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Resource-based *theories* of competitive advantage: A ten-year retrospective on the resource-based view

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Abstract

The resource-based view can be positioned relative to at least three theoretical traditions: SCP-based theories of industry determinants of firm performance, neo-classical microeconomics, and evolutionary economics. In the 1991 article, only the first of these ways of positioning the resource-based view is explored. This article briefly discusses some of the implications of positioning the resource-based view relative to these other two literatures; it also discusses some of the empirical implications of each of these different resource-based *theories*. © 2001 Elsevier Science Inc. All rights reserved.

1. Introduction

Positioning an argument relative to the received literature is, perhaps, the most difficult part of writing a theoretical essay. Not only does positioning help define and limit an argument’s contribution, it also goes a long way in determining the structure of that argument and the issues that it will and will not address.

All this is made more complicated by the fact that any one theoretical argument can be positioned in alternative ways and that each of these alternatives can generate important, but different, insights. That is, there typically is no “one best way” of positioning a theoretical essay, and whatever choice is made with respect to positioning necessarily involves emphasizing some insights at the expense of others. Indeed, altering the positioning of an essay can
change the argument so much that these alternatives can, at one level at least, appear to be different theories.

Positioning issues were important when my 1991 *Journal of Management* paper was being written. At least three alternatives presented themselves: positioning the resource-based view relative to SCP-based theories of competitive advantage (Porter, 1980), positioning this view relative to neo-classical microeconomics (Ricardo, 1817), or positioning it relative to evolutionary economics (Nelson & Winter, 1982). Of these three, I chose the first. However, the article could have just as well been written by adopting one of these other two positioning alternatives. And each of the resulting papers would have generated different insights compared to the article that was actually published. In an important sense, these three different ways of positioning the resource-based view generate what could almost be described as three different resource-based theories of competitive advantage (Schulze, 1994).

Of course, these theories are not entirely different. For example, they all share a common set of assumptions, including the assumption that resources and capabilities may be heterogeneously distributed across firms and the assumption that these differences may be long lasting (Barney, 1991). These theories also share a common emphasis on understanding why some firms can consistently outperform others. These commonalities identify these theories as examples of the broader resource-based view.

However, differences among these theories are also important. While they share critical assumptions, they emphasize very different implications of those assumptions. And while they all focus on explaining sustained performance differences across firms, they adopt different definitions of performance. Given these differences, it is not surprising that these three resource-based theories have generated three different empirical literatures within the broader resource-based view.

The purpose of this paper is to explore the implications of positioning the resource-based view relative to SCP-based theories of competitive advantage, relative to neo-classical microeconomics, and relative to evolutionary economics. The paper begins by briefly describing what the 1991 paper might have looked like if it had adopted these latter two positioning alternatives, and then examines how these three resource-based theories have evolved in the literature since 1991.

2. The resource-based view and neo-classical microeconomics

Neo-classical microeconomics, or neo-classical price theory as it is sometimes called, focuses on how market forces determine the quantity, quality, and price of goods and services sold in a market. This theory adopts many of the same assumptions as the broader resource-based view—that economic actors (be they firms or people) are boundedly rational utility maximizers, that markets can vary in their competitiveness, that information can vary in how it is diffused across a market, and so forth.

Indeed, there is only one important difference between the assumptions of neo-classical microeconomics and the resource-based view. The former adopts the assumption that, in general, resources and capabilities (what neo-classical microeconomists call factors of
production) are elastic in supply. This means that when demand for a particular resource or capability increases, the price of acquiring this resource will also increase, and the total amount of this resource made available to the market will also increase. For example, if there is a shortage of engineering talent in a particular market, the price of this talent in this labor market will increase, and the number of people who make their engineering talent available in this market—either by training to become engineers or by moving from another market to this market—will increase.

The resource-based view acknowledges that many factors of production may, in fact, be elastic in supply. However, this view also argues that because some resources and capabilities can only be developed over long periods of time (i.e., path dependence), because it may not always be clear how to develop these capabilities in the short to medium term (i.e., causal ambiguity), and because some resources and capabilities cannot be bought and sold (i.e., social complexity), at least some factors of production may be inelastic in supply (Dierickx & Cool, 1989; Barney, 1991). Supply inelasticity implies that firms that possess these kinds of resources and capabilities may be able to generate above normal profits, and these profits not lead to increased supply of these resources and capabilities in the short term, and perhaps not even in the long run. Supply inelasticity thus can become a source of sustained competitive advantage (Peteraf, 1993).

Of course, some neo-classical microeconomists have examined the profit implications of factors of production that are inelastic in supply. The best known of this work was done by Ricardo nearly 200 years ago (Ricardo, 1817). Ricardo demonstrates how these kinds of factors of production can generate profits for firms by analyzing the profitability of farms when the supply of fertile land is fixed. However, Ricardo implicitly assumes that relatively few factors of production have the attributes that make them fixed in supply. In this sense, the resource-based view is simply an extension of Ricardian economics but with the assertion that many more factors of production—besides land—are inelastic in supply (Peteraf, 1993).

Adopting neo-classical microeconomics as the theory against which to position the arguments developed in the 1991 article would have helped address many of the controversies that have emerged around the resource-based view since 1991. For example, there continues to be significant debate in the literature about whether or not equilibrium analysis can be appropriately applied in resource-based analyses (Mahoney & Pandian, 1992). If the resource-based view is seen as a logical extension of neo-classical microeconomics, this debate becomes moot, since it is clear that the only acceptable theories in neo-classical microeconomics are equilibrium theories. Also, if positioned this way, controversy about the determination of the value of a firm’s resources, and thus controversy about whether or not the resource-based view is tautological, would also have been moot (Priem & Butler, 2001), since in this context it becomes clear that the value of a firm’s resources and capabilities is determined by the market context within which a firm is operating (Barney, 2001).

Indeed, the advantages of positioning the resource-based view relative to neo-classical microeconomics are so significant, I actually wrote a paper that did so (Barney, 1986a). Published in 1986 in Management Science, this paper develops the core resource-based arguments, but does so not relative to SCP-based explanations of firm performance but relative to neo-classical microeconomics.

In that paper, the concept of strategic factor markets is introduced, and it is shown that
when these markets are perfectly competitive, acquiring the resources necessary to create imperfectly competitive product markets will absorb all the profits that this imperfect competition would otherwise create. Thus, for firms to obtain economic rents, they must acquire the resources and capabilities needed to conceive of and implement strategies in imperfectly competitive strategic factor markets—the kinds of markets studied by Ricardo. The paper concludes by describing the attributes of such markets.

However, by the late 1980s, it became clear to me that positioning the resource-based view relative to neo-classical microeconomics did not effectively address issues that were critical to many strategic management scholars. Thus, in the 1991 paper, I adopted what might be considered a more “main stream” positioning of the argument, a positioning that spoke to some of these central concerns. In so doing, I knew that I would not be able to generate the same insights that I felt I had generated in the 1986 Management Science article. On the other hand, I felt that some new insights might be forthcoming by adopting this alternative positioning.

3. The resource-based view and evolutionary economics

It is not widely known, but the first draft of the 1991 Journal of Management article was originally titled “An Evolutionary Theory of Competitive Advantage.” Indeed, I was sorely tempted to position the 1991 argument relative to evolutionary economics. That I chose not to meant that some of the insights that I felt I had developed in more evolutionary versions of this argument would be lost, so that other insights that might be more relevant to main stream strategy scholars could be highlighted.

Evolutionary economics has a long history in the field of economics. However, the most influential work in this area is undoubtedly Nelson and Winter (1982). Like all evolutionary theories, Nelson and Winter’s theory examines the implications of three fundamental processes: variation, selection, and retention. Indeed, this is what makes Nelson and Winter’s work evolutionary in character.

In the Nelson and Winter framework, firms vary in the routines they have developed to conduct their business. In this sense, routines become the fundamental unit of analysis in Nelson and Winter’s work. In the face of competition—Nelson and Winter’s selection mechanism—some of these routines are revealed to be more efficient and effective than others. The least efficient and effective routines are either abandoned or changed or a firm is likely to not be able to survive in the long run. The most efficient and effective routines generate competitive advantages for firms.

Unlike neo-classical microeconomics, this evolutionary theory does not apply equilibrium analysis. Instead, through the use of simulations and other methods, Nelson and Winter are able to demonstrate the conditions under which some routines will provide more sustainable competitive advantages than other routines. In this sense, the performance that a routine generates ensures its survival, and thus a routine within a firm is also the mechanism through which retention occurs.

There are obviously numerous analogies between the resource-based view and this evolutionary theory. Routines are an example of firm resources and capabilities. Indeed, if
one adopts the definition of capabilities as the ability of firms to use their resources to generate competitive advantages, then the definitions of routines and capabilities are virtually indistinguishable. Firm heterogeneity—as a function of history or initial firm endowments—is an important part of both theories, as is competition and the role of superior performance and sustainable competitive advantage. While the sustainability of competitive advantage in evolutionary theory is not defined with respect to equilibrium conditions, it is clear that this notion of sustainability is much closer to the concept of sustained competitive advantage, as it is used in the resource-based view, than the equilibrium notions of zero economic profit used in non-Ricardian neo-classical microeconomics.

Given the close links between the resource-based view and evolutionary economics, why did I not choose to pursue this positioning for the 1991 article? As was the case with positioning the resource-based view relative to neo-classical microeconomics, I believed that this positioning would not address many of the central issues in the field of strategic management in the late 1980s. Indeed, during this time period, the most influential version of evolutionary thinking was population ecology theory. In its most extreme version, population ecology theory suggested that firms could not change, that strategic choice was not possible, and that the study of populations of firms was the only legitimate application of evolutionary thinking (Hannan & Freeman, 1977). None of these assertions were consistent with the research interests or objectives of strategic management scholars.

Of course, since the mid-1980s, population ecology theorizing has become much more sophisticated and distinctions between evolutionary economics and population ecology theories have broken down. There are currently several efforts under way to more completely develop an evolutionary version of the resource-based view (e.g., Barnett, Greve & Park, 1994; Levinthal & Myatt, 1994; Karim & Mitchell, 2000)—efforts I support (Barney, 2001).

4. Implications of the three resource-based theories

While the resource-based view is positioned relative to only SCP-based models of competitive advantage in the 1991 article, all three of these resource-based theories have been developed in the literature. Indeed, recognizing these different resource-based theories can help organize this growing literature and can help explain differences among different resource-based scholars.

Several authors, besides Barney (1991), have examined the relationship between the resource-based view and SCP logic, including Conner (1991), and Peteraf (1993). Empirically, research by Hansen and Wernerfelt (1989), Rumelt (1991), McGahan and Porter (1997), and others has estimated the relative impact of industry and firm attributes on firm performance. And while there is apparently some variance across industries, overall, firm effects seem to be larger than industry effects—in a way consistent with the expectations developed in the 1991 paper.

Those who have explored the positioning of the resource-based view relative to neo-classical microeconomics have focused their efforts on describing and measuring the attributes of resources and capabilities that lead them to be inelastic in supply. Important theoretical developments in this area of work include Peteraf (1993), Dierickx and Cool
(1989), and Barney (1986b). Empirically, numerous studies have attempted to measure these attributes of a firm’s resources and capabilities, and then to correlate these measures with a firm’s performance. Examples of this work include Robins and Wiserma (1995), Henderson and Cockburn (1994), and Makadok (1999), among many others (Barney & Arikan, 2001). Overall, this work shows that firms that build their strategies on path dependent, causally ambiguous, socially complex, and intangible assets outperform firms that build their strategies only on tangible assets. These results are also generally consistent with expectations outlined in the 1991 article. Because this version of the resource-based view focuses mostly on how firms exploit their valuable, rare, and costly to imitate resources and capabilities to generate economic rents, Makadok (2001) calls these resource-based theories “resource-picking” theories.

Finally, evolutionary versions of resource-based logic have been developed by those scholars who are most interested in how the capabilities of firms change over time, and the competitive implications of those changes. Some of the most important theoretical work in this area includes Teece, Pisano, and Shuen (1997). Empirical research by Barnett, Greve and Park (1994), Levinthal and Myatt (1994), and Karim and Mitchell (2000) all adopt this evolutionary point of view. Makadok (2001) calls these theories “capability building” theories.

5. Conclusion

So, which was the best way to position the resource-based view? Given the context within which I was writing in the mid 1980s, I think I made the right choice. But this does not mean that these other alternatives were wrong. Given the importance of path dependence in the development of an academic discipline, choosing one of these alternative ways to position the argument probably has had profound implications for how the resource-based view has evolved.

For example, entirely different controversies might dominate the current literature if a different approach to positioning had been adopted. Or it may have even been the case that the 1991 article would have been ignored if one of these different positioning approaches had been adopted. In this situation, some other paper or special issue might have marked the beginning of a more general discourse about the resource-based view. Or maybe an entirely different theory would have arisen to challenge the theoretical hegemony of SCP-based models. These are questions without answers.

A more important question becomes: will there ever be a grand, unified resource-based theory of competitive advantages? Of course, I don’t know. On the one hand, it is possible to make some arguments about how these three theories are related. For example, in economics, SCP logic has either been abandoned outright or fully integrated into neoclassical economics (Besanko, Dranove & Shanley, 1996). It seems likely, therefore, that the resource-based theory developed relative to SCP logic could be fully subsumed by the resource-based theory developed relative to neo-classical economics. In fact, this is what I have tried to do in Barney (2002).

Also, while the resource-based theory developed relative to evolutionary economics
explains sustained superior firm performance by focusing on the differential ability of firms to develop new capabilities as environments change, rents generated by this differential ability to develop new capabilities are still Ricardian in nature. Thus, neo-classical economic resource based theory may be appropriate for studying rents generated by the ability to develop new capabilities, while evolutionary resource-based theory may be appropriate for studying the process by which these new capabilities are developed.

On the other hand, such a grand, unified resource-based theory may not be all that helpful. Rather, what may be more helpful is to understand that the resource-based view can be applied in several different ways, and that the way it should be applied depends mostly on the empirical context of the application. Those interested in firm versus industry effects can apply the resource-based view as it was developed in the 1991 and related papers. Those interested in studying the specific sources of sustained competitive advantage for a firm can take the basic logic in the 1991 paper and link it with articles by Dierickx and Cool (1989) and Peteraf (1993), among others, and use this approach to help guide their work. Finally, those interested in studying how resources and capabilities evolve over time can take the logic outlined in the 1991 paper and link it with Nelson and Winter (1982) and Teece, Pisano and Shuen (1997) to help guide their research.

Thus, what marks these theories “resource-based” are not these differences in application, but rather, the assumptions they share. These include the assumption that resources and capabilities can be heterogeneously distributed across competing firms, that these differences can be long lasting, and that they can help explain why some firms consistently outperform other firms. From this perspective, the resource-based view actually consists of a rich body of related, yet distinct, theoretical tools with which to analyze firm level sources of sustained competitive advantage.

Jay B. Barney received his Ph.D. in Administrative Sciences and Sociology from Yale University in 1982. He is currently Professor of Management and the Bank One Chair for Excellence in Corporate Strategy at The Ohio State University as well as the Academic Program Director of the MBA program. His research interest is the resource-based view of the firm, focusing on the relationship between firm skills and capabilities and sustained competitive advantage. He has published in the Academy of Management Review, the Strategic Management Journal, Management Science, the Journal of Management, and the Sloan Management Review, among other journals, and the second edition of his book, Gaining and Sustaining Competitive Advantage, has recently been published. Professor Barney has also delivered scholarly papers at many universities worldwide, and has consulted with a wide variety of public and private organizations.

References


