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ENTREPRENEURIAL YOUNGER FARMERS AND THE “YOUNG FARMER PROBLEM” IN ENGLAND

SUMMARY

In this paper we investigate the “Young Farmer Problem” in Europe with a specific focus on how it applies in England. The paper is intended as a discussion paper and represents a forerunner to a more comprehensive study of the raw Farm Business Survey data conducted through a Phd.

Recent reforms of the European Union’s (EU) Common Agricultural Policy (CAP) have specifically targeted young farmers for increased support; with young farmers being seen as more innovative, entrepreneurial and amenable to change. Furthermore, the EU has stated that the “generational renewal” of agriculture is critical for the long term viability of the sector. This paper investigates the business performance and entrepreneurial behaviour of younger farmers in England through empirical analysis of Farm Business Survey (FBS) data, and finds some evidence to support the notion of higher levels of performance among younger farmers. Farmers in the 35 - <45 years age group showed consistently higher levels of overall productivity, profitability and investment. Additionally, the results show that younger farmers demonstrate consistently higher levels of engagement with agri-environment schemes. This study concurs with the findings of Zagata and Sutherland (2015) in the need to improve targeting on the basis of age specifically in order to isolate the under 40 age group which is the focus of European policy and in the need to separate new entrants from inheritors in the assessment of young farmers; an objective which necessitates the analysis of raw data and the conduction of original research within the topic area.

This paper and, importantly, the original research which will be conducted through the accompanying Phd will address the fifth research objective of the Research platform proposed by Zagata and Sutherland (2015) to test the characterisation of young people and new entrants to farming, as entrepreneurial innovators sympathetic to and amenable with the goals of the CAP.

Key words: Young farmers, Young Farmer Problem, Entrepreneurship, CAP, England

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Paper presented at the 6th International Scientific Agricultural Symposium "AGROSYM 2015"
Note: The authors declare that they have no conflicts of interest. Authorship Form signed online.

INTRODUCTION

The European Union (EU) believes there is a notable shortage of young farmers (Council of the European Union, 2014) involved in European Agriculture. Young Farmers are identified by the EU as less than 40 years of age (ENRD, 2014). The EU has stated unequivocally through its Presidency recommendations (Council of the European Union, 2014), official literature on the CAP (Europa, 2015) and Economic Briefs on generational renewal (European Commission, 2012) that this “Young Farmer Problem” is an area which will receive attention in the long term. Furthermore lobbyists for European young farmers (e.g. The European Council of Young Farmers [CEJA]) as well as national groups are receiving support and endorsement from major national and European policy makers (CEJA, 2015).

The European Union support for generational renewal is centred around the belief that young farmers are more productive, that there is knowledge inherent to the sector which needs to be retained (through succession) and that younger farmers have a different attitude to risk and are more open to change, be it technological or technical (European Commission, 2012; Europa, 2015). The CAP has included measures for the support of young farmers since the early 1990s, and measures in certain member states existed in the 1960s (Bika, 2007). In that time the proportion of farmers under-35 across Europe has decreased from 8% in 1990 to 5% in 2007, while the proportion of older farmers (over 65) has increased from 24% in 1990 to 31% in 2007 (Matthews, 2012).

Mazorra (2000) notes the two differing strands of policy, one dealing with entry to agriculture and the other assisting or encouraging exit; early retirement systems were adopted at the European level in the CAP reform of 1992, through regulation 2079/92. The early retirement provisions – widely recognised as ineffective in increasing intergenerational transfer are being discontinued (Mazorra, 2000; Bika, 2007; Ingram & Kirwan, 2011). Discussion concerning structural adjustment within the CAP is not new, the Mansholt plan (proposed 1968 and partially adopted in 1972) originally included measures aimed at early retirement schemes (Council Directive 72/160), though the reforms were contested from the outset and reformed in 1973 (the following year) and reduced to three principles.

Research platform – the “Young Farmer Problem”

Zagata and Sutherland (2015), through analysis of Eurostat data confirmed that the proportion of older farmers is growing while the numbers of younger farmers and the usable agricultural area they farm is decreasing Europe-wide. They proposed a research platform suitable to further investigating this situation, which included the need to “characterise” these younger farmers so that they can be analysed individually and contrasted with other age groups within farming. This paper makes the case for using the substantial farm business and entrepreneurial literatures to assess and contrast farm business managers of differing ages.

Zagata and Sutherland (2015) also identified several problems with the supportive evidence for the measures, most notably the conflation of new entrants with young farmers and the partitioning of the data. On the partitioning, the policy area covers under-40s while both the Eurostat data and the Farm Business Survey (FBS) data use partitions of either under 35 or between 35 - <45 neither of which overlay accurately with the specified policy age group. This leads to limitations with our conclusions which are acknowledged and will be addressed in subsequent planned research.

This paper and its supportive research will build on the fifth research objective of the Research platform proposed by Zagata and Sutherland (2015), concerning testing the underlying assumptions concerning young people and new entrants to farming, as entrepreneurial innovators sympathetic to and amenable with the goals of the CAP. This paper seeks to analyse the entrepreneurial characteristics of young farmers as a means to explore the fundamental justification of the European policy. Based on the data from the FBS in England, our research question is “Are young farmers more profitable, productive and/or innovative than older farmers?”

The application of Entrepreneurial Research in Analysis of Young Farmers.

Agriculture in the EU has experienced considerable changes in the last ten years with restructuring of the CAP and a gradual reduction of direct agricultural support (Seuneke, 2014). Alsos et al (2011) argue that the ability and willingness of farmers to engage in entrepreneurial behaviour is a useful tool in explaining the different patterns of successes and failures within the sector. This in turn will prove beneficial as we ultimately strive to characterise the entrepreneurial and business behaviour of young farmers specifically.

Entrepreneurship, simply put, represents a positive attitude to risk (Clark, 2009). Entrepreneurs innovate and either create new business activities or modify existing activities to their advantage and to capitalise on perceived opportunities in the market. Clark (2009), Boekhoelt (1998) and Pretty (1998) list several entrepreneurial characteristics as they relate to farmers: the novel redeployment of the bases of agricultural production, the adoption of a new market orientation, capitalising on endogenous resources, the implementation of new forms of governance, the pursuit of community involvement and support and finally the effective management of space and natural resources.

These entrepreneurial characteristics are fairly general; however, considering the fundamental justification of the youth support policy namely that it provides tangible improvements in performance, the consideration of the above characteristics can be assessed through an examination of tangible outputs. Evidence of productivity, performance or profitability being higher in the under 40s is partial evidence of differing management practices, evidence of engagement in other ventures (such as diversification and environmental schemes) would be evidence of managing space, natural resources, redeployment

of resources and capitalising on endogenous resources as well as, arguably, altering market orientation. The off farm income of farmers and spouses, included in the FBS since 2004/5, is also taken into account.

MATERIAL AND METHODS

This paper uses FBS data to analyse entrepreneurial behaviour of younger farmers in England specifically, as Zagata and Sutherland (2015) note the “young farmer problem” within Europe varies in significance considerably between member states. Thus it could be argued that attempts to draw conclusions from general European figures are somewhat problematic. The focus on England makes this study unique. The FBS provides information on both the financial position and the performance of farm businesses in England. The FBS is funded by the Department for Environmental, Food and Rural Affairs (DEFRA) and is supported by the National Farmers Union (NFU) as well as the Country Landowners Association (CLA) and the Tenant Farmers Association (TFA) with the resultant data ultimately becoming part of the farm accountancy network (FADN). The Farm Business Survey sample size from 2010/11 is 1954 farms and the sampling process is stratified and targeted to give a comprehensive and balanced representation of the industry. FBS averaged data for 2013/14 is used to identify and assess the entrepreneurial characteristics of young farmers relative to other age groups. Proxy indicators based on the data provided in the FBS data are analysed to assess the rate and nature of diversification in English farms, their productivity and performance and their profitability. The survey concerns the specified sole holder of a given farm.

It has been suggested by Zagata and Sutherland (2015) that productivity increases with farm size and that since young farmers typically farm larger farms this explains their higher performance. While this may or may not be the case in other EU member states (N.B Zagata and Sutherland (2015) used Eurostat data) for England the farm age groups were checked using FBS data which shows the numbers of different age groups of farmers, active in farms of different sizes and the distribution of ages relative to farm size was found to be fairly consistent across farm sizes.

RESULTS AND DISCUSSION

Table 1 shows that young farmers (under-35 and 35 - <45) are deriving smaller proportions of income from diversified activities. Income from non-agricultural output, costs of diversification and income from diversification among the 35 - <45 age group is higher than the average but not as high as in the 45 - <55 age group.

Additionally, the under-35 age group shows particularly low levels of non-agricultural output coupled with lower levels of spending/investment in diversification (indicated by costs) indicating that any entrepreneurship to be found here is more focussed on the core business of farming. There is also little evidence to suggest that the off farm income of either farmers or more

importantly spouses (the wider farm household) differs between age groups, though these figures do not take into account the differing familial or management structures and resultant time allocation and support within the farm household. This situation can be partially addressed by the qualitative follow up to the main quantitative research in the thesis.

Table 1. Diversified activities, agri-environment income and income from off farm activities

Age Group	Non AG Output (£)	Costs of Diversification non AG (£)	Income from Diversification (£)	Proportion of Farm Business Output (%)	Agri-Environment Payments (£)	Off Farm Income of Farmer & Spouse
Avera	16471	7980	8491	5.4	6604	7263
<35	10832	4965	5867	4.5	8602	5789
35 -	17233	8802	8431	4.6	7458	6065
45 -	20010	9928	10082	6.3	6814	8697
55 -	16280	7513	8767	5.1	6571	5674
65 -	13449	6392	7057	5.5	5895	8200
75>	9159	5404	3755	4.8	5642	9460

(Source: England Farm Business Survey 2013/14)

Overall Table 1 also demonstrates the low levels of diversification as a proportion of Farm Business Output across age groups, representing approximately 5% of total output. Agri-environment payments meanwhile are highest in the under-35 age group and second highest in the 35 - <45's perhaps demonstrating either willingness to embrace environmentally friendly farming practices or a rational decision to capitalise on available subsidy. Many studies support the view that younger farmers can be more likely to practice sustainable farming (Van Passel et al, 2007), organic farming (Laepplé and Van Rensberg, 2011) and animal welfare. Whether this behaviour is a rational entrepreneurial decision conducted in pursuit of the profit motive or an ideological position is difficult to tell; nevertheless, the behaviour of young farmers aligns with the greening objectives of the CAP. The greening requirement may increasingly be seen as the norm for new entrants, a situation further normalised by changes in education and training which was not the case for older generations.

Productivity and Profitability

The higher agricultural productivity and (as a proportion) highest labour productivity for agriculture is particularly interesting. This paper concerns analysis of entrepreneurial indicators which have traditionally concerned diversifying operations and the more efficient utilisation of farm assets (Clark, 2009). According to some of the literature farmers have become more pluri-

active or multifunctional (Seuneke, 2014) yet here is preliminary evidence that younger farmers are actually most productive at agricultural operations. That said the results in Table 2 for the under-35s and the 45 - <55s are similar which highlights the importance of breaking down and analysing the 35 - <45 group.

Considering Table 1 (concerning levels of non-agricultural activities) it would seem a theme is emerging concerning younger farmers and higher agricultural performance/prominence as opposed to broader entrepreneurial (traditional multifunctional) actions.

Table 2. Productivity indicators (Source: England Farm Business Survey 2013/14)

Age Group	Agricultural Productivity(*)	Farm Business Productivity(**)	Labour Productivity (Whole Farm) (***)	Labour Productivity (***) (Agriculture)
Average	0.917	1.055	114,608	112,448
<35	0.913	1.057	113,699	110,165
35 -	0.954	1.070	123,652	125,396
45 -	0.913	1.050	113,570	111,948
55 -	0.917	1.051	116,461	115,777
65 -	0.895	1.058	108,822	100,119
75>	0.903	1.069	99,857	90,002

(*) Output in £/ Input in £, (**) Output in £/ Input in £ and (***) Output/Agricultural Work Unit

In considering profitability through examination of average farm financial performance Table 3 shows that the 35 - <45 age group demonstrates significantly higher farm business income, Margin and Gross Profit than other age groups which indicates better business performance.

Table 3: Profitability indicators (Source: England Farm Business Survey 2013/14)

Age Group	Farm Business Income	Total Gross Margin	Gross Profit	Overheads	Liabilities
Average	£45,474.00	£166,712.00	£186,546.00	£97,813.00	£185,707.00
<35	£39,953.00	£138,921.00	£150,475.00	£80,786.00	£164,240.00
35 - <45	£54,706.00	£207,885.00	£230,190.00	£131,629.00	£234,919.00
45 - <55	£44,935.00	£173,724.00	£196,203.00	£107,476.00	£211,937.00
55 - <65	£46,732.00	£170,098.00	£190,041.00	£99,179.00	£179,707.00
65 - <75	£39,825.00	£143,802.00	£160,717.00	£76,321.00	£156,433.00
75>	£35,060.00	£109,627.00	£122,303.00	£45,489.00	£78,481.00

Table 4. Profitability indicators – liabilities and investments

Age Group	Assets	Asset Purchases	NET Worth	Bank Loans
Average	£1,714,928.00	£52,734.00	£1,529,221.00	£90,544.00
<35	£1,365,160.00	£63,757.00	£1,200,920.00	£67,614.00
35 - <45	£1,768,696.00	£71,889.00	£1,533,777.00	£123,160.00
45 - <55	£1,617,284.00	£60,124.00	£1,405,348.00	£121,581.00
55 - <65	£1,716,952.00	£45,270.00	£1,537,244.00	£75,053.00
65 - <75	£1,856,536.00	£45,775.00	£1,700,103.00	£64,973.00
75>	£1,718,873.00	£40,396.00	£1,640,392.00	£52,370.00

(Source: England Farm Business Survey 2013/14)

Interestingly overheads, liabilities and as Table 4 demonstrates Bank loans (which are included in overall liabilities) and asset purchases are also higher, demonstrating a higher level of gearing in the 35 - <45 age range as well as it would seem higher levels of investment which in turn would indicate entrepreneurial action. Significant, again, is the relatively low performance in the <35 age range which reiterates the significance of the 35 - <45 split; particularly since the 45 - <55 age partition has better overall performance.

Despite lower levels of income, profit and business activity for older farmers (>65) table 4 illustrates both the lower levels of debt (liabilities, overheads and bank loans) and the comparatively high concentration of assets. This may support the views of Matthews (2012) and Glauben et al (2009) that the problem with generational renewal and what is essentially the barrier to entry for prospective entrepreneurs is the concentration of finite land and resources in the hands of older farmers, coupled with subsidy entitlements and lower debt which mean they are not incentivised to leave the industry. The resultant scarcity of land, resources and opportunities will in turn push up the costs of entry, ergo the barriers of entry, which in turn exacerbate the barriers to new entrants/entrepreneurs and entrepreneurial action.

Limitations of Research

The use of aggregated FBS data raises several issues, significantly and similarly to using aggregated Eurostat data upon which the EU justification for the support measures is based. Firstly, averages are inherently generalising and inaccurate, secondly the study has been restricted to the categories of the FBS which may or may not be relevant or representative. Thirdly while differences in the averages can be and have been discussed it is very difficult to weigh their significance, to say nothing of calculating their statistical significance, effect size or power. This was partly intentional since it acts as both an illustration of the limitations of the EU rationale for support and a justification for a more in depth analysis of the raw data. With regards to the status and/or importance of the wider farm household and other issues not explored by the FBS data this will be explored through the follow up qualitative research.

CONCLUSIONS

This paper finds some evidence to support the notion of higher entrepreneurial action in young farmers (<40). While there is little evidence that young farmers diversify more they demonstrate higher levels of engagement with Agri-Environment schemes, which it could be argued is entrepreneurially motivated. With regards productivity the 35 - <45 age range is the highest overall in terms of whole farm and agricultural productivity. Labour productivity is significantly higher for both whole farm and in agriculture. The lauding of youth unconditionally in this area is hampered by the lower performance of the <35 group, which appears similar to the 45 - <55s. In terms of profitability the 35 - <45 age group is consistently the best and the higher geared with the highest levels of debt, loans and liabilities which could be taken as evidence of investment. The lower levels of diversified activities coupled with high levels of agricultural and labour productivity for younger farmers suggests a focus on either traditional farming or entrepreneurial activity tied to traditional farming.

This study represents the preliminary findings of a Phd thesis being conducted on this topic. The aims of the thesis, through utilisation of the raw FBS data and discriminant analysis will be to isolate the under 40 age group (which is the group EU policy is concerned with) and identify its characteristics relative to farms of differing ages. By using a qualitative follow up and the adoption of mixed methods the thesis will both test the developing characterisation and explore other potential factors relevant to the <40 age groups identity.

Finally, in terms of secondary objectives for future research, aside from age partitioning it would be beneficial to separate new entrants from inheritors, succession being predominant in English agriculture, are younger farmers new entrants? The European policy conflates the two, as well as the potential benefits of each, but the personal and business characteristics and behaviours of new entrants via succession vs. new entrants from outside farming may differ.

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