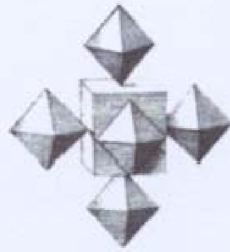

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A FUNDAMENTAL CONTRADICTION IN STANDARD RENT THEORY: A CASE STUDY ON VARIAN'S "*INTERMEDIATE MICROECONOMICS*"

by

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ABSTRACT

In this paper, I examine Varian's treatment of rent in his textbook on Microeconomics. I argue that he holds contradictory conceptions: sometimes rent is defined as surplus over cost whereas sometimes it is defined as cost, as the opportunity cost of fixed factors. I start by arguing that the distinction between fixed and variable factors is not the key for the definition of rent; ultimately, it is monopoly. Varian's conception of rent is, essentially, Ricardo's: rent is extraordinary profit turned rent. On the basis of a self-inconsistent notion of opportunity cost, Varian introduces the idea that rent is the opportunity cost of land, when what he actually defines is the opportunity cost of not renting the land. I also critically examine the related notion of "producer's surplus", and show that Varian's treatment repeats the same contradiction as in rent.

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Introduction

There are, at least, two contrary conceptions of rent in standard Microeconomics, which, in this paper, I examine as they appear in Varian's intermediate textbook on Microeconomics. The contradiction between the two notions of rent is of the same kind as that between the two standard definitions of profit as cost and as surplus over cost; likewise, profit is sometimes defined as a cost and some other times as a surplus over cost. The analysis of the contradictory definitions of rent logically leads to the question as to the distinction between rent and profit, a question which, once again, receives contradictory answers from standard Microeconomic Theory: sometimes rent is different from profit but some other times rent and profit are given the same definition. To put it briefly: the question is whether profit is the rent of capital or a payment to capital which is not of the nature of rent.

The definition of the rent of land (in general, of the fixed factors) as the opportunity cost of land or of the fixed factors obeys to the same defensive strategy as the definition of profit as the opportunity cost of capital. In both cases, we find the same self-contradictory conception of opportunity cost according to which the return to a factor is determined by its uniform competitive market price. This conception of opportunity cost is self-contradictory because it explains the competitive price of land (of capital) n the basis that land (and capital) already have a competitive price: it is, thus, a "*petitio principii*". Without an already formed competitive price of land (of capital) it is impossible to define the opportunity cost of a particular rental of land (or of a particular capital investment). To say that the opportunity cost of a factor is its uniform market price is a self-contradiction, because the factor is not ceasing to earn what it is earning.

Varian begins by defining the rent of land in relation to the notion of fixed factor. According to this idea, rent is the return to fixed factors in so far as they are fixed. However, as the argument unfolds, the tie disappears and two important ideas become clear: first, that the notion of fixed factor is void because fixity in supply is defined in a tautological way; secondly, that "fixity", being nothing, is irrelevant to define rent. The difficulty can best be seen in the contradiction between fixity and competition: to the extent that factors are fixed there is no room for competitive adjustment and, thereby, for competitive equilibrium. Hence the self-contradictory

notion of "short-run competitive equilibrium", where the "short-run" is defined as presence of fixed, that is, non-adjustable factors, which logically precludes competitive equilibrium, as competitive equilibrium demands all the contrary, namely, *mobility*.

It is to be noted that if rent is defined as the opportunity cost of land, it is irrelevant whether land is fixed or variable in supply, just as capital has an opportunity cost despite not being fixed in supply; indeed, the question as to whether capital is or not fixed in supply is not even mentioned in the presentation of the theory of profit and arises only in the course of the development of the theory of rent.

In chapter 22, Varian deals with the rent of land and fixed factors. In contradiction to chapter 18, where he presents the rent of land as an instance of opportunity cost, he says now that the rent of land is the *surplus over cost* that accrues to the owner of land. Obviously, if the rent of land is a surplus over cost, it is not a cost itself. The conception of the rent of land as surplus over cost implies that it is a surplus over *all the costs*, among which the opportunity cost of land must have already been included; otherwise, we could not say "all the costs". This implies that the rent of land is a surplus over total cost and, therefore, a surplus over the opportunity cost of land (if there were any), and, therefore, a contradiction with chapter 18.

The contradiction can be seen from another standpoint in Varian's conceptions of the income of fixed factors. Some times, the income of fixed factors is said to be fixed cost, that is, cost; some other times, on the contrary, it is said to be "rent", or more exactly, "pure economic rent", that is, surplus over cost which is not itself any kind of cost.

In chapter 22 things get somewhat more confused, as Varian gives a third definition of the rent of land which, on a closer look, is but a contradictory juxtaposition of the previous two contradictory notions provided before. He says that the income of a *variable* factor is equal to its opportunity cost, whereas the income of a *fixed* factor is equal to its opportunity cost *plus economic rent*. According to this composition of the two contradictory views, the rent of land has two parts of a contradictory nature: first, the opportunity cost of land; secondly, the surplus over this cost (and over all the other costs).

1.Analysis of Texts

Let us analyze the relevant passages of chapter 22. Varian writes:

> "If there is free entry, profits are driven to zero in the long run. But not every industry has free entry (KMO: In the long-run). In some industries the number of firms in the industry is fixed. A common reason for this is that there are some factors of production that are available in fixed supply. We said that in the long run the fixed factors could be bought or sold by an individual firm. But there are some factors that are fixed for the *economy as a whole* even in the long run." (Varian, 1993, 388).

Thus, if, in the long-run, there are factors that, for the economy as a whole, are fixed, it follows that, even in the long run, free entry will not be possible and, therefore, that profits will not be driven to zero. If there are factors that are fixed in supply for the economy as a whole, the process of entry of capital which makes supply so abundant as to close the gap between selling-price and cost-price stops before this happens. This implies that for free-entry to reach the point of zero profit, the supply of factors has to be non-fixed, that is, infinitely elastic. Let us leave this implication aside for the moment; the problem is: the surplus of revenues over costs that remains because of the presence of fixed factors that prevent free entry is profit or rent? To analyze Varian's contradictory answers to this question, we have to bear in mind the following observations.

The long-run, as opposed to the short run, is defined on the basis of the absence of fixed factors. Therefore, if, as Varian says, "there are some factors that are fixed for the economy as a whole *even in the long run*", the implication is that the *long-run competitive equilibrium* is impossible because some factors will ever remain fixed. If there are fixed factors in the long-run and if the notion of a long-run competitive equilibrium requires all factors to be variable, it follows that there can be competitive equilibrium in the short-run only: the very notion of a "long-run competitive equilibrium with fixed factors" would be a contradiction in terms. Varian is not aware of this conflict and, in the course of his book makes contradictory statements: here he writes that there can be fixed factors in the long-run but, in other places, he writes that, in the long-run, all costs become variable, which implies that, in the long-run, there are not fixed factors.

Notwithstanding this logical problem in the conception of the competitive equilibrium, which deserves separate treatment, it is clear that Varian formulates the theory of rent in the context of competition. He is following in the footsteps of Ricardo, for whom the rent of land must be explained as an outcome of competition and arises

only as far as capitals are allowed to freely compete. As Ricardo sees it, however, the rent of land arises as the competition of capitals cannot overcome the monopoly of the private property of land. This also is Varian's idea, though his system has a problem to make room for the framework he needs to restate Ricardo.

Land is a fixed factor because the supply of land does not change with the price of land; the reason is that the supply of land, the extension of the Earth's surface cannot be increased by offering money to land (if that made any sense). But this is not the only cause of the lack of elasticity in the supply of a factor:

> "There are other cases where the fixed factor is fixed not by nature, but by law. The taxicab industry in many cities is regulated in this way. (…) If there are restrictions such as the above on the number of firms in the industry, so that firms cannot enter the industry freely, it may appear that it is possible to have an industry with positive profits in the long run, with no economic forces to drive those profits to zero." (Varian, 1993, 389)

The "economic force" that drives profits to zero is, actually, competition. The term "profit" in this text means "surplus of selling-price over cost-price", so the lack of competition due to the limitations to entry fails to close the gap between selling-price ands cost-price. It seems, therefore, that the limitation of the supply of a factor, be it by law or by nature, prevents competition from annihilating profit.

The text provides a new hint on the origin of rent. The cause of rent is not exactly that the supply of land or of taxicab licenses is not perfectly elastic, but *monopoly*. The reason why rent arises is that the property of land or of taxicab licenses is not determined by free competition, but that free competition has to accept these property rights as given. In this sense, the property of land or of taxicab licenses is a monopoly power that clashes against the free movement of capital. This would mean that rent is a kind of monopoly profit, which as Varian acknowledges in the chapter on monopoly, involves a transfer from the buyer to the seller and, therefore, a corresponding loss (even a deadweight loss for the economy as a whole).

Varian said above that the existence of fixed factors for the economy as a whole made impossible free entry even in the long run. This seems to imply that, even in the long run, not all profits are driven to zero; the profits of the industries that use factors fixed in supply, by nature or by law, will not be driven down to zero. Is this the case? Varian answers:

> "This appearance is wrong. There is an economic force that pushes profits to zero. If a firm is operating at a point where its profits appear to be positive in the long run, it is probably because we are not appropriately measuring the market value of whatever it is that is preventing entry." (Varian, 1993, 389).

The seeming profit is, actually, the "market value" of the fixed factor, that is, the rent of the fixed factor. Profit has been annihilated, even if competition does not fully prevail. The surplus of selling-price over cost-price that looks like profit is not actually such, but the rent of the fixed factor that is preventing full entry. Because of the presence of fixed factors that hinders free-entry, selling-price remains above cost-price, but the surplus of the former over the latter is not profit, but rent; in this case, rent of the taxicab licenses.

The question arises immediately, Does the rent of the fixed factor represent a monopoly profit? This seems to be the obvious consequence, but Varian does not want to admit it and, to avoid it, he maneuvers to turn monopoly profit into a cost by appealing to a self-inconsistent notion of opportunity cost:

> "Here it is important to remember the economic definition of costs: we should value each factor of production at its market price –its opportunity cost. If it appears that a farmer is making positive profits after we have subtracted his costs of production, it is probably because we have forgotten to subtract the cost of his land." (Varian, 1993, 389).

This text adds confusion by attributing two different roles, capitalist (farmer) and landlord, to the same physical person. It is true that a landlord may also be a farmer, but when the question at issue is the distinction between profit and rent, the obvious way is to separate the property of capital from that of land. The income of the landowner is not the profit of the agricultural firm nor the reverse: moreover, rent has been presented as a deduction from the profit of the firm, that is, as a cost for the firm. Now Varian speaks of the rent of the landowner as if it were the same as the profit of the capital invested on the land that the landowner owns, which is yet another confusion, and writes:

> "Suppose we manage to value all the inputs to farming except for the land cost, and end up with π dollars per year of profits." (Varian, 1993, 389).

This text is utterly misleading. If we follow the example of the taxicab licenses, the π dollars of surplus of revenues over costs do not represent profit, but

rent. Competition drives profit down to zero, so the surplus of revenues over costs that remains is rent. If we add to this the idea that the rent of land is the "cost of land" because it is the opportunity cost of land, it follows that the "land cost" is π.

> "How much would the land be worth in a free market? How much would someone pay to rent that land for a year? The answer is: they would be willing to rent it for π dollars per year, the "profits" that it brings in. You wouldn't even have to know anything about farming to rent this land and earn π dollars." (Varian, 1993, 389).

But if you are in your senses, you would never undertake such a silly business."π dollars per year" is not the *profit*, but the *rent* "that lands brings in". That Varian himself stresses the word "profits" suggests that he is somehow aware that he should write "rent" and not "profit". Note the paradox: land has a "competitive price" to the extent that it is fixed in supply, which implies that the market for land cannot be competitive. Actually, there is competition among the farmer capitalists to get the permission to cultivate the land and, thus, make a profit for capital. This basic feature is obscured by Varian's anti-Ricardian view that competition kills profit. If competition kills profit, it is senseless to undertake any capital investment and, even more, to pay a rent, as there would be no profit from which rent could be deducted. In Ricardo, competition equalizes the profit rate; the farmer is willing to cede some part of his profit as rent to the landlord because, in the end, he makes profit at the same rate as any other capital investment.

As a consequence of his rejection of the Ricardian conception of competition, Varian adds nonsense to confusion. He says: anyone would be willing to pay π as rent because by paying π he purchases the right to be paid π. Right, but where is the point of such a business? You pay $10 to have the right to be paid $10. Ricardo would have said: the farmer is willing to pay $10 to the landlord as rent because he will make more than $10 from the sale of the produce of land. Indeed, he will make profit at the average rate, as what accrues to the landlord as rent is the excess profit over the uniform competitive profit rate. The "market value" of land is $10 in the sense that the rent that that land yields, the extraordinary profit that the property of land enables to pocket is $10.

What Varian means to say, once corrected from Ricardo, is that you pay *rent* in order to get the right to be paid *profits*; that is to say: you have some capital, but do

not own the land which you need for your business. Since without land your capital would remain idle, it pays to rent a piece of land and set your capital to work. You will have to make a deduction from your revenues in order to pay rent to your landlord, but once you have paid this cost (and all the other costs) you get your profit. If this profit is the same as you could do in any other business, then it pays to rent the land. Your landlord pockets an income on the basis of his monopoly power, but you pocket your profit at the current market rate. Of course, rent is a cost for you, a deduction from the profit of your capital, but you still make a profit, and at the same rate as you would anywhere else.

> "The examples in the last section are instances of **economic rent.** Economic rent is defined as those payments to a factor of production that are in excess of the minimum payment necessary to have that factor supplied." (Varian 1993, 390).

What is "the minimum payment necessary to have a factor supplied"? Varian answered this question when treating of profit: the opportunity cost, that is, the competitive market price of the factor. Accordingly, the "minimum payment to have a factor supplied" is that payment which just covers opportunity cost. It follows that economic rent is the payment to a factor *in excess of opportunity cost*: therefore, economic rent does not represent any cost, but all the contrary, a surplus over cost which is not any cost itself. To put it briefly, if rent is economic rent and, if economic rent is surplus payment over opportunity cost, it follows that rent is payment not according to, but in excess of the opportunity cost of the fixed factor.

According to Varian's self-inconsistent conception of opportunity cost, the opportunity cost of a factor is the competitive and, therefore, uniform price of the factor. In the case of capital, the "market value" of capital, which is its opportunity cost, is the competitive or average profit, that profit which competition is supposed to kill. This leads to a paradox in the notion of fixed factor, to show which we can follow Varian:

> "Consider, for example, the case of oil discussed earlier. In order to produce oil you need some labor, some machinery, and, most importantly, some oil in the ground! Suppose that it costs $1 a barrel to pump oil out of the ground from an existing well. Then any price in excess of $1 a barrel will induce firms to supply oil from existing wells. But the actual price of oil is much higher than $1 a barrel. People want oil for various reasons, and they are willing to pay more than its cost of production to get it. The excess of the price of oil over its cost of production is economic rent." (Varian, 1993, 390)

This sounds odd: the excess of the price of oil over its cost of production is profit, isn't it? Indeed, this is the definition of profit that Varian supplies in chapter 18 when he explains that the goal of the firm is the maximization of profit, not of economic rent:

"Profits are defined as revenues minus costs. Suppose that the firm produces n outputs $(y_1,\ldots,y_n)$ and uses m inputs $(x_1,\ldots,x_n)$. Let the prices of the output goods be $(p_1,\ldots,p_n)$ and the prices of the inputs be $(w_1,\ldots,w_n)$. The profits the firm receives, π, can be expressed as $\pi = \sum_{i=1}^{n} p_i y_i - \sum_{i=1}^{m} w_i x_i$" (Varian, 1993, 315-6)

The definition of profit is exactly the same as that of economic rent!

From what we have seen so far, we can summarize the basics of Varian's conceptual framework. A surplus of selling-price over cost-price, that is, of revenues over costs, means an economic rent. Economic rent is, in principle, value in excess over production cost. But, at the same time, the only way in which revenues can be greater than costs is by *monopoly* power, so, in the end, *monopoly rent, economic rent, pure economic rent* or *rent* simply are different names for the same concept, namely, value that appears as surplus value to the part that has monopoly power but as a loss to the rest of the economy.

The term "economic profit" is equivocal in this context, as it is the opposite to "accounting profit"; "economic profit" is, thus, another name for "competitive" or "normal profit". As we saw, competition kills this competitive-normal-economic profit, so the only profit that can exist under competition is …rent.

Since the income of capital profit, consists in the excess of revenues over costs, it follows that profit is the rent of capital. But a factor can get a rent only in so far as the supply of it is inelastic. The greater the lack of elasticity in supply, the higher thee rent; the extreme case would be total fixity in supply, the case of land. If the supply of a factor is perfectly elastic, it gets no surplus value, no return; thus, if the supply of capital were perfectly elastic, capital would not earn any profit. In fact, however, this is what happens under competition.

The entire income of the "factor" "land" consists in rent because the supply of land is perfectly fixed. If the supply is not totally inelastic, the income of the factor has

two parts: one, the competitive gain and, secondly, the extraordinary gain, rent. But, under competition, competitive gain must be zero. It follows that the only gain or return or income or payment that a factor (that is, a capital investment) can earn is extraordinary, that is, monopoly gain or economic rent or rent simply. To add more confusion to this pile of contradictions, Varian smuggles in an inconsistent notion of opportunity cost and tells the reader that rent is an opportunity cost because, if you have the property of some land and do not rent it, you forgo the corresponding rent; therefore, in a final fallacy, the rent you earn if you rent your land is the opportunity cost of your land.

At the root of this conceptual disaster lies a defective understanding of the notions of surplus value and competition. Varian is unable to make any sense of the notion of competitive profit, which appears to be a contradiction in terms but is fundamental to understand capitalism.

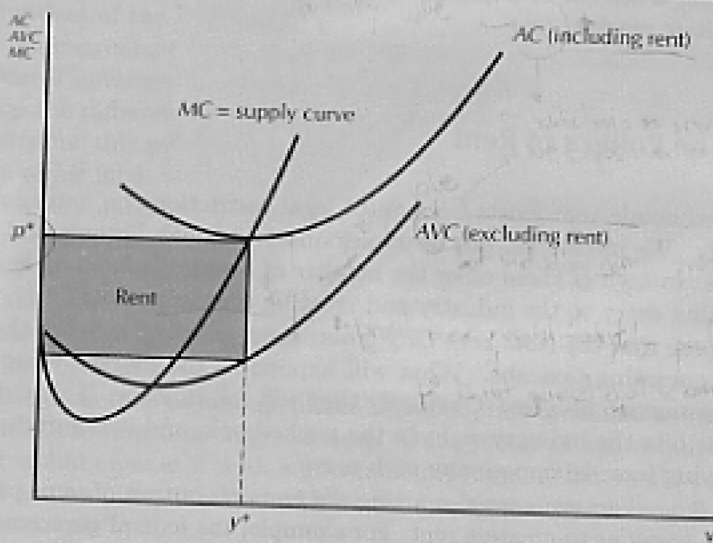
> "From the viewpoint of the economy as a whole, it is the price of agricultural products that determines the value of agricultural land. But from the viewpoint of the individual farmer, the value of his land is a cost of production that enters into the pricing of his product." (Varian, 1993, 390)

This is a paraphrase of Ricardo:

> "Corn is not high because a rent is paid, but a rent is paid because corn is high." (Ricardo, 1821, 74-5)

Varian is saying that Ricardo is right "from the viewpoint of the economy as a whole", but wrong "from the viewpoint of the individual farmer". In other words, Ricardo is right to say that price determines rent "from the viewpoint of the economy as a whole", but, wrong to imply that this would be so when looked at "from the viewpoint of the individual farmer", as in this case the right view is that rent determines price.

"From the viewpoint of the economy as a whole", the price of agricultural products determines the rent of land in the sense that it determines the surplus of the price of agricultural products over their production cost. However, in what sense does this surplus constitute a cost of production for the farmer? (actually, Varian's "farmer" is the landlord) Varian answers that this surplus *must be a cost* in the end because every income involves a cost when looked at from the "viewpoint" of the payer. What Varian



Economic rent for land. The area of the box represents the economic rent on the land. **Figure 22.7**

is actually doing is to put together his two contrary notions of rent disguising the contradiction under the cloak of a difference in viewpoint.

If the rent of land is the surplus over cost accruing to the *landowner*, rent could be said to be a *cost of production* for the *farmer*, and not for the *landowner*, to the extent that the rent of the landowner requires a deduction from the profit that the farmer would otherwise make. The farmer can pay a rent just to the extent that he parts with some of his profits. He is willing to cede such a part of his profit to the landowner because with it he wins the race over the other farmers who are looking for a profitable investment for their capital. Note, however, and this is the point, that such cession does not involve any advance of capital form the farmer to the landlord. By paying rent, the farmer is transferring to the landlord the extra profit over the uniform competitive profit that he would make were not land the subject of private property and scarce. Such cession does not represent any cost of production in the sense that it doe not involve any advance of capital. The reason why Varian introduces the view that rent is a cost right after having defined it as a surplus over cost is the erroneous principle that income, cost and flow of money are equivalent notions

Varian depicts a graph in order to illustrate his idea:

And comments:

"*rent*=$p^*y^*-c_v(y^*)$. This is precisely what we referred to as producer's surplus earlier. Indeed, it is the same concept, simply viewed in a different light. Thus we can also measure rent by taking the area to the left of the marginal cost curve, as we saw earlier. Given the definition of rent in equation (22.1), it is now easy to see the truth of what we said earlier: it is the equilibrium price that determines rent, not the reverse. The firm supplies along its marginal cost curve –which is independent of the expenditures on the fixed factors. The rent will adjust to drive profits to zero." (Varian, 1993, 391).

That “equilibrium price” determines rent is the view of Ricardo, namely, that *competitive price* determines rent. Note, by the way, that Varian does not make now any qualification as to the point of view. The message of the graph is that rent is the surplus of the value of output over variable cost; in other words, that rent is fixed cost. On the anti-Ricardian premise that the only competitive profit rate of equilibrium is zero, the average total cost curve is taken to be the same as the total average revenue curve. The excess of the latter over variable average cost, depicted in a separate curve, it said to be rent. Since every payment involves the corresponding cost and factor, it follows that the surplus of revenues over variable costs is the price of the “services” of land, the permission of the landlord to use his land.

It is interesting to note the similarity between this graph and those where Varian represents profit for the single competitive producer and monopoly profit. In all of them, there is a surplus of revenues over costs. In this case, the surplus of revenues over costs is said to be fixed cost because the cost function includes variable costs only. As I explained above, however, what the graph is saying is that only the factor fixed in supply gets a return, that the competitive return of the factors the supply of which is perfectly elastic and, therefore, properly “variable”, is zero. Remember that, in the long-run, all factors are “variable”; which means that, in the long-run, surplus value in general, be it under the form of profit or of rent, is zero.

In Ricardo, rent adjusts to drive to zero not profit in general, but only *extraordinary* or monopoly profit. As the competitive profit rate of equilibrium will in general be different from zero, Ricardo would not say that rent is the difference between Average Cost and Average Variable Cost, but between normal and extraordinary profit, that is, between average revenue and average cost (leaving aside Varian’s misleading distinction fixed-variable). The result of the transformation of extraordinary profit into rent is that the profit rate for any capital investment is the same: we get a uniform, and positive *normal* or competitive profit.

Ricardo, unlike Varian, does not reject the notions of surplus value and competitive profit; all the contrary, he builds his whole system upon them. Varian, on the contrary, rejects these fundamental notions and ends saying that rent adjusts to drive profit in general to zero, that is, so as to *annihilate* profit altogether, which amounts to the annihilation of the capitalist system. As Varian sees it, competition kills profit

because it does away with surplus value in general. When competition does not fully prevail, there is an appearance of surplus value, but, as soon as competition is given free rein, it becomes clear that the seeming surplus value was, actually, a transfer of value from some agents to others. In other words, that the seeming profit was, actually, monopoly profit; thus, no profit at all can exist under perfect competition: all that can exist is *exchange value*, but not *surplus* exchange value. Capitalism and barter are, ultimately, the same economic system.

Let me stress again the fundamental difference between Ricardo and Varian. According to Ricardo, competition does not annihilate profit, does not close the gap between selling-price and cost-price; it rather equalizes the profit rate for any capital investment. In Varian, competition and profit are opposite notions, because competition is understood to annihilate the commercial margin and, thus, profit. For Varian, unlike for Ricardo, competition equalizes the profit rate at the zero level.

Varian could have said that the surplus of the selling-price of taxicab rides over cost-price is "accounting profit", but that, if we take into account the opportunity cost of the capital invested in the taxicab industry, we would see that "economic (competitive) profit" is zero. According to this idea, the surplus of selling-price of cost-price would be a mistaking appearance: if we correctly computed all the costs, there would be no surplus of revenues over costs.

However, noticing the presence of a factor fixed in supply, or rather, the presence of monopoly, Varian attributes the surplus of selling-price over cost-price (which is thus admitted to be real) to the monopoly property over the factor, to the power to issue licenses to the best interest of the issuer. Now, Varian says that the surplus of selling-price over cost-price is the *rent* of the monopolist seller of licenses. This is Ricardo's theory of rent, according to which rent is the share in extraordinary profit of the landlord class in virtue of their monopoly power over land. But then Varian returns to the self-inconsistent notion of notion of opportunity cost that he had already appealed to in order to defend that profit is not any surplus and says that rent is the opportunity cost of the fixed factor.

This is a Microeconomic version of the standard Macroeconomic error that income and cost are correlative rather than opposite notions. To save the rent-earners from the accusation of expropriation, Varian parts company with Ricardo and says that

every payment must involve a cost because income and cost are the two sides of the same economic reality, namely, of an exchange transaction. When it comes to rent, this erroneous principle implies that rent must be a cost because it involves an income, a payment, and, therefore, it must represent the cost of some factor. According to this idea, Varian says that rent is the payment for the services that the landowner or the license-issuer make to production by accepting to sell the permission to use their factors. However, Varian comes back to Ricardo and writes:

> "Efforts directed at keeping or acquiring claims to factors in fixed supplies are sometimes referred to as **rent seeking**. From the viewpoint of society they represent a pure deadweight loss since they don't create any more output, they just change the market value of existing factors of production." (Varian, 1993, 392)

Rent does not correspond to any contribution to output, which means that it is not the equivalent of any productive service contributed to production by any productive factor. Economic rents involve a deadweight loss for *society*, that is, for the economy as a whole, because they are originated by *monopoly*. By "changing the market value of the existing factors of production", rent implies a transfer of already existing value to some monopolists from the rest of the economy. Accordingly, if somebody gets a rent it is not because of the productivity of what he "supplies" to the economy, but because of a *monopoly* he has.

2. Rent and Producer's Surplus

We have just seen how Varian links rent to producers' surplus. This is interesting as it provides another instance to see the contradictory ideas about surplus vale, profit and rent that plague standard Microeconomics. We are going to see that Varian says, on the one hand, that the producer's surplus is not a cost, but, on the other hand, that it is a cost.

> "Recall our discussion of **producer's surplus** in chapter 14. We defined producer's surplus to be the area to the left of the supply curve, in analogy to consumer's surplus, which was the area to the left of the demand curve. It turns out that producer's surplus is closely related to the profits of a firm. More precisely, producer's surplus is equal to revenues minus variable costs, or equivalently, profits plus the fixed costs." (Varian, 1993, 370)

It is strange to see profits and fixed costs together in the same box of *surplus*: if Varian's weird logic is admitted, why not put together profits and *variable* costs?

How is it possible for fixed cost, being a *cost*, to be part of the *surplus* that accrues to the producers? A *cost* that is a *surplus*? A *surplus* a part of which is a *cost*? This seems to defy all economic logic. It is the more strange when we see that variable cost is excluded from producer's surplus.

Since profit of any kind must be zero in the competitive equilibrium, it follows that, under competitive equilibrium, total revenue must be equal to fixed plus variable costs. This means that, under competitive conditions, the whole producer's surplus consists in fixed cost, that is, in cost, which reveals the contradiction in a stronger way.

"Producer's surplus is equal to revenues minus variable costs, or equivalently, profits plus the fixed costs:

$profits = py - c_v(y) - F$

$producer's\ surplus = py - c_v(y)$". (Varian, 1993, 370)

In Ricardo, rent, being diverted extraordinary profit, is not a cost of production, but the share of the property of land in surplus value. Ricardo's idea is still alive in Varian, but, as is standard in current Microeconomics, it is inconsistently mixed up with its contrary. According to the first, rent is not a production cost, but the excess of revenue over total production cost, including opportunity costs. This first view is akin to that of Ricardo's. But, according to Varian's second view, rent is the opportunity cost of fixed factors, which means that rent is a production cost. The principle underlying this second view is that the value of output cannot be different from the value of input and, accordingly, revenue can never be greater than cost. This implies that what appears to be surplus is actually no surplus, but a production cost.

In Ricardo, producers' surplus would be the temporary advantage, that is, the temporary higher profit enjoyed by the firms or industries with special facilities of production. As he correctly explains, competition tends continuously to do away with these differences and to produce a uniform profit rate.

References

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Varian, Hal R. (1993): "*Intermediate Microeconomics. A Modern Approach*", W. W. Norton & Company: New York and London. International Student Edition. Third Edition.