FIRMS, STRATEGIES, AND RESOURCES: CONTRIBUTIONS FROM AUSTRIAN ECONOMICS

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ecently, scholars working in the field of modern Austrian economics have wondered about what this literature might offer for an understanding of the nature of modern business organizations (for example, Foss 1994, 1997b; Sautet 1998; Mathews 1998). In this article, we examine the received literature on firms and strategies and find that Austrian economics has important contributions to make in two particular areas—to the theory of rent and to an understanding of the meaning of equilibrium. The legacy of perfect competition casts a long shadow, inhibiting an adequate understanding of the dynamic market process in which rent is earned in disequilibrium.

Rent features as a key concept in the modern Resource-Based Theory of Strategy. This concept is borrowed from neoclassical economics but derives ultimately from Ricardo. It is used in the Resource-Based literature in a confused and inconsistent way. We examine this theory with a view to providing a more satisfactory foundation for the theory of rent, that provided by Frank Fetter, and a more satisfactory foundation for the theory of competition, that provided by Market-Process economics. The theory of the firm that emerges is, indeed, a "strategic" theory of the firm, one that depends crucially on the entrepreneur and one that is built on a thoroughly "Mengerian" (subjectivist) theory of rent.

The new Resource-Based theory (RBT) of the firm, like the Coasian literature, takes as its point of departure the neoclassical microeconomic model of perfect competition. In perfect competition there are no "profits" 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 1997ab). As a result, according to the RBT, successful firms are able to earn "rents." This concept of rents is also derived

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from economic foundations, namely the theory of rent as developed by David Ricardo (1973) and subsequently modified by Alfred Marshall (1961).¹

From both of these constructs, 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) needless distinctions and overlooking others. We offer here a reformulated theory of rent derived from the work of Frank Fetter (1977). Fetter's work has been linked by Murray Rothbard to the Austrian tradition.

RENT AND VALUE ACCORDING TO FRANK FETTER

The value of any economic organization (firm, business, company) derives from and reflects the value to it of the resources² 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. The values attributed to the resources, and thus to the companies 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.³ That is the maximum price that anyone appraising that resource would be prepared to pay for it.⁴ Anyone considering the purchase of any resource cannot avoid (perhaps implicitly) referring to the value that this resource is expected to add to economic production. Even if the resource is purchased for resale, ultimately its value must derive from some potential productive use.

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, p. 425)

¹A closer disciple of Ricardo than Marshall, John Stuart Mill, writes:

²The 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).

³We 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.

⁴We 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?). And the estimation of the value of any production plan is in itself a speculative matter.

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. 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.⁵

"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). The price of 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: it is the sale and purchase of the unit services 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 with 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 1993, pp. 417–18; emphasis in original)⁶

⁵As Rothbard has explained, 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 resources 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 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 1993, chap. 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.

⁶Also:

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 consumers' 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 1993, pp. 502–03)

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 will 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 income 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.

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.⁷
- 3. The price of any resource (and therefore, its rental stream) will be affected by its relative scarcity.

These conclusions invite 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 modern literature. The above approach to the theory of rent probably found its most complete and cogent expression at the hand of the early-twentieth-century economist Frank Fetter (1977) and so we shall refer to this approach as the Fetter theory.

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" (1973, p. 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, p. xi)

⁷It need hardly be added here that there is no valid "cost of production" theory for the 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.

The notion that land is special because it alone does not enter into the cost of production 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 Coasian and RBT literature. Marshall recognized that the phenomenon 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 further in the modern literature, the RM approach is distinguished by two key ingredients:

- 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, p. 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 modern 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.

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.8

⁸An admiring 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, p. 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)

2. The RM theory itself is arguably convoluted and misleading by comparison with the Fetter theory. 9

RENT CONCEPTS IN STRATEGY

In the strategy literature, 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. ¹⁰ 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 imminent. 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 the 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, p. 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

normal earnings of the machine" (p. 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.

⁹ It is also true that the usage of terms relating to rent in the modern strategy and microeconomics literature is not clear or consistent (see Lewin and Phelan 1998).

¹⁰For example, Peteraf (1993) confounds Ricardian and Marshallian rents and uses Paretian rents as synonymous with quasi-rents, whereas Rumelt (1987) uses quasi-rents as synonymous with Marshallian rents.

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 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 below). 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.

RENTS AND THE MARKET PROCESS

With this in mind we may note that different economic frameworks view the discovery, generation, and capture of rent differently. In this section, we contrast an equilibrium framework (as implicitly or explicitly presumed by the neoclassical approach (and, to some extent the RBT 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. If equilibrium is understood as a situation of consistent and correct plans and expectations (Hayek 1937; Lewin 1997a), then it can be argued that the rent that matters for strategic decisions is rent that is earned in disequilibrium—call this strategic rent.¹¹ 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

¹¹We use the word "strategic" here in a manner different from its use in Game Theory, where it can refer to actions taken in an equilibrium playing out of certain "strategies." We are referring to situations in which the outcomes are radically uncertain as requiring "strategic decisions."

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 owner 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 strategic rent, rent that follows from a discovered discrepancy between revenue and cost, and is therefore 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, Lewin 1997b, 1998). 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.

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 relationships to each other. They are joint inputs into 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 combination in a manner dictated 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 that can be turned into a movie theater) is more resilient.

Heterogeneity Matters only in Disequilibrium

Clearly, heterogeneity, and the complementarity 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 equilib-

rium, 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, holdups, 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 implication 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) (Hart 1995), then either integration will occur or the transaction will be abandoned or the opportunism will be tolerated, whichever is most economical. The point is, there is no disagreement about 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 implication 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. All businesses surely have their origins in the resources of the entrepreneur (innate or otherwise) and the resources that the entrepreneurial team controls or creates, can potentially acquire, and finally combines. From this

perspective, the existence of potentially appropriable rents is 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.

What makes profit emerge is the fact that the entrepreneur who judges the future prices of the products more correctly than other people do buys some or all of the factors of production at prices which, seen from the point of view of the future state of the market, are too low. Thus the total costs of production—including the interest on the capital invested—lag behind the prices which the entrepreneur receives for the product. This difference is entrepreneurial profit. (Mises 1980, p. 109; see also Sautet 1998)

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, pp. 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 given 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 whence 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) has considerable merit. Firms and other forms of business organizations (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.

Table 1 Rents in Equilibrium and Disequilibrium

Source of Rent	Equilibrium Rents	Schumpeterian-Disequilibrium Rents
1. Ricardian	Rents earned from resources in absolutely fixed supply	Differential rents earned from the "discovery" of new resources in absolutely fixed supply
2. Marshallian (quasi-rent)	Rents earned from resources in relatively fixed supply	Differential rents earned from the "discovery" of new resources in relatively fixed supply
3. Opportunistic	No rents earned	Differential rents earned (extracted) from the "superior" insight into the value of resources in alternative uses

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 Schumpetarian 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, pp. 84–85, quoted in Penrose 1995, p. 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. This shows up in an increase in the expost 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 judgment) 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 judgment, there exists the potential for the earning of strategic rents.

A consideration of 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 co-specialized 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 co-specialized 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 re-deployment of the constructed specific asset. This is an essential time asymmetry.

This time asymmetry is not sufficient, however, for the existence of an appropriable rent. There must also be a particular information asymmetry, and this is the key to an Austrian theory of the firm. 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 by fashioning an appropriate organizational structure. 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. This is the ultimate explanation of the firm, i.e., the value added by the particular combination of resources and the way in which they are organized.

Insofar as strategic rents are the product of a dynamic market process, the calculus of neoclassical microeconomics 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 judgment 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 article, 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 a theory of the firm. Such a theory is necessarily a strategic theory. Firms are formed in order to realize, and perhaps protect, the creation of value. 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 costly 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 as 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

Table 2 Contrasting Perspectives

	Neoclassical	Market Process
Source	Rents refer to differences in the earnings of similar resources and result from monopoly, opportunism, or innovation.	Rents are the prices of the services of resources.
Equilibrium: Perfect Competition	No rents earned. Conditions are "efficient."	Rents are the prices of the services of resources. Conditions are "stagnant."
Equilibrium: Mon opolistic Competition	Rents refer to differences in the earnings of similar resources and result in 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"
Disequilib ri um	Rents refer to differences in the earnings of similar resources and result from opportunism or innovation. Entrepreneurial and other rents may be eamed. Conditions are "inefficient"	Rents are the prices of the services of resources. Strategic rents refer to ex ante-ex post differences in the earnings of resources and result from opportunism or innovation. Innovation occurs. Conditions are "dynamic."

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 an understanding of the origins and workings of the real-world business organizations we call firms.

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