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**Irish farm succession and inheritance; an  
examination of farmers' economic decision-making  
strategies as socially-constructed risk assessment**

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Thesis submitted in fulfilment of the requirements for the  
Degree of Doctor of Philosophy

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### **Author Declaration**

I hereby certify that this work is my own and I have not obtained a degree from a University or elsewhere based on this work.

Student I.D: 09625879

Brian Leonard

Signed:

Date:

## Abstract

Intergenerational farm transfer is increasingly viewed as fundamental to the sustainability and development of global agriculture, with an expectation that younger farmers, with more effective and efficient production practices, will enter the sector. However, in the EU at least, this perspective is tempered by the reality of a slow rate of farm transfer to younger farmers, reflected in the rising average age of farmers, and reduction in the number of farmers aged under 35. There is growing concern that this demographic trend may have negative impacts on the agricultural industry. The question of what motivates decisions to transfer farms is a complex one, and agricultural policy to date has not appeared to adequately address and respond to the current trends towards an ageing farm population.

The key aim of this study is to examine the phenomenon of farm generational renewal with a specific focus on the economic implications at individual farm level, with a view to better understanding the reasons for sustained low rates of farm transfer in Ireland. The specific focus for this research is the economic and financial aspects of the farm transfer process, grounded in the notion that many older farmers perceive farm transfer as a risk to their own future financial security. This risk perception is framed as socially constructed and thus affected by a range of factors. The methodological approach is a mixed methods one with converging quantitative and qualitative methods. Three academic papers make up the central chapters of this work. **Paper 1** highlights the functioning of current capital taxation reliefs for land transfer, whilst also discussing the current farm subsidy system and the way in which it has potential impacts on farmer decisions. **Paper 2** investigates current measures aimed at encouraging the uptake of farm partnerships which have been framed as a means by which to reach farm succession and inheritance outcomes. The results illustrate the inability of lower income farms to support such a management structure and highlights potential retirement income issues for older farmers. Finally, **Paper 3** focuses on farmer perceptions of the succession and inheritance process, with particular emphasis on finances. Findings from this paper broadly reflect and complement those of the earlier (quantitative) papers relating to issues of farmer income once land is transferred and taxation concerns.

Collectively the findings illustrate a need for a strategic farm generational renewal policy to assist those trying to enter the farming sector, as well as those hoping to exit from it.

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## **Dissemination**

### **Academic journal publications:**

Leonard, B., Kinsella, A., O'Donoghue, C., Farrell, M. and Mahon, M., 2017b. Policy drivers of farm succession and inheritance. *Land Use Policy*, 61, pp.147-159.

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Leonard, B., Farrell, M., Mahon, M., Kinsella, A., and O'Donoghue, C. 2019. Risky (Farm) Business: Perceptions of Economic Risk in Farm Succession and Inheritance. *Journal of Rural Studies*, (under review).

### **Academic press:**

Leonard, B., Kinsella, A., and Phelan, F. 2017. 'Transferring the family farm: Farmer concerns', *T Research*, 12, (1), Spring 2017, Teagasc: Oak Park.

Leonard, B., Farrell, M., Mahon, M., Kinsella, A., and O'Donoghue, C. 2016. Farm Succession and Inheritance: Investigating Policy. *T Research*, 11. (4), Winter 2016, Teagasc: Oak Park.

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European Association of Agricultural Economists, 2018, 166th Seminar on Sustainability in the Agri-Food Sector, Galway, Ireland.

Royal Geographic Society-IBG Postgraduate Forum Mid-Term Conference 2018, The Potential of Farm Partnerships to Facilitate Farm Succession and Inheritance, London, England

European Society for Rural Sociology Symposium 2017, The Potential of Farm Partnerships to Facilitate Farm Succession and Inheritance, Krakow, Poland.

International Farm Systems Association Conference 2016, The Potential of Farm Partnerships to Facilitate Farm Succession and Inheritance, Harper Adams University, England.

Agricultural Economics Society Annual Conference, 2015, Policy drivers of farm succession and inheritance, University of Warwick, England.

**Poster presentations:**

Leonard, B., Kinsella, A., O'Donoghue, C., Farrell, M. and Mahon, M., 2018. Policy drivers of farm succession and inheritance. Poster, Rural Futures: Adaptation to Challenges Facing Scotland's and Ireland's Rural Communities, Edinburgh.

Leonard, B., Kinsella, A., O'Donoghue, C., Farrell, M. and Mahon, M. 2015. The Economics of Farm Succession and Inheritance. Teagasc/RDS Farm Succession and Inheritance Conference, Dublin.

Leonard, B., Connolly, K., McDonnell, J., McKenna, C., and Phelan, F. 2015. Teagasc Transferring the Family Farm Clinics 2014, Teagasc/RDS Farm Succession and Inheritance Conference, Dublin.

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# **Chapter 1**

## **Introduction**

## **Chapter 1 – Introduction**

### **1.0. Introduction**

In developed countries the farming population is ageing, which can have implications for the future of agricultural production, environmental conservation, and the long term sustainability of rural communities. Research has found a positive correlation between young farmers and greater farm efficiency, innovation and engagement with environmental management than their older counterparts (Potter and Lobley, 1992; Siebert et al., 2006; Howley et al., 2012). Yet there is a clear trend towards older farmers increasingly remaining in control of their farm holdings rather than transferring them to younger farmers. The average age of farmers in the United States is 57 (Millis-Novoa, 2011) and over 50% of farmers in the United Kingdom are over 55 (ADAS, 2004). In Ireland, the average age of farmers is close to that of the US at 56 (Dillon et al., 2017). Certain European countries (including Ireland) provide financial incentives to encourage early transfer of farms, however, it is yet to be determined what level of influence and impact these have on succession and inheritance decisions. The low exit rate from farming is cited as one of the key barriers to farm entry, along with land availability, and set up costs (Williams, 2006). In spite of the available incentives, the average age of farmers continues to rise, indicating insufficient motivation on the part of older farmers to transfer farms and raising questions about the focus and effectiveness of agricultural policy in how it addresses the growing succession and inheritance dilemma. The process of farm transfer involves the eventual exit of an older farmer from the manager/owner position in the holding. However, policy focus in most European countries has tended to be on the encouragement of young farmer entry with less attention being paid to the situation and mind-set of the outgoing farmer whose decision-making can be pivotal with regard to succession and inheritance.

The last decade or so has seen a renewed emphasis on agricultural production in Ireland. The FoodWise 2025 Report, published in 2015 by the Department of Agriculture, Food and the Marine (DAFM), links this in large part to increased concerns over global food security. The report sets out production targets for each agricultural sector with a vision to increase exports from €7 billion to €12 billion by 2020. It also acknowledges that in order to realise the FoodWise 2025 objectives, certain measures must be taken at farm level, with land mobility specified as a key issue in this regard. It suggests that DAFM should ‘identify and remove impediments to land mobility’ (p.18) with specific focus on how EU schemes could assist in this regard. Regarding specific system targets, an

increase of 20% output value in the beef sector is recommended, with a 50% increase in milk production envisaged. These prescribed increases in output value and production require advanced and technically-supported methods of change and for the beef sector in particular an increase in value may be achieved through maintaining its high quality, together with farm level adjustments such as undertaking the Beef Data and Genomics Programme (BDGP<sup>1</sup>). The dairy sector requires more structural adjustments, with larger herd sizes and technical efficiency required to reach the target of a 2.75 billion litre increase. Beyond production orientated motivations, agriculture has been described as ‘the single most substantial contributor to the economic and social viability of rural areas’ (Matthews, 2014, p. 295), and a continuance of this contribution to rural sustainability is inextricably linked to the transfer of family farms to the next generation (DAFM, 2010; NRN, 2012; Macken-Walsh and Roche, 2012).

Errington and Gasson (1993) assert that farm level decisions such as expansion are strongly influenced by the presence of a successor, particularly when this is a family member. Potter and Lobley (1996) devised the terms ‘succession’, ‘successor’ and ‘retirement’ effects, to distinguish between different perspectives on farm transfer and the impacts on farm development trajectories. The succession effect for instance implies that farmers with successors are more likely to invest in or expand the farm in anticipation of its takeover by a son or daughter than those who do not have a successor. Potter and Lobley (ibid.) argue that ‘farmers without successors and those with low expectation of succession seem significantly more likely to be disengaging from agriculture’ (p.329). Several authors have established evidence which confirms the existence of the succession effect (Burton and Walford, 2005; Shawyer, 1990; Calus et al., 2008). The successor effect refers to the positive impact which successors can have on a farm once they become actively involved in running it and in the decision-making processes. The effect includes the period in which a successor assumes full or gradual managerial control; generally young farmers returning from agricultural education are more aware of new technologies or wish to implement change on their own farms resulting in increased efficiency and output (Potter and Lobley, 1996). The final effect mentioned by Potter and Lobley (ibid) is the retirement effect, which generally has a negative impact on farms; i.e. the process of semi-retirement tends to be characterised

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<sup>1</sup>The BDGP is a scheme aimed at increasing the genetic merit of the Irish suckler herd whilst also reducing greenhouse gas emissions (DAFM, 2018).

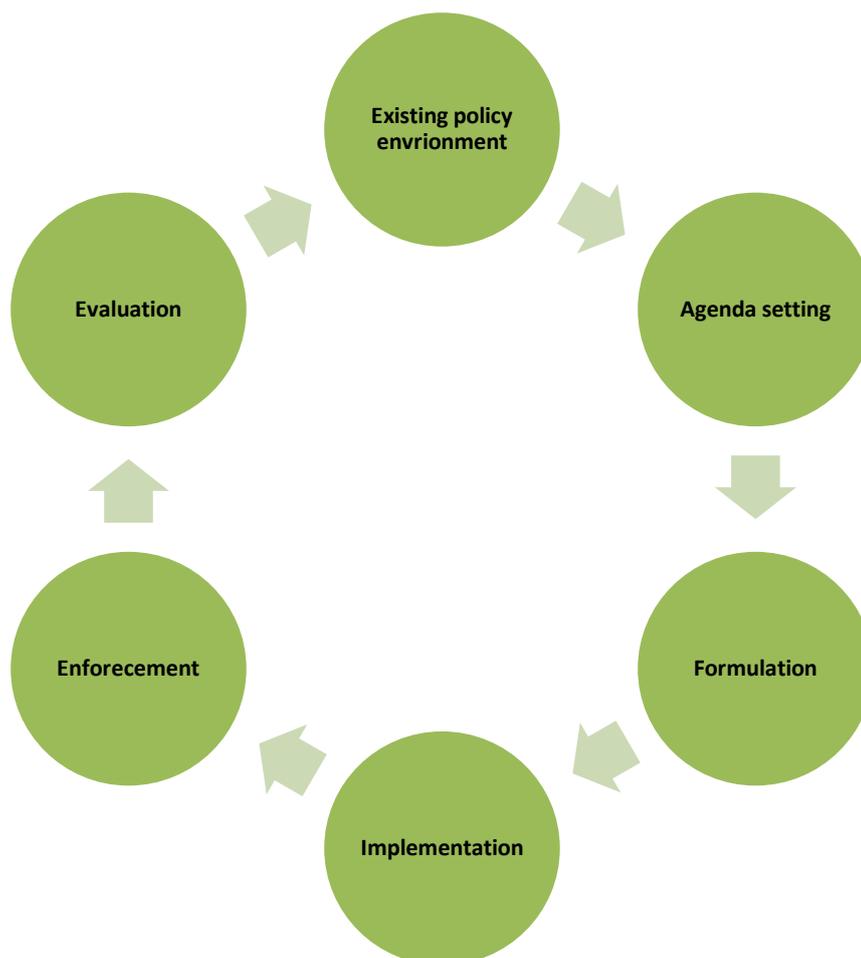
by de-intensification and liquidation of assets if there is no successor present. It refers to the period in which farmers are coming near the end of their farming careers, but is most prominent when a successor has not been identified. Each of the effects mentioned greatly impact on the economic viability and sustainability of the farm and could potentially impact global agricultural output levels. In a market that requires production in an efficient and environmentally sensitive manner, it is increasingly argued that the most productive and efficient farmers, i.e. younger farmers, should be working in the sector (Williams and Farrington, 2006). The issue, however, is that young farmers may not have access to land, and access to farm ownership in Ireland is almost entirely by inheritance (Hennessy and Rehman, 2007). An ever-increasing average farmer age, in addition to low levels of farm transfer and limited land mobility therefore has serious consequences for farm viability, indicating a requirement for policy intervention in the area of succession/inheritance.

### **1.1. The agricultural policy formulation process – impacts on farm transfer**

The main statutory instruments that address farm transfer are devised as part of wider agricultural policy, so the actual process of policy formulation is a relevant focus of enquiry into the level of successful take-up of transfer-related incentives. Although delineated as a partnership between agriculture and society, and the EU and its farmers, the process of policy making that is the Common Agricultural Policy (CAP) is widely criticised by academics. Keating and Laffan (1999) for instance consider most agricultural policy to be created at EU level rather than by its member states, implying a significant top-down approach. In contrast, others such as Greer (2005) have described the agricultural policy process as being to some extent driven by public opinion and created at a range of different levels and stages. Greer (2005) asserts that the agricultural policy process takes place in stages, beginning with an assessment of existing policy where issues arising from previous policy are identified. Agenda setting is the stage of the process where external actors create an impact, particularly if a significant issue has come to light or unprecedented events have resulted in required changes to policy (ibid.). In the formulation stage, policies are created based on the requirements of the various EU countries and the needs of key stakeholders. Brouwer (2004) also suggests that a requirement of effective policy is an appropriate incentive for the party affected by the policy, i.e. if a policy incentive is very low then uptake is likely to be limited. Programmes and schemes are generally the means by which policies are implemented, with enforcement of policy taking the form of regulations

being complied with and budgets expended correctly. The final stage (before the cycle begins again) is the evaluation of schemes and programmes of implementation, which effectively evaluate the overall policies (Greer, 2005). Similar to Greer (ibid.), Hill (2000) discusses the policy process by splitting it into five components, including background, myths, objectives, policy instruments and monitoring. Hill (ibid.) alludes to the notion that societal values and public perceptions are a part of policy formulation which affect the objectives created, and although not explicitly articulated by Greer (2005) may be included in the agenda setting stage of policy formulation. A crucial stage of policy formulation, the agenda setting phase allows for public consultation (Greer, 2005; Hill, 2000), with Pieczka and Escobar (2012) suggesting that if policies are not reflective of the issues at ground level they will not be successful. Previous attempts to introduce schemes targeting both successors and retiring farmers (Hennessy, 2014) have registered low levels of successful impact and raise questions about the policy cycle and the degree to which the complexity of succession/inheritance has been understood and taken into account by policy-makers. For example, it remains unclear what level of incentivization is required for farmers to engage in policy of this nature, or the extent to which they have been involved as stakeholders during consultation stages.

**Figure 1.1. The agricultural policy cycle (Greer, 2005, p.13)**



Another aspect of the policy environment relates to the limited level of commitment shown to the farm transfer issue. Historically, there has been no substantial long term policy put in place which has attempted to encourage a timely transfer of farms or even to assist in the process of shifting managerial control to younger farmers over time. Early Farm Retirement Schemes (EFRS) are one method used in an attempt to encourage generational renewal, with schemes being optional and mainly taken up by Ireland, France and Greece (Davis et al., 2013). Whilst there have been three rounds of an EFRS in Ireland, in 1993, 2000 and 2007 (Teagasc, 2007), all were short lived and said to have been of ‘little value for money’ (Hennessy, 2014). From a non-economic perspective, Conway et al. (2016) found that these schemes did not consider the emotional implications of asking farmers to ‘exit farming forever’ as part of the terms and conditions, but were instead ‘excessively preoccupied with financial incentives’ (p. 174), which ultimately failed to deliver on significantly increased levels of farm transfer. France and Greece also initiated an EFRS and as with Ireland, were found to be of poor economic value, with farmers entering the scheme only a few years from

retirement age (Caskie et al., 2008). In the UK, Ingram and Kirwan (2011) evaluated the Fresh Start Initiative which matched new entrant farmers with retiring farmers as a means of giving younger farmers a start and older farmers a gradual exit strategy; however, this was not considered a success, with older farmers reluctant to work with young farmers that were not blood relatives or closely acquainted. In the case of New Zealand, the dairy industry has a well-developed career structure which gives young farmers the opportunity to begin farming and has exit schemes available for older farmers such as phased exit strategies like share milking arrangements (CIAS, 1999). Many Dutch farms are in partnerships which facilitate the process of gradual succession (NRN, 2012), a process which Macken-Walsh (2010) suggests could potentially benefit young Irish farmers, becoming a clear entry point into farming. However, there are no strong Irish policy incentives to join a farm partnership and until spring 2015, registered partnerships were only an option to those operating dairy and tillage systems. In the Flemish case, developing a 'JongerenActiePlan' (Youth Action Plan) has been encouraged and entails the stimulation of young farmer education and the provision of advice during farm transfer (Calus et al., 2008). While a scheme like this would be positive, getting to the point of transfer at an earlier stage would still remain an issue. In all, the introduction of mandatory succession/inheritance policy at CAP level may be a method of reducing the age of the farm population, but the question remains as to exactly what kind of policy could be introduced, and whether economic incentives would entice farmers to consider succession and inheritance options.

## **1.2. Farmer response to economically incentivised policy**

Motivating farmers to implement farm level change is a challenge for all agricultural policy formulation, particularly considering the growing heterogeneity of the farming community when trying to develop policy that will be accepted and effective in a high number of cases (Vanclay, 2004). Briassoulis (2008) contends that 'the era of 'one-sized-fits-all theories in land use policy and planning is ended' (p.29) largely due to agricultural policy being created on a reactive basis as opposed to a proactive one (Hill, 2000). Norton (2004) refers to this reactive situation as pertaining to policy in general, stating that policy reforms only address one issue at a time, as opposed to creating a strategy that builds towards an overall direction for the sector affected.

Agricultural policy commonly contains some form of economic incentive as farmers in many instances are drawn to policy instruments that prove financially beneficial to

them. A clear example is the agri-environmental schemes implemented as part of the EU CAP reforms (Emerson and Gillmor, 1999). In the UK, environmental farming was welcomed by the farming community in Environmentally Sensitive Areas (ESAs), largely due to financial rewards which were considered by Morris and Potter (1995) as a ‘new source of subsidy’ (p. 53). In their opinion, the extent to which payments are ‘buying changes’ (ibid. p. 53) which would not otherwise occur strengthens the notion that farmers can be led by financial incentives. In Ireland, the Rural Environmental Protection Scheme (REPS<sup>2</sup>) was introduced and became enduringly popular with farmers, especially those who were receiving lower farm incomes. Emerson and Gillmor (1999) argue that ‘undoubtedly the main reason why many farmers adopt the REPS is financial’ (p. 244), with Brouwer (2004) also implying that in the area of cross-compliance farmers are economically driven, and that the correct incentive must be in place to motivate farmer participation in any scheme or programme. However, in the area of succession and inheritance it is yet to be determined if a significant number of farmers can be influenced by such a policy. The discussion of the EFRSs above indicates that the schemes did not have a major influence, and merely moved an imminent decision to transfer the farm forward by a few years (Caskie et al., 2008).

### **1.3. Research question, aims and objectives**

The research question is: What are the main economic factors that influence Irish farmer risk perception regarding succession and inheritance decision making and how do generational renewal policy measures impact the final decision? The aim of the research is to examine the phenomenon of farm generational renewal with a specific focus on the economic implications at individual farm level, with a view to better understanding the reasons for sustained low rates of farm transfer in Ireland. This includes an exploration of the institutional barriers to and drivers of farm succession and inheritance, whether and to what extent farmers are motivated by financial policy incentives, and how farmers assess the available routes to succession and inheritance. Conceptually, the farm succession and inheritance process is framed as one of risk assessment from the viewpoint of farmers (outlined in more detail in 1.4).

The following research objectives are identified:

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<sup>2</sup> This scheme financially rewarded farmers for farming in an environmentally sensitive manner.

- Assess how current policy interacts with farm transfers scenarios at individual farm level using a hypothetical microsimulation model.
- Measure the potential impact of capital taxation on individual hypothetical farms.
- Model the economic viability of farm partnerships as a means by which to reach succession and inheritance outcomes for farms of different systems and with varying income levels.
- Examine how current policy promoting farm partnerships function in terms of creating real financial incentive.
- Investigate the influence of financial motivations and risk perceptions with regard to farm succession and inheritance decision making employing a problem centred interview technique.
- Ascertain whether or not different farm systems have the same concerns regarding farm transfer finances.

#### **1.4. Conceptual framework**

To date, the concept of risk and its social construction have not been applied in the context of farm succession and inheritance. Indeed, several authors have assessed the multitude of quantifiable economic aspects of the processes, but using a broadly positivist lens (Glauben et al., 2004; Breustedt and Glauben, 2007). A constructivist approach to risk posits that risks are contextual and a result of social creation (Birkholz et al., 2014). Oliver-Smith (1996) for example, asserts that risks are fundamentally linked to the physical and social environment in which an individual dwells. Here, risk perception regarding succession and inheritance is conceptualised as socially constructed and thus created via the culmination of a myriad of social and institutional factors that influence a farmer's final farm transfer decision, or lack thereof.

Of importance here is the difference between concepts of risk and uncertainty which emerged in the initial literature search, and in the final results. For this study, it is clear that risk is considered something that can be measured whilst uncertainty is immeasurable and thus difficult to combat (Adams, 1995; Jaeger et al., 2013). Farmers are considered risk averse actors in most instances (Groom et al., 2008), and have been guided by institutional incentives with regard to actions such as environmentally sustainable practices as a means of accruing subsidies and avoiding financial risk

(Koundouri et al., 2009). However, it remains in question whether farmers perceive risk/uncertainty with regard to succession and inheritance in the first instance, and secondly if this perception can be decreased or eliminated via fiscal policy.

### **1.5. Methodology**

A mixed methods approach is taken which involves integrating both quantitative and qualitative methods (Clark and Ivankova, 2015) with a view to achieving complementary outcomes (Creswell and Plano Clark, 2007). With this in mind, generational renewal policy is evaluated from an economic perspective (quantitative) while also investigating the farm level complexities relating to finances (qualitative) at the ground level with a sample of individual farmers. This involves identifying key policies in the current CAP (including land transfer taxation reliefs) and investigating the effect these have on average farms using a hypothetical microsimulation model. Qualitative research is used to determine whether or not farmers perceive the succession and inheritance process as a risk, with particular reference to the finances associated with the twin processes of farm entry and exit. Within this, the institutional and societal factors affecting this perception will be identified. For this particular facet of farm transfer the merit of a mixed methods approach manifests itself in the fact that the quantitative results may not provide obvious explanations for actual farm level decisions, while the qualitative findings will be employed to provide a narrative that would not be questioned using a positivist approach.

### **1.6. Published papers**

This section provides an overview of the three papers that constitute the evidence and analysis sections of the thesis (Titles, author sequence and student contribution to each paper are outlined in Table 1.1). **Paper 1** deals with policy drivers of farm succession and inheritance and sets out to assess current policy aimed at encouraging generational renewal using a hypothetical microsimulation model. The remit of this paper covers the reliefs on capital taxation aimed at encouraging land transfer but in many instances go unrecognised by members of the farming community. As a policy driver, reliefs from capital taxation appear to work in a manner that is beneficial to those availing of them. **Paper 2** focuses specifically on the policies governing farm partnerships, which have been presented as a route to farm succession and inheritance. As with the first paper, a hypothetical microsimulation model is employed to generate results. Modelling of policies which include a tax relief and subsidised professional consultation revealed a

low level of incentive for higher income dairy farmers, and little or no incentive for beef farmers. Finally, **Paper 3** builds on the findings of papers 1 and 2 by investigating the perceptions of farmers with regard to the succession and inheritance process. A qualitative approach revealed commonalities between the results from the earlier papers and this one, namely the stark differences between farm systems and their approaches to the processes of farm entry and exit. The culmination of the research papers presents a range of policy implications with regard to farm transfer finances.

**Table 1.1: PhD Student’s contribution to the three articles included in this thesis<sup>3</sup>**

<b>Paper</b>	<b>Title</b>	<b>Authorship</b>	<b>Contribution of PhD student to paper</b>
1	Policy drivers of farm succession and inheritance	Leonard, B., Kinsella, A., ODonoghue, C., Farrell, M., & Mahon, M.	Article conception and design Review of literature – PhD researcher lead Drafting manuscript – PhD researcher lead Critical revisions of manuscript – PhD researcher lead (with consultation from supervisors) Final editing, preparation and submission of manuscript to the target journal <i>Land Use Policy</i> – PhD researcher
2	The potential of farm partnerships to facilitate farm succession and inheritance	Leonard, B., Mahon, M., Kinsella, A., O’Donoghue, C., Farrell, M., Curran, T., & Hennessy, T.	Article conception and design Review of literature – PhD researcher lead Drafting manuscript – PhD researcher lead Critical revisions of manuscript – PhD researcher lead (with consultation from supervisors) Final editing, preparation and submission

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<sup>3</sup> Original table template devised by Dr. Ruth McMenamin, School of Medicine, NUIG, 2016 and reproduced here with her permission.

			of manuscript to the target journal <i>International Journal of Agricultural Management</i> – PhD researcher
3	Risky (Farm) Business: Perceptions of Economic Risk in Farm Succession and Inheritance	Leonard, B., Farrell, M., Mahon, M., Kinsella, A., & O'Donoghue, C.	Article conception and design  Review of literature – PhD researcher lead  Drafting manuscript – PhD researcher lead  Critical revisions of manuscript – PhD researcher lead (with consultation from supervisors)  Final editing, preparation and submission of manuscript to the target journal <i>Journal of Rural Studies</i> – PhD researcher

### 1.7. Thesis outline

**Chapter 1** has detailed the perceived need for generational renewal, while giving a brief overview of policy formulation and institutional efforts to encourage farmer exit. Research aims and objectives are also outlined.

**Chapter 2** discusses the factors that influence farm transfer decision making based on literature to date, whilst also providing a deliberation of how risk theory relates to farm transfer decision making and the way in which perceptions are created.

**Chapter 3** charts the methodological approach taken for this research including the need for a mixed methods approach.

**Chapter 4** (the first of 3 academic papers) investigates current policy aimed at encouraging generational renewal. A quantitative approach is employed to model the financial impact said policies would have for hypothetical farms.

**Chapter 5** focuses specifically on farm partnerships as a possible means by which to realise the gradual entry of a young farmer while an older farmer begins the process of semi-retirement. Again, quantitative analysis is undertaken to evaluate the feasibility of such an arrangement and the ability of current policy measures to assist this.

**Chapter 6** employs a qualitative approach to assess the effect perceived risk has on farm transfer decision making, with a particular focus on economic aspects of the process.

**Chapter 7** concludes with policy recommendations and suggested directions for future research in the area of generational renewal in agriculture.

## **1.8. Conclusion**

Farm transfer is a pressing issue not just from an agricultural development perspective but also on a human level with the welfare of the family farm at stake. Given that the family farm remains a key unit of operation for EU agriculture it is imperative that research contributes to a clearer understanding of issues currently hampering transfer and routes to succession planning. The evidence from this research suggests that there is a series of mismatches between current support systems and mechanisms intended to incentivise farm transfer and what many farmers feel they require by way of financial and related economic assurances, based on their own assessments of the risks and uncertainties inherent to their situations. An important aspect of this research is in uncovering and understanding those dimensions of risk that prevent farmers from feeling confident enough to move ahead with farm transfer, and in considering the need for support systems and mechanisms that can take account of the complexity of these situations.

**Chapter 2**

**Literature Review**

## Chapter 2 – Literature Review

### 2.0. Introduction

This chapter examines how concepts of risk and uncertainty have been applied in the analysis and interpretation of economic decision-making in those aspects of agriculture that ultimately inform farm transfer decisions. It explores how risk and uncertainty have been theorised under different research paradigms and philosophical perspectives and assesses the significance of these for understanding agricultural-related economic risk and uncertainty and the connections to farm transfer issues. The discussion starts with an overview of these concepts, moving to a critique of their application in an agricultural context in terms of how they shape decision-making. It then focuses more specifically on their application to farm succession and inheritance decision-making processes, particularly the economics of retirement and the impact on the future of the family farm.

### 2.1. Defining risk and uncertainty

Risk is subject to numerous definitions depending on the field in which it is being discussed, resulting in a spectrum of approaches to risk. For instance Jaeger et al. (2013) define risk as ‘a situation or event in which something of human value has been put at stake and where the outcome is uncertain’ (p. 17). Jaeger et al. (ibid.) approach risk from the viewpoint of sociology, while Adams (1995) implies a level of measurability for risk by describing a risk situation as one in which ‘you don’t know for sure what will happen, but you know the odds’ (p. 23). On the strongly economic end of the risk spectrum, Just (2001) asserts that risk is ‘the case where the distribution of outcomes is known either a priori or statistically through past experience’ (p. 1131). In most instances of such a discussion, risk is closely followed by the term uncertainty with Adams (1995), Just (2001), and Jaeger et al. (2013) all alluding to it. Due to the nature of risk and uncertainty, it is often unclear which of the two is being addressed. More often than not they appear in tandem, with many being unaware of how to separate the terms or that such a separation exists (Adams, 1995). Adams (ibid.) goes on to note that a blurring of the meanings can occur where they are not separated, in particular when used in a non-technical context i.e. where a specific quantification of risk must be established.

For Just (2001), uncertainty differs from risk in that with uncertainty the odds of an outcome are not known. Jaeger et al. (2013) posit that ‘risk necessarily implies

uncertainty' (p. 17) and cites uncertainty as an indispensable aspect of risk. Depending on the research context, academics in some cases choose to conflate the terms risk and uncertainty; however, there are also scholars who insist on the separation of the two. Adams (1995) contends that fields such as economics require that the odds of an outcome be known in order to contribute to risk and uncertainty conversations. In this way a calculable outcome is available in the form of probabilities, but knowing the true nature of risk and uncertainty, it is evident that not all outcomes can be presented in a numerical manner. Ghadim et al. (2005) discuss risk and uncertainty in the context of crop innovation and throughout their research the terms are used interchangeably. The work conducted is of an economic nature and uses econometric methods, based on definitions discussed that constitute risk. Ghadim (ibid.) however, fails to acknowledge this, hence implying that the separation of the terms is of little importance to the context of their research. In contrast (but also within the realm of innovation), Barlett et al. (1980) contend that risk is constant while uncertainty is lessened once others have tested an innovation. This implies that they are intricately linked, but can be treated as separate entities. Adams (1995) provides a brief but effective definition for uncertainty stating that it exists when 'you don't even know the odds' (p. 25) i.e. uncertainty cannot be measured. In the case of economics, risk is assumed to be something calculable. The implied implication for decision making under uncertainty or risk is that risk decisions are based on available information of tangible outcomes, while decisions under uncertainty are unpredictable and thus harder to make (Cancian, 1980). Barlett (1980) asserts that the economic approach is important in providing an indication of risk but that 'local realities will always distort the mathematical curves' (p. 8). It is at this local level where individuals form their perceptions of risk (or uncertainty), indicating that the importance of local circumstance in a research context must be emphasised. The ways in which external forces influence local level circumstances must also be recognised.

The use of risk as an approach to understanding decision-making has been well-established in research, and transcends a range of disciplines. This stems from the clear logic that very few activities are immune to some form of risk (Klinke and Renn, 2002). Over time theories of risk have evolved from those of pure mathematical calculation to a spectrum of approaches in which numerical extrapolations form just one of many facets of how risk is assessed. The complex nature of risk perception and construction means that it is a multidimensional concept that can stem from various sources (Foster

and Rausser (1991), which has a wide ranging effect and is governed by a range of actors. Risk has also generally been discussed in terms of aversion and mitigation, while some research has included the term ‘adaptation’ to risk conversations (Smit and Skinner, 2002). The general consensus in this case would be that adapting to risks as opposed to purely avoiding or eliminating them could prove an effective means by which to prepare for negative outcomes. Notably, this depends on the specific risk and its context. For example, adapting to a change in farm structure (such as entering a partnership) may mean changes in day to day practices for farmers while also encompassing the actions of policy makers through schemes associated with farm partnerships (Leonard et al., 2017c).

Theories of risk and risk perception are housed in two dominant overarching paradigm approaches – rationalist and constructivist. Rationalist theories are centred on the notion that the presence of a hazard results in a rational judgement surrounding the aversion of said hazard (Birkholz et al., 2014). This judgement involves analytical thinking which has been referred to in the past as the ‘epitome of rationality’ (Slovic et al., 2004), i.e. analysing available information and reacting in a rational manner. Rationality is closely linked to scientists/experts in that they are seen to search for evidence and build on evidence to form clear risk claims, while members of the public may not act in this manner (Garvin, 2001). Thus, one main critique of a rationalist approach would be the assumption that human behaviour follows a rational pattern. Krause et al. (1992) for example, found that the risk perceptions of experts and non-experts differed somewhat with regard to chemicals and prescription drugs. The results imply a difference in perception when a rational approach is taken with statistical information, while judgements of the public differed due to a lack of information. In a similar way, and focusing on the agricultural community in particular, farmers are noted to act beyond rational thought (Vanclay and Lawrence, 1994), thus implying their risks may be perceived or created via social construction. Constructivist approaches view risks as contextual and a result of social creation; in other words risks do not exist as objective entities that are immune to different perceptions or constructions (Birkholz et al., 2014). Describing the social construction of risk, Oliver-Smith (1996) notes that risks are ‘are embedded in the relationships that human communities have with their physical and social environments’ (p. 319), making them intrinsically linked to the social sphere in which they exist.

While the construction of risk is an important facet when analysing risks in a given society, it is also vital to consider the actual means by which these risks are created in order to determine the level of threat they pose. According to Tierney (1999) the constructivist approach aims to provide such explanations of how social agents create risk in a given society. Clarke and Short (1993) likewise argue that a constructionist approach must examine why and how risks are created, leading to questions of ‘interests, power, and social conflict’ (p. 379). Questioning who constructs risks is also one of the main contributions of such an approach (ibid.). Klinke and Renn (2002) examine how public perceptions of risk can take hold and become dominant; noting that in some cases minor risks may become exaggerated. Public perceptions of risk may also vary considerably from what an expert perceives, causing these risks to be considered as sensationalised (Botzen et al., 2009). The source of this sensationalism can vary, with Klinke and Renn (2002) citing the media as one of the primary contributors to the creation of risk perception. One example used by Botzen et al. (2009) relates to how concern around flood risk (specifically flood damage to property) in the Netherlands was found to be lower than concerns for terrorism despite half of the country being below sea or river water level. However, the widespread media coverage of the attacks that took place in the USA in 2001 had heightened public perception of terrorism. While a clear risk, the likelihood of a terrorist attack causing damage to one’s home would still be lower than the likelihood of flood damage in the Netherlands. Birkholz et al. (2014) also note the propensity of the media to report the most dramatic risks, thus decreasing public risk perceptions surrounding everyday risks that may be more pertinent. The media, while an important factor, is only one component making up the greater system into which people are socialised. Birkholz et al. (ibid.) indicate that social systems are interwoven with constructions of risk; these systems include ‘culture, institutions, organisations, values, beliefs’ (p. 17). It is evident therefore that the construction of risk depends on the nature of the risk in question.

Notably the actual consequences of the risks discussed here differ in many ways. A risk event occurring can have a range of outcomes, with those facing risks often considering the end result as an amplification of the worst case scenario. The societal factors that lead to heightened perceptions are considered when employing a constructivist approach as asserted by Tierney (1999). Table 2.1 illustrates the possible consequences of the risks of flooding and a terrorist attack occurring noted by Botzen et al. (2009). The outcomes differ significantly whilst the likelihood of flooding occurring is higher.

Sensationalist accounts of terrorist attacks mean that risk perceptions are allocated in a manner unfitting of their likelihood (Botzen et al., 2009), this sensationalist reporting often relates to the magnitude of the outcome should it occur i.e. while something is unlikely to happen, the aftermath may have a more devastating impact than an event with higher likelihood.

**Table 2.1. Expected consequences of risk**

Risk	Consequence	Perception of risk
<ul style="list-style-type: none"> <li>• Flooding</li> </ul>	<ul style="list-style-type: none"> <li>• Damage to homes</li> <li>• Spread of disease</li> <li>• Infrastructural damage</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> </ul>
<ul style="list-style-type: none"> <li>• Terrorist attack</li> </ul>	<ul style="list-style-type: none"> <li>• Death/injury</li> </ul>	<ul style="list-style-type: none"> <li>• High</li> </ul>

The implications of the aftermath can clearly influence the perception of whether or not a risk is high or low. This is exemplified in table 2.1 where flooding is perceived as a lower risk than a terrorist attack despite statistics implying that a flood event is far more likely (ibid.). Similarly in agriculture, risks are perceived at various levels with high and low risk perceptions being incorrectly allocated in some instances. The next section highlights the range of risks facing agriculture and how they are influenced.

## **2.2. Contextualising the construction of agricultural risk**

This section discusses the phenomenon of risk in agriculture, as a means to outline the ways in which farmers make sense of their actual lived situation in farming and how it motivates them to address the issue of farm transfer. The agricultural sector is subject to a myriad of risks and Buckwell et al. (2017) note the high level of risk associated with farming in the first instance and also the number of farms that are unable to adequately deal with risk. Within agricultural operations, the response to risk depends upon the risk attitude of the individual as well as factors such as the farm's resource base, financial condition, organization, local and national markets, and stage in the farmer's life cycle (Fleisher, 1990). Within a society of risk shaping, each actor may wish to sensationalise a risk pertinent to them (Beck, 1992); in this case the actors in question are governments, consumers, and farmers.

### **2.3. Institutional risk shaping in agriculture**

Hardaker et al. (2015) note that changes in policy/regulation governing agriculture can have a profound effect at farm level, something that they describe as institutional risk that also incorporates political, sovereign and contractual risks. Most of these sources of risk stem from a governmental level, either national or international. The main policy instruments available to governments in shaping the agricultural sector are financial, i.e. tax relief or grant based schemes. Essentially, financial incentives are used to encourage individuals to undertake measures that achieve strategic governmental aims. This has been accomplished in the past resulting in widespread change in agriculture; for example, the policy changes that encouraged production from the 1970s onwards being a clear example of national government and EU-level control over the sector and the creation of risk perceptions arising out of a productivist agenda. This agenda involved speculation around the possible precarious state of EU food security, but led also to widespread negative impacts for human and animal welfare (e.g. BSE) and to environmental degradation (Wilson, 2001; O'Connor et al., 2006). At present, farming practices such as environmental conservation are encouraged using agri-environmental schemes, with these schemes generally benefiting farmers economically (Morris and Potter, 1995). Entering financially incentivised schemes has been linked to the reduction of uncertainty around income for farmers, thus decreasing their perceived economic risk (Koundouri et al., 2009) (i.e. the idea that a guaranteed payment to supplement farm income means less reliance on a volatile market). Koundouri et al. (2009) also refer to the importance of taking account of farmers' own attitudes to the risks involved in new policies, asserting that projected policy outcomes will vary accordingly. This issue of the varied perceptions of risk at the more individual level is also discussed by Pieczka and Escobar (2012) who assert that policies must reflect ground level issues in order to be successful.

### **2.4. Farmer risk aversion**

It has been argued that farmers are generally risk averse (Groom et al., 2008), with Hardaker (2004) asserting behaviour of this nature is evident in their decisions. He points to the example of farmers having a preference for farm systems where there are more options for diversification thereby spreading their exposure to risk of negative productivity from any one farming activity. Hardaker (ibid.) notes the research difficulties of trying to extrapolate understanding about decision-making based on such risk averse behaviour due to the range and complexity of the variables involved, and the

degree of uncertainty at play. In other words, the calculation of risk may be possible but the level of uncertainty is incalculable and has a clear influence on farmer decision making. Barlett (2016) opens a discussion on the effects of risk and uncertainty in terms of farm decisions using the example of the uptake of a new type of seed. Barlett (ibid.) theorises that under uncertainty (lack of known probabilities) early adopters of a new seed type are faced with a higher level of uncertainty, while those who use the experience of early adopters to influence their decision face less uncertainty. He observes that under these circumstances of reduced uncertainty (the risk having been successfully taken by the early adopters) more widespread take up of the new seed type by other farmers follows rapidly.

## **2.5. Current approaches to risk management in agriculture**

Depending on the farm system, there are various approaches to risk management. One example of risk management in farming would be the use of forward contracts. For forward contracting, a contract is drawn up detailing the price and product quality expected, this means the farmer is not subject to the uncertainty associated with selling their product on the open market. In the US, studies have reported a high incidence of forward contracts among grain farmers (Goodwin and Schroeder, 1994; Davis et al., 2009). In the Australian wool industry forward contracts are used by sheep farmers to ensure they receive a reasonable price for their produce (Jackson, 2008). In the Irish case there are few measures developed around forward contracts as a means of reducing market risk for farmers. Loughrey et al. (2015) investigate demand from Irish dairy farmers for such contracts, the research reports that farmers are influenced by an agglomeration of factors in their consideration of such measures, not dissimilar to succession and inheritance decisions. While forward contracts and other risk management tools are more widely available in the US, only 1% of the CAP budget is dedicated to risk management (Buckwell et al., 2017). However, Buckwell et al. (ibid.) note the presence of direct payments to farmers in the EU, which contribute significantly to farm incomes. Risk management measures such as forward contracts may be considered an institutional level approach, while farm level approaches may involve farmers choosing more resilient crops (ibid.). As such, management, or lack thereof, can contribute to individual perceptions of risk.

## **2.6. Risk and uncertainty in farm succession and inheritance**

Managing risk involves careful planning and, as with risk itself, can be subject to various definitions. Sadgrove (2005) lists the main definitions associated with risk management (p.5):

- Hazard – a source of potential harm
- Risk – the possibility that a hazard will cause loss or damage
- Risk assessment – defining what can go wrong
- Risk management – a discipline for dealing with uncertainty.

Each of these definitions is applicable to agriculture depending on what aspect they are being applied to. To date, the main focus of agricultural risk management research has been around environmental, health and safety, and economic factors. There has been no specific research conceptualising farm succession and inheritance as a risk facing individual farms and the agricultural sector as a whole, and one in need of strategic forms of risk management strategies at a range of levels from farm through to national and EU policy level. Lobley and Baker (2012) assert that ‘intergenerational farm transfers are a fundamental aspect of the sustainability of family farming’ (p. 9), while Wilkinson et al. (2012) contend that a core objective of farmers is to leave a farm business that can provide a viable career choice for the succeeding generation. Table 2.2 applies the definitions of risk management devised by Sadgrove (2005) to farm transfers at farm and sector level to conceptualise the problem of farm transfer as a risk-based issue:

**Table 2.2. Risk applied at farm and sector level**

	Farm	Sector
<b>Hazard</b>	<ul style="list-style-type: none"> <li>• No successor (labour supply or continuity issue)</li> <li>• Farmer reluctant to retire/transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Older farmers retain farms</li> </ul>
<b>Risk</b>	<ul style="list-style-type: none"> <li>• Farmer may want to retire but cannot (due to lack of retirement income)</li> <li>• Successor may push farmer to hand over causing conflict</li> <li>• Policy change may have income/tax implications</li> </ul>	<ul style="list-style-type: none"> <li>• Farms produce less owing to ageing farm population retaining land</li> <li>• Lower incidence of rural economic activity</li> <li>• Environmental degradation/lack of sustainable practices</li> </ul>
<b>Risk Assessment</b>	<ul style="list-style-type: none"> <li>• Farmer liquidates assets or land quality diminishes (retirement effect)</li> <li>• Successor takes on farm, farmer has no retirement income</li> </ul>	<ul style="list-style-type: none"> <li>• National or EU-level agricultural policy targets may not be met</li> <li>• Rural economies suffer from reduced activity</li> </ul>
<b>Risk Management</b>	<ul style="list-style-type: none"> <li>• Succession/estate planning</li> <li>• More stable policy environment</li> </ul>	<ul style="list-style-type: none"> <li>• Policy</li> </ul>

(Source: Sadgrove, 2007, p. 15 – adapted by author)

Despite the importance of farm succession and inheritance being highlighted repeatedly by academics and agricultural advisors; the majority of the farming community persistently avoids engaging in succession and inheritance planning (Santhanam-Martin, 2016). Family farms survive multiple changes of ownership between generations over time, while other businesses have difficulty surviving the transition to a second generation (De Massis et al., 2008). Given the nature of farm transfer, the continuation of a family farm depends greatly on the presence of a successor (Calus and van Huylenbroeck, 2010). In the past, it has generally been the role of the farming father to choose a suitable successor, however, Rossier (2012) contends that in modern agriculture successors decide if farming would be an option for them, as opposed to being given the title of successor and accepting it as a moral obligation.

While the processes of succession, inheritance and retirement are inextricably linked, it is important to note that differences exist between the individual stages which form the basis for generational renewal. Succession denotes the transfer of managerial control from a farmer to their successor; this can take place over time, often over the lifetime of a successor. Inheritance refers to the legal transfer of assets to a successor; generally this takes places following succession (Potter and Loblely, 1996). The final process affecting the overall farm transfer is that of retirement, while succession and inheritance relate more to a successor, retirement specifically impacts the outgoing farmer. In most instances retirement from farming takes the form of semi-retirement, while a number of

farmers do not engage in any form of retirement (Uchiyama et al., 2008). Notably in the case of this research the focus is on asset transfer (and thus inheritance), however, the inescapable linkages that exist between succession, inheritance and retirement mean that the exclusion of any one could lead to a set of results that does not appropriately address the current issues in this field.

Farm transfer can be a long and difficult process for farmers and successors alike. Inheritance as the dominant means of entering farming (Hennessy and Rehman, 2007; Taylor et al., 1998; Kelly, 1982) presents some of the key challenges underpinning risk assessment and decision-making on timely farm transfer. Lobley and Potter (2004) found that in rural England there is a high level of family continuity in farming, with 84% of respondents in their study describing themselves as ‘established family farms’ (i.e. being at least the second generation on the same farm). The transfer of managerial control can often be seen as a prelude to farm inheritance. Uchiyama et al. (2008) contend that different patterns of succession can have different effects on how smooth the process is, eventually leading to a smooth inheritance process. Harl (1996) cites the main goals of succession to be: security for retirement, ensuring all children are treated equally, and minimising cost of transfer. Others argue that handing over a business that can offer the successor a career in farming is a key aim (Wilkinson et al., 2012). Lobley et al. (2010) stress the importance of succession planning, arguing that succession issues can influence the performance and development of the farm business. Examining the way risks are established, uncertainties assessed and decisions ultimately made within this context of inheritance are key to understanding the trajectory of farm transfer.

#### *2.6.1. Risk relating to (established) farmer exit strategies*

One such issue relates to the risk of an established farmer not actually exiting farming. In many cases, transferring land to a successor could mark the retirement of a farmer, however, it is widely noted that farmers rarely enter full retirement for various reasons. Rossier (2012) argues that in agriculture continuing work-related activities after retirement ‘is the rule rather than the exception’ (p. 83), meaning even after a farmer reaches retirement age, they may not exit farming. Working on the farm after retirement age is known as ‘semi-retirement’ and is generally characterised by farmers reducing the intensity of their enterprise or farming alongside a successor (Uchiyama et al., 2008). Foskey (2005) and Wilkinson (2009) describe this phenomenon as retirement in farming, i.e. retirement from being highly active in farming, usually reducing the level

of manual labour being undertaken. Uchiyama et al. (2008) found that less farmers in the US and Japan had intentions to semi-retire compared to England and Canada, with the presence of a successor to 'semi-takeover' being highly influential in this decision. This may be attributed to the larger average farm size in the US and schemes aimed at farmer retirement in Japan. Semi-retirement may be a product of various factors, ranging from financial concerns over retirement income, to a level of land attachment meaning farmers do not want to relinquish ownership or full control of their farms. Lobley et al. (2010) found that anticipated sources of retirement income vary with location; farms in Canada for example were more likely to sell farm land and assets to fund retirement. While in England there was a tendency to rely on private pension plans. In contention with this, Barclay et al. (2007) found that farmers in Australia did not want to transfer ownership of their entire farm as they did not want to become entirely dependent on a pension citing security as a considerable point of note in their decision. In addition to concerns over retirement income, in many cases farmers have a high level of attachment to their land (Grubbstrom and Soovali-Sepping, 2012), which is of an emotional nature as opposed to an economically motivated attachment, but which is established can play a key role in the achievement of timely farm transfer (Conway et al., 2016).

## **2.7. Generational retention and farm/ business viability**

De Massis et al. (2008) assert that in the case of any business, succession will not occur if the business is not financially viable, implying that financial risk is high on the list of concerns. While financial viability of the family farm is a contributing factor to succession and inheritance, it generally does not impede the eventual succession or inheritance of a farm. Gray (1998) discusses the intricate link between farms and families, illuminating the fact that family ties to land mean that even where a farm is not viable in economic terms, it will still be passed on within the family. In addition to this, Calus and Van Huylenbroeck (2010) note the fact that farms have planning horizons which span generations as opposed to years which is often the case with businesses outside of agriculture, resulting in these longer planning horizons seeing risk spread over time. Hoppe (2014) found that multiple-generation farms in the US tended to be larger and accounted for a sizeable share of production in the sector, implying farms that are retained within a family may perform better than those that change hands more often.

The characteristics of a farm can have a strong influence on succession and inheritance outcomes and how the risks attaching to same are assessed, with factors that influence farm income (such as farm size and system) having the most impact on the processes. Uchiyama et al. (2008) found that farm size influenced succession, with successors on smaller farms being more likely to have employment outside of the farm, thus decreasing the likelihood of them entering farming. Chang (2013) raises a similar notion in stating that young people have become less interested in farming as a result of the low income that can often be accrued from agriculture. Taken in conjunction with the ideas of Uchiyama et al. (2008) regarding successors on smaller farms finding off farm employment, the probability is that smaller farms will have lower incomes, meaning attracting a successor to such a holding could be challenging. As young farmers become increasingly aware of the higher income and better lifestyle possibilities outside of farming it may become more difficult to attract a new generation to take on family farms (Burton and Fischer, 2015). Wilkinson et al. (2012) also allude to difficulty in recruiting younger farmers, especially to smaller farms with lower income, contending that young farmers generally choose to enter if there are good career prospects from a farm. In contrast to this, Rossier (2012) found that young farmers were interested in farming because of the lifestyle and aspects of the job, such as being close to nature.

Larger farms are more likely to have identified a successor, with Calus et al. (2008) revealing that farms with higher asset values were more likely to have positive succession prospects. Glauben et al. (2004) for example found that more profitable farms in Germany have a 'significantly higher probability of being transferred within the family' (p. 7). In essence, there is a very clear link between farm income/viability and likelihood of having a successor. However, Barclay et al. (2012) argue that it is difficult to discern whether larger farms have successors, or if farmers who have successors expand more. Barclay (ibid.) questions whether it is the aforementioned succession or successor effect that takes place.

In their study on farm restructuring, Loblely and Potter (2002) found that of the low number of respondents who planned to exit farming, the majority were older farmers operating smaller farms. This implies that farm size may affect the exit and entry rate, i.e. that successors are more tempted to take on larger farms, but that these may not be becoming available either in sufficient numbers or quickly enough. Chang (2013), for example, found that an increase in farm size of one hectare led to a 2.8% increase in the likelihood of succession on Taiwanese farms. Calus et al. (2008) recommend using TFA

(Total Farm Assets) as an indicator for farms that will have a successor, suggesting that farms with higher TFA have better chances of having a successor (as suggested in their results). While the idea that farm size and value have a positive effect on succession outcomes holds merit, using TFA alone as an indicator would not suffice, as it does not capture important factors such as the number of children a farmer has, if any.

Other farm characteristics that may affect the risk assessment and decision-making on succession and inheritance outcomes include aspects of farm system such as labour requirements. Calus and van Huylenbroeck (2010), for example, state that systems where controlled environments can be created (such as pig and poultry production) holdings may be less likely to be family run farms. The reason for this is that hired labour is suitable due to the predictability of outputs and inputs that are less prone to shocks, thus reducing the need for family labour in comparison to beef or dairy systems which can be unpredictable and more reliant on family labour. Gasson et al. (1988) contend that using family labour without providing any financial reimbursement and having no real division between work and leisure in family farming may be a thing of the past. The reasons as to why this may be the case are not clear; however, it can be assumed that a growing awareness of the higher income that may be accrued from off-farm opportunities among successors is a contributing factor. Kimhi and Nachlieli (2001) reveal that farms in more remote rural areas were far less likely to have a successor than those in central locations. In tandem with this, Aldanondo Ochoa et al. (2007) found that proximity to city/town decreased likelihood of successor, generally as a result of the increased exposure to off-farm employment opportunities. The culmination of a lack of young farmer entry would result in negative outcomes for agriculture, presenting risks at farm and sectoral level as outlined in Table 2.2.

## **2.8. Succession/Successor effects on risk**

As outlined in Chapter 1, Potter and Lobley (1996) have coined the terms successor, succession and retirement effects. In this section, empirical findings regarding such effects are discussed whilst also drawing links to risk. The successor effect is evident in the case of many studies, with Shawyer (1990) highlighting that farms with more than one successor were generally expanding more rapidly to facilitate the presence of successors. This was also the case in Burton and Walford's (2005) research which investigated the effect of multiple succession on farms in England. In these studies, the successor effect has taken place, albeit in a more pronounced manner as a result of the

number of successors. Gasson and Errington (1993) allude to the succession effect whereby farmers expand their assets in anticipation of a successor taking over: 'Farmers with children coming into the business may be prepared to take on heavy financial commitments (e.g. to buy more land)' (p. 94). Calus et al. (2008) note that if a successor is present, farm investment tends to be higher and farmers have an outlook based on 'long-term perspectives' (p. 43). The term 'long-term perspectives' here denotes the link to an available successor and the expectation that the farm business will continue to operate for generations, as opposed to farms where there is no successor, in which case short term (or within the lifetime of the farmer) goals may be set. The presence of a successor in instances such as these may be considered risk alleviation, in that the farm is not facing uncertainty once the farmer ceases actively farming. The succession effect has been identified by several authors as having effects on investment, expansion and the setting of future goals on farms. When interpreted in this context, the succession effect implies that where farmers have a successor, they are more open to expansion, thus more open to risk taking. In contrast to this, recent research has indicated that farmers with children between the ages of 16 and 19 tend to be more risk averse, with speculation that this may be due to the impending cost of third level education for this age group (Loughrey et al., 2015). Other studies however, note the propensity of farmers with children to expand their holdings more rapidly (Mishra and el Osta, 2008), thus implying less risk aversion where a possible successor is present.

Similarly, the succession effect has been confirmed in many cases, and has clear links to risk. When investigating factors affecting occupational choices of farm heirs in Ireland, Hennessy and Rehman (2007) assert that there is a positive correlation between succession and farm performance. A young trained farmer is more likely to take up new practices to increase farm efficiency and in some cases may even change the type of enterprise being run to suit market trends (Howley et al., 2012). The ability to adjust to market trends is important in modern agriculture as consumer demands are increasing, thus there is a need to produce efficiently. The transfer of a farm to a young trained farmer can have positive results, with studies indicating that young farmers are inclined to be more efficient (Lobley et al., 2010; Zagata and Sutherland, 2015). Inwood and Sharp (2012) for example, found in a study of farm adjustment and succession that farms with younger managers tend to have a higher incidence of entrepreneurial activity to boost farm income. However, in a study on joint farming ventures in the UK, Ingram and Kirwan (2011) found that older farmers entering joint farming ventures were unsure

of the positive effects a young farmer would have, citing lack of experience as a concern. These concerns may also be rooted in uncertainty surrounding how the young farmers will manage the farm into the future. In the case of the succession effect, the young farmer may have received agricultural education and have a high level of technical skill which could result in changing practices and improved efficiency. However, a lack of tacit knowledge may decrease the positive impact a young farmer can have on a farm. For the agricultural sector as a whole the succession effect can have a positive impact given the current drive for increased efficiency and sustainable production. Despite this however, the position of the exiting farmer must be considered, in many instances there is a clear reluctance of farmers to exit due to concerns around their future. While current policy essentially aims to enact the successor effect, without decreasing farmer risk perception around farm transfer there will be very few options for young farmers to enter the sector.

The final effect mentioned by Potter and Lobley (1996) is the retirement effect which can have undesirable effects at farm and sector level. Calus et al. (2008) suggest that farmers with no successor tend to liquidate farm assets as they age, with these findings being in tandem with the idea of a retirement effect. When examining farm transfers in England, France and Canada, Errington (1998) established that English farmers tend to rely on their farms for an income when they are past farming age; and even with the presence of a successor, maintained ownership of the farm as a method of protecting themselves financially i.e. avoiding financial risk associated with transferring the family farm on reaching retirement age. Leonard et al. (2016) similarly found that current Irish agricultural policy facilitates older farmers retaining farm payments as a source of retirement income, reducing any incentive to transfer the farm. Matthews et al. (2017) assert that ‘the CAP’s income support payments have created incentives for some farmers not to exit agriculture, reduced land reallocation towards more efficient farms, and helped to keep less efficient farms active’ (p. 56). In the case of family farms, this could culminate in frustration on the part of the successor as they would not be in full control of the farm even though their parents no longer actively farm. A lack of certainty regarding their position on the farm going forward may cause successors to seek employment off-farm; a possible outcome from this could be that the successor does not return to farming. This is reflected in research by Kimhi and Lopez (1999) who assert that when avoiding timely farm exit a farmer ‘runs the risk of not having a successor at all because his children have already found alternative employment’ (p.

155). It is evident that avoiding this risk requires a level of long term planning that is not currently apparent.

In the UK, farmers who retired and moved completely away from farming tended to feel negative social effects of retirement, in that they no longer interacted with their peers in the same manner as they did when they were farmers (Riley, 2012). This suggests that even if there is no successor present, an elderly farmer may retain some assets in a bid to remain in their locality and maintain social ties. A wish to maintain social relations is just one example of the myriad of considerations a farmer may have around their retirement decision, or lack thereof. Hennessy (2014) highlights that there is a need to address the issue of older farmers having a negative effect on national farm outputs by processes such as ‘winding down’. The perception is that older farmers should have the option to exit farming in a manner that is cost-effective, whilst simultaneously installing younger farmers in the sector in a viable way (economically viable at farm level and also at institutional level). Facilitating such an exit/entry system depends heavily on the cooperation of older farmers (Santhanam Martin, 2016). Gasson and Errington (1993) also allude to the retirement effect stating that farmers without successors may in old age ‘begin to run down the business and consume capital, if only to reduce work load’ (p. 96). In the US, Hoppe (2014) found that a number of retired farmers had entered land retirement programmes. Under these programmes farmers are paid to remove environmentally sensitive land from production, and while the programme is not specifically aimed at older farmers, it may function as one option for retiring farmers to acquire payments while contributing to USDA conservation goals.

## **2.9. Realising succession and risk reduction: The farm partnership option**

One means by which succession has been tried and tested is the mechanism of farm partnerships. Financially, partnership arrangements may promote risk reduction in net income by risk sharing and diversification effects, therefore making such an option attractive for farmers. Moreover, the risks associated with introducing new technologies can be shared among farmers (Larsen, 2008). McLeod (2012) cites the perceived risk involved in joining a farm partnership as a contributing factor to a final decision, going on to reference sharing of risks as a potential benefit to being in a farm partnership. For retiring farmers, a partnership may be perceived as attractive as it allows them to retain some control over the farm, particularly if they do not have a source of retirement income. Entering a farm partnership does not require the farmer to transfer any land to a

successor, possibly reducing the perception that they are losing control of their farm which often deters farmers from engaging in succession/inheritance (Lobley et al., 2010). From the perspective of a successor, the formation of a partnership can confirm their status on the farm. In many cases successors may be unaware if they will definitely inherit the farm or not, and often do not receive payment for the work they undertake (Gasson and Errington, 1993). The partnership contract in the Irish case incorporates the sharing of profits, which in turn reduces the risk of a successor abandoning the family farm as a result of becoming frustrated with a lack of pay or responsibility and seeking opportunities outside of farming.

While risk reduction has been outlined as a benefit associated with farm partnerships, entering a partnership can be surrounded by uncertainties given that it is a relatively novel form of arrangement. In relation to smaller farmers in particular, Crowley (2006) finds that they are ‘very slow to take risks and to become fully integrated in commercial markets unless forced to do so’ (p. 55). She suggests that they may be affected by both cultural and economic factors when making decisions around change and may be more likely to rationally keep to a prior path rather than embarking on an uncertain venture (such as joining a farm partnership), thus avoiding potential risks associated with unfamiliarity. Partnerships have developed in a variety of ways in different countries, with diverse levels of uptake. At present they are popular amongst farmers in New Zealand, France, Norway and the Netherlands (Johnson et al., 2009; McLeod, 2012). In the Irish case, Leonard et al. (2017c) found that the splitting of farm profits associated with entering a farm partnership is only suited to farms with higher income. With regard to the structure of partnerships, Ingram and Kirwan (2011) noted that farmers did not wish to enter such a management structure with young farmers who were not blood relatives, highlighting the need for a familial successor to be present in most cases for a partnership to be feasible.

#### **2.10. Failed succession – identifying risks of failure**

Burton and Fischer (2015) discuss the various negative outcomes that may arise from the absence of succession, be it as a result of no successor being present or failed succession. A lack of continuity and the decimation of cultural landscapes are just some of the suggested possible consequences to succession not taking place, all of which have long-term negative economic implications for agriculture and associated diversification possibilities. Degradation of cultural landscapes may be the result of a failure to

transfer tacit knowledge if there is not a generational successor. While the negative aspects of a lack of familial farm succession are highlighted frequently, some authors flag possible positive outcomes to such a scenario. Marsden et al. (2002), for example, discuss various results that may arise from existing farmers and their successors exiting farming. One such outcome would be the emergence of a diverse group of land holders, in which business orientated farmers and those who farm for lifestyle or leisure co-exist. Zagata and Sutherland (2015) allude to a similar notion of recreational or leisure farmers emerging as land holders where succession does not occur, resulting in the sale of farms. They argue that new entrants into farming (new entrants being defined here not as successors, but those who have entered agriculture recently without having prior ownership or ties to land) tend to be older and have raised capital to acquire land so as to farm as a hobby, as opposed to farming for pure production and profit. In tandem with this, in a recent United States Department of Agriculture (USDA) report, it is noted that while there are a substantial number of people entering farming in the US, only 14% of new entrants were under the age of 35 (Hoppe, 2015). Marsden et al. (ibid.) and Zagata and Sutherland (2015) raise an interesting suggestion as to the fate of agricultural land without familial succession, proposing that the increased emphasis on production in modern agricultural policy (the modernist agenda) may wish to impede unproductive land owners from governing the use of farmable acreage. In contrast to a scenario in which various types of landowners emerge, Lobley and Potter (2004) categorise farmers without successors in their research as ‘capital consumers’. This group of farmers are likely to liquidate assets to fund retirement but also because having no successor gives them no incentive to maintain a farm. From an institutional perspective, Kimhi and Nachlieli (2001) raise concerns that farmers with no successors may become dependent on social welfare when they reach an age at which they are no longer able to farm, resulting in negative outcomes including a higher number of individuals receiving social welfare while retaining land in an unproductive manner.

### **2.11. The importance of farm specific knowledge**

Farming is considered by some to be a long term lifestyle choice (Lobley et al., 2010), with Calus and Van Huylenbroeck (2010) supporting this and describing family farming as ‘more than a professional occupation’ (p. 640). This aspect of farming may also contribute to the lack of full retirement as discussed previously, given that a lifestyle is not something that one exits as they would a job. Unlike many forms of employment, farming takes place on one unique farm holding, meaning knowledge specific to it is

required in order to farm it successfully; in other words, tacit knowledge, or knowledge which is acquired 'on the job'. Farm specific knowledge can be of paramount importance, and is generally accumulated by generations of the same family farming an area of land, and is passed from parent to child over time (Uchiyama et al., 2008). Although farm knowledge can often be scientific and learned via formal education, this knowledge frequently has to be adapted to farm specific factors (Calus and van Huylenbroeck, 2010). Farm successors acquire this information as a result of farming alongside their parents over their lifetimes, while in other industries tacit knowledge may only be acquired when one commences formal employment. This knowledge transfer can be essential to the success of the younger farmer, and emphasises the need to have a process of succession that takes place in a timely manner with minimal conflict involved, with mechanisms to avoid these risks.

## **2.12. Gender and farm inheritance**

The agricultural sector is undisputedly male dominated, stemming from a long patriarchal history in which men were often the only family members to undertake farm work (Shortall, 2002). This male dominance of the sector extends into the realm of succession and inheritance, with the vast majority of farm successors being male. The practice of primogeniture (inheritance by the eldest son) and ultimogeniture (inheritance by the youngest son) have made up part of social norms in countless societies (Baker and Miceli, 2002). In the case of Switzerland, Rossier (2012) found that the number of sons a farmer has dramatically increases the chances of the farm being transferred to the next generation. Notably, the study also found that the number of daughters a farmer had made no impact on the likelihood of farm takeover within the family. Similar to the findings of Rossier (ibid.), Bogue (2013) found that the presence of daughters had a negative impact on succession and inheritance prospects in Ireland. Of the farmers in his study who said they did not have a successor, a number of them cited 'only have daughters' as the explanation. Barclay et al. (2012) note that in Australia, daughters inherit money or assets of a non-agricultural nature as opposed to receiving a farm or land. They found that farm daughters were provided with a good education, thus ensuring they would be able to find off-farm employment and have no dependence on the family farm, continuing a culture of 'patriarchy and primogeniture' (ibid.). One reason why sons are preferred as successors is raised by Kimhi and Nachlieili (2001) who suggest that parents in Israel prefer to deal with their son as opposed to dealing with a son-in-law when, in this case (like many other cases) it is assumed that even if a

daughter was to inherit the farm, it would be her husband that undertakes most of the farming. In the case of Ireland, Cassidy and McGrath (2014) found that there was a clear dominance of patriarchal gender norms accepted as commonplace on farming culture. Leading from this, successors are generally identified and socialised in their roles from a young age.

### **2.13. Successor identity creation as a risk factor in farm succession**

Brandth and Overrein (2013) have argued that the process of farm succession may begin long before the successor has reached the age of being able to contribute to farm work or attain agricultural education. This early stage succession process often takes the form of personal identity shaping. In studies conducted around the construction of identities of rural children it is widely contended that fathers teach their children (particularly their sons) to work on the farm from a very young age (Brandth and Overrein, *ibid.*; Fischer and Burton, 2014). Jaspers et al. (2008) found that the views of parents were often strongly imposed on children (via direct and indirect ways) meaning children up to the age of late teens shaped their opinions on that of their parents. The findings of Jaspers et al. (*ibid.*) echo those of Brandth and Overrein (2013) when applied to farm succession i.e. parents shape their children to view themselves as farm successor, or in the case of non-successors, may shape them to gear their life choices towards off farm employment. In Brandth and Overrein's (*ibid.*) study, farming fathers were interviewed around the topic of succession and child rearing. It became evident that children were brought out on to the farm from the earliest age possible. Many of the interviewees felt that their children should learn to undertake manual work on the farm regardless of if they were going to succeed the farm. One individual articulated this view in saying 'I wanted my oldest son to learn how to farm when he was young so he would know what he was in for later. But, with my other children, the main thing was that they learned how to work' (*ibid.*, p. 102). The statement by this particular farmer embodies the notion that a child (or children) is/are often given the identity of successor unbeknownst to themselves at a very early age, which in turn can shape their identities as individuals and result in them self-identifying as farmers or indeed successors. Price (2010) discusses the idea that instilling such a strong level of attachment in young farmers can result in restricted life choices and make successors feel 'bound' to the family business. Further to this, Burton (2004) has asserted that individuals tend to internalise their identity and act in a manner appropriate to this identity. In this case, successors may take on the identity that has been given to them (as opposed to chosen in some

situations) and gear their actions towards becoming a farm successor. Taking part in agricultural education would be a prime example of behaviour embodying identity. Kellermanns et al. (2008) argue that having personal ties to a family business can result in a competitive advantage, thus implying the creation of an identity as a family farm successor could have a positive impact at farm level when the succession and inheritance processes are complete. However, some academics have raised the concern that farmer plans may not match with the future plans of their children, meaning a successor may be identified by the farmer but a lack of communication may result in the potential successor being unaware of this and pursuing goals outside of farming. Rossier (2012), for example, found that in some cases Swiss farmers had identified potential successors while their children were still under the age of 15, leading to the rise of issues discussed by Kellermanns et al. (ibid). Calus et al. (2008) found that uncertainties around succession can arise as the time of transfer or as exit approaches, attributed largely to differences in the plans of farmers and their successors. Kimhi and Nachlieli (2001) noted that there are two sides involved when choosing a successor, i.e. the parents may choose a successor, but it should not be assumed that the chosen successor is willing to farm. While an internal identity creation may result in a successor being attached to the family farm, a level of communication between farmer and successor would be needed to solidify the successor's place, in doing this, a farmer may avoid the uncertainties described by Calus et al. (ibid.). Discrepancies such as these may lead to succession not occurring, with consequences for farm families and the sector.

#### **2.14. Types of successor/succession**

Given the heterogeneous nature of farms, it is no surprise that the transfer of managerial control does not take place in a uniform manner. In an effort to categorise some broad forms of succession, Gasson and Errington (1993) discuss three 'ideal' types of intergenerational succession. In the case of a 'standby holding' a successor takes on their own farm until their parents are ready to transfer the family farm, allowing the successor to gain managerial experience prior to taking over. Hoppe (2014) describes land leasing as a means by which new entrant farmers can access land, as purchasing land may result in substantial debt. In the case of a 'standby holding', acquiring enough capital to rent or buy land may be an issue for the young farmer. The second category discussed is the 'farmer's boy', here the successor works for the farmer receiving little pay or responsibility for decision making and as a result the successor gains little managerial experience. Some authors have raised the idea that the 'farmers boy'

category may not be as problematic in modern agriculture as it has been in the past, where the successor is waiting to become a full time farmer and owner for a long period of time. Uchiyama et al. (2008) for example, argue that a successor being in this category is only an issue where the successor takes the 'direct route' to farming i.e. goes straight from education to full time farming. In situations where successors acquire off-farm work or travel for a time after finishing higher education there is less concern over having to work alongside their parents immediately, largely due to a preoccupation with off farm activities and the presumption they return to the farm later in life. This could result in the time where both generations must farm together being reduced, thus decreasing the period of time where two generations will be dependent on the farm as a source of income. Similarly, Wilkinson (2012) suggests that the farmer's boy category may be a thing of the past, citing the level of sacrifice modern farm successors may have to undertake to remain on the farm as a reason for this. Wilkinson (ibid.) suggests that forgoing off-farm opportunities has become increasingly difficult due to lower farm incomes (especially on smaller farms) and the possibility of higher incomes from employment outside of the sector. Like many other aspects of farm succession and inheritance, the possibility of higher income elsewhere can be conceptualised as a risk. First in terms of a successor forgoing a potentially higher income and second in that a successor may choose to take up off farm work leaving the farm with no future. Barclay et al. (2012) found that there were very few Australian successors in this category, largely as a result of the larger farm size in Australia when compared to farms in Ireland or the UK. The final type of succession is 'partnership', which entails farmer and successor working together and transferring managerial control before reassigning assets. As discussed, while farm partnerships can facilitate succession and inheritance, they may not be suitable for farms that are unable to support two generations (Leonard et al., 2017c). In some cases a farm partnership may result in the parent-child relationship coming under considerable strain. The types of succession discussed are reflective of many situations; however, the possibility of succession taking place under one of these types may be more or less dependent on factors such as whether or not a successor intends to farm and the life stage of both the farmer and their potential successor.

### **2.15. Life stages of farmer/successor**

Life stages have a very strong influence on farm succession and inheritance. Barclay et al. (2012) describe 'critical events' such as marriage, death and illness as triggers for the

processes of succession and inheritance to be undertaken, sometimes in haste as a result of a lack of planning. One of the most important life stages (or ‘critical events’) discussed by academics is the stage in which a successor marries or has their first child. Wilkinson (2012) affirms that when a successor marries the life span of the family farm is assumed to be extended due to the introduction of another generation, while on the other end of the spectrum Kimhi and Nachlieli (2001) argue that farms without successors will gradually cease to exist over time. Similarly Wilkinson et al. (2012) describe farms without children as ‘terminal generation farms’ (p. 34), while Cassidy and McGrath (2014) suggest that the presence of another generation on the farm and the emergence of a successor can offer ‘a sense of both relief and security’ (p. 407). This implies that having a successor alleviates the risk of the farm becoming ‘terminal’.

The life stage of a farmer can effect farm level decisions; especially those pertaining to income, with Wilkinson et al. (2012) arguing that farmers in child rearing years are more likely to undertake off-farm work as income needs are greater during this stage. The uptake of off-farm employment may have a ripple effect on the farm and result in a change in system (for example) so as to facilitate off-farm work. In this case the farmer may inadvertently socialise any potential successor to part-time farming, having a knock-on effect for the future of the farm. The closer a farmer is to retirement, the higher the degree of delegation of control to a successor (Uchiyama et al., 2008). This finding is echoed by Chang (2013), who found that, as farmers age they are more likely to engage in the process of succession.

In their discussion around life stages, Wilkinson et al. (2012) state that the main reason farmers leave farming is ‘their stage of life and the resulting changes in personal and family circumstances’ (p. 35), with these ‘changes’ generally among those discussed above (marriage, birth of children etc.). While life stages and events can trigger engagement with succession and inheritance planning, in some cases this may have the opposite effect, resulting in a lack of planning for the future and reaping negative impacts. Among the reasons for late transfer described by Barclay et al. (2012) the possibility of divorce was cited with a concern amongst farmers that their successors would become divorced, resulting in the farm being sold or split. Farmers in Scotland for example, tended to delay making an incoming wife of their successor a legal partner of the farm for a number of years in order to ‘see if the marriage was successful’ (Gray, 1998, p. 353). Similarly in the Australian context, Barclay et al. (2007) found that farmers retained ownership of property ‘to reduce the risk of losing it in a forced sale if

the marriage-partnership should falter' (p. 53). In this instance marital breakdown is specifically touted as a risk. For Price and Evans (2006) the term risk is also used when discussing divorce, with their research also highlighting the unwillingness of farmers to transfer land to a successor based on concerns linked to marital problems leading to the eventual demise of the family farm. The unpredictable nature of a relationship failure however, could be considered an uncertainty rather than a risk i.e. there is no means by which to measure the likelihood of a marriage failure. To this end, Kimhi and Lopez (1999) assert that family conflict cannot be insured against; risks can be insured against, while uncertainties cannot due to their immeasurability. The complexity of this has resulted in many farmers avoiding land transfer to avoid the risk and/or uncertainty of losing a family farm, an asset of considerable emotional and economic value.

## **2.16. Conclusion**

In brief, this chapter has explored the theoretical dimensions of risk and uncertainty and the means by which these concepts infiltrate the agricultural sector as a whole, but also the effect they have on the specific processes of farm succession, inheritance and retirement. This included a discussion on the wide range of phenomena that affect the processes including the influence at institutional level, but also the various elements at farm level such as business viability, gender, identity and different life stages of a farmer and their successor. Of key importance here is the difference between risk and uncertainty (i.e. a level of measurability or lack thereof) which become apparent when discussing the countless factors that encourage a farmer to engage in the farm transfer process or delay/avoid this. The rationale behind the decision forms a tapestry of social and economic factors which can be viewed as risks, uncertainties, or both depending on the stage of the process.

# **Chapter 3**

## **Research Methodology**

## **Chapter 3 – Research Methodology**

### **3.0. Introduction**

This research is set within the complex decision-making sphere of agriculture. This incorporates two dimensions: First, a rational dimension, where the farmer draws on technical, scientific and policy-based knowledge to make decisions and investments in land use and animal husbandry that generate efficiencies and economic viability. Methodologically and philosophically these aspects tend to be researched in a quantitative, positivist way. Second, there is a dimension that involves farmers' values and cultural identities that are shaped within their particular place-based contexts, i.e. the socially-constructed nature of agriculture, reflect approaches to methodology that are more qualitative and interpretative. Looking more specifically at issues relating to farm transfer, the economic aspects of this decision-making process have been prominent on research agendas, and approaches to this have been predominantly quantitative (Caskie et al., 2002; Glauben et al., 2002; Pietola et al., 2003). However, farmers' socially-constructed perceptions of agriculture, of the institutional and social context within which agriculture is framed, and of farm succession and inheritance norms and practices reveal a far more complex range of decision-making criteria influencing farm transfer. The economic aspects of this decision making schema are conceptualised in this research as contributing to risk perceptions of farmers. This chapter outlines the rationale for the application of a mixed methods methodology to develop better understanding and more comprehensive inferences from the research through the integrated use of both quantitative and qualitative methods. It then provides a more detailed description of the actual methods of data collection used, including hypothetical microsimulation and Problem Centred Interviewing (PCI). This is followed by an outline of the process of sample and study location selection.

### **3.1. Mixed Methods as a methodological approach**

This section outlines the mixed methods approach to methodology applied in this research. Defined simply, a mixed methods approach is 'the intentional integration of quantitative and qualitative research approaches to best address the research problem' (Clark and Ivankova, 2015, p. 57). It emphasises the reality that all phenomena 'have both quality and quantity' (Bazeley, 2018, p.11) and that in a research context the connections between these dimensions must be adequately investigated and understood (ibid.). This implies the collection and integration of both qualitative and quantitative (and ideally multiple) data and analysis strategies in order to reach a collective research

goal (Fetters et al., 2013). An important distinction to make here is the one between mixed methods and multi methods approaches; the latter is qualified as using methods separately to study different issues i.e. the methods are in no way integrated (Madsen and Adriansen, 2004). The contention by Madsen and Adriansen (2004) is that there is also no triangulation (or no intentional triangulation) in the case of multi methods. In a similar way Greene (2008) asserts that studies that do not integrate methods in some phase of the research are known as ‘quasi-mixed methods studies’ (p. 14), thus inferring the centrality of integration to a mixed methods approach. Green et al. (1989) outline the range of benefits associated with the use of mixed methods, which include: increased confidence in results due to varying sources of evidence and the capacity to draw stronger inferences from them, samples/instruments are more robust, there is increased depth of research, and a more comprehensive interpretation of the area. Bazeley (2008) describes these benefits as extending the remit of positive outcomes to an enhancement of understanding of the overall processes involved.

One main argument for applying a mixed methods approach in the past would have been to safeguard from the weakness of a particular method when used in isolation; however, Bazeley (2008) asserts that each method contributes to answering the research question and can only be considered weak in terms of the question being asked. Integration, while central to mixed methods, has proven a challenge for some researchers, with Bryman’s review of research (2006) highlighting a lack of integration for a number of projects identifying themselves as having applied mixed methods approaches. For him, one of the key issues is ‘whether a “conversation” between the different sources and/or methods used was evident within the analysis, continuing into the presentation of results and discussion of those results’ (2007, p.7). He regards this as more important than concerns about identifying sources as qualitative or quantitative. His comment in this regard is that the use of qualitative and quantitative methods should result in ‘mutually illuminating’ (p. 603) results. Greene (2008) similarly points out that integration of methods can happen at different stages of research, for example on the point of interpreting results or even after analysis, as long as this notion of integration is observed. Of core importance for integration (and thus mixed methods) is that the strategies used form a means by which to reach a common research aim. Mixed methods can be applied in a range of scenarios with forms of enquiry acting in a complementary manner. One example of a mixed methods approach in agriculture is by Poortinga et al. (2004) in their study of public risk perceptions surrounding the foot and

mouth crisis in England. First, a questionnaire was undertaken, followed by focus groups to reinforce the findings of the questionnaire. In this way the overarching assumptions from the quantitative data were further analysed adding depth to the results, thus weaving results from different approaches into a more comprehensive series of findings.

Employing a mixed methods approach affords the research the benefit of triangulation, a process whereby convergence of results leads to a deeper understanding of the phenomenon under investigation (Bazeley, 2018). As with integration, triangulation has been cited as a central tenet of the mixed methods methodology (Bryman, 2006). Bryman (2008) notes that where triangulation takes place results are ‘mutually reinforcing’ (p. 611) in the sense that corroborations work in a complementary manner as opposed to a means of verifying results attained from different sources and methods. Inferences made from results of one method may imply certain correlations; however, the importance of gaining a better understanding of results can only be made clear once triangulation is undertaken. Maxwell (2004) for example, asserts that ignoring qualitative/interpretive dimensions of social phenomena can lead to ‘serious distortions of causal conclusions’ (p. 7). Bazeley (2018) notes that ideally for triangulation data is collected from different methods within a relatively short time frame so that results are not affected by changes that occurred between data collection periods.

In the case of this research a mixed methods approach is used in the following ways. Quantitative methods are used to assess broader trends in farm succession and inheritance, focusing on the operation and impacts of policy-led financial instruments, while the qualitative methods in the form of Problem Centred Interviews (PCI) are used to gain a deeper understanding of those trends. Integration is achieved through initially applying the quantitative approach using hypothetical microsimulation to investigate the policy drivers of farm succession and inheritance (Paper 1). Using this data, the example of farm partnerships as a documented potential means of promoting farm succession and inheritance was modelled (Paper 2). This paper incorporated a widening discussion on the evident problems inherent in any widespread application of farm partnerships as a possible solution to the farm transfer problem including policy inflexibility and the negative financial implications for different categories of farmer. From a risk perspective, the complexity of farm systems and possible intricacies of partnership arrangements meant that the potential decision-making strategies of farmers could not be comprehended by quantitative methods alone. The findings of Papers 1 and

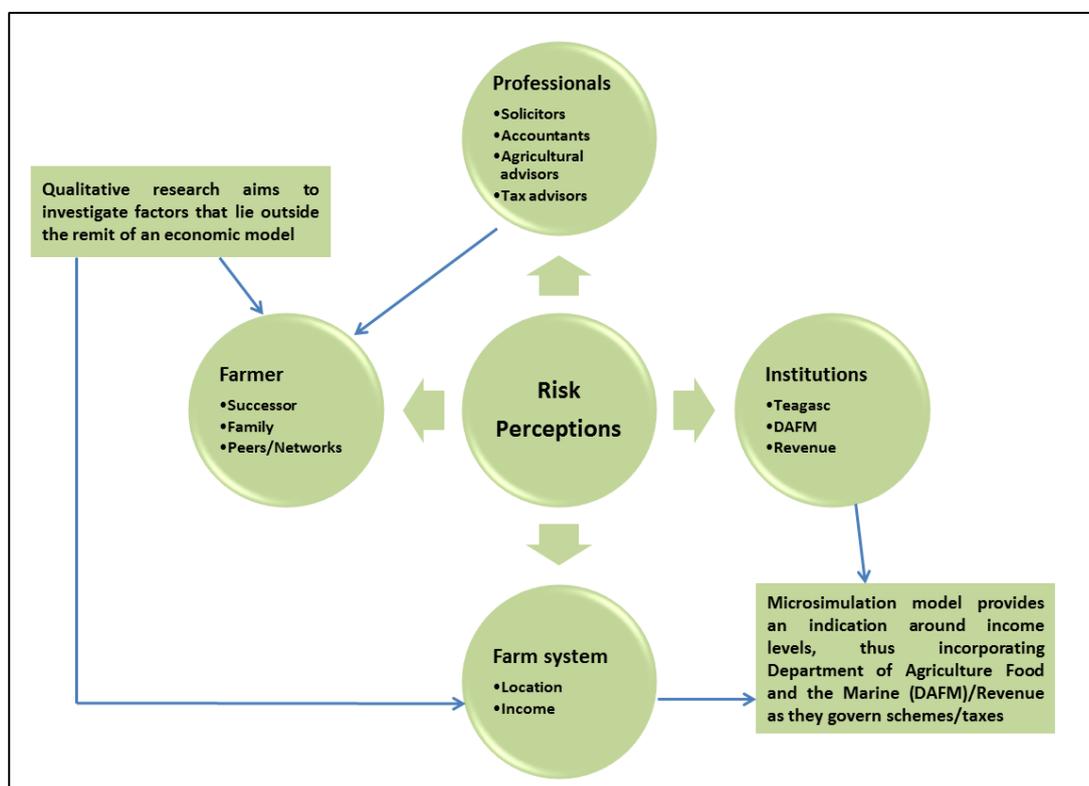
2 in turn led to the development of further enquiry instruments of a more qualitative nature, designed to investigate the more socially-constructed aspects of risk assessment and decision-making by farmers. This was conducted through Problem Centred Interviews (PCI) to probe a range of issues associated with farm transfer and their economic implications, and the influence these had on decision making around farm transfer (Paper 3).

In relation to triangulation of findings, in the case of this research data was obtained within the same CAP (2014 – 2020) funding period so that the institutional framework governing generational renewal remained unchanged, thus avoiding issues regarding regulatory change and the effect this could have on results. With regard to the findings, a range of corroborations emerged which acted in a complementary manner. Results from the hypothetical microsimulation model illustrated the workings of capital tax reliefs; however, if these results had been interpreted in the absence of farmer perceptions gained through the qualitative interviews they would potentially have been framed differently. While the reliefs function well, farmers remained concerned about capital taxation as a result of sensationalised risk perceptions, here it is evident that Maxwell's (2004) assertion that interpreting quantitative data without considering wider dimensions can lead to inaccurate causation claims. Results relating to the income levels of farmers considering farm exit were clear throughout the research papers. Papers 1 and 2 highlight the inadequacy of a state pension to act as a sole source of income for a farmer who has no other source of income once a farm is transferred. Similarly for Paper 3 farmers noted serious concerns regarding their income should they choose to transfer the farm to the next generation; from the simulation outcomes, it was clear that these concerns might be different for beef and dairy farmers. Here we observe mutual reinforcement as noted by Bryman (2008). The means by which the individual methods provide a level of complementarity are outlined in more detail later in the chapter.

In the case of this research, the socially constructed nature of risk surrounding succession and inheritance suggested that quantitative methods alone would not garner comprehensive results. The quantitative methods worked effectively in tandem with qualitative methods to jointly reveal a broader narrative surrounding the issue. Unlike many economic models, the model used in this research does not attempt to predict farmer behaviour, but rather predicts economic outcomes of hypothetical farm transfer scenarios. This avoids criticisms raised by academics such as Roling (1997) who question the use of economic modelling to derive assumptions around behaviour. The

main role of hypothetical microsimulation in this instance is to illustrate the economic/policy issues in numeric and measurable terms, with the qualitative methods delving to ground level to reveal the effect of quantifiable economic aspects of farm transfer on farmer perceptions of said process. Madsen and Adriansen (2004) note the challenge of using mixed methods to address an issue, citing the understanding of ‘actors’ practices and values’ (p. 495) as a key component of comprehending actions in rural spaces. These ‘practices and values’ can therefore be considered forms of discourse to be investigated as is the case in this research. Figure 3.1 provides a visual representation of the methods used and their interaction with the multiple parties influencing the farm transfer decision.

**Figure 3.1. Interaction of mixed methods within succession and inheritance research**



### 3.2. Methods of data collection

#### 3.2.1. Hypothetical microsimulation modelling

The initial stages of the research were dominated by quantitative microsimulation modelling and in particular using a hypothetical microsimulation to encourage decisions regarding farm transfer. Microsimulation models therefore use data on micro-units (e.g. households, firms, farms, etc.) to simulate the effect of policy or other socio-economic changes on the population of micro-units (Mitton et al., 2000). The need for

microsimulation arises from the difficulty of observing simultaneously the outcomes for the same micro-unit under a treatment and in the absence of a change (e.g. policy change), and also crucially as a tool to understand the complexity of a policy problem. The results of the microsimulation models can be affected by many factors, which make it difficult to illustrate the effect of a single factor. Hypothetical models, on the other hand, often focus on a particular scenario under certain predefined assumptions. This allows the model developer to examine a simplified version of the simulated observation (O'Donoghue et al., 2014). Microsimulation techniques have become a much used instrument for their ability to provide an assessment of differing scenarios and facilitate decision making (Spadaro, 2007). Jechlitscka et al. (2007) assert that it is not uncommon in microeconomic modelling to focus on particular components in order to assess their impact. One example of this would be the research of Anderson et al. (2014) who investigated the small area effects of measures of austerity in the UK. In their spatial microsimulation model, the effects of a potential rise in VAT on public and private transport are investigated at the level of individual wards.

In this case, hypothetical microsimulation was used to simulate decisions regarding farm transfer. Focusing on a hypothetical farm facilitated the application of various policy scenarios for the sensitivity of farms to policies to be tested while avoiding the complications that would arise were this study to be undertaken on a real farm. Farm level decisions are not always rational or economically driven (Vanclay, 2004; Howley et al., 2012), but this method facilitates the simulation of decisions based on economic incentive as opposed to basing decisions on non-economic phenomena. Adjusting aspects of the farm tested the effects of succession and inheritance policies on income in addition to the capital tax implications. The scenarios chosen to analyse the economic impact of different routes to succession and inheritance are 'traditional' farm transfer (i.e. parent to child), and also of entering a family farm partnership. Hypothetical microsimulation was the most appropriate methodological approach as it allowed for complexity to be removed to an extent and an assessment of different changes to be made at a micro level (O'Donoghue, 2014). This method facilitated the projection of income streams for both parties, whilst allowing for farm level changes (such as income increase/decrease and farm size adjustment) to be made for each scenario. In a similar manner, Hynes et al. (2013) modelled farm level simulations of potential changes made to the Single Farm Payment system and the usefulness of such a modelling approach for

governments is noted in terms of being able to model potential outcomes from policy change prior to any change initiated.

One key focal point of the hypothetical microsimulation model is the projection of potential farm transfer taxes for various inheritance scenarios. To this end, Tanton et al. (2014) note that the use of microsimulation is a ‘natural choice’ (p. 249) when modelling at individual household level and highlights the popularity of such an approach for taxation modelling in particular. Next, specifics of the model used for this research are outlined.

### *3.2.2. The ADAPT model*

The Agricultural Drivers and Actors of Policy and Taxation (ADAPT) model developed is a hypothetical microsimulation model that formulates projected income streams based on specified criteria. It is employed as part of the methodological process, and utilised policy and welfare parameters to model potential outcomes from farm transfer scenarios. The data used included taxation figures taken from the Spatial Microsimulation of the Irish Local Economy (SMILE<sup>4</sup>) model, updated for most recent years and also incorporated the documentation and application of agriculture specific income and capital taxation and policy rules, and Teagasc National Farm Survey (NFS) average farm size and income figures (Kinsella, 2016). The NFS collects business management information from a stratified random sample of circa 1,000 farms annually since 1972. It functions as part of the Farm Accountancy Data Network (FADN) of the EU. The survey collects various farm level data such as farm size and system, with the NFS report produced annually. Together with NFS data and general income taxation rules, capital tax rules and policy rules are included in the model. These taxes are charged on land and asset transfers and consist of: Capital Acquisitions Tax (CAT), Capital Gains Tax (CGT), and Stamp Duty. In order for the ADAPT model to generate financial outcomes from hypothetical farm scenarios, information regarding a hypothetical farmer, their successor, and farm system were used as possible variables (see Chapter 4 for figures used). This information includes figures for Basic Payment Scheme (BPS) and Area of Natural Constraint (ANC) payments. Reliefs pertaining to capital taxes currently in place were triggered by criteria such as age and whether or not

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<sup>4</sup> SMILE is both a static and dynamic population and socio-economic spatial microsimulation model. It is constructed using the 1996 and 2001 Censuses of population small area population statistics (SAPS) (Ballas et al., 2006)

a successor had agricultural education. Farm scenarios were modelled with results illustrating how farm payments, capital taxation, farm income and taxation all interact with the transfer of farm land and assets.

Two papers (Chapters 4 and 5) were produced using the ADAPT model, investigating separate but linked aspects of farm transfer policy. Paper 1 modelled farm transfer policy regarding taxation and farm subsidies, while Paper 2 investigated the fiscal aspect of a farm partnership as a possible route to farm inheritance. Results from these papers were presented in different formats in order to illustrate the specific results of each, with Paper 1 using graphs of income streams over time, while Paper 2 presented results in terms of changing contributions to overall income. In Paper 1, in particular, a hypothetical income stream of a farmer and their successor were extrapolated and in addition to this, the use of Net Present Value (NPV) and replacement rates supplemented the findings.

Net Present Value (NPV) is defined as ‘the difference between the present value of all cash inflows (benefit) and the present value of all cash outflows (cost)’ (Jechlitschka et al., 2007, p.113). Values such as income stream were discounted to the present value. Bacidore et al. (1997) argue that the NPV of a business can be greatly affected by strategies adapted for the future of the business and within the confines of this research the strategy of the farm business is based on the succession/inheritance decision made. Using NPV’s for the farmer and successor indicates the future income streams both would acquire in the scenarios modelled. A Net Present Value (NPV) figure was calculated for each scenario using the microsimulation model and the outcomes compared focusing on the policies and motivations which affected each decision. Together with the NPV, a replacement rate was calculated for the farmer in each scenario. This will be calculated by dividing income at age 66 by income at age 65<sup>5</sup> i.e. retirement replacement ratio:

$$\text{Replacement ratio} = \frac{\text{Income at 66}}{\text{Income at 65}} \times 100$$

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<sup>5</sup> Retirement age in Ireland is 66, thus comparing income at 65 and 66 will compare income pre and post retirement.

This formula is an edited version of the replacement ratio formula presented by Turley and Maloney (1997). The calculation of a replacement rate was used here to assess which farm transfer scenarios benefitted outgoing farmers most in economic terms.

In the case of Paper 2, the ADAPT model was used to illustrate specific financial outcomes associated with adopting a farm partnership as a management structure. The scenarios modelled had a clear focus on taxation incentives introduced to encourage the uptake of farm partnerships and the scenarios, pre and post incentive were modelled in order to portray the potential benefit policy changes would have at farm level.

### *3.2.3. Problem Centred Interviews*

Based on the emergent evidence from Papers 1 and 2, a decision was made to apply Problem Centred Interviews to explore in a more in-depth way the underlying processes of farm transfer decision-making using more individual level investigation to allow for more detailed accounts of specific farm situations.

A key benefit of PCI in this research is that it allowed for an open narrative at the beginning, followed by a thematic interview. This aspect is described as a 'significant contribution' of the approach by Schiebelhofer (2005) in that PCI allows for 'a coherent combination of different interviewing styles' (p. 19). The broad nature of the PCI is not unlike the approaches taken when using semi structured interviews in combination with the Biographic Narrative Interview Method (BNIM) or other narrative interview forms. As such, there are structured questions in the interview guide, but participants are given the opportunity at the beginning of the interview to answer a broad question and provide any detail they feel is relevant. PCI is underpinned by three principles as outlined by Witzel (2012), which include; problem centring, process orientation, and object orientation and within this study, these related to specific aspects of the research. Problem centring refers to the need for the research question to relate to a problem with direct relevance for the interviewee. Witzel and Reiter (2012) note that problem centring assists in revealing 'actual perspectives of individuals on a particular problem' (p. 24). Process orientation alludes to the development of knowledge or perception of the problem throughout the process. Object orientation relates to the flexibility of the method to the topic.

Witzel (2000) outlines four key parts of a PCI approach which include a short questionnaire, interview guideline, recordings and a postscript (p. 3). Prior to

formulating the interview guide and short questionnaire, the broad literature relating to farm succession and inheritance was reviewed in order to ascertain what specific areas had been investigated and the means by which the research was undertaken. Given the mixed method approach, the results from the hypothetical microsimulation exercise also influenced the interview guide and questionnaire.

During the open narrative stage farmers were asked to speak about their own situation and the individuals and circumstances that influence their farm decisions. Any specific themes that did not arise in the narrative but had been identified as integral to the investigation were raised with the interviewee. The aim of the open narrative section was to establish each farmer's perception of risk and explore their concerns around farm finances, with a particular focus on farm transfer. The thematic interview captured opinions on key issues including the effect of the farm system on their succession/inheritance decisions, the means by which information was sourced, and also the perception of policy surrounding generational renewal. After each interview a postscript was added detailing anything that happened during the interview that could not be captured in a recording, which in turn acted as a form of 'self-debriefing', as described by Wengraf (2001). In some cases the postscript took the form of written notes, while an audio recording was better suited where there was no time to take notes. The details of postscripts generally included contextual factors such as the apparent land quality in an area or notes on whether the interview was interrupted by the entrance of a family member as was often the case. Postscripts proved beneficial when reviewing material as they highlighted context that was not readily available from interview transcripts. In keeping with the method, interviews were recorded.

As opposed to conducting a short questionnaire at the beginning of the interview as suggested by Witzel (2010), this was held until the interview was over in a bid to avoid creating a formal environment that may have resulted in closed or short answers. Similarly, Flick (2014) suggests that a questionnaire at the outset could impede the open nature of the interview before it begins. The questionnaire was used to ascertain specifics of the farm such as size and system in order to allow for quantifiable aspects of the farms to be measured and related to the answers given.

The interviews were transcribed and thematic analysis was used to extract key issues that came to light based on financial concerns and location/farm system. Thematic analysis involves analysing interview transcripts for key themes that appear in a

recurring manner (Bryman, 2008). Mabry (2008) describe thematic analysis as ‘the identification of emerging patterns and categories from iterative reviews of the dataset’ (p. 219). Ryan and Bernard (2003) outline the importance of spotting repetitions during interviews which can be placed under a series of themes, these themes often begin as larger macro themes (such as ‘finances’ in this research) and are then coded further to create more specific themes (here these included themes such as taxation and retirement income). Braun and Clarke (2006) refer to a theme as something that relates to an important aspect of the research question and appears in a patterned manner across qualitative data. Once patterns and themes have been identified Boyatzis (1998) asserts that themes are then analysed in order to develop knowledge regarding the topic at hand, here, the knowledge developed linked to creating more depth of understanding from the quantitative results acquired earlier in the study. During the analysis of this research several articulations of risk were identified which were used as the basis for coding and organising the analysis of responses.

In this instance, the interviews were transcribed once complete. Following this the transcripts were printed and key statements regarding finances or forms of risk were highlighted. These statements revealed a range of commonalities across the interviews in tandem with the description of thematic analysis presented by Bryman (2008). The use of manual data analysis in the first instance facilitated a deeper understanding of the data which may not have been the case should a form of analysis software have been employed. Boyatzis (1998) asserts that working with data in this way ‘enhances appreciation’ (p. 30) of the information gathered and avoids any oversights such as nuances not being detected by software. A second stage of analysis was then undertaken in which the statements were pasted into Excel and placed into sub themes which formed the final (and most prominent) themes or codes, the usefulness of codes is noted by Boyatzis (ibid) in that they allow for more meaningful analysis. The main themes that emerged were: tax, retirement income, cost of long term care, and marital breakdown.

### **3.3. Sample selection rationale**

A purposive sampling approach was employed for this research. Interviewing farmers at random would not be suitable in this context as the variance in farm sizes and systems in Ireland would mean such a sample could yield very specific responses that are not comparable. There are already established differences between farm systems, their

location, and their farm succession and inheritance decisions. For instance, Uchiyama et al. (2008) found that farm size influenced succession, with successors on smaller farms being more likely to have employment outside of the farm; thus decreasing the likelihood of them entering farming. In a similar manner, Chang (2013) found that an increase in farm size of one hectare led to a 2.8% increase in the likelihood of succession on Taiwanese farms. Farm size can often be reflected in the system, for example, dairy farms tend to be larger on average than beef enterprises. Drawing on the diversity of Irish agriculture, differences in geographic, economic and demographic terms were considered as relevant for this research and are outlined below.

### 3.3.1. Farm system patterns

Farming in Ireland is dominated by key enterprises, with beef farms (namely suckler, beef finishing, and sheep farms) and dairy farms being the most popular forms of enterprise. Notably these systems vary significantly in terms of income and geographic spread.

**Figure 3.2. Average Family Farm Income (FFI) BY Region 2016, Teagasc National Farm Survey 2017**

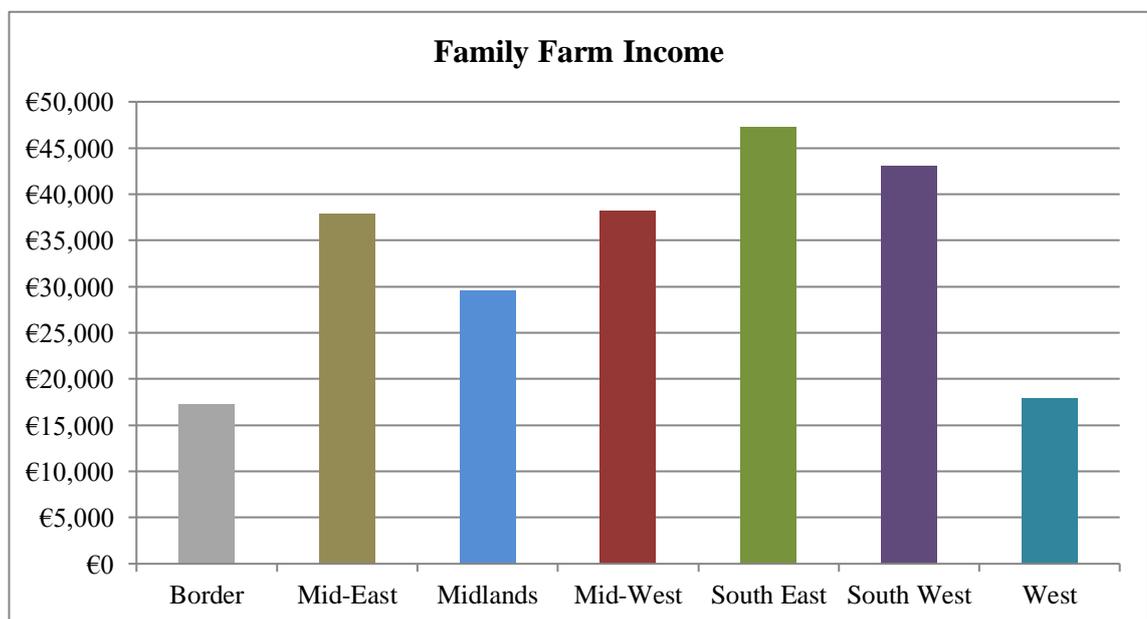


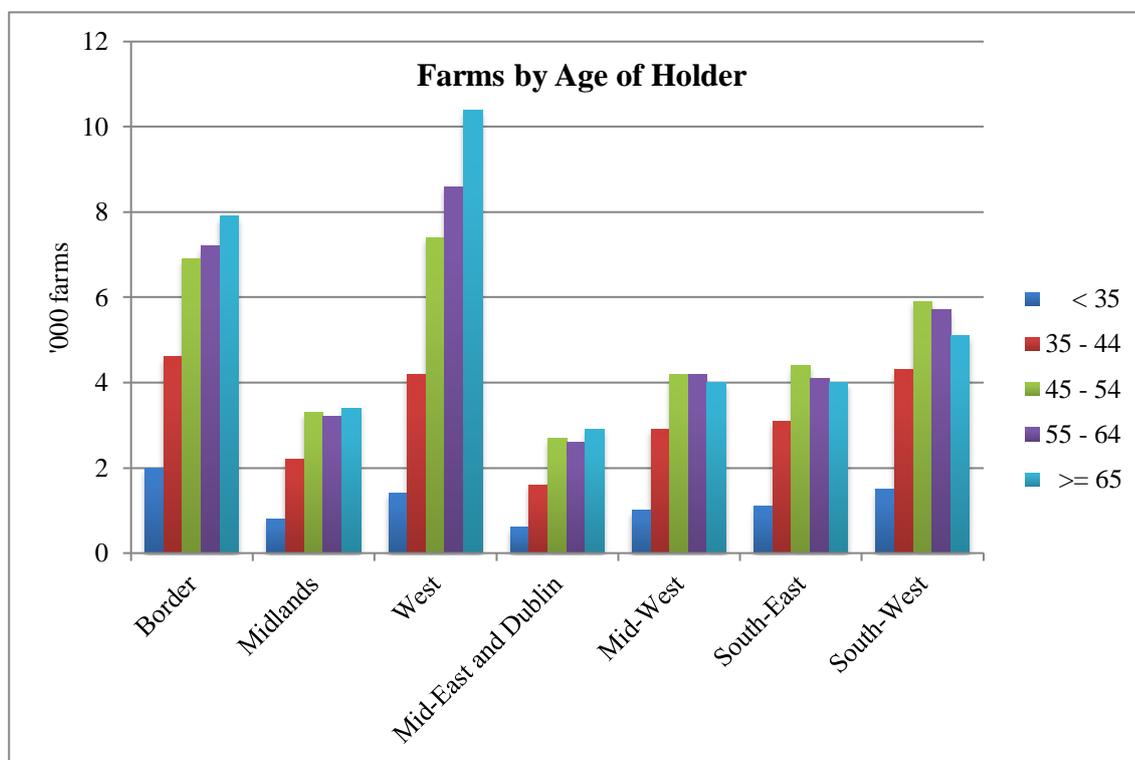
Figure 3.2 illustrates the average family farm income (FFI) by region. Farm incomes are highest in the South East and South West (owing to Dairy farms predominantly located here), while the lowest incomes are accrued in the West and Border regions (dominance of beef farms). Two of the most common farm systems in these regions are noted earlier as dairy and beef, inferring a clear link between location, farm system, and FFI. In terms

of sample selection, these regional differences form part of the rationale for comparing locations, in particular where farm incomes are in stark contrast.

### 3.3.2. Farmer demographics

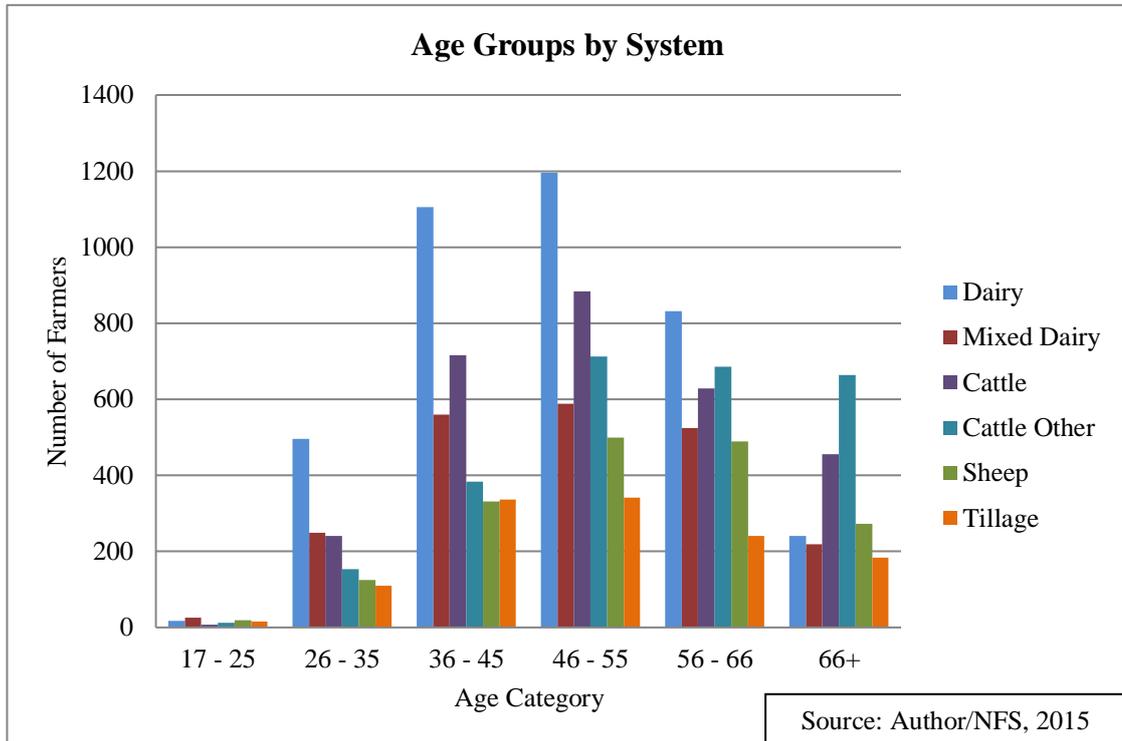
The average age of farmers on an EU wide scale is increasing, with Ireland being no exception (Zagata and Sutherland, 2015). The average farmer in Ireland is aged 56; (CSO, 2012). For many occupations the retirement age is 65, however, in the instance of farming there are very few retirements as a result of a myriad of reasons stemming from complex economic and social circumstances (see Leonard et al., 2017b, Conway et al., 2017).

**Figure 3.3. Age Group by Region (CSO, 2013)**



In Figure 3.3, a higher number of older farmers in the West than in any other region is evident, while there are notably fewer farmers above 65 in the Southern regions. This is strongly linked to Figure 3.4, where more young farmers were shown to be involved in dairy farming. This dispersal of farmer age indicates a strong correlation between farmer age, location and farm system.

**Figure 3.4. Age Group by Farm System**



The number of younger farmers involved in dairying (Figure 3.4) illustrates that there are more young farmers involved in milk production, a fact which may be attributed to the higher income generally accrued from dairy farming. In addition the older farmers involved in dairy production may be in a better financial position to hand over the farm before death. For cattle farming, the trend is inverted. A higher number of older farmers are involved in this system while the income from cattle farming is considerably lower. For this research, the economic focus warrants an investigation of different farm systems, with a strong focus on those systems at either end of the farm income spectrum. Based on Figure 3.3, there is also a need to focus on farmers in specific age categories. Given that the majority of farm transfers in Ireland are intergenerational, it is farmers in the older age groups who hold decision making power and thus farmers in these age categories will be the focus.

**Figure 3.5. (a) Area Under Retirement Scheme 1998 (b) Early Retirement Scheme Payees 2004 (Crowley et al., 2008)**

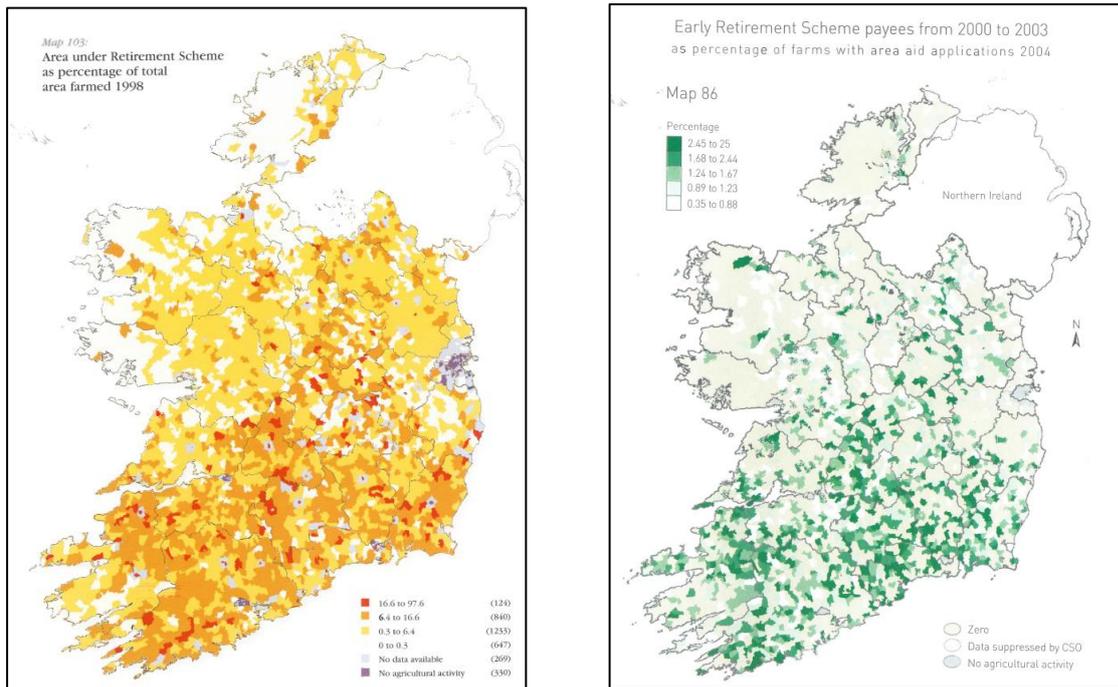


Figure 3.5 (a) shows the spread of uptake of the Farm Retirement Scheme (FRS) in 1998, evidently a higher number of farmers in the South and East regions entered the scheme. Similarly for the second round of the FRS the uptake was mainly in the South of the country (Figure 3.5 (b)). There is a clear link between location and farm income, farmer age, and likelihood of retiring; with the maps showing a significant difference between the west and south.

### 3.4. Study location

Of particular prominence in the data presented is the difference between the number of older/younger farmers in counties Cork and Mayo, for this reason (combined with the clear broader regional trends) these two counties will be used as the study locations. Additionally, these two counties are typical of their region in terms of prominence of farm system. Mayo consists of a high proportion of cattle farms, while Cork has a higher proportion of dairy farms. As a consequence, these counties also have differing average farm sizes with the average farm in Mayo being 22 Ha while the average in Cork is 38 Ha (CSO, 2011). Table 3.1 illustrates a breakdown of farms in these counties by size, revealing the most common farm size in each.

**Table 3.1. Farm Size by County (CSO, 2011)**

Cork		Mayo	
Farm size (Ha)	2010	Farm size (Ha)	2010
Less than 10	1,973	Less than 10	3,188
10 less than 20	2,500	10 less than 20	4,230
20 less than 30	2,430	20 less than 30	2,245
30 less than 50	3,712	30 less than 50	1,954
50 less than 100	3,032	50 less than 100	687
Greater than 100	575	Greater than 100	154
Total Farms	14,222	Total Farms	12,458

Given the range of farm sizes and the direct correlation between farm size and income level, a range of farm sizes will be interviewed. Farmers from the top, middle and bottom farm sizes will be interviewed to account for the range of income levels and the effect this may have on farm succession and inheritance decisions.

### **3.5. Selection of interviewees**

It is evident that there are variations between farmer age and likelihood of retirement which are correlated to farm system and location, with the West and South being the regions that differ most from each other. This presents a clear motivation to conduct comparative analysis between farmers in these regions. Ascertaining farmer perceptions of the succession and inheritance processes should allow for wide-ranging accounts of the interpretation of risk perceptions and the effects of economic/locational factors. The statistics presented imply a strong correlation between farm succession and inheritance and farm system and by association farm income. This correlation implies the presence of financial risk as a prominent factor influencing farm transfer processes.

A purposive sampling approach was employed for this research to ensure that farms with differing income levels were targeted, in particular beef and dairy farms. Central Statistics Office data was used to map the number of older and younger farmers by county. Figures 3.6 and 3.7 illustrate a concentration of younger farmers in the South, while a higher number of older farmers appear in the West. As noted, counties Mayo and Cork were chosen as study locations. Cork exhibited a high number of younger farmers (8% under 35) and a lower incidence of older farmers (20.8% over 65), while Mayo was the inverse with only 4.3% under 35 and 32.8% over 65. This sample selection allows for comparison between locations as well as between farm systems. With initial assistance from Teagasc in identifying key individuals, and then using a snowballing technique, 24 farmers in total were interviewed, 12 from Cork (6 East, 6

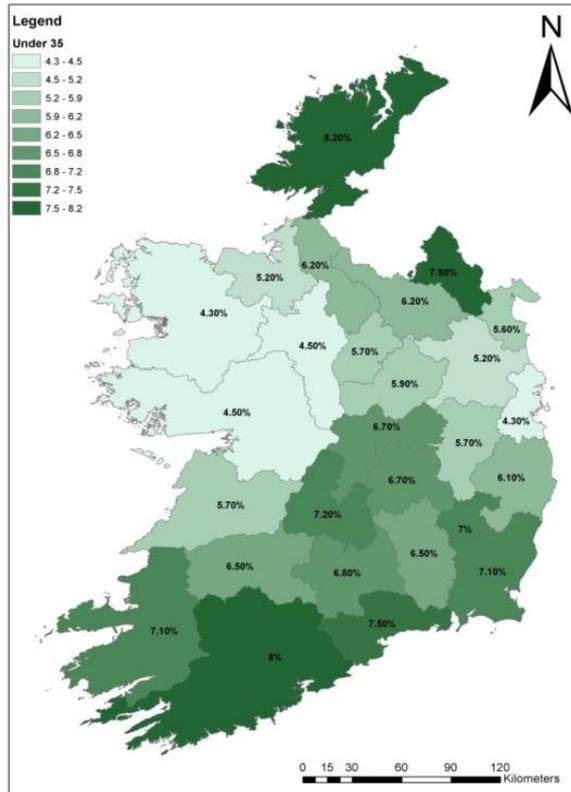
West), and 12 from Mayo (6 North, 6 South). All farmers were given pseudonyms to ensure anonymity. Of the farmers interviewed only two did not have children. In terms of employment status, the majority of beef farmers were retired from off-farm jobs, while dairy farmers were exclusively full-time farming or semi-retired from farming (Table 3.2).

**Table 3.2. Sample Farmers**

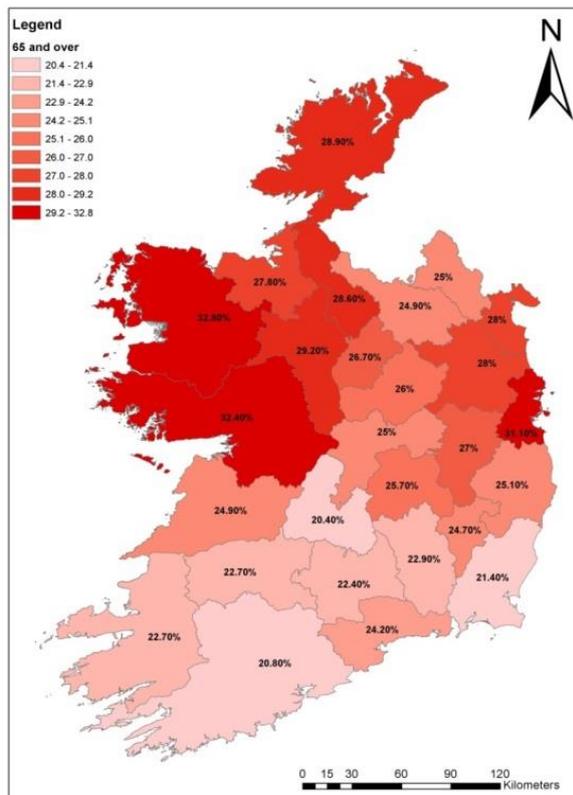
System	Name	Age	Children	Farm size	Work off farm
<b>Beef</b>	Sean	61	0	14 Ha	Retired
	Michael	71	4	28 Ha	Retired
	James	65	3	40 Ha	Yes
	Richard	56	2	19 Ha	Yes
	Nora	80	5	51 Ha	Retired
	Brendan	65	3	30 Ha	Retired
	Thomas	61	0	40 Ha (8 rented)	Retired
	Louis	66	2	24 Ha	Retired
	Jack	70	8	30 Ha	Retired
	Pat	58	6	40 Ha (30 rented)	No
	Kevin	69	4	58 Ha (36 rented)	Yes
	Stephen	69	2	52 Ha	No
<b>Dairy</b>	Joe	50	4	40 Ha (12 rented)	No
	PJ	50	3	100 Ha (60 leased)	No
	Enda	59	4	36 Ha (57 leased)	No
	Donal	58	2	36 Ha (15 rented)	No
	David	50	4	52 Ha (61 rented)	No
	Liam	50	4	85 Ha (39 rented)	No
	Padraig	65	4	40 Ha	No
	Peter	75	3	40 Ha	No
	Mark	68	5	40 Ha (28 leased)	No
	Luke	76	3	85 Ha (40 leased)	No
	Paul	64	5	45 Ha	No
	Damien	58	3	26 Ha owned (35 leased)	No

The dominance of older farmers in the West of Ireland is evident in Figure 3.7, which may be attributed to several factors including a lower average farm income in the West, but also the possibility that farmers are unable to begin the process of farm transfer due to a lack of income for retirement. Additionally, attracting a successor to a low income farm in a remote area can prove difficult (Aldanondo Ochoa et al., 2007). In parallel to the map of farmers 65 and over (Figure 3.7), figure 3.6 shows a higher number of farmers under the age of 35 are in the East and South of the country. Again, this may be a result of the higher farm incomes and dominance of dairy and tillage systems in these regions (i.e. farm systems that are capable of financially supporting two generations at once, or have a high enough income for farmers to have a private pension fund).

**Figure 3.6. Farm holders aged under 35 by county (CSO, 2012)**



**Figure 3.7. Farm Holders aged 65 and older by county (CSO, 2012)**



### **3.6. Positionality**

An important aspect of the interviews was that the farmers felt comfortable sharing information regarding a topic that they may have not discussed with family members. Cassidy and McGrath (2014) note that having ‘insider’ status was beneficial to their research regarding non-successor farm siblings. Similarly, Conway (2017) experienced the insider status gained from being a member of the farming community, which meant interviewees felt they could speak about the multitude of topics relevant to farming ranging from market trends to weather. This exemplifies the findings of Neal and Walters (2006) who note the element of a ‘stranger’ asking questions in the form of a researcher can impede the quality of information gathered, whilst having a sense of common understanding or identity can result in a more open narrative; in particular for rural research.

Making farmers aware that the researcher actively engaged in farming and was not constantly based at a desk with no practical experience or understanding of life on a farm was pivotal to the sharing of information. For the majority of farmers interviewed the revelation that the person conducting the interview came from a family farm on which they worked at weekends led to a more open flow of conversation, where interviewees used farm specific terms and often referred back to the fact that the interviewer had probably experienced some of the things they mentioned. Kuehne (2016) assert that farmers decide who is considered an insider based on criteria such as the language used by an interviewer. This contradicts the suggestion of Groves et al. (2004) who suggest that interviewers should not present personal information while conducting interviews, while this may be relevant for some research areas, in this instance personal information contributed to the quality of data gathered.

### **3.7. Ethical considerations**

The nature of the research topic, while complex, did not warrant emotive responses from interviewees as the economic aspects of farm transfer are less complicated than personal land attachment, for instance. Nonetheless, it was important that ethical considerations were taken into account, these included informed consent and confidentiality. As outlined by Fisher and Anushko (2008) the principals of informed consent specify that research participants should be made aware of (among other things) the purpose and duration of the research, the fact that they have the right to withdraw at any time, and the level of confidentiality afforded to their data. Interviewees were made

aware of the purpose of the study and given time to ask any questions to clarify any aspects of the research they were not clear on prior to interview. In addition, a consent form was used to acquire permission to record the interview and transcribe the narrative. Finally, farmers were ensured that the information they shared would be treated with the highest level of confidentiality and there would be no use of their name or address in any form of publication from the research.

The next chapters are made up of the empirical research findings garnered from the application of the above methodologies. Each of the three chapters takes the form of a stand-alone academic paper, whilst the final chapter outlines the coherencies between each chapter and the policy repercussions from the research.

## **Chapter 4**

# **Policy Drivers of Farm Succession and Inheritance**

## **Chapter 4 – Policy Drivers of Farm Succession and Inheritance**

### **4.0. Abstract**

Farm succession and inheritance is increasingly considered a complex phenomenon which not only affects core dimensions of farm family life but also the agricultural sector more widely. Intergenerational farm transfer in particular is increasingly viewed as fundamental to the sustainability and development of global agriculture. In the majority of EU countries, the average age of farmers is increasing, while the number of farmers under 40 years of age is decreasing. There is growing concern that this demographic trend may have negative impacts on the agricultural industry because it is younger and not older farmers who are associated with more efficient and effective production practices. The question of what motivates decisions to transfer farms is a complex one, and research to date has not apparently enlightened agricultural policy to the extent that current trends towards an ageing farm population are being managed. This research aims to investigate economic and financial aspects of the policy drivers of farm succession and inheritance in Ireland to understand what it is about the policy environment that is failing to stimulate higher levels of farm transfer. It draws on the Teagasc National Farm Survey data which provides Irish data to the Farm Accountancy Data Network in the European Commission. A hypothetical microsimulation model is used to investigate economic factors of farm transfers, with scenarios created to test these factors and their impacts on the transfer process. The Net Present Value (NPV) of income streams for farmers and their successors are calculated to assess which scenarios have the highest/lowest financial effects. The findings illustrate a range of possible scenarios for farm succession/inheritance, with some results indicating that under current policy retaining a farm until death may be more economically beneficial to a farmer than transferring land before death.

Key Words:

Agriculture, policy, succession, inheritance, farm transfer, young farmers

### **4.1. Introduction**

The process of farm succession and inheritance is highly complex and involves a variety of actors, ranging from family members to professionals providing advice on legal and financial matters (Williams, 2006). In most European countries the family farm model is the predominant form of ownership, meaning that farm transfer commonly takes

place generationally. Much of the literature highlights that inheritance is the dominant means of entering farming (Kelly, 1982; Taylor et al., 1998; Hennessy and Rehman, 2007). Factors affecting the decision to transfer a family farm can be both social and economic, with some farmers aiming to ensure all family members are catered for when the farm is transferred, while policy effects and economic concerns of capital taxes and future income can also have a very strong influence on farmer choices. In many developed countries there is concern over the ageing farming population. The average age of farmers in the United States, for example, is 57 (Mills-Novoa, 2011) while almost one third of farm holders in Europe are over the age of 65 (Zagata and Sutherland, 2015). More than half of farmers in the UK are over 55 (ADAS, 2004). In Ireland, the 2013 Teagasc National Farm Survey showed the average age of farmers as 57, with this figure increasing marginally year on year over recent decades, and the number of farmers under 40 years decreasing over the same period of time. This trend has become a source of major concern for the agricultural sector, given the evidence of a positive correlation between younger farmers and farm efficiency/innovation (Potter and Lobley, 1996; Lobley, 2010; Howley et al., 2012). In increasingly globalized and competitive agricultural markets it is argued that the most productive and efficient farmers should be working in the sector (Williams, 2006; Zagata and Sutherland, 2015). In the Irish context, a stifled land market has resulted in very low land mobility and there is a clear pattern of capital accumulation amongst older farmers who are fearful about their financial future and unwilling to transfer their farm assets (Matthews, 2014). Furthermore, state assistance to agriculture provides direct payments to farmers, making it financially beneficial to hold on to agricultural land rather than selling it. The result is a sector dominated by older farmers, with access for young farmers an increasingly problematic issue.

Historically, there has been no substantial long term EU policy put in place to encourage timely transfer of farms or even to assist in the process of gradually handing over managerial control to younger farmers. Early Farm Retirement Schemes (EFRS) are one of the mechanism that have been used in attempts to reduce the average farmer age and increase the entry of young farmers. These schemes were optional and mainly taken up by Ireland, France and Greece (Davis et al., 2013). Whilst there have been three rounds of EFRS in Ireland, in 1993, 2000 and 2007 (Teagasc, 2007), all were short-lived and said to have represented little value for money in the sense that they only succeeded in incentivising farmers who were already close to retirement, rather

than a fundamental restructuring of the age profile of Irish farmers (although they did show a small but temporary level of success in that regard) (Hennessy, 2014). Similar to the Irish experience, Caskie et al. (2008) found that in France and Greece the EFRSs did not bring about any deep-rooted change to farm transfer trends, as farmers entering the scheme were already close to retirement age. In the UK, Ingram and Kirwan (2011) evaluated the Fresh Start Initiative, a scheme which matched new entrant farmers with retiring farmers as a means of giving younger farmers a start and older farmers a gradual exit strategy. However, this was not seen as hugely successful because there were insufficient profits from some partnerships to sustain two salaries. In the case of New Zealand, the dairy industry does have a well-developed career structure which gives young farmers the opportunity to begin farming and has exit schemes available for older farmers such as phased exit strategies (CIAS, 1996). For dairying, this works on the basis of share milking, which enables younger farmers to begin farming whilst allowing older farmers to gradually exit. Up to 35% of dairy farms in New Zealand are share farms (Curran, 2014). For all of these schemes, getting to the point of transfer at an earlier stage is the main issue. One obvious incentivising factor for farm transfer concerns the need for the retiring farmer to have sufficient income in the form of a pension or other resources. This is connected in turn to the need for a farm to be viable in order to attract and support a new entrant. The extent to which these are influencing factors in farmers' decisions to retire and transfer their farm is not clear.

A key aim of this discussion is to critically analyse aspects of prevailing policy with a view to identifying the ways in which it influences decisions relating to succession and inheritance. It specifically examines the effect of a range of policy mechanisms including taxation and other financial instruments that control the options for farm transfer and the implications for farmers' decision-making in this regard. It focuses on the Irish context where there has been a recent surge in farming interest on the part of young people. Enrolments for agricultural degree and training programmes are at an all-time high, illustrating a strong intention to pursue farming as a primary career choice (Heanue and O'Donoghue, 2014). At the same time the availability of farms to facilitate entry of younger farmers is critically low. The paper first briefly outlines the most common forms of farm succession and inheritance and the ways that these have been typically framed within agricultural policy prescriptions. Then, taking data from the Teagasc Irish National Farm Survey of 2013, it applies a microsimulation model to analyse the financial implications of policies and individual choices on succession and

inheritance decision-making. It draws on the concept of risk to interpret the underlying processes driving decisions on succession and inheritance, exploring, for example, the extent to which the policy domain may be contributing to farmers' potential sense of vulnerability and insecurity about post-farming livelihoods and how it is mitigating against attempts to bring about a restructuring of farming in favour of younger farmers.

#### **4.2. The concept of risk in the agricultural policy domain**

The main policy instruments available to governments are financial e.g. tax relief or grant based schemes. Essentially, governments use financial incentives to encourage individuals to undertake measures that achieve strategic governmental aims (for example Food Harvest 2020 targets). In the agricultural sector, aims such as environmental conservation are achieved using agri-environmental schemes; these schemes generally benefit farmers economically (Morris and Potter, 1995). Entering financially incentivised schemes reduces uncertainty around income for farmers, thus reducing their perceived economic risks (Koundouri et al., 2009). While it has been argued that farmers are generally risk averse (Groom et al., 2008), there has been no specific research investigating whether or not farmers perceive succession and inheritance processes as a risk. Recent research has indicated that farmers with children between the ages of 5 and 19 tend to be more risk averse (Loughrey et al., 2015). This implies that farmers with potential successors may avoid risk where possible; however, generalisation based on very few studies to date cannot be made.

#### **4.3. Overview of current Irish transfer policy environment**

At present, certain financial incentives are in place to encourage early transfer of Irish farms, however, the level of influence and impact the current incentives have on succession and inheritance decisions is yet to be determined. These incentives take the form of a range of taxes and duties applying to farm transfer and inheritance.

In Ireland, there are three capital taxes that apply to farm inheritance; they are Capital Gains Tax (CGT), Capital Acquisitions Tax (CAT) and Stamp Duty. CGT applies only to the farmer transferring land out of their name and it is charged at 33% of the value the property gained between date of acquisition and date of sale/transfer. CAT is applicable to the successor and is charged at 33% of the value of the property acquired (over and above the relevant relief threshold bands in table 4.1). Like CGT, CAT reliefs are available up to certain asset value thresholds; these reliefs are dependent on the relationship between the farmer and successor (i.e. son, daughter, niece, nephew etc.).

In recent years these thresholds have decreased dramatically (See table 4.1) leading to a disincentive to take on farm land and assets in some cases, however 2015 marks the first year since 2009 that these limits have increased. Stamp Duty is also applicable to the successor, with this being charged at 2% of the value of the property, but can be reduced to 1% based on the relationship of the farmer to successor (McDonnell, 2014). If the successor is a son/daughter of the farmer, and is under the age of 35 with a minimum level 6 agricultural certificate, stamp duty is reduced to zero. Other policy incentives to facilitate earlier transfer in the Irish case are young farmer top ups on Basic Farm Payments (BFP) and other direct payments. Farmers under the age of 40 who have a minimum level 6 agricultural certificate may receive a 25% top up on their BFP (maximum limit of 50 hectares).

**Table 4.1. Capital Acquisitions Tax Thresholds 2009 - 2013**

Group	Relationship to Disponer	8/4/09 to 31/12/09	1/1/10 to 7/12/10	8/12/10 to 06/12/11	07/12/11 to 05/12/12	6/12/12 to 13/10/15	14/10/15 to present
A	Son/Daughter	€434,000	€414,799	€332,084	€250,000	€225,000	€280,000
B	Parent* <sup>6</sup> /Brother/Sister/Niece/Nephew/Grandchild	€43,400	€41,481	€33,208	€33,500	€30,150	€30,150
C	Relationship other than Group A or B	€21,700	€20,740	€16,604	€16,750	€15,075	€15,075

The above describes the current Irish policy situation, but in the Irish context, as in many developed countries, motivating farmers to implement farm level change is a challenge for all agricultural policy formulation. Vanclay (2004) for example asserts that the farming community is heterogeneous, with great variance amongst farmers; therefore, it can be very difficult to create policy that will be accepted or effective in a high number of cases. In his discussion, Vanclay (ibid) lists 27 social principles for agricultural extension within which is the affirmation that ‘farmer motivation exceeds any rational economic decision’ (p. 214). Briassoulis (2008) alludes to the same notion, in stating that ‘the era of ‘one-size-fits-all’ theories in land use policy and planning is ended’ (p.29). One possible reason for this could be the notion that agricultural policy is created on a reactive basis as opposed to a proactive one (Hill, 2000). Norton (2004)

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<sup>6</sup> \*In certain circumstances a parent taking an inheritance from a child can qualify for group A threshold

also refers to this issue in the context of policy in general, stating that policy reforms only address one issue at a time, as opposed to creating a strategy around what direction the sector affected should take. The most common reactor within agricultural policy often contains some form of economic incentive as farmers in many incidences are drawn to policy that proves financially beneficial. One such example would be the agri-environmental schemes implemented in European countries through Common Agricultural Policy reforms. In the UK, for example, farming in an environmentally-friendly manner in Environmentally Sensitive Areas (ESAs) was financially rewarded. Morris and Potter (1995) however, refer to ESAs as a ‘new source of subsidy’ (p. 53) that was welcomed by farmers. They question the extent to which such payment amounts to ‘buying changes’ which would not otherwise occur, thereby strengthening the notion that farmers can in fact be led by financial incentives. Similarly in Ireland, the Rural Environmental Protection Scheme (REPS) became very popular with farmers, especially those on lower farm incomes. Emerson and Gillmor (1999) argue that ‘undoubtedly the main reason why many farmers adopt the REPS is financial’ (p. 244). Similarly, Brouwer (2004) implies that in the area of cross-compliance farmers are economically driven, stating that the correct incentive must be in place to motivate farmer participation in any scheme or programme. However, in the area of succession and inheritance it is yet to be determined if a significant number of farmers can be influenced by such policy change.

#### **4.4 Impact of farm viability on transfer**

Farm viability is another distinct issue of relevance for Ireland, with 33% of farms in 2013 being categorised as vulnerable (Teagasc NFS, 2013) and a further 35% in the category of ‘viable’. Viable here denotes a farm that has the capacity to pay family labour at the average agricultural wage and provide a 5% return on all non-land assets; while vulnerable denotes that the farm is not viable and neither farmer nor spouse have a source of off-farm income. This can have a strong effect on farm transfer because a low farm income leads to concerns over the farm being capable of providing an income for both the farmer and/or the successor. This can also result in problems of adequate retirement income for the farmer, leading to land retention as a form of financial security.

#### **4.5. Succession effects**

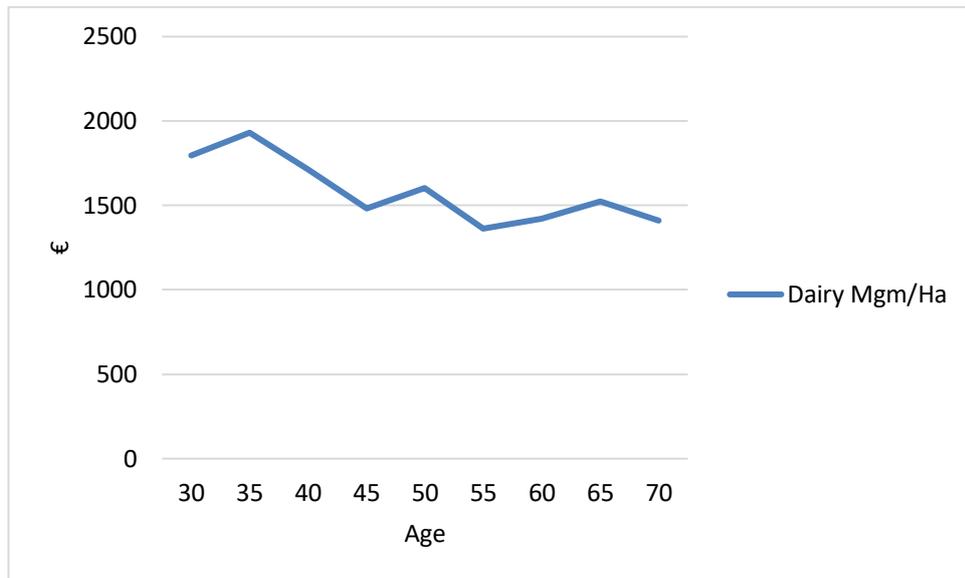
While farm viability can be of great importance, the possibility that viability may be increased or decreased is implied by Potter and Lobley (1996). They have coined the terms ‘succession, successor and retirement effects’ with each having a different impact on a farm’s trajectory. The succession effect implies that farmers with successors are more likely to invest or expand in anticipation of a takeover of the farm by a son or daughter than those who do not have a successor. In contrast to this, Loughrey et al. (2015) found that farmers with more children between the ages of 5 and 19 were more risk averse. While risk and expansion are not the same phenomenon they may be correlated; indicating further research may explain the variance of these results. Potter and Lobley (ibid.) argue that ‘farmers without successors and those with low expectation of succession seem significantly more likely to be disengaging from agriculture’ (p. 329). Several authors have attained research results which confirm the existence of the succession effect (Burton and Walford, 2005; Shawyer, 1990; Calus et al., 2008). The successor effect refers to the positive impact which a successor can have on a farm once he or she becomes actively involved in the running of a farm and decision-making processes. This also includes the period in which a successor assumes full or gradual managerial control. Generally young farmers returning from agricultural education are more aware of new technologies or wish to implement change on their own farms resulting in increased efficiency and output (Potter and Lobley, 1996). The final effect mentioned by Potter and Lobley (1996) is the retirement effect, which generally has a negative impact on farms i.e. the process of semi-retirement tends to be characterised by de-intensification and liquidation of assets if there is no successor present. It refers to the period in which a farmer is coming near the end of his or her farming career, where the impacts for the farm are most serious when a successor has not been identified.

While the positive effects of the presence of a successor can generally be measured (e.g. farm expansion), other immeasurable outcomes can stem from the succession effect. Fischer and Burton (2014) contend that farm succession as socially-constructed phenomenon necessitates a sustained engagement and process of socialisation of the successor with the farm from early childhood in order to form the kind of ‘successor identity’ (p. 417) needed to effect farm takeover (Brandth and Overrein, 2013). Drawing on the social constructivist framework of social identity to explain the formation of farming identities, they develop the concept of endogenous succession cycles to

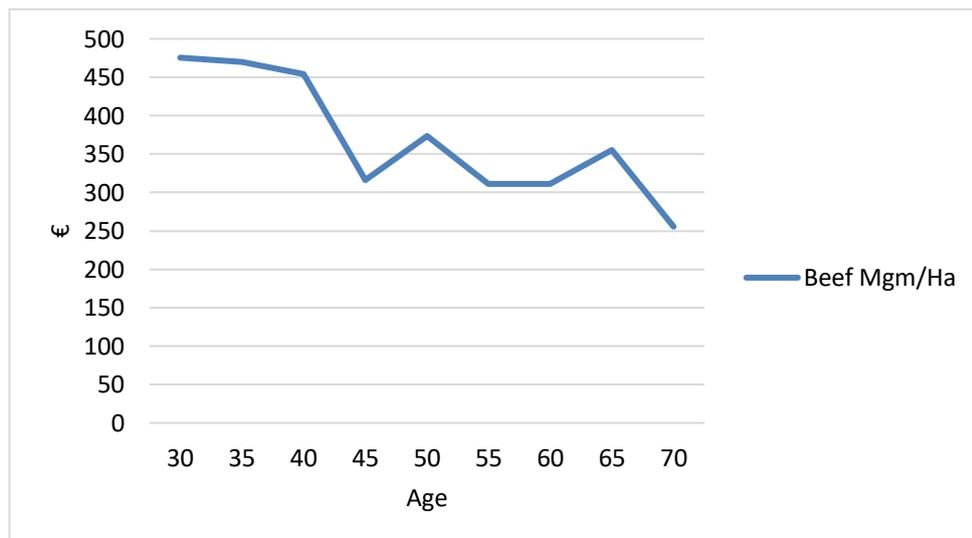
interpret the trajectory that underpins succession outcomes. This is built on three intertwined and mutually-reinforcing processes; the construction of successor identities; the progression on the farm 'ladder'; the development of farm business identities (p. 424). Under this social constructivist perspective, succession is therefore not so much an outcome of a set of rational choices or of specific policy interventions, but more about how the successor's gradual identity development has come to reflect the sustained and complex set of experiences, interactions and expectations that relate to that specific farm. For them, the policy requirements of what is essentially a farm-specific phenomenon are measures that protect and sustain endogenous cycles which in turn ensure the ongoing socialising of particularly during hardship periods or other farm crises, or that may be disrupted due to farm modernization or regulatory change.

In many cases farmers are reluctant to retire and thus retain farm ownership/control well past normal retirement age. This in turn affects the age at which a successor may become actively involved in farm decision making. There are various reasons of both economic and non-economic origin that contribute to the reluctance of farmers to retire. Riley (2012) extensively discusses the impact of farm retirement on social and cultural identities, particularly of males in farming, where farming and social relations were tightly intertwined and the idea of disrupting these is resisted, where there are conflicted emotions about cutting generational ties to farming, and where adaptation to life away from farming proves difficult. Conway et al. (2016) similarly allude to the non-economic reasons that influence such a decision, including the impact on a sense of personal identity closely connected to farming as the way of life and unwelcome reminders of mortality. These effects are all considerable for farm families, but in turn each of the effects mentioned could potentially impact on global agricultural output levels. Figures 4.1 and 4.2 show the increase in farm income until the farmer reaches his or her late 30s, with income decreasing thereafter. This indicates that for a farm transfer to have a positive economic impact on the farm, transfer should ideally take place before the successor is 40. This data concurs with the idea of a succession and successor effects. A slight peak appears around age 50 for both farm systems, which may be a result of farmers having identified successors by this age and thus begin expansion. However, a dip occurs at age 55 contradicting this argument. Further probing of NFS data may reveal the reason for this.

**Figure 4.1. Dairy market gross margin per hectare, by age ( Teagasc NFS, 2013)**



**Figure 4.2. Beef market gross margin per hectare, by age (Teagasc NFS, 2013)**



#### **4.6. Methodology and Data**

The area of farm succession and inheritance lends itself to a high level of complexity given the factors involved such as the wide-ranging impact of such a decision on the lives of the farmer, successor, and their families (Inwood and Sharp, 2012). Nonetheless, the levels of complexity must be extracted so that the chosen scenarios can be used to analyse the economic impact of different routes to succession and inheritance. Microsimulation is the most appropriate methodological approach as it allows for complexity to be removed to an extent and an assessment of different changes to be made at a micro level (O'Donoghue et al., 2014). This method facilitates

the projection of income streams for both parties, whilst allowing for farm level changes (such as income increase/decrease and farm size adjustment) to be made for each scenario. Methods used will be outlined further in this section.

#### *4.6.1. Measures of Impact/Analytical Measure*

Net Present Value (NPV) is defined as ‘the difference between the present value of all cash inflows (benefit) and the present value of all cash outflows (cost)’ (Jechlitschka et al., 2007, p. 113). Values such as income stream will be discounted to the present value. Bacidore et al. (1997) argue that the NPV of a business can be greatly affected by strategies adapted for the future of the business, here; the strategy of the farm business is based on the succession/inheritance decision made. Using NPV’s for the farmer and successor will indicate the future income streams both would acquire in the scenarios modelled. A Net Present Value (NPV) figure will be calculated for each scenario using a microsimulation model; the outcomes will then be compared focusing on the policies and motivations which affect each decision. Together with the NPV, a replacement rate will be calculated for the farmer in each scenario. This will be calculated by dividing income at age 66 by income at age 65 i.e. retirement replacement ratio.

$$\text{Replacement ratio} = \frac{\text{Income at 66}}{\text{Income at 65}} \times 100$$

This formula is an edited version of the replacement ratio formula presented by Turley and Maloney (1997). The average net replacement rate for an Irish male is 45% (OECD, 2012), with the average for all OECD countries being 66%.

#### *4.6.2. Policies and motivations*

Modelling different scenarios of succession and inheritance decisions allow for the comparison of NPVs, which will result in the most economically beneficial succession and inheritance scenarios to be established. Each scenario is affected differently by policy and the decisions taken are a result of various motivations. Table 4.2 lists the main policies and motivations that will affect each scenario.

**Table 4.2. Main policies and motivations affecting succession/inheritance**

Main policies and motivations affecting succession/inheritance	
Policies	Motivations
CAT – Agricultural relief	Age
CGT – Retirement relief	Income
Stamp Duty – Consanguinity relief	Health
Young Farmer Top Ups	Increased leisure time
	Financial security
	Education

#### 4.6.3. Base farm

To ensure each scenario is comparable two base farms will be used for this research, using capital taxation rules from 2014. The farms will be based on the NFS average data for a cattle rearing and dairy systems, as these are the most dominant farm systems in Ireland. In the case of the cattle rearing farms modelled, all farmers/successors qualify for farm assist payment based on the low income level. The figures are as follows:

**Table 4.3. Average Cattle Rearing/Dairy Data ( Teagasc NFS,2013)**

Average Cattle Rearing		Average Dairy	
Family Farm Income	€9,541	Family Farm Income	€62,994
Machinery	€17,717	Machinery	€57,218
Livestock (Breeding)	€26,534	Livestock (Breeding)	€85,569
Trading	€16,855	Trading	€27,867
Land and Buildings	€577,615	Land and Buildings	€973,079
UAA	38.1 ha	UAA	55.4 ha
Total cattle number	61	Total cattle number	143

Farmer and successor characteristics used will be as in table 4.3; these characteristics are applied so that the farmer and successor qualify for maximum capital tax reliefs. A farmer aged 35 or under is considered a young farmer for capital tax reliefs. In the scenarios modelled the successor will be the child of the farmer. While a farmer over 65 is considered to be at retirement age and is eligible for a contributory state pension (hereafter referred to as state pension) at age 66 (depending on contributions made, for all scenarios it is assumed the farmer has made full contributions). In addition, modelling with the farmer being aged 65 will allow for a comparison of pre and post retirement income. An age based tax credit is also available in Ireland on reaching age 65. The characteristics used here are:

**Table 4.4. Farmer/Successor characteristics**

Farmer	Successor
Age: 65	Age: 35
Married	Education: Level 6 Ag. Education
Pension: Contributory	Single
No off farm job	Off farm job (€25,000 income)

#### 4.6.4. Scenarios

The scenarios selected for this research are based on the predominant routes to succession that are available in Ireland and the most highly documented routes in literature (Hennessy and Rehman, 2007; Kelly, 1982). As illustrated above, there are a range of motivations and policies affecting the succession and inheritance decision. Many of the factors listed in table 4.2 will be significant in the hypothetical scenarios.

#### 4.6.5. Expected outcomes

It is expected that scenarios where tax reliefs are optimised will be the most economically beneficial to the farmer and successor, however, ages, income levels and asset values should have the biggest effect on policy drivers. Policies aimed at increasing land mobility should minimise land transfer costs and incentivise farmers to transfer land earlier, however, direct payments may make it more economically beneficial to the farmer to delay transfer until death. These payments may result in land retention by older farmers, as they provide a steady source of income into retirement. Replacement rates for some farmers may be lower than the averages mentioned above, based on a common lack of strong retirement income planning among the farming community. In section 4 the outcomes of each scenario will be discussed.

Focusing on two hypothetical farms will allow for the sensitivity of farms to policies to be tested while avoiding the complications that would arise were this study to be undertaken on a real farm. Variables such as farm size, income, and livestock units can be held constant which may not always be the case in reality. Adjusting aspects of the farms will test the effects of succession/inheritance policies on income (including future income represented as NPV) and capital tax implications.

#### 4.6.6. Hypothetical microsimulation modelling

Microsimulation models use data on micro-units (e.g. households, firms, farms, etc.) to simulate the effect of policy or other socio-economic changes on the population of

micro-units (Mitton et al., 2000). The need for microsimulation arises from the difficulty of observing simultaneously the outcomes for the same micro-unit under a treatment and in the absence of a treatment (e.g. policy change), and also crucially as a tool to understand the complexity of a policy problem. The result of the microsimulation models can be affected by many factors, which makes it difficult to illustrate the effect of a single factor. Hypothetical models, on the other hand, often focus on a particular scenario under certain predefined assumptions. This allows the model developer to examine a simplified version of the simulated observation (O'Donoghue et al., 2014). Microsimulation techniques have become a much used instrument for their ability to provide an assessment of differing scenarios and facilitate decision making (Spadaro, 2007). In this case, microsimulation will be used to inform decisions regarding farm transfer. Focusing on a hypothetical farm will allow for the sensitivity of farms to policies to be tested while avoiding the complications that would arise were this study to be undertaken on a real farm. Farm level decisions are not always rational or economically driven (Vanclay, 2004; Howley et al., 2012), but this method facilitates the simulation of decisions based on economic incentive as opposed to basing decisions on non-economic phenomena. Adjusting aspects of the farm will test the effects of succession and inheritance policies on income and capital tax implications.

#### *4.6.7. Data requirements*

The data being used here is hypothetical farm level data, each scenario described above requires information on a range of variables, namely: age of farmer/successor, incomes for both parties (on and off farm), type of pension (farmer/spouse), asset values (land, machinery, livestock, direct payments received, and personal asset values). This data will then be used in the model to generate a NPV for both parties involved. As discussed in section 2, NFS average figures for cattle rearing and dairy farms will be used for the base farm, with farmer and successor ages and incomes being simulated so that they qualify for maximum capital tax reliefs. Section 3 will describe each scenario to be modelled in detail.

### **4.7. Results**

#### *4.7.1. Routes to succession*

As mentioned above, there are a range of routes to farm succession/inheritance; nonetheless, there are only a certain number of choices available to both farmers and

successors. The variety of transfer options available were considered leading to the scenarios below, these scenarios will be modelled in section 4. In the scenarios presented, it is assumed that the NFS average figures for cattle rearing and dairy apply. For clarity of results, scenarios labelled 'A' will apply to cattle rearing systems, and scenarios labelled 'B' will apply to dairy systems. As mentioned, there are a range of other possible situations involving farm transfer; however the two shown here best illustrate the policies associated with farm transfer and how they may have an effect on succession and inheritance processes. Below the scenarios are outlined.

#### *4.7.2. Scenario 1 – transfer at death*

In this scenario the farmer retains ownership and use of all farm assets until death, resulting in financial security and retirement income for his lifetime. Transfer on death results in no CGT applying to the transfer, as this tax applies to the farmer only. This can be a financial burden for those transferring their land to another party. The farmer will acquire the state pension (contributory) from the age of 66 which will be supplemented by farm income. On death of the farmer, the successor will inherit all farm assets. This scenario is not uncommon in farming with farmers often being highly reluctant to retire, one reason for this being a lack of available retirement income (Riley, 2014). In addition, Terres et al. (2015) highlight that farmers in general will not exit agriculture unless their income becomes very low. In the case of this scenario the farmer's income should increase on reaching age 66 as a result of farm income and pension combining. Thus, there would be little financial incentive for the farmer in this situation to transfer the farm before death.

#### *4.7.3. Scenario 2 – transfer at death (destocking and retaining payments)*

The farmer here will destock to the minimum level necessary so that he/she may receive Less Favoured Area (LFA) payment (0.15 livestock units/Ha), retain their SFP, and still acquire a state pension. The pension figure here will depend on Pay Related Social Insurance (PRSI) contributions, the number of dependants the farmer has, their age and if they are living alone. The maximum weekly pension allowance here would be €230.30 and the minimum would be €92. The farmer is motivated to destock so as to cut down on labour input and thus increase leisure time. Retaining ownership of the farm will result in the farmer remaining eligible for the LFA and SFP, whilst also providing financial security to provide for long term care requirements should they arise. Gullifer and Thompson (2006) assert that farmers may disengage with their work

as they age; this is essentially what is occurring in this scenario. Similarly, Kristensen et al. (2004) found that older farmers are more likely to engage in extensification and in some cases land abandonment. However, the factors listed earlier in table 4.2 would also contribute to the farmer’s decision to destock and reduce workload.

#### 4.7.4. Outcomes

The scenarios described above were modelled on both a cattle and dairy farm using average farm system data from the 2013 Teagasc NFS. The results obtained from both systems for the two hypothetical scenarios are presented here (scenarios 1 and 2 – for cattle and dairy systems). Selection of the scenarios presented were based on the impact of changes in farming decisions on the income streams and income/capital taxes payable as measured by the NPV for the farmer and his/her successor. Table 4.5 shows the total NPV for each scenario, and also the individual NPV’s for farmer and successor. In this section analysis of the results will be discussed.

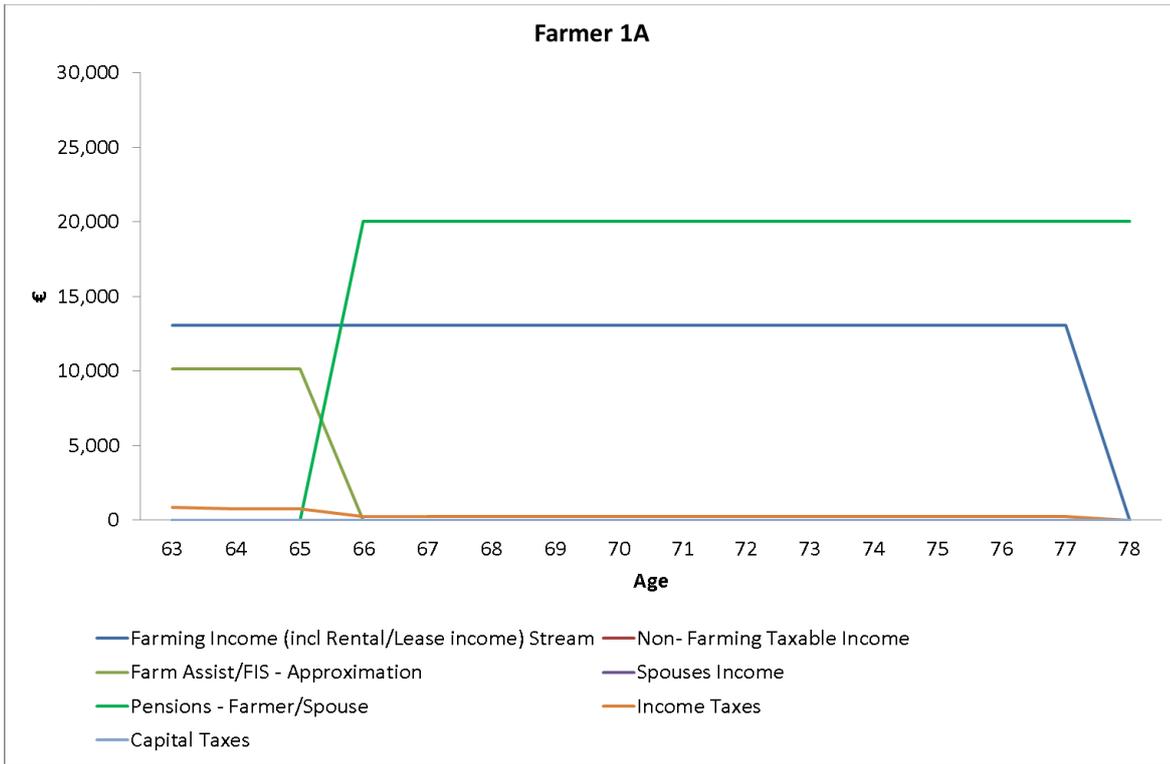
**Table 4.5. Net Present Values for farmer and successor**

Scenario	NPV	€
<b>1A</b>	NPV - Farmer	481,175
	NPV - Successor	378,506
	Total	859,680
<b>1B</b>	NPV - Farmer	957,801
	NPV - Successor	410,382
	Total	1,368,183
<b>2A</b>	NPV - Farmer	519,356
	NPV - Successor	234,739
	Total	754,095
<b>2B</b>	NPV - Farmer	639,177
	NPV - Successor	383,567
	Total	1,022,745

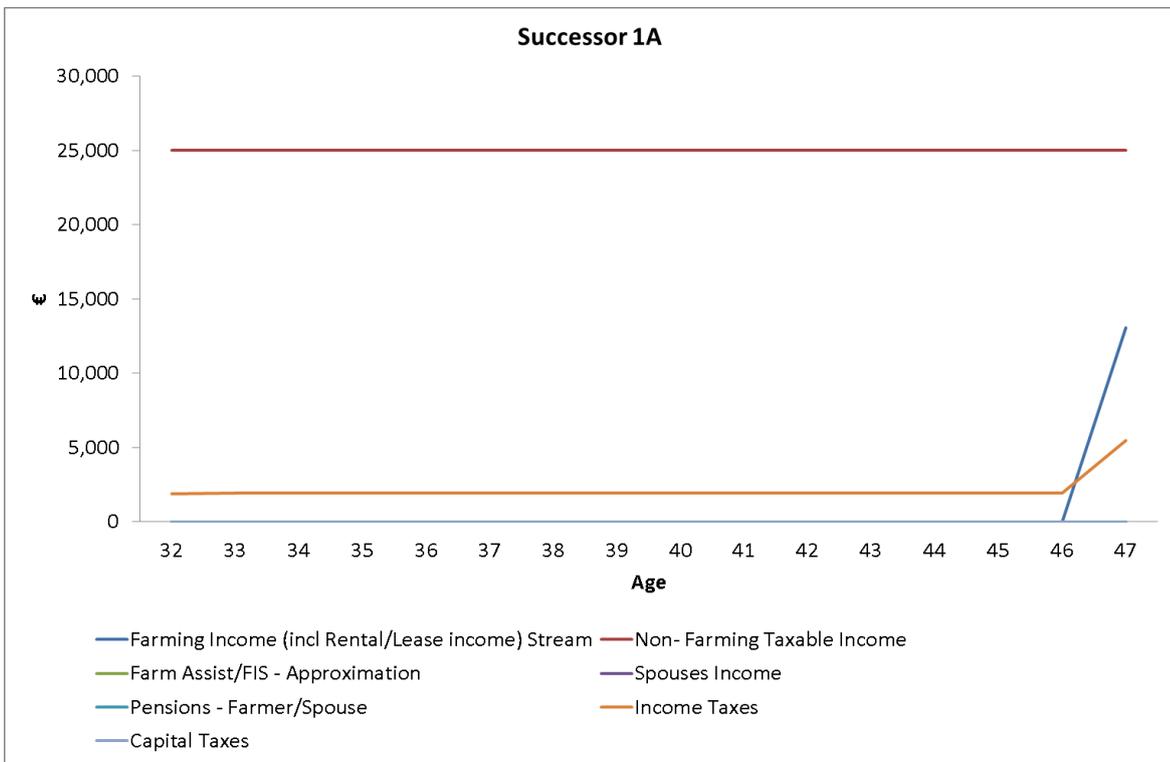
#### 4.7.5. Scenario 1A – transfer at death (cattle rearing)

The results for this scenario, an average cattle rearing farm, illustrate that on a farm where asset values and farm incomes are low then consequently capital taxes and income taxes are not payable or minimal. The NPV in total for such a farm is low. Figures 4.3 and 4.4 illustrate all income streams, income taxes and capital taxes for both the farmer and successor for the farm being transferred.

**Figure 4.3. Farmer – Scenario 1A: Cattle rearing farm transferred at death**



**Figure 4.4. Successor – Scenario 1A: Cattle rearing farm transferred at death**



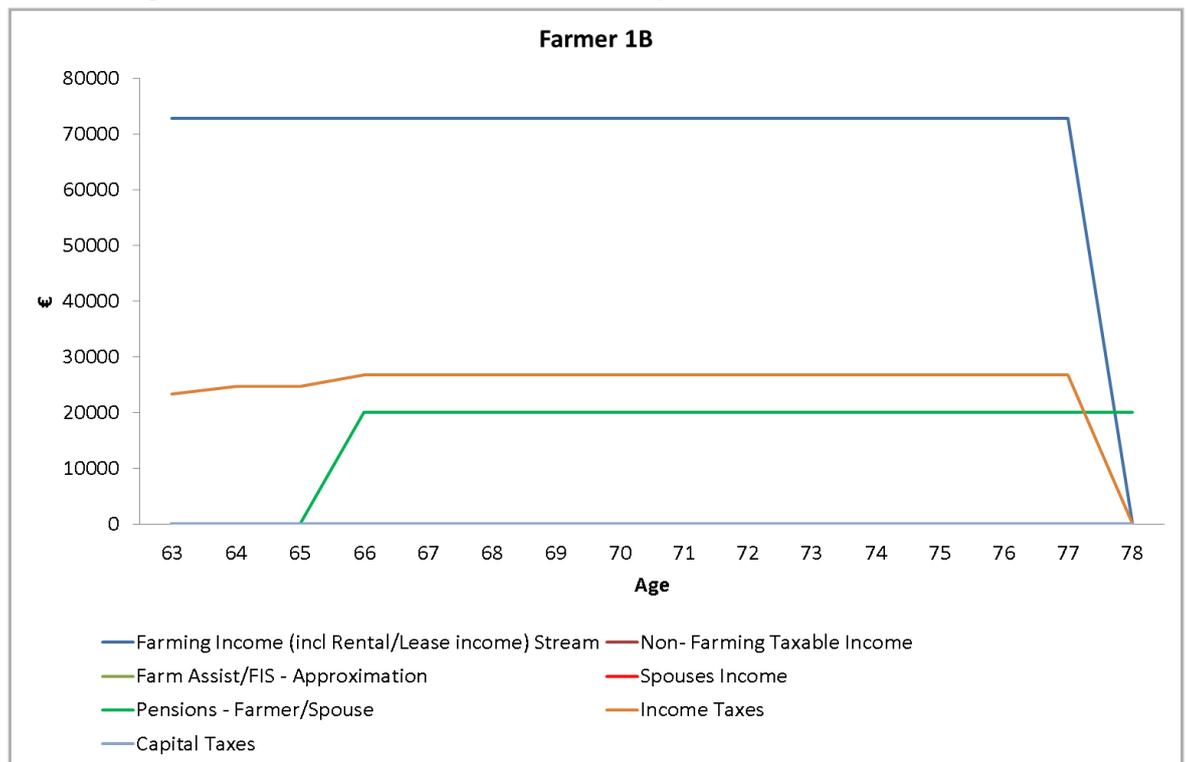
For the farmer, income remains relatively stable from age 63 to 65. An annual exemption allows those who are over 65 and married to earn up to €36,000 tax free. Therefore, on reaching age 65 this tax exemption kicks in and so leads to a reduction in

income tax payable and thus an increase in income. At age 66 there is a further income increase owing to the farmer being eligible for a state (contributory) pension. This state pension is not means tested and the farmer is therefore able to retain his/her farming income until death while also receiving the pension (for themselves and their spouse). As a result, income increases at 66 as the farmer's pension and farming income combine. The farmer transfers the farm on death and is therefore not liable for CGT on the assets disposed of. The farmer's spouse continues to receive a pension. In the case of the successor off farm income remains stable as they have an off farm job, when the farm is inherited income stream and income taxes increase. The farm is inherited at age 47; which is above the age to qualify for reliefs on CAT and Stamp Duty; however the value of the farm is relatively low so no capital taxes apply here.

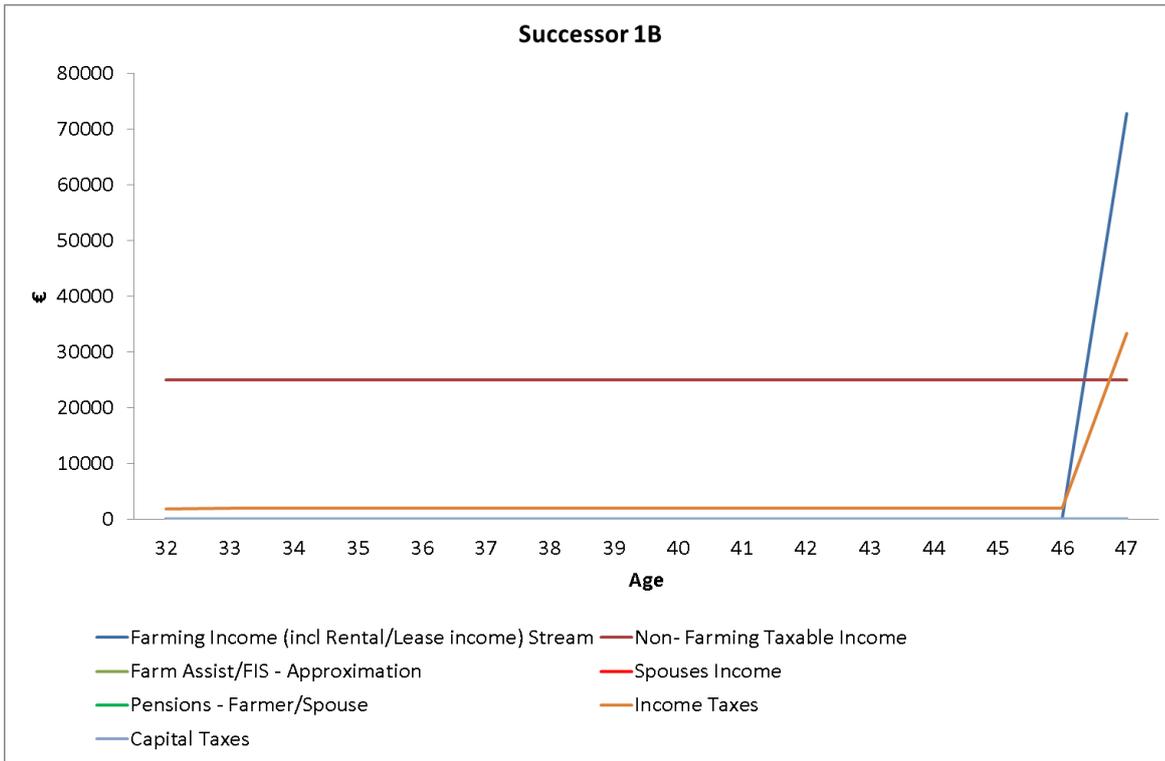
*4.7.6. Scenario 1B – transfer at death (dairy)*

This scenario is the same as 1A but using average dairy figures, therefore incomes and asset values are higher. The results present a similar pattern to 1A, albeit at higher levels.

**Figure 4.5. Farmer – Scenario 1B: Dairy farm transferred at death**



**Figure 4.6. Successor – Scenario 1B: Dairy farm transferred at death**

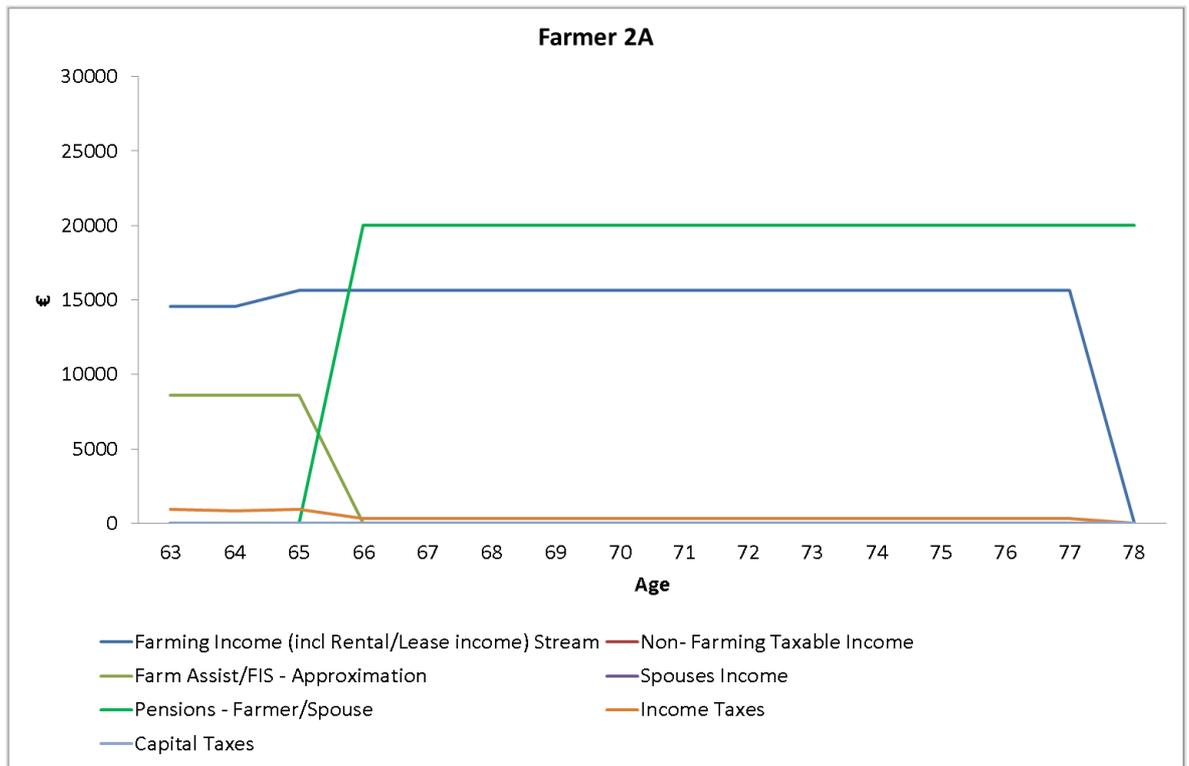


The farmer’s income increases when they reach retirement age, while the successor’s income does not increase until the farm is inherited. Interestingly, even with higher asset values and incomes, the successor does not have to pay any capital taxes on inheriting the farm as a result of capital tax reliefs.

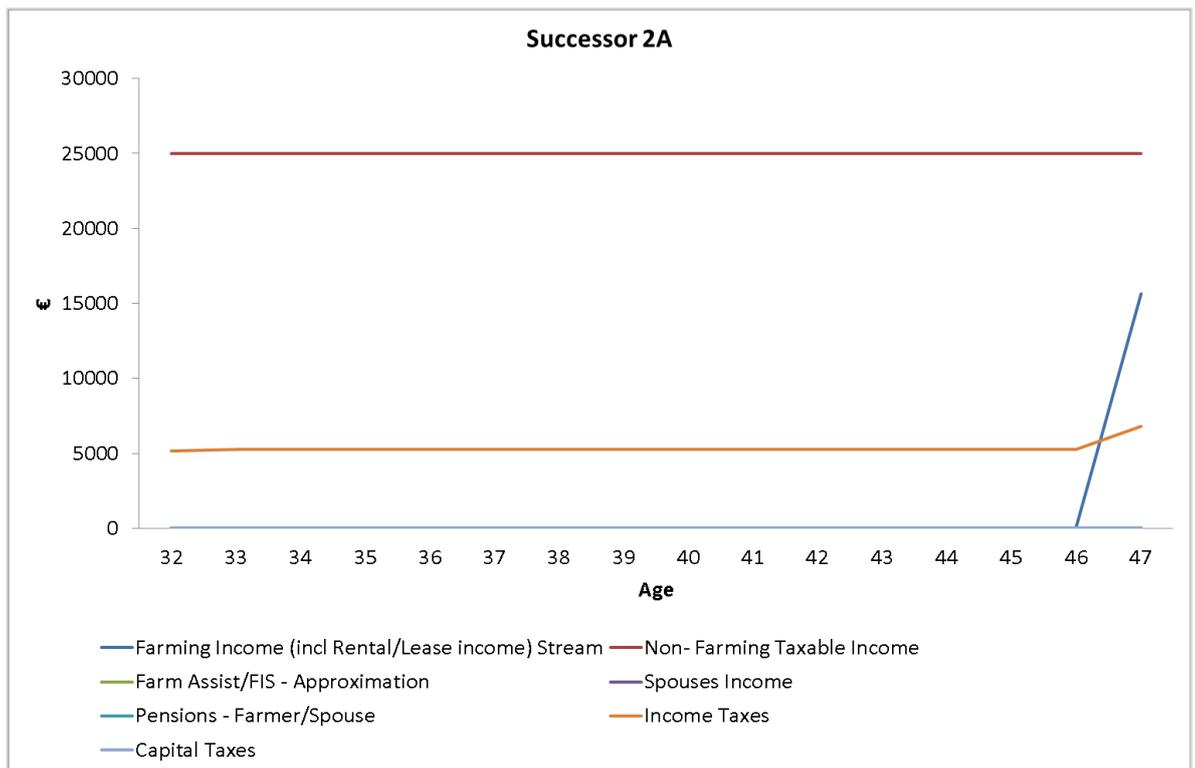
*4.7.7. Scenario 2A – transfer at death (retaining assets and payments) (cattle rearing)*

Similarly to scenarios 1A and B, the farmer retains all payments and assets, and the successor inherits the farm when the farmer is deceased. However, the farmer destocks from 1.06 LU/ha to 0.15 LU/ha at age 65 so as to retain LFA payments and SFP while minimising labour. The successor has an off farm job and does not acquire the farm until the farmer is deceased.

**Figure 4.7. Farmer – Scenario 2A: Cattle rearing farm transferred at death, farmer destocks to 0.15 LU/ha**



**Figure 4.8. Successor – Scenario 2A: Cattle rearing farm transferred at death, farmer destocks to 0.15 LU/ha**

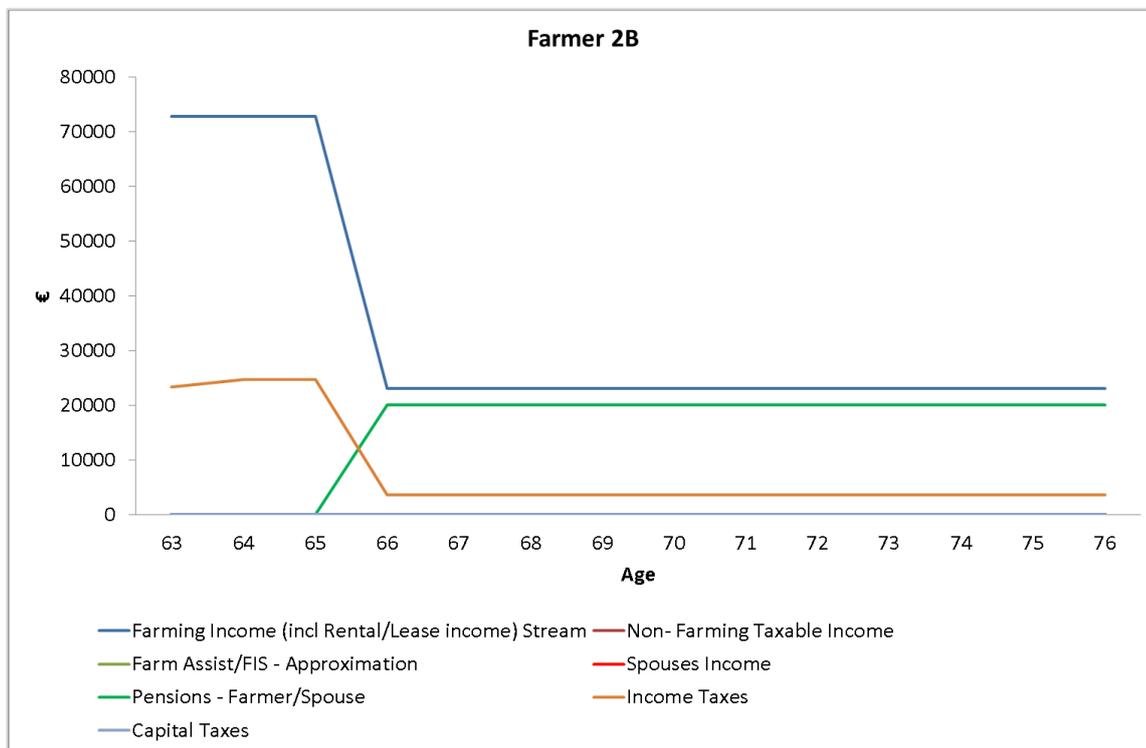


The farmer acquires state pension at 66 as with the scenarios above. However, the increase in income is greater because the farmer has destocked from 1.06 LU/ha to 0.15 LU/ha, thus reducing costs which impact the level of income (costs here are calculated based on livestock units, therefore direct costs are reduced on destocking). Pension and farm income combine to create the increased income stream for the farmer. The successor's income remains stable given the presence of an off farm job, with an increase at age 47 when the farm is inherited. Capital taxes do not affect the successor here, as the value of assets being transferred are below the thresholds.

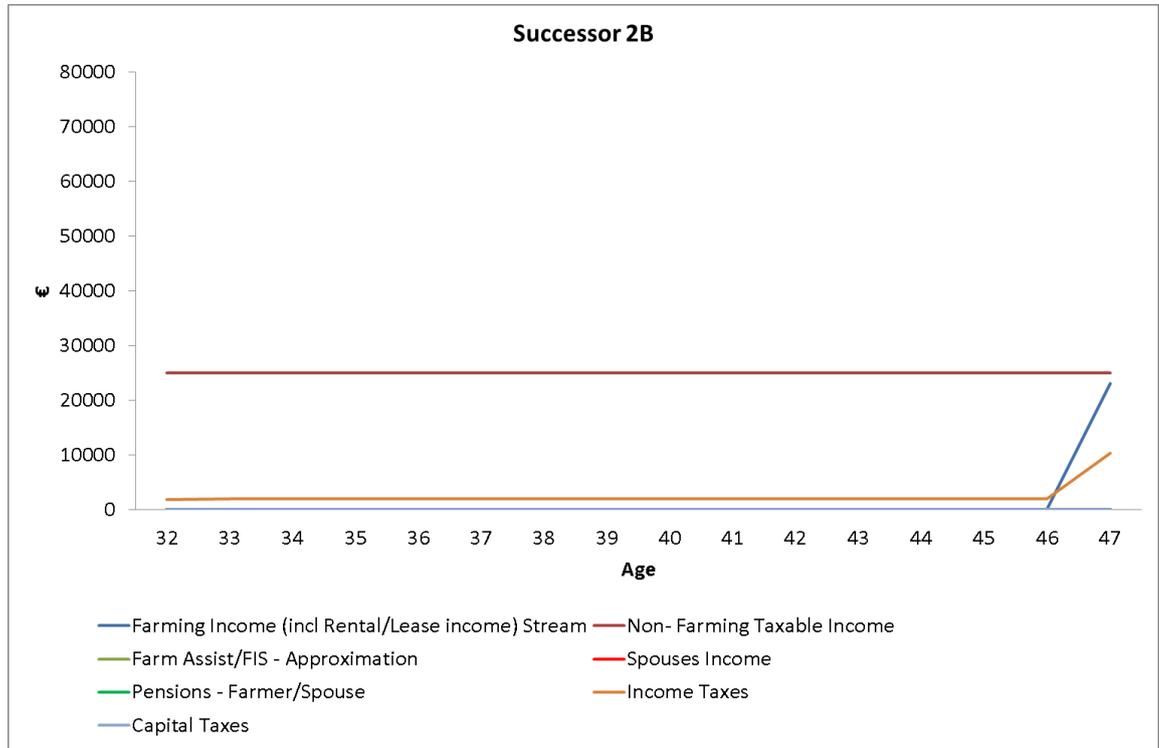
4.7.8. Scenario 2B – transfer at death (retaining assets and payments) (dairy)

As with 2A, the farmer destocks to 0.15 LU/ha (from 1.8 LU/ha as this is the average stocking rate for a dairy farm) so as to retain LFA payments and SFP while minimising labour. The successor has an off farm job and does not acquire the farm until the farmer is deceased. In this case, the asset values and income streams are based on average dairy farm figures from the 2013 Teagasc NFS.

**Figure 4.9. Farmer – Scenario 2B: Dairy farm transferred at death, farmer destocks to 0.15 LU/ha**



**Figure 4.10. Successor – Scenario 2B: Dairy farm transferred at death, farmer destocks to 0.15 LU/ha**



For the farmer in this scenario, destocking from 1.8 LU/ha to 0.15 and acquiring payments does not result in the income increase modelled in scenario 2A. In contrast, income decreases when the farmer destocks on reaching the age of 66. Income tax decreases significantly for the farmer at this age as pension income and farm payments make up the main income stream as opposed to farm income alone. Also age credit is applicable from 65 reducing taxes further. The successor does not benefit from farm transfer until the farmer is deceased. Then income stream and thus income taxes increase when off farm income and farm income are combined. Even with average dairy data, capital taxes do not apply to the successor as the asset values fall below the applicable relief thresholds (for parent to child transfers). In spring 2015 EU milk quotas were abolished (Lapple and Hennessy, 2012) giving rise to opportunities for dairy farmers in the EU to expand. This in turn increases the possibility of greater profits in the dairy sector meaning a higher likelihood of dairy farms being capable of generating sufficient income for two generations.

#### 4.7.9. Farmer replacement rates

For all scenarios, a replacement rate for the farmer was calculated by placing total income at 65 over total income at 66 (when pension age is reached). This allows us to assert whether the farmer benefits economically under each scenario. Table 4.6 presents the replacement rates (in percentages) of the incumbent farmer in each scenario.

**Table 4.6. Replacement rates for farmers**

Scenario	Replacement rate (%)
1A	143%
2A	165%
1B	127%
2B	59%

For all scenarios the replacement rates are high compared to the average replacement rate for Ireland (45%) as discussed earlier. The highest replacement rate is for scenario 2A (165%) in this case, the farmer retains his/her cattle farm income into retirement combined with pension income (as opposed to pension replacing farm income). In addition to this, the farmer destocks to a minimum level of 0.15 LU/ha so as to retain LFA payments and BFP. Scenario 2B has the lowest replacement rate at 59%, this is a result of the dairy farm destocking to 0.15 LU/ha from 1.8 LU/ha, meaning a reduction of income for this farm. Even though replacement rate is the lowest in the sample, it remains well above the Irish average of 45%. Also, the farmer's leisure time would be greatly increased as a result of the low stocking rate, with labour requirement decreasing as a result.

#### 4.8. Discussion and Policy Recommendations

While succession and inheritance can be a highly complex area, the deconstruction of the problems associated with these processes will aid policy makers in generating more effective solutions. Notably, the policy making process requires a level of assessment prior to this occurring. Based on the findings of this research, there are clear economic concerns regarding farm succession and inheritance with the the most notable concerns being the ability (or inability) of a farm to generate enough income to support both a farmer and their successor, and also the residual income of the farmer should they transfer the farm prior to death. Incidence of capital taxation has little economic impact in any of the scenarios modelled, despite taxation being cited as one of the main reasons Irish farmers attended nationwide Teagasc Transferring the Family Farm (TFF) clinics

held in autumn 2014, this result was acquired from a survey conducted at said clinics. This indicates that taxes may be perceived as a large financial risk for farmers when transferring land. Further research and more in-depth analysis is required to fully assess the impact of these taxes.

#### *4.8.1. Suitability of capital tax reliefs*

In all average scenarios (for both cattle rearing and dairy) that have been modelled, capital taxes do not apply where the successor is a son/daughter of the farmer. The thresholds for tax reliefs, although they have reduced over time, remain relatively high. Such reliefs in cases where the successor is not a son/daughter of the farmer are much lower, modelling scenarios in which the successor is a niece/nephew or non-blood relation will provide more insight into capital tax reliefs and how they impact different categories of farmers/successors. Given the high number of farmers indicating they have no successor (48%) in Bogue's (2013) report reliefs for this category may become more pertinent; as a lack of successor may indicate that some farmers who have no successor may have no children. In these instances transfers would be to other relatives (except those who come under favourite niece/nephew – see table 4.1) or non-relatives in which cases there would be much higher capital taxes accrued. Nonetheless, the results indicate that the most common form of farm transfer (parent to child) does not result in capital taxation for average dairy and cattle rearing farms. Despite the high number of farmers attending Teagasc TFF clinics for farm transfer tax information, it would appear that only those with above average farm sizes and asset values would experience capital taxation. The high level of concern amongst farmers regarding capital taxation may be a result of societal influence. Negative experiences of farm transfer in which farmers incurred large tax bills may be sensationalised by the media and also within the social networks of some farmers, resulting in the risk of taxation unduly being of great concern to farmers. Continued dissemination of such relevant information on farm transfers by Teagasc using forums such as the TFF clinics will ensure that the farming community are aware of the factors and issues affecting farm transfer and so are more prepared for succession and inheritance.

#### *4.8.2. Policy incentives for farm exit*

It is evident from the results that farmers in the scenarios presented are not incentivised by any policy measures to transfer the farm early (i.e. before death). The promise of a steady income past retirement age could in fact encourage farmers to retain farm

ownership. With lack of retirement income being mentioned by Riley (2014) as one of many reasons farmers are highly averse to retirement, it is expected that a high number of farmers may opt to defer farm transfer until death. Cases such as this may be contributing to the increasing number of farmers over the age of 65 in Europe (Zagata and Sutherland, 2015). Thus negatively affecting the entrance of young farmers into the sector which has been alluded to as essential for the development of agriculture (Williams, 2006). As such, if there is to be an increase in the number of young farmers in Europe, then there is a requirement to address the exit of older farmers so as to cater for the concerns and needs of both groups. Based on the tables illustrating the income streams of farmers it is apparent that there is a clear lack of policy facilitating farmer exit. As outlined previously, farmers respond positively to economic incentive (Brouwer, 2004; Sutherland, 2010) indicating that a policy of this nature may have a strong effect on the number of farmers exiting farming at retirement age. As mentioned heretofore the effects of EFRSs have been described by academics as of poor institutional value (Hennessy, 2014; Davis et al., 2013). Therefore the reintroduction of an EFRS may not be a suitable solution to this issue; however it is apparent that current tax reliefs may not be ample to encourage older farmers to transfer land or to participate in a phased farm management transfer approach. The fact that farmers are not encouraged by a clear policy to retire or transfer land /management earlier indicate that the policies in question may have been created at higher levels of the EU as discussed by Keating and Laffan (1999). Additionally, the notion that policies will not be effective if they do not reflect ground level issues comes to the fore (Pieckzka and Escobar, 2012). Here, young farmer entry is encouraged by certain incentives, but older farmer exit has received very little attention.

#### *4.8.3. Farm income: effects on succession and inheritance*

In scenarios 1A, 1B and 2A the farmer retains a steady income until death, in some cases farmer income even increases. Scenario 2B contrasts somewhat to the other three presented in that the farmer's income decreases before death. This is a result of the farmer destocking from the average dairy stocking rate (1.8 LU/ha) which is higher than the average cattle rearing stocking rate (1.06 LU/ha). While a dairy system would have a reduced income as a result of destocking the farmer would benefit from decreased labour requirements. Reducing stocking rate is indicative of older farmer's management behaviour with this phenomenon being highlighted by Kristensen et al. (2004). In a case such as this, the farm is capable of producing enough income for both the farmer and

their successor should they take over control of the farm. Entering a period of semi-retirement could be a viable option for farmers on farms with higher incomes. Researchers have found that some farmers planned to enter a stage of semi-retirement at the age of 65, in which the farmers would have a reduced role in managerial control and provide some labour input (Barclay et al., 2007; Kirkpatrick, 2012). Where this is an option a farmer may be able to transfer some level of farm management responsibility to their successors. However, it is also clear, given the average income figures for a cattle rearing farm that incomes are not high enough to support two generations simultaneously. Therefore, an inability of a farm to provide for exiting and entering generations has been cited as having an influence on the timing of farm transfer (Kirkpatrick, 2012), which can often be an issue for lower income farm systems. Therefore, there is merit to the notion that the level of income can be a contributing factor to a lack of business planning amongst those on more marginal farms (Tanewski et al., 2000) and indeed where a farm not considered a viable business there may be a tendency to perceive planning as unnecessary. Nonetheless, the evidence presented within this study suggests that an average dairy farm may be able to facilitate two generations in terms of income. A development of policy to cater for the range of farm systems and income levels would be a positive step towards increasing the number of young farmers in the sector. However the other instrumental factors associated with transfer of farm management/ownership must be considered in tandem with the economic concerns.

#### *4.8.4. Young farmer definitions*

One issue which has been lobbied against in Ireland is the variance in definitions of a 'young farmer' under different policies. In terms of BFP applications, a young farmer is 40 years of age or younger, while in terms of capital tax relief a young farmer is 35 years of age or younger (DAFM, 2009; Zagata and Sutherland, 2015). Given the rising average age of farmers, the cut off age to be defined as a young farmer may need to be higher to reflect the increasing age trend. Recent statistics show that at present, 10% of farmers in Ireland are aged 40 or under, with 7% of all farmers being under 35 years of age (NFS, 2013). This data implies that only 7% of farmers would be able to receive relief on capital taxes (provided they also have agricultural education) and young farmer top ups. However, those between 35 and 40 (3%) would only qualify for a 25% top up on their BFP; disparity such as this can cause confusion amongst the farming community and should be avoided.

#### *4.8.5. Direct payment dependence – policy lessons*

The research undertaken has revealed that a dependence on farm payments as a source of income into retirement years is a feasible option for older farmers. In scenario 1A, a cattle farmer could destock their land to the minimum level (0.15 LU/ha) to retain LFA payment and BFP, while also receiving a state pension. In this case, the farmer benefits more financially if they do not transfer the farm until after death. The effect of this delay in inheriting passes to the successor as they do not inherit the farm until the farmer is deceased. As a result, the successor may not have worked on the farm and may thus lack the managerial experience required to maximise farm income. It may be assumed in cases such as this that successors have acquired employment outside of agriculture and therefore have very little experience of farm management. Gasson and Errington (1993) discuss 'ideal' types of intergenerational succession. One of these is entitled 'standby holding'. This involves a successor taking on his or her own farm until their parents are ready to transfer the family farm, allowing the successor to gain managerial experience prior to taking over, thus preparing them for the management of the family farm once they acquire it. File and Prince (1996) document evidence of the correlation between family business failure and lack of succession planning, yet also report that successors in family businesses were self-reportedly unprepared for takeover, particularly where there was no succession plan in place. For Weston (1977) the issue of management in succession is crucial to the continued success of the farm, and needed to be addressed from the earliest possible stage due to its potential to disrupt relationships between farmer and successor, and to ensure that both parties had a clear understanding of how the division of management responsibility would be handled. Avoiding 'sudden, unplanned and significant change' is cited as essential (Weston, 1977, p.243). Hutson (1987) likewise details the nature of successor preparation for management as a sustained and complex one, especially on family farms where not only are there likely to be ideological and educational differences between farmer and successor, but where the wider context for farming is also under a state of constant change. Hutson (1987) also notes that successors in some small businesses have to compromise their ambitions for the family business until they gain managerial control, but that there was the risk that said ambitions may have faded by the time transfer takes place. As a potential way to address concerns regarding successor preparation, Errington (2002) discusses the idea of a 'professional detour'. This is a period in which a young farmer acquires education or work experience not specifically related to

agriculture. The successor may acquire skills that are transferable to farm management during their time away from the family farm. Weston (1977) likewise argues that training in areas such as business management may be just as beneficial as agricultural training to a young farmer.

Successors may be averse to expansion or investment as they would most likely have gone past their late 30s by the time they inherit the family farm (Figures 4.1 and 4.2 presented earlier illustrate the decrease in farm income after late 30's, indicating a lack of investment/expansion after this age). Wilkinson (2012) alludes to a similar issue noting that successors may not be willing to invest the required time or money needed to rejuvenate a farm once the retirement effect has taken place.

The fact that farmers may acquire payments while also receiving a pension indicates that there may have been an oversight from policy makers. Based on the stages of policy formulation discussed by Greer (2005) it may be the assessment stage that is being neglected. As mentioned, this is the stage of policy formulation in which previous policies are reviewed. In the case of CAP payments policy makers seem to have failed to notice this issue which continues to be a factor influencing intergenerational land mobility. The creation of a policy that does not allow farmers to retain farm payments when they acquire a pension may increase incidence of land transfer. However this may generate issues of retirement income for farmers, therefore the resultant issue of retirement income would need to be addressed.

#### **4.9. Conclusion**

The above discussion has sought to provide some explanation to the seemingly intractable problem of an ageing farmer profile coupled with a reluctance to engage in farm transfer, using Ireland as a case study example. The extent to which this could be connected with a set of risk factors linked to current fiscal measures underpinning succession and inheritance was investigated. This yielded a range of potential outcomes, indicating that the process is complex and specific to individual holdings and their particular structure and composition. Each route to succession and inheritance that has been discussed will have a different economic impact on the current and future income of all parties involved in farm transfer. The various means by which individuals undertake succession/inheritance is justifiable as there are a range of income levels, asset values, personal reasons and farm systems, meaning there is no single 'optimal' route to be taken. This variance in routes to farm succession and inheritance needs to be

reflected in agricultural policy in order to facilitate the development of a sector that is efficient and sustainable (i.e. one which contains a significant cohort of young farmers). In the absence of a strong policy incentive, the average age of farmers may continue to rise resulting in a stagnant land market and indeed an agricultural sector that does not meet contemporary demands.

#### *4.9.1. Future research*

One issue which has not yet been addressed in the modelling above is the cost of long term care and the effects of the Fair Deal Scheme<sup>7</sup>. This can result in an on-going expense for retired farmers or in some cases may be paid for by their successors. The cost of long term care can often be high adding to financial concerns around succession and inheritance i.e. if a farmer transfers the farm, will they be capable of paying this cost. Behavioural analysis of farmers around the time succession and inheritance takes place will also need to be undertaken to assist with understanding the actors and drivers most influencing the decision to transfer.

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<sup>7</sup> The Fair Deal Scheme (Also known as the Nursing Home Support Scheme, is a scheme of financial support for people who need long-term nursing home care. Those who require care may apply for the scheme which will contribute to nursing home costs, along with a contribution from the applicant which is calculated based on income and personal assets. Those in receipt of the payment may defer their personal contribution until death, meaning a next of kin would pay the balance.

**Chapter 5**  
**The Potential of Farm Partnerships to**  
**Facilitate Farm Succession and Inheritance**

## **Chapter 5 – The Potential of Farm Partnerships to Facilitate Farm Succession and Inheritance**

### **5.0. Abstract**

The rising average age of farmers and low level of young farmer entry is viewed as problematic on a global scale and farm partnerships are presented as a possible means by which farm succession and inheritance could take place in a timely manner. Using the example of Ireland, this research investigates a recent proposal by government to introduce a tax relief as an incentive for farmers to part take in farm partnerships. In this discussion, a hypothetical microsimulation model is used to investigate the possible outcomes of such a tax relief, with scenarios created to examine how this would materialise. It draws on the Teagasc National Farm Survey data which provides Irish data to the Farm Accountancy Data Network in the European Commission. The findings illustrate that even with a tax relief, cattle rearing farms would struggle to reap any economic benefit from entering a farm partnership, while their dairy counterparts would receive more value from tax reliefs. Results also indicate that farm viability will play a large role in whether or not collaborative farming is viewed as an option for farmers.

Key Words: Farm partnership; succession; inheritance; collaborative farming.

### **5.1. Introduction**

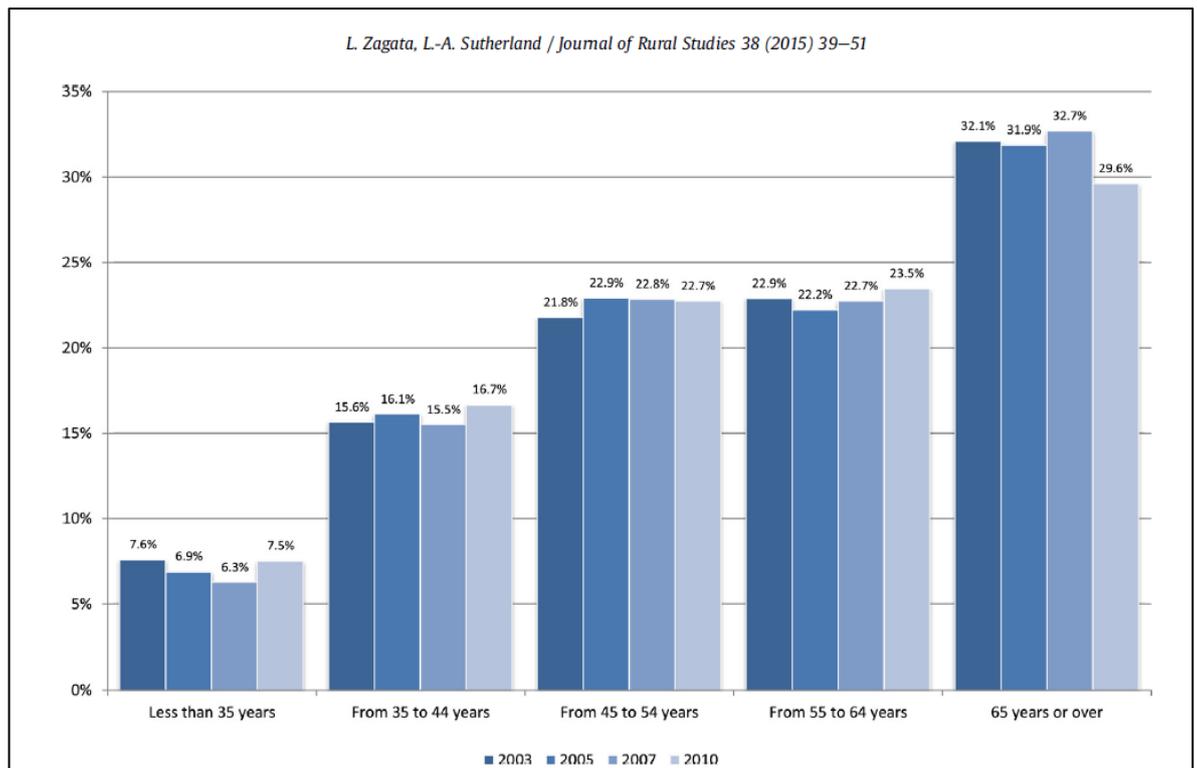
Contemporary agriculture faces a myriad of challenges ranging from farm viability to reducing environmental impacts and addressing animal health and food security issues. One of the most important issues farmers face is that of business continuity, of which succession and inheritance planning is an integral part. Succession denotes the transfer of managerial control, while inheritance describes the transfer of assets<sup>8</sup>. Farmer decision-making around succession and inheritance is complex and multifaceted, and influencing factors are economic, personal and social, with every farm succession and inheritance route an idiosyncratic one (Conway et al., 2016). Due to the complexity of the situation, policy makers are challenged in their endeavour to encourage transfer of farm ownership or management to a younger generation. The increasing average age of farmers (Figure 5.1) globally has been problematized as a situation of lower production, efficiency and technology adoption correlated with older land-holders (Lobley et al.,

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<sup>8</sup> For this research both succession and inheritance are used in conjunction as both processes are being discussed.

2010; Howley et al., 2012; Zagata and Sutherland, 2015). This perceived problem of reduced productivity and efficiency as a function of an ageing farm population is under particular scrutiny within Europe, North America and Australasia where the competitiveness of the agricultural sector is high on national economic development agendas.

**Figure 5.1. Share of farm holders by age category for years 2003 – 2010 (Zagata and Sutherland, 2015)**



With a view to addressing the ageing profile of farming in EU contexts, a range of strategies and policy interventions have been put in place over the last three decades or so, from early retirement schemes to various nationally-based tax incentives in an effort to encourage a more structured and predictable rate of entry into and exit from farming as an occupation. Farming is also construed as a ‘way of life’ as much as an occupation, and it is contended that emotional and other cultural and symbolic associations with agriculture have confounded attempts to introduce policy in a format that can take account of these complexities (Conway et al., 2016; Inwood and Sharp, 2012; Gasson and Errington, 1993). The issue remains, however, that policy at both EU and national levels has not apparently been sufficiently innovative to alter the established dynamic of low rates of transfer and an ageing farming population. The issue is particularly evident in the Irish context, where the vast majority of farm transfers are made via inheritance, and generally take place within families. This has culminated in a particularly stifled

land market and very limited pathways to entry for young farmers (Hennessy and Rehman, 2007; Matthews, 2014). From an economic competitiveness perspective, the notion of engaging younger farmers in agriculture as a policy priority also implies their intention to actively farm in a productive way.

One strategy for change currently being developed in the Irish policy context is the introduction and promotion of farm partnerships across all farming systems. The rationale behind farm partnerships is that they incentivise a new set of working arrangements between older and younger farmers, as a way of providing more options for younger farmers to enter farming in an active and productive way, with recognised status and responsibilities and agreed sharing of the farm profits (Macken Walsh and Roche, 2012). Farm partnerships are also held to create more opportunities to maximise efficiencies and profitability through combining expertise, experience and resources and through convincing older farmers of the benefits of earlier farm transfer. The benefits associated with young farmers being involved in an enterprise from the point of view of encouraging farm transfer have been widely cited. Potter and Lobley (1996) have coined the terms ‘succession, successor and retirement effects’ to describe the processes whereby an identified successor or lack thereof can significantly influence the original holder’s level of interest and investment in the farm when approaching what should be their own retirement from farming. Potter and Lobley (ibid) argue that ‘farmers without successors...seem significantly more likely to be disengaging from agriculture’ (p. 329). The successor effect thereby refers to the positive impact which a successor can have on a farm once he or she becomes actively involved in the running of a farm and decision-making processes. The retirement effect generally has a negative impact on farms, i.e. the process of semi-retirement tends to be characterised by de-intensification and liquidation of assets if there is no successor present. The contention is that a farm partnership could promote the successor and succession effect together with creating an environment for shared decision making and control, while stifling the negative outcomes of the retirement effect (ibid).

A key aim of this research is therefore to provide a critique of the current mechanisms relating to farm succession and inheritance, through assessing the plausibility of farm partnerships as a means by which farm succession and inheritance can be facilitated. The issue of financial viability of a farm partnership is a second crucial aspect; if the partnership cannot sustain the farm and provide a reasonable income for those involved, it is unlikely to be embarked upon regardless of its capacity to encourage farm

succession to take place. The paper is structured to initially provide a comparative analysis of farm partnerships internationally (including Ireland) as a mechanism to support succession and inheritance, focusing on structural and policy aspects. Secondly, taking the example of Ireland, it examines the financial implications for farmers of embarking on farm partnerships with a view to farm succession. It does this by applying a hypothetical microsimulation model to assess the value of a range of tax reliefs offered as incentives to enter partnership arrangements, and to proceed on to farm transfer. For this research the terms succession and inheritance are used in conjunction due to the complexity of the farm transfer process, but also given the fact that both succession and inheritance take place in the microsimulation results.

## **5.2. Collaborative farming models to support succession and inheritance**

Farm partnerships come under the umbrella term ‘collaborative farming’. Other arrangements considered collaborative farming include contract rearing, share farming, cow leasing and long term land leasing (Curran, 2015). Forms of collaborative farming, particularly farm partnerships, have been identified as a step towards farm succession and inheritance. Commins and Kelleher (1973) (and later Gasson and Errington, 1993) refer to the succession process as a ‘ladder’ of responsibility which is gradually ascended by a young farmer entering a business. Generally the process of retirement and succession is a gradual one that follows clear phases, hence the ladder analogy. The first phase is where the farmer shares the workload with the successor. Following this, management is slowly passed over to the successor before eventually the successor becomes the sole operator. The identified middle phase is likened by Gasson and Errington (1993) to a farm partnership. A farm partnership involves the pooling of resources and skills of the parties involved, a contract is agreed which specifies profit shares for the parties involved and sets out levels of input each partner will have. Macken Walsh and Roche (2012) describe a farm partnership as a situation in which ‘two or more farmers join resources and efforts in order to acquire various benefits’ (p.2).

## **5.3. Opportunities of the farm partnership model**

### *5.3.1. Partnerships facilitating succession and inheritance*

The transfer of decision making responsibilities can be a contentious issue for farm successors with older farmers retaining control over decisions until they exit farming. A farm partnership provides an avenue for responsibilities to be more formally shared

between farmer and successor, thus reducing the possibility of a successor becoming frustrated over time (Errington, 1998). This transfer of responsibility can benefit the farm by allowing young farmers bring new ideas to the business. Chiswell (2016) found that farmers in the UK were aware of the importance of these new ideas with some interviewees articulating their importance due to the ever changing nature of the sector. Also in the UK context, Ingram and Kirwan (2011) evaluated the Fresh Start Initiative, a scheme which matched new entrant farmers with retiring farmers as a means of giving younger farmers a start and older farmers a gradual exit strategy. However, this was not seen as hugely successful because there were insufficient profits from some partnerships to sustain two salaries. In contrast, Gasson and Errington (1993) describe the partnership model as an excellent means by which a successor can gain managerial responsibility prior to fully taking over a family farm. In addition they assert that farms where a farmer-son partnership is in place tend to expand far more than their counterparts. Ingram and Kirwan (2011) also note that farmers are more willing to cooperate with family members. Many Dutch farms are in partnerships which facilitate the process of gradual succession (NRN, 2012). In New Zealand farming in partnership is popular amongst dairy farmers, with McLeod (2012) referring to forms of farm partnership as 'succession options'. In the Dutch case a 'maatschap' allows a successor to build up a share in the farm business over time and also facilitates the gradual transfer of control from the farmer to their successor (Gasson and Errington, 1993). This form of partnership is utilised by the majority of farms in the Netherlands with aspects such as the sense of security created for a successor in knowing that they will eventually take over the farm being lauded (Johnson et al., 2009; Van der Veen et al., 2002). In the case of New Zealand, the dairy industry has a well-developed career structure which gives young farmers the opportunity to begin farming and has exit schemes available for older farmers such as phased exit strategies (CIAS, 1996). Up to 40% of New Zealand's dairy farms operate under share milking agreements, indicating a high success rate, while over 20% of all dairy farms in Norway are managed using some form of partnership (McLeod, 2012). However, McLeod (2012) notes that sheep and beef farms tend to use 'more traditional' forms of succession and inheritance. Until recently, registered partnerships in Ireland were only an option where at least one partner was operating a dairy system; however, partnerships were introduced for all farming systems as of spring 2015.

### 5.3.2. Risk reduction

A critical issue in partnership arrangements is how decision-making and risk assessment are shared. Groom et al. (2008) note that farmers are generally risk adverse, which is exemplified by Hardaker et al. (2004) who suggest that farmers tend to avoid the uptake of new technology if they have little experience with it. Similarly, Vollenweider et al. (2011) found that uptake of the Rural Environment Protection Scheme (REPS) was dependant on the ability of the associated subsidies to smooth income over time and thus reduce financial risk. Partnership arrangements however, may promote risk reduction in net income by risk sharing and diversification effects; thus partnership arrangements should be an attractive option for farmers. Moreover, the risks associated with introducing new technologies can be shared among farmers (Larsen, 2008). McLeod (2012) cites the perceived risk involved in joining a farm partnership as a contributing factor to a final decision, going on to reference sharing of risks as a potential benefit to being in a farm partnership. For retiring farmers, a partnership may be perceived as attractive as it allows them to retain some control over the farm, particularly if they do not have a source of retirement income. Entering a farm partnership does not require the farmer to transfer any land to a successor, possibly reducing the perception that they are losing control of their farm which often deters farmers to engage in succession/inheritance (Lobley et al., 2010). From the perspective of a successor, the formation of a partnership can confirm their status on the farm. In many cases successors may be unaware if they will definitely inherit the farm or not, and often do not receive payment for the work they undertake (Gasson and Errington, 1993). The partnership contract in the Irish case incorporates the sharing of profits, which in turn reduces the risk of a successor abandoning the family farm as a result of becoming frustrated with a lack of pay or responsibility and seeking opportunities outside of farming.

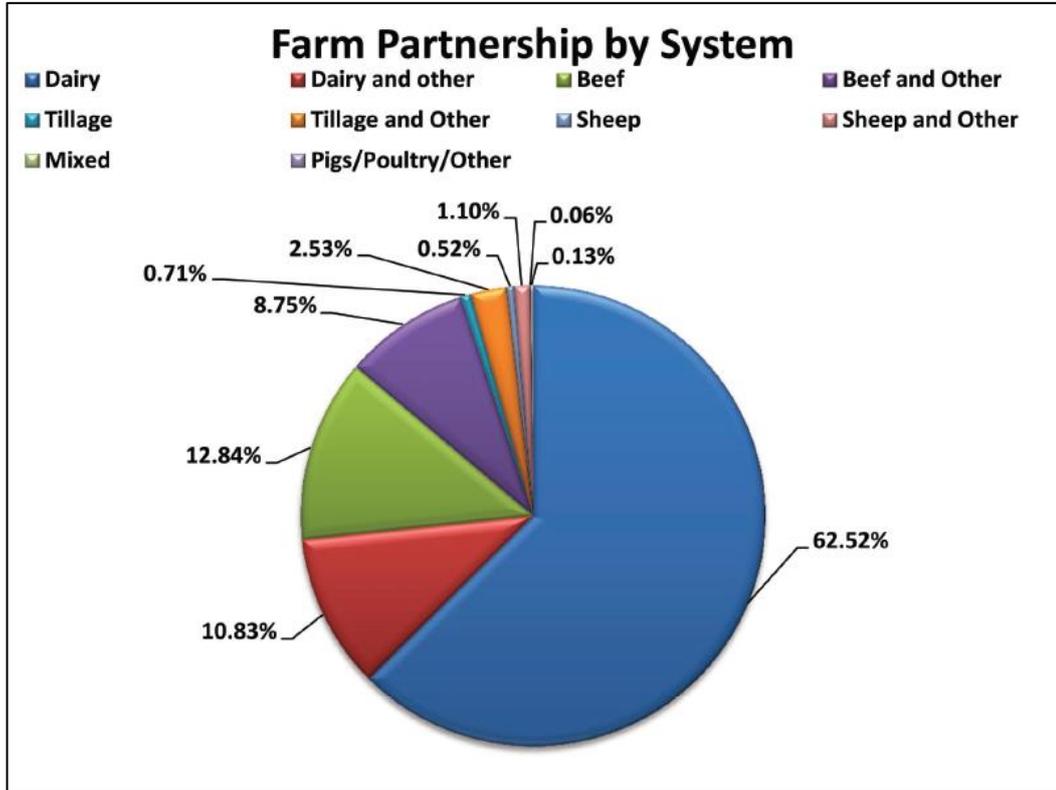
While risk reduction has been outlined as a benefit associated with farm partnerships, entering a partnership can be surrounded by uncertainties given that it is a relatively novel form of arrangement, particularly within the Irish context. With farmers described as risk averse it is expected that they may be negatively predisposed to a new management structure. In relation to smaller farmers in particular, Crowley (2006) finds that they are 'very slow to take risks and to become fully integrated in commercial markets unless forced to do so' (p. 55). She suggests that they may be affected by both cultural and economic factors when making decisions around change and may be more

likely to rationally keep to a prior path rather than embarking on an uncertain venture (such as joining a farm partnership), thus avoiding potential risks associated with unfamiliarity. Partnerships have developed in a variety of ways in different countries, with diverse levels of uptake. At present they are popular amongst farmers in New Zealand, France, Norway and the Netherlands (Johnson et al., 2009; McLeod, 2012).

#### **5.4. Methodology and Data**

In 2002, registered Milk Production Partnerships (MPP) were made available to dairy farmers in Ireland based on the Groupements Agricoles d'Exploitation en Commun (GAEC) system. Partnerships in Ireland are most similar in structure to those in France, known as GAECs (Groupements Agricoles d'Exploitation en Commun). The GAECs facilitate the bringing together of small scale farms with the objective of making farming more viable. Policy changes in French agriculture have accommodated the GAECs in order to encourage farmers to enter or remain in an arrangement. In general, governments favour agricultural land mobility via inheritance tax incentives, or lack of land transfer taxes (Bird and Slack, 2002). In Ireland, for instance, there are numerous taxation incentives surrounding agricultural land transfer (Leonard et al., 2017), while in the Australian case there is no inheritance tax (Ernst and Young, 2013). Initially partnership agreements were confined to bringing together two producers who each had a holding and a milk quota; however, in 2003, new regulations were introduced which aimed to expand the use of partnership arrangements. One of the features of this change was to provide for partnership arrangements between a parent and son/daughter and in conjunction with this, under the restructuring scheme, to allow priority access to quota to the son/ daughter as a new entrant to dairying. Although initial interest in partnerships was low there has been significant uptake in recent years, particularly in the new entrant/parent arrangements. In 2016, partnerships were made available for all farm systems to enter and current figures indicate that there are 1,556 registered partnerships in Ireland (DAFM, 2016). Figure 5.2 presents a breakdown of these partnerships by system, it is clear that dairy (including dairy and other) is the dominant system involved in farm partnerships in Ireland, with beef (including beef and other) being the second most likely system to engage in such a farm arrangement.

Figure 5.2. Farm Partnerships in Ireland by System (DAFM, 2017)



Section 5.5 focuses on an analysis of the different tax relief schemes available to farmers in partnerships in terms of how they potentially impact on succession and inheritance decision-making. It does this through the use of microsimulation modelling to produce a comparative analysis of 2 (hypothetical) base farms involved in farm partnerships, with one farm in the pre-2016 and the other in the post-2016 (proposed) Succession Farm Partnership Scheme (SFPS), in terms of how each fares out in terms of financial viability. In addition to this, farms in pre-2016 scenarios will not receive assistance from the ‘Support for Collaborative Farming Grant Scheme’ (SCFG - discussed below). Here, details of the different tax reliefs under each scheme is first outlined, followed by a description of the hypothetical simulation model applied, and then the presentation of a series of scenarios for succession and inheritance linked to partnership arrangements.

#### 5.4.1. Financial incentives/tax reliefs

In December 2015, the Irish government announced an income tax credit (subject to EU approval) to encourage the transfer of farms within families (i.e. the SFPS). A new register will be created for farm partnerships in which one partner is a young trained

farmer. This register will allow an annual €5,000 income tax credit to be split between the partners in a farm partnership for a five year period. One of the conditions is that 80% of farm assets must be transferred within 3 to 10 years of applying to register a partnership to avail of the tax credit.

Changes introduced as part of the introduction of the most recent CAP reform have embraced the concept of multiple payment thresholds to registered farm partnerships across all CAP Pillar I and Pillar II schemes. The concept that farmers entering into a registered farm partnership should not be in any way disadvantaged when compared to farmers operating in their own right has been embraced by policy holders. Technical issues can still arise that cause problems for farmers obtaining their multiple payments.

An SCFG has also been introduced to cover 50% of the costs incurred in entering a farm partnership. This grant aims to cover some of the legal, financial and advisory fees associated with setting up a collaborative farming arrangement and the maximum payment is €2,500. Those in a Department of Agriculture, Food and the Marine (DAFM) registered farm partnership can also avail of stock relief in two ways, with young farmers receiving 100% stock relief for the first four years after setting up as a farmer. Other partners can avail of an enhanced stock relief at a rate of 50% on their share of the increase in stock value. Farmers can also benefit from a higher investment ceiling for the Targeted Agricultural Modernisation Scheme (TAMS) and multiple payments under GLAS, ANC and the Organic scheme.

#### *5.4.2. Hypothetical microsimulation modelling*

The area of farm succession and inheritance lends itself to a high level of complexity given the factors involved, such as, the wide-ranging impact of such a decision on the lives of the farmer, successor, and their families (Inwood and Sharp, 2012). For this research, the chosen scenario used to analyse the economic impact of different routes to succession and inheritance is that of entering a farm partnership. Hypothetical microsimulation is the most appropriate methodological approach as it allows for complexity to be removed to an extent and an assessment of different changes to be made at a micro level (O'Donoghue, 2014). This method facilitates the projection of income streams for both parties, whilst allowing for farm level changes (such as income increase/decrease and farm size adjustment) to be made for each scenario.

Microsimulation models use data on micro-units (e.g. households, firms, farms, etc.) to simulate the effect of policy or other socio-economic changes on the population of micro-units (Mitton et al., 2000). The need for microsimulation arises from the difficulty of observing simultaneously the outcomes for the same micro-unit under a treatment and in the absence of a treatment (e.g. policy change), and also crucially as a tool to understand the complexity of a policy problem. The result of the microsimulation models can be affected by many factors, which makes it difficult to illustrate the effect of a single factor. Hypothetical models focus on a particular scenario under certain predefined assumptions. This allows the model developer to examine a simplified version of the simulated observation (O’Donoghue et al., 2014). Microsimulation techniques have become a much used instrument for their ability to provide an assessment of differing scenarios and facilitate decision making (Spadaro, 2007). In this case, microsimulation is used to understand economic decisions regarding farm partnership and conclusions will be drawn around the likely follow on implications for farm transfer. Focusing on a hypothetical farm allows for the sensitivity of farms to policies to be tested while avoiding the complications that would arise were this study to be undertaken on a real farm. Farm level decisions are not always rational or economically driven (Vanclay, 2004; Howley et al., 2012), but this method facilitates the simulation of decisions based on economic incentive as opposed to basing decisions on non-economic phenomena.

Modelling different farm partnership scenarios allows for the comparison of outcomes, resulting in the most economically beneficial succession and inheritance scenarios becoming established. Each scenario is in turn affected differently by existing policy and associated legal and financial instruments along with other, more subjective motivating factors (listed on the right hand side of table 5.1). Table 5.1 lists the main policies and motivations that will affect each scenario (DAFM, 2015; Loble, 2010).

**Table 5.1. Main policies and motivations affecting succession/inheritance**

<b>Main policies and motivations affecting succession/inheritance</b>	
<b>Policies</b>	<b>Motivations</b>
Farm Partnership Tax Relief	Age
Collaborative Farming Scheme	Income
Stock Relief	Health
CAT – Agricultural relief	Reduced work load
CGT – Retirement relief	Increased leisure time
Stamp Duty – Consanguinity relief	Financial security
Young Farmer Top Ups	Education

### 5.4.3. Base farm characteristics

The hypothetical figures used are average figures from the National Farm Survey (NFS) (presented in table 5.2). The NFS collects business management information from a stratified random sample of 1,000 farms annually and is part of the Farm Accountancy Data Network of the EU. Average figures for cattle rearing and dairy farms are used for the base farm, as these are the most dominant systems in Ireland, with farmer and successor ages, marital status and qualifications being simulated so that they qualify for maximum capital tax reliefs. For the purposes of testing the efficacy of the simulation model, a base farm without other enterprises (e.g. sheep, poultry, etc.) was used. The addition of sensitivity analysis in future applications of the model to test for the impact of same forms the basis of future research as part of this project. The scenarios to be modelled are described in detail later in this section. To ensure each scenario is comparable two base farms are used for this research. In the case of the cattle rearing farms modelled, all farmers qualify for farm assist<sup>9</sup> payment based on low income level.

**Table 5.2. Average Cattle Rearing/Dairy Data ( Teagasc NFS, 2013)**

Average Cattle Rearing		Average Dairy	
Family Farm Income	€9,541	Family Farm Income	€62,994
Machinery	€17,717	Machinery	€57,218
Livestock (Breeding)	€26,534	Livestock (Breeding)	€85,569
Trading	€16,855	Trading	€27,867
Land and Buildings	€577,615	Land and Buildings	€973,079
UAA	38.1 ha	UAA	55.4 ha
Total cattle	61	Total cattle	143

Farmer and successor characteristics used are outlined in Table 5.3. These characteristics are applied so that the farmer and successor qualify for maximum capital tax reliefs. A farmer aged 35 or under is considered a young farmer for capital and farm partnership tax reliefs, while a farmer over 65 is considered to be at retirement age and is eligible for a contributory state pension at age 66 (depending on contributions made).

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<sup>9</sup> Farm assist is a social welfare payment for farmers, it is means tested. Here it is assumed that farm income has been the same in the years leading to the beginning of each scenario, thus cattle farmers here will qualify for farm assist payment.

**Table 5.3. Farmer/Successor characteristics**

<b>Farmer</b>	<b>Successor</b>
Age: 65	Age: 35
Married	Education: Level 6 Ag. Education
Pension: Contributory	Single
No off farm job	Off farm job (€25,000 income)

## **5.5. Results and Discussion**

The outcomes of farm partnership scenarios are illustrated under different policy circumstances in this section, with the scenarios to be modelled described initially. Following this, previous issues involving the farm partnership structure interacting with policies are outlined. Finally, an illustration is given of the microsimulation outcomes with a brief discussion of the results.

### *5.5.1. Scenarios – format and expected outcomes*

The scenarios for this research focus on hypothetical farm partnerships before and after certain policy changes have occurred. As illustrated in table 5.1, there are a range of motivations and policies affecting the succession and inheritance decision, and many of these will be significant in the hypothetical scenarios. It is expected that scenarios where tax reliefs are optimised will be the most economically beneficial to the farmer and successor. However, income levels should have the biggest effect on policy drivers. Policies aimed at increasing land mobility should minimise land transfer costs and incentivise farmers to transfer land earlier; however, direct payments may make it more economically beneficial for the farmer to delay transfer until death. These payments may result in land retention by older farmers, as they provide a steady source of income for retirement. Focusing on two hypothetical farms allows for the sensitivity of farms to policies to be tested while avoiding the complications that would arise were this study to be undertaken on a real farm. Variables such as farm size, income and livestock units can be held constant which may not always be the case in reality. Adjusting aspects of the farms will test the effects of succession/inheritance policies on income, in particular the effects of policies surrounding farm partnerships will be investigated.

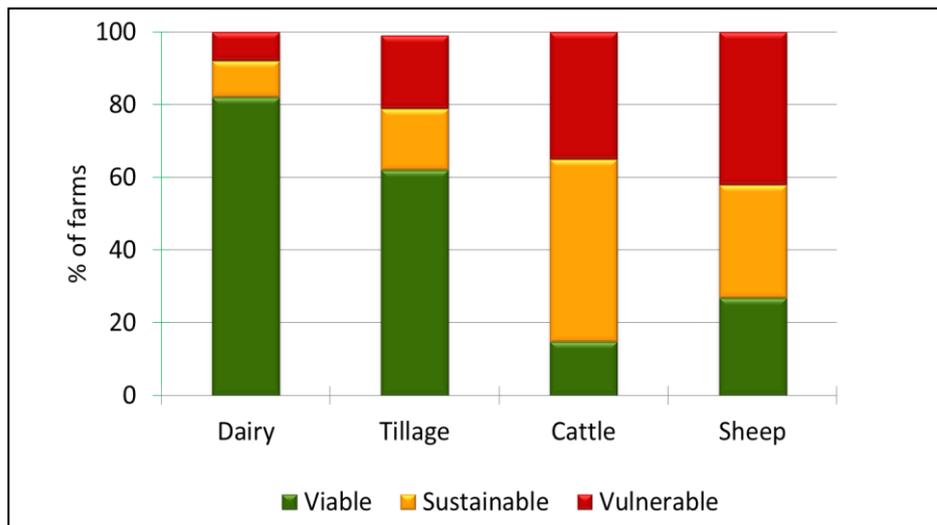
While farm viability<sup>10</sup> is not the only factor taken into account when making succession and inheritance decisions, a non-viable farm is less likely to be capable of supporting two generations at once as part of a farm partnership. In the Irish case, Hennessy and

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<sup>10</sup> Viable here denotes a farm that has the capacity to pay family labour at the average agricultural wage and provide a 5% return on all non-land assets.

Moran (2015) note that more dairy and tillage farms tend to be considered viable with beef and sheep farms being more likely to be sustainable or vulnerable (Figure 5.3), factors which are seen to impact significantly on the results presented in this research.

**Figure 5.3. Ireland - Farm Viability by System 2014 (Source: Hennessy and Moran, 2015 )**



#### 5.5.2. Routes to succession

As mentioned, there are a range of other possible situations involving farm transfer; however, the two shown here best illustrate the effects of policy changes associated with farm partnerships and how they may have an effect on succession and inheritance processes.

#### 5.5.3. Scenarios modelled

Two scenarios are presented in this section for the farm systems mentioned; these show both a farmer and their successor prior to scheme changes and after scheme changes (described earlier and in this section). The scheme changes here include both proposed future changes and those that have created issues in the past. For all scenarios the farm will be transferred to the successor at the end of a 10 year partnership, with farm income being split 50:50 from the outset of the partnership. The cost of entering a partnership will be borne by the farmer (this cost will be fixed at €2,500 in accordance with the maximum relief available under the SCFG).

#### 5.5.4. Previous disincentives for farm partnerships

In Ireland, there have been policy changes in recent years to facilitate the promotion of collaborative farming and allow multiple payments to farmers farming in registered

farm partnerships. Unlike the GAEC system in France, formal farm partnerships have not been a prominent feature of Irish agriculture and policy makers have not generally facilitated collaborative forms of farming. In the case of the Rural Environmental Protection Scheme (REPS) and the Disadvantaged Area Payment (DAS) farmers availing of same suffered financially in the following ways if they joined a farm partnership. In the case of Rural Environment Protection Scheme (REPS) payments, partnerships were not catered for in the earlier schemes. If a farmer in REPS entered a partnership with a non-REPS farmer (who did not qualify for the scheme) then both partners would be rendered ineligible. Here a REPS farmer would have to exit REPS and pay back penalties. Changes introduced as part of the REPS IV scheme facilitated multiple payments to registered farm partnerships. Notably, the current Agri-Environmental Scheme (Green Low Carbon Agri-Environment Scheme – GLAS) caters for farmers in partnership to be treated as separate individuals to avoid any loss of payment. For the DAS, the issue was that two farmers in a partnership would only receive one payment. Under the follow up scheme from the DAS, (the Areas of Natural Constraint (ANC) payment) this situation has changed, and farmers are not penalised for being in a partnership (See appendix 1 for further information). Table 5.4 illustrates the effects of the changes in policy in monetary terms.

**Table 5.4. Changes to area based payments for partnerships**

<b>Changes to area payments for partnerships</b>		
	<b>DAS (2013)</b>	<b>ANC (2015)</b>
<b>Annual payment for partnership (two farmers)</b>	€2,468	€4,936
<b>Annual losses from joining partnership</b>	€2,468	None

#### *5.5.5. Potential benefits*

Figures 5.4 to 5.7 present an example of potential benefits for average dairy and cattle rearing farmers and their successors where the two parties enter a partnership, the successor here brings 10 ha to the partnership which is being leased. The graphs illustrate ‘pre’ and ‘post’ policy changes with pre change not including; higher ceiling of ANC payments, CFGS, or the proposed SFPS, but with post change including these benefits. The contribution of each income component prior to, during and after a partnership is investigated and the graphs show the percentage contribution of each component to overall income. In this way, the importance of changes and their impact on personal income at different stages of the partnership can be assessed.

### 5.5.6. Dairy farm

The results illustrated in figures 5.4 and 5.5 are for a dairy farm before and after scheme changes. The main changes are triggered by the SCFG, SFPS and changes to ANC payments.

On entering the partnership, the farmer's income stream decreases significantly as he/she was receiving all income from the dairy farm. Income taxes also decrease with income stream reduction and decrease further when the farmer reaches age 65 as a result of age benefit<sup>11</sup>. At 66, the farmer is eligible to receive a contributory state pension, meaning this becomes a significant contribution to overall income stream. Post change, the benefit of the scheme changes becomes evident for the farmer as income tax is reduced as a result of the SFPS. After the farm partnership ends and all assets and payments are transferred to the successor, the farmer becomes solely dependent on his/her pension as a source of income. Being dependent on a pension may be an issue in the case of a dairy farmer given the higher level of income they would have received prior to transferring the farm, thus indicating a disincentive to engage in an arrangement such as this. Based on the level of farm income the farmer in this case is not eligible for Farm Assist. One benefit post change that is not evident in figure 5.4 would be the benefit of the CFGS. Establishing a partnership would cost €5,000 without the CFGS, while this figure is halved post change.

In the case of the successor, entering the farm partnership means an increase in overall income because they also now have access to the farm income, on acquiring farm income the successor's income tax increases significantly. In the case of post change, the successor has a lower income tax figure due to the benefit of the SFPS. For ANC payment, the successor does not receive their payment on the 10 ha they bring to the partnership pre change, resulting in a loss of €822 per year. Additionally, without the proposed SFPS for the first five years, the partnership incurs €5,000 of income tax for five years that would not be charged under the proposed scheme. This reduction in tax presents an opportunity for farm investment or to begin saving for future investment requirements. In addition to this, the TAMS grant and stock relief stipulations outlined earlier would apply were this partnership to increase herd size or make structural farm improvements.

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<sup>11</sup> In Ireland, from age 65 a married couple can earn up to €36,000 tax free.

Figure 5.4. Contribution of farmer income components before, during and after partnership

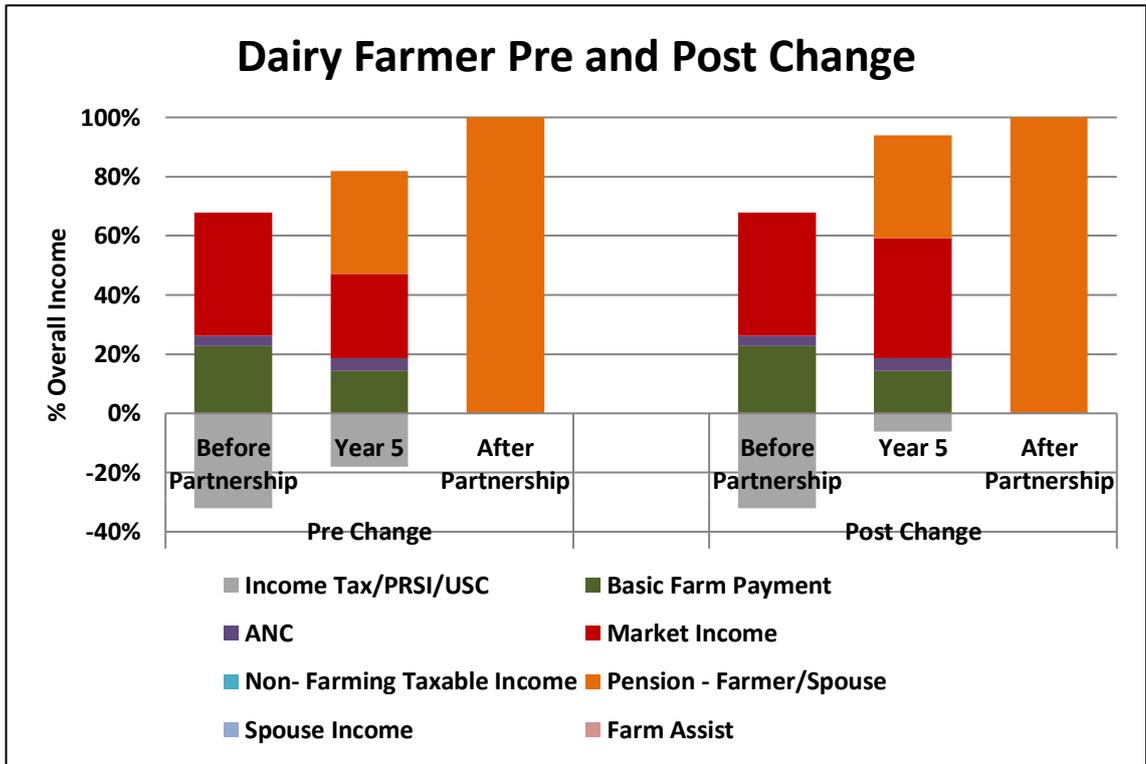
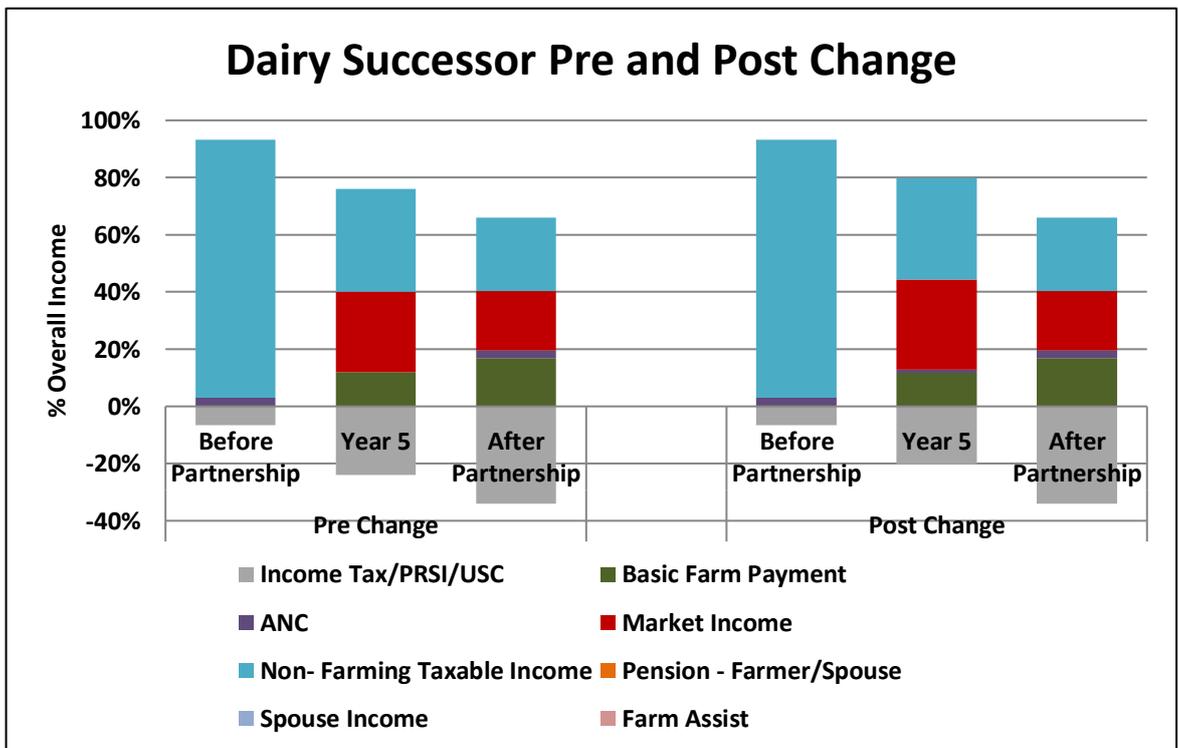


Figure 5.5. Contribution of successor income components before, during and after partnership



### *5.5.7. Cattle rearing farm*

The results for a cattle rearing system (figures 5.6 and 5.7) differ somewhat from those acquired for a dairy system. On entering the partnership the farmer's income is diminished due to splitting an already meagre income with their successor. In addition, the cost of setting up a partnership pre change decreases income further. The farmer receives Farm Assist as a result of the low income from cattle farming. Similar to the dairy scenario, the farmer is left with his/her pension as the only source of income, however this is comparatively not as significant an income decrease. As with other scenarios, the successor receives half of the farm income and payments when the partnership is entered.

In contrast to the dairy system post changes, the cattle rearing system modelled does not receive the same economic benefit. In fact, there is very little change evident in the figures presented for a cattle farmer. While both parties receive the tax relief, it does not benefit the farmer as much due to their low income tax (stemming from low income level). The SCFG has a positive effect (€2,500) as described for the dairy farmer and the successor receives the tax relief and ANC payment post change as was the case for the dairy farm. Basic Farm Payment remains the same regardless of the year of partnership, this payment may contribute to the farmer in all cases being reluctant to transfer the farm to their successor. Once the farmer has transferred all assets and payments to the successor, he/she may face financial issues; this, however depends on individual circumstance, as is the case with many aspects of farm succession and inheritance.

Changes to income structure for both the farmer and their successor are presented in the above figures. One main change of note would be the fact that 100% of the farmer's income comes from their pension once the partnership has ended and all farm income is transferred to their successor but this may pose economic issues for the farmer depending on their costs, but for the successor, the changes that take place regarding income appear as a form of income diversification, with their overall income being enhanced due to the merging of farm income with off farm income. Figure 5.6 illustrates the benefit of the proposed tax relief for a successor (see appendix 2 for farmer and successor income components in monetary form, graphs illustrating the changes discussed over time are also included).

Figure 5.6. Contribution of successor income components before, during and after partnership

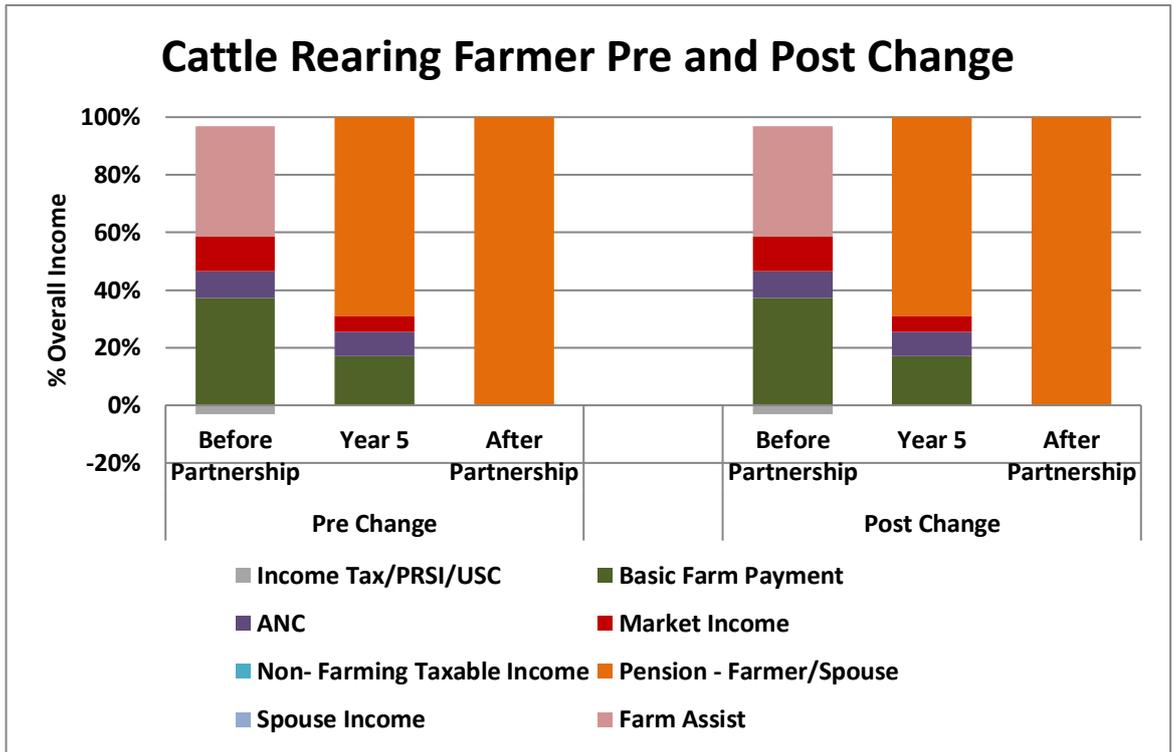
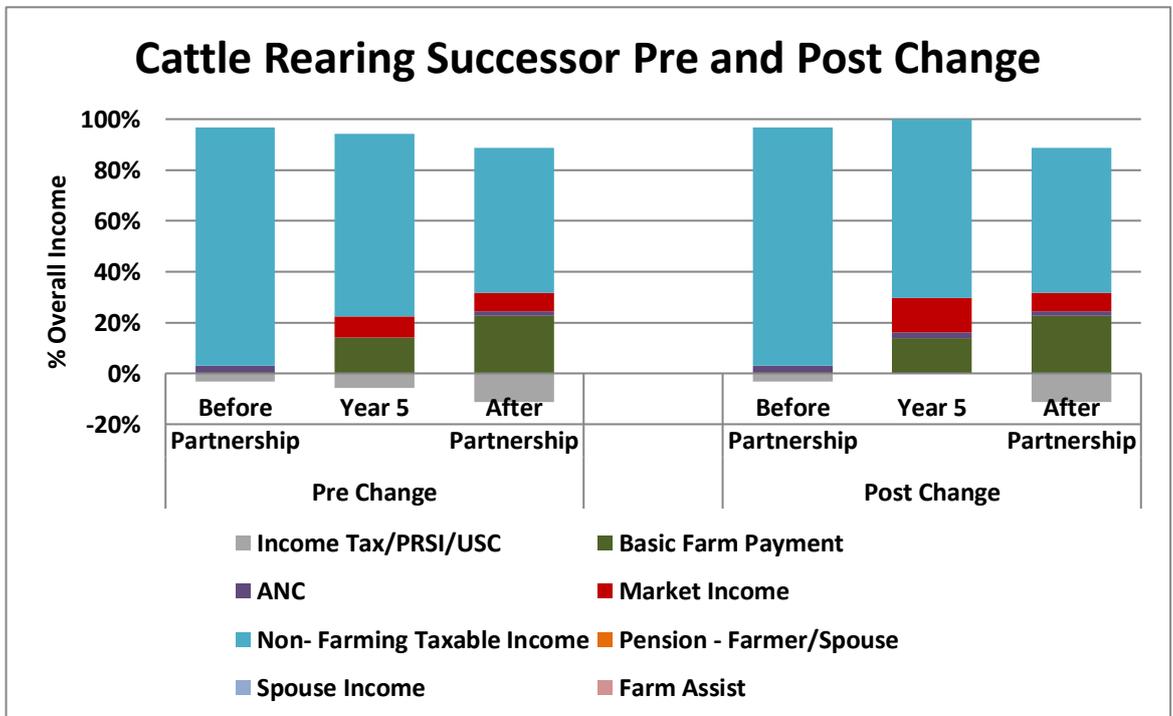


Figure 5.7. Contribution of successor income components before, during and after partnership



#### *5.5.8. Issues of farm size and income*

In addition to the influence of farm size already discussed, this can also affect the risk preferences of farmers when considering structural changes such as entering a farm partnership. Crowley (2006) asserts that smaller farms will engage in new practices but ‘only if there is a high level of confidence that it will not threaten their subsistence’ (p. 55), going on to note the higher risk threshold larger farms can afford as a result of their stronger financial situation. Our findings support this argument; farmers on average cattle farms have their subsistence threatened due to the splitting of an already meagre income. In this situation it is assumed that the farmer may perceive a partnership arrangement as a risk to retirement income, particularly where they do not have any source of off-farm income. As mentioned earlier, however, a collaborative farming arrangement may in such cases also reduce the risk of a successor abandoning the family farm. Thus it is also possible to conceptualise the partnership model as a farm survival strategy akin to forms of farm diversification. While farm partnerships may not be financially attractive to cattle rearing farms, the need to gradually exit and allow the entry of a successor into the farm business may be met by such an arrangement. In tandem with this, Ingram and Kirwan (2011) suggest that farm partnerships may provide a suitable means by which older farmers can gradually exit farming. In a partnership farmers may retain levels of control while their successor can also have an influence over decision making. The nature of a farm partnership contract facilitates the staged exit of an older farmer and entry of a young farmer and in this manner a successor may ascend the ‘succession ladder’. However, while there are benefits of a non-financial nature associated with farm partnerships beef and sheep systems continue to take a traditional approach to farm succession and inheritance (McLeod, 2012). This indicates that farmers in systems where finances are not as robust may fail to see positive aspects of partnerships. Gasson and Errington (1993) for example describe ‘limited farm size with its associated shortage of adequate income and accommodation to support the two generations’ (p. 208) as constraints for the formation of farm partnerships. While this may be the case, partnerships for farm systems where off-farm work is the norm may be undertaken for reasons such as those listed earlier (see table 5.1). Applying this to the findings here, it can be determined that cattle rearing farms need to be made more aware of the non-pecuniary benefits of partnerships.

The differences in average size and income between dairy and cattle rearing systems indicate that dairy systems tend to be larger and more profitable. These factors are likely

to be the reason that dairying is the main farm system in which farm partnerships are utilised (McLeod, 2012). The results emerging here concur with McLeod's (ibid.) findings, suggesting that cattle rearing systems are less suited to joining a farm partnership when compared to their dairy counterparts, particularly if the main motivation to become involved in a partnership is economic. It is established in the literature that the characteristics of a farm can have a strong influence on succession and inheritance outcomes, with factors that influence farm income (such as farm size and system) having the most impact on the processes. Uchiyama et al. (2008) found that farm size did influence succession, with successors on smaller farms being more likely to have employment and thus an income source outside of the farm, therefore decreasing the likelihood of them entering farming. Hennessy and Rehman (2007) also found this to be the case in the Irish context. Chang (2013) raises a similar issue when stating that young people have become less interested in farming as a result of the low income that is often accrued from agriculture. The implication is that smaller farms with associated lower incomes will render attracting a successor a difficult task, meaning that the partnership option has very little role to play in the succession process. Larger farms with higher asset values are more likely to be able to identify a successor (Calus et al., 2008). In a study on farm restructuring conducted by Lobley and Potter (2004) which observed a low number of respondents planning to exit farming, the majority of those exiting were older farmers operating smaller farms. The overall implication is that farm size can affect the exit and entry rate, i.e. successors are more enticed to take on larger farms, while exiting farmers are more likely to be leaving smaller farms that are probably financially unviable. Calus et al. (2008) recommend using Total Farm Assets (TFA) as an indicator for farms that will have a successor. While the idea that farm size, value etc. have a positive effect on succession outcomes, using TFA alone as an indicator would not suffice, as it does not capture important factors such as the number of children a farmer has, for example. This is similar to the research findings here, as some of the motivations listed in table 5.1 cannot be measured.

## **5.6. Conclusions**

The results presented demonstrate the ways in which the SFPS and SCFG would function, with varying outcomes. In general, the most notable concerns are the relative ability of a farm to generate enough income to support both a farmer and the successor, as well as the residual income of the farmer should they transfer the farm prior to death. In this regard there are clear differences emerging from the simulation exercise that

appear to have a strong correlation in the first instance with the type of farm system involved. The proposed tax scheme accrues more financial benefit to successors as they gain farm income from joining the partnership whilst also acquiring the tax relief. However, from the farmer's perspective there is a reduction in farm income, and in the case of cattle rearing systems, tax relief provides little or no benefit. While the introduction of a farm partnership scheme is a positive step towards improved land mobility, successor-centred policy does not adequately address the fact that there are two parties to be catered for in any farm succession and inheritance process. In terms of the SCFG, this provides a minor incentive as it alleviates some costs associated with the setting up of a partnership. The benefit of hypothetical microsimulation as an analytical tool for policy is clear in this paper, with the results illustrating a clear picture of the income components of a farmer and their successor and how they would be affected by policy change. Additionally, the ground level complexities of farm transfer are abstracted allowing for a clear evaluation of proposed and previous changes.

The findings from this research would indicate that there is a rational economic path to be followed towards farm partnership for larger and more financially viable farms, which in turn may facilitate quicker hand-over of farms from an older generation to a younger one. The rationale for undertaking farm partnerships to encourage the exit of older farmers is not apparent, and the merits of the tax relief scheme are otherwise not sufficiently appealing to promote extensive up take at the present time. While the SCFG eliminates half of the associated costs of set up, this may not be a sufficient incentive to enter a collaborative arrangement. The recommendations from this research would be for more wide-ranging enquiry into the ways in which the tax relief scheme would generate broader appeal, along with a series of recommendations on how this would be implemented. This may involve two strands of further research; the first would entail a qualitative study regarding farmer and successor perceptions of policy aimed at encouraging farm transfer. Second, a follow up quantitative study investigating other less prominent farm systems and the implications policy changes may have at farm level in terms of encouraging engagement in farm succession and inheritance processes. As it stands, its impact on the major policy concerns of an ageing farm population and associated implications for farm efficiency and agricultural productivity will be minimal. In the case of cattle farms, there is potentially an argument to be made for creating a scheme that provides an economic incentive beyond tax relief for farms of this nature; this would in turn have financial implications that would require more

extensive research. Additionally, the consultation of individuals who fully understand the practical and administrative aspects of introducing new schemes is advised at the early planning stages of scheme rules and details. This could be realised in the form of small stakeholder groups participating in the design of such policy initiatives to ensure that issues of collaborative farming interacting with future policy change are minimised.

The main findings from this research indicate that farm partnerships are to some extent a suitable means by which to expedite farm succession and inheritance; however, this statement comes with some caveats. The suitability of a partnership depends on the individual farm level situation and also on what expectations the farmer/successor has for a partnership. Based on the findings from this research, deciding to enter a partnership based solely on an economic rationale is best suited to dairy systems, while cattle rearing farms may have a propensity to focus on benefits such as the gradual transfer of control and increased leisure time afforded to partners. These wider non-economic benefits that could potentially be generated through farm partnerships, which could in turn bring a shift in mind-set about the value of earlier farm transfer, require further research and wider dissemination of information on same. This is especially important in the case of farmers' operating systems where budgetary constraints are present.

In summary, facilitating a sector-wide increase in farm succession and inheritance will require a higher level of understanding of different farm systems and the way in which partnerships as part of this process can aid these farm businesses in the first instance, and facilitate timely farm transfer in the second. Based on the results from this research, current policy does not provide a suitable financial benefit for farms that face higher levels of income uncertainty (in this case cattle rearing systems). Finally, as the farm partnership scheme is in its infancy an appraisal of the scheme is required to ensure it is effective in encouraging farm succession and inheritance.

## **Chapter 6**

# **Risky (Farm) Business: Perceptions of Economic Risk in Farm Succession and Inheritance**

## **Chapter 6 – Risky (Farm) Business: Perceptions of Economic Risk in Farm Succession and Inheritance**

### **6.0. Abstract**

Intergenerational farm transfer is increasingly viewed as fundamental to the sustainability and development of global agriculture, with an expectation that younger farmers, with more effective and efficient production practices will enter the sector. However, in the EU at least, this perspective is tempered by the reality of a slow rate of farm transfer to younger farmers, reflected in the rising median age of farmers, and reduction in the number of farmers aged under 40 as they pursue other career paths where access to farming is increasingly not an option. Using the example of Ireland, this research investigates the complex phenomenon of farm succession and inheritance, particularly its role in preventing young farmer entry to the sector. The specific focus for the research is the economic and financial aspects of the farm transfer process, grounded in the notion that many older farmers perceive farm transfer as a risk to their own future financial security. Problem centred interviews were used to collect data from a sample of farmers in the west and south of Ireland. Dairy and beef producers were chosen as representing the two most dominant farm systems in Ireland, with dairy farmers generally receiving higher incomes and beef producers attaining significantly lower returns from their agricultural activities. The main findings indicate that a) farmers in lower income systems such as beef farming are averse to farm transfer due to the lack of financial support for them once they have transferred their farm assets; b) in the case of transfer to a son or daughter, that the farmer owner in turn would face financial hardship trying to survive solely on the farm income without an off-farm job or on-farm enterprise. These findings illustrate a need for a strategic farm generational renewal policy to assist those trying to enter the farming sector, as well as those hoping to exit from it.

Key words: Risk perception, generational renewal, inheritance, farm retirement.

### **6.1. Introduction – the complexity of farm generational renewal**

Even though an on-going concern of EU policymakers around generational renewal in agriculture has been articulated over the past decade or so, it has not, as of yet, resulted in an effective policy response from any member state. Generational renewal, meaning the successive retirement of older farmers who are replaced by a younger or newer cohort of farmers, is viewed as essential for a progressive agricultural sector. Even

though farmers constantly upskill as part of their profession, the reality of a sector that is relatively closed to new entrants in comparison to other occupations is regarded as detrimental to its longer-term competitiveness in terms of gradual loss of creativity, innovation and transformation (Rovny, 2016; Kimhi and Nachilieli, 2001). Zagata and Sutherland (2015) discuss the perceived need for an influx of young farmers into European agriculture as linked to the ‘modernist agenda’ (p. 40) in agriculture where increased efficiency and production will lead to economic development. This contention is based upon studies that have identified a correlation between young farmers and higher productivity/efficiency (Williams and Farrington, 2006; Howley et al., 2012). In addition to productivity levels, more importantly, younger farmers have been linked to an increase in environmental measures at farm level (Ward and Lowe, 1994). Siebert et al. (2006) assert that younger and better educated farmers tend to be well represented in adopters of agri-environmental measures. In tandem with this Mills et al. (2016) found that in some cases successors were at odds with their parents when trying to increase the level of environmental activity on farm. In their study of farm restructuring in England, Lobley and Potter (2004) also found that younger farmers fell into a grouping of more dynamic farmers, while older farmers tended to be less likely to undertake significant restructuring. Within the EU, the high number of older farmers is mirrored by a lower figure for younger farmers in the sector (Zagata and Sutherland, 2015). While some of this can be attributed to general societal trends such as rising life expectancy and an increase in the amount of time spent by younger persons in education; farm demographics still exhibit a greater degree of complexity compared to the general workforce. Entering farming as a career is often the result of land transfer by a relative, for example a parent or grandparent; i.e. farm enterprises are passed down in a generational manner (De Haan, 1994; Hennessy and Rehman, 2007). These transfers take place only when the incumbent farmer feels fully ready to do so, often resulting in the deferral of farm transfer until after their death (Conway et al., 2017). This prioritises the personal wishes and visions of the incumbent (which usually incorporate a mix of cultural, social and economic concerns) as opposed to a transfer prioritising the ongoing success of the farm as a business enterprise. With the development trajectory of EU agriculture based strongly on the success of family farms in most member states, Lobley et al. (2010) assert that without generational renewal ‘the risk is that the cornerstone of agricultural businesses in these countries will fail to meet national and global expectations’ (p. 60) with serious implications for the sector as a whole.

Farmers have been supported for several decades by a range of CAP measures, the aim of which has been to sustain the agricultural sector by essentially supplementing farm incomes in ways that work contrary to market efficiencies. Matthews (2014) notes the importance of CAP payments at present in particular given the level of income volatility linked to fluctuating commodity and output prices. In addition, farmers in receipt of a Basic Farm Payment (BFP) can choose to join agri-environmental schemes which provide further income in return for farming in a sustainable manner that avoids environmental degradation. Research has indicated a link between farm payments and the impediment of farm transfer, Leonard et al. (2017b) note that subsidies do not encourage farmers to consider engaging in farm transfer processes because farmers can receive direct payments while engaging in a minimum level of agricultural activity and receive a state pension alongside these payments. In tandem with this Breustedt and Glauben (2007) assert that increased subsidy payments are linked to a reduction in the number of farmers exiting. Payments to farmers receiving a BFP can vary, although in general, larger farms receive higher BFPs despite the higher income they accrue. Beef farmers in Ireland, for example, are particularly dependant on farm payments, with subsidies making up over 100% of farm income in many cases (Dillon et al., 2017). In contrast to the Irish system, Swiss farmers cannot receive direct payments and a pension simultaneously, resulting in many farms being transferred once a farmer reaches retirement age (Contzen et al., 2017). Similarly in Germany a 'Hofabgabe Klausel' (farm transfer clause) means that farmers must transfer their farm assets if they wish to receive a farmers pension (Mehl, 2013).

There appears to be no detailed investigation of how the perceptions of economic risk associated with farm transfer affects farmers' decisions to proceed or not with transfer. Using the example of Ireland, this paper explores this issue, focusing on the decision-making process of a sample of individual farmers. It first outlines concepts of risk and their application to the agricultural sector, and illustrates how these provide an explanatory framework for the ways that farmers make decisions, and particularly economic decisions, at individual family farm level that have implications for land transfer. Methodologically, a qualitative approach is applied focusing on the two most dominant farm systems (beef and dairy) in order to ascertain the opinions of farmers on the economic challenges of contemplating farm transfer. Information gathered through problem centred interviews is examined using thematic analysis to outline the main financial concerns farmers have and how these indicate whether or not there is a risk

perception associated with farm transfer. Finally, key implications from this research for generational renewal policy are discussed.

## **6.2. Risk - constructivist versus rationalist perspectives**

The following sections discuss key academic perspectives on the construction of risk in order to develop a framework for analysis of how this occurs in the context of contemporary farming, under complex conditions of agricultural change impacting from the global down to the very local level and its influence on farmers' decision-making. It first outlines constructivist and rationalist understandings of risk, followed by the distinction between risk and uncertainty as a further means to identify what issues exactly drive farmers' decision-making and the role that different forms of knowledge (or lack of it) play in their assessment. It then examines more specific literature on the phenomenon of risk and uncertainty in agricultural studies mainly from institutional and policy perspectives.

To date, the main focus of agricultural risk research has been around environmental, health and safety, and economic factors. There has been no specific research conceptualising farm succession and inheritance as a risk facing individual farms and the agricultural sector as a whole. Prior to outlining the link between farm transfer processes and risk it is important to discuss the key aspects of risk theories. Discourses surrounding risk perception are drawn from two dominant approaches; constructivist and rationalist. Constructivist approaches view risks as contextual and a result of social creation (Birkholz et al., 2014). Here, Kirby (1990) explains that risk perception 'is usually dependent upon a social representation, which can be defined as a culturally conditioned way of viewing the world' (p. 282), i.e. the perception of risk is heavily influenced by the social and institutional environment in which individuals are embedded. Rationalist theories on the other hand are centred on the notion that the presence of a hazard results in a rational judgement about the avoidance of a potential hazard (Birkholz et al., 2014). The rationalist approach implies that risk perception is measurable and can be quantified (Scolobig et al., 2012), based on full information about the issue in question, and on the pros and cons of alternatives (Zinn, 2017). Adams (1995), for example, implies a level of measurability for risk by describing a risk situation as one in which 'you don't know for sure what will happen, but you know the odds' (p. 23). On the strongly economic end of the risk spectrum, Just (2001) asserts that risk is 'the case where the distribution of outcomes is known either a priori or

statistically through past experience' (p. 1131). One main critique of a rationalist approach would be the assumption that human behaviour follows a rational pattern. The constructivist approach on the other hand aims to explain how social agents create risk in a given society (Tierney, 1999), leading to more affective and subjective questions of 'interests, power, and social conflict' (Clarke and Short (1993, p. 379); in other words, an emphasis on who constructs these risks and why.

It is therefore important to look for the means by which risks are created, as these can influence the narrative about the level of actual threat they pose. Klinke and Renn (2002) use the example of how relatively minor public risks may be sensationalised via media narratives, leading to exaggerated public reactions and demands for their management. Similarly, Botzen et al. (2009) note that public perceptions of risk may vary considerably from that of an expert in a particular field. They use the example of public concerns about flood risk (specifically flood damage to property) in the Netherlands, which were found to be lower than concerns about terrorism despite half of the country being below sea or river water level. This was felt to be due to widespread media coverage of the attacks that took place in the USA in 2001 which heightened public perceptions of terrorism. While a clear risk, the likelihood of a terrorist attack in the Netherlands causing damage to one's home would still be lower than the likelihood of flood damage.

Birkholz et al. (2014) suggest that social systems such as 'culture, institutions, organisations, values, beliefs' (p.17) into which people are socialised are interwoven with risk constructs. In examining the underlying processes that give rise to such constructs, some key variables that gauge the significance of a perceived risk are noted by Klinke and Renn (2002): qualitative risk characteristics such as voluntariness, personal control, familiarity, dread, and others; emotional associations with the risk (stigma); trust in regulatory agencies and risk-handling institutions; social and cultural beliefs associated with the cause of risk or the risk-handling actors. Such variables can take several forms and generally pertain to individual interactions on which individuals build their perceptions pertaining to a particular risk source.

### **6.3. Risk and uncertainty in an agricultural decision-making context**

The agricultural sector is subject to a myriad of risks to the extent that Kinsella et al. (2013) cite risk as 'an inherent part of agricultural production' (p. 42). Likewise, Buckwell et al. (2017) note the high level of risk associated with farming, with

particular note for the number of farms that are unable to adequately deal with risk. Within agricultural operations, the response to risk depends upon the risk attitude of the individual as well as factors such as the farm's resource base, financial condition, organization, local and national markets, and stage in the farmer's life cycle (Fleisher, 1990). Within a society of risk shaping, each actor may wish to sensationalise a risk pertinent to them (Beck, 1992) and in this case the actors are governments, consumers and farmers. One of the issues that arises in much of this literature on risk in agriculture is the difference between risk on one hand and uncertainty on the other, even though the two terms are frequently used interchangeably. A general consensus would be that risk is in some way quantifiable or that the results of taking a risk can be put into some form of probability, while uncertainty implies a lack of knowledge regarding what will happen; in other words, uncertainty differs from risk in that with uncertainty the odds of an outcome are not known (Just, 2001; Adams, 1995). In the context of forms of risk and uncertainty in agriculture, Hardaker et al. (2015) describe uncertainty as 'imperfect knowledge' (p. 4) while risk constitutes 'uncertain consequences' (p. 4). Said consequences generally pose a threat in some way, thus attaching a value to risk outcomes. So approaching a situation without possessing full knowledge means there can be no assumptions or calculations as to what outcomes might occur (i.e. uncertainty), whereas having knowledge of possible consequences means there can be some expectations for a set of outcomes (i.e. risk).

While it has been argued that farmers are generally risk averse (Groom et al., 2008) in many areas, there has been no specific research investigating whether or not farmers perceive succession and inheritance processes as a risk. Groom et al. (ibid) note that in the case of Cypriot farmers approaching irrigation choices, risk aversion is the favoured approach. In a similar way, Hardaker (2015) asserts that the risk averse behaviour of farmers is evident in their decisions, for example some farmers have a preference for certain farm systems where there are more options for diversification. Following on from this, Hardaker (ibid) notes that the research implication arising from risk averse behaviour means that it is difficult to foresee what decisions farmers may take. Thus, as mentioned, the calculation of risk may be possible but the level of uncertainty is incalculable and has a clear influence on farmer decision making. Barlett (1980) opens a discussion on the effects of risk and uncertainty in terms of farm decisions using the example of the uptake of a new type of seed. In theorising this example, Barlett (ibid) affirms that early adopters of a new seed type are faced with a higher level of

uncertainty (lack of known probabilities), while those who use the experience of early adopters to influence their decision face less uncertainty. Whilst Adams (1995) asserts that more quantitative economic approaches to assessing the odds of an outcome (i.e. a calculable outcome in the form of probabilities that has the effect of lessening uncertainty whilst keeping risk at a constant) are important in providing an indication of risk, Barlett (1980) contends that ‘local realities will always distort the mathematical curves’ (p. 8). It is at this local level where individuals form their perceptions of risk (or uncertainty), thus the importance of local circumstance must be emphasised in research of this nature (although, as indicated above, the ways in which external forces influence local level circumstances must also be recognised).

In the case of this research, making the distinction between the two phenomena as two different but interlinked parts of a complex decision-making process enables a more accurate analysis of the issues underlying the perception of risk and the decisions that result from them, particularly the problem of the unknown and how this is assessed and evaluated by farmers. In the case of farm succession and inheritance the calculation of probabilities in terms of farm transfer outcomes may be impossible; for example, farmers will be uncertain regarding future policy change that may affect farm transfer as they have no means by which to assess possible changes.

Risk has frequently been discussed in terms of aversion and mitigation, while some research has included the term ‘adaptation’ to risk conversations (Smit and Skinner, 2002). The general consensus in this case would be that adapting to risks as opposed to purely avoiding or eliminating them could prove an effective means by which to prepare for negative outcomes. Notably, this depends on the specific risk and its context. For example, adapting to a change in farm structure (such as entering a partnership) may mean changes in day to day practices for farmers while also encompassing the actions of policy makers through schemes associated with farm partnerships (see Leonard et al., 2017b). Smit and Skinner (2002) refer to such a change in enterprise as a ‘strategic adaptation’ (p. 94) i.e. a change that may apply to the long term planning or risk mitigation/adaptation of the farm. It is also noted that government can become involved in these strategies via policies that aim to mitigate risks at sector level.

### *6.3.1. Institutional risk shaping in agriculture*

Risk perceptions are formed based on the society in which an individual is embedded; in most instances the media and political actors attempt to place certain risks in the

public eye with a view to economic or political gain. Hardaker (2015) notes that changes in policy/regulation governing agriculture can have a profound effect at farm level, something he describes as institutional risk that also incorporates political, sovereign and contractual risks. Most of these sources of risk stem from a governmental level be it national or international. The main policy instruments available to governments in shaping the agricultural sector are financial, i.e. tax relief or grant based schemes. Essentially, financial incentives are used to encourage individuals to undertake measures that achieve strategic governmental aims. This has been achieved in the past resulting in widespread change in agriculture; for example, the policy changes that encouraged production from the 1970s onwards are a clear example of national government and EU-level control over the sector and the creation of risk perceptions.

This productivist agenda involved speculation around the possible precarious state of EU food security, but led also to widespread negative impacts for human and animal welfare (e.g. BSE) and to environmental degradation (Wilson, 2001; O'Connor et al., 2006). At present, farming practices such as environmental conservation are encouraged using agri-environmental schemes, with these schemes generally benefiting farmers economically (Morris and Potter, 1995). Entering financially incentivised schemes has been linked to the reduction of uncertainty around income for farmers, thus decreasing their perceived economic risk (Koundouri et al., 2009) (i.e. the idea that a guaranteed payment to supplement farm income means less reliance on a volatile market). Koundouri et al. (2009) also refer to the importance of taking account of farmers' own attitudes to the risks involved in new policies, asserting that projected policy outcomes will vary accordingly. This issue of the varied perceptions of risk at the more individual level is also discussed by Pieczka and Escobar (2012) who assert that policies must reflect ground level issues in order to be successful.

### *6.3.2. Risk and uncertainty in farm succession and inheritance*

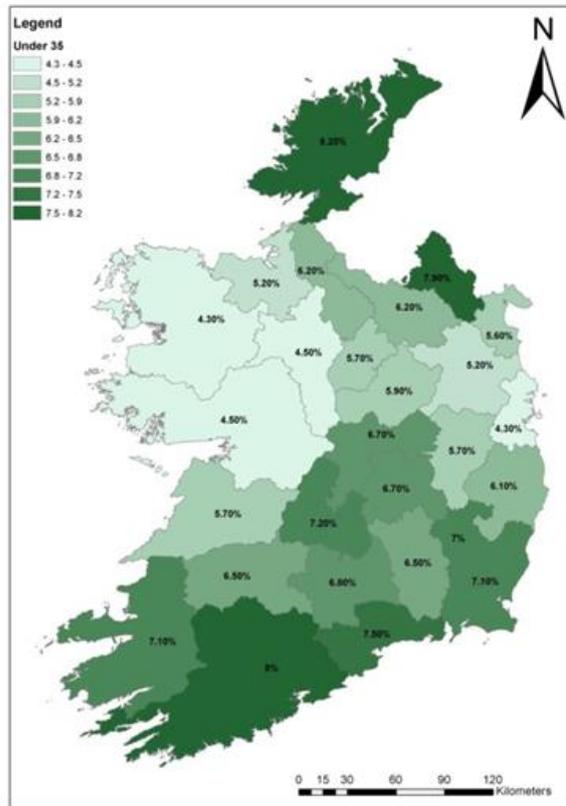
Lobley and Baker (2012) assert that 'intergenerational farm transfers are a fundamental aspect of the sustainability of family farming' (p. 9). The farm transfer process however, is fraught with difficulties, several of which are of an economic nature. For instance, farmers transferring land to their successors require a revenue stream once they have forgone their farm income, and in many cases, they tend to continue relying financially on the farm once they have handed over ownership to a successor (McLeod, 2012). Errington (2002) notes that many farmers avoid transferring managerial control to a

successor to protect their income beyond retirement age. This stems from a historical lack of planning for retirement income in the farming community; a point illustrated by Weston (1977) who also highlights that a lack of such planning was more prominent for smaller farms. Ward and Lowe (1994) assert that farm succession and the desire to transfer the farm to a family member are constructed in a social manner, referring to succession as a 'social goal' (p. 175) that aims to merge family and business. In turn this social decision becomes economic as it is affected by income, inheritance taxation, and legalities associated with land transfer. Fischer and Burton (2014) also highlight the socially constructed and hence subjective nature of succession ideals, while referring to the countless studies that have categorised and quantified factors that affect the process. They also note that no two farms respond in the same way to any source of influence on the succession/inheritance decision.

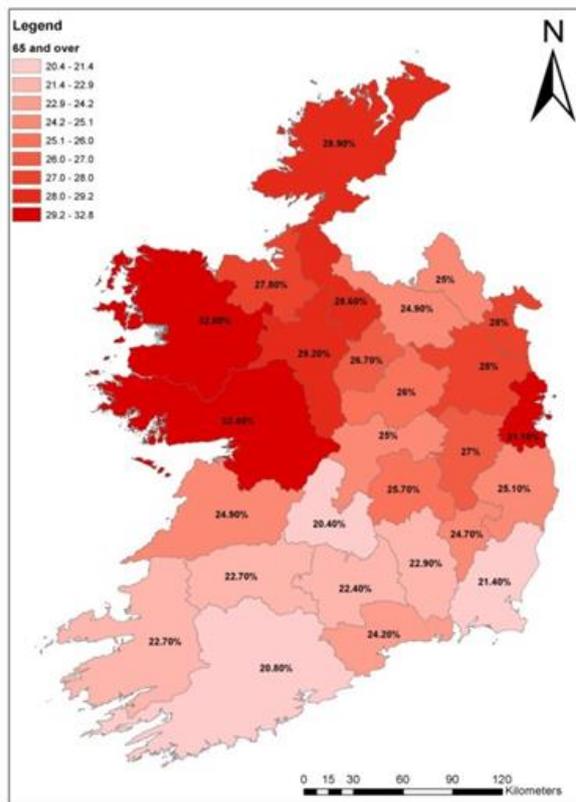
#### **6.4. Methodology**

A purposive sampling approach was employed for this research to ensure that farms with differing income levels were targeted, in particular beef and dairy farms. These are the two most dominant farm systems in Ireland, with beef farmers receiving a significantly lower average income in comparison to dairy. In addition to this, the locations of these farm systems tend to be regionalised, with a high concentration of dairy farms in the South, and many of the beef farms based in the West. Central Statistics Office data was used to map the number of older and younger farmers by county. Figures 6.1 and 6.2 illustrate a concentration of younger farmers in the South, while a higher number of older farmers appear in the West. Based on these statistics counties Mayo and Cork were chosen as study locations. Cork exhibited a high number of younger farmers (8% under 35) and a lower incidence of older farmers (20.8% over 65), while Mayo was the inverse with only 4.3% under 35 and 32.8% over 65. This sample selection allows for comparison between locations as well as between farm systems. With initial assistance from Teagasc in identifying key individuals, and then using a snowballing technique, 24 farmers in total were interviewed, 12 from Cork (6 East, 6 West), and 12 from Mayo (6 North, 6 South). All farmers were given pseudonyms to ensure anonymity. Of the farmers interviewed only two did not have children. In terms of employment status, the majority of beef farmers were retired from off-farm jobs, while dairy farmers were exclusively full-time farming or semi-retired from farming (Table 6.1).

**Figure 6.1. Farm Holders in Ireland aged under 35 by county (CSO, 2012)**



**Figure 6.2. Farm holders in Ireland aged 65 and older by county (CSO 2012)**



**Table 6.1. Sample farmers**

System	Name	Age	Children	Farm size	Work off farm
Beef	Sean	61	0	14 Ha	Retired
	Michael	71	4	28 Ha	Retired
	James	65	3	40 Ha	Yes
	Richard	56	2	19 Ha	Yes
	Nora	80	5	51 Ha	Retired
	Brendan	65	3	30 Ha	Retired
	Thomas	61	0	40 Ha (8 rented)	Retired
	Louis	66	2	24 Ha	Retired
	Jack	70	8	30 Ha	Retired
	Pat	58	6	40 Ha (30 rented)	No
	Kevin	69	4	58 Ha (36 rented)	Yes
	Stephen	69	2	52 Ha	No
Dairy	Joe	50	4	40 Ha (12 rented)	No
	PJ	50	3	100 Ha (60 leased)	No
	Enda	59	4	36 Ha (57 leased)	No
	Donal	58	2	36 Ha (15 rented)	No
	David	50	4	52 Ha (61 rented)	No
	Liam	50	4	85 Ha (39 rented)	No
	Padraig	65	4	40 Ha	No
	Peter	75	3	40 Ha	No
	Mark	68	5	40 Ha (28 leased)	No
	Luke	76	3	85 Ha (40 leased)	No
	Paul	64	5	45 Ha	No
	Damien	58	3	26 Ha owned (35 leased)	No

Given the nature of this research topic, Problem Centred Interviews (PCI) were deemed the most appropriate approach to evidence collection. Farms, and in particular farm transfers, are idiosyncratic and thus require an individual level of investigation that allows for the interviewees to describe their specific farm situation. PCI is a qualitative approach, a key benefit of which is to allow for an open narrative at the beginning, followed by a thematic interview (Schiebelhofer, 2005). Witzel (2000) outlines four key parts of a PCI approach which include a short questionnaire, interview guideline, recordings and a postscript (p. 3). In the case of this research, the aim of the open narrative section was to establish each farmer's perception of risk and explore their concerns around farm finances, with a particular focus on farm transfer. The thematic interview captured opinions on key issues including the effect of the farm system on their succession/inheritance decisions, the means by which information was sourced, and also the perception of policy surrounding generational renewal. During the open narrative stage farmers were asked to speak about their own situation and the individuals and circumstances that influence their farm decisions. Any specific themes that did not arise in the narrative but had been identified as integral to the investigation were raised with the interviewee. As opposed to conducting a short questionnaire at the

beginning of the interview as suggested by Witzel (2010), this was held until the interview was over in a bid to avoid creating a formal environment that may have resulted in closed or short answers. Similarly, Flick (2014) suggests that a questionnaire at the outset could impede the open nature of the interview before it begins.

The interviews were transcribed and thematic analysis was used to extract key issues that came to light based on financial concerns and location/farm system. Thematic analysis involves analysing interview transcripts for key themes that appear in a recurring manner (Bryman, 2008). Mabry (2008) describe thematic analysis as ‘the identification of emerging patterns and categories from iterative reviews of the dataset’ (p. 219). During the analysis of this research several articulations of risk were identified which were used as the basis for coding and organising the analysis of responses. The main themes that emerged were: tax, retirement income, cost of long term care, and marital breakdown.

## **6.5. Risks and Uncertainties Perceived in the Farm Transfer**

The following sections outline the key concerns farmers articulated around farm succession and inheritance. The interviews revealed numerous factors of an economic nature that influenced the farmer decision-making process, with varying degrees of negative or positive perception based on the region and farm system in question. A key tool in analysing the interviews was the social constructivist lens which framed all of the articulations of risk in terms of the societal context in which the interviewee was based. Some aspects discussed by farmers had a clear element of measurability (e.g. taxation) while others were immeasurable (e.g. whether or not their successor would experience marital problems), indicating a mix of risks and uncertainties. Here, interviewees from the West are referred to collectively as beef farmers, with those from the South referred to as dairy farmers.

### *6.5.1. Tax as a sensationalised risk*

Despite recent research indicating that land transfer taxation would be of little consequence to an average farmer where his or her successor met tax relief criteria (holding a minimum level of agricultural education etc.) (Leonard et al., 2017b), one of the most prominent concerns that beef farmers had relating to farm succession and inheritance was land transfer taxation. In stark contrast a majority of the dairy farmers saw taxation as something that could be managed efficiently. These concerns were presented mainly by beef farmers in terms of the negative economic effect that a large

tax bill would have on a successor. Some interviewees were aware that they could avoid paying Capital Gains Tax (CGT) if the farm was not transferred until after their death, implying however that the financial risk would be dealt with by deferring succession. Michael (71, beef) articulated the concerns of many beef farmers interviewed:

*'I hear a lot of people talk about stamp duty, no not stamp duty, eh...inheritance tax. There should be an awful lot more done with that, that you could give it (land) more freely and nobody is crucified. I hear a lot of people say there's places sold over it'.*

File and Prince (1996) note that many family businesses can be subject to estate taxes which can place a burden on family members in a succession context. In the case of farming however, planning for farm transfer could result in little or no tax being paid (Leonard et al., 2017a). However, Richard (56, beef) also highlighted his concerns around taxation for both him and his successor:

*'If I was to transfer to my sons, the thing that would worry me is what tax implications would be for them. That'd be one of the things that'd concern me. Naturally enough I'd be wondering about my own income'.*

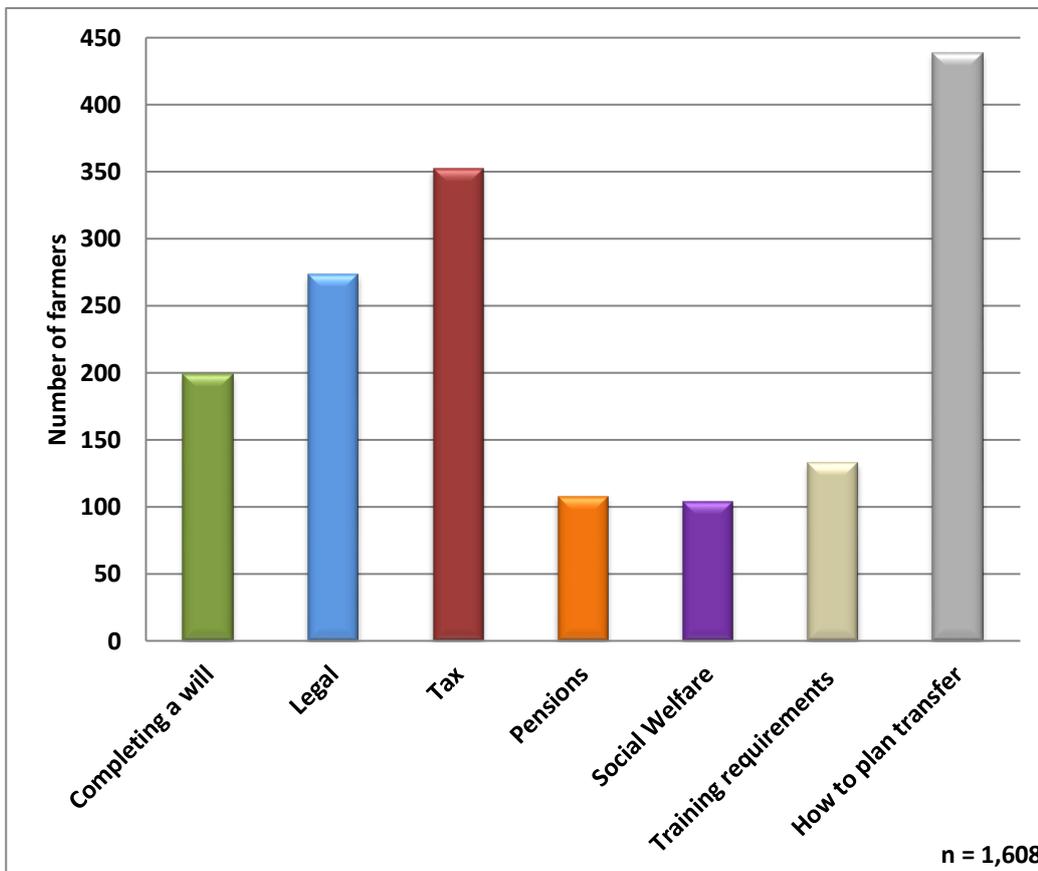
Neither of the farmers cited above (like many others) mentioned having availed of any professional consultation to assess possible tax outcomes despite being given the opportunity to comment on same. The implication here is that these and other farmers have built their opinions of land taxation on anecdotal evidence rather than on the advice of taxation or other farm finance professionals, leading to a sensationalised perception of possible consequences. In one instance a beef farmer (Stephen, 69) highlighted that they did not possess sufficient knowledge to make a decision on farm transfer:

*'You'd need to know the tax implications of it (land transfer), in other words we don't know enough about the tax implications to make any decision....they'd need to be educated more (farmers)'*

This comment indicated an awareness of a lack of professional contact; however, given Stephen's age (69) he had chosen to avoid the transfer process thus far despite being aware that he required information prior to making a decision. In a series of surveys conducted by the author with farmers at a series of Teagasc 'Transferring the Family Farm Clinics' (TFFCs) held around Ireland during 2015/16 it emerged that taxation was a key reason for their attendance, indicating a high level of uncertainty about its

implications for farm transfer (see Figure 6.3). Notably, fewer farmers in the South indicated that tax was a prominent reason for their attendance.

**Figure 6.3. Main information sought by farmers attending TFFCs**



As discussed, risk and uncertainty differ in terms of impacts on decision-making. Taxation can be seen as a risk by definition i.e. a calculable outcome (Just, 2005). The beef farmers revealed a high risk perception associated with land transfer tax, but very little engagement with experts who could assess that risk (except for one farmer, who made contact at a late stage), for example accountants or tax advisors. In other words, whilst significant uncertainty was present (and was contributing to a misleading and negative perception of the risk), there was little evidence that this was an issue that required any urgent clarification via other sources of information. Contrary to this, dairy farmers frequently alluded to engaging with professionals (accountants in particular) regarding their family farm transfer, which in turn resulted in a very low risk perception associated with the cost of transferring the farm to their successor. This relates to the connection between adaptation and mitigation (Smit and Skinner, 2002) and risk, engaging with professionals in a timely manner meant that these farmers could adapt to or mitigate against taxation before it became an issue.

The differing views of farmers regarding taxation were evidently a result of an array of phenomena influencing their perceptions of the financial risk it entailed. The risk being that they, or their successor, would have to pay a significant tax bill once the farm was transferred. This finding reflects the work of Veerman et al. (2016) who note that awareness of risks and the need for risk management vary considerably among farmers. For dairy farmers interviewed the lower perception of risk around tax stemmed from two main sources; previous experience, and contact with a professional. Donal (58, dairy) briefly summarised the sentiments of many of the farmers regarding taxation:

*'We'd expect our accountants will come up with a package that will be most beneficial to us...you really need people that know what they're doing and do a lot of this'.*

Similarly, Pdraig (65, dairy) had investigated and was aware of the tax reliefs available for transfer of land to younger farmers:

*'We've looked at it a small bit...3 million [euro] is it, tax free transfer? We'd be under that category. It shouldn't be a major issue; it would have to be done before (son) is 35'.*

Dairy farmers in general exhibited a more comprehensive knowledge of structures and reliefs associated with land transfer tax, and this evidently contributed to a positive approach to farm transfer. The value of an average dairy farm is generally higher than that of their beef counterparts, meaning dairy farmers would have higher land transfer taxation bills (if any). In addition to contact with professionals, some dairy farmers referred to their own experience of receiving the family farm. Joe (50, dairy) for example noted that he paid 'very minor tax for inheritance' when he had taken over the family farm. The experience provided by Joe reinforces the opinion of Klinke and Renn (2002) who assert that familiarity or association with a risk can dictate an individual's perception. In this instance dairy farmers exhibited a low level risk perception, stemming from a clear knowledge of the risk (i.e. lower uncertainty about it), and in some cases previous positive association with farm transfer.

Evidently there is a heightened perception of risk associated with land transfer taxation for beef farmers in the West of Ireland, whilst those involved in dairying in the South exhibit a more open and positive approach to taxation. This variance in perception resonates with the notion that risk is contextual (Birkholz et al. 2014); i.e. risk perceptions are created by numerous factors that are specific to a particular social

context. While all interviewees were situated within the same policy environment, they were embedded in distinctly contrasting discourses. Of particular note were the economic differences within the sample which appeared to be strongly correlated with farm system and region.

### *6.5.2. Retirement income*

Although the factors affecting farm transfer decisions are influenced to some degree by the cultural and social contexts in which the farmer operates (including for instance distinctive and often localised farming cultures, farmers' peer groups, and relationships with state-sponsored and private advisory staff and other consultants and experts), the economic context is arguably the most important for the majority of farmers. This has been highlighted to some extent by Whitehead et al. (2012) who note that the need for income when entering retirement/semi-retirement is inescapable and sources of such income vary based on location; for example farmers in Canada were more likely to sell their farms, while those in England more commonly rely on private pensions. Regardless of the source of said income, the farm plays a role in financing it. In addition to this, Rossier (2012) found that only large farms can provide an income that allows for two generations to farm at once, while medium and small farms cannot support the entry of a successor while the incumbent farmer is still economically dependent on the farm.

Given the intricate linkage between farm succession/inheritance and retirement many interviewees alluded to concerns about sources of retirement income. While most farmers may never actually retire in the sense of remaining active in the farm operations, what is meant by retirement income for this research is the available income once the farm has been transferred to a successor. As with taxation issues, there were contrasting views between higher income farmers in dairying and lower income farmers in beef. However, both raised concerns regarding a need for economic security once they transferred the farm, indicating economic risk linked to farm exit. Leonard et al. (2017c) raise concerns that if farmers become purely dependant on an Irish state pension (contributory) once the farm has been transferred, this would not provide a substantial income ( less than €21,000 annually between a farmer and their spouse). In his 2013 report on Irish farm succession, Bogue (2013) found that 82% of farmers surveyed (197 of 421 surveyed answered this question) would be dependent on such a pension once their successor had taken over the farm.

Sean (61, beef) voiced these concerns that he would be in a vulnerable position once the farm was signed over, noting a fear of being forced out of his home:

*'It's very hard for them [farmers] to hand over all their assets, and basically you're 70 or 80 years of age and you now have nothing, or that's the way you think - 'I've given away everything', it feels like. If they throw me out on the side of the road that's where I'm going to be; there has to be something to encourage us to sign over'.*

This illustrates a strong linkage between farm transfer and fear of being economically dependant on others once the transfer process was completed. For Sean a lack of security in one's own home was one of the key economic factors hindering his engagement with the process of transferring the farm to his nephew. Lobley et al. (2010) concur with these concerns surrounding retirement income noting that 'inadequacy of pension provision' (p.61) can act as a barrier to farmer engagement with retirement or semi-retirement processes. Thomas (beef, 61) alluded to the inadequacy of a pension provision, but also the shortcoming in government policy to support exiting farmers:

*'I think since they got rid of this European pension scheme it has affected the whole scheme quite a bit, at least you had some security then when that was in it, guaranteed something like. If you're depending on just the state pension it's very little really'.*

Thomas' comments express the need for security once the farm has been handed over, implying that this would reduce the economic risk of not having enough income once retired. Koundouri et al. (2009) assert that financially incentivised schemes can contribute to a reduction in financial risk for farmers. Echoing this, Vollenweider et al. (2011) contend that agri-environmental payments may be seen as a means of income stabilisation for some farmers. Without the presence of income stabilisation supports beyond farm exit or semi-retirement farmers may continue to avoid the farm transfer process, because depending on a low income farm to support two generations is unfeasible. In the context of New Zealand agriculture, McLeod (2012) asserts that dependence on the business for a basic income and the fear of losing this is 'possibly one of the main reasons that owners fear the process so much' (p. 187). Similarly, Errington (2002) found that English farmers continued to rely on the farm for income even past retirement age, with many farmers protecting their 'pension' (i.e. the farm) by retaining managerial control as they got older. In this way, farmers ensure they are not facing the risk of having little or no income later in life.

While dairy farmers discussed prospective retirement income sources they did not indicate a lack of income as a risk, but postulated that they would need to prepare for later life by means of a private pension. A private pension plan depends on the retiree's ability to pay into such a fund during their working life, and for the dairy farmers interviewed this was less of an issue. Joe (dairy, 50) outlined his plan to use farm income to build a pension on which to live on once he had transferred the farm:

*'By the time I'm 60 we would be in a partnership; he [his son] would be doing most of the work, drawing an income from it. Then in a few years I'd have enough set aside that I could retire...if I can make enough in the next 10 years to secure myself for retirement'.*

In the same way, PJ (dairy, 50) described how current farm income would be used to fund a pension that would ensure financial stability once one of his daughters took on the farm:

*'I would be hoping that I'd have the majority of my income in a pension of some description... you don't need a huge income when you retire but you need an income, you need a recurring income that's safe'.*

At present there is no form of farm retirement scheme or farmer's pension in Ireland, apart from the already-mentioned state pension that is available to citizens from the age of 66. In Switzerland, farmers receive 'old age survivor's insurance' provided they have handed over the farm to a successor by the age of 65. As is the case in Ireland, there is a high reliance in Switzerland on direct farm payments, meaning that this relatively reliable source of farm income becomes a disincentive to farm transfer (Rossier, 2012). Similarly in Germany, farmers receive a pension once they have transferred the farm and relinquished their farm income (Mehl, 2009). Based on the empirical results from this research, farmers would welcome a form of income security once they reach an age at which they could semi-retire. Policies based on the transfer of all assets however, or an implication in such an arrangement that farmers would fully exit farming may result in low uptake from farmers, as indicated in the findings of Conway et al. (2016).

### 6.5.3. Long term care costs

When discussing farm succession and inheritance many farmers raised concerns around their own ageing and the possibility of long-term care costs to be faced. While costs of long term care are clearly linked to retirement income, this emerged as a strong theme

and thus merited discussion separate to that of retirement income. This issue was raised as a significant risk by beef and dairy farmers alike. Internationally, farm successors are subject to different arrangements regarding care for their parents once they take on the farm. In Israel, only one successor can be chosen, and the successor is the only child to build a home on the family plot of land; legal transfer of farm assets takes place later in life with an obligation on the successor to care for their elderly parents (Kimhi and Nachlieili, 2001). Likewise, successors in Austria care for their parents later in life as opposed to buying the farm from them (Stiglbaeur and Weiss, 1999). In the case of this research many farmers implied that their successor would assist in caring for them later in life but were acutely aware that the cost of going to a nursing home would be high should they have to do so. Donal (58, dairy) had strong concerns that there would be serious economic issues if the farm had to fund him staying in a nursing home. While he did not explicitly make a connection between this and a heightened risk of transferring the farm, this was one obvious implication; if he transferred the farm, he would possibly not have an independent means to pay for care. If the successor took on the responsibility of care, it could financially threaten the farm's viability. The other risk was that by placing the burden on the successor (should he go ahead with farm transfer) it would financially threaten the farm's viability:

*'The other thing that's coming down the road here is the cost of healthcare, and as you get older the cost of a nursing home is €1,000 a week...there aren't many farming businesses that can support that....that definitely is always in the back of your head when you're moving forward'.*

Of note here is the fact that Donal is involved in one of the most profitable farm systems but still feels that the cost of long-term care could threaten the farm financially. Marsden et al. (1992) assert that finances associated with providing for care of an elderly farmer can lead to 'severe drain on capital resources' (p. 419). While the Nursing Home Support Scheme (NHSS – also known as the Fair Deal Scheme<sup>12</sup>) aims to assist with the cost of long term care, farmers are in the unique position of owning substantial assets that may be taken into account as part of a means test to qualify for

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<sup>12</sup>The NHSS is a scheme of financial support for people who need long-term nursing home care. Under the NHSS, those who require long term care contribute towards the cost of care required and the state contributes the rest of the cost based on a financial assessment which takes into account assets owned, including farm assets (<https://www2.hse.ie/file-library/fair-deal/fair-deal-information-booklet.pdf>).

the scheme. For the farm to be excluded from the means test, farmers must have transferred all farm assets 5 years prior to entering long term care. Recent changes made to the scheme have improved the position of farmers, in that farms are included in the means test, but only for the first 3 years which a person is in care. Michael (71, beef) had strong reservations about the NHSS:

*'I think the older people that made this country the way it is, they're not being looked after right, even just to give them a decent place in a home, they're crucified now to go into a home, god forbid if I had to go in. The place would be sold over it, that fair deal scheme, it's not a fair deal. It's like a lot of the other schemes, it's only meant for a few'*

Michael's concerns were centred on the potential loss of the farm due to the financial pressures placed on the business as a result of the NHSS conditions. While this issue of care potentially surfaces whether or not the farm has been transferred, the main point for this discussion is that it does feature as one of the considerations that (indirectly at least) is influencing the overall risk assessment for farm transfer, i.e. it introduces further uncertainty to the decision-making process.

#### *6.5.4. Concerns around marriage breakdown*

In most instances, themes that emerged from this research were common to both farm systems; however, breakdown of a successor's marriage only appeared as a key concern for dairy farmers, because of the potential loss of the farm through subsequent division of assets. Notably, there was no question in the interview guide that related to this topic yet many farmers highlighted it as an issue. These concerns were centred on the risk not only of losing an asset laden with personal value, but also an economic asset. Much of the research on intergenerational family farming cites marriage as a positive part of the process leading to farm transfer. The concept of life stages have a very strong influence on farm succession and inheritance, with Barclay et al. (2012) describing 'critical events' such as marriage, death and illness as triggers for the processes of succession and inheritance to be undertaken. One of the most important life stages (or 'critical events') discussed by academics is the stage in which a successor marries or has their first child. According to Wilkinson et al. (2012), when a successor marries, the family farm's life span is assumed to be extended due to the introduction of another generation. Wilkinson et al. (ibid) also engage with the notion of life stages stating that the main reason farmers leave farming is due to 'their stage of life and the resulting changes in personal and family circumstances' (p. 35). In this research, marriage was seen as a

barrier to farm transfer rather than a pivotal moment that encouraged a farmer to engage in the process, in other words, it is construed as a risk which may in certain circumstances constitute a reason to defer farm transfer. Mark (68, dairy) articulated serious concerns around a marriage breakdown resulting in the farm being sold:

*'The real fear farmers have in the back of their minds is in case the farm won't be secure going forward, especially now with family break ups and things, this is the real fear people have. If you transfer the land to your son and your son gets married and the marriage breaks up, the farm has to be sold, that's the real fear'.*

This comment summarises the concerns raised by several dairy farmers interviewed, and also resonates with research findings in international contexts. The possibility of divorce is cited among the reasons for late transfer in Australia with Barclay et al. (2012), outlining the concerns of farmers about successors' marriage break-up and divorce resulting in the sale of the family farm. In a similar manner, Fischer and Burton (2014) assert that the timing of a farm transfer depends on many factors, but of particular importance is when a young farmer marries and to whom. While the sale of the family farm presents an economic risk (i.e. a measurable outcome), the likelihood of marital breakdown is immeasurable and thus is by nature a form of uncertainty (Just, 2001). Donal (58, dairy) was of the opinion that this would not be an issue for his farm based on confidence in professionals associated with such legalities:

*'The stories you hear are of whoever has taken over the farm, their marriage breaking up, there will be I presume steps taken to protect the business'.*

In this instance, Donal was implying that a form of mitigation may include the use of a prenuptial agreement to protect farm assets; however, Price and Evans (2006) who write about the issue of marriage break up and the fate of family farms contend that these agreements tend to have little legal standing. In their research, interviewees solely discussed the possibility of women being a threat to the farm 'by virtue of their entitlements if the relationship breaks down' (p. 280). These concerns may not necessarily be rooted in a mistrust of a successor's partner (or their gender), but more linked to the uncertainty associated with an external individual becoming embedded in the farm enterprise, which is intrinsically linked to the risk of having to sell the family farm. However, in this research, concerns about female heirs was also raised. PJ (50, dairy) who only has daughters was clear on the fact that their partners would influence his decision on farm transfer:

*'It depends on who my daughters team up with; who they pick as partners has a huge influence on it'.*

Additionally, a lack of any form of mitigation against the possible eventuality of the farm being sold means that farmers have no control over the situation, which only serves to heighten negative perceptions of the farm transfer process. In the absence of a means by which to protect the farm, farmers will continue to avoid engaging in farm transfer as a result of the uncertainty present and the perception of risk that it constitutes.

## **6.6. Conclusions**

This paper has set out to understand the importance of economic and financial factors in farm transfer decisions. It has done this through examining farmers' socially-constructed risks about the economic viability of their farms and the effects of uncertainty as they arise from key unexpected events (that also have significant economic implications for the farm), and how these impact upon farmers' decision-making for succession planning. Approaching risk as a socially-constructed phenomenon has provided unique insights into some of the complexities of economic and financial decision-making on farm succession at the level of the individual farmer. These are issues that farmers in this research believed are not always sufficiently accommodated under the available, but more rigid approaches to state generational renewal policy which do provide for a clearly calculable risk (e.g. taxation), and/or arise from other uncertainties about income security and the longer-term security of the farm holding post-transfer (e.g. the possible need for long-term care, or successor's marriage breakdown). These constituted the two key, reiterated concerns of farmers: first, the need for financial security once a farmer reached retirement age; second, the possibility of having to sell the farm to release finance as a direct result of unanticipated events like illness or divorce.

The financial implication of a process that is also influenced by social considerations is clearly in evidence in this research. These dilemmas are already reflected to some extent in the work of Ward and Lowe (1994) in their references to farm succession as a 'social goal' (p.175) that nonetheless is heavily contextualised within financial and legal considerations, which (in the case of this research) ultimately drive the decision-making process. However, the means to take account of these complex realities and subsequent approaches to risk-construction and decision-making are not currently available in

policy, and thus create difficulties for key institutional stakeholders (e.g. advisory services) who have a strong vested interest in promoting farm transfer for farm and wider agricultural sector efficiency reasons, but who have limited scope to discuss satisfactory options with potential farm retirees.

The clear divide in understandings on the implications of taxation was evident between the beef and dairy farmers, with the larger and more financially profitable dairy farms (all farmers including prospective successors as full-time farmers) evidently having a succession plan in place. These farmers reported being in regular contact with their accountants and thus had a low risk perception regarding land transfer taxation. The beef farmers on the other hand who were all part-time farmers were far less aware of the taxation implications and were working on the basis of anecdotal information about taxation obligations, constructing same into a negative risk perception (Klinke and Renn, 2002). The hosting of advice clinics by Teagasc around the country in 2015 saw over 1,600 farmers attending, reflecting a desire for information on farm succession options and implying a prevailing and significant level of uncertainty. Based on dairy farmers' practices, i.e. their more sustained, one-to-one engagement with their accountants or the relevant experts (which clearly reduces levels of uncertainty and builds the perception of farm transfer as a manageable risk), it would appear that in order to change risk perceptions for other groups of farmers, some form of individualised advisory service would be needed. The need to counteract anecdotal but possibly erroneous accounts of successors being faced with financially ruinous tax bills (i.e. a sensationalised risk, as discussed by Klinke and Renn, 2002) through making more accurate information available to farmers on the financial implications associated with farm transfer would seem to be a priority response by the relevant institutional actors. With the correct information and professional assistance, farmers can act to mitigate or eliminate some of the risks they perceive. A continuation of the Teagasc Transferring the Family Farm Clinics<sup>13</sup>, with an emphasis on one-to-one consultations, would assist in providing farmers who generally do not have a high level of contact with professionals with the information they need to prepare in a timely manner for eventual farm transfer, taking into account the potential complexities of each individual case and the reality that risk is contextual (Veerman et al., 2016; Birkholtz et al., 2014).

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<sup>13</sup> These events allow farmers to meet with professionals (accountants, solicitors etc.) free of charge and are facilitated by Teagasc

In the context of an ageing society the concerns raised regarding the inadequacy of the state pension system go beyond the farming community, posing serious questions as to how policy can support an ever-growing older population. With regard to older persons in rural areas, specifically those who are members of the farming community, there is strong merit in considering more support for Home Help<sup>14</sup> initiatives as a means of avoiding entering long term care and placing a strong economic burden on farm families. Where long term care in the form of a nursing home is required, the stipulations of the NHSS should be reviewed so that a means test would reflect the actual income accrued from a farm as opposed to the value of the assets should they be sold. In most cases the farm income does not equate to the farm value, in particular for lower income farm systems such as beef and sheep farming.

Given the widespread concern amongst dairy farmers in relation to successor marital breakdown, a case is to be made for reconsidering the current legalities associated with prenuptial agreements. Prior to this however, further research into legal structures surrounding marriage breakdown in farm situations is required.

Alleviating the risk of economic insecurity once a farmer has reached an age at which they wish to transfer the farm may take the form of a farmer's pension or a more farmer friendly retirement scheme.

Based on the results of this research, farmers would be more open to earlier farm transfer if they were not facing economic risk once the process was complete. However, the succession and inheritance process affects both a farmer and their successor, thus a scheme which encourages both parties to engage would have more relevance. For example a 'Farm Future' programme which would require farmers to have a plan in place over a number of years in order to receive a gradual exit payment which increased as the transfer of assets came closer would be an example of such a scheme. This would involve the requirement of a farm transfer plan to be in place on joining the scheme; the plan could take a similar time scale to the Succession Farm Partnership Scheme which allows for a transfer over a period of up to 10 years. In addition, the Farm Future programme could allow for retention of 20% of farm assets for the older farmer should

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<sup>14</sup> The home help service provides support to people in the community who need help with day-to-day tasks because of illness or disability.  
[http://www.citizensinformation.ie/en/health/health\\_services/care\\_in\\_your\\_community/home\\_helps.html](http://www.citizensinformation.ie/en/health/health_services/care_in_your_community/home_helps.html)

they wish. The gradual payment would change based on transfer of ownership i.e. if a farmer had transferred 50% of the farm assets, they would receive 50% of the maximum payment amount. In this way, the transfer is not sudden, and the farmer will be aware of the financial situation going forward, reducing risk perception.

Another possible option would be to provide a supplementary payment to farmers who are eligible for a state pension should they commit to farm transfer, again, the benefit of such a payment would be that farmers have a degree of certainty in economic terms once they have transferred the farm to a successor. One key stipulation for this state pension top up would be that the recipient cannot also have a private pension fund, in this way; the payment would target lower income farmers who are unable to contribute to a private pension. In addition, it is evident from the results attained here that those who have private pensions do not perceive this aspect of farm transfer as a risk that would negatively impact their decision to transfer. For those who are eligible, such a payment would decrease the risk perception linked to concerns around income once the family farm has been transferred. The available evidence is that there is scope for innovation in this regard, with the earlier examples cited from Switzerland, and Germany (Mehl, 2009) providing secure options for both farmers and their successors post-farm transfer. Under current arrangements, the prospects for any dramatic improvement in the rate of farm transfer do not appear imminent.

# **Chapter 7**

## **Conclusions**

## **Chapter 7 – Conclusions**

### **7.0. Introduction**

The aim of this research has been to examine farm generational renewal through focusing on the economic implications of the process at individual farm holding level, with a view to better understanding the reasons behind farmer decision making on this issue. The research question has been addressed via a mix of quantitative and qualitative research papers, each contributing to the realisation of the aim and the objectives set out in Chapter 1. In this final chapter, the contribution to knowledge on the value of a social constructivist approach to risk is outlined. The following section draws together the key issues on which farmers' decision-making was informed by their assessment of associated risks and identified by them as pivotal to their farm transfer decision are highlighted. Lastly, policy recommendations and avenues for future research stemming from the results attained in this study are charted.

### **7.1. Contribution to critical perspectives on risk and uncertainty in farmers' decision-making**

In adopting a risk approach, particularly risk as socially-constructed, this research has sought to illustrate the complex ways in which decisions about succession and inheritance which have economic implications for farmers are made by them. The wide range of quantifiable economic aspects of succession and inheritance have been researched by authors who have drawn on a more rational decision making perspective (Glauben et al., 2004; Breustedt and Glauben, 2007). Such approaches are of value in ascertaining overall patterns and trends in decision-making, and in establishing objective arguments for risk assessment. However, they have not been as revealing of the ways in which farmers comprehend the realities of succession and inheritance and how these realities inform their risk assessments, which in turn have not been managed within national policy or programme efforts to incentivise succession and inheritance. The use of a constructivist approach has enabled a focus on farmers as a distinct group whose perceptions of risk are delineated in particular ways that are ultimately reflective of their own particular family farm circumstances and of doubts (at best) or a lack of trust (at worst) in available structures and arrangements (institutional and personal) to protect them financially in their retirement from farming. The difficulty for agricultural policy is that while this kind of assessment of economic risk may only seem to have validity within the farming community that has constructed it, it is currently powerful enough to negatively impact on that policy at the wider national level. Klinke and Renn

(2002) discuss this dilemma over whether and how to balance the more technical estimates of risk against those that are socially constructed. This research has contributed to these discussions in revealing how a range of farming issues and circumstances, contemporary and historic, social, cultural and economic, as understood by a sample of farmers themselves operating within their own social and spatial contexts, have led to them producing particular kinds of risk assessment that largely prioritise their own economic security in retirement, potentially over the viability of the farm business into the future. These assessments and the responses go against (or in some cases take unintended advantage of) the kinds of technical reasoning used to establish, for example, national level policy-led financial retirement incentives where farmers seek to act in their own best financial interests. These issues are discussed in more detail in the following sections.

## **7.2. Farmers' assessment of risk**

### *7.2.1. Lack of exit incentive from farming for prospective retirees*

Previous chapters have outlined the clear link between the processes of farm succession and inheritance, and retirement (or semi-retirement). For generational farm transfer the entry of a younger farmer into the business signals the beginning of the exit or decreased activity of an older farmer. Nonetheless, this research indicates that there are minimal policy efforts to incentivise farmers to even consider an arrangement that would involve them handing over some or all of their farm assets to a successor. For example, the policy simulations of farm transfer and farm partnership scenarios, carried out as part of this research, pointed to a clear reduction of income stream for farmers who did not have a private pension. For both sets of simulations farmers were economically better off if they retained farm income and acquired a state pension simultaneously. In addition, beef farmers were clearly in a better financial position if they destocked their land and maintained a minimum stocking rate in order to continue receiving subsidies. In tandem with this, a majority of beef farmers interviewed raised concerns that they would be dependent on a state pension that provided a meagre income, and that there was no real economic incentive to provide security for them if they were to transfer the farm to a successor.

### *7.2.2. Impact of farm systems*

A prominent feature of this research has been the comparison between the two most dominant farm systems in Ireland, beef and dairy production, with beef farming

dominant in the west, and dairying in the south. The evidence illustrated a strong financial contrast between the two farming systems. In terms of economic modelling, the figures illustrated the differences in several ways; for example a dairy farmer who destocked land to a minimum level to retain payments did not fare better economically, as was the case for beef farmers. The possibility of a farm partnership was clearly more economically viable for dairy farming, whereas the income accrued from an average beef farm did not prove sufficient to support two generations farming at once on the same holding. Again, these results were confirmed via the farmers' narratives. Many dairy farmers mentioned that they would not have an issue handing over the farm as they would have a private pension built up due to the level of farm income they can accrue. As noted, this was the opposite for beef farmers who had grave concerns surrounding retirement income.

### **7.2.3. Assessment of land transfer taxation risks**

Based on the initial findings from the ADAPT (Agricultural Drivers and Actors of Policy and Taxation) model, the current capital taxation reliefs for transfer of farm assets from parent to child function in an efficient manner where relief stipulations are met (see chapter 4 for description of reliefs and stipulations). In other words, the transfer of an average farm to a familial successor did not incur capital taxation liability for the cases modelled. Despite these findings, however, when the qualitative research was undertaken taxation emerged as high on the agenda for beef farmers. In some instances the concern was not only for the tax bill they might incur, but also for potential taxation that would be faced by their successor. Further qualitative enquiry revealed that beef farmers' perceptions were founded on sources such as word of mouth and the media as opposed to being based on the advice of professionals. In contrast, dairy farmers reported having regular contact with their accountants which meant they had planned for tax efficiency, thus this aspect of farm transfer did not appear to negatively influence their decision making process. Based on the ADAPT simulations, it is evident that dairy farmers have higher incomes levels and asset values, meaning any concerns regarding taxation, if these had been raised, would be somewhat warranted. In the case of beef farmers (for an average farm) the opposite is true. In other words, capital taxation concerns among this group of beef farmers can be considered a sensationalised risk.

### **7.3. Synthesis with literature**

#### *7.3.1. Policy process*

The existence of an Irish policy trajectory that is in contention with aims of generational renewal is apparent throughout the findings. Examples of this include the farm subsidy system encouraging delayed farm transfer and the lack of clear financial incentive to assist older farmers in exiting. These findings corroborate similar critiques of agricultural policy such as that by Brouwer (2004) who asserts that effective policy needs to provide an appropriate incentive. The implication is that policy is not currently cognisant of ground level issues is also reflected in the work of Pieczka and Escobar (2012). The evidence that it is created from the upper tiers of the policy making hierarchy has also been flagged by Keating and Laffan (1999). An approach that allowed those affected by such policy to be consulted or to participate in its formulation in a meaningful manner would appear to represent a logical way forward.

#### *7.3.2. Contrasting approaches to succession and inheritance/risk*

The review of the existing literature surrounding both farm transfer and risk illustrated that farms approached succession and inheritance differently depending on their farm income/size. Risk research asserting that farmers are risk averse (Groom et al., 2008; Hardaker, 2015) and that schemes providing financial incentives acted as a source of certainty for those subscribing to them (Koundouri et al., 2009) has been similarly confirmed in the case of this research. In terms of the effects that farm size and income have (linked to farm system) the findings concur with those of Crowley (2006) who notes that smaller farms avoid engaging in practices that threaten their subsistence. Similarly Tanewski et al. (2000) found that income level contributed to a lack of business planning, which was the case for beef farmers interviewed who lacked the financial resources to prepare for farm exit. The stated lack of economic capacity on beef farms to provide for exiting and entering generations, reflected also in the work of Gasson and Errington (1993) and Kirkpatrick (2012), indicate a serious concern for farm progression planning on behalf of older farmers.

#### *7.3.3. Influence of life stages*

A key revelation from this research was the perceived threat that a successor experiencing marital breakdown posed to a family farm. The presence of an identified successor normally generates positive sentiments for farmers (Cassidy and McGrath, 2014). However the process of transferring farm ownership can be hampered by the life

stages of a farmer and the successor (Barclay et al., 2012), life stages that are generally embodied by events such as marriage and death/illness. While previous research has discussed the different life stages (Wilkinson et al., 2012), the main life stage highlighted in this research was that of marriage, specifically the ending of a matrimonial agreement. Previous studies have cited farmer concerns regarding divorce leading to the forced sale of the farm as central to farm transfer decisions (Gray, 1998; Price and Evans, 2006; Barclay et al., 2007). Similarly here the possibility of divorce resulting in the sale of a farm was cited as divisive in the farmer decision making process, but notably only with dairy farmers. The possible explanation for this would be that dairy farmers had considered succession in more detail and also have higher asset values to consider. For beef farmers the key perceived risks were not connected to divorce, but were down to other factors such as tax.

#### **7.4. Recommendations for policy and practice**

##### *7.4.1. Fair deal scheme*

The Irish NHSS (Nursing Home Support Scheme, also known as the Fair Deal Scheme) (Chapter 6) aims to assist with the cost of long term care for older persons who cannot be looked after in their own home. Farmers are in the unique position of owning substantial assets that may be taken into account as part of a means test to qualify for this scheme. For the farm to be excluded from the means test, farmers must have transferred all farm assets 5 years prior to entering long term care. However, in some instances the need for long term care may arise unexpectedly, in particular given the age profile of farmers in Ireland. Recent changes made to the scheme have improved the position of farmers, in that farms are included in the means test, but only for the first 3 years of which a person is in care (as opposed to the entire duration of their stay in long term care). The means test values farm land as an asset based on its market value as opposed to the income that is earned from it. The recommendation arising from this research would be to assess the income made from the farm in the previous 5 years leading to a farmer entering a nursing home. In this way, the contribution made to the cost of care by the farmer would better reflect the income the farm can generate. This would contribute to a reduction in uncertainty regarding the unpredictable nature of a requirement for nursing home care, and a reduction in risk perception around the cost of said care.

#### *7.4.2. State pension incentive*

The results from both the ADAPT model and the interviews highlighted the severe inadequacy of the current state pension to provide a reasonable income on which to retire. Here it is recommended that a supplementary payment is made available to farmers who are eligible for a state pension should they commit to farm transfer. This would give farmers a degree of certainty in economic terms once they have transferred the farm to a successor. One key stipulation for this state pension top up would be that the recipient cannot also have a private pension fund. In this way; the payment would target lower income farmers who are unable to contribute to a private pension. Another stipulation would be linked to the 'Farm Future' programme (Chapter 6), which requires a gradual transfer of assets to take place which is linked to the level of payment received by farmers. It is also evident from this research that those who have private pensions do not perceive this aspect of farm transfer as a risk that would negatively impact their decision. For those who are eligible, such a payment would decrease the risk perception linked to concerns around income once the family farm has been transferred.

#### *7.4.3. Information provision*

The interview evidence suggests that knowledge of taxation and farm transfer finances varies between farmers, with dairy farmers appearing to be more aware of the structures governing taxation. This stemmed from more frequent contact with professionals such as accountants due to the income levels involved. In contrast, beef farmers did not possess the knowledge they required to make an informed and timely farm transfer plan. The continuance of the Teagasc 'Transferring the Family Farm' Clinics is recommended in particular at locations where farm incomes are lower, as the evidence here suggests that farmers operating lower income farm systems are less likely to consult a professional regularly. In addition, the introduction of subsidised consultations with professionals such as accountants and solicitors for farmers over the age of 55 may encourage farmers to seek advice and acquire the information they need to make a farm transfer decision.

#### *7.4.4. Farm partnerships*

A key finding from the economic modelling relates to the clear inability of some farm systems to cater for an incoming successor/outgoing farmer in financial terms. This was of particular note with regard to farm partnerships; the economic incentives currently in place are not substantial enough to encourage the adaptation of such a management

structure for farms that receive lower incomes. Two options are recommended. The first would be to replace the current €5,000 tax relief with a grant payment, maintaining the same stipulations as the current scheme (i.e. requirement for 80% asset transfer and qualifying young farmer). The second option involves increased dissemination of the non-pecuniary benefits of a farm partnership structure; this could be linked to the subsidised consultation recommended in the previous section.

#### *7.4.5. Policy definitions*

An issue of contention in Irish agriculture is the variance in definitions of a ‘young farmer’ under different policies. In terms of BFP (Basic Farm Payment) applications, a young farmer is 40 years of age or younger, while in terms of capital tax relief a young farmer is 35 years of age or younger. Given the rising average age of farmers, the cut off age to be defined as a young farmer may need to be set at 40 for all reliefs/grants to reflect the increasing age trend. This is of particular relevance for farm systems where farmers are older on average or farming part time as successors may inherit farms later in life, in comparison to those involved in full time farming where successors are more likely to be present at a younger age. Making the definition of a young farmer the same for all generational renewal measures would also avoid confusion amongst farmers as to who qualifies as a young farmer. Furthermore, given that measures stipulate that they only apply to the first 5 years in which a young farmer is operating, the likelihood is that young farmers who are at a later stage in their career (farming or otherwise) would be in a better position to match investment grants such as TAMS (Targeted Agricultural Modernisation Scheme).

### **7.5. Future research**

While the findings arising from this work provide clear correlations between risk/uncertainty and the influence it has on farm transfer decision making within the current institutional arrangement, other questions remain underexplored. This section highlights potential areas of further research arising from these.

#### *7.5.1. Marital breakdown*

A clear narrative emerged framing successor marital breakdown as a risk that is highly influential when considering the transfer of a farm to a successor; this was described as particularly pertinent for dairy farmers. This warrants further research on the issue of marital breakdown and the effect it has on family farm succession and inheritance

decision-making. The research may take the form of an investigation into the legalities involved (for example pre-nuptial agreements do not have legal standing in most scenarios). In addition, a wider base of interviewees would probe the issue further and lead to suggestions as to how this concern could be alleviated while also remaining cognisant of the rights and entitlements of the incoming spouse.

#### *7.5.2. Farm transfers beyond parent to child*

As noted, the most common form of farm transfer is generational, with land moving from a parent to their child in many instances. However, modelling taxation and policy outcome for land transfers to a niece/nephew or non-blood relative could reveal a different set of results. Current reliefs are geared towards familial land transfer based on the prominence of this tradition, thus farmers with no blood relatives interested in farming are faced with selling the land or possibly being overlooked by policy. In addition, young people who wish to enter farming but are not related to a farmer could face very high investment costs should they have to purchase a farm to enter the sector.

#### *7.5.3. ADAPT verification and long term care costs*

Combining the ADAPT model with real life scenarios could verify the potential of the model to project specific and accurate outcomes from farm transfer. This would take the form of case studies of family farms undergoing the farm transfer process comparing actual farm transfer figures and those produced by the model. In time, this could lead to the model being used as a tool by Teagasc advisors to assist in advising farmers regarding the processes of succession, inheritance, and retirement. Using the ADAPT model to project the outcome of potential changes to the NHSS could also inform the changes to policy suggested. Modelling the potential cost of long term care under example scenarios would provide a clear picture of the concerns farmers raised here. The outcomes of such a model could assist and influence farm planning whilst also strengthening the claims made by farmers regarding the potentially detrimental costs of funding long term care.

#### *7.5.4. Wider consultation*

While this research focused on farmers currently operating holdings, a wider ranging investigation would consult potential successors as well as professionals who influence generational land transfer decisions. In this way the parties involved in and affected by the decision could inform a broader understanding of how perceptions are created. Of

particular importance based on the findings here would be the narratives produced by the professionals. A study of this nature would deepen understandings of how farmer risk perceptions are created and suggest more ways in which to alleviate these concerns.

## **7.6. Conclusion**

The institutional environment in which generational renewal policy operates has been investigated via a series of quantitative and qualitative approaches using a social constructivist lens. The research focused on the influence of economic aspects of farm succession and inheritance on farmer decision making resulting in a range of implications for policy and practice. A clear policy focus on the entry of younger farmers amplifies the neglect of older farmers and the provision of a viable means for them to begin the process of gradual farm exit. While it was evident that policy alone does not act as a sole driver of the farm transfer choices farmers make, it does make a strong contribution to the perceptions farmers have of their retirement options. This related to the social construction of the range of succession and inheritance risks/uncertainties that are influenced by the societal spheres and networks in which farmers operate. To probe the construction of these risks, the use of a mixed methods approach proved the most suitable. The use of hypothetical microsimulation allowed for the identification of broad trends and economic effects of policy that were probed using a qualitative approach at farm level.

The broad implication arising from this research is that farmers do perceive some economic aspects of farm succession, inheritance and retirement as a risk (or uncertainty in some cases); whilst current policy makes insufficient effort to aid the reduction of this perceived risk. The influence of monetary facets of farm transfer is pervasive, but should not be considered in isolation, therein lies the benefit of viewing the perceptions of farmers as socially constructed. Efforts on behalf of policy makers to encourage generational renewal in agriculture should thus be cognisant of the complex decision making deductions that farmers part take in, but also the very clear differences that exist between farm income levels as a result of farm systems. Prescribing a blanket policy to such an idiosyncratic group will only lead to a sustained increase in the number of older farm operators, leading to negative implications for the agricultural sector and young farmers waiting to gain entry.

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## **Appendices**

## Appendices

### Appendix 1: ANC issues (Chapter 5)

During 2015, initial issues arose for ANC payments interacting with farm partnerships, caused mainly due to technical problems. At an administrative level, for farms to enter a partnership (where partners both have a herd prior number) typically, one herd number would become 'dormant' on the Department of Agriculture, Food and the Marine (DAFM) registration system. In this instance only one herd number associated with a partnership could meet the qualifying criteria and therefore no payment issued to the partnership. This issue has been resolved for 2016 by applying the qualifying criteria at partnership level rather than at individual partner level. The changes now allow for multiple payments to issue from 2016 onwards. A similar technical issue arose in terms of the Basic Payment Scheme (BPS) entitlements, farmers joining a partnership would have entitlements merged making it very difficult to exit a partnership at the end of the agreed time period without financial loss (see below for working example). This has also now been resolved to ensure that when farmers dissolve their partnership, they can take back their entitlements in the same fashion as they first contributed them.

Additionally, technical issues prevented farmers in farm partnerships obtaining multiple payments in the previous Disadvantaged Area Scheme (DAS). Under the scheme, a farmer operating in his own right would attract one payment on up to a maximum of 30 hectares. When two farmers who were drawing area based payments entered into a MPP they were then reduced to one payment threshold, likewise with three farmers. Only one payment was achievable under the scheme and consequently farmers entering registered partnerships were at a financial loss by entering partnership. Similar to agri-environmental payments, existing disadvantaged area payments (now 'Areas of Natural Constraint' – ANC) also cater for partnerships allowing multiple payment thresholds where two farmers are in partnership (i.e. max. of 60 ha for a partnership with two partners). Appendix 2 illustrates the potential losses from area based payments not facilitating farm partnerships.

#### Example

Farmer A farmed 40 hectares and owns 40 entitlements worth €850 each (€34,000).

Farmer B farmed 50 hectares and owns 50 entitlements worth €250 each (€12,500).

They entered into partnership and all 90 hectares was farmed under one herd number and the partnership claimed all entitlements.

If they cannot establish separate set of BPS entitlements in 2015, a situation arises where all entitlements are averaged out (that means the partnership will receive 90 BPS entitlements worth €516.60 each or a total value of €46,000).

Without separate set of entitlements, a serious issue arises when these farmers want to dissolve their partnership in the future. They will be faced with two choices, (i) divide out on the basis of total value or (ii) by the number of entitlements.

(i) If they divide the payments on the basis of total value, then Farmer A would receive 65.81 entitlements (worth €34,000) but he only has 40 hectares available to claim them. Therefore he is left with insufficient land. Farmer B would receive 24.19 entitlements (worth €12,500) and he is left with 25.81 hectares with no entitlements.

(ii) If they divide the payments based on the number of entitlements then Farmer A would receive 40 entitlements worth €20,664. He would suffer a loss or reduction in the value of his entitlements of €13,336. Farmer B would receive 50 entitlements worth €25,830. He would gain €13,336 at the expense of Farmer B.

(iii) Either way, there is no satisfactory division of entitlements on the dissolution of the partnership. This will prove to be a strong deterrent to farmers entering partnership.

(iv) It also means that they can only qualify for one ANC payment even though they are both eligible as individuals (as in the real case study further on).

(v) It is unclear whether there is an implication of a doubling of the investment ceiling under TAMS II.

(vi) This may lead to legal issues (court action) in the future if they cannot recover their entitlements in an equivalent fashion to joining the partnership.

NOTE: The fundamental principle of two farmers forming a partnership is that they can dissolve it in future without any conflict and recover the assets licensed into the partnership for its' duration. The new BPS system must embrace this principle to the fullest extent and be capable of achieving this or it will sound the death knell for farmers joining partnership. Farmers will not go into partnerships if they think there is the possibility of their entitlements being merged with their partners.

## Appendix 2: Dairy farmer and successor income components (Chapter 5)

### Dairy Farmer Income Components Years 1 and 5 of Partnership

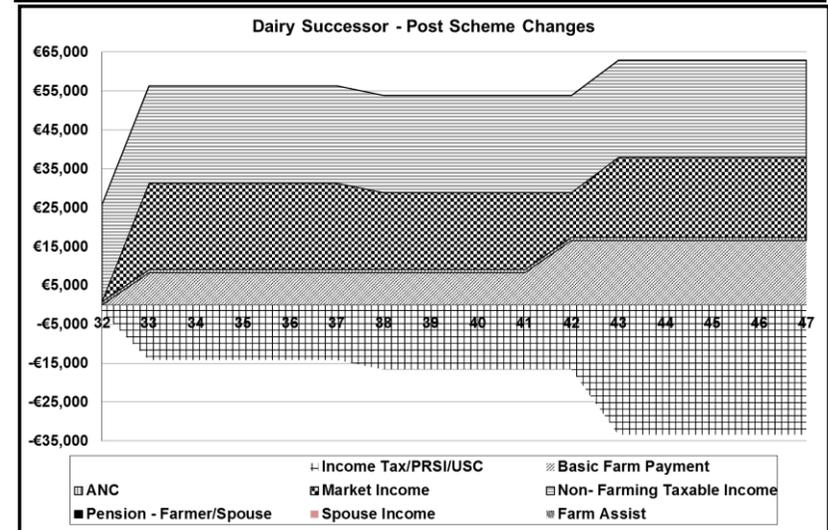
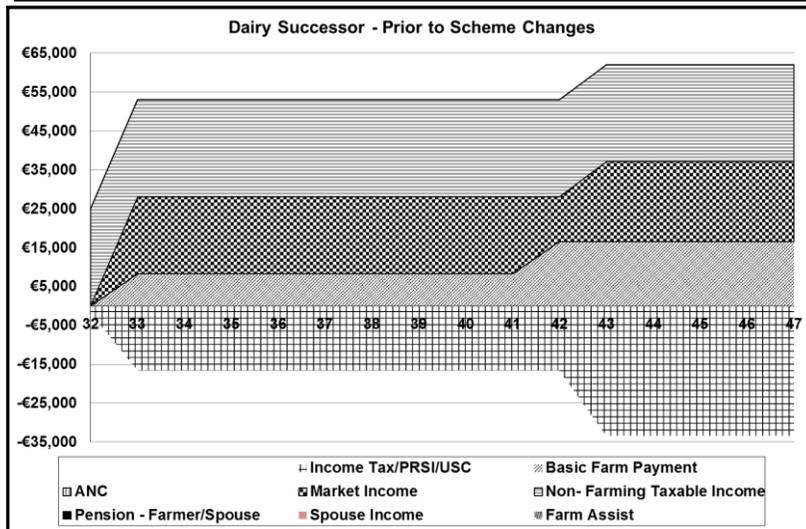
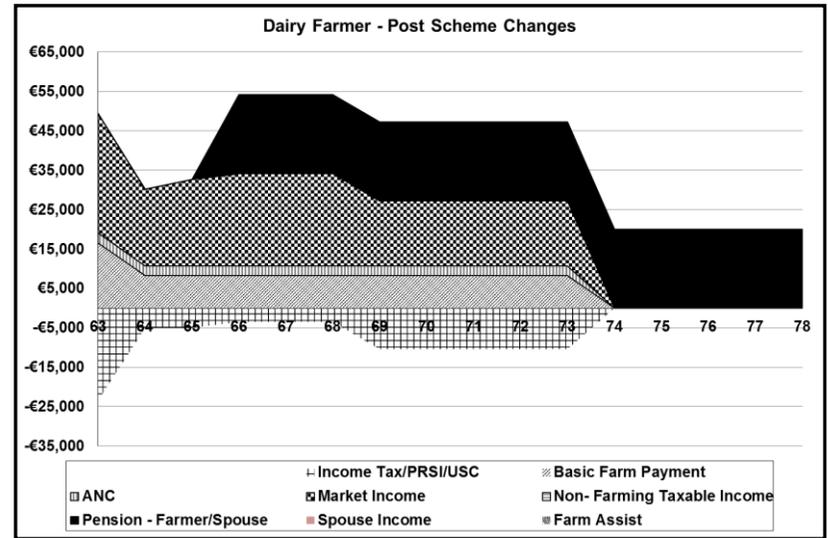
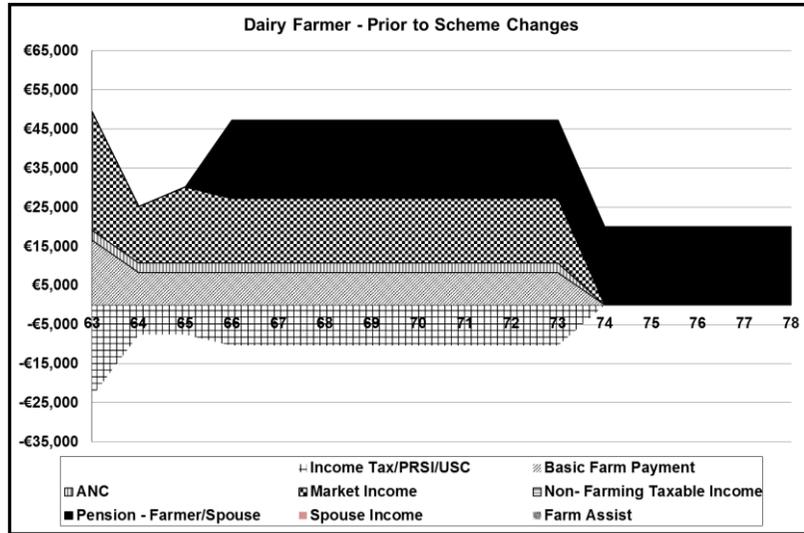
Year	Pre/Post	Income Tax/PRSI/USC	Basic Farm Payment	ANC	Market Income	Non-Farming Taxable Income	Pension - Farmer/Spouse	Spouse Income	Farm Assist	Cost of Set Up	Tax Credit Received
1	Pre	€-7507	€8277	€2468	€14368	€0	€0	€0	€0	€-5000	€0
1	Post	€-5007	€8277	€2468	€19368	€0	€0	€0	€0	€-2500	€2500
5	Pre	€-10431	€8277	€2468	€16444	€0	€20011	€0	€0	N/A	€0
5	Post	€-3502	€8277	€2468	€23373	€0	€20011	€0	€0	N/A	€2500

### Dairy Successor Income Components Years 1 and 5 of Partnership

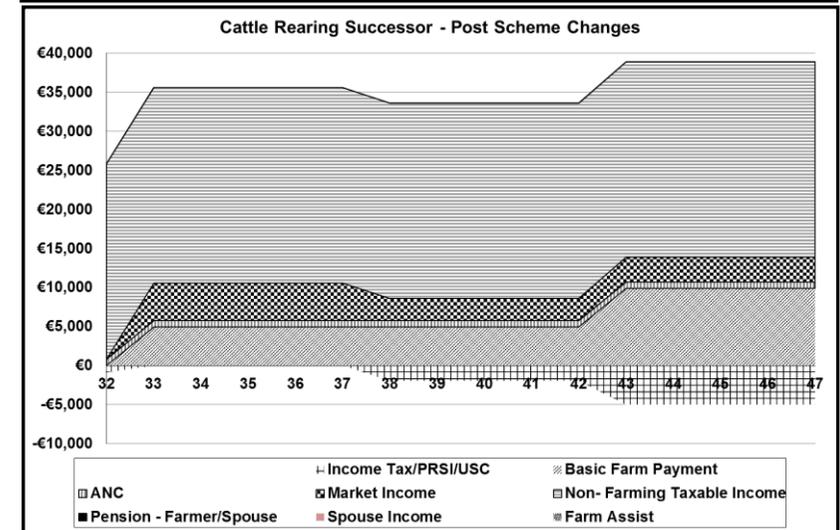
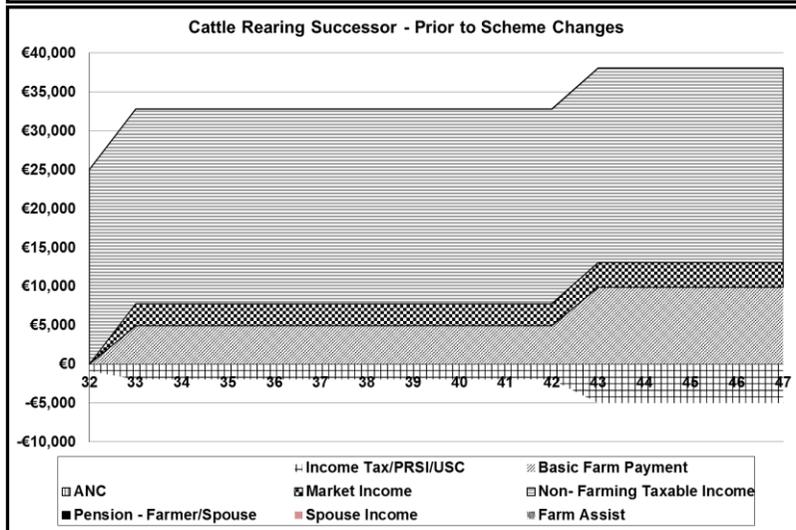
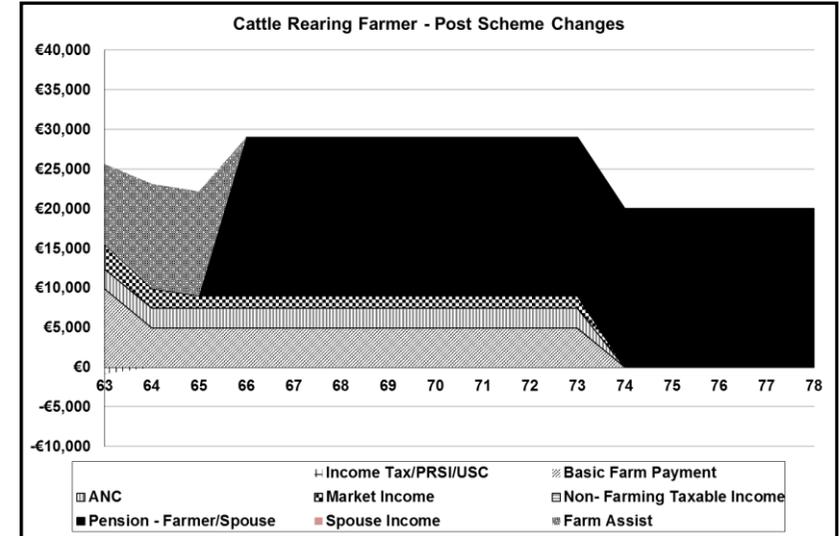
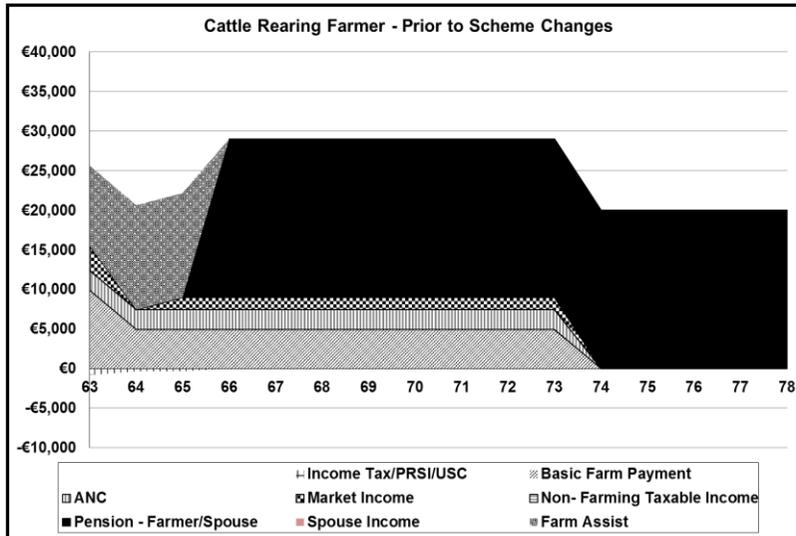
Year	Pre/Post	Income Tax/PRSI/USC	Basic Farm Payment	ANC	Market Income	Non-Farming Taxable Income	Pension - Farmer/Spouse	Spouse Income	Farm Assist	Tax Credit Received
1	Pre	€-16659	€8277	€0	€19677	€25,000	€0	€0	€0	€0
1	Post	€-14159	€8277	€823	€22177	€25,000	€0	€0	€0	€2500
5	Pre	€-16659	€8277	€0	€19677	€25,000	€0	€0	€0	€0
5	Post	€-14159	€8277	€823	€22177	€25,000	€0	€0	€0	€2500

The tables here present the fiscal values associated with the graphs presented earlier, this provides a ground level image of the components that effect the farmer and successor income pre and post changes at the beginning and during a partnership. The reduction in tax for both parties is notable here, with the tax relief providing a strong economic incentive.

### Appendix 3: Dairy Farmer and Successor Pre and Post Scheme Changes



## Appendix 4: Cattle Rearing Farmer and Successor Pre and Post Scheme Changes



## Appendix 5: Interviewee consent form

### Farm succession and inheritance finance research consent

- I..... voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me and I have had the opportunity to ask questions about the study.
- I understand that participation involves my providing oral information on my knowledge and experiences in relation to this topic.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in conference presentations, published papers and reports
- I understand that signed consent forms and original audio recordings will be retained in the School of Geography & Archaeology, NUIG, under secure conditions and with access only to those directly researching on this project, until the completion of the project and for a period of 5 years after.
- I understand that a transcript of my interview in which all identifying information has been removed will be retained for 5 years after completion of the project.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Signature of research participant

----- Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

----- Date

## **Appendix 6: Interview guide**

### Farm Succession and Inheritance Finances Problem Centred Interview

The main aim of this interview is for me to get your opinions on farm transfer, but with a main focus on the financial/economic side of things.

We know that most farmers never really retire, and this can be for many reasons. While the emotional attachment to the farm is a major factor, that is not what I want to investigate. My focus is on how important the financial concerns are, and how they influence decisions on farm transfer. I'm not going to be asking you for personal financial information. I am interested in understanding the current financial environment for farmers when it does come to thinking about arrangements for farm transfer (either through inheritance, i.e. legal transfer of the farm, or succession, as in transfer of managerial control). I'm talking here about any and all of the things that dictate the financial state of the farm (for example, sources of income and costs, schemes and programmes, taxation, the effect of agricultural or financial policies, and so on). Within all of that, you as a business person draw on the information available to you, and you calculate the risks and uncertainties so that you can make the best decisions about running the farm as profitably as possible. You also, at certain points, come to conclusions about the viability of the farm and the likelihood of being able to transfer it to a family member who wants to continue to farm it. Basically, my interest is in finding out whether farmers feel they can afford (in purely financial terms, not emotional ones) to transfer their farms in order to let the next generation of farmers take them on and manage them as their own; how they are currently calculating the risks and trying to manage the uncertainties of farm transfer. What do policy-makers in particular not seem to understand about this decision-making process that might lead to some kinds of supports being put in place for the future, to make farm transfer a more realistic option for farmers.

When I'm talking about risk, I mean something as follows: 'A situation where you don't know for sure what will happen, but you might know the odds through past experience, or through being able to calculate it in other ways'. Uncertainty is where you don't know the odds of the outcome. I'm interested in both, because, for example, if we have very poor farm transfer policy in Ireland, where the financial risks are not appreciated by policymakers, and the situation is one of uncertainty for farmers, then farmers are

left with making those calculations for themselves, which may end up with them deciding not to opt for farm transfer.

Decision-making on the farm; the identification of (perceptions of) risk and uncertainty in operating a family farm:

Could you talk to me generally about how you identify and calculate the financial risks and uncertainties in operating the farm, perhaps breaking it down into different groups of interactions? What I mean is, that you would think about and maybe discuss various risks within the family farm unit; you would also have certain discussions with the farming community about perhaps other kinds of risk, such as at the mart, or in other situations like that; these discussions could be about everyday farming concerns, or about farm transfer that worked or didn't, etc.

Then there are more external groups. Perhaps we could go through those in turn, starting with risk discussions at the family farm level.

How financial risk and uncertainty are identified and calculated within:

- i. the family farm – e.g. what things you would be likely to focus on;
- ii. the farming community;
- iii. with external actors such as discussion groups, advisors, accountants, bank/credit union managers;
- iv. within 'virtual' communities (e.g. online groups)?;
- v. by the 'reporting' media;
- vi. through other sources of information, e.g. DoneDeal.ie.?

Farm system and risk

You are a dairy/beef/suckler/sheep/mixed farm. To what extent do you think your farm system impacts on the financial situation of your farm?

The different schemes – which are you part of at the moment? (Including Single Farm Payment)

How important are they as a:

- source of financial stability?
- form of risk and uncertainty in terms of whether they continue or not?

Do you see wider opportunities to generate profitability into the future?

Would you consider this a form of risk and uncertainty that you would not want to see a successor have to labour under?

Contextualising responses – impact of region/location on risk

Do you get any sense that the actual geographical region you are in has mattered to the way that you think about farm profitability and ultimately farm transfer?

By this, I am wondering if things like advisory services or financial institutions are more or less likely to help you promote your farm business and view it as a ‘going concern’ for the next generation?

Do other particular regional or locational characteristics matter?

Policy influence on farmer perceptions of risk in succession and inheritance

Can I ask you about the impact of current policies?

At the moment there is no Farm Retirement Scheme, and the one that used to be in place was highly criticised because of some of the unworkable conditions attached to it, such as the notion that a farmer would give up any involvement in agriculture. Would a new form of scheme be an incentive to transfer?

Are there other policies or conditions that you know of, connected with farm transfer, that are currently discouraging transfer?

In Germany, farmers can receive either their farm payment or a pension, but cannot receive both at once. What are your thoughts on this? Do you think it would be a positive or negative system if it was in Ireland?

Are you aware of the farm partnership scheme? (explain)

What do you think the likelihood is that this kind of arrangement would make a difference to encouraging farm transfer – for example the tax incentive? (specifically the financial implications)

Finally, I'd like a small profile of the farm, if you wish you can fill this section out yourself or I can ask you the questions.

Profile				
Age	50 - 55	56 - 60	61 - 65	65 and over
Children				
System				
Farm size				
Location				
Work off farm				

Aspects of finance:

- Taxation
- Farm viability
- Splitting of income
- Retirement income
- Successor income
- Scheme payments
- Basic farm payment
- Debt/loans
- Social welfare/ farm assist

## Appendix 7: Teagasc Transferring the Family Farm Clinic Survey



CONFIDENTIAL

Location: \_\_\_\_\_

Transferring The Family Farm Clinics 2016

By completing this form you will help us to improve future events

<b>Why did you attend this clinic?</b>

<b>How did you find out about this event?</b>		<i>Please tick the appropriate box/ boxes</i>	
Newspaper (Local)	<input type="checkbox"/>	Text Message	<input type="checkbox"/>
Teagasc Newsletter in post	<input type="checkbox"/>	Personal Contact from Teagasc Advisor	<input type="checkbox"/>
Radio	<input type="checkbox"/>	Teagasc Website	<input type="checkbox"/>
	<input type="checkbox"/>	Word of Mouth	<input type="checkbox"/>

<b>What information were you looking for?</b>		<i>Please tick the appropriate box/ boxes</i>	
Completing a will	<input type="checkbox"/>	Training requirements for farming	<input type="checkbox"/>
Legal	<input type="checkbox"/>	How to plan succession / inheritance guidance	<input type="checkbox"/>
Tax	<input type="checkbox"/>	Other (Please specify):	
Pensions	<input type="checkbox"/>		
Social welfare	<input type="checkbox"/>		

<b>Did you bring specific questions that you wanted to ask?</b>
Circle Yes or No                      Yes                      No

<b>If Yes, were your questions answered to your satisfaction?</b>
Circle Yes or No                      Yes                      No

<b>Please rate how useful/ helpful you found the information provided by:</b>						<i>(on a scale of 1 to 5)</i>
<i>Circle the appropriate number</i>	<b>Not very helpful</b>				<b>Very helpful</b>	
Introduction Presentation	1	2	3	4	5	
Solicitor	1	2	3	4	5	
Accountant/Tax advisor	1	2	3	4	5	
Teagasc advisor	1	2	3	4	5	
Mediator	1	2	3	4	5	
Citizens Information	1	2	3	4	5	
Department of Social Protection	1	2	3	4	5	
Other professional we should include at a similar event						

<b>Please rate time allocated to:</b>						<i>(on a scale of 1 to 5)</i>
<i>Circle the appropriate number</i>	<b>Too little</b>				<b>Too much</b>	
Teagasc introduction presentation	1	2	3	4	5	
One-to-one sessions with the specialists	1	2	3	4	5	
Clinic in general	1	2	3	4	5	

Would you prefer more detail in the presentation and less time allocated in the one to one consultation?		
<i>Circle Yes or No</i>	<b>Yes</b>	<b>No</b>

What other areas would you like to get more information about?		<i>Please tick the appropriate box/ boxes</i>	
Financial supports/ services available to farmers	<input type="checkbox"/>	Other ( <i>Please specify</i> )	<input type="checkbox"/>
Rural Social Scheme	<input type="checkbox"/>		
LEADER Programme	<input type="checkbox"/>		
Retirement / pension	<input type="checkbox"/>		
Common Agricultural Policy (CAP)	<input type="checkbox"/>		

Would you be willing to attend an information session in relation to the above areas in your local Teagasc office?		
<i>Circle Yes or No</i>	<b>Yes</b>	<b>No</b>

Would you like to be contacted Teagasc launched a similar type of clinic on managing farm finances?		
<i>Circle Yes or No</i>	<b>Yes</b>	<b>No</b>

Would you like to be invited to a similar event if another is held on farm succession and inheritance?		
<i>Circle Yes or No</i>	<b>Yes</b>	<b>No</b>

If Yes, how would you prefer to be notified of the events in the future?		
Phone (Mobile)	<input type="checkbox"/>	Email: <input type="text"/>
Phone (Home)	<input type="checkbox"/>	

Teagasc are currently conducting research regarding the financial concerns farmers may have surrounding succession and inheritance. This research aims to highlight issues farmers are facing in this area and will contribute to future policy measures for farm transfer.

Would you be willing to take part in an interview on this topic at a later stage?		
<i>Circle Yes or No</i>	<b>Yes</b>	<b>No</b>
If yes, we will use the above details to contact you, if you have not provided contact details above please provide them here:		

Do you have any suggestions on how this event could be improved?

**Go raibh maith agat – Thank you**

**Appendix 8: Poster presented at Teagasc Walsh Fellow event, Johnstown Castle, November 2018**

# Risky (Farm) Business: Farmer Perceptions of Risk in Farm Succession and Inheritance



**Brian Leonard<sup>1,2</sup>, Marie Mahon<sup>2</sup>, Maura Farrell<sup>2</sup>, Anne Kinsella<sup>1</sup>, Cathal O'Donoghue<sup>3</sup>**  
 1 Teagasc Rural Economy and Development Programme, Mellows Campus, Athenry, Galway, Ireland.  
 2 School of Geography, NUI Galway, Ireland.  
 3 College of Arts, Social Sciences and Celtic Studies, NUI Galway, Ireland.



## 1. Key Message

Farmers perceive succession and inheritance processes as a serious risk to their farm business. These perceptions differ depending on the farm system. The main concern for beef farmers was land transfer taxation, while dairy farmers felt that the potential breakdown of their successors marriage may pose a serious threat to their holding. Decreasing the perceived risk could contribute to a more proactive approach to farm transfer.

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## 2. Introduction

- Contemporary agriculture faces a myriad of challenges: farm viability, reducing environmental impacts; animal health and food security issues.
- One of the most important issues farmers face is business continuity, of which succession and inheritance planning is an integral part.
- Young farmers have been associated with production efficiency and positive impacts in environmental terms.
- Farm demographics at a national and international scale indicate a low representation of younger farmers in the sector:

**Ireland**

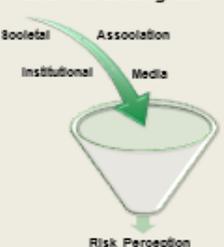
- 29.5% over 65
- 7.5% under 35

**EU 28**

- 30% 65 and over
- 5% under 35

- Farm succession and inheritance can be seen as a risk for exiting farmers, which will affect their farm business, but also their personal finances. Research to date has not conceptualised farm succession and inheritance as a risk.

**Factors influencing risk:**



**Sensationalised risk:**

- Some risks can be amplified by different influencing factors.
- E.g. media sensationalization.

**Risk in agriculture:**

- In countries where farmers receive subsidies (e.g. Basic Farm Payment - BFP), there is a lower perceived risk regarding farm income due to the expectation that farmers will receive BFP regardless of market conditions.

## 4. Results

The interviews revealed that farmers perceive farm succession and inheritance as a risk, in particular regarding finances associated with the process. Contrasting perceptions emerged based mainly on farm system.

### Taxation as a Sensationalised Risk

- Beef farmers felt that land transfer tax was a serious risk to their farm, however, the likelihood of this is low for an average beef farm. This indicates taxation is a sensationalised risk for these farmers.
- Dairy farmers were less concerned as they had frequent contact with experts such as advisors and accountants, making them more aware of tax reliefs.

**Farmer quotes**

*"I hear a lot of people say there's places sold over it!"*  
Richard, 77, Beef

*"If I was to transfer to my sons, the thing that would worry me is what tax implications would be for them. That'd be one of the things that'd concern me!"*  
Richard, 66, Beef

*"We've looked at it a small bit... 3 million is it tax free transfer? We'd be under that category it shouldn't be a major issue. It would have to be done before (son) is 35"*  
Patrick, 44, Dairy

*"I was talking to the accountant, there's a lot of ways around tax he said"*  
Paul, 64, Dairy

### Marital Breakdown

- The breakdown of a successors marriage was a predominant risk for dairy farmers. Their main concern was that the farm would have to be sold or split if their successors' marriage ended.

**Farmer quotes**

*"The real fear farmers had in the back of their minds was in case the farm won't be secure going forward, especially now with family break ups and things, this is the real fear people have. If you transfer the land to your son and your son gets married, and the marriage breaks up, the farm has to be sold, that's the real fear"*  
Alan, 68, Dairy

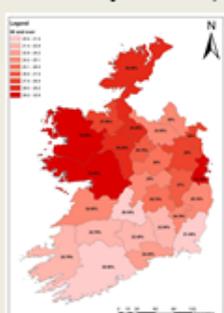
### Future Income

- Farmers noted the need for income once they had transferred the farm.
- Beef farmers raised concerns that they would have to depend on a state pension or rely on farm income into their old age.
- Dairy farmers felt they would be able to contribute to private pensions.

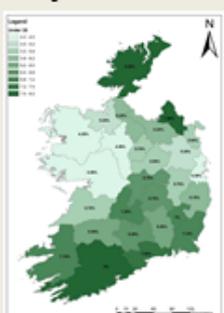
**Farmer quotes**

*"I think since they got rid of this European pension scheme... at least you had some security... guaranteed something like if you're depending on just the state pension it's very little really"*  
Thomas, 97, Beef

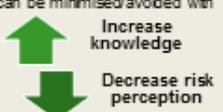
*"I would be hoping that I'd have the majority of my income in a pension of some description... you don't need a huge income when you retire but you need an income, you need a recurring income that's safe"*  
R, 60, Dairy



**County Mayo**  
 High percentage of farmers over 65  
 Low percentage of farmers under 35  
 Beef farming most common system  
 Average income: €12,529



**County Cork**  
 Low percentage of farmers over 65  
 High percentage of farmers under 35  
 Dairy farming most common system  
 Average income: €36,069






# The Potential of Farm Partnerships to Facilitate Farm Succession and Inheritance

Brian Leonard<sup>1,2</sup>, Marie Mahon<sup>2</sup>, Anne Kinsella<sup>1</sup>, Cathal O'Donoghue<sup>3</sup>, Maura Farrell<sup>2</sup>, Thomas Curran<sup>4</sup>, Thia Hennessy<sup>5</sup>

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<sup>4</sup> Teagasc, Moorepark, Cork, Ireland.  
<sup>5</sup> Department of Food Business and Development, Cork University Business School, University College Cork, College Road, Cork, Ireland.



## 1. Key Message

Current economic incentives to promote farm partnerships may not be suitable to encourage farmers to enter collaborative farming arrangements. In particular in the case of lower income farm systems such as cattle rearing.



## 2. Introduction

Contemporary agriculture faces a myriad of challenges ranging from farm viability to reducing environmental impacts and addressing animal health and food security issues. One of the most important issues farmers face is that of business continuity, of which succession and inheritance planning is an integral part. A low instance of retirement and even lower level of land mobility mean that young farmer entry into the sector is difficult. As of 2015, farm partnerships became an option for all farm systems (only dairy farms could enter prior). With this came incentives to encourage the uptake of partnerships as a means of increasing the rate of generational renewal.

## 3. Methodology and Data

This research uses Teagasc National Farm Survey (NFS) figures to model how new incentives focused on farm partnerships would encourage the uptake of such arrangements in economic terms. In this case average figures for dairy and cattle rearing systems were used, these are the most common farm systems in Ireland. Additionally, the incomes for these systems vary significantly, with dairy farms generating higher incomes.

The main schemes focused on here are:

### Succession Farm Partnership Scheme

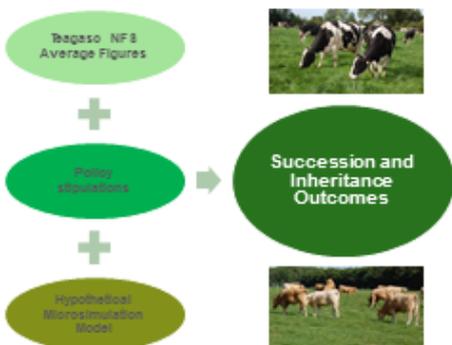
- An annual income tax relief of €5,000 is split between the partners of a farm partnership for the first five years of the arrangement. One of the partners must be a young trained farmer. By the end of a ten year period 80% of the farm assets must be transferred to a successor.

### Collaborative Farming Grant Scheme

- This scheme covers half of the costs of setting up a farm partnership (up to €2,500). These costs generally include fees from professionals such as accountants, advisers and solicitors.

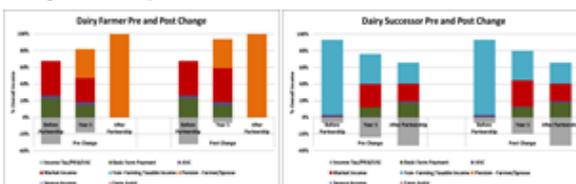
### Hypothetical Microsimulation Modelling:

Focusing on a hypothetical farm allows for the sensitivity of farms to policies to be tested while avoiding the complications that would arise were this study to be undertaken on a real farm. The scenarios will illustrate the economic effect of each policy on an average farm by modelling farm incomes pre and post policy changes. Both the farmer and the successor are modelled in this instance. The successor has an off farm income of €25,000 also.

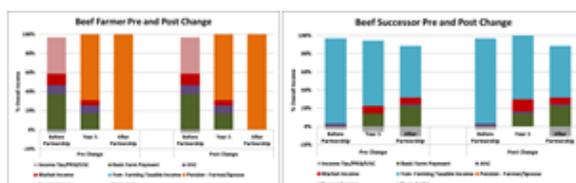


## 4. Results

The results presented illustrate contrasting images for dairy and beef farms. The overall potential of a farm partnership in this case relies heavily on the ability of a farm to provide income for a farmer and their successor.



For the dairy farmers modelled the tax relief works to its full potential. However, the income of the dairy farmer decreases significantly on entering the farm partnership. In the case of the successor, income tax increases significantly on entering the farm partnership due to the amalgamation of off farm income and farm income. While the CFGS is utilised here, €2,500 is a small amount when considering a lifetime transfer, in particular in the case of a dairy system where income levels are high.



The results for a beef farmer are somewhat different. In this case the farmer is left with very little farm income once the partnership begins, additionally the farmer qualifies for Farm Assist due to the low level of income received. For the successor, the additional farm income appears as a mild form of income diversification which enhances their overall income.

## 5. Conclusions

- While the economic benefits of a farm partnership are not evident for a lower income farm, the non-economic benefits should also be considered. The partnership model allows for a gradual exit for the outgoing farmer, whilst also facilitating a change in control that is not abrupt.
- The already higher incidence of farm partnerships in dairy farming is reflective of the larger farm size and higher income accrued from milk production, thus allowing the farm to support two generations at once.
- For the farmers there is little incentive to enter a collaborative arrangement given the splitting of income. In the case of cattle rearing farms the SFPS has little impact due to the low level of income tax being paid. Both farm systems find the farmer completely dependent on a pension once all farm income is transferred.
- Facilitating a sector-wide increase in farm succession and inheritance will require a higher level of understanding of different farm systems and the way in which partnerships can act as a means of reaching timely transfer.
- At present, policy does not provide a suitable financial benefit for farms that are facing uncertainty in terms of income (in this instance beef farmers).
- Future research on this project will involve qualitative fieldwork interviewing farmers on their perceptions of the farm transfer process.

## 6. Acknowledgements

The author gratefully acknowledges the funding provided under the Teagasc Walsh Fellowship Scheme and the RDS. This research has been published in the International Journal of Agricultural Management, (Vol.6, 1)



# Appendix 10: Poster presented at Teagasc/RDS event, Dublin, May 2015

NUI Galway  
OÉ Gaillimh

## Economics of Farm Succession and Inheritance

Brian Leonard \* \*\* Prof. Cathal O'Donoghue\*\* Dr. Maura Farrell\* Dr. Marie Mahon\* Ms. Anne Kinsella\*\*  
\*NUIG \*\*Teagasc

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### Introduction

In many OECD countries there is concern over the ageing farming population, this is an issue that threatens the future of agricultural production and the long term sustainability of rural communities.

International Farm Demographics

- Average farmer in US aged 57
- Average farmer in UK aged 55
- Almost one third of farm holders in Europe over 65

Irish Farm Demographics

- Average farmer aged 57
- Less than 10% of farmers under 40
- 7% under 35

**Definitions required for this study:**

- **Inheritance** denotes the legal transfer of ownership of the business assets (including land)
- **Succession** refers to the transfer of managerial control over the use of these assets
- **Retirement** marks the withdrawal of the present manager from active managerial control and/or involvement in manual work on the farm (Errington, 1998)

**Inheritance**  
In Ireland, entry to farming is almost entirely by inheritance (Kelly, 1982; Hennessy and Rehman, 2007)

**Land attachment**  
Land has great significance in Ireland; high number of farmers want land to stay in their family (Kelly, 1982; Bogue, 2013). This has resulted in a very stifled land market (Matthews, 2014)

**Young farmers**  
Correlation between farm performance and succession; requirement for more young farmers to enter the sector (Gasson and Errington, 1993; Caskie et al., 2008; DARM, 2009; Hennessy, 2014)

### Methodology

Hypothetical Microsimulation model (ADAPT)

+

Teagasc National Farm Survey average figures for dairy and beef systems

=

Analysis of current policies and their economic effects on farm succession and inheritance

### Results and Discussion

#### Scenario 1A

In this scenario the farmer retains all land and assets until death. At age 66 the farmers pension and farm income combine to increase overall income. The successor in this scenario does not earn any farm income until the farmer is deceased.

#### Scenario 2A

In this scenario the farmer retains all land and assets until death. However, the farmer also destocks to 0.15 livestock units to retain LFA payments. The income in this scenario is marginally higher due to decreased costs as a result of de-intensification. As with scenario 1A, successor does not have farm income until transfer.

- The scenarios presented here illustrate the common occurrence of non-transfer of agricultural assets during the farmers lifetime.
- This research has modelled 12 other scenarios for cattle rearing and dairy farms
- The results to date indicate that farmers generally do not benefit economically from transferring the farm to a successor during their lifetime. Additionally, a pension may not prove to be sufficient income, particularly if long term care is required for the farmer/spouse.
- Regarding capital taxation, the successor is not liable to pay any tax on acquiring the farm assets as the asset values do not go above the tax relief thresholds in the scenarios modelled.
- Table 1 presents the main policy/non-policy motivations that may affect the decision to transfer /take on a farm.

Main policies and motivations affecting succession/inheritance	
Policies	Motivations
CGT - Agricultural relief	Age
CGT - Retirement relief	Income, Education
Stamp Duty - Consequential relief	Health
Young Farmer Tax Allowance	Increased leisure time
	Financial security

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### Aims and Objectives

The aims of this research are to:

- Explore the institutional barriers/drivers of farm succession/inheritance
- Investigate farmers are motivated by financially incentivised policy
- Evaluate non-farmers assess the roles to succession/inheritance available

These aims will be achieved by means of the following objectives:

- Produce a data set of policies and reforms associated with farm succession and inheritance
- Develop a hypothetical microsimulation model using the Teagasc National Farm Survey data to assess initial methods of farm transfer and modelled effect on both farmer and successor
- Directly analyse agricultural policy Teagasc's role in succession and inheritance

### Conclusions

#### Demographic issues

- Perceived demographic issues in farming – ageing profile of farmers, low number of young farmers. Previous research implies that young farmers are more efficient and innovative when compared to their older counterparts.

#### Policy

- Requirement for policy makers to fully understand the situation so that effective policy can be created – creating succession/inheritance policy requires a deep level of understanding on the part of policy makers.

#### Payments/Tax system

- Payments/tax rules incentivise older farmers to stay on the land – there is no economic incentive for older farmers to transfer land; in many cases earlier retirement could mean the outgoing farmer having very little income.

#### Possible solutions

- Creating exit/phased strategy for older farmers.
- Facilitating easier entry into the sector for young farmers.

Appendix 11: Poster presented at Teagasc/RDS event, Dublin, May 2015

## Teagasc Transferring the Family Farm Clinics 2014

Brian Leonard<sup>1,2</sup>, Kevin Connolly<sup>1</sup>, James McDonnell<sup>1</sup>, Catriona McKenna<sup>1</sup>, Fintan Phelan<sup>1</sup>



<sup>1</sup>Teagasc  
<sup>2</sup>NUIG



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### Introduction

- In Autumn 2014 Teagasc held 11 Transferring The Family Farm Clinics, with one in each Teagasc regional unit.
- The clinics were open to the public and provided a place for people to have their questions on succession/inheritance answered.
- Attendees were given the opportunity to consult with teams of professional solicitors, accountants, Teagasc advisors, Social Welfare, mediators & other relevant parties to who could assist in creating an effective succession plan for farm families.
- Over 3,000 people attended the clinics which were held over a 4 week period.
- At the clinics, attendees completed a survey on what they had come to the clinic for and what they thought of the clinics. 470 surveys were completed and returned.
- Each attendee received a copy of the Teagasc 'Guide to Transferring the Family Farm', which covers the main aspects of farm transfer, including areas such as capital taxation and making a will. This guide was put together by Teagasc farm management specialists.

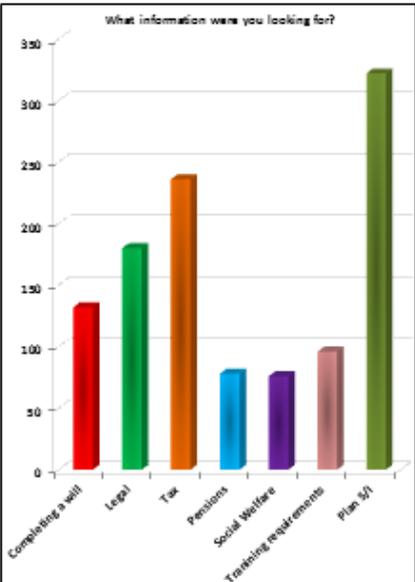


Map of Clinic Locations

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### Results

#### What information were you looking for?



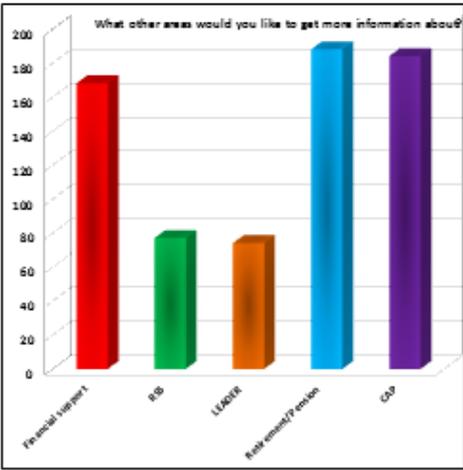
A high number of respondents were looking for information on planning succession/inheritance and taxes associated with farm transfer. The three main capital taxes affecting farm transfer were outlined in the presentation at the beginning of the clinics i.e. Capital Gains Tax (CGT), Capital Acquisitions Tax (CAT) and Stamp Duty. Additionally, planning succession/inheritance was discussed, with the speaker at each clinic illustrating the different stages and actors involved in the processes of succession and inheritance.

Areas in which attendees felt they required more information were retirement/pensions, financial support and CAP. These areas were addressed, however, for future clinics, Teagasc will endeavour to target these issues.

Notably, 75% of respondents were aware of the difference between a contributory and non-contributory pension.

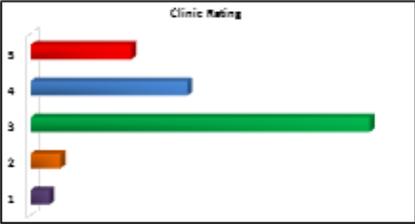
Overall attendees were satisfied with the clinics, with the vast majority of respondents rating the clinic 3 or higher.

#### What other areas would you like to get more information about?

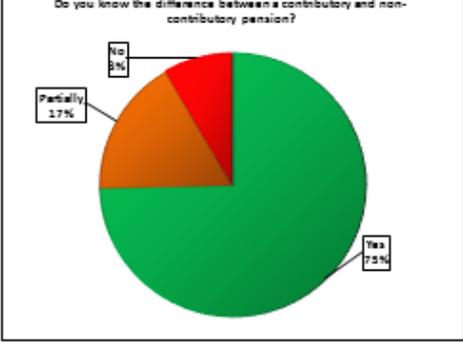


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#### Clinic Rating



#### Do you know the difference between a contributory and non-contributory pension?



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### Conclusions

- The clinics addressed many of the concerns raised by farm families, specific issues not dealt with in the introductory presentation could be brought to the individual consultations.
- Based on the results here, the main concerns for farm families is planning of succession/inheritance and dealing with tax and legal aspects of farm transfer.
- Teagasc aim to hold Transferring the Family Farm Clinics in autumn 2015 with some improvements as suggested by the respondents.








**Transferring the family farm: farmer concerns**





**The process of transferring the family farm has been labelled as one of many serious issues facing today's agriculture. For the transfer of a family farm to take place in a timely and efficient manner, multiple actors are required; this includes family members, accountants, solicitors and other professionals.**

**Young farmer entry**  
The average age of farmers continues to be of concern both in Ireland and most European countries. Young farmer entry into the sector is stifled by a reluctance of older farmers to exit, coupled with a low level of land mobility. Research to date indicates that young farmers tend to have a positive impact at farm level in terms of efficiency, environmental awareness and higher incidence of new technology uptake.

**Teagasc Transferring the Family Farm Clinics**  
Over a two-year period, in the autumn of both 2014 and 2015, Teagasc held a series of Transferring the Family Farm Clinics (TFFCs) around the country. The purpose of these seminars was to inform participants about key issues to be taken into account when planning a transfer and to outline the importance of careful planning. These events invited farmers to attend to discuss their concerns about transferring their farms to the next generation. The farmers had the opportunity to speak with a series of experts from the legal, accountancy, state pensions and family mediation fields on a one-to-one basis. The farmers in attendance at both year's events were asked to complete a survey that included questions about their farm succession and inheritance concerns. There were 690 farmer responses to the survey over the 2014/2015 period. The respondents were given the opportunity

to give feedback on what they thought of the clinic and the reasons as to why they attended. Other questions surrounding the format of the event were also included.

**Main clinic survey results**  
In general, the feedback on the clinics that the farmers provided was positive. Of particular interest was the information farmers were looking for from attending the clinics (see Figure 1). The two most prominent reasons farmers attended were information on taxation around land transfer and how to plan for succession and inheritance.

**Farm transfer taxes**  
The main taxes associated with land transfer are Capital Gains Tax (CGT), Capital Acquisitions Tax (CAT) and Stamp Duty. These taxes are subject to a range of reliefs, depending on the farmer's/successor's age, level of qualification and number of years farming. As land taxation can be complex farmers should consult relevant professionals for advice in a timely manner to avoid any unexpected outcomes regarding farm transfer taxation.



Fintan Phelan, Head of Farm Management and Rural Development Programme.

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At The Teagasc Successions Inheritance Clinics held in The Errigal Hotel, Cootshill, Co Cavan are (from left) James McDonnell, Teagasc Farm Management Specialist, Kevin Connolly, Teagasc Farm Management Specialist, and Tom Curran, Collaborative Farming Specialist.

**Succession and inheritance planning**

Regarding planning for farm succession and inheritance, farmers are encouraged to engage in planning for the future of both their farm and family in as timely a manner as possible. Some of the planning options include entering a farm partnership so that both the farmer and their successor are fully aware of plans regarding succession and inheritance. A farm partnership would also allow the young farmer to enter gradually while facilitating the planned exit of the older farmer over time. In addition to this, the knowledge gained by the young farmer in agricultural education, coupled with the experience of the older farmer, should further benefit the farm. The suitability of the farm system to such arrangements is one issue that needs careful consideration. The Succession Farm Partnership Scheme (coming soon) will allow a farmer and their successor to split a €5,000 tax credit for the first five years of a farm partnership. Schemes such as this are essential to encourage farmers and their successors to engage in farm transfer. Discussions with an advisor should assist and inform farmers in making such decisions.

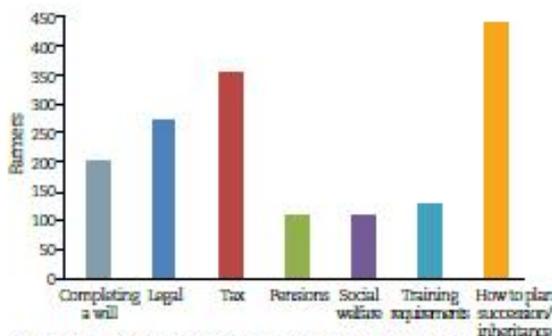


Figure 1. Farmer response to 'what information were you looking for?'

**Conclusions**

Farm succession and inheritance is an issue that transcends all farm systems and thus must be addressed appropriately in order to ensure the agricultural sector continues to thrive and progress. In the case of this article, it is evident that farmers have concerns surrounding the process. With almost 5,000 farmers attending the TFPCs over the two-year period 2014/15, it is clear that farm transfer remains high on the agenda. To this end, Teagasc plans to hold a forthcoming series of clinics during autumn 2017 in six locations in an effort to continually address farmer concerns on this pertinent issue.

**Acknowledgments**

The authors wish to recognise the considerable administrative, event coordination, staff training and event participation effort made by all farm management staff (specialists, advisors, regional managers and especially administrative staff) in the seminars/clinics, which has been rewarded by excellent feedback from the farming public and demand from the farming community and local legal and financial professionals for further similar events.



**RED**

# Farm succession and inheritance: Investigating policy



**The age of Ireland's farming population is an ongoing concern, with farmers reluctant to transfer farms to a younger generation. New research from Teagasc suggests that without a strong policy incentive this fact is unlikely to change and may result in an agricultural industry that does not reach its full potential.**

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**Anne Kinsella,** Research Officer, Teagasc Agricultural Economics and Farm Surveys Department, Athenry, Co Galway

**Maura Farrell,** Lecturer, Discipline of Geography, NUIG

**Marie Mahon,** Lecturer, Discipline of Geography, NUIG (not pictured)

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The process of farm succession and inheritance is highly complex and involves a variety of actors, ranging from family members to professionals, providing advice on legal and financial matters. In most European countries, the family farm model is the predominant form of ownership with farm transfer commonly taking place generationally. Factors affecting the decision to transfer a family farm can be both social and economic, with farmers aiming to ensure family members are provided for when the farm is transferred. Policy effects and economic concerns about various capital taxes and future income can also have a very strong influence on farmer choices.

In many developed countries, there is concern over the ageing farming population and Ireland is no exception. The 2015 Teagasc National Farm Survey showed the average age of farmers as 57. This figure has increased marginally year on year over recent decades with the number of farmers under the age of 40 decreasing over the same period of time. This trend has become a source of major concern for the agricultural sector, given the evidence from a number of studies of a positive correlation between younger farmers and farm efficiency and innovation.

In Ireland, a stifled land market has resulted in very low land mobility and there is a clear pattern of capital accumulation among older farmers who are fearful about their financial future and unwilling to transfer their farm assets (Matthews, 2014). Furthermore, State assistance to agriculture provides direct payments to farmers, making it financially beneficial to hold on to agricultural land rather than transferring it. The result is a sector dominated by older farmers, with access for young farmers an increasingly problematic issue. Adding to this is the issue of farm viability, with one-third of farms in 2015 categorised as vulnerable and a further one third viable (Teagasc National Farm Survey [NFS]). This has a strong effect on farm transfer because low farm income leads to concerns over the farm's capability of providing an income for both the farmer and/or their successor. This can also result in problems of inadequate retirement income for the farmer, leading to land retention as a form of financial security.

32 | TResearch



**Current Irish transfer policy**

There are three capital taxes that apply to farm inheritance in Ireland: Capital Gains Tax (CGT), Capital Acquisitions Tax (CAT) and Stamp Duty. CGT applies only to the farmer transferring land out of their name and it is charged at 33% of the value the property gained between date of acquisition and date of sale and/or transfer. CAT is applicable to the successor and is charged at 33% of the value of the property acquired. Stamp Duty is also applicable to the successor, with this being charged at 2% of the value of the property, but can be reduced to 1% based on the relationship of the farmer to the successor. For each of these taxes, certain reliefs apply (Leonard et al., 2017). Other policy incentives to facilitate earlier transfer are young farmer top-ups on Basic Farm Payments (BFP) and other direct payments. Farmers under the age of 40 who have a minimum level 5 agricultural certificate may receive a 25% top-up on their BFP.

**Methodology**

For this research, hypothetical microsimulation was used to assess the policy environment. This technique allows for the creation of hypothetical farms and models how they interact with current policies. In this case, average Teagasc NFS income figures were used to investigate how various beef and dairy farm decisions interacted with farm inheritance taxes.

One scenario model is a farm on which the farmer transfers all farm assets to their successor on death. Another model is a farmer who destocks the land at pension age to retain farm payments (Less Favoured Area and Basic Farm Payment), and transfers assets on death.

**Main findings**

The modelling produced outcomes in the outlined scenarios for both the farmer and the successor. The successor fulfilled all the required criteria for reliefs so that in all scenarios the successor was not subject to any capital taxes when farm assets were transferred.

In the case of the farmer, no capital taxes were incurred as the farm was not transferred until death. However, the results indicated that when a beef farmer destocks and retains payments, they will also qualify for a State pension, thus they are marginally better off financially than farming at an average stocking rate. This finding is problematic as it illustrates that farm payments are not encouraging older farmers to facilitate earlier entry of younger farmers. This is only heightened by the fact that some farmers have no source of retirement income once they transfer the farm to a successor, thus the retention of a steady retirement income from farming is enticing for older farmers.

For dairy systems, the farm is capable of producing enough income for both the farmer and their successor should they take over control of the farm. While a dairy system would have a reduced income as a result of destocking, the farmer would benefit from decreased labour requirements. Reducing stocking rate is often indicative of the management behaviour of older farmers.

Entering a period of semi-retirement could be a viable option for farmers on farms with higher incomes. Development of policy to cater for the range of farm systems and income levels would be a positive step towards increasing land mobility and, consequently, the number of young farmers in the sector. However, the other instrumental factors associated with transfer of farm management/ownership must be considered in tandem with the economic concerns.

**Conclusions**

In the absence of a strong policy incentive, the average age of farmers may continue to rise resulting in a stagnant land market and an agricultural sector that does not meet contemporary demands. The main focus, to date, has been on encouraging young farmer entry by various incentives, but older farmer exit has received little attention. This article highlights some of the key points outlined in a full length article published in Land Use Policy entitled 'Policy drivers of farm succession and inheritance' (Leonard et al., 2017).

**Acknowledgements:**

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This work was supervised by Cathal O'Donoghue, Dean of Arts, NUI Galway, who contributed significantly to this work in his role as PhD supervisor.

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## Appendix 14: National media coverage of research

# FARM IRELAND

Wednesday 12 December 2018

NEWS

AGRI-BUSINESS

PROPERTY

DAIRY

TILLAGE

BEEF

SHEEP

MACHIN

## Marriage split fears holding back farm handovers to next generation



*Majority of dairy farmers said potential marital breakdown of their successor was one of their biggest concerns. Stock image.*



Claire Fox  

September 12 2018 6:00 AM



The risk of a successor's marriage breaking down is one of the biggest factors preventing dairy farmers from handing on land to the next generation, according to new research.

“For dairy farmers marital breakdown of a successor is a serious concern - they are worried that if a divorce were to take place that it would split the farm,” Teagasc researcher Brian Leonard told the Farming Independent.

“Many said that they might hold off on transferring the farm to a successor and see how the marriage goes and keep the farm in their name for a while.

“I didn't bring up the topic of marital breakdown with the farmers, so I was surprised that it was brought up. I think more dairy farmers spoke about it because their assets are higher or maybe they might have heard of more experiences of marital breakdown in their area,” said Mr Leonard.

Mr Leonard interviewed 12 beef farmers in the west and 12 dairy farmers in the south of the country to discuss the perception of financial risks surrounding succession and inheritance.

Concerns differed between the two groups and a majority of dairy farmers said potential marital breakdown of their successor was one of their biggest concerns.

The cost of long-term nursing home care was a concern for dairy farmers who were worried that it would cost them over €1,000 a week.

Tax issues were a major worry for western farmers when transferring land.

“The majority of beef farmers were very concerned that they would be lumped with a huge tax bill when transferring the land, or that it would be a serious debt burden, but there are lots of reliefs in place that can be availed of with careful planning that can help minimise risk.”

Beef farmers also said that their sons or daughters who might be possible successors were unable to get employment in the west but hope that they would get work after a few years’ experience elsewhere.

Meanwhile, dairy farmers said that in most cases their possible successors returned to work on the farm after completing a degree or attending agricultural college.

Mr Leonard recommended that a scheme be put in place to encourage a gradual succession process. “There are schemes in place for young farmers looking to enter farming but very little for older farmers exiting. It’s not about pushing older farmers out. Succession can’t happen overnight, it has to be gradual.”

Mr Leonard’s research was funded by the Teagasc Walsh Fellowship programme and the Royal Dublin Society.

A nationwide series of Teagasc ‘Transferring the Family Farm’ meetings begin on September 25 with the first seminar in the Ballygarry House Hotel in Tralee, Co Kerry.