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The effects of the Common Agricultural Policy on exit strategies and land re-allocation

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ABSTRACT

This paper investigates how farm-households would dispose of farms following a decision by the farm-household to exit from farming, and in particular when a decision is made to sell the land The paper builds on data from a survey of stated intentions carried out in 9 EU countries at the beginning of 2009, using a probit Heckman model, where the model is applied to explain stated intentions to sell land in the case of farm-households that have decided to exit from farming activities, under two extreme Common Agricultural Policy (CAP) scenarios. The numbers of farm households opting to exit from agriculture increases sharply under the scenario characterised by the removal of the CAP. The statistically significant determinants are mostly consistent with previous studies, but show different behaviour when comparing the exit decision with the willingness to sell the farm. The outcomes of this study seem to deliver a clear policy message reinforcing the notion that the current CAP payments are important for staying in/exiting farming activities, but the land reallocation process clearly requires more targeted instruments. At the same time, greater attention should be paid to mechanisms of land rent or alternative land tenure solutions.

Introduction

In recent decades, EU agriculture has been characterised by a continuous decrease in the number of farms and by a continuous process of farm households exiting from agriculture. Overall, the number of farms in the EU 27 decreased by about 9% in the period between 2003 and 2007, but in some countries the pace of exit was more than twice the average (European Commission, 2010a).

The exit process by the whole household also implies land re-allocation, in contrast to the exit by an individual farmer which often involves the taking up of the land by a successor within the family. The process of land re-allocation may take rather different forms, ranging from the simple renting out of land, to the outright sale of the farm. A potentially policy-relevant case occurs when land is maintained at the disposal of the household, but left uncultivated. Recent policy reforms have likely had a role in this process, through a progressive reduction of price support, its substitution with area payments, and through the decoupling of farm payments. Upcoming CAP reforms (post-2013) may include a reduction in payments, which could in turn be applied in some areas by way of a payment re-allocation, such as by shifting from a historical to a regionalized.

Understanding the exit mechanisms and the related re-allocation process is clearly a key to the future structure of farming, land management, and the population and employment dynamics in rural areas. Explaining the determinants of exits and land re-allocation can also help better understand more specific issues, such as changes in land property patterns, the role of renting, re-location of farm production, and cropping patterns. Furthermore, knowing which types of farms are most likely to exit and what they intend to do with their land, may well be useful to policymakers interested in the effects of exits on the remaining farms and farming communities in general.

These issues are clearly relevant to agricultural policy and government program payments. Amongst the hottest issues, potential land abandonment connected to exiting from farming activities is a major policy concern, as both the first pillar payments of the CAP and specific policy measures (such as compensation for Less Favoured Areas) are strongly driven by the perceived threat of land abandonment, particularly in marginal areas (European Commission, 2010b).

This paper investigates how farm-households would dispose of farms following a decision by the farm-household to exit from farming, and in particular when a decision is made to sell the land.

The data used for the analysis are the stated intentions to exit and dispose of the presently operated land, and were derived from a survey carried out in the context of the CAP-IRE project (Assessing

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the multiple Impacts of the Common Agricultural Policies (CAP) on Rural Economies, fp7) in 9 EU countries at the beginning of 2009.

For both connected decisions (exit and land sale) we identify the determinants under two different policy scenarios, using a probit Heckman model where the model is applied to explain stated intentions to sell the land in the case of those farm-households who have decided to exit from farming activities. This methodology has been applied twice: once considering the stated intention under a CAP scenario (current Health Check policy) and again using the stated intention under a No-CAP scenario (hypothesis of the elimination of all CAP payments and regulations) (see below for further details).

The main innovative aspect of this paper concerns the joint consideration of exit decisions and land sale decisions under alternative CAP policy scenarios, an approach which, to the best knowledge of the authors, has not been applied in the existing literature. In addition, unlike most of the available literature, the exit decision has been analysed as a decision by the entire farm-household, rather than by the individual farmers, which leads to a different perspective with regard to the treatment of succession (i.e. implies no succession).

Another innovative component of our exercise is the consideration of extreme policy scenarios to which stated intentions about farming activity and land disposal are referred. The scenarios are not meant to be a forecast per se, but rather as a means of considering plausible alternative futures. Indeed, our scenarios seem realistic enough, or at least compatible with the level of realism of other scenario-based exercises, and are certainly close to some of the hypotheses that the EU Commission seeks to verify for the purposes of any potential reforms. In addition, the extreme No-CAP scenario can be envisaged as a way of eliciting the net effect of the CAP on farm exits and land re-allocation.

The issue of the determinants of exiting alone has already been examined using the same sample in Mishra et al. (2010), the authors of which performed a comparison between EU and USA agriculture on this issue.

The structure of the paper is as follows: first we present the background and the methodology introducing the probit Heckman model; then we describe the data used and the main results obtained. A discussion concludes the paper.

Literature

The connection between the changing policy framework, exits and consequent land re-allocation is mostly unaddressed in the literature. This lack of studies may be due to the types of policy reforms that have mostly characterised European agriculture up until recently, namely those mainly related to decoupling (which were generally not expected to have a direct effect on farm exits). For example, Tranter et al. (2007), in their analysis of farm reactions to decoupling, did not even consider the option of farm exits, whilst land abandonment had a major role in the survey. On the contrary, Lobleym and Butlerm (2010) consider different farm reactions to policy change including exits, but the specific issue of land disposal is not addressed.

However, such a connection gains relevance when policy reforms have the potential of affecting exits in a relevant way, as may be the case for the post-2013 CAP reform if subsidies are indeed reduced or undergo a major re-allocation. A similar issue has been considered in Douarin et al. (2007) who investigate, amongst other issues, stated reactions by farmers to different policy options concerning the decoupling of the CAP, through survey information in England, France, Sweden, Lithuania and Slovakia. They also consider exit strategies and find that less than 10–38% of farmers (depending on the country considered) would exit agriculture in the 5 years following the survey; however, exiting is analysed on a personal basis, and hence reactions are dominated by the option of transferring the farm to a successor (about 50% of the farmers). Only between 15 and 30% of the farmers would sell the farm outright after exiting. Exiting and sale choices appear to be independent from the scenario proposed, except in the case of Slovakia, possibly hinting at other drivers being much more important than policy change.

Using the same survey information, Gorton et al. (2008) investigate farm plans in France, Lithuania, Slovakia, Sweden and England through a cluster analysis of farmers. They also investigate the willingness to sell, rent out or abandon land, and find no statistical difference between the clusters identified as far as the sale of land is concerned.

The joint analysis of the two processes (exit and future land destination) was also considered in Stokstad (2010), but land sale is not the main focus of the study. In this paper, the author investigates the main causes of land abandonment in Norway under the hypothesis that one of the prerequisites is represented by the farm exit. The methodology applied consists of two independent logit models for identifying the determinants of the exit in the first model, and, in the second, the determinants for renting land out. The results show that property structure is an important factor for abandonment, but that it is less important for the exit-decision. The determinants that are more influential on exit-decision are the size and specialisation. In fact, the study demonstrates that larger farms with breeding stock, primary sheep and dairy cattle, are more likely to continue farming.

Stokes (2006) uses a Markov chain model for farm size to study the determinants of structural change in Pennsylvania's dairy sector. The simulation analysis includes both the exit and the expansion possibility for farms. The analysis found that milk prices, price volatility, land values, and dairy termination programs have an impact on farm decisions.

The future attitudes of dairy farms are analysed by O'Donnell et al. (2011) using a telephone survey of milk suppliers. The results, analysed though a linear regression model, show that the key factors influencing farmer decisions to expand, to exit or to contract are interrelated. The main factors affecting such decisions are: succession, location, farm size, facility standard and age.

More attention has been dedicated to considering separately the processes of exit and land disposal. In the exit analysis two different streams of literature can be found: one focuses on micro data (farm level), mainly obtained from longitudinal surveys or censuses (Kimhi and Bollman, 1999; Bragg and Dalton, 2004; Hoppe and Korb, 2006; Lobleym and Butlerm, 2010; Dong et al., 2010); and the other on aggregated data (area/county level) (Breustedt and Glauben, 2007; Goetz and Debertin, 2001). An alternative classification of available studies can distinguish those analysing *ex-post* data sets related to actual farm exits and those analysing stated intentions to exit, the latter being more often associated with original surveys of individual farm-households.

Using longitudinal datasets, in particular individual farm data from censuses, Kimhi and Bollman (1999) studied farm exits in Canada and Israel. The authors used a probit model to estimate the exit probability and to seek the determinants of exit behaviour.

In another study, Bragg and Dalton (2004) used a two-stage approach to investigate farm exits in the State of Maine. In the first step the authors identify the factors affecting the profitability of exits whilst in the second step a logit regression model is applied to determine if and how demographic variables, efficiency, and opportunity costs influence the exit decision. In particular, return over variable cost, the producer's age, the importance of off-farm income and the diversity of on-farm income are the main factors influencing the individual's exit decision.