

**RENT AND RESOURCES:
A MARKET PROCESS PERSPECTIVE**

Peter Lewin^{*}

and

Steven E. Phelan

School of Management
University of Texas at Dallas
Box 830688, Richardson, Texas 75083-0688.
(972-883-2729)
plewin@utdallas.edu
www.utdallas.edu/~plewin/
sphelan@utdallas.edu

Draft - August 1999

Please do not cite or quote without permission

Comments welcome.

^{*} Peter Lewin would like to thank the members of the Austrian colloquium at New York University for helpful comments and suggestions, particularly Mario Rizzo, Frederic Sautet, Israel Kirzner, Joseph Salerno, Bill Butos, David Harper, Roger Koppl and Glen Whitman. The usual disclaimer applies, particularly since we have not followed their advice in every case.

Introduction: Resource Based Theory and Rents	3
Part I: Considering Rent.....	5
Rent and Value According to Frank Fetter.....	5
Ricardian and Other Rents.....	10
Rent Concepts in Strategy	14
Rent and Strategy: Clarification and Extension.....	17
Part II: Considering the Competitive Framework.....	24
Rents and the Market Process	24
Strategic and Other rents.	34
Conclusion: A Tale of Two Worlds.....	39

Abstract

Two strategic perspectives are analyzed, the neoclassical microeconomic perspective (using the Ricardo-Marshall approach to rent) and the Market Process perspective (using the Fetter approach to rent). In a neoclassical world, rents indicate “unsolved” or unexploited “inefficiencies” as every hypothetical outcome is viewed against the standard of perfect competition. By contrast, in the market process world there is no single ideal standard by which to measure any particular outcome. All action takes place in an open ended universe in which the future is continually being created, in which, competition is a “discovery process.” A market process approach is not only more “realistic,” it is better suited to the Resource-Based Theory of corporate and business strategy.

Rent and Resources: A market process perspective

Introduction: Resource Based Theory and Rents

The new resource based theory (RBT) of the firm relies, in many ways, on economic foundations. It takes as its point of departure the neoclassical microeconomic model of perfect competition. In perfect competition there are no “profits”¹ and all firms are identical. The RBT explains why firms differ - that is, what aspects of the perfect competition model most plausibly do not apply. Different firms possess different (heterogeneous) resources and are (somehow) able to maintain those valuable differences (for example, Barney, 1991, Foss, 1997a). As a result, according to the RBT, successful firms are able to earn “rents”. This concept of “rents” is also derived from economic foundations, in this case deeper foundations than the model of perfect competition, namely the theory of rent as developed by David Ricardo (Ricardo, 1973 [1821]) and subsequently modified by Alfred Marshall (Marshall, 1961 [1920]).²

In both of these cases, the perfect competition model and the theory of rent, it is possible to feel that the RBT has borrowed too uncritically. In the case of rent theory in particular, RBT has complicated its own framework by reproducing (or inventing)

¹ The reason for the use of scare quotes around certain terms in this section will become apparent as the argument proceeds, since this article aims, *inter alia*, to examine and clarify some key concepts.

² A closer disciple of Ricardo, John Stuart Mill, writes: “This is the theory of rent, first propounded at the end of the last century by Dr. Anderson and, which, neglected at that time, was almost simultaneously rediscovered, twenty years later, by Sir Edward West, Mr. Malthus, and Mr. Ricardo. It is one of the cardinal doctrines of political economy; and until it was understood, no consistent explanation could be given of many of the more complicated industrial phenomena (Mill, 1987 [1871]: 425).

needless distinctions and overlooking others. This article is an examination and reformulation of the concept of rent and a suggestion for incorporating the reformulated framework into the RBT. This reworked theory of rent derives from an economic tradition that is different from the neoclassical one. We refer here particularly to the Austrian School of Economics, which, in its modern developments, is sometimes referred to as Market Process economics. Recently scholars working in the strategy field have discovered important commonalities between Strategy and Market Process economics (for example, Foss, 1994, 1997b, Jacobson, 1992). We believe this is a largely unexplored and fruitful area, a contribution to which is offered here.

This paper consists largely of two main parts, corresponding to an examination of the two foundational areas mentioned, the theory of rent (Part I) and the theory of competition (Part II). In the next section we offer a reformulated theory of rent derived from the work of Frank Fetter. Fetter's work has been linked by Murray Rothbard to the Austrian tradition. In the following section we relate this discussion to the ways in which "rents" have been used in the RBT literature. We then summarize the various approaches and consider their relevance to the question of strategic behavior. In Part II we turn to an alternative framework of market competition to explore the earning of rent in a dynamic, ever changing complex world. In the next to final section we provide an overview of conclusions from the preceding sections by observing that rents can be earned in both equilibrium and disequilibrium, but that it is the latter that is relevant to strategy. We conclude with a final summary that contrasts the two perspectives, that from neoclassical economics and that from market process economics.

Part I: Considering Rent

Rent and Value According to Frank Fetter

In this section we outline an alternative theory of rent as expounded, for example, by Murray Rothbard (see Fetter, 1977). This theory of rent probably found its most complete and cogent expression at the hand of the early twentieth century economist Frank Fetter (Fetter, 1977) and so we shall refer to this approach as the Fetter theory.

The value of any economic organization (firm, business, company) derives from and reflects the value to it of the resources³ under its control, that is resources that it owns or rents. Most resources can be owned or rented, though some (like reputations) cannot be rented and others, like human capital, cannot be alienated from their owners and must be rented for wages. At any time the *economy as a whole* will possess an inventory of potentially productive resources (that is resources that are capable of producing value). This productive potential can only be realized through the combination of these resources often in complex ways. There is a complex and changing resource structure in the economy that encompasses combinations of resources both within and between firms (Lachmann, 1978 [1956]). This structure is the (in part unintended) result of individual actions taken in the pursuit of gain. Some resource combinations are the intentional and conscious result of individual production plans involving complementary resource elements, while others are the unintended (and often unconscious) result of a myriad of market transactions. The values attributed to the resources, and thus to the companies

³ The term “resources” has been variously used in the RBT literature. Here it is used to denote valuable assets that may be tangible or intangible (like reputations, patents, organizational routines).

that own or control them, is part of the market process underlying the formation and mutation of the resource structure. But, as we shall see, these values may look different from different perspectives and will have different magnitudes and effects depending on who is able to create them and appropriate them (in whole or in part).

From the perspective of the economy as a whole, adopting, as it were, a “God’s eye” view, the value of these resources, at any point in time, can be seen as the discounted total of the (estimated) income stream attributable to them. In other words, the value of any economic resource is logically the present value of any income stream that can be attributed to the use of that resource in production.⁴ That is the maximum price that anyone appraising that resource would be prepared to pay for it. We may leave aside for the moment the question of how it is possible to attribute to any resource an income flow. Clearly, insofar as resources must invariably be used in combination, it is no simple matter to impute to any single resource a value for its individual contribution (how does one divide up and evaluate the contributions of individual members of a team, for example?).⁵ And the estimation of the value of any production plan is in itself a speculative matter.⁶ The point is that anyone considering the purchase of any resource cannot avoid (perhaps implicitly) referring to the value that this resource is expected to

⁴ We use “production” here in the broadest possible sense to refer to the addition of economic value for the ultimate consumer. So, for example, distribution and marketing activities are, from this perspective, part of the productive process.

⁵ This is known in Austrian economics as the “imputation problem” about which a large and old literature exists.

⁶ For a further discussion see (Lewin, 1998), chapter 9.

add to economic production. Even if the resource is purchased for resale, ultimately its value must derive from some potential productive use.

Imagine for a moment, that no ambiguity or uncertainty whatsoever attaches to the production processes in the economy. All individuals possess the same hard knowledge of what resources can do and, therefore, what they are worth. In such a world, when a resource is rented its rental rate must reflect the value of the current addition it makes to the value of production (its value-marginal-product), or else the owner would be reluctant to rent it to the firm; and where the resource is not rented but is owned by the firm, the implicit “cost” of using the resource must reflect that same value. Thus there is no “surplus value” to be had, since all values are known and become incorporated into the (implicit and explicit) prices of resources. Nevertheless, in the sense advanced here, “rents” are earned by the factor owners.⁷

⁷ To be sure, from the perspective of the economy as a whole, in an economy in which from the start everything is known with certainty, the sum of all rents earned on factors that are constructed, is zero, since all such rents are “swept back” to the owners of the “original” factors of production. What one person pays for a piece of capital equipment for example, a machine, will fully reflect the seller’s knowledge of the net (of maintenance) discounted marginal value sum to be earned by that machine. By the same token, the prices of all of the inputs into the production of that machine will reflect their capitalized income streams in the same manner, all the way back to the “original” inputs. In this way the only remaining “net” rents are those earned by the “fixed” factors of land and raw labor. And if we regard the pure earnings of labor as necessary for its existence and maintenance (reproduction), then perhaps the only “pure” rent remaining is that on land (See Rothbard, 1970 [1962], chapter 5). This perspective appears to be related to Ricardo’s identification of land as the only rent-earning resource, but it is not the same point, as will become clear from the discussion below.

“Rents” refers here to the income streams attributable to the resource-inputs in the productive process. Resources can generally be conceived of as a stock of potential productive services. Rents are the prices paid for these services. Rents are the prices of the *flow* of services emanating from the *stock* of resources (Penrose, 1995 [1959], Dierickx and Cool, 1989). The price of the any resource stock is the discounted present value of the prices of the services it yields. In this framework rent is nothing more nor less than the rental price of the service of a productive input. As Murray Rothbard has explained:

We are using “rent” to mean the unit price of the services of any good. It is important to banish any preconceptions that apply the concept of rent to land only. Perhaps the best guide is to keep in mind the well-known practice of “renting out.” Rent, then, is the same as hire: is the sale and purchase of the unit service of any good. It therefore applies as well to prices of labor services (called “wages”) as it does to land or any other factor. The rent concept applies to all goods, whether durable or nondurable. In the case of a completely nondurable good, which vanishes fully when first used, its “unit” of service is simply identical in size of the “whole” good itself. In regard to a durable good, of course, the rent concept is more interesting, since the price of the unit service is distinguishable from the price of the “good as a whole”. ... The price of the “whole good,” also known as the capital value of the good, is equal to the sum of the expected future rents discounted by ... the rate of interest (Rothbard, 1970 [1962] : 417-418).⁸

⁸Also: “We have been using the term rent in our analysis to signify the hire price of the services of goods. This price is paid for unit services, as distinguished from the prices of the whole factors yielding the service. Since all goods have unit services, all goods will earn rents, whether they be consumer’s goods or any type of producers’ goods. Future rents of durable goods tend to be capitalized and embodied in their capital value and therefore in the money presently needed to acquire them” (Rothbard, 1970 [1962]: 502-503).

This conclusion is not changed at all when we drop our assumption of perfect and certain knowledge. In the real world where the future is irredeemably uncertain, the value of any productive resource will still reflect the discounted value of its expected future rental stream. Certainly, different people will have different estimates of these rental streams and, therefore, will appraise differently the value of the resources that yield them. The market process of production and exchange will work in such a way that resources tend to move to those who appraise them most highly. As mentioned above, a firm may employ resources in production by owning or renting them. If a firm decides to purchase a resource it must do so because, in its estimation, the additional value to it of the future incomes streams attributable to the use of that resource meet or exceed the price paid for it. Similarly a firm will not rent a resource unless, in its estimation, the value added to production, by combining that resource with others in the production process, meets or exceeds the rental rate asked.⁹

This framework suggests the following conclusions:

1. There is no categorical distinction between the earnings of some resources and others, they are all rents.
2. The value of any productive resource is the discounted value of the rent streams that can be attributed to it. There is no valid “cost of production” theory for the

⁹ Once again this is not to deny or minimize the uncertainties or indeterminacies involved in the imputation problem. There may be significant bargaining problems associated with the inability to neatly apportion contributions to indivisible resources (Alchian and Demsetz, 1972) but none of this disturbs the conclusion that resource earnings are rents and that the value of these resources must derive from some way of estimating their contribution to production.

determination of value. All value derives from the value of final outputs to consumers. It follows then that there are no “unearned” rents in the sense of Ricardo (to be examined below) or in the sense of any “monopoly rents”. All rents reflect the “value contributed” to the production process.

3. It is true, of course, that the price of any resource will be affected by its relative scarcity. In fact, scarcity and value are simply two sides of the same coin. If a resource has a positive value it is scarce. If it is scarce, relative to the demand for it, it will have a positive value. The absolute number of any type of resource in existence is, in itself, economically irrelevant. (A firm that employs the oldest janitor in the world, a one of a kind resource, does not have a scarce resource in any economically meaningful sense). If a resource suddenly becomes more abundant (e.g.: the discovery of a new source for a natural resource like oil), its marginal value in the economy and its price will fall. This is because with more of the resource available, the supply of the products to which it contributes will rise and their prices will fall. Thus the value of the rents that any resource can earn will be greater the more restricted the supply of identical or similar resources, other things constant.

This last conclusion will facilitate a consideration of the relationship between the above treatment of rent and the rent concept as originally introduced by Ricardo and as used in the current RBT literature.

Ricardian and Other Rents

According to Ricardo, “rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil” (Ricardo, 1973 [1821]: 33). He was concerned to explain the earnings that accrued to the different

groups in society (capitalists, workers and landowners). He tried to eliminate rent as a determinant of exchange value, so that he would be free to concentrate on the relationship between labor and capital. Thus he argued that the amount paid to the landowner was “determined by the scarcity and differential fertility of land; it is the difference between what capital and labor can earn on the more fertile land and on land ... which is just worth cultivating ... but yields no surplus in the form of rent. In this respect rent differs from other forms of income: it does not enter into the cost of production for society as a whole; it cannot determine the value of corn, rather it is created by the fact that corn has value” (Winch, 1973: xi).

We have already seen the sense in which it is misleading to suggest that rent does not enter into the cost of production. This notion is encouraged by Ricardo’s perception that land was a special and different category of input. From the perspective of the above discussion, what makes land different (in Ricardo’s model) is simply that it is in fixed supply. Its supply curve is vertical. Rents are earned simply by virtue of the (fixed) existence of the resource without any action having to be taken; they are pure scarcity rents.

Marshall tried to defend and extend Ricardo’s approach and it is the Ricardo-Marshall (RM) approach that is the basis for the modern treatment, including that found in the RBT literature. Marshall recognized that the phenomenon that Ricardo had identified as scarcity rents applied equally well to any factor (resource) in (temporarily or permanently) fixed supply. A scarce (unique) ability or a highly specialized machine may be valued very highly. Marshall referred to this as *quasi-rent*. It is that part of the value of the machine that is due to its temporarily restricted supply.

As it has been extended and developed in the modern literature, the RM approach is distinguished by two key ingredients:

1. rent is a phenomenon that accrues only to factors in fixed (or “quasi-fixed”) supply; and/or
2. rent is a surplus, an excess of earnings over some benchmark taken to indicate the “normal” situation.

According to the latter condition, rents are seen as “super normal profits” or “above normal earnings.” This usage derives (incorrectly) from Ricardo’s observation (as noted above) that some types of land may earn more rent than others by virtue of superior fertility. If land of inferior fertility were in large abundance it would not have any value on the market. That is to say, it would be a free good and it would not command a rental rate. The rent on the more fertile and scarce land could then be seen as a surplus for fertility, a differential payment. This seems to have created the impression in the modern literature that all rent partakes of this differential status. But in an economy where no land is free, all land is scarce and *all land earns rent*. Rent is not due to the existence of land of differing fertility. Rent is caused solely by the fact that land is scarce. *It will be paid even when all land is homogeneous*. (See, for example, Mill, 1871: 433)

It is true of course that differences in fertilities will result in differences in rental rates. And in many situations it is the differences in rents that are the relevant objects of attention. In fact in most of the RBT literature the usage of rent in its various forms can be more accurately identified as *differential rent*. It is differential rent that is being sought

or is in danger of being appropriated.¹⁰

While we do not speculate as to how or when this particular usage got started, it is clear that:

1. It is not strictly consistent with Ricardo or Marshall.¹¹
2. The RM theory itself is arguably convoluted and misleading by comparison with the Fetter theory.
3. The usage of terms relating to rent in the RBT literature is not clear or consistent.

Regarding this last point we cannot provide a complete account here. Some pertinent examples will be examined.

¹⁰ In a related literature Milgrom and Roberts define rent as, “A return received in an activity that is in excess of the minimum needed to attract the resources to that activity” (Milgrom and Roberts, 1992: 603) and quasi-rent as “the portion of earnings in excess of the minimum amount needed to prevent a worker from quitting his or her job or a producer from exiting its industry. ... rents are defined in terms of decisions to enter a job or an industry, quasi-rents are defined in terms of the decision to exit” (Ibid. 269). As will become clear below this usage differs from both Ricardo and Marshall, and, of course, Fetter. It does, however, draw attention to the important distinction between *ex ante* and *ex post* perspectives on rent that arise because of time and information asymmetries. This is discussed in Part II below.

¹¹ An admired textbook treatment of the subject of rent notes as follows: “There is no explicit, formal definition of quasi-rent in Marshall, and the term has been used both by him and by other writers in a variety of related but not identical senses” (Stonier and Hague, 1964: 292). They continue, in an attempt to provide their own definition, “The quasi-rent of a machine is its total short-run receipts less the total costs of hiring the variable factors used with it and of keeping the machine in running order in the short run. In long-run equilibrium *quasi-rent will become equal to the (constant) normal earnings of the machine*” (Ibid. 93, italics added). Thus there is no suggestion here that (quasi-)rent refers to any type of surplus, though it is attributable to the fact that the machine, even in the long run, has value, i.e. is scarce.

Rent Concepts in Strategy

In a definitive and influential article Richard Rumelt (Rumelt, 1987) makes a distinction between Ricardian, Paretian and entrepreneurial rents. Ricardian rents are earned by factors in fixed supply. Just as Ricardo had land of differential fertility, industries may be characterized by firms with similar fixed inputs which differ only in their productivity. The least productive is said to earn no rent. The rent earned by any such input is thus the difference between its earnings and the no-rent earnings. “The marginal firm earns zero profit (sic) while the more efficient firms earn rents” (Rumelt, 1987: 142). Paretian rents are “the difference between a resource’s payment in its best and the payment it would receive in its next best use....[it] is the payment received above and beyond that amount required to call it into use.” (Ibid. 144). By contrast, entrepreneurial rents are “the difference between a venture’s *ex post* value (or payment stream) and the *ex ante* cost (or value) of the resources combined to form the venture” (Ibid. 143).¹² Entrepreneurial rents are meant to apply in Schumpeterian fashion to the addition of value by the combining of resources in new combinations (or the discovery, or creation of new resources, or modes of organization). They thus apply to the “entrepreneurial discovery of resource value” (Ibid. 144). Insofar as such value was not widely known or anticipated, entrepreneurial rents apply to a situation of disequilibrium,

¹² Rumelt adds a footnote that is very relevant to what follows below: “Historically, the term *rent* applies to continuing nondiminishing payments. Above normal returns that diminish over time are frequently labeled *quasi-rents*. However, modern theory is less concerned with long-term equilibria and more concerned with *ex ante* equilibria of expectations. In this context, in which values are present values rather than annuities, we use the simple term *rent* to cover both quasi-rents and persistent rents.”

whereas Ricardian or Paretian rents can be earned in a situation of equilibrium (where resource values are widely known).

In a widely quoted article, Margaret Peteraf also distinguishes between Ricardian and other rents. She attributes Ricardian rents to resources “which are in limited supply.” “They may be fixed factors which cannot be expanded. Most often, they are quasi-fixed, in the sense that their supply cannot be expanded rapidly” (Peteraf, 1993: 189).¹³ Peteraf is thus combining Ricardian and Marshallian (Paretian) rents as identified by Rumelt above. She writes, “The Ricardian model is often thought of with respect to resources which are strictly fixed in supply. But it may be applied as well to quasi-fixed resources, which are of much greater importance” (Ibid. 190). Now she introduces monopoly rents, “What distinguishes monopoly profits (sic) from Ricardian rents is that monopoly profits result from a deliberate restriction of output rather than an inherent scarcity of resource supply” (Ibid. 191).

Joseph Mahoney and J. Rajendran Pandian (Mahoney and Pandian, 1992) define rent “as return in excess of a resource owner’s opportunity costs” and as “above-normal rates of return” (205). They distinguish between Ricardian rents (from ownership resources like valuable land, locational advantages, patents and copyrights), monopoly

¹³ The next sentence by Peteraf is. “They are scarce in the sense that they are insufficient to satisfy demand for their services.” which is hopelessly imprecise and reveals the confused state of this literature. Any available amount can be sufficient or insufficient only at a *particular price*, and if the industry is in equilibrium (which she is here assuming) then the price of the resource must be just sufficient (in fact *is determined by* its ability) to satisfy the demand for its output. This is clearly revealed in the Fetter approach discussed above.

rents (achieved by government protection or by collusive arrangements), entrepreneurial (Schumpeterian) rents (achieved by risk-taking and entrepreneurial insight into an uncertain/complex environment, which unlike the above two types of rent are necessarily temporary) and finally quasi-rents (which are appropriable rents from firm specific resources). It is not clear what the difference here is between quasi and Ricardian rents, though in a footnote Pandian and Mahony note the following: “Quasi-rent as used by Klein Crawford and Alchian (KCA) (Klein *et al.*, 1978) is referred to as a Pareto (Marshallian) rent by Rumelt (1987). Note that in the economics literature a quasi-fixed scarce resource that yields rents is sometimes referred to as a ‘quasi-rent’ where the meaning is ‘quasi-Ricardian rent.’ In this paper quasi-rent is used in the KCA sense of Pareto (Marshallian) rents” (Pandian and Mahony, 1992: 220).

Peteraf also addresses this (apparently) fifth type of rent. “The difference between the value of a resource to a firm and its opportunity cost is also a form of rent. Pareto rents, also called quasi-rents are the excess of an asset’s value over its salvage value or its value in its next best *use*. Following KCA I use the term ‘appropriable quasi-rents .. refer to the excess of an asset’s value over its value to the second highest valuing potential *user* or bidder for the resource. KCA demonstrate that it is entirely possible for a resource to generate [these] rents in the absence of either Ricardian or monopoly rents” (Peteraf, 1993: 194, italics original).

The KCA article referred to is a classic from the transaction cost literature. According to KCA, “The quasi-rent value of the asset is the excess of its value over its salvage value, that is, its value in its next best *use* to another renter. The potentially appropriable specialized portion of the quasi-rent is that portion, if any, in excess of its

value to the second highest-valuing *user*” (Klein, Crawford and Alchian, 1978: 106, *italics original*). Furthermore, “An appropriable quasi-rent is not a monopoly rent in the usual sense, that is, the increased value of an asset protected from market entry over the value it would have had in an open market. An appropriable quasi-rent can occur with no market closure or restrictions placed on rival assets” (Ibid. 107).

In addition to proliferating in the academic literature, the above typologies of rents have also permeated the textbooks in the fields of strategy (Collis and Montgomery, 1998), entrepreneurship (Dollinger, 1999) and transaction cost economics (Milgrom and Roberts, 1992).

Rent and Strategy: Clarification and Extension

The discussion in the previous section should be sufficient to establish that there exists a fairly formidable terminological thicket surrounding the phenomenon of rent and its determinants. In this section we attempt to clarify concepts and provide some useful extensions.

Five different concepts of rent have been identified, namely,

- ♦ Ricardian rents,
- ♦ Marshallian (or Paretian) rents,
- ♦ monopoly rents,
- ♦ entrepreneurial rents and
- ♦ quasi-rents.

Different theorists have defined these differently however. For example, Peteraf confounds Ricardian and Marshallian rents and uses Paretian rents as synonymous with quasi-rents, whereas Rumelt uses quasi-rents as synonymous with Marshallian rents.

Inconsistency, in and of itself, is perhaps not a big problem in a rapidly developing field, particularly if there is some reason to believe that a speedy convergence to a uniform taxonomy is immanent. We believe, however, that Occam's razor suggests the adoption of an alternative simpler system, one based on Fetter's approach to the concept of rent.

The RBT of strategy emphasizes that fact that industries are populated by firms that are different (that perform differently). Indeed, it has been noted that the variance in firm performance *between* industries is, surprisingly, substantially less than that *within* industries (Rumelt, 1987: 141). This suggests some essential *firm heterogeneity*. Firms are different because they "know" how to do different things (even in the production of the same or similar products) or because they have been "lucky" enough to stumble upon a superior technique, in short because, for one reason or another, they possess different capabilities (Barney, 1986). Thus, the observation of firm heterogeneity leads naturally to the inference of *resource heterogeneity* (Barney, 1991, Foss, 1997b). Some firms possess "things" that are valuable in production that other firms do not and thus are able to outperform them. In this way the performance of firms is tied to the earnings (rents) that can be attributed to these resources and the ability to sustain such a competitive advantage is linked to the ability of the firm to *identify and protect* (and perhaps extend) that essential resource heterogeneity. The theory must explain therefore how this is possible, that is, how it is possible that the firm may be able to successfully isolate its distinctiveness from imitation or emulation (Rumelt, 1984).

The identification of distinct categories of resource rent may be seen as instrumental in this regard. If different resource characteristics give rise to different categories of rent, then this can be taken into account when formulating firm strategy.

Some rents, like Ricardian rents, will result simply from the possessions of unique, non-reproducible resources and the strategy relating to these is simply to identify and protect them, ensure that they remain under the ultimate control of the firm (though it may be possible to gain from leasing them out, see Gabel, 1984). Marshallian (quasi-) rents are similar except that they are attributable to resources whose supply is variable in the long run, so that an effective strategy should aim to maximize these rents by protecting them as long as possible. On the other hand entrepreneurial rents are difficult to tie to specific resources and may inhere more in the particular combination (organization, supervision) that the entrepreneur-manager brings. In this case the “resource” has to be “created” and then protected. The other categories of rent lead similarly to particular strategic actions, for example, protecting monopoly rents implies the maintenance of entry barriers and the exercise of market power (controlling product supply to maintain price, Peteraf 1993), while the existence of quasi-rents (in the KCA sense) implies strategies (like integration) to guard against *ex post* appropriation by opportunistic trading partners.

All this is correct and helpful as far as it goes (and is discussed a little more in Part II). An understanding of the different rent types is equivalent to an understanding of the circumstances under which they occur and can be used to suggest appropriate strategies. Ultimately, however, in every case, the existence and size of a particular rent, in the RM sense (that is in the sense used in all of neoclassical economics), boils down to circumstances surrounding the *supply of particular resources to the market and to the firm*. As explained above, in a more inclusive and helpful sense (as developed by Fetter) a rent is nothing more nor less than a resource value (or more accurately the value of the services of a resource) and all resource based strategies come down to the creation,

enhancement and protection of such values. This can be seen clearly in an examination of the resource characteristics suggested in the literature as necessary (or helpful) for the earning of rent.

The connection of rent types to strategies is bolstered in the literature by an attempt to identify characteristics of resources that enable them to earn rents. Barney's (1991) oft-used scheme is perhaps the best known. According to Barney, in order for resources to be rent-earning (strategic) they must possess four characteristics, they must be:

- ♦ rare
- ♦ valuable
- ♦ hard to copy and
- ♦ non-substitutable¹⁴

An examination of this scheme reveals an insufficient understanding of the nature of rent. The first two (rare and valuable) are not separate conditions. To say that a resource is rare is to say that it is scarce. Scarcity is inescapably relative, there is no such thing as absolute scarcity. Something can be scarce only in relation to some known or perceived use for it. And that is also what makes it valuable. To say that something is scarce (rare) is to say that it is valuable (Menger, 1981 [1871]). As Carl Menger

¹⁴ Peteraf (1993) also has a scheme. Her four-part scheme relates primarily to the environment in which resources find themselves but is, ultimately, as we shall see, similar to Barney's. According to Peteraf, resources must be heterogeneous, imperfectly mobile, subject to *ex post* limits to competition and *ex ante* limits to competition.

established at great length in his revolutionary work, there are only two kinds of goods in the world, free goods (which are not scarce relative to the demand for them either because they are relatively abundant, or because they have no known use) and economic goods which are scarce (and therefore have value).

Nevertheless, Barney's intuition is correct. In order for a resource to earn rent it must be valuable, that is, its supply curve must slope upwards. His first two conditions thus collapse to the observation that only valuable resources earn rents, since, as explained above, a resource's value is the present value of its expected rental earnings over its life (net of maintenance and construction costs if any). Rent is the flow of which value is the stock. But the causation goes from rent to value and not the other way round. A resource has value because, and only because, it is expected to earn rent. Thus the observation of particular (potential) rents is a precondition to the observation that a resource has value.

As a result, and somewhat tautologically, the fact that a resource is (potentially) valuable, is capable of earning rents, is, indeed, a precondition for any rent-earning strategy. It is the identification of a relationship between a resource and the market (or the economy) in general. The next step in the formulation of any rent-earning strategy relates to the conditions under which a firm may appropriate (or protect from appropriation) the earnings of any valuable resource. And this is where Barney's remaining two conditions come in.

The market price of any resource will be determined by both the supply and demand conditions to which it is subject. This is true even of resources that are not (cannot be) traded whose implicit price is derived from their expected contribution to

earnings. Thus, for any given demand conditions, that is demand for the final product, the value of any resource in the economy will be determined by the supply of that resource. We are speaking here of a *stock* supply, the amount in existence at any time. In the extreme case of a fixed factor (like a Picasso painting) its price will be determined completely by the demand for it. At the other extreme, where the resource is super-abundant (relative to the demand) its price will be zero. More generally, where the amount of a resource in existence at any point in time can change over time, and is subject to economic incentives, the price *over time* will be determined (as Marshall realized) by the rate at which it can be increased (the degree of “fixedness”).

Thus when Barney invokes the characteristic of “hard to copy” he is referring to a particular aspect of a resource in limited supply. To be in limited supply is not unusual. It is the general case. The more limited the more valuable in the long term. Anything that the firm can do to influence this limitation, for example by protecting the knowledge needed to reproduce a particular resource over time, will add to its value and the stability of its value.

This is irrelevant to the firm, however, unless it “owns” the resource (or owns its services). In other words, we must make a crucial distinction between the value of a resource from the perspective of the economy as a whole, which, as mentioned, is the capitalized value of its earnings,¹⁵ and *the value it has to a particular firm*. The latter is the difference between the capitalized earnings attributable to that resource when

¹⁵ To facilitate comparison with the RM way of thinking about things, one can think of this as is the difference between the value that the resource would have if it were not scarce, zero, and the value it actually has.

employed in the firm and the price paid by the firm to acquire (and use) it. The latter is fundamentally the capitalized value of its earnings in its next best use, where “*use*” *here must be understood to be under different ownership*.¹⁶ This is the only sense in which the differential rents identified can be attributed to the firm. The difference between its earnings in one use and a next best use *within the firm* is indeed a “profit” to be attributed by the firm to efficient allocation (and this may be greater or less than firm-specific differential rents identified above) but this is not directly relevant to inter-firm strategic issues. Thus, Barney’s “hard to copy” condition must apply to a resource owned by a firm that other firms are desirous of copying, and the rent pursued is a differential rent attributable to some idiosyncratic aspect of the firm in question.

Barney’s fourth condition, non-substitutability, is also an aspect of supply. More accurately it is an aspect of the way in which we categorize resources. Any resource that is a perfect substitute for any other is, to all intents and purposes, economically identical to the resource for which it is a substitute. When we identify resource heterogeneity as a key factor in the RBT, we must be referring to functional heterogeneity. The heterogeneity that is relevant here is heterogeneity as manifested in differences in productive function. Resources that are in some physical sense heterogeneous but are used in the same productive activity and earn the same rent, are in a relevant sense homogeneous. *Heterogeneity in function* is what matters (Lachmann, 1978). Similarly, the observation that for firm specific rents to be earned, resources must be “immobile” is another way of saying that these rents must be specific to the firm in question, in other words, they would not be available in another use.

¹⁶ This is perhaps what Peteraf (1993) means when she refers to a different *user*.

Thus, limitations to the substitutability of a resource, are, in a more fundamental sense limitations to the supply of the same or similar resources (where “similar” is understood to refer to the possession of similar capabilities, (Richardson, 1972). It is not clear that this is really a different condition from the “hard to copy” condition.

Thus Barney’s four conditions come down to two, of which only one is directly relevant to the formulation of firm strategy. Resources must be valuable, that almost goes without saying. Strategy concerns the question of how, under different circumstances, that value may be appropriated by a particular firm. And the four categories of rent discussed above may all be reduced to the identification of variations in the value of particular resources (and their services) under different circumstances. This will become clearer from our consideration of strategy within a disequilibrium framework in the next section.

Part II: Considering the Competitive Framework

Rents and the Market Process

Different economic frameworks view the discovery, generation and capture of rent (value) differently. In this section we contrast an equilibrium framework (as implicitly or explicitly presumed by the neoclassical approach) with a disequilibrium or market process approach (as derived from an Austrian economics framework). A brief outline of the relevant ingredients of the market process approach follows.

Rent and equilibrium: Consider the relationship between rent and equilibrium. What is meant by “equilibrium?” In neoclassical equilibrium models equilibrium is characterized by a situation in which no “surplus” rents are earned. It is identified as a

“no rent” situation. This is the approach, for example, that Peteraf (1993) follows. It is true that some theorists have posited the possibility of “monopoly rents” in equilibrium, a “monopolistic equilibrium” in which entry and other permanent barriers to competition exist (for example Montgomery and Wernefelt, 1988). In fact, in the “Chicago” approach to economics, equilibrium is assumed to exist at all times (Shmanske, 1994). In effect, this assumption is equivalent simply to the assumption of rational or purposeful individual action. Evidently, however, like rent, the concept of equilibrium is used in different (and sometimes inconsistent) ways by different theorists.

We suggest that the most helpful and relevant way to think about equilibrium is in terms of *change*. That is, equilibrium should be understood as a situation characterized by the absence of change in those things that are relevant to decision makers.¹⁷ The most important operational implication of this is that equilibrium will manifest as a situation in which all individuals’ expectations are fulfilled. The operational meaning of “no change” is simply that nothing unexpected happens. This has the further implication that equilibrium must refer to a situation in which all of the relevant expectations of all of the individual decision makers are *mutually compatible*, that is everyone’s plans (which are

¹⁷ “... economic problems arise always and only in consequence of change. As long as things continue as before, or at least as they were expected to, there arise no new problems requiring a decision, no need to form a new plan” (Hayek, 1945: 82).

based on their expectations) can be implemented.¹⁸ If expectations (of the same relevant events) vary across individuals, then, at most, one of them can turn out to be correct (Lachmann, 1977) and some plans must fail (in whole or in part). If expectations vary some are bound to be disappointed.

If equilibrium is understood in this way, as a situation of consistent and correct plans and expectations, then it can be argued that the rent that matters for strategy is rent that is earned in disequilibrium - call this *strategic rent*. In equilibrium all rents are uniformly capitalized and no strategic opportunities exist. This follows from considering the relationship between rent and resources as discussed above. If the price of any resource reflects the discounted value of its expected future earnings, and if everyone shares the same correct expectations, then that price will include all correctly anticipated value components. There are no strategic decisions to be made. *Ex ante* values will turn out to be equal to *ex post* values. There will be no “surplus” or “abnormal” rents, because all resource owners, whether they sell or rent their resource, will correctly impute any value added by their resource to any production process of which they (the resources) are a part. Resource users will thus treat these rents as a cost. There is no discrepancy between total cost and total revenue and both equal total rents earned. Thus

¹⁸ “For a society, ... , we *can* speak of a *state* of equilibrium at a point of time - but it means only that the different plans which the individuals composing it have made for action in time are mutually compatible. And the equilibrium will continue, once it exists, so long as the external data correspond to the common expectations of all the members of the society” (Hayek, 1937: 41, italics original). For evidence that this is indeed the concept of equilibrium used by most eminent contemporary economic theorists (implicitly or explicitly) see Thomsen, 1992: 9-10. For an in depth examination of its implications see Lewin, 1997a.

strategic rent, rent that follows from a discovered discrepancy between revenue and cost, and thus is equal to what we normally understand as “profit,” applies only to disequilibrium situations. But since equilibrium, as defined above, is a very rare event we should expect strategic rent to be quite common. Disparate expectations provide the opportunity for strategic rents (for different appraisals of the worth of resources).

Resources as capital: We may see this more clearly if we reformulate our framework slightly. All resources may be seen as a type of “capital.” Their prices are the capitalized values of their expected future rents. Value gets created by entrepreneurial decision makers who form new *capital combinations* (Lachmann, 1978). From this perspective, the particular organizational form in which the capital combination exists may be seen as a resource if it adds value to the productive process. That is, since organization matters for productive value it is a resource. Resources in general may thus be seen as part of an intricate capital structure composed of heterogeneous capital goods.

The notion of functionally heterogeneous productive inputs, that perform different and specific functions but complement each other in crucial ways, was clearly laid out by Joseph Schumpeter in his description of the nature and function of an economy’s capital

stock.¹⁹ His approach was much more fully developed by Ludwig Lachmann in his market process theory of capital (Lachmann, 1978, see also Lewin, 1997b). Lachmann's work is a conscious critique of the general equilibrium (perfect competition) approach to capital theory, in which all inputs are divided into large homogeneous categories, one of which is the capital stock. This work is relevant to our theme. What Lachmann says about the capital stock (narrowly understood) can be seen to apply to the resource stock in general.

As Lachmann explains the notion of a capital *structure* is a much more realistic

¹⁹ In a section of his book entitled "The Structure of Physical Capital," he writes:

The initial stock of goods is neither homogeneous nor an amorphous heap. Its various parts complement each other in a way that we readily understand as soon as we hear of buildings, equipment, raw materials, and consumers' goods. Some of these parts must be available before we can operate others; and various sequences or lags between economic actions impose themselves and further restrict our choices; and they do this in ways that differ greatly according to the composition of the stock we have to work with. We express this by saying that the stock of goods existing at any instant of time is a *structured quantity or a quantity that displays structural relations within itself*, that shape, in part, the subsequent course of the economic process (Schumpeter, 1954: 631-632, italics original).

way to think about capital inputs than the notion of capital *stock*.²⁰ The capital structure is characterized by (intentional and unintentional) capital complementarity and *multiple specificity*. Multiple specificity means that resources are characterized by degrees of specificity, that is, they have a wider or narrower range of alternative uses. A completely specific resource has no value in any alternative combination.

Like Schumpeter, Lachmann envisages production as a process driven by the entrepreneur who forms new and continually changing *capital combinations*. Within these combinations the individual capital items (resources) stand in complementary relationship to each other. They are joint inputs in to the achievement of a production plan in the broadest sense. When the plan fails in part or in whole the entrepreneur has to adapt by making *substitutions*. Thus substitutability and complementarity are not so much attributes of capital resource inputs (as in neoclassical economics with its emphasis on equilibrium) as they are of states of the world. Complementarity is a feature of *stability*, substitution is a feature of *change*. Together they describe two aspects of the capital structure (broadly understood), its resilience and its flexibility.

When substitutions have to be made, the entrepreneur must change the capital

²⁰ “In a homogeneous aggregate each unit is a perfect substitute for every other unit, as drops of water are in a lake. Once we abandon the notion of capital as homogeneous, we should therefore be prepared to find less substitutability and more complementarity. There now emerges at the opposite pole, a conception of capital as a *structure*, in which each capital good has a definite function and in which all such goods are complements. It goes without saying that these two concepts of capital, one as a homogeneous fund, each unit being a perfect substitute for every other unit, the other as a complex structure, in which each unit is a complement to every other unit, are to be regarded as *ideal types*, pure equilibrium concepts neither of which can be found in actual experience.” (Lachmann, 1947: 199).

combination in a manner constrained by the physical and institutional constraints. Some resources will have only one use and will be rendered useless by the change. Their value will fall to zero. These, as explained, are completely specific resources. Most resources will have more than one use (they are characterized by multiple specificity). The more adaptable a resource the greater its value in alternative uses. A resource that has to be sold for scrap in the face of change has limited uses, while a resource that can be used in a variety of alternatives (an opera house can be turned into a movie theater) is more resilient.

Heterogeneity matters only in disequilibrium: Clearly, heterogeneity, and the complementarity and multiple specificity that it implies, are relevant only in conditions of disequilibrium. In equilibrium where no unexpected changes occur the capital structure will be perfectly sustainable requiring no changes. In this way heterogeneity and change are intimately related. Only if *ex ante* values (as seen by someone in the market) turn out to be different from *ex post* values, will heterogeneity matter. If the values of all resources turn out as expected their heterogeneity would have no strategic significance. But in the absence of equilibrium, the heterogeneous nature of resources significantly reflects the fallible decisions of the past as well as the possibilities and constraints of the future.

So, in a fundamental sense, it is the *heterogeneity of expectations*, that matters more than the heterogeneity of resources as such. Heterogeneous resources give rise to differing expectations of their worth as conceived in various possible capital combinations. Those expectations that turn out to be correct give rise to strategic rents.

Rent and opportunism: Opportunistic behavior or the potential for opportunistic

behavior is a key ingredient of the transaction cost approach to the theory of the firm (Klein, *et. al.*, 1978, Williamson, 1985, for example). From the above discussion, however, it should be clear that while the presumption of the potential for opportunistic behavior (shirking, hold ups, etc.) may shed considerable light on the existence of the firm as a vertically integrated productive unit, or on productive organizational arrangements more generally, this can never have any strategic implications in the absence of disequilibrium. In other words, opportunism matters only if there is a divergence of expectations. It is true that this literature places some emphasis on the existence of *asymmetric information*, that is, the possession of different information by different trading parties. But this asymmetry is strategically irrelevant unless it gives rise to a divergence of expectations between the parties.

For example, if both the buyer and the seller confidently expect the buyer to appropriate the enhanced value of a constructed specific resource by “holding up” the seller after the asset has been constructed, and if both believe that a contract to prevent this is unenforceable or insufficient (incomplete), then either integration will occur or the transaction will be abandoned or the opportunism will be tolerated, whichever is more economical. The point is, there is no disagreement on which alternative is the most economical (efficient) and, therefore, no real strategic questions arise, only potential ones. If, however, there are *asymmetric expectations*, one of the parties will turn out to be wrong and the value of the resource will turn out to be different from that expected by at least one party. That difference is a strategic rent. For example, the buyer may have a different “vision” (Penrose, 1995) of the potential use of a particular resource that the seller does not share because he has less or different information, or, more significantly,

because he *interprets the same information differently*. If the buyer turns out to be correct, he will have earned a profit, a strategic rent, the difference between the *ex ante* price paid for the resource (built by the seller), his cost, and the *ex post* value to him of the resource, as reflected by its contribution to his revenue. Of course, the buyer too may be (pleasantly) surprised if the *ex post* value of the resource turns out to be even higher than he expected, but this has no strategic implications since, there being no expectation of this enhanced value, it could not have been part of his strategic behavior. It is a windfall gain, a profit, but not a strategic rent. Thus not all rents earned in disequilibrium are strategic rents, but all strategic rents are earned in disequilibrium.

Furthermore, there is an important sense in which the existence or absence of potentially profitable opportunistic behavior cannot, *in itself*, be an explanation for the existence of the firm. An insight from the RBT is surely that businesses have their origins in the resources of the entrepreneur (innate or otherwise) and the resources that the entrepreneurial team controls, creates, can potentially acquire and finally combines. From this perspective, the existence of potentially appropriable (quasi-) rents, in the KCA sense, is sequentially and logically subsequent to the perception of a potential profit. All profitable business ventures must trace back to some differential insight or some unexpected event. There must first be the perception of a potentially appropriable rent before the question of organizational arrangement can be relevant. And this perception must signal the “discovery” of some undervalued resource or resource *combination that was hitherto unperceived*. Once a potential profit is perceived by at least one person, the question then arises as to which organizational arrangement is best suited to its appropriation or renders it vulnerable to appropriation by others. We discuss this further

in the next section.

Time and knowledge in the market process: All this points to the role of time and knowledge in the market process. The process is a disequilibrium process in the sense that it is driven by the continual arrival of new knowledge (and thus the falsification of old expectations). It is almost inconceivable that the passage of time should not imply some form of learning. Time and knowledge belong together. “As soon as we permit time to elapse, we must permit knowledge to change ...” (Lachmann, 1976: 127-28). Real time, as opposed to mathematical time, is suffused with unique unanticipatable events. At the very least this insight is an implication of the observation that at any point of time different individuals have different expectations, so that all but one of them are bound to be falsified. Individuals are bound to learn by the passage of time.

Related to this is the importance of recognizing the private nature of knowledge. While information (data) has objective existence, knowledge is inescapably personal (Fransman, 1994). The same information is often interpreted differently by different individuals. Knowledge is different from the information from which it derives. This means that different individuals appraising the same resources may perceive different uses and expect different earnings, in short, the same resources may have different values for different individuals. Without differences of opinion there is no market process.

Knowledge, in fact, is an additional and necessary dimension attaching to every resource. Without the “knowledge” of how to profitably use a resource, it is not a resource, it has no value. Resources without knowledge have no meaning. And given the personal and often idiosyncratic nature of knowledge, it appears to us that the “knowledge based” variant of the RBT (Libeskind, 1996, Grant, 1996, Conner and

Prahalad, 1996) is definitely on the right track. In the hurley burley of the market process, firms and other forms of business organization (joint ventures, business alliances, arms length contracts, etc.) serve as experimental incubators for the entrepreneurial visions of various and varied resource combinations that reflect the particular knowledge and expectations of their designers.

Strategic and Other rents.

From the market process perspective then, rents may be revealingly divided between strategic rents and all other rents. Strategic rents are profits and are earned only in disequilibrium. (Profits are the difference between the *ex ante* prices (values) of resource stocks, their costs, and their *ex post* value in use, the revenues they generate). A summary appears in Table 1.

This table shows the result of adding another dimension to the usual taxonomy of rents found in the RBT literature, the dimension of equilibrium and disequilibrium states. The addition of this dimension allows one to view strategic rent-earning as a dynamic process in real historical time. Schumpeterian rents, from this perspective, include all rents earned in disequilibrium. They encompass Ricardian, Marshallian, opportunistic and any other imaginable rents in disequilibrium situations. The key aspect of Schumpeterian rents is that they arise from innovation, from the introduction of something new. “[I]n capitalist reality as distinguished from its textbook picture, [the]...kind of competition which counts [is] the competition from the new commodity, the new technology, the new source of supply, the new type of organization” (Schumpeter, 1947): 84-5, quoted in Penrose, 1995: 114n)

Ricardian rents may be understood to refer to rent from resources in absolutely

fixed supply, i.e. with vertical supply curves (a Picasso painting, a unique location, a unique talent). In equilibrium the value of these resources is known to everyone and the institutional environment, the configuration of ownership rights, is likewise known and accepted. By definition of equilibrium, there is no decision that needs to be taken to extract and protect this value. All actions are a sort of mechanical playing out of the already determined efficient steps that must be taken by resource owners to extract maximum rents. All relevant decisions must have been taken prior to the establishment of equilibrium.

By the same token, where a Ricardian resource is newly discovered or created or where a new method of protecting its value (restricting the use of its services) is found, a Schumpeterian innovation has been made. This shows up in an *increase* in the *ex post* recognized value of the resource that, in our story, should be thought of as a strategic rent. Once introduced strategic rents become embodied in the rent stream and in the absence of further changes (innovations) lose their strategic character.

Similarly, Marshallian rents, those that can be imputed to any resource in less than infinite supply (relative to the demand), may be strategic or otherwise. As with Ricardian rents, where a resource is newly discovered or created or where a new method of protecting its value (restricting the use of its services) is found, a Schumpeterian innovation has been made, and this shows up in an *increase* in the *ex post* recognized value of the resource and is a strategic rent.

The key general distinction is whether or not the value of the resource is a matter of uniform agreement or whether, as explained, because of differences of opinion (of judgement) or because of unanticipated events, there exists a wedge between the *ex ante*

appraisal and the *ex post* realization of some traders in the market. Wherever there is room for the exercise of judgement there exists the potential for the earning of strategic rents.

Considering the question of so called “opportunistic rents” raises related questions. Earnings from opportunistic behavior arise because of time and information asymmetries. Time asymmetries refer to the widely noted potential that exists, whenever some fixed cospecialized investment of a specific nature is made by more than one party, for opportunistically changing the nature of the agreement for sharing the fruits of that investment. This potential arises because of the “irrelevance of sunk costs.” Since the value of the resource in alternative uses (by alternative users) is less than in its current use, a potential exists for one of the parties to “blackmail” the other for an amount up to the difference between the value of the resource in its current use and its value in the next best use, by threatening to withdraw the cospecialized resources necessary for the achievement of the full value of the project. This is sometimes (confusingly) referred to as an “appropriable quasi-rent.” It exists because the only “costs” that matter for decisions are opportunity costs, that is, the value of alternatives to be sacrificed. *Before* a specific investment is made, resources could be committed elsewhere. However, *after* the investment is made this is irrelevant, since the alternative to commit them elsewhere no longer exists even if they end up earning less than anticipated. The only alternative that remains is the redeployment of the constructed specific asset. This is an essential time asymmetry.

Table 1

Rents in equilibrium and disequilibrium.

<u>Source of rent</u>	<u>Equilibrium Rents</u>	<u>Schumpeterian- Disequilibrium Rents</u>
Ricardian	Rents earned from resources in absolutely fixed supply	Differential rents earned from the “discovery” of new resources in absolutely fixed supply
Marshallian (quasi-rent)	Rents earned from resources in relatively fixed supply	Differential rents earned from the “discovery” of new resources in relatively fixed supply
Opportunistic	No rents earned	Differential rents earned (extracted) from the “superior” insight into the value of resources in alternative uses.
Other	Rents earned from any “resources” in the production process.	Differential rents earned from any “ <i>new</i> resources” in the production process

This time asymmetry is not sufficient, however, for the existence of an appropriable rent. There must also be an information asymmetry. If both parties are equally aware of the potential for *ex post* opportunism and to the same extent, then this, as explained earlier, *will already be reflected in the value of the resources*. Thus in equilibrium, where all parties share the same expectations there can be no opportunistic rents actually earned. In a disequilibrium situation, however, where the parties will have different opinions as to the values of resource combinations, such opportunities will be manifest. An optimistic, visionary, entrepreneur who values resources more highly than the owners from whom he rents them, and who turns out to be right, is vulnerable to being held up by the resource owners, *once the enhanced value of the resources becomes apparent*. He will attempt to take steps to protect himself. But even if he is unsuccessful, the rents earned, by him or by the opportunistic owner, will be Schumpeterian in nature, they are the result of “superior” insight, of an innovative combination or use. Hence we conclude that in order for opportunistic rents to exist some value must have been entrepreneurially (strategically) added.

Finally, it is surely possible that the above three categories do not exhaust all of the actual rent creating situations that one finds in the market process. Whether they do or not depends on how one defines a “resource.”²¹ If they are defined broadly enough to include such things as “organizational ability,” “entrepreneurial insight,” “tacit knowledge,” “team synergies” and similar intangible, sometimes unobservable and even undiscoverable assets, then all rents attributable to them are covered by Ricardian and Marshallian rents. A more narrow definition would suggest a residual category.

²¹ See footnote 3 above.

Whichever way we go, however, the same distinction between strategic and other rents applies. Strategic rents are earned by successful entrepreneurs who add a value to a productive process, as ultimately reflected in the values of all of the resources involved in that process, *that was not generally anticipated*.

Insofar as strategic rents are the product of a dynamic market process, the calculus of neoclassical micro economics is not immediately relevant to them. In a disequilibrium situation the cost curves as depicted, for example, by Peteraf (1993) are as much a matter of judgement as the demand curves, and the costs that matter are those that apply to anticipated rather than to historical events. They include so called “dynamic transactions costs” (Langlois, 1991, Langlois and Robertson, 1995) of not correctly anticipating and providing for future resource needs. In such a world strategic rents can be earned by better assessing such costs.

Conclusion: A Tale of Two Worlds.

In this paper we have examined and reformulated the theory of rent and related it to the concept of equilibrium and the theory of competition in order to arrive at a more consistent and satisfactory basis for the RBT of strategy and the firm. Table 2 summarizes the differences in the two perspectives we have been analyzing, the neoclassical microeconomic perspective (using the RM approach to rent) and the market process perspective (using the Fetter approach to rent). In a neoclassical world, rents indicate “unsolved” or unexploited “inefficiencies.” This is because every hypothetical outcome is viewed against the standard of perfect competition in which all products are produced and provided to the consumer at minimum possible costs, that is with the least sacrifice in alternative value. In this world discrepancies in the values of resource

combinations across firms is an indication of unexploited profits and, therefore, of inefficiency. This viewpoint invites a curious normative ambiguity. While an economy characterized by large profits may, in some sense, be viewed as dynamic and desirable, the large profits, at the same time, signal gross inefficiencies. While we seek the knowledge to inform business strategists in their pursuit of profit, we seek also the wisdom as economists to structure the world to ensure their elimination.

By contrast, in the market process world there is no single ideal standard by which to measure any particular outcome. All action takes place in an open ended universe in which the future is continually being created, and in which, therefore, competition is a “discovery process” (Hayek, 1978). The likelihood that the expectations of different individuals will be mutually compatible is extremely low. There is no assurance that the market will, through the competitive process, always arrive at the least cost way of doing things, but the availability of the opportunity to experiment in different means, methods and products suggests that not only will there be pressure to keep the costs of producing any given product at low as possible, but that the choices available to consumers will tend to expand without limit. From the market process perspective high profits are an indicator of economic dynamism and the efficient uncovering of continually emerging profitable opportunities, unless, of course, they are the result of special privilege (legal barriers to entry). As such the market process perspective does not share the ambiguous view of profits (which are the difference between *ex ante* resource costs and *ex post* resource values) characteristic of the neoclassical approach. A market process approach is thus not only more “realistic,” it is surely better suited to the RBT of corporate and business strategy.

Table 2

Contrasting perspectives.

	Neoclassical	Market Process
<u>Source</u>	Rents refer to <i>differences</i> in the earnings of similar resources and result from monopoly, opportunism or innovation	Rents are the prices of the services of resources.
<u>Equilibrium - perfect competition</u>	No rents earned. Conditions are “efficient.”	Rents are the prices of the services of resources. Conditions are “stagnant.”
<u>Equilibrium - monopolistic competition</u>	Rents refer to <i>differences</i> in the earnings of similar resources and result from monopoly. Monopoly rents are earned from special privileges or “barriers to entry”. Conditions are “inefficient.”	Rents are the prices of the services of resources. Monopoly rents are earned only from special privileges. Conditions are “inefficient.”
<u>Disequilibrium</u>	Rents refer to <i>differences</i> in the earnings of similar resources and result from opportunism or innovation. Entrepreneurial and other rents may be earned. Conditions are “inefficient.”	Rents are the prices of the services of resources. Strategic rents refer to <i>ex ante-ex post differences</i> in the earnings of resources and result from opportunism or innovation. Conditions are “dynamic.”

REFERENCES

- Alchian, A.A. and Demsetz, H. (1972) Production, Information Costs, and Economic Organization, *American Economic Review*, 62: 777-795.
- Barney, J. (1991) Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17(1): 99-120.
- Barney, J.B. (1986) Strategic factor markets, expectations, luck and business strategy, *Management Science*, 32(10): 1231-1241 as reprinted in N. Foss, J. (Ed) *Resources, Firms and Strategies: A Reader in the Resource Based Perspective* (Oxford, Oxford University Press, 1997): 146-160.
- Collis, D.J. and Montgomery, C.A. (1998) *Corporate Strategy: A Resource-Based Approach* (New York, McGraw Hill).
- Conner, K.R. and Prahalad, C.K. (1996) A resource-based theory of the firm: Knowledge versus opportunism, *Organization Science*, 7: 477-501.
- Dierickx, I. and Cool, K. (1989) Asset Stock Accumulation and Sustainability of Competitive Advantage, *Management Science*, 35(12): 1504-1511 as reprinted in N. Foss, J. (Ed) *Resources, Firms and Strategies: A Reader in the Resource Based Perspective* (Oxford, Oxford University Press, 1997): 161-172
- Dollinger, M.J. (1999) *Entrepreneurship: Strategies and Resources* (Upper Saddle River, NJ, Prentice-Hall).
- Fetter, F.A. (1977) *Capital, Interest and Rent: Essays in the Theory of Distribution*, edited with an introduction by Murray N. Rothbard (Mission, Kansas, Sheed, Andrews and McMeel).
- Foss, N.J. (1994) The Theory of the Firm: The Austrians as Precursors and Critics of Contemporary Theory, *Review of Austrian Economics*, 7(1): 31-66.
- Foss, N.J. (1997a) Resources and Strategy: A Brief Overview of Themes and Contributions, in N. Foss, J. (Ed) *Resources, Firms and Strategies: A Reader in the Resource Based Perspective* (Oxford, Oxford University Press).
- Foss, N.J. (1997b) Austrian Insights and the Theory of the Firm, *Advances in Austrian Economics*, 4: 175-198.
- Fransman, M. (1994) Information, Knowledge, Vision and Theories of the Firm, *Industrial and Corporate*

- Change*, 3(3): 713-757.
- Gabel, L. (1984) The Microfoundations of Competitive Strategy, Insead Working Paper.
- Grant, R.M. (1996) Toward a knowledge-based theory of the firm, *Strategic Management Journal*, 17(Winter): 109-122.
- Hayek, F.A. (1937) Economics and Knowledge, *Economica*, IV new series: 33-54.
- Hayek, F.A. (1945) The Use of Knowledge in Society, *American Economic Review*, 35: 519-530.
- Hayek, F.A. (1978) Competition as a Discovery Process in *New Studies in Philosophy, Politics, Economics and the History of Ideas* (Chicago, University of Chicago Press).
- Jacobson, R.J. (1992) The "Austrian" School of Strategy, *Academy of Management Review*, 17(4): 782-807.
- Klein, B., Crawford, R.G. and Alchian, A. (1978) Vertical Integration, Appropriable Rents and the Competitive Contracting Process, *Journal of Law and Economics*, 21: 297-326, as reprinted in Putterman L. and Kroszner, R.S. *The Economic Nature of the Firm* (Cambridge: Cambridge University Press, 2nd ed., 1996): 105-124.
- Lachmann, L.M. (1947) Complementarity and Substitution in the Theory of Capital, *Economica*, 14: 108-119.
- Lachmann, L.M. (1976) From Mises to Shackle: An Essay on Austrian Economics and the Kaleidic Society, *Journal of Economic Literature*, March: 24-62.
- Lachmann, L.M. (1977) *Capital, Expectations and the Market Process* (Kansas City, Sheed, Andrews and McMeel).
- Lachmann, L.M. (1978 [1956]) *Capital and its Structure* (Mission, Kansas, Sheed, Andrews and McMeel, Inc.).
- Langlois, R.N. (1991) Transaction cost economics in real time, *Industrial and Corporate Change*, 1(1): 99-127 as reprinted in N. Foss, J. (Ed) *Resources, Firms and Strategies: A Reader in the Resource Based Perspective* (Oxford, Oxford University Press, 1997): 286-307.
- Langlois, R.N. and Robertson, P. L. (1995) *Firms, Markets and Economic Change: A Dynamic Theory of Business Institutions* (London, Routledge).
- Lewin, P. (1997a) Hayekian Equilibrium and Change, *Journal of Economic Methodology*, 4(2): 245-266.

- Lewin, P. (1997b) Capital in Disequilibrium: A Reexamination of the Capital Theory of Ludwig M. Lachmann, *History of Political Economy*, 29(3): 523-548.
- Lewin, P. (1998) *Capital in Disequilibrium: The Role of Capital in a Changing World* (London and New York, Routledge).
- Libeskind, J.P. (1996) Knowledge, Strategy, and the Theory of the Firm, *Strategic Management Journal*, 17(Winter): 93-107.
- Mahoney, J.T. and Pandian, J.R. (1992) The resource-based view within the conversation of strategic management, *Strategic Management Journal*, 13: 363-380 as reprinted in N. Foss, J. (Ed) *Resources, Firms and Strategies: A Reader in the Resource Based Perspective* (Oxford, Oxford University Press, 1997): 204-234.
- Marshall, A. (1961 [1920]) *Principles of Economics: An Introductory Volume* (London and New York, Macmillan).
- Menger, C. (1981 [1871]) *Principles of Economics* (New York, New York University Press).
- Milgrom, P. and Roberts, J. (1992) *Economics, Organization and Management* (Englewood Cliffs, NJ, Prentice-Hall).
- Mill, J.S. (1987 [1871]) *Principles of Political Economy* (Fairfield, NJ, Augustus M. Kelly).
- Montgomery, C.A. and Wernfelt, B. (1988) Diversification, Ricardian Rents, and Tobin's q, *RAND Journal of Economics*, 19(4): 623-632.
- Penrose, E. (1995 [1959]) *The Theory of the Growth of the Firm* (London, Basil Blackwell).
- Peteraf, M.A. (1993) The cornerstones of competitive advantage: A resource-based view, *Strategic Management Journal*, 14: 179-191 as reprinted in N. Foss, J. (Ed) *Resources, Firms and Strategies: A Reader in the Resource Based Perspective* (Oxford, Oxford University Press, 1997): 187-203.
- Ricardo, D. (1973 [1821]) *The Principles of Political Economy and Taxation* (London, The Guernsey Press).
- Richardson, G.B. (1972) The Organization of Industry, *Economic Journal*, 82: 883-896.
- Rothbard, M. (1970 [1962]) *Man, Economy and State* (Los Angeles, Nash).
- Rumelt, R.P. (1984) Towards a strategic theory of the firm, in: R.B. Lamb (Ed) *Competitive Strategic*

- Management* (Englewood Cliffs, NJ, Prentice-Hall).
- Rumelt, R.P. (1987) Theory, strategy and entrepreneurship, in: D. J. Teece (Ed) *The Competitive Challenge: Strategies for Industrial Innovation and Renewal* (Cambridge, Mass, Ballinger).
- Schumpeter, J. (1947) *Capitalism, Socialism and Democracy* (New York, Harper).
- Schumpeter, J. (1954) *History of Economic Analysis* (New York:, Oxford University Press).
- Shmanske, S. (1994) On the Relevance of Policy to Kirznerian Entrepreneurship, *Advances in Austrian Economics*, 1:199-222.
- Stonier, A.W. and Hague, D.C. (1964) *A Textbook of Economic Theory* (London, Longmans, Green and Co. Ltd.).
- Thomsen, E.F. (1992) *Prices and Knowledge: A Market Process Perspective* (London and New York, Routledge).
- Williamson, O. (1985) *The Economic Institutions of Capitalism* (New York, The Free Press).
- Winch, D. (1973) Introduction in *The Principles of Political Economy and Taxation by David Ricardo* (London, The Guernsey Press).