

Farm Business Survey 2018/2019 Hill Farming in England



David Harvey and Charles Scott

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Foreword to the Fourteenth Series

Now in its fourteenth year of production, our series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)* has now arguably greater relevance to the farming and horticultural sectors in England than ever before. Following a general election in December 2019, the UK Government has now passed legislation through parliament which will result in the UK leaving the EU at the end of January 2020. A transition period will then follow, with the expectation that by the end of December 2020 the UK will have completed the transition phase of fully leaving the EU.

The new era will impact on many areas of activity in the UK; UK agriculture will witness and experience one of the largest transitions it has seen in decades. The new Agriculture Bill 2019-20 will be translated into policies and subsequently implemented, with an "Agricultural Transition" starting on the 1st January 2021 and being completed by 2028. During this agricultural transition, English agricultural and horticultural businesses will experience a phased decline in the Basic Payment Scheme support, that many businesses have received, while new opportunities for payments for public goods will be introduced and implemented, all against a backdrop of a need to reduce agriculture's 'carbon footprint' and increase productivity performance. Alongside this change in emphasis, trade deals will be negotiated with the EU, the USA and other countries with which we currently, and intend to, trade with. This change in the UK's agricultural policies and trading relationship will lead to both challenges and opportunities for business. Irrespective of the challenges and opportunities that lay ahead, most industry commentators note the need for businesses to adapt and to be fully aware of their costs and returns. We hope that RBR's core focus on independent analysis of the economics of agricultural and horticultural sectors will continue to provide the industry with the data on enterprise and sectoral returns to aid business decision making.

For the 2018/19 year, average Farm Business Income (FBI), derived from our work on the Farm Business Survey (FBS), fell to £50,400 per business from £56,100 in 2017/18. The 2018/19 year relates to the 2018 harvest year, which witnessed an exceptionally cold spring "The Beast from the East" followed by one of the driest summers on record (almost in line with the 1976 drought). These weather impacts led to forage shortage and thus increased livestock feeds costs in the grazing sectors, and reduced cropping yields, albeit with an increase in crop prices. The dairy and grazing livestock sectors witnessed the largest percentage decreases in FBI, as they faced the higher costs of feed and lower prices for stock, particularly in the less favoured areas (LFAs).

As with our previous editions of these reports, available at www.ruralbusinessresearch.co.uk, our core aim is to inform agricultural and horticultural businesses about the economics in their sector. This series of reports, and our work on the FBS more generally, would not be possible without the cooperation of the farmers and growers who participate in the FBS to ensure that the data we provide for policy making, and in our reports and free to use online data services at www.farmbusinesssurvey.co.uk, is truly representative of the sectors. Our sincere thanks therefore go to the farmers and growers for their most valuable contribution.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research January 2020

www.ruralbusinessresearch.co.uk

Executive Summary

The total area of land classified as Less Favoured Area (LFA) in England is 2.2 million hectares. Of this, 1.8 million hectares are farmed - 17% of the total farmed area of England¹. This total is made up of Severely Disadvantaged Areas (67%) and Disadvantaged Areas (33%). The Moorland designation of semi-natural vegetation covers 42% of the LFA area². These are areas where farming is more difficult due to poor climate, soils and terrain, which in turn lead to lower yields, and higher production and transportation costs. LFAs essentially define the upland hill-farming areas; they include almost all of the upland areas in the North of England (including the Pennines, Lake District and North York Moors), the Peak District, the English part of the English-Welsh border, Exmoor, Dartmoor, and parts of Cornwall. In England, 27% of beef cows and 40% of female breeding sheep are on LFA grazing livestock farms³. Farming plays a crucial role in maintaining the distinctive landscape of such areas.

The average LFA Grazing Livestock farm has 165 ha of enclosed land and typically has access to an area of common grazing. It is part owned (78 ha) and part rented (94 ha) and most of the farm (96 ha) is in permanent grass. The average LFA farmer is 61 years old, has 26 beef cows and 383 breeding ewes. Cattle and sheep youngstock and fatstock make up the total to 83 cattle and 752 sheep on the farm, making a total of 90 Grazing Livestock Units.

The average LFA Grazing Livestock farm earns 59% of its total revenue (output) from crop and livestock farming activities, 25% comes from the Basic Payment, and 11% from specific agri-environment payments. The balance of revenues (5%) is earned from diversification activities.

The crop and livestock farming side of the business covers its variable costs and earns a respectable gross margin of £21,839 per farm. However, since this side of the whole farm business is assumed to incur most of the fixed costs (81%) the average LFA farm is shown as making an <u>Agricultural Business Income</u> loss of -£21,496 (before unpaid labour) from crop and livestock production per farm in 2018/19. Allowing for the unpaid labour allocation of £26,062 to this side of the business results in an <u>Agricultural Corporate Income</u> of -£47,558.

Farm revenues from all sources combine to generate a headline <u>Farm Business Income</u> of £15,545 per farm in 2018/19, a 42% decrease on the previous year. This income fails to cover the opportunity costs of the unpaid labour (provided mainly by the farmer and family) estimated at £27,951 per farm. As a result, <u>Farm Corporate Income</u> shows a loss of -£12,406 per farm (from -£664 in the previous year). Adjusting for the net interest payments made by the farm, <u>Farm Investment Income</u> (which represents the return on risk and entrepreneurship on all capital invested in the farm business whether borrowed or not) of -£9,109 is reduced by 460% compared with the previous year's figure of £2,533. The traditional measure of farm income of <u>Net Farm Income</u> (which puts all farm businesses on a comparable tenanted basis) averaged £5,906 per farm, down 66% from £17,184 in 2017/18. LFA farms depend to

 $^{^{1}\} Defra-\ http://archive.defra.gov.uk/rural/countryside/uplands/land-classification.htm$

² Natural England - Entry Level Stewardship: Environmental Stewardship Handbook (NE349)

³ Data from Defra, June Survey of Agriculture and Horticulture, 2018

a substantial extent on public payments; the Basic Payment and Agri-environmental payments together account for over 36% of their revenue. Although there is substantial variation amongst the farms in terms of their commercial performance, most of these farms could not survive in their present form as commercial businesses without the public payments, particularly those with an emphasis on cattle production.

1. Background & Context

The total area of land classified as Less Favoured Area (LFA) on farms in England is 2.2 million hectares. Of this, 1.8 m hectares are farmed - 17% of the total farmed area of England⁴. This total is made up of Severely Disadvantaged Areas (SDAs) which account for 67% of the LFA, and Disadvantaged Areas (DAs) accounting for 33% of the LFA. The Moorland designation of semi-natural vegetation covers 42% of the LFA area⁵. These are areas where farming is more difficult because of poor climate, soils and terrain, which in turn lead to lower yields and higher production and transportation costs. LFAs essentially define the upland hill-farming areas; they include almost all of the upland areas in the North of England (including the Pennines, Lake District and North York Moors) the Peak District, the English part of the English-Welsh border, Exmoor, Dartmoor, and parts of Cornwall. In England, 27% of beef cows and 40% of female breeding sheep are on LFA grazing livestock farms⁶. Farming plays a crucial role in maintaining the distinctive landscape of such areas.

There are some 12,904 commercial holdings classified as Grazing Livestock (LFA) farms and these account for 1.5 million ha of English farmland (excluding commons) ⁷. While these holdings predominantly farm in the LFA this is not exclusively the case; that is some LFA Grazing livestock farms may farm areas of lowland and some Lowland grazing farms may farm some areas of the LFA. Of the 12,904 LFA Grazing livestock holdings, this report presents data representing the 6,928 commercial holdings above the lower size limit of 25,000 euros of Standard Output (see below).

As we reported last year (Hill Farming in England, 2017/18, RBR) the continued economic health of the farmers (and other land users and managers) in the uplands is of considerable value to society. The current performance and, hence, economic health of the livestock farmers in the Less Favoured Areas of England is the focus of this report. (Other farm types present in the LFA including Upland Dairy farms are covered by other Enterprise Reports in this series, see Appendix 8. Reports in this series).

1.1 The LFA

Map 1 (Appendix 1) shows the LFA areas and also the Government Office (GO) Regions. This report does not concentrate on data by Government Office region (which is otherwise available on the <u>Rural Business Research</u> website) but rather the EU Regions, which are used for administrative purposes at the European level and represent amalgamations of GO Regions:

- EU West Region comprises the South West and West Midlands GO regions.
- <u>EU North</u> Region includes North West, North East and Yorkshire & Humberside GO regions.
- EU East Region is the East Midlands, Eastern and South East GO regions.

⁴ Defra- http://archive.defra.gov.uk/rural/countryside/uplands/land-classification.htm

⁵ Natural England - Entry Level Stewardship: Environmental Stewardship Handbook (NE349)

⁶Data from Defra, June Survey of Agriculture and Horticulture, 2019

⁷ Data from Defra, June Survey of Agriculture and Horticulture, 2019

The LFA designation is part of EU law and extra farm support was provided for farms in these areas as Hill Livestock Compensatory Allowances between 1975 and 2000. This was paid as headage support to eligible beef cows and ewes. In 2001 this support was replaced by an area based scheme - the Hill Farming Allowance (HFA). In 2010 the HFA scheme was replaced by the Uplands Entry Level Stewardship Scheme (Uplands ELS). For further detail see the section on Hill Farm Support below.

A major change to note is that land in the Disadvantaged Areas (DA) became ineligible for HFA as of 1st January 2007 (including Moorland and common land in the DA). In comparison to land in the SDA, land in the DA is generally higher-grade agricultural land, is more accessible, and producers have more options to maximise the potential of the land. Under the Single Payment Scheme (SPS) and now the Basic Payment Scheme (BPS) the DA is subsumed within the lowland region and therefore receives a higher flat rate payment than the SDA.

1.2 Hill Farm Support

The traditional basis of farming in the LFA is the keeping of beef suckler cows and breeding ewes. The breed of livestock kept corresponds with the type of land; the hills being dominated by hardy breeds and the lower land having more upland and lowland type stock. Between 2006 and 2009 (and with the exception of DA land from 2008 – see above) suckler cow and/or sheep producers who had at least 10 ha of eligible forage area in the English LFAs (including common land) were eligible for the HFA. Holdings with less than 10 ha of English LFA land were not eligible, unless part of the holding was in Wales, Scotland or Northern Ireland. Livestock had to be kept at a minimum stocking density of 0.15 livestock units per hectare (LU/ha); this could be less if producers were taking part in an agri-environment or other scheme which restricted their stocking density. Up to and including 2006, producers needed to follow Good Farming Practice (GFP) and undertake to keep their LFA land continuously in agricultural production for five years from the date of first payment of LFA support (i.e. HFA or HLCA).

Since 2007 producers had to follow Good Agricultural and Environmental Condition (GAEC) requirements to qualify for all support payments. The HFA scheme ended with the HFA 2010 payment in Spring 2010 (covering land farmed and stock held in 2009). From July 2010, uplands support became fully integrated into Environmental Stewardship with a specific uplands strand to the Entry Level Stewardship (Uplands ELS - UELS, and Organic Uplands ELS - OUELS). Farms that were in Environmentally Sensitive Area (ESA) agreements or Countryside Stewardship Schemes (CSS) were excluded from applying for UELS but were able to apply for the Uplands Transitional Payment (UTP) until such time as the ESA or CSS agreement terminated. The payment rates (per hectare) for the 2018 UELS and OUELS schemes are shown in Table 1. Although 2018 was designated the final year for the UELS, some farms have been invited to roll the scheme forward at the discretion of Natural England.

Table 1 Uplands Entry Level Scheme rates (2018)

Uplands Entry Level Scheme payments (£/ha) 2018

Land Type	UELS	OUELS
SDA below the moorland line	£62	£92
SDA above the moorland line in parcels of <15ha (not commonland)	£62	£92
SDA above the moorland line in parcels of >15ha (not commonland)	£23	£23
SDA above the moorland line in parcels of >15ha on commons	£28	£28

2. The Data: FBS Grazing Livestock Farms (LFA)

The data presented in this publication comes from 212 farms, which are all part of the Farm Business Survey. Sixty-three per cent come from the EU North Region, 28% from the EU West and the remaining 9% from the EU East. The data have been 'weighted' to represent the total population with each individual farm assigned a weighting factor. As a consequence, the 'raised sample' provides a basis for estimating the total land use and performance for the LFA, by farm type and by region.

2.1 Farm Types within the LFA

The Farm Business Survey classifies farms based upon Standard Outputs (SO)⁸. This is a departure from the Standard Gross Margins (SGM) basis for classification which prior 2010/11 was used to the year (see http://www.defra.gov.uk/statistics/foodfarm/farmmanage/fbs). Where comparisons are made with the 2009/10 year the 2009/10 data has been reconfigured onto an SO basis. LFA Grazing Livestock Farms are holdings on which cattle, sheep and other grazing livestock account for more than two thirds of their total SO - except holdings classified as dairy. Dairy farms are those where dairy cows account for more than two thirds of the total SO (and are excluded from this report). A holding is classified as an LFA holding if 50% or more of its total area is in the LFA. Of holdings classified as LFA, those whose LFA land is wholly or mainly (50 per cent or more) in the SDA are classified as SDA; those whose LFA land is wholly or mainly (more than 50%) in the DA are classified as DA. For the purposes of the survey, only those farms with an SO of greater than 25,000 euros are considered, which excludes some 11,000 very small holdings in the LFA. In addition, these farms are also classified according to their size (measured by their 'standard labour requirement' (SLR) see Appendix 10. Definition of Terms).

The structure of the sample and estimates of the population distribution are shown in Table 2. The population estimates are calculated using weighted sample data. As can

⁸ The Standard Output (SO) for a farm business represents the theoretical output for all the agricultural production activities on the farm, based on standard coefficients for each commodity on the farm. The SO is representative of expected output under typical conditions for enterprises of average size and performance. Farms are classified according to the enterprise mix of SOs on a farm. 2007 SO coefficients are used to classify the farm datasets from 2010/11 to 2011/12, 2010 SO coefficients used for the datasets 2012/13 to 2017/18 and 2013 SO coefficients from 2018/19 (2017/18 results have been recalculated and presented in this report on the 2013 coefficients. (See Appendix 10. Definition of Terms, for more information on Standard Output.)

be seen, the FBS sample is (deliberately) biased towards the larger (and more commercial) farms, which are responsible for the management of most of the LFA. However, the results presented in this report are weighted to remove this selection bias.

Table 2 Sam	ple character	istics and pop	ulation o	distribution ((2018))

Farm	Sam	ple	Population from 2018 June survey		Average size (SLR) *		•	ge area ed (ha)
Size	No.	%	No.	%	Sample	June survey	Sample	June survey
Part-time †	22	11%	2886	42%	0.7	0.6	61	60
Small	54	27%	1865	27%	1.5	1.4	106	126
Medium	50	25%	951	14%	2.5	2.4	175	230
Large	86	43%	1226	18%	5.9	5.1	423	553
All Sizes	212	100%	6928	100%	2.3	1.9	168	188

^{*} The Standard Labour Requirement (SLR) for a farm business represents the labour requirement (in full-time equivalents) for all the agricultural activities on the farm, based on standard coefficients for each enterprise on the farm. The SLR is representative of labour requirement under typical conditions for enterprises of average size and performance.

¢ Average area farmed is unadjusted UAA plus land rented in on a short term basis (net of land let out on a short term basis).

Within this Grazing Livestock (LFA) group there are four sub-groups:

- 1. *SDA Sheep* farms where more than two thirds of the total SO is accounted by sheep, and 50% or more of the total area of the farm is in the LFA, of which 50% or more is in the SDA;
- 2. *SDA Beef* farms where more than two thirds of the total SO is accounted by beef cattle, and 50% or more of the total area of the farm is in the LFA, of which 50% or more is in the SDA;
- 3. SDA Cattle and Sheep- farms that are neither specialist sheep or cattle but where more than two thirds of the total SGM is accounted by beef cattle and sheep, and 50% or more of the total area of the farm is in the LFA, of which 50% or more is in the SDA;
- 4. *DA Cattle and sheep farms* farms where more than two thirds of the total SO is accounted by beef cattle and sheep, and 50% or more of the total area of the farm is in the LFA, of which 50% or more is in the DA;

Other farm types are present in the LFAs, but analysis has been restricted to cattle and sheep farms as they represent the most common type of LFA holdings.

[†] Part-Time includes 2 Spare-time sample farms which are excluded from the SLR analysis. Large and Very large SLR bands are combined in the SLR analysis in band 4. Note: FBS survey data refers only to those businesses calculated to generate more than €25,000 of Standard Output (see footnote 8) which excludes 11,000 very small 'holdings' within the LFA as recorded by the June Survey.

3. The LFA Farms in context

The comparative business performance of LFA farms is illustrated in Figure 1, which compares the Net Farm Income (NFI) and Farm Business Income (FBI) per farm earned by the LFA grazing farms and by all farms in the England FBS sample over the last ten years. In order to compare the pre-2009/10 data (where the data is only available on an SGM basis of classification) with the 2010/11 to 2012/13 data, the 2009/10 data have been reclassified on a Standard Output (2007SO) basis and both data sets for 2009/10 are presented. The trend up to 2009/10 can then be clearly seen on an SGM basis and the 2009/10 to 2017/18 trend on an SO basis. In fact there is actually very little difference at this level between the two methods of classification on the data presented for 2009/10. The 2012/13 data is also presented under both the 2007SO and 2010SO bases. Farm Business Income represents the financial return to all unpaid labour (farmers and spouses, non-principal partners and their spouses and family workers) and on all their capital invested in the farm business, including land and buildings (net of any interest payments on debt capital). Net Farm Income deducts from Farm Business Income a notional return to unpaid family labour (at local wage rates) and also deducts an imputed rental figure for owner-occupied land (at prevailing local rents for similar land) and adds back net interest payments and landlord type expenses. Hence NFI is a measure of the returns to the farmers' own labour, tenant's capital and management, on a consistent basis for both owned and tenanted farms.

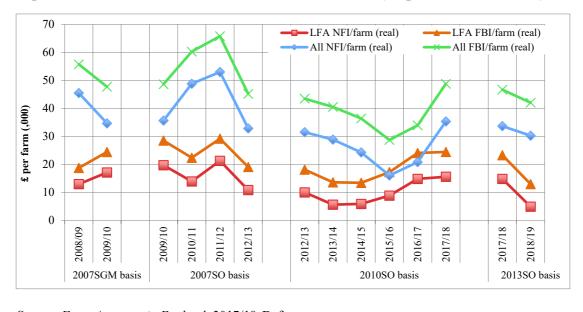


Figure 1 LFA^a farms vs All farms 2008/09 to 2018/19 (England in real^b terms)

Source: Farm Accounts in England, 2017/18, Defra Notes: a: defined as Upland Grazing Farms b: Real terms = deflated by RPI (all items).

As can be seen, the upland farms have always under-performed relative to their peers elsewhere in the industry in terms of income per farm. The average farm generally has shown variable income performance over the last ten years in real (purchasing power) terms. The national income peaks of English farms in general, of 2011/12 and 2017/18, were not shared with their upland counterparts although the LFA farms did experience slight upturns at those points. From 2014/15 LFA incomes did increase

slightly through to 2017/18, only to drop back again in 2018/19 to levels not seen since 2006/07.

However, there is substantial variation around these average figures for all farms, both between regions and between years, as Figure 2 illustrates.

40 2015/16 (10SO basis) 35 ■2016/17 (10SO basis) 2017/18 (13SO basis) 30 ■2018/19 (13SO basis) £ per farm (,000) 25 20 10 5 0 West North West North East Yorkshire & East Midlands South West England Midlands Humber

Figure 2 LFA Farm Business Income per farm, by region (2015/16 to 2018/19)

Source: - Government Office Reports, 2018/19, RBR.

Notes: Data in real terms (by RPI) 2015/16 to 2016/17 on a 2010SO basis and 2017/18 to 2018/19 on a 2013SO basis.

4. The Average LFA Farm in 2018/19

Although the average LFA farm in the FBS sample in 2018/19 does not reflect the wide variation in either the sample, or still more the whole population, its description still provides a general picture of the sector. The sample represents just over 6,900 LFA farms in England (excluding the smallest farms - those with a Standard Output of less than 25,000 euros). The average farm area is 172 ha plus common grazing. This area includes some 7 ha under woodland, buildings and roads and 66 ha rough grazing. A further 4 ha of land is rented in (net of land let out) giving a total of 168 ha farmed (excluding common grazing). The adjusted area (see Appendix 10. Definition of Terms, for a full description of adjusted area) of the on-farm rough grazing equates to 19 ha adjusted area which, plus 9 ha of adjusted common grazing, gives a total adjusted area farmed of 130 ha. The average farm is part owned (78 ha) and part rented (94 ha) and most of the farm (96 ha) is in permanent grass. The average LFA farmer is 61 years old, and has 26 beef cows and 383 breeding ewes. Cattle and Sheep youngstock and fatstock make up the total to 83 cattle and 752 sheep on the farm, making a total of 90 Grazing Livestock Units (GLUs) ⁹.

GLUs convert different livestock types (cows, sheep, young stock) into a common unit based on nutrient requirements, with a dairy cow being the numeraire (=1 GLU).

4.1 The average LFA Farm account

The average LFA Grazing Livestock farm in England in 2018/19 is represented by the set of accounts shown in Table 3. This table reports the average farm accounts for the whole sample of 212 farms, broken out by four "cost centres" representing the different aspects of the farm business: agriculture (production agriculture and agricultural contracting) environmental management, diversification (off farm activities except agricultural contracting) and the Basic Payment Scheme. To the extent possible, the variable costs of the business have been separated out as relevant to each of these cost centres, while fixed costs (including depreciation) have also been allocated so far as possible, including the casual labour cost, according to the shares of each centre in total costs.

On average, these farms only earn some 59% of their total revenue (output) from the agriculture cost centre, with 25% coming from the Basic Payment, and 11% from specific agri-environment payments. The balance of revenues (5%) is earned from non-farm activities (mostly associated with tourism and recreation and non-agricultural contracting; agricultural contracting is included in the agriculture cost centre). The farming business covers its variable costs and earns a positive gross margin of £21,839 per farm (a 14% increase on the previous year). However, since the production agriculture side of the farm business is assumed to incur most of the fixed costs (81%) the average LFA farm is shown to generate a negative Agricultural Business Income of -£21,496 per farm in 2018/19 – a 79% reduction on the figure of -£11,983 in the previous year.

The revenues earned from agri-environment, diversification and the Basic farm payments more than offset their own costs and are able to offset the losses from traditional production activities to generate a headline <u>Farm Business Income (FBI)</u> (or profit) of £15,545 per farm in 2018/19, a 42% deterioration on the previous year. This income fails to cover the opportunity costs of the unpaid labour (provided by the farmer and partners) of £27,951 per farm and as a result, <u>Farm Corporate Income</u> registers at -£12,406 per farm (a 1768% decrease on the -£664 in 2017/18). Adjusting for the net interest payments made by the farm, the <u>Farm Investment Income</u> (which represents the return on risk and entrepreneurship on all capital invested in the farm business whether borrowed or not) is -£9,109, down by 460% compared with the previous year's figure of £2,533.

The traditional measure of farm income is Net Farm Income (NFI)¹⁰. NFI adjusts the business accounts to put all farm business on the same (tenancy) basis. A rental value is imputed for all owner-occupied farms (as a measure of the opportunity cost of owning land, item 12 in Table 3) and adjusted for landlord costs (item 13 in Table 3). In addition, NFI is gross of the unpaid labour of the principal farmer and spouse (though not that of other partners). NFI is, therefore, an expression of the returns earned by the business to pay the farmer and spouse for their own labour, management and tenant's capital invested in the business. The net result of these

Following extensive consultation, Defra decided that Farm Business Income is a more appropriate headline measure of farm income, particularly on the grounds that most farms are not rented nowadays, and that there are a number of other business arrangements emerging between landowners and operators. However, this does mean that Farm Business Income may not be strictly comparable between farms with different tenure/ownership arrangements.

adjustments is shown in Table 3, giving an average NFI of £5,906 per farm, down 66% from £17,184 in 2017/18.

In the case of LFA grazing farms there is still a substantial number of tenanted farms. In the EU North Region, where 67% of LFA farms are found, only 43% of the land is owned. The average proportion of land owned on LFA grazing farms over the whole country is only 47% compared to a national average of 67% across all farm types (Defra 2018). It therefore makes some sense in the case of LFA farms to retain a focus on NFI as opposed to FBI for comparison purposes.

4.2 Uplands Transitional Payment and Uplands Entry Level Scheme

The Hill Farm Allowance (HFA) ended with the 2010 HFA payment in the spring of 2010 (relating to the 2009 farming year). All farmers previously eligible for the HFA were entitled to apply for the Uplands Entry Level Scheme (UELS) or the Uplands Transitional Payment (UTP) if still participating in other agri-environment schemes. As the Environmentally Sensitive Area (ESA) and Countryside Stewardship Schemes (CSS) came to an end in 2015 to 2016 so did the top-up UTP – all upland support now accessed through the UELS (or Organic UELS [OUELS] for organic farms). The UELS (and OUELS) measures of support are recorded on an "as-received" basis (as are most other agri-environmental payments) rather than on an "as-due" basis as had been the case for the HFA. This does mean that year on year comparisons of both overall income and the agri-environment cost centre's contribution to farm income must be tempered with the understanding that there may be multiple payments in some years and absent in others – simply due to the timing of these payments. The UELS (and OUELS) officially ended in 2018 but some farms have been invited (by Natural England, and where appropriate criteria are met) to roll the scheme forward one year at a time.

Table 3 LFA Grazing Livestock Farms: Business Output, Input Costs and Income

The average LFA grazing farm

Derivation of farm income measures							Cost C	entre (£ pe	er farm)							
		Agricultu	ıre		Agri-envi	ronment		Diversific	ation out		Basic Pay	ment		Farm Business		
					and other	payments		of agricul	lture		Scheme			(£ per farı	n)	
		2017/18	2018/19	% change	2017/18	2018/19	% change	2017/18	2018/19	% change	2017/18	2018/19	% change	2017/18	2018/19	% change
%	contribution of cost centre revenue to total:	60%	59%		11%	11%		5%	5%		24%	25%				
1	Total output (Revenue)	71,550	67,625	-5%	13,587	12,774	-6%	5,613	5,460	-3%	28,521	28,938	1%	119,270	114,797	-4%
2	Variable costs	42,424	45,786	8%	5	16	229%	100	146	46%	4	11	-	42,533	45,960	8%
3 =1-2	Total Gross margin	19,126	21,839	14%	13,582	12,758	-6%	5,513	5,314	-4%	28,517	28,927	1%	76,738	68,837	-10%
4	Fixed costs	41,425	43,381	5%	2,273	2,426	7%	2,468	2,650	7%	3,885	4,882	26%	50,050	53,338	7%
5 =2+4	Total Costs	82,848	89,166	8%	2,278	2,442	7%	2,568	2,796	9%	3,889	4,893	26%	92,583	99,298	7%
6	Profit/(loss) on sale of fixed assets	316	46	-86%										316	46	-86%
7=1-5+6	Farm Business Income	-11,983	-21,496	-79%	11,309	10,332	-9%	3,045	2,664	-13%	24,632	24,045	-2%	27,003	15,545	-42%
8	Adjustment for unpaid manual labour	26,093	26,062	0%	451	463	3%	1,123	1,426	27%	0	0	-	27,667	27,951	1%
9 =7-8	Farm Corporate Income	-38,076	-47,558	-25%	10,858	9,869	-9%	1,922	1,238	-36%	24,632	24,045	-2%	-664	-12,406	-1768%
10	Interest payments (net of interest received)	2,867	2,968	4%	98	108	10%	100	83	-17%	132	139	5%	3,197	3,297	3%
11 =9+10	Farm Investment Income	-35,209	-44,590	-27%	10,956	9,977	-9%	2,023	1,321	-35%	24,764	24,184	-2%	2,533	-9,109	-460%
	% contribution of cost centre costs to total:	89%	90%		2%	2%		3%	3%		4%	5%				
				12								In	puted rent	11,566	11,652	1%
				13								Ownersh	ip charges	3,649	3,803	4%
				18							D	irector's rer	nuneration	123	259	-
				16					U	npaid labo	ur of princi	pal farmer a	and spouse	22,445	22,604	1%
				17 =11-12	+13+18+16	,						Net Far	m Income	17,184	5,906	-66%
				19						Holding ga	ains not inc	luded in fa	rm income	-4,523	-3,292	-27%
				20						Breeding	Livestock	Appreciation	on (BLSA)	2,166	-5,591	-358%
	2018/19 Sample size (unweighted)	212		21				Revalua	tion of mad	chinery, per	rmanent cro	ps, glassho	use, quota	351	1,995	468%
	Number (weighted)	6,928		22 Revalutation of land			-7,040	304	-104%							
	2017/18 Sample size (unweighted)	203		23							Manager's	paid manag	erial input	59	52	-13%
	Number (weighted)	6,861		24 =17-16	+23					Manag	gement and	Investme	nt Income	-5,202	-16,647	-220%

5. The LFA Farms' circumstances

There is, as already noted, a substantial range of performance exhibited by the sample. Figure 3 shows the sample distribution by quartile, based on Farm Business Income per farm. The "high" group of farms is the upper quartile of the (weighted) distribution of farms, consisting of the top 25% of farms ranked by FBI/farm, with the other quartiles defined accordingly. Figure 3 also distinguishes between the Agriculture Business Income (ABI) (derived solely from the agricultural enterprises. and excluding environmental, diversification and the Basic Payment Scheme (BPS)) and the Farm Business Income (which includes environmental, diversification and BPS payments). Hence, the difference between the two measures indicates the contribution of the strictly non-agricultural 'enterprises' in the farm business – the environmental schemes, diversification income and BPS payments. As can be seen, all LFA farm groups make losses as far as their agricultural enterprises are concerned. The medium and top quartiles manage to offset these losses by the incomes earned through environmental and diversification activities and the BPS, but not so for the lowest quartile which returns a negative FBI. In general, the better performing farms make greater incomes from their non-agricultural farm business activities and receipts.

As we reported in Hill Farming in England, 2006/7 (RBR) current estimates of the social value of landscape management and environmental conservation associated with hill farming in England broadly correspond to the extent of public payments made to these farms for their provision of CARE (Conservation, Amenity, Recreation and Environment). We have no new information to elaborate on this broad correspondence for this report.



Figure 3 LFA Agriculture and Farm Business Income by FBI/farm quartile

Figure 4 presents similar data on farm business performance by quartile, though here on the basis of Farm Business Income (FBI) per Grazing Livestock Unit (GLU) which

removes the effect of farm size on the FBI earnings per farm. The story remains the same with all LFA farm groups returning a negative Agriculture Business Income or net margin for their production activities.

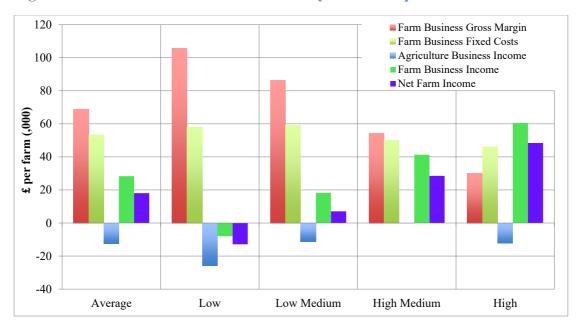


Figure 4 LFA Farm Business Performance by FBI/GLU quartile

Figure 5 demonstrates how, while the CARE Business Income can rescue most farms, it is insufficient to offset the ABI losses of the lowest quartile and this group returns a negative NFI. The improvement in ABI performance is seen to be the result of both better gross margins (revenues minus variable costs) and lower fixed costs per GLU exhibited by these farms.

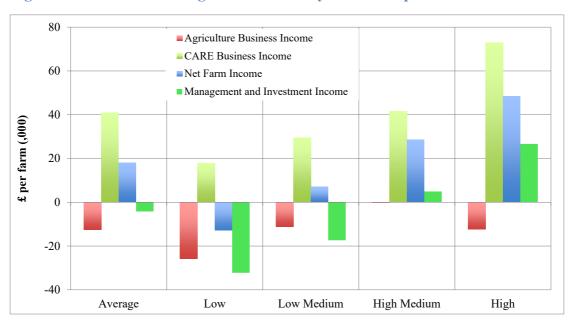


Figure 5 LFA Farm Earnings Performance by FBI/GLU quartile

The viability of all LFA farms depends heavily on the CARE payments (the BPS payments, environmental payments and income from recreation and amenity services) as indicated by the differences between the Agriculture Business Income and the

Farm Business Income. Figure 5 also shows the Management and Investment Income (MII) per farm; Management and Investment Income deducts a notional payment for the unpaid labour of the farmer and spouse and represents the balance available as a return on invested capital. Only the top two quartiles manage a positive MII suggesting that only these businesses are economically robust in the longer term.

Figure 6, showing the main measures of business performance by main farm type, suggests that the SDA Mixed grazing and Specialist sheep livestock groups appear to be the most profitable at the NFI level despite both having a negative ABI. The Specialist beef farms however, not only suffer losses at the ABI level but are barely able to recoup these losses through gains in CARE income in the same way as other farm types are able. The Various grazing livestock (DA) farms in the Disadvantaged Area of the LFA designation are now (since 2008) ineligible for the targeted Upland support (now the UELS) which provides a substantial share of the CARE revenue for farms with predominantly SDA land.

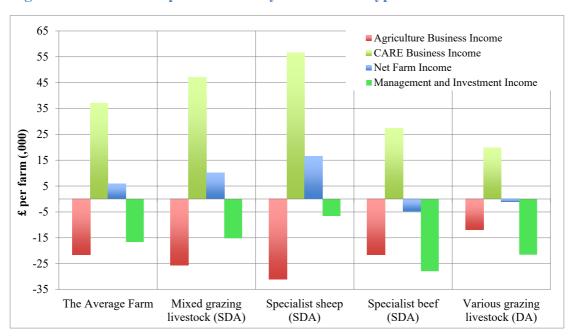


Figure 6 LFA business performance by Main Farm Type

Figure 7 shows the business performance by size, measured here by the Standard Labour Requirement (SLR)¹¹ and illustrates that size is important to these farms' earning ability, although as previously seen it is the CARE income that rescues all farms from economic failure. The greater losses of ABI in the larger size groups demonstrate that in years of poor performance of the Agriculture cost centre when farm gross margins are reduced, there are size related fixed costs that still have to be covered. This figure dramatically demonstrates both the importance of CARE income and the weak position of production agriculture to LFA farms. A full explanation of the derivation and boundaries of the SLR size bands is given in paragraph 15 of Appendix 10. Definition of Terms.

¹¹ The Standard Labour Requirement (SLR) for a farm business represents the labour requirement (in full-time equivalents) for all the agricultural activities on the farm, based on standard coefficients for each commodity on the farm. The SLR is representative of labour requirement under typical conditions for enterprises of average size and performance.

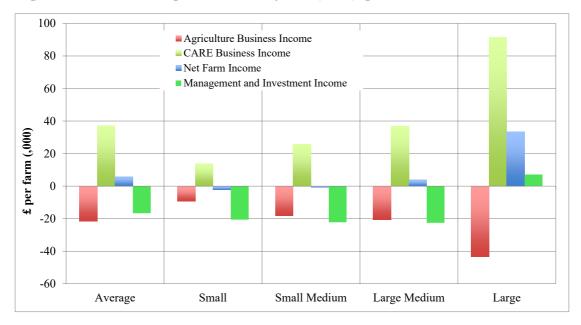


Figure 7 LFA business performance by size (SLR) quartile

Figure 8 shows the same business performance measures by EU region. As above, it is the CARE income that dominates the picture of business performance. The average LFA farm in England North is considerably larger, has more sheep and has less cattle than LFA farms in England East or West – which, from above, will partly explain the differences in regional profitability.

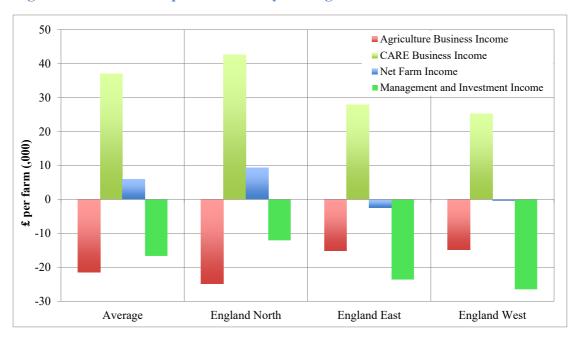


Figure 8 LFA business performance by EU region

5.1 Frequency distribution of farm incomes

The distribution of LFA farm incomes in England is shown in Figure 9 to Figure 11. The income bands have been amalgamated to avoid presenting groups of less than 10 farms. There is substantial variation between farms across the income measures and it is abundantly clear that less than 50% manage to realise a positive MII – as in a

positive return on the tenant's capital invested and return on the farmer's management skills.

Figure 9 Frequency Distribution of FBI/farm of LFA Farms in England

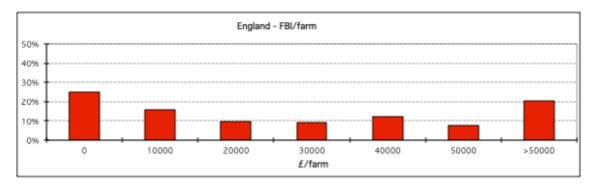


Figure 10 Frequency Distribution of NFI/farm of LFA farms in England

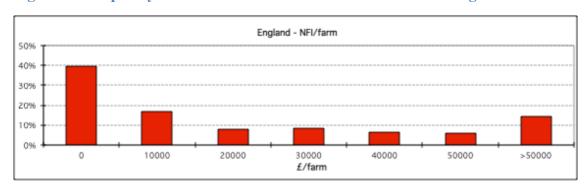
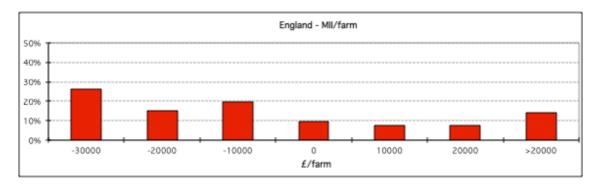


Figure 11 Frequency Distribution of MII/farm on LFA farms in England



6. LFA Enterprise Gross Margins

The major livestock enterprises on LFA grazing farms are suckler cows, typically producing store cattle (for finishing in the lowlands) and Hill and Upland sheep flocks, typically producing cross-bred ewe lambs (supplying the lowland flocks with breeding stock) and store lambs (also for finishing in the lowlands). Where conditions allow some cattle and lamb finishing also occurs on LFA farms.

Enterprise margins for Upland sheep are shown in Table 4 with a flock stratification shown in Table 5. Upland sheep flocks are those with lambing rates typically in excess of 100% (FBS Enterprise code 103) and more typically found on lower altitude LFA farms than Hill sheep flocks (lambing rates typically less than 100% FBS Enterprise code 102).

Table 4 SDA upland sheep flock performance 2017/18 and 2018/19

	All Upland flocks		C	hange
	2017/18	2018/19	£/ewe	%
Number of farms	109	109		
Number of farms (weighted)	3105	3183		
Flock size (no. ewes)	494	512	18.1	4%
(£ per ewe)				
Enterprise Output (excl. BLSA)	105.5	92.0	-13.6	-13%
BLSA	0.6	-9.6	-10.3	-1602%
Total Variable costs	51.8	55.6	3.9	8%
Concentrates	20.4	23.0	2.6	13%
Purchased fodder and keep	4.9	5.3	0.4	8%
Veterinary and medicines	8.0	7.5	-0.5	-7%
Other livestock costs	12.6	13.3	0.7	6%
Forage variable costs	5.9	6.5	0.7	12%
Gross Margin (excl. BLSA) / Ewe	53.8	36.3	-17.5	-32%
Gross Margin range	-42 to 137	-45 to 111		
Total Fixed costs	70.7	67.4	-3.3	-5%
Total costs	122.4	123.1	0.6	1%
Enterprise NM (excluding BLSA)	-16.9	-31.1	-14.2	84%
Enterprise NM after F&S labour (excl BLSA)	-48.1	-60.9	-12.8	27%
Stocking rate (GLUs/total adj ha)	0.74	0.70	0.0	-5%
Lambing rate (born and reared/average no. ewes)	1.49	1.34	-0.1	-10%

Table 5 SDA upland sheep flock performance by flock size 2018/19

		<300	300-600	>600
2018 lambing	All flocks	ewes	ewes	ewes
Number of farms	109	29	40	40
Number of farms (weighted)	3183	1250	1074	860
Flock size (no. ewes)	512	169	415	1133
(£ per ewe)				
Enterprise Output (excluding BLSA)	92.0	76.6	97.4	92.8
BLSA	-9.6	-9.0	-8.6	-10.3
Total Variable costs, of which:	55.6	48.0	56.0	57.1
Concentrates	23.0	17.6	24.7	23.4
Purchased fodder and keep	5.3	4.5	4.6	5.8
Veterinary and medicines	7.5	6.9	7.3	7.8
Other livestock costs	13.3	13.2	12.0	13.9
Forage variable costs	6.5	5.8	7.4	6.3
Gross Margin (excluding BLSA) / Ewe	36.3	28.6	41.4	35.7
Total Fixed costs	37.6	65.7	32.2	34.1
Total costs	28.0	56.7	23.6	23.8
Net Margin (excluding BLSA) / Ewe	-31.1	-59.9	-24.8	-27.7
Net Margin after F&S labour (excl BLSA)	-60.9	-122.5	-67.0	-44.8
Stocking rate (GLUs/total adj ha)	0.70	0.70	0.73	0.69
Lambing rate (born and reared/average no. ewes)	1.34	1.32	1.42	1.31

Table 6 SDA hill sheep flock performance 2017/18 and 2018/19

	All Hil	All Hill flocks		nge
	2017	2018		
	lambing	lambing	£/ewe	%
Number of farms	56	59		
Number of farms (weighted)	1818	1743		
Flock size (no.ewes)	540	528	-11	-2%
(£ per ewe)				
Enterprise Output (excl. BLSA)	59.4	59.9	0.6	1%
BLSA	2.1	-8.3	-10.4	-505%
Total Variable costs	41.3	45.0	3.7	9%
Concentrates	15.6	18.1	2.5	16%
Purchased fodder and keep	6.3	6.8	0.4	7%
Veterinary and medicines	7.1	7.2	0.1	2%
Other livestock costs	9.2	9.1	-0.1	-1%
Forage variable costs	3.2	3.9	0.7	23%
Gross Margin (excl. BLSA) / Ewe	18.1	14.9	-3.1	-17%
Gross Margin range	-88 to 99	-43 to 114		
Total Fixed costs	61.7	62.7	1.0	2%
Total costs	103.0	107.7	4.7	5%
Net Margin (excl. BLSA) / Ewe	-43.6	-47.8	-4.1	10%
Net Margin after F&S labour (excl. BLSA)	-66.5	-71.7	-5.3	8%
Stocking rate (GLUs/total adj ha)	0.55	0.59	0.0	7%
Lambing rate (born and reared/average no. ewes)	1.08	1.04	0.0	-3%

Table 7 SDA hill sheep flock performance by flock size 2018/19

	All	<300	300-600	>600
2018 lambing	flocks	ewes	ewes	ewes
Number of farms	59	19	23	17
Number of farms (weighted)	1743	750	641	352
Flock size (no.ewes)	528	164	434	1474
(£ per ewe)				
Enterprise Output (excl. BLSA)	59.9	76.4	57.9	57.1
BLSA	-8.3	-6.1	-7.2	-9.5
Total Variable costs, of which:	45.0	50.6	46.8	42.7
Concentrates	18.1	21.8	18.0	17.2
Purchased fodder and keep	6.8	1.9	7.1	7.7
Veterinary and medicines	7.2	8.3	7.5	6.8
Other livestock costs	9.1	12.1	9.8	8.0
Forage variable costs	3.9	6.4	4.4	3.1
Gross Margin (excl. BLSA) / Ewe	14.9	25.8	11.1	14.4
Total Fixed costs	51.7	67.8	56.4	45.4
Total costs	43.3	61.6	49.2	35.9
Net Margin (excl. BLSA) / Ewe	-47.8	-61.4	-52.0	-42.3
Net Margin after F&S labour (excl. BLSA)	-71.7	-124.4	-81.3	-54.2
Stocking rate (GLUs/total adj ha)	0.59	0.64	0.58	0.57
Lambing rate (born and reared/average no. ewes)	1.04	1.23	1.05	0.99

^{*}A part of this table was derived from data with less than 15 observations in the sample which could reduce the robustness of the results

Table 4 to Table 7 show that Sheep farming on its own in the English LFA by whatever measure is unable to fully cover all enterprise costs. There are also very clear economies of scale. This has major implications for the UK Sheep industry as a whole and the critical role that non-agricultural income streams play on LFA farms.

Table 8 LFA suckler herd performance 2017/18 and 2018/19

	All herds		ch	ange
	2017/18	2018/19	£/cow	%
Number of farms	149	153		
Number of farms (weighted)	3,969	4,171		
Herd size (no.cows)	41	39	-2	-4%
(£ per cow)				
Enterprise Output (excl. BLSA)	430	425	-5	-1%
BLSA	63	-75	-137	-219%
Total Variable costs	206	234	29	14%
Concentrates	57	61	4	7%
Purchased fodder and keep	23	33	10	46%
Veterinary and medicines	28	27	-1	-2%
Other livestock costs	55	65	10	19%
Forage variable costs	43	48	5	11%
Gross Margin (excl. BLSA) / Cow	224	191	-34	-15%
Gross Margin range	-1855 to 2557	-594 to 578		
Total Fixed costs	428	445	18	4%
Total costs	633	680	46	7%
Enterprise NM (excl. BLSA)	-203	-255	-51	25%
Enterprise NM after F&S labour (excl. BLSA)	-377	-441	-64	17%

LFA Suckler cow results, for 2017/18 and 2018/19, are shown in Table 8 with a herd size stratification shown in Table 9, both tables demonstrate that Beef farming in the

English LFA, regardless of size, is unable to cover all enterprise costs, and that this must have major implications for the UK Beef supply industry.

Table 9 LFA suckler herd performance by herd size 2018/19

2018/19 calving period	All herds	<30 cows	30-60 cows	>60 cows
Number of farms	153	52	60	41
Number of farms (weighted)	4,171	1,999	1,527	645
Herd size (no.cows)	39	17	41	103
(£ per cow)				
Enterprise Output (excl. BLSA)	425	387	413	456
BLSA	-75	-84	-65	-79
Total Variable costs, of which:	234	276	236	212
Concentrates	61	64	63	57
Purchased fodder and keep	33	63	22	29
Veterinary and medicines	27	30	31	23
Other livestock costs	65	72	73	55
Forage variable costs	48	47	48	48
Gross Margin (excl. BLSA) / Cow	191	111	176	244
Total Fixed costs	445	475	454	422
Total costs	680	751	690	634
Enterprise NM (excl. BLSA)	-255	-365	-277	-178
Enterprise NM after F&S labour (excl. BLSA)	-441	-657	-519	-260

A further more detailed analysis of LFA enterprise gross margins and efficiency factors is presented in Table 37 to Table 41 for all LFA enterprises with a sample size greater than 10 farms. The premium group is calculated as the top third of the sample on the basis of Gross Margin per cow or ewe, or in the trading livestock enterprises, the top third by Gross Margin per adjusted hectare.

7. Organic LFA farms

The current sample of 212 English LFA grazing farms includes 20 fully organic farms. Within this there are 17 organic suckler herds, 13 organic upland flocks and 4 organic hill flocks.

Table 10 compares suckler herd performance to the gross margin (GM) and net margin (NM) level across organic and non-organic farms. The organic suckler herd output is £47/cow less than the non-organic output but with £88/cow less spent on variable costs (particularly concentrates and purchased fodder) the gross margin for organic sucklers is £40/cow more than the non-organic average. As can be seen from the spread of GMs there is considerable variation across farms. Organic fixed costs are unusually higher, by £59/cow, than the non-organics meaning that the non-organic farms have a £18/cow advantage at the net margin level (excepting farmer and spouse labour). After allowing for the farmer and spouse labour the final net margins are £19/cow higher for organic herds than the non-organic herds (albeit negative in both cases). The stocking rate for the organic farms is 0.69 GLU/total adjusted area (including commons and all land rented in) and 0.74 GLU/total adjusted area for the non-organics.

Table 10 LFA suckler herd performance Non-organic and Organic (£/cow)

2018/19	All Suckler herds	
	Non-organics	Organics
Number of farms	136	17
Number of farms (weighted)	4026	145
Herd size (no.cows)	39	44
(£ per cow)		
Enterprise Output (excluding BLSA)	427	380
BLSA	-75	-63
Total Variable costs	238	150
Concentrates	63	21
Purchased fodder and keep	34	16
Veterinary and medicines	28	26
Other livestock costs	66	59
Forage costs	48	28
Gross Margin (excluding BLSA)	189	229
Gross Margin range	-594 to 566	60 to 578
Total Fixed costs	443	502
Total costs	681	652
Enterprise NM (excluding BLSA)	-254	-272
Enterprise NM after F&S labour (excl	-442	-423
Stocking rate (GLUs/total adj ha)	0.74	0.69

Table 11 compares organic and non-organic Upland SDA flocks to the GM and NM level. Enterprise output is £7/ewe lower for organics (at £85/ewe) than that of the non-organics. Variable costs are £15/ewe lower for organic flocks (at £41/ewe) than the non-organics. The resultant gross margin is £45/ewe for organic flocks and £36/ewe for the non-organic flocks. Fixed costs are £78/ewe for organic flocks and £67/ewe for non-organics — this results in net margins (after farmer and spouse labour) of -£53/ewe for organic flocks and -£61/ewe for non-organic flocks.

Table 11 SDA flock performance Non-organic and Organic

2018 lambing	Upland SDA Flocks		
	Non-organic	Organic	
Number of farms	96	13	
Number of farms (weighted)	3096	88	
Flock size (no. ewes)	515	408	
(£ per ewe)			
Enterprise Output (excluding BLSA)	92.1	85.0	
BLSA	-9.7	-9.4	
Total Variable costs	56.0	40.5	
Concentrates	23.3	11.4	
Purchased fodder and keep	5.3	3.1	
Veterinary and medicines	7.5	9.2	
Other livestock costs	13.3	13.8	
Forage costs	6.6	2.9	
Gross Margin (excluding BLSA) / Ewe	36.1	44.5	
Gross Margin range	-45 to 111	9 to 87	
Total Fixed costs	67.2	77.9	
Total costs	123.2	118.3	
Enterprise NM (excluding BLSA)	-31.1	-33.3	
Enterprise NM after F&S labour (excl BLSA)	-61.1	-53.4	
Stocking rate (GLUs/total adj ha)	0.70	0.78	
Lambing rate (born and reared/average no. ewes)	1.34	1.31	

^{*}A part of this table was derived from data with less than 15 observations in the sample which could reduce the robustness of the results

Table 12 compares whole farm profitability across all four cost centres between the 20 fully organic farms and the 192 non-organic LFA grazing farms in the sample. This table shows that the overall difference in profit favours the organic farms by £2,352 in Farm Business Income and by over £7,000 in Farm Corporate Income and Farm Investment Income. After the appropriate adjustments these profit figures translate to a Net Farm Income (NFI) of £6,688, which is £802 higher than the nonorganic LFA grazing farms, and a Management and Investment Income (MII) loss of -£13,770, which is £3,000 better than the non-organic farms' loss of -£16,720. This greater FBI is down to the higher profitability of the non-production cost centres; the Agri-environmental cost centre (by £977) the Basic payment cost centre (by £7,038) and the Diversification cost centre (by £679) which offset the £6,343 loss of the Agriculture cost centre. Agricultural production activities realise a negative FBI for both organic and non-organic farms. Clearly the large area advantage that the organic farms enjoy goes some way to explain the difference in the Basic Payment revenue – see Table 13. Table 13 compares the Organic sample with the Non-organic sample through a series of land use, stocking, outputs and variable costs. With an average area farmed of 215ha, organic farms are 29% larger, in area terms, of the nonorganics (167ha) and while a large portion of this is rough grazing very little of it is common land. Organic LFA farms are 60% owner occupied, against 46% for the nonorganics, and actually use 14% less labour (at 1.4 annual labour units per farm) than the non-organic average. Further comment on Organic farms may be found in a sister publication – see Appendix 8. Reports in this series.

Table 12 Farm Income measures by cost centre, Organic vs. Non-organic

2018 lamb crop						Cost Cen	tre (£ per fa	rm)			
				Agri-envir	onment	Diversification out of			Farm Business		ness
		Agriculture and other payments		agriculture	e	Basic Payr	nent Scheme Income				
		Non-		Non-		Non-		Non-		Non-	
Derivation of farm income measures		organic	Organic	organic	Organic	organic	Organic	organic	Organic	organic	Organic
% contribution of centre revenue to total:		59%	52%	11%		<u> </u>	4%	25%	32%		
Total output (Revenue)	(a)	67,819	59,972	12,747		5,471	5,016	28,745	36,551	114,783	115,371
Variable costs	(b)	45,987	37,866	14	97	150	11	10	65	46,161	38,038
Total Gross margin	(c =a-b)	21,832	22,106	12,733	13,735	5,321	5,005	28,735	36,487	68,622	77,333
Fixed costs	(d)	43,219	49,760	2,425	2,450	2,674	1,679	4,864	1 '	53,183	59,466
Total Costs	(e=b+d)	89,206	87,626	2,440	2,546	2,824	1,690	4,874	5,642	99,343	97,504
Profit/(loss) on sale of fixed assets	(f)	48	-28							48	-28
Farm Business Income	(g=a-e+f)	-21,339	-27,682	10,308	11,285	2,647	3,326	23,871	30,909	15,487	17,839
Adjustment for unpaid manual labour	(h)	26,182	21,353	463	437	1,442	805	0	0	28,087	22,595
Farm Corporate Income	(i=g-h)	-47,521	-49,035	9,844	10,848	1,206	2,521	23,871	30,909	-12,600	-4,756
Interest payments (net of interest received)	(j)	2,985	2,293	108	103	84	39	139	121	3,316	2,557
Farm Investment Income	$(\mathbf{k}=\mathbf{i}+\mathbf{j})$	-44,536	-46,742	9,952	10,951	1,289	2,560	24,010	31,031	-9,284	-2,200
% contribution of centre total costs to total:		90%	90%	2%	3%	3%	2%	5%	6%		
							I	mputed rent	(1)	11,506	17,412
							Owners	hip charges	(m)	3,772	5,030
							Director's re	muneration	(n)	246	773
					Unpaid la	bour of prin	cipal farmer	and spouse	(o)	22,657	20,496
		Net Farm Income				$(\mathbf{p}=k-l+m+n+o)$	5,886	6,688			
		Holding gains not included in farm income				(q)	-2,968	-16,083			
		Breeding Livestock Appreciation (BLSA)				(r)	-5,603	-5,114			
Non-organic Sample size (unweighted)	192	Revaluation of machinery, permananet crops, glasshouse, quota			(s)	1,977	2,692				
Number (weighted)	6,757	Revalutation of land (t)					(t)	658	-13,661		
Organic Sample size (unweighted)	20	Manager's paid managerial input (u)				(u)	52	39			
Number (weighted)	171	Management and Investment Income (v=p-o+u)					$(\mathbf{v}=\mathbf{p}-\mathbf{o}+\mathbf{u})$	-16,720	-13,770		

Table 13 Land use, stocking, outputs & variable costs - Organic vs Non-organic

Land Use and Stocking	The Average LFA Farm			
2018/19	LFA Non-organics	LFA Organics		
Number (unweighted)	192	20		
Number (weighted)	6,757	171		
Total Area (includes woodland and roads etc) (ha)	170.6	218.2		
Area Farmed (ha)	167.0	215.7		
Net Land Hired In (ha)	3.4	9.1		
Utilised Agricultural Area (ha)	163.6	206.6		
Of which Total main products and set-aside (ha)	1.5	3.2		
Grass, fodder crops and rough grazing (ha)	162.1	203.4		
Of which rough grazing (unadjusted) (ha)	65.2	91.6		
Adjusted rough grazing (sole occupation)	18.6	21.5		
Adjusted rough grazing (shared)	9.4	0.5		
Total Adjusted Utilised Agriculture Area (ha)	117.0	136.4		
Area owner occupied (ha)	76.4	129.2		
Area tenanted (ha)	94.2	89.0		
Average age of farmer (years)	61	59		
Agricultural labour units (ALU)	1.6	1.4		
Standard Output size units (2010SO)	97,246	109,277		
Standard Output size group (2010SO)	7.0	7.2		
Land Use	7.0	7.2		
Tempory Grassland Area (ha)	3.1	12.1		
Permanent Grassland Area (ha)	95.6	106.3		
Stocking	93.0	100.5		
Total Beef cows	25.4	44.2		
Total Cattle	81.6	119.7		
	385.5	286.9		
Ewes (LFA and lowland)		546.3		
Total Sheep	757.5	540.5		
Livestock Units Total Cattle LU	48.2	72.2		
	40.5	73.3 29.1		
Total Sheep LU	89.2			
Grazing LU (cattle, sheep, horses and others)	89.2	103.2		
Outputs & Variable Costs				
Farm Business Output	114,783	115,371		
of which: Output from agriculture	67,819	59,972		
Agri environment payment	12,747	13,831		
Diversified output	5,471	5,016		
Basic Payment	28,745	36,551		
Livestock Enterprise Output	60,573	53,802		
of which: Cattle Enterprise Output	27,360	30,679		
Sheep Enterprise Output	33,087	23,071		
Crop Enterprise Output	3,851	3,628		
Non agriculture, no other category output	3,386	2,496		
Variable Costs				
Farm Business Variable costs	46,161	38,038		
of which: Agriculture Variable Costs	45,987	37,866		
Agriculture Crop Costs	5,514	3,216		
Agriculture Livestock Costs	34,242	22,605		
of which: Purchased Fodder Feed	19,715	8,014		
Home Produced Fodder Feed	767	1,531		
Veterinary and medicines	4,405	3,924		
Other Livestock Costs	9,355	9,136		
Agriculture Contract Costs	3,844	9,909		
Agriculture Casual Labour	2,316	1,895		
	•	•		

8. References

Hill Farming in England, 2006/7, RBR

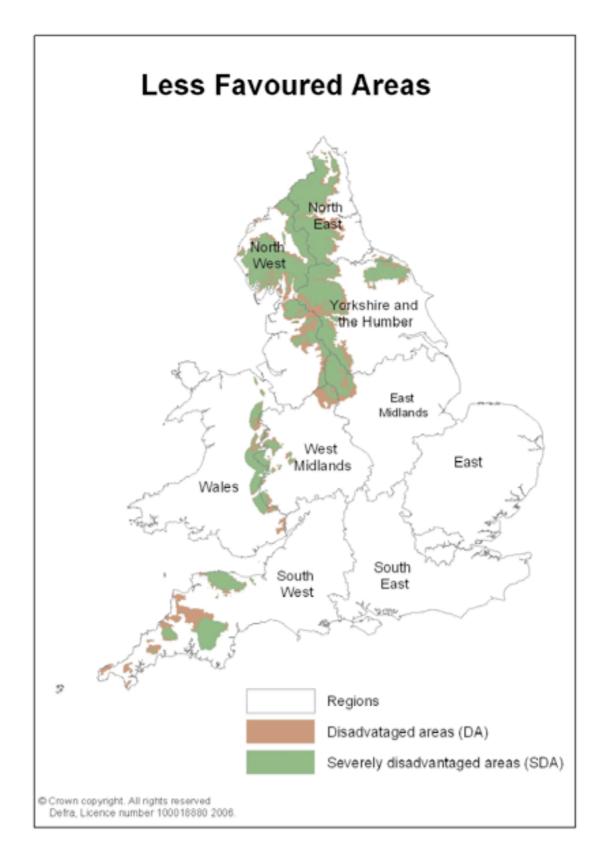
Hill Farming in England, 2017/18, RBR

Defra 2017 structure-june-eng-farmtypeseries2015-10mar17

Government Office Reports, 2018/19, RBR (http://www.farmbusinesssurvey.co.uk/)

Appendix 1. Less favoured Areas of England

Figure 12 Map of Less Favoured Areas, England



Source: Defra

Appendix 2. Analysis of LFA Grazing Farms (England) by farm type

Table 14 Farm Income measures by Cost Centre - Mixed grazing livestock (SDA)

The average Mixed grazing livestock (S	DA) farm					
2018/19		Agriculture	Agri-environment	Centre (£ per farm) Diversification out	Basic Payment Scheme	Farm Business
Derivation of farm income measures:		2018/19	and other payments 2018/19	of agriculture 2018/19	2018/19	(£ per farm) 2018/19
Total output	(a)	89,553	17,623	4,529	36,805	148,511
Variable costs	(b)	58,700	63	212	5	58,980
Total Gross margin	(c =a-b)	30,853	17,561	4,317	36,801	89,531
Fixed costs	(d)	56,743	3,650	2,624	5,397	68,414
Total Costs	(e =b+d)	115,443	3,713	2,837	5,401	127,393
Profit/(loss) on sale of fixed assets	(f)	305		•		305
Farm Business Income	(g =a-e+f)	-25,585	13,911	1,692	31,404	21,422
Adjustment for unpaid manual labour	(h)	29,999	861	1,754	0	32,614
Farm Corporate Income	(i=g-h)	-55,584	13,049	-61	31,404	-11,192
Interest payments (net of interest received) (j)	3,894	153	83	164	4,293
Farm Investment Income	(k =i+j)	-51,690	13,203	21	31,568	-6,898
Derivation of Net Farm Income:				Imputed	rent (I)	13,209
				Ownership cha		4,660
				Director's remunera	• • •	119
			Unpaid labour of	principal farmer and spo	` '	25,393
			•		ome (p =k-l+m+n+o)	10,065
			Holding gains	s not included in farm inc	come (g)	-8,015
				vestock Appreciation (Bl		-6,981
		Revaluation	on of machinery, permaner			2,811
The average farm			371	Revaluation of		-3,845
Number (unweighted)	77		Mar	nager's paid managerial i		139
Number (weighted)	1,416			ent and Investment Inc		-15,189

Table 15 Farm Income measures by cost centre - Specialist Beef (SDA)

The average Specialist beef (SDA) farm								
2018/19		Agriculture	Agri-environment	Centre (£ per farm) Diversification out	Basic Payment	Farm Business		
			and other payments	of agriculture	Scheme	(£ per farm)		
Derivation of farm income measures:		2018/19	2018/19	2018/19	2018/19	2018/19		
Total output	(a)	64,826	5,344	8,841	23,195	102,206		
Variable costs	(b)	42,209	7	1	61	42,279		
Total Gross margin	(c =a-b)	22,617	5,337	8,840	23,134	59,927		
Fixed costs	(d)	44,387	945	4,098	4,948	54,379		
Total Costs	(e =b+d)	86,596	953	4,100	5,009	96,658		
Profit/(loss) on sale of fixed assets	(f)	192				192		
Farm Business Income	(g =a-e+f)	-21,578	4,392	4,742	18,186	5,741		
Adjustment for unpaid manual labour	(h)	24,996	229	1,436	0	26,662		
Farm Corporate Income	(i=g-h)	-46,574	4,163	3,305	18,186	-20,921		
Interest payments (net of interest received)	(j)	1,850	59	85	73	2,068		
Farm Investment Income	(k =i+j)	-44,724	4,222	3,391	18,259	-18,853		
Derivation of Net Farm Income				Imputed	rent (I)	15.323		
				Ownership cha	()	5,944		
				Director's remuner	- , ,	321		
			Unpaid labour of	f principal farmer and spe	` '	23,173		
			- · · [· · · · · · · · · · · · · · · · · ·		ome (p =k-l+m+n+o)	-4,737		
			Holding gains	s not included in farm inc	come (a)	2,433		
				ivestock Appreciation (Bl		-3,848		
		Revaluation	on of machinery, permane			2,221		
The average farm				Revaluation of		4,060		
Number (unweighted)	33		Mar	nager's paid managerial	` '	0		
Number (weighted)	851		Management and Investment Income (v=p-o+u)					

Table 16 Farm income measures by cost centre - Specialist Sheep (SDA)

The average Specialist sheep (SDA) farm	Г					
2018/19		Agriculture	Agri-environment	Centre (£ per farm) Diversification out	Basic Payment	Farm Business
			and other payments	of agriculture	Scheme	(£ per farm)
Derivation of farm income measures:		2018/19	2018/19	2018/19	2018/19	2018/19
Total output	(a)	59,395	24,876	6,313	39,362	129,946
Variable costs	(b)	49,889	8	17	5	49,920
Total Gross margin	(c =a-b)	9,506	24,868	6,296	39,357	80,027
Fixed costs	(d)	40,380	4,418	3,012	6,524	54,334
Total Costs	(e =b+d)	90,269	4,426	3,029	6,530	104,254
Profit/(loss) on sale of fixed assets	(f)	-235				-235
Farm Business Income	(g =a-e+f)	-31,109	20,450	3,284	32,832	25,457
Adjustment for unpaid manual labour	(h)	25,518	647	1,021	0	27,187
Farm Corporate Income	(i=g-h)	-56,627	19,803	2,263	32,832	-1,730
Interest payments (net of interest received)	(j)	3,637	225	96	238	4,195
Farm Investment Income	(k =i+j)	-52,991	20,028	2,359	33,070	2,466
Derivation of Net Farm Income				Imputed	I rent (I)	12,478
				Ownership cha		3,301
				Director's remuner		48
			Unpaid labour of	f principal farmer and sp	ouse (o)	23,193
			,		ome (p=k-l+m+n+o)	16,530
			Holding gains	s not included in farm inc	come (a)	-3,224
				ivestock Appreciation (B		-7,668
		Revaluatio				1,819
The average farm		Revaluation of machinery, permanent crops, glasshouse & quota (s) Revaluation of land (t)				2,625
Number (unweighted)	42		Mar	nager's paid managerial	` '	76
Number (weighted)	2,027			ent and Investment Inc		-6,587

Table 17 Farm Income measures by cost centre - Various grazing livestock (DA)

The average Various grazing livestock (D	A) farm		Cost Centre (£ per farm)			
2018/19		Agriculture	Agri-environment	Diversification out	Basic Payment	Farm Business
			and other payments	of agriculture	Scheme	(£ per farm)
Derivation of farm income measures:		2018/19	2018/19	2018/19	2018/19	2018/19
Total output	(a)	63,076	3,256	4,211	18,544	89,087
Variable costs	(b)	36,842	1	258	3	37,104
Total Gross margin	(c =a-b)	26,234	3,255	3,954	18,541	51,983
Fixed costs	(d)	38,183	713	1,916	3,319	44,132
Total Costs	(e =b+d)	75,025	714	2,174	3,323	81,236
Profit/(loss) on sale of fixed assets	(f)	75				75
Farm Business Income	(g =a-e+f)	-11,874	2,541	2,037	15,221	7,926
Adjustment for unpaid manual labour	(h)	24,710	182	1,557	0	26,449
Farm Corporate Income	(i=g-h)	-36,584	2,360	480	15,221	-18,523
Interest payments (net of interest received)	(j)	2,318	9	71	70	2,468
Farm Investment Income	(k =i+j)	-34,266	2,369	551	15,291	-16,055
Derivation of Net Farm Income				Imputed	I rent (I)	8,993
				Ownership cha	` '	3,037
				Director's remuner		477
			Unpaid labour of	f principal farmer and sp	` '	20,468
			·		come (p=k-l+m+n+o)	-1,067
			Holding gains	s not included in farm inc	come (a)	-2,656
				ivestock Appreciation (B		-3,809
		Revaluation	on of machinery, permaner			1,618
The average farm			, , , , , , , , , , , , , , , , , , ,	Revaluation of		-466
Number (unweighted)	60		Mar	nager's paid managerial	` '	3
Number (weighted)	2,634			ent and Investment Inc	. , ,	-21,532

Table 18 Output, variable costs and farm gross margins by cost centre & farm type

The Mixed Various

V I	The average	Mixed grazing	Specialist	Specialist	Various grazing
	LFA	livestock	sheep	beef	livestock
2018/19	Farm	(SDA)	(SDA)	(SDA)	(DA)
Number of farms in the group	212	77	42	33	60
Number (weighted)	6,928	1,416	2,027	851	2,634
Utilisable Agricultural Area (UAA) (ha)	165	212	252	117	87
Average adjusted UAA (ha)	118	146	148	95	86
Average adjusted sole grazing (ha)	19	31	37	9	1
Average herd size	27	43	12	47	23
Average flock size	383	493	600	142	235
Output					
Farm Output	115,035	148,961	130,152	102,352	89,265
Farm Business Output	114,797	148,511	129,946	102,206	89,087
of which: Output from agriculture	67,625	89,553	59,395	64,826	63,076
Agri environment payment	12,774	17,623	24,876	5,344	3,256
Diversified output	5,460	4,529	6,313	8,841	4,211
Basic Payment	28,938	36,805	39,362	23,195	18,544
Livestock Enterprise Output	60,405	81,273	56,448	59,667	52,473
of which: Cattle Enterprise Output	27,442	41,745	8,386	43,862	29,114
(incl Livestock disease compensation)	206	450	0	566	118
Sheep Enterprise Output	32,839	39,521	47,944	15,617	23,190
Poultry Enterprise Output	111	6 0	106	144	161
Pigs Enterprise Output	3 9	1	0 12	0 44	8
Other Livestock Enterprise Output	3,845	3,186	1,055	4,076	0 6,272
Crop Enterprise Output of which: Crop Subsidies	3,643	3,100	1,055	4,076	0,272
Main Crops	1,579	923	94	2,506	2,774
Forage & by-products	2,225	2,193	952	1,669	3,400
Cultivations output	42	2,193	8	-100	3,400 98
Non agriculture, no other category output	3,364	5,092	1,893	1,083	4,304
Disposal Previous Crops	3,304	2	1,095	1,003	4,304
Farm Business Output	114,797	148,511	129,946	102,206	89,087
Tarm Business Output	114,757	140,511	120,040	102,200	05,007
Variable Costs					
Farm Business Variable costs	45,960	58,980	49,920	42,279	37,104
of which: Agriculture Variable Costs	45,786	58,700	49,889	42,209	36,842
Agri environment Variable Costs	16	63	8	7	1
Diversified income Variable Costs	146	212	17	1	258
BPS Variable Costs	11	5	5	61	3
Agriculture Crop Costs	5,457	7,090	3,484	6,624	5,721
of which: Seed	401	399	150	605	529
Fertilizer	3,959	5,544	2,837	4,964	3,647
Crop Protection	437	495	203	582	538
Other Crop Costs	661	652	295	473	1,008
Agriculture Livestock Costs	33,954	44,376	39,619	29,668	25,377
of which: Purchased Fodder Feed	19,426	25,827	24,259	15,632	13,491
Home Produced Fodder Feed	786	952	105	1,891	863
Veterinary and medicines	4,393	5,636	5,439	3,536	3,195
Other Livestock Costs	9,350	11,960	9,815	8,609	7,828
Agriculture Contract Costs	3,994	4,536	3,704	4,164	3,871
Agriculture Casual Labour	2,306	2,519	3,058	1,745	1,794
Agriculture, no other category Variable Costs	75	179	24	8	79
Farm Business Gross Margin	68,837	89,531	80,027	59,927	51,983
Agriculture Gross Margin	21,839	30,853	9,506	22,617	26,234
Agri Environment Gross Margin	12,758	17,561	24,868	5,337	3,255
Diversified Gross Margin	5,314	4,317	6,296	8,840	3,954

Table 19 Fixed costs and farm income measures by main farm type

		Mixed grazing	Specialist	Specialist	Various grazing
	The Average	livestock	sheep	beef	livestock
2018/19	LFA Farm	(SDA)	(SDA)	(SDA)	(DA)
Number (unweighted)	212	77	42	33	60
Number (weighted)	6,928	1,416	2,027	851	2,634
Utilisable Agricultural Land (UAA) (ha)	165	212	252	117	87
Average adjusted UAA (ha)	118	146	148	95	86
Average adjusted sole grazing (ha)	19	31	37	9	1
Average herd size	27	43	12	47	23
Average flock size	383	493	600	142	235
-					
Gross Margin					
Farm Business Gross Margin	68,837	89,531	80,027	59,927	51,983
Agriculture Gross Margin	21,839	30,853	9,506	22,617	26,234
Agri Environment Gross Margin	12,758	17,561	24,868	5,337	3,255
Diversified Income Gross Margin	5,314	4,317	6,296	8,840	3,954
BPS Gross Margin	28,927	36,801	39,357	23,134	18,541
· ·					
Fixed Costs					
Farm Business Fixed Costs	53,338	68,414	54,334	54,379	44,132
of which: Agriculture Fixed Costs	43,381	56,743	40,380	44,387	38,183
Agri Environment Fixed Costs	2,426	3,650	4,418	945	713
Diversified Income Fixed Costs	2,650	2,624	3,012	4,098	1,916
BPS Fixed Costs	4,882	5,397	6,524	4,948	3,319
Agriculture Paid Labour	6,948	8,416	9,811	6,510	4,099
Of which Fixed Labour Costs	4,642	5,896	6,753	4,764	2,305
(-) Casual Labour Costs (a Variable Cost)	2,306	2,519	3,058	1,745	1,794
Agriculture Machinery Costs	17,666	24,090	16,073	19,902	14,715
of which: Machinery Running Costs	8,607	11,698	8,001	9,275	7,195
Agriculture Depreciation Tenants Capital	9,059	12,392	8,072	10,627	7,520
Agriculture General Farming Costs	10,469	13,064	10,251	10,115	9,357
of which: Agriculture Bank & Professional Fees	1,971	2,355	1,843	1,750	1,936
Agriculture Other General Costs	5,529	6,815	4,772	6,515	5,103
Net Interest Payments	2,968	3,894	3,637	1,850	2,318
Bad Debts Write-offs	0	0	0	0	0
Agriculture Property Costs	8,777	10,654	6,177	8,735	9,783
Non Agriculture Other Fixed Costs	1,826	3,038	1,125	871	2,023
Profit/loss sale of fixed assets	46	305	-235	192	75
Agriculture Net Margin (AGRICULTURE BUSINESS					
INCOME)	-21,496	-25,585	-31,109	-21,578	-11,874
Unpaid manual labour	26,062	29,999	25,518	24,996	24,710
Of Which Unpaid Farmer and Spouse	21,405	23,991	21,721	21,549	19,726
Unpaid Partner	4,657	6,008	3,798	3,448	4,984
Agriculture Economic Profit (AGRICULTURE CORPORATE INCOME)	-47,558	-55,584	-56,627	-46,574	-36,584
Agriculture Net Interest Payment (added back)	-47,558 2,968	3,894	3,637	1,850	2,318
AGRICULTURE INVESTMENT INCOME	-44,590	-51,690	-52,991	-44,724	-34,266
AGRICULTURE INVESTMENT INCOME	-44,590	-51,090	-52,991	-44,724	-34,200
Farm Not Margin (FARM BUSINESS INCOME)	15,545	21,422	25,457	5,741	7,926
Farm Net Margin (FARM BUSINESS INCOME) Farm Economic Profit (FARM CORPORATE INCOME)	*	-11,192	25,45 <i>1</i> -1,730	-20,921	-
FARM INVESTMENT INCOME	-12,406 -9,109	-11,192 -6,898	-1,730 2,466	-20,921 -18,853	-18,523 -16,055
I AIMI IIVES I WENT INCOME	-9,109	-0,090	∠,400	-10,003	- 10,000
NET FARM INCOME	5 OO6	10.065	16 520	A 707	1 067
	5,906	10,065	16,530 -3,224	-4,737 2,433	-1,067 -2,656
Holding gains not included in farm income BLSA	-3,292 -5,591	-8,015 -6,981	-3,224 -7,668	-3,848	-2,656 -3,809
	•	-	•	*	-
Revaluation of Machinery, permanent crops etc.	1,995 304	2,811	1,819	2,221	1,618
Revaluation of Land	304	-3,845	2,625	4,060	-466
MANAGEMENT AND INVESTMENT INCOME	-16,647	-15,189	-6,587	-27,910	_21 E22
WANAGEWENT AND INVESTIMENT INCOME	-10,047	-15,189	-o,ɔơ <i>i</i>	-21,910	-21,532

Table 20 Balance sheet by main farm type

		Mixed			Various
		grazing	Specialist	Specialist	grazing
2040/40	The Average	livestock	sheep	beef	livestock
2018/19	LFA Farm	(SDA)	(SDA)	(SDA)	(DA)
Number (unweighted)	212	77 4 446	42	33	60
Number (weighted) Average Farmed Area (ha)	6,928 168.3	1,416 216.5	2,027 259.3	851 121.7	2,634 87.3
Adjusted Utilisable Agricultural Area (ha)	117.5	145.7	148.2	94.6	86.2
Utilisable Agricultural Area (ha)	164.7	211.9	252.1	116.8	87.5
Grazing Livestock Units	89.5	123.7	78.6	103.6	75.1
Ewes (head)	383	493	600	142	235
Beef Cows (head)	25	40	12	45	20
Occupied Area (ha)	77.7	89.2	105.5	80.3	49.3
Tenanted Area (ha)	94.1	126.7	161.0	39.8	42.7
Percentage of Land Owned (%)	45.2	41.3	39.6	66.9	53.6
Assets					
Fixed Assets	900,148	1,025,378	917,178	1,120,071	748,658
Of which Agricultural Land	690,832	757,199	691,949	910,606	583,276
Woodland	11,583	7,182	2,957	5,837	22,444
Total Buildings	28,548	39,241	22,825	43,449	22,390
Total Improvements	12,846	8,577	29,855	7,773	3,691
Milk quota	0	0	0	0	0
BPS Entitlements	29,430	37,038	41,474	22,431	18,334
Machinery	59,307	81,294	54,395	68,663	48,244
Breeding Livestock	66,418	94,099	73,099	61,268	48,061
Miscellaneous Business Assets	1,184	747	623	42	2,219
Current Assets	82,828	100,869	78,296	100,022	71,063
of which: Trading Livestock	32,519	44,503	16,548	51,581	32,209
Crops	443	207	0	1,684	509
Forage	3,438	4,386	2,148	5,549	3,238
Cultivation	784	1,305	195	1,238	811
Stores	3,729	4,253	2,664	4,004	4,178
Liquid Assets	41,915	46,214	56,741	35,967	30,117
Of which: Cash at Bank and In Hand	28,500	30,807	36,079	26,807	21,976
Debtors	8,402	10,459	11,346	7,464	5,334
Suspended	0	0	0	0	0
BPS debtors	5,013	4,948	9,316	1,696	2,808
Total Assets (£/farm)	982,976	1,126,247	995,474	1,220,094	819,722
Of which: Total Landlord-type Capital	743,810	812,199	747,587	967,666	631,800
Tenant Type Capital	239,167	314,048	247,888	252,427	187,921
Loans	00.440	404.070	74.070	44.400	F7 070
Total Long Term Loans	69,149	101,872	71,979	44,428	57,372
Of which: Bank Loans	35,309	70,075	30,038	11,240	28,457
Institutional Loans Of which: AMC	25,439	26,156	35,654	32,487	14,914
Building Societies	19,987 1,242	13,082 1,140	30,245 211	24,779 7,708	14,254
Other Institutional Loans	4,211	11,934	5,198	7,708	0 660
Family Loans		5,411	6,287	460	14,001
Other Loans	8,325 76	229	0,207	241	14,001
Current Liabilities	27,78 5	32,623	24,931	24,260	28,520
Of which: Hire Purchase	4,912	5,720	3,361	5,824	5,377
Leasing	4,912	0,720	0,301	20	0,577
Other Current Liabilities	22,870	26,903	21,570	18,417	23,143
Of which Creditors	8,031	10,681	9,465	6,342	6,049
Bank Overdraft	14,598	16,039	11,476	11,915	17,093
Others	241	182	628	160	0
Total Liabilities	96,934	134,495	96,910	68,688	85,892
	2 0,00 1	, 100	22,010	22,000	,
Closing Net Worth	886,042	991,752	898,564	1,151,405	733,829
Opening Net Worth	891,056	995,588	911,650	1,136,110	739,828
Change in New Worth	-5,014	-3,835	-13,086	15,295	-5,999
-	•				•

Table 21 Land use, stocking and technical efficiency by main farm type

	The Average	Mixed grazing	Specialist	Specialist	Various grazing
2018/19	LFA Farm	livestock (SDA)	sheep (SDA)	beef (SDA)	livestock (DA)
Number (unweighted)	212	77	42	33	60
Number (weighted)	6,928	1,416	2,027	851	2,634
Total Area (includes woodland and roads etc) (ha)	171.8	215.9	266.5	120.1	92.0
Area Farmed (ha)	168.3	216.5	259.3	121.7	87.3
Net Land Hired In (ha)	3.6	4.6	7.3	4.9	-0.2
Utilised Agricultural Area (ha)	164.7	211.9	252.1	116.8	87.5
Of which Total main products (ha)	1.6	1.1	0.1	2.2	2.8
Grass, fodder crops and rough grazing (ha)	163.1	210.8	252.0	114.7	84.7
Of which rough grazing (unadjusted) (ha)	65.8	97.2	140.9	31.6	2.3
Adjusted rough grazing (sole occupation)	18.7	31.0	37.0	9.4	1.0
Adjusted rough grazing (shared)	9.2	13.3	21.3	1.3	0.3
Total Adjusted Utilised Agriculture Area (ha)	117.5	145.7	148.2	94.6	86.2
Area owner occupied (ha)	77.7	89.2	105.5	80.3	49.3
Area tenanted (ha)	94.1	126.7	161.0	39.8	42.7
Average age of farmer (years)	61	57	61	63	62
Agricultural labour units (ALU)	1.6	1.8	1.7	1.5	1.3
Standard Output (2010SO)	97,543	130,428	94,311	95,654	82,966
Standard Output size group (2010SO)	7.0	7.5	7.0	6.9	6.8
Land Use					
Temporary Grassland Area (ha)	3.3	5.2	0.6	2.5	4.6
Permanent Grassland Area (ha)	95.9	111.7	115.2	84.6	76.2
Stocking					
Total Dairy Cows	1	3	0	0	1
Total Beef cows	26	40	12	47	22
Total Cattle	83	122	29	146	82
Ewes (LFA and lowland)	383	493	600	142	235
Of which LFA Ewes	375	493	600	142	213
Lowland Ewes	8	0	0	0	22
Total Sheep	752	954	1,157	308	476
<u>Livestock Units</u>					
Total Cattle LU	49	72	17	87	48
Of which Beef Cows LU	19	30	9	35	17
Other Cattle LU	25	35	7	49	27
Dairy Cows and Heifers	4	7	1	4	4
Total Sheep LU	40	51	61	16	26
Of which Ewe LU	27	35	42	11	17
Grazing LU (cattle, sheep, horses and others)	90	124	79 70	104	75 75
Total LU	90	124	79	104	75
Financial Performance per CLU					
Financial Performance per GLU Farm Business Output per GLU (£/GLU)	1 202	1 201	1,654	987	1 106
	1,282 513	1,201 477	635	408	1,186 494
Farm Business Variable Costs (£/GLU) Farm Business Gross Margin (£/GLU)	769	724	1,019	579	692
Farm Business Fixed Costs (£.GLU)	596	553	692	525	
Farm Business Income (£/GLU)	174	173	324	55	587 106
Farm Corporate Income (£/GLU)	-139	-91	-22	-202	-247
Farm Investment Income (£/GLU)	-102	-56	31	-182	-214
Holding Gains Not In Income (£/GLU)	-102	-65	-41	23	-35
of which Land Revaluation (£/GLU)	3	-31	33	39	-6
5on Land Novalidation (LIGEO)	3	-01	55	55	-0
Net Farm Income (£/GLU)	66	81	210	-46	-14
Management and Investment Income (£/GLU)	-186	-123	-84	-270	-287
	100	120	0-1	210	201
Agriculture Net Margin (Agriculture business income) (£/GLU) Agriculture Economic Profit (Agriculture corporate income)	-240	-207	-396	-208	-158
(£/GLU)	-531	-449	-721	-450	-487
Agriculture Investment Income (£/GLU)	-498	-418	-675	-432	-456

Appendix 3. Analysis of English Grazing Livestock Farms in the LFA- by EU region

Table 22 Output, variable costs and farm gross margins by EU region

2010110	The average	EU Region	EU Region	EU Region
2018/19	LFA Farm	England North	England East	England West
No week an affarmed in the arrange	242	400	40	00
Number of farms in the group	212	133	19	60
Number (weighted)	6,928	4,622	478	1,828
Utilisable Agricultural Area (UAA) (ha)	165	192	140	103
Average adjusted UAA (ha)	118	128	120	91
Average adjusted sole grazing (ha)	19	24	20	5
Average herd size	27	24	35	32
Average flock size	383	453	239	245
Output	445.005	404.000	440.040	04.750
Farm Output	115,035	124,666	110,946	91,759
Farm Business Output	114,797	124,386	110,651	91,643
of which: Output from agriculture	67,625	70,366	73,021	59,286
Agri environment payment	12,774	15,420	7,049	7,584
Diversified output	5,460	5,687	7,024	4,478
Basic Payment	28,938	32,914	23,557	20,295
Livestock Enterprise Output	60,405	64,171	64,191	49,896
of which: Cattle Enterprise Output	27,442	24,476	42,262	31,067
(incl Livestock disease compensation	206	0	747	586
Sheep Enterprise Output	32,839	39,537	21,796	18,796
Poultry Enterprise Output	111	158	83	0
Pigs Enterprise Output	3	0	0	12
Other Livestock Enterprise Output	9	0	49	21
Crop Enterprise Output	3,845	3,571	3,678	4,582
of which: Crop Subsidies	0	0	0	0
Main Crops	1,579	1,549	209	2,011
Forage & by-products	2,225	2,026	3,233	2,464
Cultivations output	42	-4	236	107
Non agriculture, no other category output	3,364	2,608	5,152	4,806
Disposal Previous Crops	11	15	0	2
Farm Business Output	114,797	124,386	110,651	91,643
Variable Costs				
Farm Business Variable costs	45,960	50,857	42,949	34,370
of which: Agriculture Variable Costs	45,786	50,747	41,581	34,344
Agri environment Variable Costs	16	23	1	5
Diversified income Variable Costs	146	72	1,367	16
BPS Variable Costs	11	15	1	5
Agriculture Crop Costs	5,457	5,825	4,122	4,877
of which: Seed	401	371	168	538
Fertilizer	3,959	4,245	2,900	3,515
Crop Protection	437	435	504	422
Other Crop Costs	661	774	549	403
Agriculture Livestock Costs	33,954	37,943	33,385	24,018
of which: Purchased Fodder Feed	19,426	22,458	20,679	11,433
Home Produced Fodder Feed	786	546	129	1,564
Veterinary and medicines	4,393	4,959	4,141	3,027
Other Livestock Costs	9,350	9,981	8,436	7,993
Agriculture Contract Costs	3,994	4,187	3,165	3,722
Agriculture Casual Labour	2,306	2,733	904	1,592
Agriculture, no other category Variable Costs	75	58	4	134
Farm Business Gross Margin	68,837	73,529	67,702	57,273
Agriculture Gross Margin	21,839	19,618	31,440	24,942
Agri Environment Gross Margin	12,758	15,397	7,048	7,579
Diversified Gross Margin	5,314	5,615	5,658	4,461
BPS Gross Margin	28,927	32,899	23,556	20,290

Table 23 Fixed costs and farm income measures by EU region

2018/19	The Average LFA Farm	EU Region England North	EU Region England East	EU Region England West
Number (unweighted)	212	133	19	60
Number (weighted)	6,928	4,622	478	1,828
Utilisable Agricultural Land (UAA) (ha)	165	192	140	103
Average adjusted UAA (ha)	118	128	120	91
Average adjusted sole grazing (ha)	19	24	20	5
	27	24	35	32
Average herd size				
Average flock size	383	453	239	245
Gross Margin	CO 007	72.520	67.700	F7 070
Farm Business Gross Margin	68,837	73,529	67,702	57,273
Agriculture Gross Margin	21,839	19,618	31,440	24,942
Agri Environment Gross Margin	12,758	15,397	7,048	7,579
Diversified Income Gross Margin	5,314	5,615	5,658	4,461
BPS Gross Margin	28,927	32,899	23,556	20,290
Fixed Costs				
Farm Business Fixed Costs	53,338	55,677	54,994	46,992
of which: Agriculture Fixed Costs	43,381	44,436	46,649	39,858
Agri Environment Fixed Costs	2,426	2,967	1,127	1,397
Diversified Income Fixed Costs	2,650	2,585	3,536	2,582
BPS Fixed Costs	4,882	5,689	3,682	3,155
Agriculture Paid Labour	6,948	8,354	3,159	4,387
Of which Fixed Labour Costs	4,642	5,620	2,255	2,795
(-) Casual Labour Costs (a Variable Cost)	2,306	2,733	904	1,592
Agriculture Machinery Costs	17,666	18,379	19,868	15,285
of which: Machinery Running Costs	8,607	8,796	8,607	8,127
	· ·	*	•	•
Agriculture Depreciation Tenants Capital	9,059	9,583	11,261	7,158
Agriculture General Farming Costs	10,469	10,339	9,605	11,025
of which: Agriculture Bank & Professional Fees	1,971	2,061	1,512	1,864
Agriculture Other General Costs	5,529	5,127	6,637	6,256
Net Interest Payments	2,968	3,150	1,455	2,904
Bad Debts Write-offs	0	0	0	0
Agriculture Property Costs	8,777	8,521	11,967	8,589
Non Agriculture Other Fixed Costs	1,826	1,576	2,954	2,164
Profit/loss sale of fixed assets	46	-9	168	152
Agriculture Net Margin (AGRICULTURE BUSINESS INCOME)	-21,496	-24,827	-15,041	-14,764
Unpaid manual labour	26,062	24,406	28,156	29,703
Of Which Unpaid Farmer and Spouse	21,405	20,201	20,233	24,756
Unpaid Partner	4,657	4,205	7,923	4,948
Agriculture Economic Profit (AGRICULTURE CORPORATE INCOME)	-47,558	-49,233	-43,197	-44,467
,	•	*	•	•
Agriculture Net Interest Payment (added back)	2,968	3,150	1,455	2,904
AGRICULTURE INVESTMENT INCOME	-44,590	-46,082	-41,742	-41,563
Farm Net Margin (FARM BUSINESS INCOME)	15,545	17,843	12,876	10,433
Farm Economic Profit (FARM CORPORATE INCOME)	-12,406	-8,212	-20,688	-20,842
FARM INVESTMENT INCOME	-9,109	-4,683	-19,151	-17,671
NET FARM INCOME	5,906	9,274	-2,392	-439
Holding gains not included in farm income	-3,292	-1,703	10,579	-10,937
BLSA	-5,591	-7,556	-2,701	-1,379
Revaluation of Machinery, permanent crops etc.	1,995	2,059	2,530	1,691
Revaluation of Land	304	3,794	10,749	-11,249
MANAGEMENT AND INVESTMENT INCOME	-16,647	-12,045	-23,591	-26,463

Table 24 Balance sheet by EU region

	The Average	EU Region England	EU Region England	EU Region England
2018/19	LFA Farm	North	East	West
Number (unweighted)	212	133	19	60
Number (weighted)	6,928	4,622	478	1,828
Average Farmed Area (ha)	168.3	194.9	151.2	105.4
Adjusted Utilisable Agricultural Area (ha)	118	128	120	91
Utilisable Agricultural Area (ha)	165	192	140	103
Grazing Livestock Units	90	91	98	84
Ewes (head)	383	453	239	245
Beef Cows (head)	24.7	22.5	29.9	29.0
Occupied Area (ha)	77.7	86.4	47.6	63.7
Tenanted Area (ha)	94	115	95	41
Percentage of Land Owned (%)	45	43	33	61
Assets Fixed Assets	900,148	856,271	691,759	1,065,537
Of which Agricultural Land	690,832	628,935	459,994	907,639
Woodland	11,583	14,897	8,863	3,918
Total Buildings	28,548	28,438	47,931	23,759
Total Improvements	12,846	16,577	3,929	5,746
Milk quota	0	0	0,020	0,740
SPS/BPS Entitlements	29,430	33,377	23,502	21,003
Machinery	59,307	62,923	72,372	46,751
Breeding Livestock	66,418	69,426	74,884	56,600
Miscellaneous Business Assets	1,184	1,697	284	122
Current Assets	82,828	82,587	110,063	76,319
of which: Trading Livestock	32,519	31,174	44,154	32,878
Crops	443	445	77	533
Forage	3,438	3,342	4,812	3,319
Cultivation	784	187	5,194	1,140
Stores	3,729	3,666	3,278	4,007
Liquid Assets	41,915	43,772	52,547	34,442
Of which: Cash at Bank and In Hand	28,500	28,465	46,175	23,969
Debtors	8,402	9,222	1,934	8,020
Suspended	0	0	0	0
BPS debtors	5,013	6,085	4,438	2,452
Total Assets (£/farm)	982,976	938,858	801,822	1,141,856
Of which: Total Landlord-type Capital	743,810	688,848	520,717	941,062
Tenant Type Capital	239,167	250,010	281,105	200,794
Loans				
Total Long Term Loans	69,149	72,073	35,808	70,477
Of which: Bank Loans	35,309	32,945	9,681	47,986
Institutional Loans	25,439	30,121	10,325	17,555
Of which: AMC	19,987	22,742	10,325	15,547
Building Societies	1,242	1,495	0	926
Other Institutional Loans	4,211	5,884	0	1,082
Family Loans	8,325	9,005	15,124	4,830
Other Loans	76	2	679	106
Current Liabilities	27,785	28,110	29,866	26,420
Of which: Hire Purchase	4,912	6,147	2,844	2,333
Leasing	2	0	0	9
Other Current Liabilities	22,870	21,963	27,022	24,078
Of which Creditors	8,031	8,528	6,612	7,146
Bank Overdraft	14,598	13,130	20,410	16,791
Others	241	305	0	141
Total Liabilities	96,934	100,183	65,674	96,896
Closing Net Worth	886,042	838,675	736,147	1,044,960
Opening Net Worth	891,056	845,864	717,167	1,050,750
Change in New Worth	-5,014	-7,189	18,981	-5,790
-	•	•	•	•

Table 25 Land use, stocking and technical efficiency by EU region

	The Average LFA Farm	EU Region England North	EU Region England East	EU Region England West
2018/19				
Number (unweighted)	212	133	19	60
Number (weighted)	6,928	4,622	478	1,828
Total Area (includes woodland and roads etc.) (ha)	171.8	201.2	142.7	105.1
Area Farmed (ha)	168.3	194.9	151.2	105.4
Net Land Hired In (ha)	3.6	3.1	11.2	2.9
Utilised Agricultural Area (ha)	164.7	191.8	139.9	102.5
Of which Total main products and set-aside (ha)	1.6	1.6	0.2	2.0
Grass, fodder crops and rough grazing (ha)	163.1	190.2	139.7	100.6
Of which rough grazing (unadjusted) (ha)	65.8	87.9	39.1	17.2
Adjusted rough grazing (sole occupation)	18.7 9.2	23.9	19.5	5.3
Adjusted rough grazing (shared)		12.8	0.0	2.5
Total Adjusted Utilised Agriculture Area (ha)	117.5 77.7	127.8 86.4	120.4 47.6	90.7 63.7
Area owner occupied (ha) Area tenanted (ha)	94.1	114.9	95.2	41.4
Average age of farmer (years)	61	60	93.2 62	62
Agricultural labour units (ALU)	1.6	1.6	1.5	1.5
Standard Output (2010SO)	97,543	98,215	107,890	93,142
Standard Output (201000) Standard Output size group (2010SO)	7.0	7.0	7.2	7.0
Land Use	7.0	7.0	1.2	7.0
Temporary Grassland Area (ha)	3.3	2.9	0.1	5.2
Permanent Grassland Area (ha)	95.9	100.5	111.6	80.2
Stocking	00.0			00.2
Total Dairy Cows	1	1	3	1
Total Beef cows	26	23	32	31
Total Cattle	83	74	114	96
Ewes (LFA and lowland)	383	453	239	245
Of which LFA Ewes	375	444	239	237
Lowland Ewes	8	9	0	8
Total Sheep	752	887	512	476
Livestock Units				
Total Cattle LU	49	43	67	58
Of which Beef Cows LU	19	17	24	23
Other Cattle LU	25	22	36	31
Dairy Cows and Heifers	4	4	7	4
Total Sheep LU	40	47	28	26
Of which Ewe LU	27	32	20	18
Grazing LU (cattle, sheep, horses and others)	90	91	98	84
Total LU	90	91	98	84
Financial Performance per GLU				
Farm Business Output per GLU (£/GLU)	1,282	1,370	1,129	1,090
Farm Business Variable Costs (£/GLU)	513	560	438	409
Farm Business Gross Margin (£/GLU)	769	810	691	681
Farm Business Fixed Costs (£.GLU)	596	613	561	559
Farm Business Income (£/GLU)	174 -139	196 -90	131 -211	124 -248
Farm Corporate Income (£/GLU) Farm Investment Income (£/GLU)				
Holding Gains Not In Income (£/GLU)	-102 -37	-52 -19	-195 108	-210 -130
of which Land Revaluation (£/GLU)	-3 <i>1</i>	-19 42	110	-134
of which Land Revaluation (£/GLO)	3	42	110	-134
Net Farm Income (£/GLU)	66	102	-24	-5
Management and Investment Income (£/GLU)	-186	-133	-241	-315
.g (2, 020)			2	0.0
Agriculture Net Margin (Agriculture business income)				
(£/GLU)	-240	-273	-153	-176
Agriculture Economic Profit (Agriculture corporate income) (£/GLU)	-531	-542	-441	-529
Agriculture Investment Income (£/GLU)	-498	-542 -507	-441	-494
Agriculture investment income (L/OLO)	-430	-501	-420	-434

Appendix 4. Analysis of English Grazing Livestock Farms in the LFA- by farm size (SLR Publication size band)

Table 26 Output, variable costs and farm gross margins by SLR size band

	T L -				
	The Average	Band 1	Band 2	Band 3	Band 4
2018/19	LFA Farm	(Part time)	(Small)	(Medium)	(Large)
Number of farms in the group	212	17	54	50	86
Number (weighted)	6,928	1,621	2,356	1,062	1,421
Utilisable Agricultural Area (UAA) (ha)	165	67	104	170	410
Average adjusted UAA (ha)	118	57	79	117	272
Average adjusted sole grazing (ha)	19	7	13	19	48
Average herd size	27	12	18	30	64
Average flock size	383	97	243	395	1,047
<u>Output</u>					
Farm Output	115,035	46,391	74,256	123,110	278,978
Farm Business Output	114,797	46,333	74,114	122,800	278,353
of which: Output from agriculture	67,625	26,290	41,168	76,680	166,945
Agri environment payment	12,774	3,898	7,847	11,346	35,805
Diversified output	5,460	5,265	4,488	4,757	7,278
Basic Payment	28,938	10,879	20,612	30,017	68,325
Livestock Enterprise Output	60,405	18,606	39,189	68,428	151,822
of which: Cattle Enterprise Output	27,442	9,301	19,061	33,628	61,742
(incl Livestock disease compensation)	206	0	195	400	383
Sheep Enterprise Output	32,839	9,305	19,986	34,378	90,028
Poultry Enterprise Output	111	0	126	400	34
Pigs Enterprise Output	3	0	0	21	0
Other Livestock Enterprise Output	9	0	16	0	17
Crop Enterprise Output	3,845	2,764	873	3,282	10,013
of which: Crop Subsidies	0	0	0	0	0
Main Crops	1,579	0	342	916	6,274
Forage & by-products	2,225	2,755	481	2,310	3,672
Cultivations output	42	9	50	56	67
Non agriculture, no other category output	3,364	4,920	1,105	4,970	5,061
Disposal Previous Crops	11	0	0	0	51
Farm Business Output	114,797	46,333	74,114	122,800	278,353
Variable Costs					
<u>Variable Costs</u> Farm Business Variable costs	45,960	15,611	30,711	50,424	113,173
of which: Agriculture Variable Costs	45,786	15,011	30,694	50,424	112,966
Agri environment Variable Costs	16	0	30,034	63	27
Diversified income Variable Costs	146	392	10	106	171
BPS Variable Costs	11	28	4	10	9
Agriculture Crop Costs	5,457	1,624	3,203	6,367	14,089
of which: Seed	401	76	186	316	1,168
Fertilizer	3,959	1,188	2,521	4,899	9,725
Crop Protection	437	161	252	437	1,191
Other Crop Costs	661	198	245	716	2,006
Agriculture Livestock Costs	33,954	11,235	23,355	38,117	82,262
of which: Purchased Fodder Feed	19,426	6,402	13,620	22,393	46,257
Home Produced Fodder Feed	786	0	274	746	2,660
Veterinary and medicines	4,393	1,307	3,245	4,584	10,880
Other Livestock Costs	9,350	3,527	6,216	10,395	22,463
Agriculture Contract Costs	3,994	1,923	2,912	3,693	9,259
Agriculture Casual Labour	2,306	377	1,223	1,821	7,215
Agriculture, no other category Variable Costs	75	32	2	246	141
Farm Business Gross Margin	68,837	30,722	43,403	72,376	165,180
Agriculture Gross Margin	21,839	11,099	10,474	26,435	53,979
Agri Environment Gross Margin	12,758	3,898	7,844	11,283	35,778
Diversified Gross Margin	5,314	4,873	4,478	4,651	7,107
BPS Gross Margin	28,927	10,852	20,608	30,007	68,316

Table 27 Fixed costs and farm income measures by SLR size band

	The				
	Average	Band 1	Band 2	Band 3	Band 4
2018/19	LFA Farm	(Part time)	(Small)	(Medium)	(Large)
Number (unweighted)	212	17	54	50	86
Number (weighted)	6,928	1,621	2,356	1,062	1,421
Utilisable Agricultural Land (UAA) (ha)	165	67	104	170	410
Average adjusted UAA (ha)	118	57	79	117	272
Average adjusted sole grazing (ha)	19	7	13	19	48
Average herd size	27	12	18	30	64
Average flock size	383	97	243	395	1,047
Gross Margin					
Farm Business Gross Margin	68,837	30,722	43,403	72,376	165,180
Agriculture Gross Margin	21,839	11,099	10,474	26,435	53,979
Agri Environment Gross Margin	12,758	3,898	7,844	11,283	35,778
Diversified Income Gross Margin	5,314	4,873	4,478	4,651	7,107
BPS Gross Margin	28,927	10,852	20,608	30,007	68,316
Fixed Costs					
Farm Business Fixed Costs	53,338	25,971	36,242	56,122	117,689
of which: Agriculture Fixed Costs	43,381	19,978	28,930	46,872	98,062
Agri Environment Fixed Costs	2,426	785	1,775	2,109	6,293
Diversified Income Fixed Costs	2,650	2,828	2,243	2,474	2,608
BPS Fixed Costs	4,882	2,379	3,293	4,667	10,727
Agriculture Paid Labour	6,948	1,781	2,633	4,377	24,001
Of which Fixed Labour Costs	4,642	1,404	1,410	2,557	16,787
(-) Casual Labour Costs (a Variable Cost)	2,306	377	1,223	1,821	7,215
Agriculture Machinery Costs	17,666	8,110	13,621	20,343	37,347
of which: Machinery Running Costs	8,607	3,928	6,653	9,245	18,582
Agriculture Depreciation Tenants Capital	9,059	4,182	6,968	11,098	18,765
Agriculture General Farming Costs	10,469	4,542	8,177	11,915	21,526
of which: Agriculture Bank & Professional Fees	1,971	1,039	1,607	2,347	3,633
Agriculture Other General Costs	5,529	2,903	4,690	6,578	9,566
Net Interest Payments	2,968	600	1,880	2,990	8,327
Bad Debts Write-offs	0	0	0	0	0
Agriculture Property Costs	8,777	3,717	5,084	8,970	19,551
Non Agriculture Other Fixed Costs	1,826	2,206	640	3,088	2,851
Profit/loss sale of fixed assets	46	-422	123	-183	637
Agriculture Net Margin (AGRICULTURE BUSINESS					
INCOME)	-21,496	-9,301	-18,333	-20,619	-43,446
Unpaid manual labour	26,062	20,056	23,079	31,868	35,724
Of Which Unpaid Farmer and Spouse	21,405	17,381	20,296	25,427	25,498
Unpaid Partner Agriculture Economic Profit (AGRICULTURE CORPORATE	4,657	2,674	2,784	6,441	10,226
INCOME)	-47,558	-29,357	-41,412	-52,488	-79,169
Agriculture Net Interest Payment (added back)	2,968	600	1,880	2,990	8,327
AGRICULTURE INVESTMENT INCOME	-44,590	-28,757	-39,533	-49,498	-70,843
Farm Net Margin (FARM BUSINESS INCOME)	15,545	4,330	7,285	16,071	48,127
Farm Economic Profit (FARM CORPORATE INCOME)	-12,406	-17,966	-17,418	-17,721	10,781
FARM INVESTMENT INCOME	-9,109	-17,324	-15,249	-14,482	19,994
NET FARM INCOME	5,906	-2,237	-666	3,948	33,339
Holding gains not included in farm income	-3,292	1,451	-1,254	1	-14,762
BLSA	-5,591	-1,536	-3,198	-4,848	-16,524
Revaluation of Machinery, permanent crops etc	1,995	1,039	1,521	2,600	3,891
Revaluation of Land	304	1,947	422	2,249	-2,129
MANAGEMENT AND INVESTMENT INCOME	-16,647	-20,581	-22,227	-22,548	7,142

Table 28 Balance sheet by SLR size band

	The				
2049/40	Average	Band 1	Band 2	Band 3	Band 4
2018/19 Number (unweighted)	LFA Farm 212	(Part time) 17	(Small) 54	(Medium) 50	(Large) 86
Number (weighted)	6,928	1,621	2,356	1,062	1,421
Average Farmed Area (ha)	168.3	67.4	106.4	174.6	423.4
Adjusted Utilisable Agricultural Area (ha)	165	67	104	170	410
Utilisable Agricultural Area (ha)	118	57	79	117	272
Grazing Livestock Units	90	34	60	97	216
Ewes (head)	383	97	243	395	1,047
Beef Cows (head)	24.7	10.0	18.0	28.5	57.4
Occupied Area (ha)	77.7	52.6	67.8	87.9	125.4
Tenanted Area (ha)	94	19	39	85	308
Percentage of Land Owned (%)	45	74	64	51	29
Assets					
Fixed Assets	900,148	630,961	780,653	899,821	1,460,963
Of which Agricultural Land	690,832	515,505	633,160	680,255	1,000,813
Woodland	11,583	30,569	4,346	5,384	9,443
Total Buildings Total Improvements	28,548 12,846	15,811 3,928	27,566 5,732	26,754 7,932	48,904 40,283
Milk quota	12,040	3,920 0	0,732	7,932	40,203
SPS/BPS Entitlements	29,430	11,861	20,450	29,606	70,147
Machinery	59,307	30,930	43,203	77,635	119,186
Breeding Livestock	66,418	22,341	45,517	71,517	168,113
Miscellaneous Business Assets	1,184	16	681	738	4,074
Current Assets	82,828	46,613	65,250	74,374	178,487
of which: Trading Livestock	32,519	13,243	24,607	38,481	72,021
Crops	443	0	203	128	1,684
Forage	3,438	2,042	2,102	3,743	7,894
Cultivation	784	131	751	614	1,850
Stores	3,729	2,312	2,346	4,783	7,753
Liquid Assets	41,915	28,884	35,240	26,624	87,285
Of which: Cash at Bank and In Hand	28,500	23,880	25,675	16,360	53,558
Debtors	8,402	4,275	7,021	8,214	15,868
Suspended	0	0	0	0	0
BPS debtors	5,013	729	2,545	2,050	17,859
Total Assets (£/farm)	982,976	677,574	845,903	974,194	1,639,450
Of which: Total Landlord-type Capital	743,810	565,813	670,803	720,325	1,099,443
Tenant Type Capital	239,167	111,761	175,100	253,869	540,007
Loans					
Total Long Term Loans	69,149	9,300	47,487	69,825	195,619
Of which: Bank Loans	35,309	2,885	16,557	57,104	98,728
Institutional Loans	25,439	2,057	13,912	8,321	92,403
Of which: AMC	19,987	2,057	8,054	3,767	78,936
Building Societies	1,242	0	0	2,138	4,456
Other Institutional Loans Family Loans	4,211 8,325	0 4,358	5,858 16,798	2,416 4,389	9,012 4,488
Other Loans	76	4,330	220	4,369	4,466
Current Liabilities	27,78 5	16,160	19,543	34,295	56,847
Of which: Hire Purchase	4,912	2,653	3,198	9,115	8,808
Leasing	2	0	0,100	0,110	12
Other Current Liabilities	22,870	13,507	16,345	25,180	48,027
Of which Creditors	8,031	2,639	5,967	8,994	18,540
Bank Overdraft	14,598	10,083	10,378	15,815	29,487
Others	241	785	0	371	0
Total Liabilities	96,934	25,460	67,030	104,120	252,466
Closing Net Worth	886,042	652,114	778,873	870,075	1,386,985
Opening Net Worth	891,056	657,076	781,028	866,164	1,402,822
Change in New Worth	-5,014	-4,962	-2,155	3,911	-15,837

Table 29 Land use, stocking and technical efficiency by SLR size band

2018/19	The Average LFA Farm	Band 1 (Part time)	Band 2 (Small)	Band 3 (Medium)	Band 4 (Large)
Number (unweighted)	212	17	54	50	86
Number (weighted)	6,928	1,621	2,356	1.062	1,421
Total Area (includes woodland and roads etc) (ha)	171.8	71.3	106.5	172.9	433.4
Area Farmed (ha)	168.3	67.4	106.4	174.6	423.4
Net Land Hired In (ha)	3.6	0.3	2.0	5.0	13.6
Utilised Agricultural Area (ha)	164.7	67.1	104.4	169.6	409.8
Of which Total main products and set-aside (ha)	1.6	0.0	0.4	0.9	6.2
Grass, fodder crops and rough grazing (ha)	163.1	67.1	104.1	168.7	403.5
Of which rough grazing (unadjusted) (ha)	65.8	17.2	38.2	70.7	185.3
Adjusted rough grazing (sole occupation)	18.7	6.8	13.0	18.5	47.9
Adjusted rough grazing (shared)	9.2	0.0	7.7	11.9	23.2
Total Adjusted Utilised Agriculture Area (ha)	117.5	56.7	79.3	117.4	272.4
Area owner occupied (ha)	77.7	52.6	67.8	87.9	125.4
Area tenanted (ha)	94.1	18.7	38.7	85.0	307.9
Average age of farmer (years)	61	65 1.0	60	59	56
Agricultural labour units (ALU)	1.6 97,543	1.0 36,141	1.2 63,283	1.7 103,282	2.7 241,429
Standard Output (2010SO)	7.0	6.1	6.8	7.6	8.5
Standard Output size group (2010SO) Land Use	7.0	0.1	0.0	7.0	0.0
Temporary Grassland Area (ha)	3.3	1.0	2.6	3.5	7.6
Permanent Grassland Area (ha)	95.9	49.3	63.8	98.8	219.8
Stocking	00.0	10.0	00.0	00.0	210.0
Total Dairy Cows	1	0	0	1	4
Total Beef cows	26	12	18	29	59
Total Cattle	83	35	59	95	182
Ewes (LFA and lowland)	383	97	243	395	1,047
Of which LFA Ewes	375	89	237	390	1,030
Lowland Ewes	8	8	6	5	17
Total Sheep	752	216	473	787	2,029
Livestock Units					
Total Cattle LU	49	22	34	55	108
Of which Beef Cows LU	19	9	14	22	45
Other Cattle LU	25	12	19	29	51
Dairy Cows and Heifers	4	1	2	4	12
Total Sheep LU	40	12	26	42	108
Of which Ewe LU	27	8	18	28	72
Grazing LU (cattle, sheep, horses and others)	90	34	60	97	216
Total LU	90	34	60	97	216
Financial Performance per GLU	1 202	1 251	1 001	1 261	1 207
Farm Business Output per GLU (£/GLU)	1,282 513	1,351 455	1,231 510	1,261 518	1,287 523
Farm Business Variable Costs (£/GLU) Farm Business Gross Margin (£/GLU)	769	455 896	721	743	764
Farm Business Fixed Costs (£.GLU)	596	757	602	576	544
Farm Business Income (£/GLU)	174	126	121	165	223
Farm Corporate Income (£/GLU)	-139	-524	-289	-182	50
Farm Investment Income (£/GLU)	-102	-505	-253	-149	92
Holding Gains Not In Income (£/GLU)	-37	42	-21	0	-68
of which Land Revaluation (£/GLU)	3	57	7	23	-10
,					
Net Farm Income (£/GLU)	66	-65	-11	41	154
Management and Investment Income (£/GLU)	-186	-600	-369	-232	33
Agriculture Net Margin (Agriculture business income)	~	c= :	00-	212	
(£/GLU) Agriculture Economic Profit (Agriculture corporate	-240	-271	-305	-212	-201
income) (£/GLU)					
	-531	-856	-688	-539	-366

Appendix 5. Analysis of English Grazing Livestock Farms in the LFA - by Performance Ratio

Table 30 Output, variable costs and farm gross margins by performance ratio

	The			
	Average	Per	formance Band	
2018/19	LFA farm	Low	Medium	High
Number of farms in the group	212	29	107	76
Number (weighted)	6,928	1,698	3,490	1,740
Utilisable Agricultural Area (UAA) (ha)	165	69	130	328
Average adjusted UAA (ha)	118	62	106	195
Average adjusted sole grazing (ha)	19	3	15	42
Average herd size	27	17	28	35
Average flock size	383	146	360	660
<u>Output</u>				
Farm Output	115,035	43,916	107,853	198,818
Farm Business Output	114,797	43,818	107,620	198,435
of which: Output from agriculture	67,625	26,651	68,481	105,880
Agri environment payment	12,774	2,950	8,144	31,643
Diversified output	5,460	2,456	5,933	7,441
Basic Payment	28,938	11,761	25,061	53,470
Livestock Enterprise Output	60,405	23,234	60,813	95,851
of which: Cattle Enterprise Output	27,442	12,590	30,185	36,433
(incl Livestock disease compensation)	206	43	317	143
Sheep Enterprise Output	32,839	10,631	30,461	59,275
Poultry Enterprise Output	111	0	157	128
Pigs Enterprise Output	3	13	0	0
Other Livestock Enterprise Output	9	0	11	14
Crop Enterprise Output	3,845	2,316	3,777	5,474
of which: Crop Subsidies	0	0	0	0
Main Crops	1,579	143	1,816	2,503
Forage & by-products	2,225	2,142	1,891	2,974
Cultivations output	42	30	69	-3
Non agriculture, no other category output	3,364	1,101	3,874	4,549
Disposal Previous Crops	11	0	18	6
Farm Business Output	114,797	43,818	107,620	198,435
<u>Variable Costs</u>				
Farm Business Variable costs	45,960	23,314	47,782	64,400
of which: Agriculture Variable Costs	45,786	23,273	47,570	64,171
Agri environment Variable Costs	16	0	7	51
Diversified income Variable Costs	146	12	200	169
BPS Variable Costs	11	28	4	9
Agriculture Crop Costs	5,457	2,461	5,750	7,794
of which: Seed	401	230	377	615
Fertilizer	3,959	1,891	4,055	5,785
Crop Protection	437	99	528	583
Other Crop Costs	661	241	790	811
Agriculture Livestock Costs	33,954	17,469	35,169	47,600
of which: Purchased Fodder Feed	19,426	9,912	20,408	26,738
Home Produced Fodder Feed	786	148	761	1,458
Veterinary and medicines	4,393	2,244	4,327	6,620
Other Livestock Costs	9,350	5,166	9,673	12,784
Agriculture Contract Costs	3,994	2,549	4,072	5,246
Agriculture Casual Labour	2,306	768	2,477	3,463
Agriculture, no other category Variable Costs	75	26	102	68
Farm Business Gross Margin	68,837	20,505	59,838	134,035
Agriculture Gross Margin	21,839	3,377	20,911	41,710
Agri Environment Gross Margin	12,758	2,950	8,137	31,593
Diversified Gross Margin	5,314	2,444	5,733	7,272
BPS Gross Margin	28,927	11,734	25,057	53,461
2. 2 5.000 margin	20,021	. 1,707	20,001	JU,-rU i

Table 31 Fixed costs and farm income measures by performance ratio

	The			
	Average	Р	erformance band	i
2018/19	LFA Farm	Low	Medium	High
Number (unweighted)	212	29	107	76
Number (weighted)	6,928	1,698	3,490	1,740
Utilisable Agricultural Land (UAA) (ha)	165	69	130	328
Average adjusted cale grazing (ha)	118 19	62 3	106 15	195 42
Average adjusted sole grazing (ha) Average herd size	19 27	ა 17	28	35
Average flock size	383	146	360	660
Avorage mook size	000	140	000	000
Gross Margin				
Farm Business Gross Margin	68,837	20,505	59,838	134,035
Agriculture Gross Margin	21,839	3,377	20,911	41,710
Agri Environment Gross Margin	12,758	2,950	8,137	31,593
Diversified Income Gross Margin	5,314	2,444	5,733	7,272
BPS Gross Margin	28,927	11,734	25,057	53,461
Fixed Costs Farm Business Fixed Costs	F2 220	20.444	E4 440	70.470
	53,338	32,141	51,113	78,478
of which: Agriculture Fixed Costs	43,381	24,937	42,394	63,353
Agri Environment Fixed Costs Diversified Income Fixed Costs	2,426 2,650	932 2,048	1,627 3,000	5,484
BPS Fixed Costs	4,882	4,224	4,092	2,535 7,107
DF3 Fixed Costs	4,002	4,224	4,092	7,107
Agriculture Paid Labour	6,948	1,913	5,407	14,952
Of which Fixed Labour Costs	4,642	1,145	2,930	11,489
(-) Casual Labour Costs (a Variable Cost)	2,306	768	2,477	3,463
Agriculture Machinery Costs	17,666	9,179	18,631	24,008
of which: Machinery Running Costs	8,607	4,887	9,029	11,388
Agriculture Depreciation Tenants Capital	9,059	4,293	9,602	12,620
Agriculture General Farming Costs	10,469	7,508	10,245	13,806
of which: Agriculture Bank & Professional Fees	1,971	1,486	2,054	2,279
Agriculture Other General Costs	5,529	4,194	5,699	6,492
Net Interest Payments	2,968	1,828	2,492	5,036
Bad Debts Write-offs	0	0	0	0
Agriculture Property Costs	8,777	6,658	8,255	11,891
Non Agriculture Other Fixed Costs	1,826	446	2,333	2,157
Profit/loss sale of fixed assets	46	-141	35	249
Agriculture Net Margin (AGRICULTURE BUSINESS INCOME)	-21,496	-21,701	-21,448	-21,394
Unpaid manual labour	26,062	24,088	26,895	26,319
Of Which Unpaid Farmer and Spouse	21,405	20,437	21,932	21,294
Unpaid Partner	4,657	3,650	4,964	5,025
Agriculture Economic Profit (AGRICULTURE CORPORATE	•	•	•	•
INCOME)	-47,558	-45,788	-48,343	-47,712
Agriculture Net Interest Payment (added back)	2,968	1,828	2,492	5,036
AGRICULTURE INVESTMENT INCOME	-44,590	-43,960	-45,851	-42,676
Farm Net Margin (FARM BUSINESS INCOME)	15,545	-11,777	8,760	55,806
Farm Economic Profit (FARM CORPORATE INCOME)	-12,406	-36,855	-20,628	27,935
FARM INVESTMENT INCOME	-9,109	-34,900	-17,921	33,724
NET FARM INCOME	5,906	-18,113	-915	43,015
Holding gains not included in farm income	-3,292	-4,647	-206	-8,160
BLSA	-5,591	-2,163	-4,876	-10,367
Revaluation of Machinery, permanent crops etc	1,995	897	2,171	2,712
Revaluation of Land	304	-3,381	2,500	-506
MANAGEMENT AND INVESTMENT INCOME	16 647	20 507	24.000	20 570
MANAGEMENT AND INVESTMENT INCOME	-16,647	-39,507	-24,088	20,578

Table 32 Balance Sheet by performance ratio

	The Average		Performance band	
2018/19	LFA Farm	Low	Medium	High
Number (unweighted)	212	29	107	76
Number (weighted)	6,928	1,698	3,490	1,740
Average Farmed Area (ha)	168.3	68.3	135.2	332.1
Utilisable Agricultural Area (ha)	164.7	68.6	130.2	327.5
Adjusted Utilisable Agricultural Area (ha)	117.5	62.4	105.9	194.6
Grazing Livestock Units	89.5	45.2	88.7	134.3
Ewes (head)	383	146	360	660
Beef Cows (head)	25	14	25	33
Occupied Area (ha)	78	47	72	119
Tenanted Area (ha)	94	26	62	226
Percentage of Land Owned (%)	45.2	65.0	53.9	34.4
<u>Assets</u>				
Fixed Assets	900,148	688,443	858,447	1,190,308
Of which Agricultural Land	690,832	557,594	665,626	871,365
Woodland	11,583	30,772	4,328	7,412
Total Buildings	28,548	21,380	28,247	36,145
Total Improvements	12,846	4,449	6,463	33,838
Milk quota	0	0	0	0
SPS/BPS Entitlements	29,430	12,675	25,002	54,655
Machinery	59,307	26,122	63,809	82,653
Breeding Livestock	66,418	31,954	64,769	103,347
Miscellaneous Business Assets	1,184	3,497	203	894
Current Assets	82,828	36,956	73,360	146,570
of which Trading Livestock	32,519	14,845	33,415	47,965
Crops	443	36	491	743
Forage	3,438	1,867	3,600	4,645
Cultivation	784	442	1,057	571
Stores	3,729	2,655	3,423	5,390
Liquid Assets	41,915	17,110	31,373	87,255
Of which Cash at Bank and In Hand	28,500	13,220	21,039	58,370
Debtors	8,402	2,214	6,508	18,236
Suspended	0,402	0	0,000	0
BPS debtors	5,013	1,675	3,825	10,650
Total Assets (£/farm)	982,976	725,398	931,807	1,336,878
Of which Total Landlord-type Capital	743,810	614,195	704,665	948,760
Tenant Type Capital	239,167	111,203	227,142	388,119
Loans	200,107	111,200	221,172	000,110
Total Long Term Loans	69,149	38,148	59,537	118,670
Of which Bank Loans	35,309	18,017	34,889	53,020
Institutional Loans	25,439	19,729	12,004	57,952
Of which AMC	19,987	19,729	6,435	47,414
Building Societies	1,242	0	166	4,611
Other Institutional Loans	4,211	0	5,403	5,928
Family Loans	8,325	402	12,496	7,691
Other Loans	76	0	148	7,031
Current Liabilities	27,785	20,067	29,589	31,697
Of which Hire Purchase	4,912	2,713	5,351	6,179
Leasing	2	0	0,001	10
Other Current Liabilities	22,870	17,355	24,238	25,508
Of which Creditors	8,031	4,437	7,463	12,678
Bank Overdraft	14,598	12,122	16,685	12,830
Others	14,596	796	90	12,630
Total Liabilities	96,934	58,215	89,126	150,367
i otta Elabilities	30,334	JU,£ 13	03,120	150,507
Closing Net Worth	886,042	667,183	842,681	1,186,512
Opening Net Worth	891,056	686,928	846,758	1,179,033
Change in New Worth	-5,014	-19,745	-4,077	7,478
enange in Non-Horar	-0,01-	-13,173	,011	1,410

Table 33 Land use, stocking and technical efficiency by performance ratio

	The Average	Perf	ormance band	
2018/19	LFA Farm	Low	Middle	High
Number (unweighted)	212	29	107	76
Number (weighted)	6,928	1,698	3,490	1,740
Total Area (includes woodland and roads etc) (ha)	171.8	73.1	133.5	345.1
Area Farmed (ha)	168.3	68.3	135.2	332.1
Net Land Hired In (ha)	3.6	-0.3	5.0	4.6
Utilised Agricultural Area (ha)	164.7	68.6	130.2	327.5
Of which Total main products (ha)	1.6	0.2	2.0	2.0
Grass, fodder crops and rough grazing (ha)	163.1	68.4	128.2	325.5
Of which rough grazing (unadjusted) (ha)	65.8	9.5	38.9	174.8
Adjusted rough grazing (sole occupation)	18.7	3.3	14.6	41.9
Adjusted rough grazing (shared)	9.2	3.5	5.3	22.7
Total Adjusted Utilised Agriculture Area (ha)	117.5	62.4	105.9	194.6
Area owner occupied (ha)	77.7	47.5	71.9	118.8
Area tenanted (ha)	94.1	25.6	61.5	226.3
Average age of farmer (years)	61	65	60	58
Agricultural labour units (ALU)	1.6	1.2	1.6	2.0
Standard Output size units (2010SO)	97,543	49,982	94,761	149,523
Standard Output size group (2010SO)	7.0	6.3	7.0	7.6
Land Use				
Temporary Grassland Area (ha)	3.3	1.4	2.2	7.3
Permanent Grassland Area (ha)	95.9	57.1	90.7	144.3
Stocking				
Total Dairy Cows	1	0	1	1
Total Beef cows	26	17	27	33
Total Cattle	83	48	85	112
Ewes (LFA and lowland)	383	146	360	660
Of which LFA Ewes	375	130	352	660
Lowland Ewes	8	16	8	0
Total Sheep	752	281	725	1,268
<u>Livestock Units</u>				
Total Cattle LU	49	29	49	67
Of which Beef Cows LU	19	12	20	25
Other Cattle LU	25	15	26	36
Dairy Cows and Heifers	4	2	4	6
Total Sheep LU	40	16	39	67
Of which Ewe LU	27	11	26	45
Grazing LU (cattle, sheep, horses and others)	90	45	89	134
Total LU	90	45	89	134
Financial Performance per GLU				
Farm Business Output per GLU (£/GLU)	1,282	968	1,213	1,477
Farm Business Variable Costs (£/GLU)	513	515	538	479
Farm Business Gross Margin (£/GLU)	769	453	674	998
Farm Business Fixed Costs (£.GLU)	596	710	576	584
Farm Business Income (£/GLU)	174	-260	99	415
Farm Corporate Income (£/GLU)	-139	-815	-232	208
Farm Investment Income (£/GLU)	-102	-771	-202	251
Holding Gains Not In Income (£/GLU)	-37	-103	-2	-61
of which Land Revaluation (£/GLU)	3	-75	28	-4
Net Farm Income (£/GLU)	66	-400	-10	320
Management and Investment Income (£/GLU)	-186	-873	-271	153
A minute man Na A Na main / A minute /				
Agriculture Net Margin (Agriculture business income) (£/GLU)	-240	-480	-242	-159
Agriculture Economic Profit (Agriculture corporate income)	-240	-4 00	-242	-109
(£/GLU)	-531	-1,012	-545	-355
Agriculture Investment Income (£/GLU)	-498	-972	-517	-318

Appendix 6. Analysis of English Grazing Livestock Farms in the LFA – enterprise margins

Table 34 LFA Suckler herd margins by herd size

2018/19	Enterprise Output and Gross margin per cow, GLU & ha				
2010/19	All herds	<30 cows	30-60 cows	>60 cows	
Number of farms	153	52	60	41	
Number of farms (weighted)	4,171	1,999	1,527	645	
Area Farmed (UAA + net hired in) (ha)	201	142	135	538	
Utilisable Agricultural Area (ha)	194	136	130	525	
Adjusted UAA (ha)	144	108	103	355	
Grazing Livestock Units (farm)	106	66	90	272	
Grazing Livestock Units (enterprise)	38	17	39	103	
Forage area (enterprise) (ha)	59	35	49	158	
Stocking rate (GLUs/total adj ha)	0.7	0.6	0.9	0.8	
Cows per herd	39	17	41	103	
Total Cattle	109	58	109	265	
Breeding Flock	416	313	242	1,148	
Output per cow					
Enterprise Output (excluding BLSA)	425	387	413	456	
BLSA	-75	-84	-65	-79	
Concentrates	61	64	63	57	
Purchased fodder and keep	33	63	22	29	
Veterinary and medicines	27	30	31	23	
Other livestock costs	65	72	73	55	
Seed	3	3	2	3	
Fertilizer	38	36	38	38	
Sprays	3	3	3	2	
Other crop costs	4	5	4	5	
Total Variable costs	234	276	236	212	
Gross Margin (excluding BLSA) / Cow	191	111	176	244	
Gross margin (excluding BLSA) / forage ha	125	53	146	160	
Gross Margin (excluding BLSA) / GLU	193	108	184	244	
Enterprise Gross margin (excluding BLSA)	7,427	1,861	7,181	25,249	
Measures of Income					
Farm Business Income	14,624	8,287	7,527	51,054	
Farm Corporate Income	-13,814	-16,674	-19,911	9,476	
Agricultural Economic Profit	-53,466	-45,113	-46,626	-95,529	
Agri-environment Economic Profit	11,746	9,176	6,701	31,650	
Diversified Economic Profit	1,274	-42	1,114	5,726	
SPS Economic Profit	26,632	19,305	18,900	67,629	
Farm Investment Income	-9,514 4,757	-14,550	-18,106	26,422	
Net Farm Income	4,757	367	-2,577	35,712	
MII	-17,517	-20,495	-25,125	9,714	
Enterprise NM/cow (excluding BLSA)	-255	-365	-277	-178	
Enterprise NM/cow after F&S labour (excl. BLSA)	-441	-657	-519	-260	

Table 35 Upland SDA flock margins by flock size

Upland SDA Flocks (flock lambing % usually >100)	Enterprise Output and Gross margin per ewe, GLU			
2018 lamb crop	All flocks	<300 ewes	300-600 ewes	>600 ewes
Number of farms	109	29	40	40
Number of farms (weighted)	3,183	1,250	1,074	860
Area Farmed (UAA + net hired in) (ha)	173	97	145	319
Utilisable Agricultural Area (ha)	168	92	143	308
Total adj. area farmed inc. commons (ha)	146	79	122	275
Grazing Livestock Units (farm)	103	55	89	190
Grazing Livestock Units (enterprise)	62	20	52	136
Forage area (enterprise) (ha)	105	52	81	213
Stocking rate (GLUs/total adj ha)	0.70	0.70	0.73	0.69
Cows per herd	27	18	22	46
Total Cattle	88	64	79	134
Breeding Flock	512	169	415	1,133
Total Sheep	972	319	812	2,122
Output per ewe				
Enterprise Output (excluding BLSA)	92	77	97	93
BLSA	-10	-9	-9	-10
Concentrates	23	18	25	23
Purchased fodder and keep	5	5	5	6
Veterinary and medicines	8	7	7	8
Other livestock costs	13	13	12	14
Seed	0	0	0	0
Fertilizer	5	5	6	5
Sprays	0	1	0	0
Other crop costs	1	0	1	1
Total Variable costs	56	48	56	57
Gross Margin (excluding BLSA) / Ewe	36	29	41	36
Gross margin (excluding BLSA) / forage ha	176	92	212	189
Gross Margin (excluding BLAS) / GLU	299	236	328	298
Enterprise Gross margin (excluding BLSA)	18,600	4,822	17,174	40,414
Measures of Income (per farm)				
Farm Business Income	19,007	7,976	18,344	35,875
Farm Corporate Income	-8,960	-14,233	-14,568	5,712
Agricultural Economic Profit	-45,821	-35,190	-41,754	-66,358
Agri-environment Economic Profit	7,626	4,907	3,910	16,222
Diversified Economic Profit	2,176	1,330	671	5,286
SPS Economic Profit	27,059	14,721	22,605	50,562
Farm Investment Income	-6,666	-13,033	-11,545	8,687
Net Farm Income	9,918	1,729	8,760	23,270
MII	-13,717	-17,751	-18,039	-2,452
Enterprise NM/ewe (excluding BLSA)	-31	-60	-25	-28
Enterprise NM/ewe after F&S labour (excl BLSA)	-61	-122	-67	-45
Lambs born & reared/ewe	1.34	1.32	1.42	1.31

Table 36 Hill SDA flock margins by flock size

Hill SDA Flocks (flock lambing % usually <100)	Enterprise	Output and Gro	ss margin per ewe	, GLU and ha
2018 lambing	All flocks	<300 ewes	300-600 ewes	>600 ewes
Number of farms	59	19	23	17
Number of farms (weighted)	1,743	750	641	352
Area Farmed (UAA + net hired in) (ha)	257	98	184	728
Utilisable Agricultural Area (ha)	250	98	171	715
Total adj. area farmed inc. commons (ha)	155	75	130	373
Grazing Livestock Units (farm)	91	47	75	213
Grazing Livestock Units (enterprise)	51	20	44	131
Forage area (enterprise) (ha)	160	40	114	498
Stocking rate (GLUs/total adj ha)	0.59	0.64	0.58	0.57
Cows per herd	27	19	22	56
Total Cattle	74	51	59	149
Breeding Flock	528	164	434	1,474
Total Sheep	891	323	744	2,366
Output per ewe	001	020	,	2,000
Enterprise Output (excluding BLSA)	60	76	58	57
BLSA	-8	-6	-7	-9
BEON	-0	-0	-1	-5
Concentrates	18	22	18	17
Purchased fodder and keep	7	2	7	8
Veterinary and medicines	7	8	7	7
Other livestock costs	9	12	10	8
Seed	0	0	0	0
Fertilizer	3	5	3	3
Sprays	0	0	0	0
Other crop costs	0	0	0	0
Total Variable costs	45	51	47	43
Gross Margin (excluding BLSA) / Ewe	15	26	11	14
Gross margin (excluding BLSA) / forage ha	49	105	42	43
Gross Margin (excluding BLAS) / GLU	153	210	109	162
Enterprise Gross margin (excluding BLSA)	7,873	4,241	4,800	21,186
Measures of Income (per farm)				
Farm Business Income	20,077	2,716	17,853	61,065
Farm Corporate Income	-8,369	-19,621	-7,444	13,893
Agricultural Economic Profit	-59,765	-38,379	-50,970	-121,265
Agri-environment Economic Profit	19,479	4,815	17,599	54,103
Diversified Economic Profit	1,056	1,363	402	1,591
SPS Economic Profit	30,860	12,580	25,525	79,464
Farm Investment Income	-1,260	-17,419	-4,602	39,206
Net Farm Income	9,425	-4,403	6,853	43,528
MII	-11,290	-23,489	-13,254	18,243
Enterprise NM/ewe (excluding BLSA) Enterprise NM/ewe after F&S labour (excl	-48	-61	-52	-42
BLSA)	-72	-124	-81	-54
Lambs born & reared/ewe	1.04	1.23	1.05	0.99

^{*}A part of this table was derived from data with less than 15 observations in the sample which could reduce the robustness of the results

Appendix 7. Enterprise gross margins and efficiency factors – sample and premium

Table 37 LFA Sucklers

2018/19		Sample			Premium		
No farms	s in sample	153			58		
	No farms	4171			1375		
Production information							
Average cow numbers		39			43		
Enterprise grazing livestock units *		38			43		
Calves per cow		0.93			1.02		
Herd replacement rate (%)		19%			16%		
Adjusted forage area (including comm	ions)	51.16			49.54		
Stocking rate (cows per adj. forage ha		0.76			0.86		
Stocking rate (GLUs per adj. forage ha	•	0.75			0.87		
Enterprise Output		Total	per cow	per adj for ha	Total	per cow	per adj for ha
zmorprios output		(£)	(£)	(£)	(£)	(£)	(£)
		(-)	(-)	(-)	(=)	(-)	(-)
		00450	F 4 7	004	07004	200	550
Suckler calves †		20153	517	394	27231	636	550
Less Herd Depreciation		3589	92	70	3183	74 500	64
Total Output (A)		16564	425	324	24049	562	486
Variable Costs							
Concentrates		2373	61	46	2447	57	49
Coarse fodder		1289	33	25	683	16	14
Vet and Medicines		1070	27	21	1029	24	21
Other livestock costs		2548	65	50	2402	56	48
Total Variable Costs (B)		7280	186	142	6560	153	132
Gross Margin before forage (A-B) =	(C)	9284	239	182	17488	409	354
Forage Variable Costs		672	17	13	934	22	19
Gross Margin after forage (A-B) = (C	;)	8613	222	169	16555	387	335
Prices							
Calf price (£/calf) *		684			798		
Cull cow price (£/cow)		765			813		
Replacement heifer/cow price (£/head	1)	1070			1128		
E Ot-							
Forage Costs		10			15		
Fertilizer (£/ha)		10			15		
Seed (£/ha) Spray (£/ha)		1 1			1 1		
Other crop costs (£/ha)		1			2		
Total (£/ha)		13			19		
Unadjusted forage area excluding com	nmons	59.36			51.48		
* excludes stock away on agistment							
† Calf price is as sold off the cow or a	transfer valu	e at weaning	9				

Premium is weighted top third by gross margin after forage per cow

Table 38 Finished cattle from suckler bred calves or stores

2018/19	Sample		Premium	
No farms in sample	40		16	
No farms	1082		361	
Production information				
Enterprise grazing livestock units *	33		40	
Adjusted forage area (including commons)	37.08		40.31	
Stocking rate (GLUs per adj. forage ha.)	0.89		0.99	
Enterprise Output	Total (£)	per adj, for. ha (£)	Total (£)	per adj for ha (£)
Cattle output	25959	700	38065	944
Total Output (A)	25959	700	38065	944
Variable Costs				
Concentrates	11155	301	11352	282
Coarse fodder	514	14	484	12
Vet and Medicines	716	19	1050	26
Other livestock costs	4041	109	4383	109
Total Variable Costs (B)	16426	443	17270	429
Gross Margin before forage (A-B) = (C)	9533	257	20795	515
Forage Variable Costs (D)	576	16	672	17
Gross Margin after forage (C-D) = (E)	8958	241	20123	498
Prices				
Dairy heifer transfer or sale price £	na		na	
Finished cattle price £	1204		1175	
Store cattle price £	963		979	
·				
Forage Costs				
Fertilizer (£/ha)	11		13	
Seed (£/ha)	2		2	
Spray (£/ha)	1		1	
Other crop costs (£/ha)	1		1	
Total (£/ha)	16		17	
Unadjusted forage area excluding commons * excludes stock away on agistment	43.65		43.01	

Table 39 Store cattle from suckler bred calves or stores

2018/19	Sample		Premium	
No farms in sample	113		40	
No farms	3316		1108	
Production information				
Enterprise grazing livestock units *	22		27	
	04.44		00.00	
Adjusted forage area (including commons)	31.11		30.99	
Stocking rate (GLUs per adj. forage ha.)	0.71		0.86	
Enterprise Output	Total (£)	per adj. for. ha (£)	Total (£)	per adj. for. ha (£)
Cattle output Total Output (A)	12627 12627	406 406	20065 20065	647 647
Total Output (A)	12021	400	20065	047
Variable Costs				
Concentrates	4583	147	4491	145
Coarse fodder	654	21	547	18
Vet and Medicines	639	21	704	23
Other livestock costs	2634	85	3118	101
Total Variable Costs (B)	8511	274	8860	287
Gross Margin before forage (A-B) = (C)	4116	132	11205	360
Forage Variable Costs (D)	239	8	308	10
Gross Margin after forage (C-D) = (E)	3877	124	10897	350
Prices				
Dairy heifer transfer or sale price £	na		na	
Finished cattle price £	1120		1144	
Store cattle price £	871		890	
·				
Forage Costs				
Fertilizer (£/ha)	6		8	
Seed (£/ha)	0		1	
Spray (£/ha)	0		1	
Other crop costs (£/ha)	1		1	
Total (£/ha)	8		10	
Unadjusted forage area excluding commons * excludes stock away on agistment	31.19		30.39	

Premium is weighted top third by gross margin after forage per adjusted forage hectare

Table 40 Upland SDA flocks

2018 lamb crop	Sample			Premium		
No farms in sample	109			50		
No farms	3183			1059		
Production information						
Average ewe numbers	512			557		
Enterprise grazing livestock units *	62			74		
Lambs reared per ewe	1.34			1.63		
Flock replacement rate (%)	27%			28%		
Adjusted forage area (including commons)	87.3			85.3		
Stocking rate (ewes per adj. forage ha.)	5.9			6.5		
Stocking rate (GLUs per adj. forage ha.)	0.7			0.9		
			per adj			per adj
Enterprise Output	Total	per ewe	for ha	Total	per ewe	for ha
	(£)	(£)	(£)	(£)	(£)	(£)
Lambs †	54266	106	622	75400	135	884
Wool	721	1	8	899	2	11
Less Flock Depreciation	7892	15	90	7913	14	93
Total Output (A)	47095	92	540	68385	123	802
Variable Costs						
Concentrates	11776	23	135	12478	22	146
Coarse fodder	2714	5	31	1487	3	17
Vet and Medicines	3847	8	44	4666	8	55
Other livestock costs	6804	13	78	7318	13	86
Total Variable Costs (B)	25141	49	288	25949	46	304
Gross Margin before forage (A-B) = (C)	21954	43	252	42436	77	498
Forage Variable Costs (D)	2029	4	23	2632	5	31
Gross Margin after forage (C-D) = (E)	19924	39	229	39805	72	467
Prices	£/hd	£/hd	% sales		£/hd	% sales
Fat Lamb price	80	75		81	85	
Store Lamb price	57	16		57	9	
Ewe Lamb price	83	9		88	6	
Draft ewe price	79			94		
Cull ewe price (£/ewe)	49			57		
Wool price (£/kg)	0.66			0.73		
Replacement price (£/head)	93			97		
Forage Costs						
Fertilizer (£/ha)	19			26		
Seed (£/ha)	1			1		
Spray (£/ha)	1			2		
Other crop costs (£/ha)	2			2		
Total (£/ha)	23			31		
Unadjusted forage area excluding commons * excludes stock away on agistment † includes all enterprise output except wool	105.5			91.8		

Premium is weighted top third by gross margin after forage per head

Table 41 Hill SDA flocks

2018 lamb crop	Sample			Premium		
No farms in sample				21		
No farms	1743			604		
Production information						
Average ewe numbers	528			320		
Enterprise grazing livestock units *	51.4			38.5		
Lambs reared per ewe	1.04			1.41		
Flock replacement rate (%)	26%			27%		
Adjusted forage area (including commons)	86.3			46.2		
Stocking rate (ewes per adj. forage ha.)	6.1			6.9		
Stocking rate (GLUs per adj. forage ha.)	0.6			0.8		
Enternaine Output	Total		per adj for ha	Total		per adj for ha
Enterprise Output	(£)	per ewe			per ewe	
Lambs †	38980	(£) 74	(£) 452	(£) 39035	(£) 122	(£) 845
Wool	529	1	452 6	527	2	045 11
	7864	15	91	3759	12	81
Less Flock Depreciation	31645	60	3 1	35803	112	775
Total Output (A)	31043	00	307	33603	112	113
Variable Costs						
Concentrates	9535	18	111	5571	17	121
Coarse fodder	3571	7	41	1114	3	24
Vet and Medicines	3796	7	44	2688	8	58
Other livestock costs	4798	9	56	3818	12	83
Total Variable Costs (B)	21701	41	252	13191	40	286
Gross Margin before forage (A-B) = (C)	9944	19	115	22613	72	489
Forage Variable Costs (D)	1167	2	14	965	3	21
Gross Margin after forage (C-D) = (E)	8777	17	101	21648	69	468
Prices	£/hd	£/hd	% sales		£/hd	% sales
Fat Lamb price	76	62		82	88	
Store Lamb price	51	22		62	2	
Ewe Lamb price	66	15		78	10	
Draft ewe price	74			79		
Cull ewe price (£/ewe)	39			59		
Wool price (£/kg)	0.59			0.69		
Replacement price (£/head)	89			92		
Forage Costs						
Fertilizer (£/ha)	11			17		
Seed (£/ha)	0			1		
Spray (£/ha)	1			2		
Other crop costs (£/ha)	1			2		
Total (£/ha)	14			21		
Unadjusted forage area evaluding commens	159.7			51.0		
Unadjusted forage area excluding commons * excludes stock away on agistment	139.7			31.0		
† includes all enterprise output except wool						
I molades all efficience output except wool						

Premium is weighted top third by gross margin after forage per head

Appendix 8. Reports in this series

Organic Farming in England

Crop Production in England

Dairy Farming in England

Hill Farming in England

Horticulture Production in England (Horticultural Business Data)

Lowland Grazing Livestock Production

Pig Production in England

Poultry Production in England

Details available at www.ruralbusinessresearch.co.uk

Appendix 9. References

Defra 2018 - structure-england-farm_type_series_14nov19a.xlsx - Farm type breakdown for commercial holdings

Appendix 9. Definition of Terms

1. Accounting years: To ensure consistency in harvest/crop year and commonality of subsidies within any one FBS year, only farms which have accounting years ending between 31 December and 30 April inclusive are included in the survey.

Aggregate results are presented in terms of an accounting year ending at end-February, the approximate average of all farms in the FBS. Thus the results relate, on average, to March - February years

Business Outputs, Inputs, Costs and Income

- 2. Farm business income for sole traders and partnerships represents the financial return to all unpaid labour (farmers and spouses, non-principal partners and directors and their spouses and family workers) and on all their capital invested in the farm business, including land and buildings. For corporate businesses it represents the financial return on the shareholders capital invested in the farm business. Note that prior to 2008/09 directors remuneration was not deducted in the calculation of farm business income. It is used when assessing the impact of new policies or regulations on the individual farm business. Although Farm Business Income is equivalent to financial Net Profit, in practice they are likely to differ because Net Profit is derived from financial accounting principles whereas Farm Business Income is derived from management accounting principles. For example in financial accounting output stocks are usually valued at cost of production, whereas in management accounting they are usually valued at market price. In financial accounting depreciation is usually calculated at historic cost whereas in management accounting it is often calculated at replacement cost.
- **3. Farm corporate income** represents the return on own capital invested in the farm business, to risk and to entrepreneurship. It is derived by deducting unpaid labour, both manual and managerial, from Farm Business Income. This allows the profitability of sole traders and partnerships to be compared directly with that of companies. Currently we are able to deduct an estimate of unpaid manual labour but not of unpaid managerial labour and so the data are only approximate. However, we plan to undertake a research project to produce a method for deriving an estimate of unpaid managerial labour, so that we can produce better data for this measure in future.
- **4. Farm investment income** represents the return on **all** capital invested in the farm business **whether borrowed or not**, to risk and to entrepreneurship. It is a general measure of the profitability of farming as an activity rather than of a particular business. It is derived by adding net interest payments to Farm Corporate Income. Since currently the data for Farm Corporate income are only approximate, so too are the data for Farm Investment Income.

5. Net Farm Income (NFI) is intended as a consistent measure of the profitability of tenant-type farming ¹² which allows farms of different business organisation, tenure and indebtedness to be compared. It represents the return to the farmer and spouse alone for their manual and managerial labour and on the tenant-type capital ¹³ invested in the farm business.

To represent the return to farmer and spouse alone, a notional deduction is made for any unpaid labour provided by non-principal partners and directors, their spouses and by others; this unpaid labour is valued at average local market rates for manual agricultural work.

To confine the measure to the tenant-type activities and assets of the business, an imputed rent is deducted for owner-occupied land and buildings and for landlord-type improvements made by the tenant. No deduction is made for interest payments on any farming loans, overdrafts or mortgages; interest earned on financial assets is also excluded.

- **6. Cash income** is the difference between total revenue and total expenditure. Revenue is: receipts adjusted for debtors; and expenditure is: purchases adjusted for creditors. It is assumed, therefore, that all end of year debtor and creditor payments are settled in full, even though this may happen beyond the end of the accounting year. Cash income represents the cash return to the group with an entrepreneurial interest in the business (farmers and spouses, non-principal partners and directors and their spouses and family workers) for their manual and managerial labour and on all their investment in the business.
- **7. Family farm income** is a measure of farm income used by the European Commission. It is based upon actual tenure and indebtedness. However, it is a broader measure than net farm income in that it represents the return to all unpaid labour (farmers and spouses, non-principal partners and directors and their spouses and family workers). It also includes breeding livestock stock appreciation although it cannot be realised without reducing the productive capacity of the farm.

Cropping, Stocking and Labour

8. Utilised agricultural area (UAA) is the crop area, including fodder, set-aside land, temporary and permanent grass and rough grazing in sole occupation (but not shared

¹² Tenant-type farming was never conceived of as including non-agricultural activities on farm (using farm resources) except perhaps for value added activities such as small-scale food processing, e.g. sales of farm produced butter and cream and retail sales of farm produced liquid milk. However, recent research has revealed that many of the more varied non-agricultural activities which have been increasing on farms over the years have been inadvertently included in the calculation of NFI, with the result that about three-quarters of non-agricultural activities on farm by value are currently included and one-quarter excluded, without any clear basis for this division. Although this means that the definition of NFI has become untenable on the current basis, it has been decided to continue with historical practice for reasons of continuity, rather than to change the definition, pending the introduction of a wider measure to include all on-farm business activities.

¹³ Tenant-type capital comprises livestock, machinery, crops in store, stocks of consumables, work in progress, orchards, other permanent crops, glasshouses, cash and other assets needed to run the business. It does not include land and buildings.

rough grazing) i.e. the agricultural area of the farm. It includes bare land and forage let out for less than one year.

- **9. Total area of farm** is the utilized agricultural area plus woodland and other areas of the farm not used for agriculture (e.g. buildings, roads, water, household gardens).
- 10. Total tillage comprises the utilised agricultural area, plus bare land and forage hired in from others in the accounting period, minus temporary and permanent grass and rough grazing in sole occupation (but not shared rough grazing).
- 11. Total area farmed comprises the total area of the farm minus woodlands and buildings, etc. plus net land hired in.
- **12.** Adjusted utilised agricultural area comprises the utilised agricultural area with rough grazing in sole occupation converted to a permanent pasture equivalent.

(See the end of this appendix for further information on adjusted area calculations).

- 13. Stocking figures are the average annual level of stocking based on estimated average livestock numbers on the farm for the year, including fractions for livestock on the farm for less than a year.
- **14. Total livestock units** are used as an approximate measure of stocking intensity and are based on the estimated energy requirements of different species and ages of livestock. The factors used are set out in Appendix 2 of 'Farm Incomes in the United Kingdom 1999/00'.
- **15. Annual labour units (ALU)** are the estimated number of full time worker equivalents of persons working on the holding during the year. Part-time workers are converted to full-time equivalents in proportion to their actual working time related to that of a full-time worker. One ALU represents one person employed for 2,200 hours. [I SLR = 1,900 hours]

Outputs, Inputs and Farm Business Income

16. Agricultural output is the main measure of individual crop and livestock output.

It comprises:

(a) Crop enterprise output, which is the total value of crops produced by the farm (other than losses in the field and in store). It includes crops used for feed and seed by the farm business and those consumed in the farmhouse and by farm labour. Crop enterprise output is calculated on a "harvest year" as distinct from an "accounting year" basis; that is, it refers only to those crops (with the exception of certain horticultural crops) wholly or partly harvested during the accounting year and excludes any crop carried over from the previous year. Thus valuation changes (between the previous and current crops) are not relevant and the total harvested yield of the crop is valued at market prices (plus any subsidies). However, any difference between the opening valuation of any stocks of previous crops and their ultimate disposal value (sales, used on farm and any end-year stocks) is included in total farm output.

- **(b) By-products, forage and cultivations**, which cover the value of output of the by-products of agricultural activity, sales of fodder, valuation changes for fodder and cultivations. It also covers revenue from the letting of bare land or forage on a short-term lease.
- (c) Livestock enterprise output comprises the total sales of livestock and livestock products including direct livestock subsidies and production grants received, part of the valuation change (see below), produce consumed in the farmhouse and by labour and the value of milk and milk products fed on the farm (excluding direct suckling) adjusted for debtors at the beginning and end of the year (except for direct livestock subsidies) and transfers between enterprises; less purchases of livestock and livestock products from outside the farm business. Stock appreciation for breeding livestock (cattle, sheep and pigs see paragraph 18) has been excluded from individual livestock enterprise outputs. However, changes in the numbers of breeding livestock between the opening and closing valuation and the total valuation change of trading livestock are included. Unlike crop enterprise output, livestock enterprise output is calculated on an accounting year basis.
- (d) Miscellaneous output covers the value of output from those activities which are still within the agricultural cost centre but do not fall within either livestock or crop enterprise output. These will include revenue from wayleaves, agricultural hirework, sundry woodland sales, contract farming rent, miscellaneous insurance receipts and compensation payments.
- 17. Agricultural costs comprise payments and the estimated value of non-cash inputs, including home-grown feed and seed, adjusted for changes in stocks and creditors between the beginning and end of the year.

Total variable costs

These are taken to be costs of feed, veterinary fees and medicines, other livestock costs, seeds, fertilisers, crop protection and other crop costs.

Purchased concentrate feed and fodder

This represents expenditure on feeds and feed additives, including charges for agistment.

Home-grown concentrate feed and fodder

This includes ex-farm value of all home produced cereals, beans, milk (excluding direct suckling) etc. fed on the farm both from the current and previous years' crops.

Veterinary fees and medicines

This consists of veterinary fees and the cost of all medicines.

Other livestock costs

This comprises straw bought specifically for bedding materials, breeding costs (including AI and stud fees) miscellaneous dairy expenses, disinfectants, marketing and storage costs of animal products, milk levies and other livestock costs not separately identified.

Purchased and home-grown seeds

This comprises expenditure on purchased seeds, plants and trees adjusted for changes in stocks. Home-grown seed from the previous crop is included and charged at estimated market price: any seeds from current crops and sown for a succeeding crop are excluded, but are included in the closing valuation of the crop and hence in enterprise output. This enables the value of home-grown seed used in the production of the current crop to be identified.

Fertilisers

This includes lime, fertilisers and other manures, and is adjusted for changes in stock. Fertilisers sown for next year's crops are treated as if they were still in store and are included in the closing valuation.

Crop protection

This includes costs of pre-emergent sprays, fungicides, herbicides, dusts and insecticides and other crop sprays.

Other crop costs

These comprise all crop inputs not separately specified, e.g. marketing charges, packing materials, crop levies, baling twine and wire (though not fencing wire).

Total fixed costs

These are the costs of labour, machinery, contract work, land and buildings, other general farming costs and depreciation.

Labour (excluding farmer and spouse) This comprises wages and employer's insurance contributions, payments in kind, and salaried management. To calculate net farm income an imputed charge for unpaid labour is made, excluding that of the farmer and spouse, valued at the rate of comparable paid labour. The value of the manual labour of the farmer and spouse is not charged as an input in calculating net farm income (i.e. it is a component of net farm income).

Contract costs

These costs include expenditure on work carried out by agricultural contractors, including the costs of materials employed, such as fertilisers, unless these can be allocated to the specific heading. Costs of hiring machines to be used by the farm's own labour are also included. Expenditure on contract labour is only included here if it is associated with the hiring of a machine. Otherwise it is entered under (casual) labour. Machinery running costs

These represent the cost of machinery and equipment repairs, fuel and oil and car mileage expenses. It excludes depreciation.

Land and building inputs

For the calculation of farm business income these comprise any rent paid, insurance, rates and repairs to land and buildings incurred by the whole business. In the derivation of net farm income land and building costs also include an imputed rental charge for owner occupiers but exclude those costs associated with land ownership such as the insurance of farm buildings, and landlord-type repairs and upkeep.

Depreciation of machinery, glasshouses and permanent crops

Depreciation provisions in respect of machinery, glasshouses and permanent crops (e.g. orchards) are shown on a current cost basis. The rates of depreciation used (generally on a diminishing balance basis for machinery and straight line for glasshouses and permanent crops) are intended to reflect the degree of deterioration of the assets.

Other general farming costs

These consist of electricity, heating fuel, water for all farming purposes, insurance (excluding labour and farm buildings), bank charges, professional fees, vehicle licences, and other miscellaneous expenses not recorded elsewhere.

Interest payments

Interest charges on loans taken out for business purposes, net of interest receipts on monies invested temporarily outside the business, are deducted in the calculation of farm business income.

Depreciation of buildings and works

This is calculated on a current cost basis (generally on a straight line basis over 10 years) with an adjustment to allow for the effect of capital grants.

18. Breeding livestock stock appreciation represents the change in market prices of breeding cattle, sheep and pigs between the opening and closing valuations. It is not included in the calculation of farm business income but is shown separately within tables.

Balance Sheet Tables

- **19. Total fixed assets** includes land, buildings, breeding livestock, and machinery and equipment. For tenanted farmers, assets can include the tenant's component of farm buildings, cottages, etc., where these are owned by the landlord.
- 20. Liquid assets comprise cash and sundry debtors.
- **21.** Bank term loans and other long and medium term loans are loans which exceed 12 months.

22. Net Worth represents the residual claim or interest of the owner in the business. It is the balance sheet value of assets available to the owner of the business after all other claims against these assets have been met.

Yields and Implied Output Prices

- **23.** Crop yields are calculated as total production divided by crop area.
- **24. Implied output prices** are average unit returns excluding direct subsidies. For crops they are calculated by dividing the value of sales, closing stocks, farm house consumption, benefits in kind and own-produced feed by total production. Sales are valued at prices actually received at the farm gate before the deduction of marketing charges paid direct by the farmer such as drying and cleaning costs. More detailed information about sales volumes is collected for livestock and, in this case, the unit returns refer to sales of livestock including casualties. In both cases, any compensation payments or insurance payouts for output produced in the current year and destroyed are included.

Adapted from: DEFRA – Farm Accounts in England Results from the Farm Business Survey 2015/2016

 $\frac{https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/483835}{fbs-farmaccountsengland-10dec15.pdf}$

Standard Output (SO)

SOs are representative of the level of output that could be expected on the average farm under "normal" conditions (i.e. no disease outbreaks or adverse weather). Different SOs are calculated for North England, East England, West England, Wales, Scotland and Northern Ireland to allow for the differences in output in different areas. Standard outputs measure the total value of output of any one enterprise - per head for livestock and per hectare for crops. For crops this will be the main product (e.g. wheat, barley, peas) plus any by-product that is sold, for example straw. For livestock it will be the value of the main product (milk, eggs, lamb, pork) plus the value of any secondary product (calf, wool) minus the cost of replacement.

Up until 2010, Standard Gross Margins were used for the classification of farms. The difference between standard outputs and standard gross margins is that no variable costs are deducted in the derivation of standard outputs. A Defra note looking at the effects on the population by farm type as a result of the change from SGMs to SOs is available at:

(http://webarchive.nationalarchives.gov.uk/20130123162956/http:/www.defra.gov.uk/statistics/files/defra-stats-foodfarm-farmmanage-fbs-reviseclass 111221.pdf)

SOs are calculated from rolling five-year averages – this in order to lessen the impact of yearly fluctuations on calculated SOs. The SOs used for the presentation of data for the period 2009/10 to 2011/12 are based on the 2007SOs, the data for the period 2012/13 to 2015/16 are based on the 2010SOs, and the data for the period 2017/18 to 2018/19 are based on the 2013SOs.

The 2007, 2010 and 2013 SOs for England can be seen on Annex 1 under UK Farm Classification on the above site.

Source: https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

Adjusted Forage hectares (adj. for. ha)

The adjusted forage area allows an area of rough grazing to be equated to an equivalent area of flat mowable land on the basis of effective stocking capacity. This therefore reflects the true stock carrying capacity of a parcel of land and allows meaningful comparisons on true farm stocking rates to be presented. This measure is particularly important for LFA farms with large tracts of poor quality land including those with areas of common grazing.

Farm performance ratio

Farm performance is measured as the ratio of farm business output to farm business costs. An imputed value for unpaid manual labour, including that of the farmer and spouse is added to farm business costs. The value of paid managerial input is subtracted. The farms are ranked in descending order according to this ratio and allocated to quartiles with the top quartile (25 percent) representing the high performance band (Premium Group). Note that the farm weights are used to allocate farms to quartiles so the number of farms in a quartile will not necessarily be equivalent to a quarter of the sample.

Front cover photograph courtesy of a Hill Sheep farm in England