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An Austrian Theory of the Firm

PETER LEWIN* plewin@utdallas.edu
STEVEN E. PHELAN
School of Management, University of Texas at Dallas, Box 830688, Richardson, Texas 75083-0688, USA

Abstract. The modern Theory of the Firm uses the concept of rent and makes implicit assumptions about equilibrium. An Austrian (Market Process) Theory of the Firm should have something to say about each of these. 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."

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Introduction: The Absence of an Austrian Theory of the Firm?

There has been much conversation recently about the absence of an Austrian theory of the firm and suggestions for remedying the situation (for example, Foss 1994, 1997b, Sautet (forthcoming)). It is not self evident that Austrian economics needs a theory of the firm—it is quite possible that *the* definitive theory exists outside of Austrian economics. Nor is it obvious what that theory might look like.

In this paper we contend however that, in fact, there *is* an incipient Austrian theory of the firm that does add something to the existing theories. The nature of that theory is suggested by the very relationship that existing theories of the firm bare to the foundational body of theory out of which they arose and to which they are continually looking. To be more specific, the seminal contribution to the theory of the firm by Coase (1937), which belatedly spurned an incredibly large (and still growing) volume of work, arose out of a perceived deficiency in the corpus of microeconomic theory. This deficiency was its inability to provide, or at least failure to address, the rationale for the existence of the firm. In truth, if Austrian economics has no theory of the firm, neither does neoclassical economics. What goes by that name is really a theory of the industry, a theory of industrial structure that is not meant to be descriptive of the real world institutions that we identify as firms. It is thus incapable of addressing questions relating to firm, as opposed to industry, structure.

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And it is the mission of Coasian economics to remedy this, to provide guidance to the organizational structuring of the firm.

We shall argue that in developing this rationale for the firm Coasian economics has ventured outside of the confines of neoclassical theory into an area of economics that is fundamentally incompatible with it (that is, with neoclassical economics). The rationales that have been developed, specifically the various manifestations of the costs of transacting, like opportunistic behavior (Williamson 1985), incomplete contracts (Hart 1995), etc., all have significance only in a world in which there is an absence of the type of equilibrium assumed by and deemed necessary for perfect competition.

Recently there has developed in the area of corporate and business strategy an interesting, and to some extent alternative, approach to analyzing the firm. This has most recently been dubbed the Resource-Based Theory. In this approach is to be found the ingredients of an Austrian theory to the firm. However, as it is now developing, it is, like the Coasian approach, needlessly encumbered by the legacy of perfect competition. Additionally, a key concept in this literature is the concept of rent. 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. In doing this we are able to identify the Austrian theory of the firm. In short, the Austrian theory of the firm is 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.

Rent and Resources

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"[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) needless distinctions and overlooking others. We offer here 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 (Fetter 1977).

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 resources[3] 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 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 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 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]

"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]). 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 or less than the rental price of the service of a productive input. As explained by Fetter (1930:371) rent is simply "the amount paid by contract for the use of a more or less . . . durable agent . . . entrusted by an owner to a borrower for a limited period . . ."[8] And Murray Rothbard has expanded:

> 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).[9]

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.[10] (Thus, to anticipate the discussion below, the explanation for the integration of resources into a firm (and thus for firm boundaries) may originate in different estimates of resource values and a desire to protect and/or appropriate this difference.) This framework suggests the following conclusions:

1. There is no categorical distinction between the earnings of some resources and others, they are all rents (for example, Fetter (1901:320) and Fetter (1977) generally).
2. The value of any productive resource is the discounted value of the rent streams that can be attributed to it.[11]

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.

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 Coasian and 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 distinguish 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.[12]

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.[13]
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 modern literature is not clear or consistent.

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

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).[14] 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, 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).[15] 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 than 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 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 we 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).[16]

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
- 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 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 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 or 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

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. 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. 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)).[17] 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.

Following Hayek we suggest that the most helpful and relevant way to think about equilibrium is in terms of *change* (Lewin 1997a). That is, equilibrium should be understood as a situation characterized by the absence of change in those things that are relevant to decision makers.[18] 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 based on their expectations) can be implemented.[19] 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,[20] as a situation of consistent and correct plans and expectations, then it can be argued that the rent that matters for strategic decisions is rent that is earned in disequilibrium—call this *strategic rent*.[21] 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 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.

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 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 strategically 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 or of organizational form more generally. All businesses surely 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 (strategic) rents is sequentially and logically subsequent to the perception of a potential profit.[22] 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 1980:109 [1951], 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 1976:127–28). 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

We may conclude from the market process perspective then that rents (which are the earnings of the services yielded by stocks of resources) 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. We have transformed the confused taxonomy of the literature surveyed above so that it refers simply to the earnings of resources (more accurately, their services) in different situations as explained below.

Table 1. Rents in equilibrium and disequilibrium.

Source of rent	Equilibrium rents	Schumpeterian-disequilibrium rents
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 "*new* resources" in the production process

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.

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 (though, of course, other types of rent may be). 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*.[23] In a successful firm, a particular type of organizational configuration is an idiosyncratic resource that reflects privileged knowledge (Sautet (forthcoming)).

Finally, if it may be held 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."[24] 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. 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 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

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—monopolistic competition	Rents refer to *differences* 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."
Disequilibrium	Rents refer to *differences* 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 *ex ante-ex post differences* in the earnings of resources and result from opportunism or innovation. Conditions are "dynamic."

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 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 opportunities, unless, of course, they are the result of special privilege (legal barriers to entry).[25] 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.

Notes

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 1987:425 [1871]).
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).
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 of course the "imputation problem" about which a venerable Austrian literature exists.
6. For a further discussion see (Lewin 1998), chapter 9.
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.
8. Also by implication, if a resource is owned one may think of the owner paying the rent to himself.
9. Also: "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 1970:502–503 [1962], see also Fetter 1904:212).

10. Once again this is not to deny or minimize the uncertainties or indeterminancies 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.
11. It 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 (See Fetter 1901:333ff).
12. 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.
13. 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.
14. 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."
15. 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.
16. 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).
17. This goes back, of course, to Robinson (1933) and Chamberlin (1946).
18. ". . . 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).
19. "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).
20. A referee points out that this definition of equilibrium does not preclude a situation of mutual ignorance of profit opportunities by all of the agents—even if their plans are mutually consistent. The referee notes further: "As a result, there can be strategic rents in a situation in which plans are mutually compatible." This does not appear to be correct. First, we would distinguish between an equilibrium and an optimum. Only in the latter are all profitable opportunities exhausted (see Lewin (1997a) for an in-depth discussion). Second, insofar as opportunities are not (differentially) perceived they give rise to no strategic rents and are not relevant for

strategic behavior. There are at any time surely an infinite number of unperceived opportunities some of which will eventually come to be perceived with the passage of time. Thus we cannot agree with the referee who states: "it seems that what matters most is not so much the divergence of expectations, but the existence of overlooked opportunities".

21. It is important to note that we 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."
22. See note 23 below.
23. A referee questions this explanation of the existence of the firm. What should be clear from the text is that the transaction cost-contractual story (Williamson, Hart, etc.) of using integration to protect or appropriate rents that have been created is not so much wrong as it is incomplete. It does not explain the *origin* of the rents (*which, indeed, could not arise in equilibrium* and therefore must be "exogenous"). We have done this by noting that the origin of entrepreneurial rents (which give rise to the potential for opportunistic behavior) is rooted in the nature of knowledge and time which implies that disparate expectations exist. As the referee notes, "entrepreneurial activity, driven by the existence of appropriable rents, logically precedes opportunism". This is a distinctly Austrian view, hence providing an Austrian theory of the firm. We do not claim it is an entirely new perspective (see Langlois and Robertson 1995 and Foss 1994) but our treatment of rent and its connection to equilibrium does seem to provide a new perspective.
24. See footnote 3 above.
25. These "monopolistc rents" are the objective of the activity of "rent seeking" as analyzed in the public choice literature.

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