, Gibbert's ideas also underscore the distance we still must travel to transform the RBV into a truly useful theory for strategy scholars. In light of this, our intention in this essay is to point out the key weaknesses of the RBV and provide prescriptions for curing them. In so doing, we hope to accelerate progress in understanding enduring firm advantages and provide points of reconciliation for RBV advocates and opponents alike. We acknowledge that Professor Gibbert's arguments are focused solely on the generalizability of RBV empirical findings. Our original intention was to simply comment on his ideas. However, after further contemplation, we concluded that the weaknesses of the RBV as currently utilized are so substantial that addressing only Gibbert's ideas (i.e., generalizability) would not effectively "close the door" on continued criticism of the RBV nor provide the basis for advancement of the RBV.

To do so, we make three general observations. First, the RBV's "paradox" of generalizability as identified by Gibbert (2006) and others (i.e., the inability to generalize results that are based on unique resources) simply does not exist. Moreover, we question the usefulness and appropriateness of generalizability of research findings in fostering the RBV. Second, we argue that RBV researchers have not used valid operationalizations for RBV constructs. It is quite surprising to us that researchers such as Gibbert would concern themselves with generalizability when the lack of construct validity precludes robust testing of the theory. Third, we argue that proponents and opponents of the RBV must look beyond Barney (1991) and toward recent progress in the RBV (e.g., on dynamic capabilities and other related

research streams) on which to base future work. Failure to do so will ensure continued debate and a lack of theoretical and empirical progress with regard to the RBV. We then conclude our essay with summary arguments and future challenges for the RBV.

PROFESSOR GIBBERT'S ARGUMENT AND SOLUTION

Professor Gibbert describes his focus in the following way:

Resources that are valuable, rare, inimitable, and non-substitutable . . . provide the basis for sustained competitive advantage. . . . However, *generalizability*, or external validity, refers to the extent to which research findings are not unique (idiosyncratic) to the case or sample studied . . . that is, generalizability describes the degree to which research findings in one study or firm are valid in others. . . . Thus, if one's research findings regarding firm resources actually were generalizable, they would violate the RBV criterion of idiosyncrasy . . . and would, therefore, not be conducive to building, managing, and sustaining firms' competitive advantage (pp. 124-125).

In short, Gibbert claims that because the RBV is a framework that identifies "valuable, rare, inimitable, and nonsubstitutable" resources, empirical generalizability is precluded. *Uniquely possessed resources*, by definition, cannot reside in other firms, samples, and so on, thereby precluding generalization of one's research findings to other samples. We assume that for Professor Gibbert, this is problematic from a "philosophy of science" perspective because "a scientist, whether theorist or experimenter, puts forward statements, or systems of statements, and tests them step by step" (Popper, 1968, p. 27). Falsification of theories or the inability to generalize across different contexts or operationalizations of variables calls into question the underlying credibility of the theory (e.g., Lynch, 1982).

Professor Gibbert proposes four idiosyncrasy and/or generalizability combinations that "can provide a helpful tool for making more-appropriate methodological choices for empirical work in the RBV" (p. 129): (a) industry-idiosyncratic resources that are common in firms within an industry, (b) firm-idiosyncratic resources that are unique to a specific firm, (c) cross-industry resources that are similar in firms across industries, and (d) rule for riches that

“are strategic options and processes that any firm can employ, irrespective of context” (p. 131). In this essay, we argue that the paradox identified by Gibbert (2006) is more perceived than real, and attempts to promote generalizability in the RBV may actually hamper rather than foster the development of the RBV. Moreover, the problems inherent in the RBV extend far beyond generalizability, and therefore, curing the RBV of its ailments requires a considerably more detailed discussion. Our more specific points are discussed throughout the remainder of this essay.

Research Generalizability and Idiosyncratic Resources: A Nonexistent Paradox

The term *paradox* has multiple meanings. For example, *Webster's Encyclopedic Unabridged Dictionary* (1989) defines a *paradox* as “a statement or proposition seemingly self-contradictory or absurd but in reality expressing a possible truth” (p. 1046). For a paradox of this type to exist, the logic reconciling the apparently contradictory ideas has to be valid. Thus, the expression *less is more* provides an apparently self-contradictory statement that nonetheless can be deduced as valid. On the surface, one cannot have less of something and simultaneously have more of that same thing. A deeper philosophical rendering, however, leads to the interpretation that having less of something provides greater focus on and effort toward utilizing that which is scarce. This same dictionary also defines *paradox* as “a self-contradictory and false proposition” (p. 1046). “This statement is false” is an example of such a proposition. Self-contradiction occurs because, if this statement is false, then it must be true (and because it is false, it cannot be true). Again, for a statement of this type to be considered a paradox, a certain consistency of analytic order is required. In this case, *false* refers to the statement, as does implicit *truthfulness* (i.e., the statement is simultaneously “false” and “true”). The analytic consistency in this statement is achieved because both descriptors (i.e., “false” and “true”) refer to the “statement.”

Gibbert (and other RBV opponents) claims to have identified such a “paradox” but does not achieve this same consistency. The basic premise for Gibbert is that resource uniqueness, a prerequisite for competitive advantage according to the RBV, precludes the generalizability of research findings on the RBV.²

Although each of the components of this argument can be construed as correct (i.e., the RBV framework postulates under what conditions sustainable competitive advantage is achieved; generalizability results from replication of research findings), the components cannot be easily juxtaposed per *Webster's* (1989) definition. The attribute of *uniqueness* in the RBV applies to *resources*, whereas *generalizability* in positivist science refers to *research findings*. Indeed, it is important to underscore the point that the RBV framework depicted by Barney (1991) and cited by Gibbert itself deals with resource attributes of value, rarity, inimitable, and nonsubstitutability and not the resources themselves. Researchers can have generalizable research findings on resource attributes that will yield competitive advantage without those resources losing their firm specificity. Indeed, the idea that “uniquely valuable” resources (Penrose, 1959, p. 46) confer a sustainable competitive advantage does provide a research finding from the RBV that is generalizable. For example, a researcher could find that Disney integrates various resources such as Mickey Mouse, distribution, reputation, and so on into a competitive advantage because their use and/or integration provides effective advantages that cannot be eroded by competitors. That same researcher might find that Wal-Mart's distribution system, numerous locations, low prices, and so on provides similar advantages because of their effectiveness and durability. Although this two-observation sample provides little power in a statistical sense, it does demonstrate that generalizability and resource uniqueness can peacefully coexist. Gibbert's ostensible paradox, in other words, is nonexistent.

How Important Is Generalizability to Advancement of the RBV?

A more pressing issue is whether generalizability is even necessary for RBV advancement. One should recall that Cook and Campbell (1979) viewed external validity (i.e., generalizability) as the least important of four methodological validities of concern to theoretical researchers.³

For persons interested in theory testing it is almost as important to show that the variables involved in the research are constructs *A* and *B* (construct validity) as it is to show that the relationship is causal and goes from one variable to the other (internal validity). Few theories specify crucial target settings, populations,

or times to or across which generalization is desired. Consequently, external validity is of relatively little importance. In practice, it is often sacrificed for the greater statistical power that comes through having isolated settings, standardized procedures, and homogenous respondent populations. (p. 83)

Consistently, Calder, Phillips, and Tybout (1982) argued that efforts aimed at achieving external validity may reduce the effectiveness of any single experiment and, more important, impair the process of scientific discovery. Although Gibbert (2006) uses Calder et al. (1982) to provide support for his claims, the primary aim of Calder et al.'s (1982) article is to contest Gibbert's suggestions. Calder and colleagues argued that advances in knowledge and science are most likely achieved not through confirmation and/or replication of one study's findings by subsequent studies (as Gibbert advocates) but through refutation of preexisting theory by more advanced theory.

Indeed, Calder et al. (1982) argued that attempts to ensure generalizability may halt scientific process. The reason for this is simple. Generalizability of empirical results across various types of firms, time periods, or industries is contingent on identifying *ex ante* all necessary "background variables" (i.e., unidentified variables that if included in the study would modify the effects obtained; Calder et al., 1982). As Cook and Campbell (1979, p. 73) stated, tests of generalizability essentially amount to "tests of interactions." If a researcher, for example, finds the effect of firm patenting proclivity on firm performance to be conditioned by industry (i.e., patenting proclivity and industry interact to determine performance), then she or he cannot conclude that the effect of patenting on performance generalizes across industries. Such a result is well established in the literature and easy to test (e.g., Sorenson & Stuart, 2000). However, arguing for the importance generalizability "amounts to a counsel of despair . . . [since] a researcher must literally enumerate and anticipate all of the background factors that could interact with treatments" (Calder et al., 1982, p. 241). Efforts to ensure generalizability would thrust researchers into a never-ending search for background variables that would significantly slow or even halt the scientific progress. Cronbach (1975) recognized this by arguing that individuals operate in open systems, and therefore all factors affecting behavior and decision making

will be difficult to isolate. As such, "rejection of a theory based solely on an examination of empirical association across contexts is not very helpful because one cannot easily determine whether the failure is due to inadequate measures, misspecified theory, or both" (Calder et al., 1982, p. 242).⁴

Such concerns about this never-ending and unlimited search are especially relevant to the RBV because much of what researchers in this area focus on are ethereal and imprecisely described. Indeed, "it may be very difficult . . . to understand the reasons for [superior performance] or to know what inputs to attribute the performance of successful firms" (Demsetz, 1973, p. 2). Often, the fact that managers may not even understand the source of their own firm's advantage precludes their leaving the firm and replicating the strategy elsewhere (Peteraf, 1993). If such "ignorance" is the norm, how can researchers (who probably know less about the firm than do managers) expect to understand and identify the resources and capabilities critical to sustainable competitive advantage? And, given this ignorance, can RBV researchers effectively operationalize key constructs? Before researchers focus on generalizability, it is first necessary to ensure valid operationalizations of constructs (Calder et al., 1982; Cook & Campbell, 1979).

Are RBV Researchers Using Valid Constructs (or at Least Correctly Estimating Models That Account for Inabilities to Do So)?

Without construct validity, any empirical conclusions relating to the RBV are suspect. We contend that this critical goal has not been achieved. Indeed, Gibbert's and others' (e.g., Rouse & Daellenbach, 1999) attempts to identify and operationalize "key" resources illustrates a common misperception made by many RBV researchers that certain resources can be isolated from others to provide robust tests of the RBV.

Although many studies have attempted to operationalize the key resources and/or capabilities of the RBV, Levitas and Chi (2002) argued that such attempts are futile. True competitive advantages do not inhere in a few resources and/or capabilities but rather involve a complex network of evolving resource and/or capability interactions (e.g., Black & Boal, 1994; Dierickx & Cool, 1989). Attempting to

disentangle certain "key" resources from others represents a misunderstanding of the RBV. Levitas and Chi (2002) used the example of learning to demonstrate this point. The ability of a firm to learn is a function of a multitude of factors including technology absorption abilities, employee morale and cohesiveness, experience, complementary resources, geographic factors, and a host of other individual, organizational, and environmental elements (e.g., Levinthal & March, 1993; Nonaka, 1994; Woodman, Sawyer, & Griffin, 1993). To effectively operationalize "learning," a researcher must identify all factors that play a part in the learning process and recognize the interconnections among these factors. In other words, she or he must understand all interaction points that exist among the determinants of learning, and identify those that are not also possessed by competitors (to confirm the rareness criteria). Furthermore, much of what a firm knows is "tacit" because it is obtained only via experience, and thus defies easy transfer to "noninformed" parties (e.g., Kogut & Zander, 1992). Accordingly, researchers attempting to operationalize learning may face the even more difficult problem of attempting to observe that which is not easily observed.⁵

This task of identification is monumentally more difficult when considering that learning is only part of a system of resources and capabilities responsible for an enduring competitive advantage. A company such as Wal-Mart provides an effective example of this complexity. Wal-Mart has operated for more than 40 years in discount retailing and associated industries (e.g., pharmacy, groceries, and toys). Much of its advantage vis-à-vis main competitors (e.g., Target Stores; Kmart/Sears) stems from the knowledge of operations it acquired over that period and the ability to alter its knowledge and/or processes to changing circumstances. In addition to this knowledge, its advantage is also a function of the efficiencies achieved from its distribution system (e.g., economies of scale and scope, cross-docking, centralization of inventory management, and supplier power), its size in terms of locations, attendant exposure and accessibility, its reputation for low prices, convenient hours, goods selection, buyer power, cash flow that allows it to continually expand domestically and internationally, ability to leverage its tangible and intangible assets into additional industries (e.g., from discount retail to groceries, toys, and pharmacy), and so on. As is the case with learning, distribution,

physical location, reputation, power, cash flow, and others all have their own complexities that may defy researcher comprehension. Further complicating any attempt at in-depth understanding is the fact that each one of these factors interacts to determine the others. Distribution provides further knowledge of logistical efficiencies and knowledge of customers. Knowledge provides the impetus for new product offerings and desired areas for expansion. Expansion provides more cash for distribution. One is therefore left with a series of factors that, individually, are difficult to understand, but collectively, belong to an exceptionally intricate and complex web of links that is beyond true comprehension. This poses a considerable problem for RBV researchers because empirical testing is contingent on effective identification and operationalization of constructs (i.e., one cannot estimate a model without first having developed valid constructs).

If construct validity cannot be achieved (and in the case of the RBV, we do not believe it can be), then certain estimation corrections need to be employed. Several things can be done to address these concerns. First and foremost, researchers must admit to some "ignorance" regarding constructs and their operationalizations. As noted, if managers who are relatively proximate to their firms do not completely understand the nature and causes of the advantages (e.g., Demsetz, 1973; Lipmann & Rumelt, 1982), researchers who are merely external observers certainly will not have any greater insight. As evidenced by the Wal-Mart example, one simply cannot hope to completely understand what provides Wal-Mart's superiority vis-à-vis competitors. Our ignorance can, however, be effectively modeled by the use of certain statistical techniques the fixed-firm effects in our empirical models (e.g., Kennedy, 1996). In a regression equation, for example, this amounts to a firm-specific parametric shift that captures unexplained firm-specific variance (Greene, 1997). Although somewhat dissatisfying because of the inherent lack of specificity (i.e., the exact constitution of such effects is subject to speculation), use of fixed effects can nonetheless overcome other difficulties of identification and measurement.

Furthermore, because of the complex network of interactions among resources and/or capabilities, researchers need to consider estimation techniques that allow for the modeling of such linkages. One class of candidates is simultaneous equation models

that allow for multiple paths among constructs. Certain models that allow latent variable modeling could be especially helpful as researchers could conceivably move toward estimating otherwise inestimable "uniqueness" variables. Conceivably, the paths from various manifest variables such as size, R&D expenditures, firm-specific effects, and others that researcher hypothesizes to determine advantages could be more effectively modeled than in simple linear regression. In this way, elements about which we are cognizant and ignorant can be statistically modeled. Indeed, perhaps the combination of observable variables and fixed effects in this manner can be used to model a more complex and ethereal "advantage."

Complexity about which RBV researchers speak may cross levels of analysis. Henderson and Cockburn's (1994) distinction between component and architectural competencies is a case in point. *Component competencies* refer to the ability to perform certain business unit tasks. *Architectural competence* refers to a firm's ability to integrate these functions into a coherent whole. Hierarchical estimation techniques that model architectural variables as "fixed" across varying business unit levels (e.g., Bryk & Raudenbush, 1992) might be useful in effectively capturing these effects as well.

Regardless of technique, it is our opinion that RBV researchers have yet to provide valid operationalizations of their constructs and/or the used attendant necessary estimation techniques. Any empirical advances with the RBV are contingent on rectifying these omissions first.⁶

The RBV Has Moved Beyond Barney (1991)

Barney (1991) was pivotal in integrating a series of previous work on RBV (e.g., Barney, 1986, Dierickx & Cool, 1989; Penrose, 1959; Rumelt, 1984; Wernerfelt, 1984) into a coherent framework. The influence of this piece is exemplified by the more than 1,400 citations it has received since publication. This and subsequent works (e.g., Collis, 1994, Peteraf, 1993) established the RBV as is usually cited. Barney (1991) and these other works were instrumental to the development of the RBV. In fact, as Makadok (2001) accurately pointed out, the RBV was developed in a piecemeal fashion by the above works. This development, however, did not stop with the early work. The RBV has had more than a decade of development and evolution.

Yet Gibbert (2006), like many advocates and opponents of the RBV (e.g., Bromiley & Fleming, 2002; Priem & Butler, 2001) falls prey to a common trap: the belief that Barney (1991) represented the current and most advanced state of RBV thinking. This ignores more recent research in the RBV that focuses on the dynamic aspects of capabilities (Eisenhardt & Martin, 2000; Kogut & Zander, 1992; Teece, Pisano, & Shuen, 1997). *Dynamic capabilities* are conceptualized as a firm's ability to build and/or extend basic capabilities to deal with changing environments (Teece et al., 1997). A shift in focus to dynamic capabilities reduces if not eliminates the applicability of the valuable, rare, inimitable, and nonsubstitutable (VRIN) framework because the emphasis of the strategist shifts from trying to protect sources of current competitive advantages to continuously creating resources and/or capabilities to yield future competitive advantages (Winter, 2003). IBM, for example, has resuscitated itself many times, using many different resources and capabilities through its history. It is not evident, however, that any single set of IBM's resources remained valuable, rare, inimitable, or nonsubstitutable during that period. Rather, the various advantages it developed emerged from evolving and varied resources and/or capability networks. In the early 1900s, IBM transformed itself from a struggling computer punch-card manufacturer to the world's leading producer of typewriters, time clocks, and tabulators. IBM later became the world's largest producer of mainframe computers, and subsequently the world's largest producer of personal computers (while ceasing its punching card operations). After a stalled growth period that threatened company survival, it transformed itself once again into to a leading hardware, software, technology developer and service provider of computer products (e.g., Gerstner, 2002). Unfortunately for many RBV theorists, Barney's (1991) framework does not allow one to account for IBM's varied and changing resource and/or capability sets. By focusing on Barney's (1991) criterion for idiosyncrasy, Gibbert and others therefore ignore a critical aspect of enduring advantage: the ability to change and adapt resources and/or capabilities to maintain superiority (e.g., Kogut & Zander, 1992; Teece et al., 1997).

Furthermore, application of the four VRIN attributes has provided researchers with logical difficulties. What seems to be an adaptation from Penrose's (1959, p. 46) discussion of "uniquely valuable" resource

services has created an easy target on which to base criticism. Priem and Butler (2001) noted the tautology inherent in valuable resources conferring competitive advantages because, by definition, competitive advantages are valuable. Other "endogeneity" issues arise as well. For example, rareness and inimitability might enhance value as reduced supply makes certain factors more precious. Conversely, value may cause rareness as a rush to acquire desirable goods reduces their supply. In this sense, what were developed as independent constructs (i.e., sustainable competitive advantage, value, rareness, inimitability, nonsubstitutability) are mutually causal. Their application to superiority identification, therefore, becomes quite confusing and, perhaps, misleading.

Focus on any single article as representative of an entire theory also significantly reduces the explanatory power of that theory. One article cannot hope to comprehensively contain a theory that purports to describe firm behavior. This is especially true given that the RBV claims to explain "why firms are different." In some cases, firms may have lower costs of logistics and transacting for production inputs vis-à-vis their competitors (e.g., Dell). Other firms may have unique abilities to learn and apply that learning to the development of new technologies (e.g., IBM). Indeed, firms may possess enduring uniqueness for a wide variety of reasons. Transaction cost theory and its descriptions of supplier and buyer integration (e.g., Williamson, 1975), behavioral theory and its discussion of competing political coalitions (Cyert & March, 1963), learning and the ability-inability to develop new technologies (e.g., Levinthal & March, 1993), evolutionary theory and the development of resources over time (e.g., Nelson & Winter, 1982), and Austrian economics and survival in conditions characterized by nonequilibrium (Jacobson, 1992) as well as other theories may all describe important elements of firm uniqueness. Focus on a single article that cannot hope to address all these complexities will provide a limited and perhaps incorrect depiction of the events it attempts to describe. Indeed, it may be that the RBV is more of metatheory whose application is quite wide but that is made up of subordinate theories whose applications are more context specific.

Other Issues

Aside from the issues addressed in this essay, the RBV faces other challenges. The RBV is, contrary to

certain assertions (e.g., Priem & Butler, 2001), not simply a business-level phenomenon. It applies to a firm's entire range of activities (e.g., Peteraf & Barney, 2003). One simply cannot disaggregate businesses and isolate a single market when assessing "uniqueness" because advantages in one market are often determined by activities in others. Wal-Mart, for example, now sells more groceries in the United States than any other company. In 2003, for example, its grocery sales were \$66.5 billion. This was about \$20 billion more than Kroger (the second largest U.S. grocer). It overtook companies such as Kroger by leveraging the assets it developed in more traditional retailing sectors (*Standard & Poor's Industry Surveys*, 2005). Indeed, Wal-Mart's existing infrastructure and capabilities has allowed it to prosper in an otherwise turbulent industry. Overlooking the other markets Wal-Mart competes in when analyzing its performance in the grocery market obviously gives the researcher a distorted perception of "reality" in that industry.

By restricting focus to a single market, researchers are doing a disservice to the RBV, and, more important, misconstruing that which provides uniqueness. Porter (1985) and others have already described strategy in single industries. The RBV purports to do something different, namely examine uniqueness. Indeed, a firm's products in one market are often enhanced by or even substituted for by products in another market (Henderson & Cockburn, 1996). Operations in one market may provide the springboard for new entry into another market (Kim & Kogut, 1996). Honda's production of motorcycle engines and motorcycles provided it with the platform on which to move into automobiles. Failing to address this "cross-pollination" ignores many important "off-balance sheet" items that distinguish a firm from its peers.

These issues raise additional complexities for RBV researchers. First, researchers need to carefully rethink definitions of *competitive advantage*. Because firms may have a relatively unique portfolio of operations and thus might not compete in identical sets of markets, how does one define a firm's competitors? One can simply define *competitors* as those existing in the firm's dominant industry; however, that leaves the RBV as a mere extension of Porter (1985) and others. Industry selection of this sort allows analysis of industry competitive advantages but ignores much of the determinants of continued advantage in that

industry as well as potential advantages developed or possessed elsewhere.

Second, this situation obviously creates a testing quandary for RBV scholars. How can researchers compare firms of unique industry portfolios? Comparing a company such as Johnson & Johnson that produces pharmaceuticals, beauty products, and medical diagnostic equipment with companies that produce only pharmaceuticals will undoubtedly provide a deceiving indication of what if anything makes Johnson & Johnson unique.

CONCLUSION

We began this essay with the question of whether the RBV was ready for generalization. This turned out to be an unnecessary question because generalizability is, from our perspective, not a desirable attribute for advancing the RBV. In addition to the inappropriateness of generalizability as a goal for the RBV, we believe that the RBV is not ready for generalization. Thus, our refutation of the paradox discussed by Gibbert (2006) is threefold. First, we argued that the paradox between idiosyncratic resources and generalizable research findings is nonexistent. The misperception that such a paradox exists results from the logical fallacy of confounding the characterization of *idiosyncrasy* that applies to resource attributes and generalizability that refers to research findings. Second, we argued that the quest for generalizability is counterproductive when applied to the RBV. Not only is generalizability the least relevant of the external validity criteria (Cook & Campbell, 1979), it can only be assessed after valid operationalizations for constructs are developed across different contexts, industries, samples, and so on. Because we believe that RBV researchers have yet to achieve construct validity within their empirical testing, it appears to us that the RBV is simply not ready for generalizability. Finally, when we incorporate RBV developments that have occurred since Barney (1991) such as the knowledge-based view (Grant, 1996) and dynamic capabilities (Teece et al., 1997), many arguments by Gibbert and others are rendered obsolete. This is because the focus of the RBV has long ago advanced to the continuous creation and augmentation of resources and capabilities, and beyond the now-obsolete protection of (static) competitive advantage (Winter, 2003).

In this essay, we have made certain suggestions that we feel will allow the RBV to progress beyond its current conflicted state. These suggestions may not be easily accomplished. Without their adherence, however, we feel RBV research will continue to be misguided and maligned.

NOTES

1. Citation count as of the date of submission of our essay. Barney (1991) developed the well-known valuable, rare, inimitable, nonsubstitutable (VRIN) framework.

2. As previously noted, Gibbert claims that "resources that are valuable, rare, inimitable, and nonsubstitutable . . . provide the basis for sustained competitive advantage. . . . However, generalizability, or external validity, refers to the extent to which research findings are not unique (idiosyncratic) to the case or sample studied" (pp. 124-125).

3. In addition to generalizability or external validity, Cook and Campbell (1979) discussed internal validity (the degree to which a researcher can infer and/or conclude no plausible alternative explanations than that hypothesized), construct validity (the degree to which the variable operationalizations accurately measure the constructs of interest), and statistical conclusion validity (the degree to which one can derive valid conclusions about the existence of treatment effects).

4. One way to promote generalizability is to select heterogeneous samples (e.g., firms from a wide range of industries, sizes, etc.). Unfortunately, this is not costless in a statistical sense as within-sample heterogeneity may increase the probability of making a Type II error (i.e., failing to reject a false null hypothesis; Calder, Phillips, & Tybout, 1981). Indeed, as Cook and Campbell (1979, p. 44) noted, heterogeneous control effects that are not correlated with independent variables but do have an effect on the dependent variable can inflate error variance, thus reducing the sensitivity of statistical tests.

5. Of course, in-depth case studies by researchers might "reveal" some or all of these connections and the tacit elements to researchers (Rouse & Daellenbach, 1999). However, if such revelations are possible, that which was identified by the researcher could not be the source of competitive advantage in the first place (Levitas & Chi, 2002; Peteraf, 1993).

6. Given the complexities of operationalization, it might be important to recall a distinction made by Cook and Campbell between *generalizing to* and *generalizing from*. Cook and Campbell (1979) noted the following:

Generalizing *to* well-explicated target populations should be clearly distinguished from generalizing

across populations. Each is germane to external validity: the former is crucial for ascertaining whether any research goals that specified populations have been met, and the latter is crucial for ascertaining which different populations (subpopulations) have been affected by a treatment. (p. 71)

Generalizing *to* refers to the ability of generalizing findings from one subpopulation to the target population of interest. Generalizing *from* refers to the ability to generalize across all subpopulations from the target population of interest. Because of the difficulty in operationalizing constructs, it appears to us generalizing across populations (something that Professor Gibbert does seem to desire) will be counterproductive if not impossible. In light of the supposed durability of advantages, generalizing within a population across time seems more relevant to the RBV.

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