Does Taxation Change the Land Strategy of Farmers? Evidences from Albania

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Abstract

Fallow land is a major issue in Albanian agriculture. According the Faostat figures, nearly 20% (between 16 and 17%) of agricultural land is fallow land, and more than 1 out of five agricultural farms, do not cultivate at least one part of their agricultural land. The agricultural land is a scarce resource in Albania, with 0.4 ha/habitant (FaoStat), Albania is ranked among the countries which have a less surface for habitant, on Balkan peninsula. On this regard, the agricultural policy should provide instruments in order to incite farmers to increase the cultivated land surface. The paper seeks to assess the optimal level of a tax on fallow land which is going to change the farmer strategies, and reduce the surface of the fallow area. It proposes a hypothetic scenario and asses the willingness to pay of owners for leaving their agricultural land not cultivated, and or to rent or sell it to farmers who are willing to cultivate it.

Keywords: Fallow land, land taxation, payment card method, Albania

JEL Code : Q15, Q24, R14, R52

Introduction

The land abandonment is an important issue in use of natural resources. The agricultural and fertile land is limited and not always exploded on a proper way (Gradinaru et al., 2015). During the next 20 years the increase of agricultural land surface will be hampered by two main phenomena i.e. the abandonment of the less productive agricultural surface and urbanisation (Bruinsma, 2003). The phenomenon is particularly intense in the temperate climate area (Griffiths et al., 2013). In the EU countries the agricultural land abandonment is due mainly to the decrease of the economic viability of the extensive (low input) small scale agricultural systems (Keenleyside and Tucker, 2010). According to Griffiths et al. (2013) during the last twenty years the land use has dramatically changed on the

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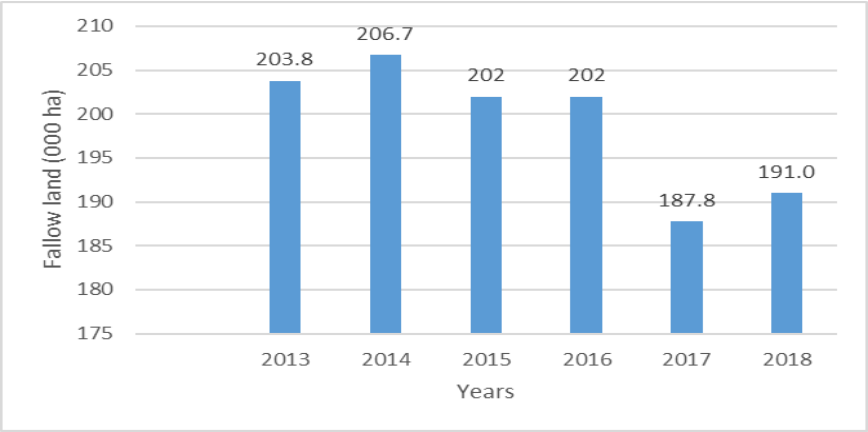
former Soviet Union and Central and Eastern Countries (CEE) having strong implications on agricultural production and affects carbon pools, biodiversity and food security on a local and even on a global level (Schierhorn et al., 2012). The agricultural area abandonment is selective and affects mostly the mountainous, and poor soils areas (Keenleyside and Tucker, 2010). The economic viability and the important level of internal migration make this phenomenon even more important in Albania. The fallow land is an important problem of Albanian agriculture. The de-collectivisation process in Albania produced a large number of small and fragmented farms all over the country (A. Civici, 2010). The high share of fallow land in Albania is product of at least the following characteristics : 1)The high number of plots with in the farm –many times even several kilometres away one from the others-(Sabates-Wheeler, 2002)(Civici, 2003), 2)The lack of land security due to a problematic process of compensation to the former owners (Zhllima and Guri, 2013), 3)The massive migration process from the urban to the rural areas (Guri et al., 2014), 4)The mediocre quality of some agricultural lands – integrated in the agricultural land during the '70-80.

Albanian agricultural statistics on fallow land in Albania[1] are not available. Nevertheless, statistics from FAOSTAT show that nearly 200 thousand ha or 16% of the agricultural area is fallow land (see figure 1). According the Albanian Institute of Statistics), more than one out of 5 agricultural farms in activity (23% for 2013)(INSTAT, 2012), do not plant at least a part of their land. The fallow land have decreased from 16.2% of the agricultural land on 2006 to 8.2% on 2012, it is still quite important in some regions of the country. The regions that have the highest share of the fallow area, are those with the highest share of internal or external migration (Guri and Jouve, 2015).

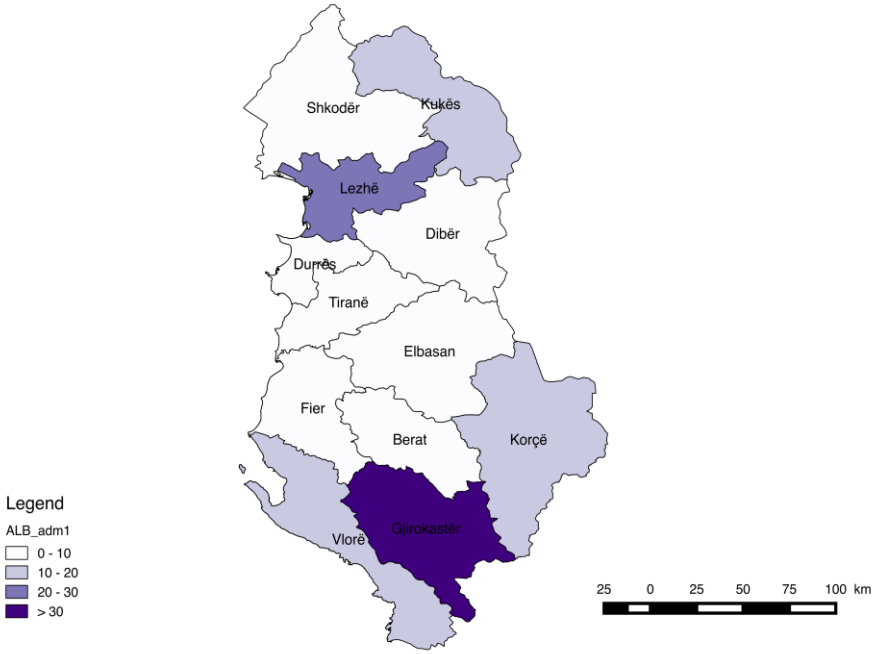


Source: FAOSTAT

Figure 1: Evolution of fallow land surface in Albania for the period 2014-2018

[1] The figures of fallow land in Albania are calculated only for the farms that do not cultivate at least a part of their agricultural land, in these figures are not taken into account the abandoned farms belonging to families that have migrated nationally or internationally.

The figure 2 shows the evolution of the fallow land on the regional area, for the period 2006-2012 (which was the last year when this data was made available by INSTAT). As the figure shows, the phenomenon of fallow land is more present in the regions of Gjirokastër and Lezhë, but exists in the majority of the regions of the country (Korçë. Kukës, Durrës, Vlorë) and hits not only remote mountain areas, but as well coastal regions like Tirana and Durrës.



Source: Ministry of Agriculture, Rural Development and Water Management (MBUMK, 2006)(MBUMK, 2012)

Figure 2: Evolution of the fallow land (in share of total agricultural area) in regional level in Albania in the period 2006 – 2012

Land taxation is a way to increase the owner incitation's to better use agricultural area and to better introduce the later on the land market. The land taxation is considered to be as an effective way of developing the land markets in Albania, but still now only a little is made to apply this policy instrument in Albania.

Many scholars have analysed the limited land market in Albania, as an impeding factor for a productive land use in agricultural sector. The land markets are developed mainly for not agricultural purposes (Guri, 2008)(Guri et al., 2014)(Guri and Jouve, 2015) and the rental land markets are limited due to a high land insecurity existing on the rural areas (Zhllima and Guri, 2013). All these factors, do not produce an effective land market even though where this is possible and economically efficient. As a result, in many rural areas can be verified a paradox.

On one side small farms have difficulties to be economically sustainable due to their limited size and fragmented land, and on the other side fallow areas are voluntary set aside from the agricultural production.
The aim of this paper is to identify the taxation level for the fallow land that improve the land productivity by cultivating and or introducing the later on the land market.
The paper is organised in following parts: the theoretical background, methods and procedure, results and discussion and conclusion.

Theoretical Background

The taxation of agriculture in developing countries is important to improve the incomes of the rural population but it is as well important to finance the non-agricultural sector on the rural and urban area (Khan, 2001). Khan (2001) considers that one of the main objectives of the farmers taxation is to improve the efficiency on the agricultural sector and to increase the diversification of the sector.

The increase of the agricultural inputs efficiency used in production process and especially land, is considered to be one of the main non-revenue objectives of the land taxation (Skinner, 1991a).

Skinner (1991a) considers that the application of a land taxation may encourage the absentee land owners to sell their land to small landholders. The scholars do not provide large theoretical explanations why and how the land taxation may improve the land use in agriculture (Skinner, 1991a). Theoretically the tax application should not affect the land use strategies, nevertheless Libenstein (1978), considers that the level of land taxation may incite farmers to use better the land by using more efficient methods of agriculture. However, an important land taxation may have both positive and negative effect on land productivity and farmers' incomes (Yamamura, 1986), (Lindauer and Singh, 1979). In the same vein, the land taxation is considered to reduce effectively the land speculation prices (Skinner, 1991a).

According to Skinner (1991a) the land taxation may be used for environmental purposes (Pigovian taxation). Taking this into consideration, the land taxation may be used as well to reduce the fallow area if the existence of the latter is considered as a negative externality for the society.

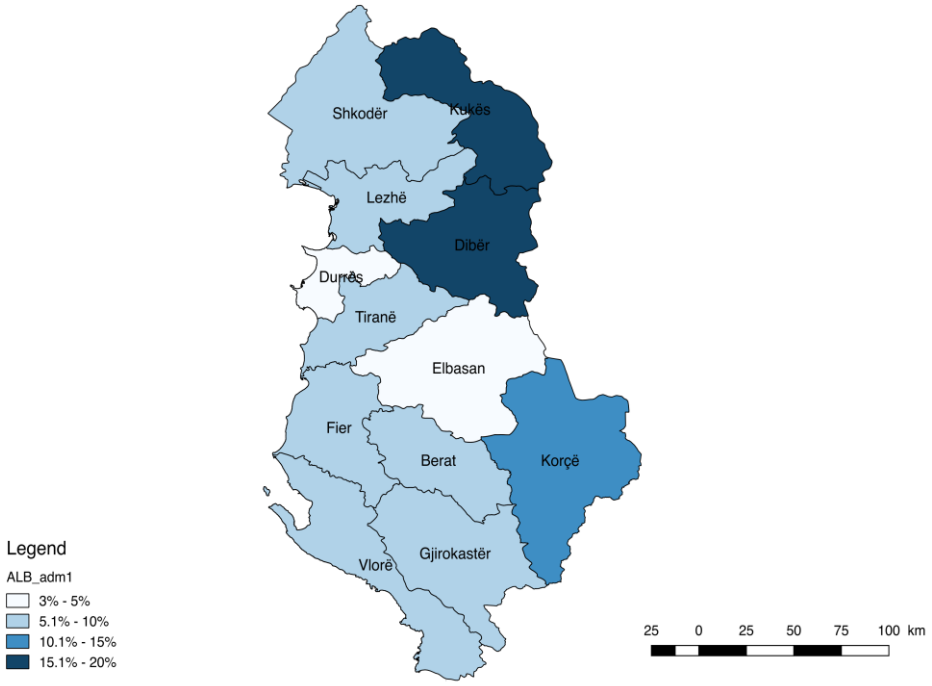
Generally the land taxation is conceived to be an instrument for funds collection on the rural areas, due to little or no impact on the agricultural product prices (Skinner, 1991b). However, there are little evidences on land tax, used to increase the efficiency of land on agricultural sector or to bust the agricultural activity on the rural areas. Hoff (1991b) stated that the combination of an land tax with the product taxation produces an increase on the labour supply provided by the farmers (Hoff, 1991a). In the same vein, Lewis (1984) states that the land taxation increases the farmers marketing activities. In land taxation the whole burden is carried by the owners and may lead to land prices increase (Skinner, 1991b). Nevertheless, the land taxation has not to be considered as a miracle solution

because its variability on land quality and sites value, makes difficult its application (Skinner, 1991b). In rural areas, especially in developing countries, the limited number of market transactions, the imperfections in risk land markets evaluations can give rise to tax valuation which are important constraints on tax policy and economic efficiency (Hoff, 1991b). Nevertheless, the land tax is proved to be an ideal tax and the risk is not considered important (Hoff, 1991a). For the above mentioned factors the application of the land taxation differs according to the country. In the Southern Asiatic countries, it is applied to the small-scale farmers, and on the Latin America countries only on large-scale holdings and for farms producing export products. Same times the land taxation is applied on land value and other times or in land quality (Skinner, 1991b).

Methods and Procedure

The paper analysis is based on a survey made with land owners that have migrated on the urban areas, and do not cultivate their land on the village where they come from. The interviewed landowners are selected among those that have migrated from the rural areas to the surroundings areas of Tirana. The sample size is defined with the confidence level 95% and the margin of error 5%. This approach offers a convenient sample size without compromising the reliability of the results.

230 landowners are interviewed coming from different areas of the country. During the interviews it has been paid attention to increase the share of representatives of the areas where the fallow land is more important.



Source: Survey

Figure 3: Distribution of the interviews according the respondent origin

The questionnaire is organised on 5 parts. The first part of the questionnaire is dedicated to socio-economic information of the landowner (e.g. age, education, members of the family, origin county, date of the migration toward Tirana etc. In this part we haven't gathered the information concerning the incomes of the family. We know that this information is very important to understand the actual land strategy of the landowners but it was very difficult to have reliable information on family incomes. The second part of the questionnaire is dedicated to the land distribution strategy applied in different counties of Albania in 1991 and the land surface the family has on the origin rural area. A large number of scholars (A. Civici, 2010)(Zhllima and Guri, 2013) has stated that the de collectivisation process has not been applied on the same way all over the country. On the North and North-East regions of the country, the land distribution is made according the historical properties of the families, whereas on the South regions of the country the distribution is made on the equal basis in terms of quantity and quality of land for each inhabitant of the rural areas. In this part is gathered as well the information concerning the land security perceived by the landowners.

The third part of the questionnaire is dedicated to the information on the agronomic qualities of the land (fertility level, irrigation etc.).

On the fourth part is gathered the information concerning the reasons why the land is abandoned and if the land strategy will change in the future (if nothing happens).

The last part of the questionnaire a payment card method is used to identify the taxation level for the fallow land that makes possible the change of land strategy from fallow land to cultivated land and or integration on the land market. A payment card design of Contingent valuation similar to what have already been used by other scholars (Hu et al., 2011) is applied. Respondents were presented with 34 tax levels for fallow land in order to identify at which level the owner will modify its land strategy from fallow land to 1) cultivate by himself, 2) rent the land out or 3) sell the land out. For the three alternative strategies, the taxation levels are the same and start from 500 ALL/Year (per 10 Are or a Dyn), equal with 3.7 EUR/dyn/Year. The respondents were asked: *Assuming that a taxation level is applied on the fallow land, at what taxation level are you going to modify your land strategy from fallow land to a) cultivation by yourself, b) renting the land out, c) selling the land out.*

As previously said to determine the average level of tax, rent and selling price, the payment card technique of contingent valuation, is used. Unlike other contingency valuation techniques such as referendum or single bounded and double bounded choice formats, this technique helps visually the interviewer, reduce the number of no and I don't know responses. The payment card is presented for both strategies and the wording is as follow: 1) *What would be the tax level that incites you to cultivate your land?* The payment ranged from:100 ALL/ dyn/year, -500 ALL/ dyn/year ,1000 ALL/ dyn/year ,1500 ALL/ dyn/year..... 20000 ALL/ dyn/year and

Other ____ ALL/ dyn/year option. The other option is included to not force the respondents to choose in the payment amount presented in the card. The same payment card is presented also in the other strategies: *2) What would be the tax level that incites you to rent out your land? -3) What would be the tax level that incites you to sell out your land?* The payment ranged from:

Results and Discussion

The results indicate that a tax level of 37 Eur/dyn/year will push the respondent to cultivate their fallow land. The first result of the analysis presents an important piece of information for the Albanian policy makers on two levels: Firstly, it shows that the application of a tax on the fallow land has an evident effect on the reduction of the abandoned agricultural area. Secondly on average the level of the tax that changes the land strategies is 37 EUR/dyn/year. It is important to underline that this extra financial charge will increase the burden for the farmers that already deal with lower incomes in agricultural sector. We suggest, that the tax should be applied only for the fallow area or if it is going to be applied on a national level it should be combined with public payments for farmers which repays the environmental services the farmers offers to the society.

As expected the tax level that changes the land policy differs based on the education level and the year of migration. Low educated landowners change their land strategy for a lower tax level compared with higher educated landowners (F=1,640, p (value) =0, 02). A lower salary and incomes can explain the difference of 15 EUR/dyn/year. Taking this into consideration the share of the tax represent comparatively a higher share of incomes compared to the higher educated landowners.

Another interesting result of the analysis is the impact of internal migration year on the tax level that changes the land use from fallow land to cultivate by themselves. The families that have migrated before 2015 are keen to cultivate the land by themselves if a lower tax is applied (F=1,530, p(value)=0,03) compared to those that have migrated after 2015. The explanation behind this result is linked with the economic activity performed in Tirana by both group of migrants. The first migration waves toward Tirana were massive and not always offered higher economic possibilities for the family members, on the other side those who have migrated after 2015 did it because they had a real economic project in Tirana, which offers them higher incomes, so the tax applied for a change in land use should be higher.

Another factor influencing the tax level to cultivate the land is the land quality (F=1,494, p(value)=0,05). This factor is measured with a scale from 1 to 10, where 1 is land at very good quality and 10 very bad. Those disposing a very bad quality land show a high level taxation (18500 ALL/ dyn/year), while those having a good quality, bid a lower tax level (6000 ALL/ dyn/year) however the lowest bid is among owners that classify their land quality at six (2500 ALL/ dyn/year). The main explanation for this incoherence is related to the fact that the agricultural land

in owner family is not considered as a productive resource, but as a family asset, on that regard, the agronomic characteristics of the land are not the main ones which determines their strategy. For the owner, landing out the land is withdrawing a part of their ownership, that's why they have a higher level of resistance in changing their land strategy. Furthermore, the overall amount of the tax is significantly low (18500 ALL is less than a minimal monthly wage), for the other tax levels, the monetary amount is even lower, which increases the resistance strategy among the land owners.

The land owners who consider their land only as a production input, the level of tax which changes their strategy is between 4000 -5000 ALL/dyn/year (respectively those thinking that cultivation expenditures exceed profits and those that don't use the land because they think that is very difficult to work the land and in the meantime live in Tirana). For this owner category the resistance strategy is very limited, which is also related to their reduced capacity to pay an extra tax for their land.Land security is considered to be a key issue on the land strategies in Albania (Guri and Jouve, 2015) (Guri et al., 2014) (Guri 2008), (Civici 2010), which has an important impact on the decisions to cultivate or not cultivate, or how to distribute the land among the heirs. On that regard it seems to play an important role on the cultivation strategy under a tax application. As mentioned before renting out or selling the land, is considered to give up from a part or of the totality of the ownership on the land. Implicitly meaning that the give up process is going to cost more to those who have a higher security on their land property than those who feel insecure for their asset. The feeling of land security is very difficult to be identified that is the reason why we have asked to the owners to self-declare their level of land security. In our sample the land security can be even evaluated by 4000 ALL /dyn/ year (a difference between the average bid of those who feel totally secure for the ownership of their land and the average bid of those who feel totally insecure. The bid is even higher if the owner is going to give up totally from the land, 14000 ALL /dyn/year, which can be seen as a monetary evaluation of the linkage that exists between the owner and its land expressed on an annual basis. We consider that these data can be valuable for other scholar who want to analyse the future developments of the land markets in Albania, or similar countries, where the actual data on the transactions is missing or is very limited.

Conclusions

The taxation in agriculture sector is generally used to improve the agriculture performance in the country and to help small and fragmented farmers. One of the tax cutting incentives is used for the agricultural cooperation enterprises which from 2018. Grouped farmers can have an income tax reduction from 15% to 5%. On this regard more can be done on using the tax measures to incite the actor's behaviour.

The taxation method can be used not only to improve the production but as well as a policy option by the policy makers to better use of a scares natural resource like

land. This instrument has a direct and important impact on revitalising the rental and selling market for the agricultural land. This is going to strengthen the land market for agriculture which is going to overpass the existing land market in Albania which relates only on urban uses.

The analysis of the survey concludes that the frequency of land cultivation on the origin area is mostly related on the socio-economic features compared to the agronomic ones. The distance between the origin area and the living area as well as the low incomes coming out form the agriculture are the main factors that increases the fallow land on the rural area. The taxation of the fallow land will incite the owners to change the actual strategy of land use and increase new land surfaces on agricultural sector by the own land use, rent out or sale. The average land taxation level that will change the land use strategy is 5000-5500 ALL/ dyn/ year to be cultivated by the owner, 7000-7500 ALL / dyn/ year, to be rented out and 17500-18000 ALL/ dyn/ year to be sold. Theoretically the tax level should be lower if we rent out the land compared to the cultivation by the owner. The owner that has migrated from the area has higher costs to go back on the origin area and cultivate the fallow land than rent it out. This difference may be considered a proxy of land insecurity or of transaction consist to rent the land out.

As expected the education level and the period of migration are positively related with the tax level. Families that have higher education level or have migrated for the origin area only recently, change the land use strategy when a higher tax level is applied.

The fallow land taxation in Albania is expected to inject new agricultural areas on the sector, but nevertheless the sector suffers from important ghosts of the past (e.g. land insecurity), that will impact the performance of the sector even in the near future.

The paper opens a wide field of land economics in Albania and new perspectives on land policy making instruments. More accurate results can be obtained if the sample is going to be extended not only on migrant owners but as well rural owners. It is going to be interesting how the owner strategy is going to change for a region to another or even on different subgroups on the same region, which is going to provide more insights for the policy makers.

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