ECONOMICS OF RESOURCE BASED AND DYNAMIC CAPABILITIES VIEW: A CONTEMPORARY FRAMEWORK

Satyanarayana Parayitam, University of Massachusetts Dartmouth
Kishor Guru – Gharana, Texas A&M University, Commerce

ABSTRACT

In strategic management literature, both Resource Based View (RBV) and Dynamic Capabilities Approach (DCA) have gained currency during the last decade. Despite the incredible popularity of these approaches, to date there has been a great deal of confusion about the economic basis of RBV and DCA. Viewing from the prism of unadulterated versions of Ricardo (1817) and Schumpeter (1934), this paper is a modest attempt to (i) provide a conceptual clarity about the rent generation process (ii) integrate RBV and DCA using the contemporary framework. The implications of the framework from strategic management literature are discussed.

INTRODUCTION

One of the burning questions in strategic management is how firms attain sustained competitive advantage. Taking cue from Andrews (1971) that firms appraise the internal resources and competencies while formulating strategies, researchers focused on resources and capabilities as primary drivers for a firm's sustained competitive advantage. Following Penrose (1959), a research stream that dominated the strategic management literature consisted of contributions from several scholars in terms of resource based view (RBV) and dynamic capabilities approach (DCA). The intellectual currency for these approaches is coming from Barney (1986,1991), Lippman and Rumelt (1982), Wernerfelt (1984), Dierickx and Cool (1989), Castanias and Helfat (1991), Conner (1991), Mahoney and Pandian (1992), Teece (1980, 1982), Teece, Pisano & Shuen (1997), to name a few.

A literature review of these approaches reveals that each scholar has made an unique contribution to the field, though sometimes there is overlap of the concepts and terminological conflicts. Despite some disagreements about terminology (for review please refer to Teece et al (1997) for DCA and Priem & Butler (2001), Barney (2001) for RBV), strategy researchers are attempting to combine these two approaches viz. RBV and DCA. It is interesting to note that at both the approaches have used the classical economic concepts of rent generation process in their

www.manaraa.com

explanation of sustained competitive advantage. To be precise these are Ricardian rents and Schumpeterian rents. The underling economics of the RBV and the origins of heterogeneity have been emphasized by Barney (1991) while the DCA has incorporated Schumpeterian rents in the explanation of sustainable competitive advantage (Teece et al, 1997).

Let us consider some examples. In their classic paper on dynamic capabilities, Teece et al (1997) have emphatically stated in table 1 that the nature of rents are 'Ricardian" for Resource-based perspectives and 'Schumpeterian' for Dynamic capabilities perspectives (p. 527). While synthesizing the resource based and dynamic capabilities views, in a recent paper, Makadok (2001) mentioned:

> "For those who take the Ricardian perspective (Ricardo, 1817) that has been codified into 'resource-based view' (e.g., Barney, 1986, 1997: 138-141: Conner, 1991; Montgomery and Wernerfelt, 1988; Peteraf, 1993; Wernerfelt, 1984), resource-picking is the main mechanism for the creation of economic rent. ..... However, as Mahoney and Pandian (1992) pint out, this Ricardian perspective has been challenged by Schumpeterian perspective (Schumpeter, 1950) that has been codified into a 'dynamic –capability view' (e.g., Amit and Schoemaker, 1993; Dierickx and Cool, 1989; Mahoney, 1995; Nelson and winter, 1982; Teece, Pisano, and Schuen, 1997). This Schumpeterian dynamic-capability view highlights the importance of an alternative rent-creation mechanism—namely, capability building—which is rather different from resource-picking" (p 388).

The purpose of this paper is to bring to the attention to the strategic management scholars that the work at the conceptual level, particularly with regard to rent generation process, requires re-consideration lest it might misdirect the future researchers. Before going further, it is imperative to revisit the Ricardian and Schumpeterian concepts of rents and properly apply these to the sustained competitive advantage. This paper is a modest attempt to unravel the false/inappropriate dichotomy between the processes of generation of rents on which these approaches are based. Taking in the much lighter vein, the scholars of both RBV and DCA have unwittingly misunderstood the very basic concepts of Ricardian and Schumpeterian rents and took a myopic view of the economic bases of rent generation process. When one views from the prism of the unadulterated versions of Ricardo and Schumpeter the contemporary framework emerges emphasizing that both rents are quite indispensable for sustained competitive advantage.

This paper is organized into three sections. First section outlines the traditional approach (i.e. the approaches so far followed). Second section is devoted to the discussion of Ricardian rent and its applicability to sustained competitive advantage. Third section is devoted to the discussion of Schumpeterian rents. Based on the unadulterated versions of Ricardian and Schumpeterian concepts,

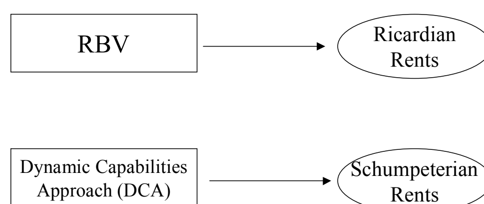
المنارة للاستشارات
www.manaraa.com

a contemporary approach is discussed in the fourth section. The contemporary framework in terms of 2x2 matrix with its implications to future strategic management are discussed in the final section.

TRADITIONAL APPROACH

Much has been said about the sustained competitive advantage in terms of both RBV and DCA. Much more have been empirically demonstrated in support of these approaches. Strategic management scholars are now busy integrating both approaches, as if these are totally different, though emerging from the same branch. Before any attempt to go further, it is imperative to look back and verify the foundation of economic basis of both RBV and DCA. It is time to re-consider the economics of RBV and Dynamic capabilities view especially with regard to the dichotomy between Ricardian and Schumpeterian rents. Strategic management scholars so far have been convinced of one simple fact: Ricardian and Schumpeterian rents are mutually exclusive and competitive. Without doubt, to date there is a great deal of confusion about the economic basis of both RBV and Dynamic Capabilities view. A majority of scholars agree with the explanation of RBV through Ricardian rents and emphasize that heterogeneity of resources are the primary cause of economic rents (Peteraf, 1993; Barney, 1991). It is also contended that market-based models (such as Porter's Five-forces model) result in monopoly rents as the firms restrict output taking into account the relative position and behavior of other firms in industry. This being so, the Dynamic capabilities view considers Schumpeterian rents as the economic basis which is a radical departure from Ricardian rents. The traditional thinking is captured in Figure 1.

FIGURE 1.
Traditional approach

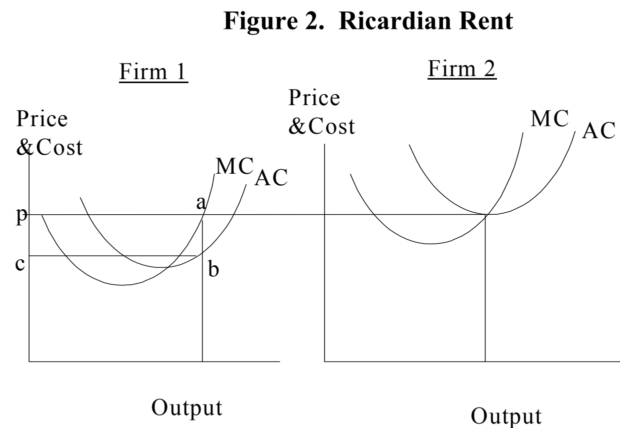


المنارة للاستشارات
www.manaraa.com

RICARDIAN RENT

Ricardian rent arises because of scarcity (rarity of resources/capabilities). Resources, when valuable, result in low cost and as long as these resources are scarce and available only to some firms, the operating cost will be low when compared to cost of production to other firms. The other competing firms will have to produce at a high cost and the difference between the unit cost of production of competing firms and the lowest unit cost of production of the firms possessing these scarce resources result in economic rent known as 'Ricardian rent'. This can be seen in the Figure2.

Figure 2. Ricardian Rent



Ricardian rent to the extent of 'ab' per unit of output arises to firm 1 by virtue of scarcity of the capabilities which are valuable. As long as firm2 is not having the resources possessed by firm 1, the firm 2 will have to charge higher price to survive in the market. The difference between the marginal revenue charged by the firm 2 and profit maximizing (equilibrium) level of average cost i.e. b is equal to Ricardian rent. In this sense, Ricardian rent arises by virtue of 'scarcity/ rarity' of the resources which are deployed by the firm. The surplus of revenue over costs here is the area under the rectangle 'pabc' and is termed as 'scarcity rent' (alternatively, the profits).

The concept of rent was originally applied to the land, according to Ricardo in his 'Principles of Political Economy and Taxation (1817)[1], as the 'payment to the landlord for the use of the original and indestructible powers of the soil' (p.33). Though, on the surface it might appear that rent is a productivity phenomenon, the ultimate rationale is more clearly expressed in terms of productivity and scarcity by Ricardo:

www.manaraa.com

> "On the first settling of a country, in which there is an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of actual population or indeed can be cultivated with the capital which the population can command, there will be no rent; for no one would pay for the use of land and when there was an abundance quantity not yet appropriated, and therefore, at the disposal of whosoever might choose to cultivate it.
>
> On the common principles of supply and demand, no rent could be paid for such land, for the reason stated why nothing is given for the use of air and water, or for any other of the gifts of nature which exist in boundless quantity….If all land had the same properties, if it were unlimited in quantity, and uniform in quality, no charge could be made for its use, unless where it possessed peculiar advantages of situation. It is only because land is not unlimited in quantity and uniform in quality and because land of an inferior quality is called into cultivation, that rent is ever paid for the use of it. When, in the progress of society, land of the second degree of fertility is taken into cultivation, rent immediately commences on that of the first quality, and the amount of that rent will depend on the difference in the quality of these two portions of land.
>
> When land of the third quality is taken into cultivation, rent immediately commences on the second, and it is regulated as before by the difference in their productive powers." (pp. 34-35).

Thus, Ricardo used 'scarcity' as the root cause for the existence of 'rent'. Ricardo (1817) contends that 'possessing utility, commodities derive their exchangeable value from two sources: from their scarcity, and from the quantity of labor required to obtain them' (p.5). The statement that "all land had the same properties, if it were all unlimited in quantity, and uniform in quality, no charge be made for its use, unless it possesses peculiar advantages of situation" refers to 'differential rent' according to Ricardo.

SCHUMPETERIAN RENT

In a sharp contrast, Schumpeterian rent arises by virtue of non-imitability of innovation (capabilities of competing firms) and non-substitutability of the capabilities a firm possesses and develops over a period of time. This can be seen in the following sequence. According to Schumpeter, profits to entrepreneur arise because of innovation (strategies) and as long as imitators are not available to imitate the innovation, entrepreneur continues to enjoy the profits. When imitators come into existence, profits get evaporated. Entrepreneurs continue to search for new innovations. Thus, profits (rents) appear (when innovations are new), disappear (when imitators imitate the innovations), and reappear (when new innovations take place). In this cycle of profits

المنارة للاستشارات

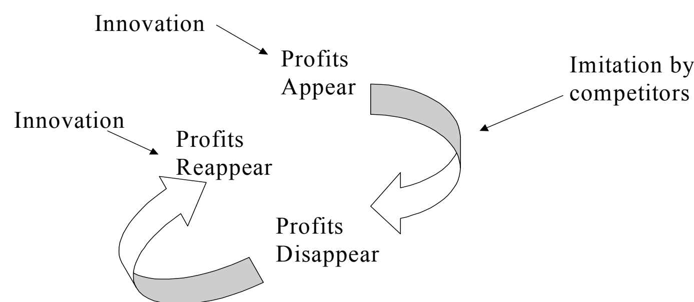
www.manaraa.com

appearing, disappearing, and re-appearing the 'imitators' play a critical role. Thus, according to Schumpeter, non-imitability gives rise to entrepreneurial profits. To Schumpeter, the dynamic innovations of the entrepreneurial class constitute the most powerful competitive force in any economy. According to Schumpeter (1934):

> “Stated differently, it is quite possible that short-run semi-monopolistic positions, agreements, and strategies, with accompanying short-run inefficiencies in resource allocation and inequalities of income distribution, are necessary to provide a basis for the innovational investment that brings greater long-run performance and more vigorous long-run competition. Entreprenuership may be, in large measure, a function of an institutional sociopolitical structure which permits protection to the innovator and the generation of pure economic profits through the manipulation of price, quantity, and quality variables via techniques which in the short run appear restrictive and monopolistic. Thus, the possibility of retention, at least temporarily, of above-normal profits from innovations may well stimulate a higher rate of innovation and technological improvement. Short-run strategies and practices that protect the monopoly position of the innovator thus may be the price society pays for technological progress and thereby a higher growth rate over the long run. Moreover, because of the tendency of innovations to spread, by imitation and extension to allied fields, the monopoly position-- and the associated monopoly profits-- of the industrial pioneer is only temporary (pp. xxxvii-xxxviii & p 152).

Schumpeterian rents can be understood from the Figure 3.

Figure 3. Schumpeterian rents

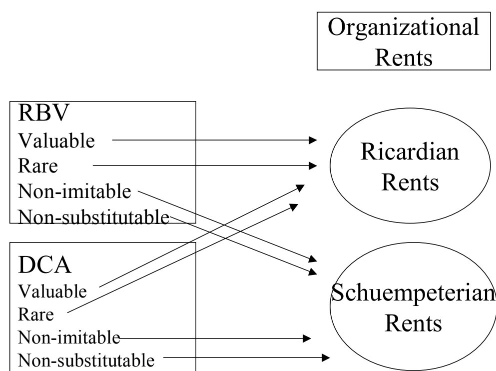


المنارة للاستشارات
www.manaraa.com

CONTEMPORARY APPROACH

Following Ricardo (1817) and Schumpeter (1934), it can be noted that rents a firm appropriates come from both sources. Figure 4 represents the contemporary approach, which is a radical departure from the traditional approach represented by Figure 1.

FIGURE 4
Contemporary approach



The point that there existed a great deal of confusion in making distinction between Ricardian and Schumpeterian rents in strategic management literature is explanatory when Figure 1and 2 are compared. To make the point more clear and to substantiate this claim that rents comprise of both sources Ricardian and Schumpeterian approaches to rents are revisited. While Ricardian rent is essentially dealing with rent arising from scarcity of resources, Schumpeterian rent is attributed to the non-imitability of the strategies by the competing firms. Often scholars contend that Ricardian rent accrues to RBV while Schumpeterian rent accrues to Capability building approach. Actually in both RBV and Capability building approaches both rents arise. Conceptually, to the extent resources are valuable and rare, the economic rent is termed as 'Ricardian rent' while the rents that arise due to non-substitutability and non-imitability are explained through Schumpeterian rent. According to Schumpeter, rents appear, disappear and reappear in the sense a firm makes rents as long as competitors do not duplicate or imitate the strategies of other firms and when they start imitating then rents disappear. The rents reappear when firms innovate something new (develop new capabilities or acquire new resources that enables a firm to develop capabilities that are valuable, rare, non-substitutable, and non-imitable. Once again, in this process a part of Schumpeterian rents are called Ricardian rents as long as the capabilities become rare (scarce).

المنارة للاستشارات
www.manaraa.com

CONTEMPORARY FRAMEWORK

When we sit through the Schumpeterian and Ricardian rents and see the rent-generation process, contrary to what most of the strategic management scholars believe, RBV & DCA both give rise to both these rents. To be more specific, to the extent rents are due to rarity and value of the resources (and capabilities organizations possess and develop) Ricardian rents are assumed. On the other hand, to the extent rents are due to non-imitability and non-substitutability, Schumpeterian rents are assumed.

Organizational Rents (OR)

These comprise of both Ricardian and Schumpeterian rents. When a firm achieves sustained competitive advantage OR generates as follows:

Organizational Rents = Ricardian rents + Schumpeterian rents

The contemporary approach of organizational rents is depicted in Figure 4. The Figure 4 is self-explanatory and it unravels the confusion between Ricardian and Schumpeterian rents and explains that organizational rents comprise of both Ricardian and Schumpeterian rents.

Using the unadulterated Ricardian and Schumpeterian rents, an integrating framework of RBV and DCA can be developed. An attempt to provide a dynamic view of strategic management is not new in strategic management literature. As things stand now, it can be observed that there is a virtual polarization of the approaches, with one approach emphasizing 'industry' (goes by the term 'Porter's Industry analysis'); and 'resources' being the emphasis of the other (goes by the term Resource Based View of Barney and other scholars). Taking RBV as the logical foundation, a group of scholars have attempted to develop a sub-stream calling it Capabilities view (Teece et al, 1997). Digging up the literature reveals the basic paradigmatic approaches to the dynamic view of strategy wherein these basic approaches are dealt with separately. Recently a theoretical model is developed synthesizing the RBV and Dynamic-capability views of rent creation wherein arguments are made that these approaches are complementary rather than competitive (Makadok, 2001). Thus as suggested by Williamson (1991) that:

> "The leading efficiency approaches to business strategy are the resource-based and dynamic capabilities approach… It is not obvious to me how these two literatures will play out--- either individually or in combination. Plainly, they deal with core issues. Possibly they will be joined" (Williamson, 1991: 76)

المنارة للاستشارات
www.manaraa.com

Though some authors consider the resource perspective complements the industry analysis framework (Amit and Schoemaker, 1993: 35), in several important respects the perspectives are also competitive (Teece et al, 1997: 526). However, it should be noted that " slavish adherence to one class to the neglect of all others is likely to generate strategic blind spots" (Teece et al, 1997: 526). Thus, consistence with the suggestions made by strategic management scholars, an integrative framework is provided in the Figure 5.

FIGURE 5
Contemporary framework

Ricardian rents		Schumpeterian rents: No	Schumpeterian rents: Yes
	Yes	Purely Ricardian rents : Competitive Advantage (Only traits:Valuable, Rare are present)	Ricardian+ Schumpeterian rents : Sustained Competitive Advantage All the traits: V,R,Ns,Ni Nt are present.
	No	No rents Sustained Competitive Disadvantage (None of the traits is present)	Purely Schumpeterian rents : Competitive Advantage (Only traits: Ns,Ni,Nt are present)

V= Valuable; R= Rare; Ni = Non-imitable; Ns= Non-substitutable; and Nt= Non-transferable

A cursory look at the framework suggests four cells. Cell 1: This is characterized by 'no rents' at all. This is represented by the absence of both Ricardian and Schumpeterian rents. Firms will not be able to have any competitive advantage and hence no rents. Firms leave the scenario sooner than later. Many new firms that cannot survive for long belong to this category. Cell 2: Purely Ricardian rents: This is characterized by the situation of presence of two or the traits specified by Barney (1991). When the resources/ capabilities are valuable and rare, Ricardian rents are said to be accruing to the firms. Firms will be able to enjoy competitive advantage. Cell 3: Schumperian rents: When resources/capabilities possess the traits of non-transferability, non-transperency, and non-imitability, then Schumpeterian rents are said to be accruing to the firms. Cell 4: Organizational rents: When the resources/capabilities possess all the traits specified by Barney (1991), sustained competitive advantage is the outcome. That is to say, organizations will be able to enjoy both Ricardian and Schumpeterian rents.

المنارة للاستشارات
www.manaraa.com

IMPLICATIONS FOR FUTURE RESEARCH

The conceptual clarity of the rent generation process under the contemporary framework would be useful to future researchers who are attempting to integrate both RBV and DCA. Especially in view of the changing landscape of the competition in the twenty first century, calling for industry transformation and suggesting the firms to change the configurations of resources and capabilities to meet the changing demands, the contemporary framework would be much useful. As pointed out by Penrose (1959), environmental changes 'may change the significance of resources to the firm' (p.79). The contemporary framework suggests that the RBV and DCA focus on only a part of organizational rents and firms enjoy sustained competitive advantage only when they are operating on cell 4. The framework would be helpful for the future researchers to integrate both these approaches help them extending the framework to link it to industrial organization view. Such linkage is essential because organizations have to tie the resources and capabilities with what is required in environment i.e. to take advantage of opportunities and reduce threats from environment.

ENDNOTES

[1] The Principles of Political Economy and Taxation was first published in 1817. Reprinted in 1917. Also see Ricardo (1951-73) The works and correspondence of David Ricardo, ed. P. Sraffa (11 vols) Cambridge: Cambridge University Press

REFERENCES

Amit, R & Schoemaker, P.J., 1993. Strategic assets and organizational rent, *Strategic Management Journal*, 14: 33-46.

Andrews, K.R. 1971. *The concept of corporate strategy*, Irwin, Homewood, IL.

Barney, J.B. 1986. Strategic factor markets: Expectations, luck and business strategy, *Management Science*, 42: 1231-1241.

Barney, J.B 1991. Firm resources and sustained competitive advantage. *Journal of Management***,** 17:99-120.

Barney, J.B. 2001. Is the resource-based “view” a useful perspective for strategic management research? Yes, *Academy of Management Review*, 26(1): 41-56.

Castinas, R & Helfat, C. 1991. Managerial resources and rents, *Journal of Management*, 17: 155-171.

Connor, K. 1991. A historical comparison of resource-based theory and five schools of thought within industrial economics: Do we have a new theory of firm? *Journal of Management*, 17: 121-154.

Dierickx, I., & Cool, K. 1989. Asset stock accumulation and sustainability of competitive advantage, *Management Science***,** 35: 1504-1511.

المنارة للاستشارات
www.manaraa.com

Lippman, S.A & Rumelt, R.P. 1982. Uncertain imitability: An analysis of interfirm differences in efficiency under competition, *The Bell Journal of Economics*, 13: 418-438.

Mahoney, J & Pandian, J.R. 1992. Resource based view within the conversation of strategic management, *Strategic Management Journal*, 13: 363-380.

Makadok, R. 2001. Towards a synthesis of resource based and dynamic capabilities view of rent creation, *Strategic Management Journal*, 22: 387-401.

Penrose, E.T. 1959. *The theory of growth of the firm*, Basil Blackwell, London.

Peteraf, M. 1993. The cornerstones of competitive advantage: A resource based view, *Strategic Management Journal*, 14: 179-191.

Priem, R.L & Butler, J.E. 2001. Is the resource based view a useful perspective for strategic management research?, *Academy of Management Review*, 26(1): 22-40.

Priem, R.L & Butler, J.E. 2001. Tautology in the resource-based view and the implications of externally determined resource value: Further comments, *Academy of Management Review*, 26(1): 57-66.

Ricardo, D. 1817. *The principles of political economy and taxation,* Reprinted J.M. Dent and Son, London.

Schumpeter, J.A. 1934. *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*, Harvard University Press, Cambridge, MA (originally published 1911).

Teece, D.J. 1980. Economics of scope and the scope of the enterprise, *Journal of Economic Behavior and Organization*, 1: 223-247.

Teece, D.J. 1982. Toward an economic theory of multiproduct firm, *Journal of Economic Behavior and Organization*, 3: 39-63.

Teece, D.J., G.Pisano & A. Shuen, 1997. Dynamic capabilities and strategic management, *Strategic Management Journal*, 18(7)L 509-533.

Wernerfelt, B. 1984. A resource-based view of the firm, *Strategic Management Journal*, 5: 171-180.

Williamson, O.E, 1991. Strategizing, economizing, and economic organization*, Strategic Management Journal*, Winter Special Issue 12: 75-94.

المنارة للاستشارات

www.manaraa.com

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

المنارة للاستشارات

www.manaraa.com