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The Succession Crisis in European Agriculture

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Abstract: This article addresses the issues raised by Chiswell and Lobley concerning our publication 'Understanding Farm Succession as Socially Constructed Endogenous Cycles'. Our response rebuts Chiswell and Lobley's criticisms of the article and assembles evidence from the literature to suggest that in a number of countries and regions of Europe, farm succession failure is at crisis levels. We suggest that the primary source of Chiswell and Lobley's optimism is the international FARMTRANSFERS survey, which they interpret as providing a positive assessment of farm transfer within the family. We present an alternative interpretation of their conclusions.

Introduction

We thank Chiswell and Lobley for taking an interest in our article on endogenous cycles in farm development (Fischer & Burton, 2014) and Professor Bock for allowing this discussion to take place. In way of an introduction we would like to emphasise that Chiswell and Lobley's objections are not primarily about the empirical or theoretical content of the article itself, but rather to comments made in the abstract, first paragraph and conclusions. As noted in Chiswell (2014), Matt Lobley has, for the last few years, asserted that the notion of a succession crisis lacks empirical support – a contention which appears to be based largely on survey data from his extensive and international FARMTRANSFERS survey. Our mention of a widely accepted crisis has clearly provoked a reaction based on these same arguments (which can be found in greater detail in Lobley [2010] and Lobley *et al.* [2010]). Our response, in turn, is divided into two parts. In the first we respond to Chiswell and Lobley's criticisms or evidence point by point and, in the second, we put forward our reasons for believing a succession crisis is occurring – although it is not one that is spatially uniform. We apologise to Chiswell and Lobley in advance if we have misinterpreted their views or evidence; however, we do not have the benefit of access to the FARMTRANSFERS data.

Response to the authors comments

The first main concern Chiswell and Lobley raise is to our statement that 'the certainty of continuity is declining,' to which they note 'there never was any certainty of continuity', and follow this up with an example to illustrate why this is the case. Unfortunately for the effort expended on proving that certainty never existed (which our article does not, at any point, dispute), this criticism results from a misreading on their part. Our wording does not suggest that there ever was certainty of continuity but refers to the 'level of certainty of continuity declining'. In our opinion it is clear that where we say certainty is declining we are not referring to absolute (100%) certainty having ever existed but to a declining degree of certainty (for example, from a 70% chance to a 50% chance). If we wished to say otherwise, we would have simply said 'There is no longer any certainty of succession.' In retrospect, perhaps 'likelihood of succession' would have been a better choice of words as it is more commonly used in this context (for example, Lobley *et al.* 2010; Sottomayor *et al.* 2011). However, we believe our meaning is clear.

Their second main concern is that we suggest that a recruitment crisis in agriculture exists. Using mainly their own publications and non-peer reviewed sources, Chiswell and Lobley proceed to outline how their (mostly Lobley's) evidence supports steady or increasing rates of succession. In particular, the authors suggest that the FARMTRANSFERS survey indicates that farm succession rates are healthy. Two reasons are given for this conclusion, namely (i) the rate of succession increases as farmers get older, and (ii) rates of successor

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identification are steady across the world and family farming is persisting under these levels. In addition, the authors note that figures from surveys in 2002 and 2005 show that England experienced a dramatic increase in succession rates. While the database is extensive (FARMTRANSFERS involves a total of 15,600 responses in 19 countries so far (Lobley 2010) and the two additional but unrelated English surveys add many more – Lobley *et al.*, 2002; 2005) we question the way the authors have interpreted it. There are three primary issues.

First, making the argument that succession rate changes with farmers' age in the FARMTRANSFERS data, the authors suggest that 'the rate of successor identification is known to increase significantly with age' and, citing Lobley (2010), observe how successor rates were 45% for farmers aged 55 to 65 and 60% for farmers aged 65 and over.¹ The authors' point here is (presumably) that those of us who suggest a crisis exists have failed to consider the influence of aging on succession certainty, that is, a successor is likely to emerge eventually. However, the probability of farm exit also 'increase(s) as the farm operator further advances in years in particular in farms where succession is unlikely' (Kimhi and Bollman 1999, Stiglbauer and Weiss 2000, p. 10). Thus, the probability of farmers without successors retiring themselves out of the sample frame also increases as the farmer gets older. The result, for any random survey of active farmers (such as those presumably used in the FARMTRANSFERS studies), is an age versus likelihood of succession profile that is naturally biased towards increasing certainty with age beyond a certain point (when retirement becomes possible). Thus Chiswell and Lobley's age versus successor identification evidence does not necessarily support the absence of a succession crisis.

Second, we question Chiswell and Lobley's contention that because the FARMTRANSFERS survey 'has consistently pointed ... to steady rates of succession and the ongoing persistence of the family farm across the developed world' there is therefore no crisis. Here the problem is one of data interpretation. In Lobley's (2010) international comparison of 15 studies only three showed the percentage of respondents with an identified successor at over 50% – while six studies showed rates of around or less than 33% (see figure 1, p. 853). The argument that communities of family farms continue to exist under such steady rates is somewhat specious given that even a consistently moderate level of succession is bad news for family farming if extended over generations. For example, a steady rate of succession of 50% would lead to a population of 1000 farmers declining to 500 by the end of the first generation, 250 by the end of the next and 125 by the end of the third generation. At 33% only 36 farmers would be left from a community of 1000. Even a constant rate of 60% (the figure given for Germany in Lobley 2010, and the highest reported succession rate in the FARMTRANSFERS surveys) would result in the loss of 78% of family farms within three generations. For family farming communities to be sustainable, succession rates need to increase dramatically, not remain stable.

Thirdly, Chiswell and Lobley present the fact that

in England, despite difficulties associated with the foot and mouth disease (FMD) outbreak in 2001/2002 and later, the uncertainty surrounding the 2003 CAP reforms, sequential work by Lobley et al. (2002) and Lobley et al. (2005) found increasing rates of successor identification across the same six English study areas

as more evidence that there is no succession crisis. However, the studies indicated an increase in succession certainty of 21% over a 3-year period – a rate that cannot possibly represent a typical movement of increased certainty. Lobley *et al.* (2005) explain it as due to increased confidence and this is probably true. However, rather than providing evidence to support a general increase in succession certainty it is more likely to represent a rebound from a very low level caused by the FMD episode in 2001–2002 that emotionally and psychologically devastated farming communities (Convery *et al.* 2005; Mort *et al.* 2005).

That the 2005 figure, at 57%, was even higher than earlier estimates for England using the FARMTRANSFERS survey (approx 50% in 1990, and 53% in 1997) is attributable to a difference in question wording. The 2002 and 2005 surveys asked 'Have you already identified a potential successor who will take over the business?' (yes/no), while the FARMTRANSFERS survey (according to Glauben *et al.* 2004) asks the question 'Have you already identified a successor? (yes, definitely/no, but there is a potential successor/no successor available). Consequently, the existence of a 'potential successor' could fall in the 'no' category for the FARMTRANSFERS survey but not in Lobley's later surveys. It is important to emphasise here that the way the succession question is asked is critical to the outcome. For example, a recent Irish telephone survey of 421 farmers asked the question 'Have you identified a farming successor for your farm?' of which 52% responded 'yes' even where 'possibly' or 'uncertain' was instructed to be registered as a 'no' (Bogue 2013). However, in

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23% of the 'yes' cases the farmer noted that the child was unaware, meaning that the number of confirmed successions was actually 40.4%. The lack of a standardised approach can make direct comparisons between quantitative studies very difficult.

Chiswell and Lobley next pose a question interesting to us, namely 'what is the optimum level of familial succession?' The authors claim that 'a certain level of succession failure is necessary' in order to '... free land up for growing farms wanting to accommodate their own identified potential successors, and secondly, to make room for new entrants' who they suggest bring new attitudes, skills and dynamism.

There are two points to respond to here. The first, that succession failure opens up land for other farms with potential successors, is true but paradoxical in that the sustainability of the system (profitable farm development and continued family farming through absorption of non-succeeded farms) is dependent on the failure of its own components. Relying on individual family farm failures cannot ensure the continuity of family farming. Instead, what is required is for the economic and social pressures that force farms to expand in order to accommodate a successor to diminish or cease. The second point, that succession failure is 'necessary' to promote innovation/dynamism is also questionable. For example, Marsden (2010) observed for Devon that 'ruptures' in the conventional agri-food system caused by FMD provided spaces to act and try something different that enhanced the opportunities for the development of the eco-economy. However, Marsden does not suggest this space was opened up by farmers departing from the land, but that FMD opened up a 'political space' for their growth, raising the issue of agriculture to the front of the local political agenda. Thus, while failed succession might prompt innovation in individual cases, it is not a prerequisite. Indeed, there is no reason why new attitudes, skills and dynamism should not emerge from within the family (see Burton and Walford 2005; Sutherland *et al.* 2012).

Now we deal with two specific concerns Chiswell and Lobley have with our concept of endogenous cycles. In the first they suggest that mechanisation, rather than discouraging succession, simply changes the dynamic as it can be important in 'creating new opportunities for IT-savvy farm children to be involved in the farm'. We agree that mechanisation creates new opportunities. In fact, we specifically refer to it in our case example (p. 430) when we discuss how, to attract their successor back to work on the farm in his holidays, the incumbent farmers bought a new tractor for their son to operate – and we note equally, from the son's perspective, that this approach appears to have been successful. When we refer to new technologies reducing the opportunities for the development of succession (for example, through being difficult or too dangerous to operate) we refer to the early socialisation stages only. Does this change the dynamic? Yes, of course. But given the critical nature of the early socialisation processes, we contend that the dynamic is changed in a negative way, that is, if succession cycles are not established early there will simply not be an opportunity for the later engagement in farm practices referred to by Chiswell and Lobley.

The second concern referred to our suggestion that Scottish farmers may feel marginalised in society. Chiswell and Lobley cite 'contemporary' research documenting 'farming's renewed standing in society in the UK' which, they suggest, is further evidenced by the 'increasing spread of farming programmes on TV and the emergence of "celebrity farmers". However, none of the documents cited by Chiswell and Lobley have been published in peer-reviewed journals (or other reliable sources), nor does any of them provide the time-series data necessary to support the claim that farmers have a 'renewed' standing in society. Two (Defra 2010; Carruthers *et al.* 2013) are review reports of earlier documents, including the third cited document, the Institute of Grocery Distribution (IGD 2009). In general, the evidence presented for a 'renewed standing' is limited, unreliable and unclear. While the National Farmers' Union (NFU) claims that commissioned polls show increasingly positive public attitudes towards farmers in the UK (NFU 2014), until these private surveys openly enter the public realm² it is difficult to ascertain their quality, impartiality or reliability. While we do not deny that farmers' renewed standing is possible, reliable studies are required.

More to the point, however, it is not rational urban adults who give carefully thought-out responses to UK-wide surveys that determine how Scottish farmers' children experience anti-farming views but, far more viscerally, the behaviour of teenage and sub-teenage children in rural Scotland. We observe that marginalisation was 'particularly evident in the context of secondary school, where labels such as "country bumpkin" or "whining farmer" were evoked by participants in how they experienced being stereotyped' (p. 434). Riley (2009) similarly observed in his study of the Peak District (England) that farmer's children were labelled 'country bumpkins' as well as 'stinky farm kids,' leading to some of them trying to hide their farming origins. He also contends, as we do, that those who are adequately socialised into agriculture (with a strong enough peer group) become resilient to these taunts. Then there is the issue of nationality. As there is a noted antipathy in Scottish

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rural communities towards English 'incomers' (Burnett 1998) it is doubtful that the appearance of English 'celebrity farmers' in the media (the majority and best known are English) would decrease the feelings of marginalisation experienced by farmer's children in Scotland. In the end, we simply have to believe our respondents.

Is there a succession-recruitment crisis?

Is there a succession-recruitment crisis? Although we have addressed much of Chiswell and Lobley's argument we have not, in the process, provided sufficient evidence to support the claim that a crisis in succession actually exists. Although this was not part of our original study (nor was it ever our intention to justify the presence of a crisis), we can present Chiswell and Lobley with evidence of an unfolding European crisis in farm succession. In Norway, for example, between 1999 and 2010 the number of active agricultural holdings declined from around 70,740 to 46,624 (Forbord *et al.* 2014) and by 2012 had fallen further to 44,500 (Heggum 2014) (37% of the 1999 number in a decade and a half). Interestingly, immediately prior to this dramatic decline, Jervell (1999) estimated that the likelihood of succession in Norway (from a survey of 456 farmers distributed in five municipalities) was around 30 to 38% (depending on the level of pluri-activity). The subsequent rapid decline of active farming suggests that measured successor identification rates of around a third of farmers (that is, six of the FARMTRANSFERS studies – Lobley 2010) are no indication that a crisis is unlikely to occur.³ While the changes in Norwegian farming cannot be completely attributed to failed succession, the changing expectations of potential successors has been noted to play an important role in the decline (Brandth and Overrein 2013; Heggum 2014). Currently only 50% of Norwegian farmers believe their farm will still be in existence in 20 years' time (Bjørkhaug and Rønningen 2014).

Similar statistics are available for Finland and France. Väre (2006) observes that between 1990 and 2004 the number of active farms in Finland declined from 129,114 to 72,054 (a 44% decline) with the number of farm successions dropping from an annual rate of 2000 per year in 1990 to less than half of that figure by the end of the century. De Raymond (2013) similarly observes that in France the number of farms declined from over a million in 1988 to 490,000 in 2010 – a decline of over 50% in just over two decades. Whether one calls the situation in Finland, France and Norway a crisis or necessary restructuring depends on one's views of the need for economic reform (which there clearly was to some extent). However, for the family farmers and the farming communities themselves, this level and speed of decline would certainly appear to indicate they are in or have recently been experiencing a succession-recruitment crisis.

There may also be a problem emerging in Germany. Official figures gathered by the Statistisches Bundesamt (2010) show that 128,600 of the 185,300 family farms with a manager aged 45 or older face unclear succession or a lack of succession (69.4%). The same outcome is evident in Sottomayor *et al.*'s (2011) survey of 1209 farmers in Germany. From this study Sottomayor *et al.* estimated that the succession rate in Germany was 49.8%. However, to arrive at that figure, they combined the category of 'possibly' with those of 'very likely' and 'definitely.' If 'possible' is not counted as an affirmative response, as was the case for the official statistics, Sottomayor *et al.*'s (2011) figures match the official figures almost exactly. Assuming farmers in Germany will retire at the age of 65, this means that between 50% and 70% of family farms in Germany could transfer ownership to non-family members over the next 20 years. However, the numbers are likely to be fewer than this when accounting for new successor identifications and new policies that have been implemented to try to address the issue of succession failure (Schwarz, pers. com.).

So why is the FARMTRANSFERS figure so different? FARMTRANSFERS data for Germany in 2003 suggests a very optimistic 60% positive succession rate – the highest of the international data (Lobley 2010). However, there are two reasons for doubting (or, rather, entirely dismissing) the FARMTRANSFERS figure as representative of Germany. First, the figure does not originate from a survey of farmers in Germany but a survey of full-time farmers from Schleswig-Holstein (Glauben *et al.* 2004)⁴ – a region noted in the past as having the 'most economic farm size structure' in the western part of Germany (Jones 1990, p. 11). Secondly, official government figures (Statistisches Bundesamt, 2010, figure 1) show that the proportion of Schleswig-Holstein farmers certain of succession in 2010 was actually 31% – half the 60% noted by Lobley for 2003 and in keeping with the German average. Any attempt to assess the cause of the discrepancy is speculative. However, the most likely candidates are the composition of the sample (full-time farmers), a self-selection process where farmers with successors were more likely to respond,⁵ a genuine reduction in successor identification between 2003 and

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2010, or a combination of all three (Table 1).

Region	No successor or
	uncertain (%)
Germany	69
Baden-Württemberg	77
Bayern	63
Brandenburg	75
Hessen	74
Mecklenburg-Vorpommern	73
Niedersachen	68
Nordrhein-Westfalen	67
Rheinland-Pfalz	83
Saarland	78
Sachsen	72
Sachsen-Anhalt	70
Schleswig-Holstein	69
Thüringen	74
Stadtstaaten	83

Norway, Finland, France and Germany represent four countries that have either recently experienced a crisis, are currently experiencing a crisis or show signs of an impending crisis in succession. However, this crisis is not uniformly distributed geographically. In Jervell's (1999) Norwegian study, for example, the overall succession rate was highly variable in the five study municipalities, where the successor identification rates ranged between 10 and 62%. Table 1 shows the regional variation in successor identification in Germany. While 63% is the lowest level of succession failure recorded, in some regions successor identification failure is as high as 83%. Spatial variation is even more evident in farm exit figures at the county level. In particular, Glauben *et al.* (2006) note that farm exit rates for the 326 counties in western Germany ranged between 4 and 55%, suggesting that a succession crisis is much more likely in some counties than others (also Schwarz, pers com.). This spatial variability is likely to occur across Europe. Bika (2007) suggests that regional imbalances in the uptake of the early retirement scheme are associated with the absence of successors and thus display a regionality to succession rates across the EU.

Regionality may also be hidden within some of the FARMTRANSFERS studies undertaken at a national level. In Austria, for example, the FARMTRANSFERS data suggests that 57.2% of farmers in full-time farming (the combined Schleswig-Holstein figure) were certain of succession (with an additional 31.1% indicating that no successor had been identified but that succession was possible) while even in part-time farms the rate was 38.6% certain with 37.1% succession possible (Glauben *et al.* 2004).⁶ However, in another Austrian study of protected green belt agriculture in Linz/Urfahr conducted at a similar time, Silber and Wytrzens (2007, p. 30) found that 75% of farmers were unsure of succession – reportedly because of 'worse income opportunities and missing future perspectives in agriculture'. The area had already experienced a 37.5% reduction in the number of farmers over the previous 15 years; from 80 farmers in 1988 to 50 in 2003.

In the UK, while the succession situation may be positive in counties such as Devon – described by Marsden (2010, p. 229) as 'a leader in eco-economic (and relocalized) food networks, especially organic farming, short food supply chains and sustainable tourism' – in some more marginal regions the succession situation is undoubtedly at crisis levels. The Lake District of Cumbria is an example of this. In the mid-2000s concern was expressed that the upland hill farming communities responsible for managing much of the distinctive hefted commons landscape were in danger of collapse due to a widespread failure of succession (Burton *et al.* 2005; Federation of Cumbria Commoners 2006). A later report by Reebanks Consulting Ltd (2010) noted that of 92 National Trust farms in the region two-thirds have no successor, meaning that 40–50

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farms are likely to change hands by 2020 and 60–70 by 2025. More recently, Dave Smith, the current Chairman of the Federation of Cumbrian Commoners, was cited as saying:

Looking forward I see the existence of traditional farming systems on commons as remaining very fragile because of economics and changing lifestyle expectations which make it harder to convince upcoming generations of their worth. (British Farmer and Grower 2013)

Others have expressed similar concerns for both succession failure and the impact it will have on the ecology, appearance and authenticity of a cultural landscape on which a £2 billion tourism industry depends (Herdwick Sheep Breeders Association 2011; Lake District National Park Authority, 2011; Harvey *et al.* 2013). The Lake District example does not suggest that a 'renaissance in agriculture' as noted by Lobley and colleagues (Whitehead *et al.* 2012) is being experienced – or, if it is, it appears to be too late to affect the endogenous cycles that lead to successful succession outcomes (Fischer and Burton 2014). Nor should the Lake District example be seen as a once-off case. For the UK uplands as a whole, a recent Defra Agricultural Change and Environment Observatory (2010) report, 'Farming in the English Uplands' observed that only 37% of upland farmers had successors, 21% of farm businesses did not expect to continue beyond 2015 and the most common reasons given for failure of succession were that the family do not see a future in farming (41%) and the family is not interested (31%). Similar stories of family farming communities in important cultural landscapes being under pressure as a result of succession failure have emerged from the Pyrenees (Mottet *et al.* 2006), the Burren (O'Rourke 2005) and the Massif Central (André 1998; O'Rourke 2006).

Conclusion

Our objective here has been to not only address Chiswell and Lobley's comments about our article, but to provide evidence that there is cause to believe a succession crisis is being experienced in many parts of Europe. This evidence is strong. The situations in Norway, Finland, France and potentially Germany appear to represent past, current and future major reconfigurations of family farming in Europe associated with succession failure. In places, such reconfigurations are also apparent at a regional and local level. Chiswell (2014, p. 304) suggests that the perceived succession crisis 'has relied on the farmers' voice to paint a worrying but largely unfounded picture, because of insufficient engagement with the successor'. However, available data would seem to indicate a similar picture – albeit a patchy one. Further, in our study we engaged not only parents, but successors and non-successors, male and female alike, through an intensive interview process with a wide cross-section of family members. If both studies that involve the farmers' voice and those that involve the voice of the successor indicate the same crisis, then perhaps a crisis is not as unlikely as Chiswell and Lobley seem to think. There is no doubt that agriculture and family farm succession in some parts of Europe is in a healthy condition; however, there is equally no doubt that in many regions and countries it is comprehensively not.

Notes

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¹This relationship is not necessarily a simple one of increasing successor identification with age. For example, Aldanondo-Ochoa *et al.* (2007) found a quadratic effect for farmers over 45 with the likelihood of having a successor decreasing up to the age of 59 and then increasing.

²While we cannot be entirely sure this is the case, the 2014 survey was conducted by a private company (OnePoll) and is available neither via the search engine on the company's website nor at the NFU site.

³Bjørkhaug and Wiborg (2010) state that Bygdeforskning's *Trender I Norsk Landbruk* (Trends in Norwegian Agriculture) survey showed a national succession rate as high as 67% in 2010. However, the survey does not ask whether these farms will be actively farmed or not and, as Norwegian farm areas are very small, many are likely to end up as holiday homes with land farmed by others (see Forbord *et al.* 2014). In terms of active farming, Bjørkhaug and Wiborg state 'In 2006 only 17% of all active farms in 1969 were still in production' (p. 5).

⁴We can only assume that this is the study, as Lobley (2010) and Lobley *et al.* (2010) provide no references for the study data. However, Bohak *et al.* (2010) note that Glauben *et al.* (2004) is a FARMTRANSFERS project publication and it was conducted in 2003 using the FARMTRANSFERS questionnaire. It should also be noted that the only figure given for succession probability in Schleswig-Holstein was combined with that for full-time

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farmers in Austria in Glauben $et\ al.\ (2004)$ – reportedly because there was no statistically significant difference between the samples.

⁵Errington (1998: 126) observes of the English (1991) and French (1993) FARMTRANSFERS a non-response bias as 'older farmers and those from smaller farms were under-represented among respondents'.

⁶Note that the response rate to the Austrian survey was very low at only 17% (Glauben *et al.* 2004), leaving some form of response bias a distinct possibility.

⁷Note that in Bogue (2013), failure to engage with the successor led to an overestimate rather than an underestimate of likely succession rates, as many successors were unaware of their position as confirmed successor (see above).

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