## **Extended Abstract**

Paper/Poster Title

Study on Economic and Social Drivers of Farm Succession in Ireland

## Abstract prepared for presentation at the 96<sup>th</sup> Annual Conference of the Agricultural Economics Society, K U Leuven, Belgium

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Abstract 200 words max

A decreasing number of young farmers and the ageing of the farmer population is a matter of concern for the Irish and European agricultural sector and is associated with barriers to farm succession. The process of generational renewal takes place gradually over the lifecycle and is not only based on rational economic choice, but is also dependent on relevant social factors. To understand the process of farm succession, we seek to identify drivers and barriers through quantitative analysis with panel data containing information about both the economic and social characteristics of Irish farms and farm holders. Preliminary results show a positive relationship between farm size and the probability of succession. Farm investment also has a strong association with succession, reflecting optimism in the future of the farm business. Demographic factors, particularly the absence of younger household members and instances of farmers living alone are identified as potential barriers to succession. Workload is also confirmed as being negatively related to farm succession. The results confirm the importance of social factors in the succession process and suggest the necessity to mitigate social hardship and to take measures that assist both older and younger farmers in solving the farm succession problem.

Keywords	Farm succession, social factors, ageing, probit model
JEL Code	J10, Q12, Q18

Introduction 100 – 250 words

The importance of sustainable farming, including economic, environmental, and social dimensions, is recognised as central to delivering the key objectives of the Common Agricultural Policy (CAP). A decreasing number of younger farmers and the ageing of the farm population is evident in Ireland (Meredith and Crowley 2017) and across Europe (May et al 2019). The share of farm holders aged 65 or over is almost one-third compared to one-fifth in 1991 (CSO 2021).

Farm household demography is widely recognised as one of the most significant factors in farm succession. Much research has been done on the question of farm succession and non-succession highlighting important explanatory factors such as farm size, composition of household members, farmer's education, and economic viability (Kimhi and López, 1999; Stiglbauer and Weiss 2000; Glauben 2006; Cavicchioli et al 2015).

Despite wide recognition of the issue, there is still space in the academic literature for further exploration of the potential association between social sustainability and farm succession. Abdala et al (2020) identify relation between farm succession and social factors, which promote or inhibit the discussion between farm holders and potential successors in the case of Brazil.

While farm/farmer factors may be relevant to understanding farm succession, their effect must be understood with an appreciation for the long duration of succession processes containing



development of successor's identity (Fischer and Burton 2014). The objective of our study is to investigate the social and economic determinants of farm succession in Ireland with emphasis on social aspects.

Methodology 100 – 250 words

Teagasc National Farm survey (NFS) data from 2018 is primarily used to undertake the analysis. This data contains detailed information about farms and information about farm succession including whether or not farm holders have identified a successor. Additionally, the Teagasc Land Use questionnaire from 2014 was used to validate the findings from the 2018 NFS data. This 2014 questionnaire was undertaken with a stratified random sample of Irish farmers.

We model the drivers and barriers of farm succession using the probit model with the dependent variable being the presence of a chosen successor. The choice of independent variables is based on the need to account for farm, family and social factors. Farmer age, land quality and an interaction between the presence of a dairy enterprise and the size of land ownership are included as possible explanatory factors.

Many of these independent variables tend to not vary much in value over time and this reduces the potential problem of reverse causality. We attempt to account for the influence of past household composition by the inclusion of lagged independent variable using data from the 2013 Teagasc NFS survey. The NFS 2018 data provides information about social factors including isolation (defined as living alone) and the presence of workload stress/pressure. These social variables are an important consideration despite the possibility of endogeneity. Marginal effects are calculated to show the change in the probability of succession due to a change in the value of the independent variables.

Results 100 – 250 words

Preliminary results indicate the positive impact of farm size in influencing the probability of farm succession. Investment has a strong impact on the probability of succession and this is consistent with previous studies (Calus et al 2008). In addition, the lagged independent variable for the presence of young adults in the farm household was positive and significant. This confirms that past household composition influences farm succession over time. This was also confirmed in the data from the 2014 land use survey. Farmer agricultural education is also positive and significant in 2018. Our findings indicate that formal education levels (agriculture and non-agriculture combined) are negatively associated with farm succession. These findings could explain that formal education have two opposing effects on farm succession (Stiglbauer and Weiss, 2000).

The results point to the importance of social factors including isolation, which has a negative and significant impact on the probability of succession. Furthermore, the amount of family labour on the farm is higher where a successor is identified.

Those farmers reporting a higher workload and/or related stress are also less likely to have identified a successor. This is in line with previous research by May et al 2019 who found that farmers who experience hardship on their farm may be reluctant to encourage their children to choose a career as a farmer.

## **Discussion and Conclusion**

100 - 250 words

In this study, we investigate the drivers and barriers of farm succession using social and economic variables. The marginal effects are estimated to indicate the relative contribution of different variables towards the probability of farm succession. Preliminary investigation finds that selected economic characteristics and age variables are positive factors in the probability of identifying a successor. Similarly, certain social factors are negatively correlated with farm succession.



Our study highlights the difficulties of identifying successors where farmers feel stress/anxiety in relation to workload. In developing pathways for generational renewal, some factors influence succession decision-making over a long-time frame (Lobley 2010). Therefore, it is necessary to mitigate hardship at different stages of the farm succession process. Our study also finds that farmers living alone are less likely to have identified a successor. Policy measures can target the situation for older farmers without strong family networks and older farmers with excessive workloads. This can enable older farmers to stay in farming while sharing the workload with an identified successor through a partnership model for example.

A limitation of this study is that the analysis is based on information provided by farmers as to whether or not the farmer has identified a successor and is not based on actual evidence of same. That said, the majority (about 86%) of farm holders confirm that they have discussed the matter with the identified successor, confirming to some degree the accuracy of the data in relation to the identification of a successor.

