THE LAND RENT CATEGORY IN MAINSTREAM ECONOMICS AND ITS CONTEMPORARY APPLICATIONS

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Abstract. The economic globalisation process makes the economic factors rotate faster. As a result the value added is intercepted by market mechanism and transferred to the economically stronger entities. That process concerns especially agriculture. There exists a crucial question whether an agricultural land factor is still capable to generate economic rents which would be the determinants of comparative advantages? On the one hand, D. Ricardo’s land rents are vanishing, H. George’s rents are provoking financial crisis, monetarists assumptions are becoming unsufficient, on the other, the land factor gains new environmental applications and there is still a hope that land rents have its origins in a real value. This paper aims at presenting the evolution of the land rents theory starting from classical economics. The author makes an attempt to answer the question if the land rent theories are still relevant and how land rent category can be implemented in agricultural policy of the UE? One formulates a hypothesis that the neoclassical theory of rent usually presented in economic textbooks is insufficient to describe reality reducing the sources of land rent to a low land supply flexibility and treating that as constant variable in economic models.

Key words: land rent, mainstream economics, land utility, Common Agriculture Policy

INTRODUCTION

An economic rent means additional revenue which is linked to any production factor over the transfer income needed to induce the factor to serve those services in this implementation [Begg et al. 1993]. Thus, an economic rent appears in the situation of permanent assets rarity or if there is not any possibility to evaluate the resources and include it ex ante into account. If an asset is evaluated in the market mechanism and its
supply can increase, an economic rent will disappear, becoming a sort of cost. Theoretically, a rent can’t take negative values, but the process of its creation doesn’t coincide with the process of profit-taking. This is why, negative residual income of rare assets means that economic rent has been intercepted by other enterprises.

Let us notice that the land factor fulfils first of the conditions – it is characterized by permanent rarity. This feature was noticed by the economists at the beginning of XVIII century in the Physiocrats’ school who regarded the agricultural land rent as the only kind of a pure product manufactured by the farmers and consumed by the landlords in shape of lease rent. In the Physiocrats’ theory there exists the assumption of a zero accumulation of a “barren class” – nowadays of industry, in which the average incomes were reduced to zero due to competition and the rents did not exist. The Physiocrats’ school confined to state the fact of land rent creation in farming but did not take on explaining what is the source of land rent? Is the rent substance created by the relatively higher land productivity and does it result from real processes of goods production or rather subjective regarding of the exchange value and assets scarcity? Physiocrats did also not take on the situation in which the farming producer is simultaneously the land owner and does not obtain the rent. Who takes over the rent then and what are the economic consequences for agriculture and all economy? The above dilemmas fall under the key problems which the theory of land rents encounters and it must be highlighted that nowadays they become more and more important. To emphasize them we can implement a following simplification: if the land rents do not come from real production processes they can become a speculation object and the destabiliser of market economy, if they are conditioned by the land productivity, on the contrary – they are the indicator of the extended reproduction and the basic factor of farming development. The first aim of the following paper is to contrast the opposite opinions formulated in mainstream economics from XVIII century up to now concerning above mentioned dilemmas, especially the question of the source of land rent. The second aim is to answer the question if the land rent theories are still relevant and how it can be implement in agricultural policy of the UE? One formulates a hypothesis that the neoclassical one usually presented in economic textbooks is insufficient reducing the sources of land rent to a low land supply flexibility and treating that as a constant variable in economic models.

FROM ADAM SMITH TO DAVID RICARDO – CLASSICAL LAND RENTS THEORY

In literature of main economy trend David Ricardo is considered to be the author of land rents’ theory. Among the precursors we can find Adam Smith and Thomas Malthus who differed four forms of land rent – of fertility differences, location, extra capital expenditures and general rent – absolute [Smith 1954]. In “The Wealth of Nations” Adam Smith from the beginning pays attention to different sources of land rents’ origin. Firstly it is the farmers’ labour, secondly the land factor reward, thirdly “monopoly price” paid for using the land [Mieszczankowski 1964]. Thomas Malhtus similarly searches for the sources of land rent in land scarcity though he does not consider the monopoly prize stating that when concerning cereal if it comes to the magnitude actually produced it is sold on the indispensable (read: market – BCz) price on the contrary
to Adam Smith who thought that “farming products when being sold always reach the monopoly price” [Ricardo 1957]. From the above we can conclude that at the very beginning of describing the rent the discrepancies appeared.

The key issue when assessing the sources of land rents is adapting the adequate value theory. In this direction the following analysis develops in post-classical trends of land rents. Two attitudes arise – the supporters of the theory based on labour and subjective value theories including the theory of production marginal cost. In view of the value theory based on labour the issue of land rents is the most widely elaborated by David Ricardo and Marxist economy.

Ricardian trend which as the first one developed the issue after Adam Smith assumed only the existence of differential rents and negated the existence of absolute rent. “If the high price of cereal was a result and not the reason of rents the price would change accordingly to the increase or drop and the rent would be the element of the price. However, the price of cereal is established by the cereal produced with the biggest labour input and the rent even to the smallest extent does not constitute and cannot constitute its price (...) For the price is always defined by the income gained form the last part of capital which does not pay any rent” [Ricardo 1957]. Thus marginal plots simultaneously define the value and market price of cereal and if the value stated this way will be higher from the borne costs plus an ordinary income then the rent appears – but it is always the differential rent.

The theory of land rent as presented above is equal to the theory of marginal productivity assuming the existence of two-factor production – land and labour. The law of decreasing incomes in David Ricardo’s times was mostly connected with farming and agriculture. The carried arguments based on historical data indicating that the growth of population forces people to cultivate the land of a lower class or that the soils of different fertility are cultivated at the same time. It was to prove that the added value from the land of certain class cannot be increased along with the constant or decreasing outlay – the expenditures per marginal product must be higher and higher. In this view the land rent is actually the product surplus over the capital and labour inputs borne by the marginal rural household in intensive crops and its existence is prejudged by the limited land supply [Blaug 2000]. The rent stated this way equals the marginal land productivity. In extensive crops David Ricardo admitted the land rent payment also for the marginal farms.

So the absolute rent would only exist in case of extensive production conditions or would equal the differential rent. However, the question is whether in such a situation marginal lands would be excluded from goods production if they did not bring any rent? For the owner it would mean their renting for free (if he/she was not the landowner at the same time) or not including in the economic calculus by the farmer-owner the alternative rent cost. The Ricardo’s theses i.e. the opinion according to which “the capital used last does not bring any land rent” was criticised by Rodbertus [1959] and then by Karol Marx. Both arguments differed to some extent nevertheless they formulated the theory on absolute rent creation mechanism more precisely.
Karl Rodbertus – economist in XIX – searched for the absolute rent’s sources in the value added to capital relation in farming comparing it to other economy branches. It must be stressed that speaking about the capital he meant fixed assets along with salary funds but without land capital. The analysis starting-point was the assumption of the expected profit rate levelling in all economy. Assuming that the expected profit rate is defined on the same level in farming and its surrounding the higher relation of value added to capital implemented in farming than in other branches means higher efficiency of inputs in agriculture and the existence of land rent. The above mentioned relation according to Karl Rodbertus is immanently higher in agriculture on account of the fact that the basic share of capital inputs in industry is of resources and machines of which the agricultural value is much lower [Mieszczankowski 1964]. In other words the relation of fixed capital inputs to a labour inputs expressed in value of wages or by quantity of the employees in industry is permanently higher assuming constant profit rate. So in the agricultural surrounding the capital accumulation processes appear relatively faster with all their negative consequences.

The above thesis was rejected by the research carried out in the USA and highly developed countries of western Europe in the 60s. However there are many premises to return to it in times of transformations of CAP of the UE form so-called Agenda 2000. As we know the food economy of the EU encountered numerous barriers which were impossible to overcome in capital-consuming intensive farming production. Riskily it has approached to the point in which the environmental and social order is disturbed which leads to irreversible changes in particular resources of human eco-system. The changes gain the support of electorate in highly-developed countries where the demand for the farming products becomes stratified, inclining to the healthy food and environmental services resulting in higher price paid in taxes from which agriculture is subsidized. Hence the shift of the EU agriculture to pro-environmental and pro-ecological path forces via the market mechanisms the reversing of trend of agricultural production intensification. In this context the expired Marxian economics – theses of a lower organic capital in farming than in its surrounding – seem to gain a new meaning. In sense of “sustainable agriculture” model promoted by the richest countries, the Marxist theory paradoxically is going to be relevant again.

So Karl Rodbertus brought the mechanism of creating a land rent down to the so-called “organic capital composition” which in farming was to be immanently lower than in the industry. This conception is significant because it belonged to the key categories in the analysis of added value which was carried by Karl Marx. For as it was mentioned it is the Marxian economics that took on the widest analysis of the absolute rent within the value conception based on labour. De facto it was the polemic with David Ricardo, identifying the absolute and differential rent on the basis of theorem of decreasing marginal resources efficiency. Quoting the reasoning of Marx the absolute rent constitutes the crops prices because in conditions of a growing demand the prices must increase to the level which will allow to cultivate the worst lands. It means that land rent is paid to the landowners by higher prices. In other case they will not assigned the land for production purposes. Hence, the rent of marginal grounds is not... “the consequence of the crops price growth” but on the contrary: “this circumstance that the
worst soil should bring the rent to let it be cultivated would be the reason of the crops price growth to the level when this condition can be fulfilled” [Marks 1959].

In the view of the value based on Karl Marx paper the absolute rent is defined as the product value surplus over its production price which appears for two reasons:
– monopoly of the land ownership,
– a lower relation of capital to the labour factor comparing to other branches - on the condition of profit rates levelling.

However Marx did not prove the basic assumption of the presented theory of absolute rent – that there exists the mechanism which brings the agricultural profit rate to the average. His contemporary economists reproached the lack of a free competition in the agricultural sector which prevents it. The mechanism seems to be the most faulty when this sector is in the bad economic condition [Mieszczankowski 1964] and loses relatively more than other branches. Does the assent to a lower profit rate than the average question the existence of an absolute rent? Not necessarily – the acceptance of a lower profit rate in agriculture in times of recession theoretically should keep the realisation of land rents at the previous level.

HENRY GEORGE’S RESIDUAL RENT AND ITS INFLUENCE ON MARGINAL ECONOMICS

An American economist – Henry George – defined the land factor much wider than David Ricardo and Karl Marx, i.e. as a resource which is neither the capital nor labour. So it is a residual interpretation which in practice covers much wider range of natural resources than traditionally considered land. In this approach the land was separated from the ground and this the difference in comparison to other resources is that it cannot be withdrawn from the production as labour and capital (no matter if its products are useful in an economic sense). It can only be appropriated or got rid of the ownership passing it to another entity.

Land rents are a part of the product which goes to the landlords or owners of other natural resources due to the ownership. The above definition partly covers other conceptions formed in XIX century. Nevertheless, Henry George specified that in an economic sense rents are only the payment for using the land excluding any inputs to improve it. In other words the land rent concerns the “virgin” land and it should not be mistaken with the capital and labour gratification involved including the land into the manufacturing processes.

The land resource as a residual resource covers numerous values of an inflexible supply. In a primary definition it mostly covered resources, natural powers and the opportunities provided by the nature such as:
– arable land – with the potential to produce the agricultural resources,
– unpolluted air,
– water supplies,
– natural resources,
– mountain chains, seas and oceans, lakes, rivers, icebergs, forests etc. – in this group we can include all lands of tourist and recreational interest.
Nowadays to this list we can also add:

– radio waves and an access to various frequencies,
– air-routes,
– communication and telecommunication infrastructure including internet access,
– political balance in the world regarded as the control of crucial resources,
– national cultures which heritage is permanently connected with land,
– time as an element of transactional costs,
– sovereignty of nations and inviolability of land, sea and air borders [Backhaus 1997].

All factors mentioned above are determined by widely implied localisation factor and they generate specified economic rents ranks by Henry George among land rents. Their market value results most of all from their scarcity and is exclusively by the demand on specific services. For this reason rents connected with the localisation factor are particularly prone to speculation and in a moment when they exceed acceptable borders they can lead to a global crisis. Current financial crisis which started in the real estate market is certainly of such a basis.

Land rents become a destimulus of economy development. Hence George [1981] in his conception of a single tax postulated a take-over of an entire land rent by the State in a sense of taxation of a land itself without the existing improvements.

Many economists of a main trend protested against Henry George’s conception many times since it was created but it is also easy to find the votes for as well as the attempts of adaptation in modern economies – de facto the solutions based on it function in practice also in Poland (a land taxi is an example). Despite common belief eminent representative of marginal economy mostly supported interventional theses of Henry George within the nationalisation of land rents [Foldvary 2008].

Carl Menger [1976] claimed that the law of diminishing marginal utility concerns all resources except land. Therefore economic rents stay only in the payment of one factor which creates unique products and services [Menger 1976]. The land factor is characterized by offering space in which all other factors are placed. So it is impossible to replace whereas labour and capital substitute each other.

Hermann Gossen following the efficiency premises reckoned that land should be the possession of all society which in practice means the national state because then it is possible to rent it on best conditions and maximalisation of resource’s productivity. It should be understood this way that the state has the opportunity to buy the land at relatively low price (nationalisation) and consequently quite strong bargaining position to rent it with profit. In turn the leaseholder will use the land much more efficiently than the owners because they will not speculate on the land rent growth [Foldvary 2008].

Menger’s student – Freiddrich von Wieser – formed the alternative cost theory and developed the idea of his master to indicate the production factors’ value on the basis of goods’ value which they produce. He recognised the land rent as a feature beyond political system which exists also in socialism – however in this case it was realised by the state or as some prefer – all society [Weiser 1971].

Léon Walras contributed an important observation into the theory of land rents. Assuming that prices of goods rise when their marginal utility grows or the supply drops, the development of market economy causes that salaries grow but not necessarily whereas the land rent holds the increasing trend. Intensity of needs which are fulfilled by the land goods (i.e. its marginal utility) grows along with the population growth.
From the above sake benefits should also be shared by all society and not only realised by individuals. Walras [1990] also proposed the way how the state can take over the rents in capitalism. The first step is to implement a system of land taxes and this way to overtake a part of ownership powers of land resource. Secondly, land redemption from the owners by bond issue and its lease. Thirdly, land bonds’ repayment from growing lease rents and gradual land taxes abolition.

According to Vilfredo Pareto, in contrast to Austrian school, prices of production factors are not the derivative of goods’ value which they produce but they only state the conditions of balance of demand and supply function. Production costs do not indicate the final goods’ prices but also the prices of final goods do not show the costs. If the price of a particular good generates the economic rent then the supply of a rare factor and its products increases reducing the marginal utility and price. Nevertheless so-called land capital is a specific kind of capital because it is characterised by a fixed supply and though its prices are created by the same mechanism of demand-supply balance it can generate the economic rent. Costs in economy are the lost benefits. Land as a natural production factor does not have an alternative cost but it is of a significant social importance. Therefore a takeover of land rents by the state is a progress in Pareto [1964] sense and it raises the allocative efficiency.

NEOCLASSICAL LAND RENT THEORY – IS IT STILL RELEVANT TODAY?

Finally, the economy of a main trend developed the land rent interpretation of Alfred Marshall focusing on market factors, i.e. demand-supply mechanism. In this concept only land supply flexibility decides about the rent existence. The rent of an income surplus of a particular factor over its supply price is reached only by those factors which are characterised by an inflexible supply. Otherwise the supply of such a factor would grow and the rent would drop to zero. This reasoning concerns also the land factor – each cultivated hectare reaches the so-called transfer price which is established on the basis of land demand plus the differential rent when the income from this factor exceeds the transfer price [Robinson 1948]. Similar reasoning but even more simplified was presented by Samuelson [1958] – the level of land rent indicates the intersection point of fully inflexible supply curve of land supply with the demand curve. So a land rent exists and varies due to the demand function course. In these conditions each arable land brings the rent which is included in production costs, constituting the price. The rent must be realised in case of a leased land – otherwise the leaseholder quit the cultivation. A producer alike who is simultaneously the land owner must realise the rent – otherwise it is more profitable to sell the land. Only the state can overtake a part of the rent in form of taxes.

The above reasoning is presented in many contemporary economic text-books. So, according to the approach originating from neoclassical economy this is the supply limitation which created the absolute rent due to scarcity, while the land of different quality creates differential rents (first ones) treated as a difference between production costs on marginal and more fertile land. However, if the fertility of various plots differs due to the capital inputs (fertilization, melioration, etc.) then the so-called second differential rent appears. In turn a higher productivity in financial categories caused by local-
isation creates so-called localisation rent (third differential rent). Whereas, in case of specific environmental virtues of the resource a fourth differential rent occurs – the so-called environmental rent.

This theory for over a hundred years resisted the time [Fiszel 1957]. The question still remains if nowadays, at the beginning of XXI century it is still valid. Some contemporary economists of a main trend undermine its validity introducing into the analysis a third factor – capital. According to them the negative effects of labour inputs growth in relation to land resources are fully compensated by the capital inputs even in conditions of lack of the technical progress. Bearing in mind that a technical progress additionally increases capital productivity, the limited land sale is not a problem anymore because in a long-term its total product is melted in salaries and interest (and there is no third production factor) and some special land rent theory is not necessary [Blaug 2000].

The agricultural subsidies policies in highly-developed countries, e.g. in the USA or EU seem not to prove the above constatation. The more that the subsidies’ level despite the support instruments changes is constant or growing as the analysis carried out since the 50s of XX century have shown. Why do we still retransfer rents of a factor which according to Mark Blaug can be considered constant? It seems that the absolute rent must be paid because the factor of agricultural land despite new solutions is still characterized by scarcity in food production. The scarcity has however got a new meaning – means that rising productivity encounters impassable barriers of environment and human health degradation. On the one hand the intensive way of agricultural development is closed for highly-developed countries. On the other more sustainable growth delivers new kinds of goods and services broadening the land function and supply of land utilities. If the expected land rent constitutes land prices which de facto grow systematically, the above mentioned conclusion has been confirmed. Thus the land prices represents the actual value of expected land rents – perpetual rents [Woś 2006]. The conclusion is that land produces real utilities (not speculative values) which can be sources of land rent assuming that the expected profitability of capital in agriculture is higher than average. So, how to explain the fact that so many individual farms have negative residual incomes? It is possible that land rent occurs but it is intercepted by other entities (for example because of monopoly) [Czyżewski 2008].

In the author’s opinion it is a big simplification to reduce the sources of land rent to a low land supply flexibility. The single fact of resource immobility does not create any additional value and it constitutes only the source of market unreliability. It leads to the above mentioned interpretation of Henry George in which the land rent is considered as a destabilizer of market economy. Disputable seems to be to put down this feature to arable land which in individual agriculture rarely becomes speculative. Neoclassical theory of a land rent does not explain the above mentioned problems therefore there are premises to develop it into a wider theorem holistically seizing creation process and realisation of a land rent.
A SIGNIFICANCE OF LAND RENT CATEGORY FOR AGRICULTURAL POLICY OF THE UE

It is worth focusing on how the valorisation of land rents can be implemented in agricultural policy of the UE? Land rents provide at least two functions very important for the agricultural sector development:

Firstly, if the absolute rent does not exist in the individual farms performances it is a signal that there is no reproduction process, so the farm or a group of farms stop providing their economic functions and the assets degrade. Those are important guidelines for reorientation of used CAP's tools, macroeconomic and fiscal. The above situation does not mean that the land rents do not exist but that they are in some amount intercepted by market mechanism and other entities use them. This situation can be corrected by the adequate budgetary retransfers or fiscal tools.

Secondly, if the land rent obtained by an individual farm (or by all sector) is higher than the value resulting from land prices, it indicates the process of restructurization and one can estimate to what extent it has progressed and calculate the rate of broadened reproduction. It is a guideline how the flows within institutional structures complete budgetary transfer. In practice this value shows how much the structural support of II Pillar of CAP addressed to specific households can be lowered in order to unburden the tax-payers assuming that the role of the state was intercepted by institutional flows. Moreover, income growth which is not estimated by the market has an impact on all macroeconomic policy because it causes particular growth of global demand and starts the multiplayer's effects.

CONCLUSIONS

Finally, an interesting conclusion is that paradoxically from all the presented land rents theories, it is the Marxist approach which becomes the most up-to-date because it has the most common points with the reality of CAP and introduced reforms. The history described a circle. Marxists’ explanation of the land rent substance basing on organic capital composition was disproved by the reality of post-war years of the second half of XX century. This time brought a dynamic growth of capital-absorption in farming, the drop of the employment rate in agriculture as well as production intensification till the possible limits of ecosystem. Industrial model of agriculture which struggles with food overproduction problem and low prices of farming products denied the existence of sources of land rents in the theory based on labour and land utility. In times of industrial farming directed to produce cheap food, the marginal utility of land was dreadfully low, threatening this resource with degradation. Many economists regarded the land factor function as constant announcing almost its full substitution with capital. The changes which de facto are forced by the consumer in highly-developed countries in reality depend on reversing the land utility trend form decreasing to the growing one. In globalisation times the natural environment and land factor regain their previous utility for consumers and even gain a new one which is proved by the growing dynamics of land prices. The land factor in highly-developed countries becomes more and more complementary in comparison to capital. In this context the reality is closer to
Marxist theory of a land rent, which searched for its sources in agriculture than to a simplified neo-classical vision which made the rent’s level fully dependent on food demand function and land scarcity.

REFERENCES


KATEGORIA RENTY GRUNTOWEJ W EKONOMII NURTU GŁÓWNEGO I JEJ WSPÓŁCZESNE ZASTOSOWANIA

Streszczenie. Globalizacja ekonomiczna przyspiesza przepływy czynników wytwórczych w skali krajowej i globalnej. W rezultacie wartość dodana jest przechwytywana przez mechanizm rynkowy i przepływa do podmiotów silniejszych ekonomicznie. Dotyczy to w szczególności sektora rolnego. Pojawia się ważne pytanie, czy w tych warunkach czynnik ziemi jest zdolny do generowania renty ekonomicznych, które stanowiliby przesłankę przewag komparatywnych? Z jednej strony – ricardiańskie renty gruntowe zanikają, renty ekonomiczne według doktryny Henry George’a wywołują kryzysy finansowe, a założenia monetarystyczne okazują się niewystarczające. Z drugiej strony – czynnik ziemi zyskuje nowe zastosowania w zakresie usług środowiskowych, które pozwalają założyć, że renty gruntowe mają źródło w przepływach realnych. Celem artykułu jest ukazanie ewolucji teorii renty gruntowej od czasów ekonomii klasykowej do dzisiaj. Podjęto w nim próbę odpowiedzi na pytanie, czy znane teorie renty gruntowej są aktualne i jak można wykorzystać kategorię renty gruntowej we współczesnej polityce rolniczej Unii Europejskiej?
Stawia się hipotezę, że teoria neoklasyczna, na ogół prezentowana w literaturze tematu, jest niewystarczająca do opisu rzeczywistości, ponieważ redukuje źródła renty gruntowej do nieelastyczności podaży ziemi i traktuje ją jako stałą w modelach ekonomicznych.

Słowa kluczowe: renta gruntowa, ekonomia nurtu głównego, użyteczność czynnika ziemi, Wspólna Polityka Rolna

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