



Farm Business Survey 2021/2022 Hill Farming in England



David Harvey and Charles Scott
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David Harvey and Charles Scott

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Readers should be aware that Defra have not reviewed this report nor have they cross-checked the figures with those from their publications. The structure and content are based on the 2021 reports which Defra have previously approved. Any errors or omissions are the responsibility of the author(s) and not of Defra.

Foreword to the Seventeenth and Final Series

Welcome to this seventeenth and final series of reports on the economics of agriculture and horticulture in England produced from *Rural Business Research (RBR)*. Over the last seventeen years, RBR, our leading academic consortium comprising the Universities of Cambridge, Newcastle, Nottingham and Reading, and Askham Bryan and Duchy Colleges has, as detailed in Professor Seabrook's first foreword in this series, set out through these reports to "*make a valuable and useful contribution to the farming industry*". Reflecting on these series of reports, and the research and analysis that lies behind them, I am confident that we have both achieved and surpassed these initial aims, as evidenced through their longevity in production and loyalty of readership.

This final series draws on the 2021/22 financial year for farmers and growers, and covers the 2021 harvest year. Over this financial year, average Farm Business Income (FBI), derived from our work on the Defra-funded Farm Business Survey (FBS), increased to £86,100 per business, representing an increase of 66% on 2020/21. In percentage increase terms, General Cropping, Lowland Grazing Livestock and Mixed farm types saw FBI increase of 117, 85 and 84% respectively. At the top end of these average incomes per farm business, General Cropping, Dairy and Specialist Poultry received average FBIs in the order of £140,000. In contrast and borne out by the structural change we are witnessing in the pig sector, average FBI returns to Specialists Pig farms decreased by 75%, leaving an average FBI of only £11,800. The challenges and opportunities currently facing farmers and growers are many and varied, ranging from supply reductions and increased demand driving up commodity prices, to major shortages or greatly inflated prices of key inputs such as feed, fuel and fertiliser, to the ongoing challenges of attracting labour to our industry.

Of course, at the same time, for many farmers and growers the reduction, and the eventual loss, of the Basic Payment is now becoming a dawning realisation. Many businesses, on the back of strong FBI performances, will be well placed to adapt. However, for others, and in particular grazing livestock businesses, this payment reduction and eventual loss will be a hard pill to swallow. As we approach the mid-point years of the "2021-2027 Agricultural Transition" evidencing the economics of agricultural and horticultural businesses will grow in importance. Policy makers will rightly continue to draw on the FBS as the most authoritative evidence base of the changing fortunes of agriculture and horticulture. At the heart of this evidence base, across England over the last 86 years, has been the Universities and Colleges that have supported the methodological development of the FBS with Defra, working alongside colleagues in Wales and Scotland in a partnership approach, to deliver the Gold Standard of data quality upon which we have all become reliant. It is therefore with a heavy heart that, following the outcome of a recent open tender for this work, I announce that our specialist consortium will no longer be delivering this important work in the future. The FBS in England is of crucial importance to the farming industry and I wish it well in its new future under Promar International's delivery, and hope that RBR's collective 86 years of expertise and input serves as a strong basis for its continued success.

As I draw this seventeenth and final series to a close, I do so by thanking Defra for funding this vital work over the years, and to the thousands of farmers and growers who have, over nearly nine decades, freely shared their information, farm business data and time with us for the benefit of the industry. I also thank most of all both current and former colleagues from the universities and colleges who have worked on the FBS and who may continue to do so; it is their professionalism and dedication that has delivered every year, frequently against the backdrop of enormous challenge, and it has been the greatest of professional privileges to have led this team over the last 16 years.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
December 2022

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 166 ha of enclosed land and typically has access to an area of common grazing. It is part owned (81 ha) and part rented (92 ha) and most of the farm (104 ha) is in permanent grass. The average LFA farmer is 59 years old, has 23 beef cows and 404 breeding ewes. Cattle and sheep youngstock and fatstock make up the total to 78 cattle and 802 sheep on the farm, making a total of 89 Grazing Livestock Units.

The average LFA Grazing Livestock farm earns 65% of its total revenue (output) from crop and livestock farming activities, 20% comes from the Basic Payment, and 10% 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 £47,555 per farm. However, since this side of the whole farm business is assumed to incur most of the fixed costs (84%) the average LFA farm is shown as only making an Agricultural Business Income profit of £161 (before unpaid labour) from crop and livestock production per farm in 2021/22. Allowing for the unpaid labour allocation of £28,347 to this side of the business results in an Agricultural Corporate Income of -£28,185.

Farm revenues from all sources combine to generate a headline Farm Business Income of £42,881 per farm in 2021/22, a 29% increase on the previous year. This income has to cover the opportunity costs of the unpaid labour (provided mainly by the farmer's family) estimated at £30,337 per farm. As a result, Farm Corporate Income shows a return of £12,544 per farm (from £5,076 in the previous year). Adjusting for the net interest payments made by the farm, the Farm Investment Income (which represents the return on risk and entrepreneurship on all capital invested in the farm business whether borrowed or not) of £15,566 is improved by £7,760 compared with the previous year's figure of £7,806. The traditional measure of farm income of Net Farm Income (which puts all farm businesses on a comparable

¹

Defra-
<https://webarchive.nationalarchives.gov.uk/ukgwa/20100713171709/http://www.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, 2021

tenanted basis) averaged £31,667 per farm, up 34% from £23,608 in 2020/21. LFA farms depend to a substantial extent on public payments; the Basic Payment and Agri-environmental payments together account for 30% 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 12,233 commercial holdings classified as Grazing Livestock (LFA) farms and these account for 1.18 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 12,233 LFA Grazing livestock holdings, this report presents data representing the 6,348 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, 2020/21, 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 [Rural Business Research](#) website) but rather the the England Regions, which represent amalgamations of GO Regions:

- England West Region comprises the South West and West Midlands GO regions.
- England North Region includes North West, North East and Yorkshire & Humberside 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, 2021

⁷ Data from Defra, June Survey of Agriculture and Horticulture, 2021

- England East Region is the East Midlands, Eastern and South East GO regions.

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 2020 UELS and OUELS schemes are shown in Table 1. Although 2019 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 (2021)**Uplands Entry Level Scheme payments (£/ha) 2021**

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 203 farms, which are all part of the Farm Business Survey. Sixty-five per cent come from the FBS North Region (Government Office regions North East, North West and Yorkshire and the Humber) 26% from the FBS West Region (Government Office regions West Midlands and South West) and the remaining 10% from the FBS East Region (Government Office regions East Midlands, East of England and South East) see Figure 12. 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.

It is important to note that all surveys are subject to sampling error as they are not measuring the whole population, the FBS is no exception. It is common practice to publish 95% confidence intervals and error bars alongside any published estimated figures to give the reader an indication of the size of the sampling error. These signify that we are 95% confident that this range contains the true value. For simplicity within these reports, the confidence intervals have not always been published. Readers should be aware that the figures calculated from the FBS data have a level of uncertainty around them and that all figures are estimates. Generally, the smaller the sample size the greater the sampling error and the less confidence we have in the estimates. For details on the FBS confidence intervals, please refer to Defra FBS publications <https://www.gov.uk/government/collections/farm-business-survey>

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 was used prior to the 2010/11 year (see <http://www.defra.gov.uk/statistics/foodfarm/farmmanage/fbs>). LFA Grazing

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.)

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% 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 9. 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 be seen, the FBS sample is 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 Sample characteristics and population distribution (2021)

Farm	Sample		FBS Population (based on 2021 June survey)		Average size (SLR) *		Average area farmed (ha) ¢	
Size	No.	%	No.	%	Sample	FBS Popn.	Sample	FBS Popn.
Part-time & Spare-time †	18	9%	1,249	20%	0.7	0.7	62	50
Small	66	33%	2,747	43%	1.5	1.5	103	104
Medium	38	19%	1,050	17%	2.5	2.5	182	171
Large & Very large	81	40%	1,302	21%	5.6	5.7	464	378
All Sizes	203	100%	6,348	100%	3.2	2.4	258	154

* 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).

† 4 Spare-time sample farms which are excluded from the SLR analysis.

Note: FBS survey data refers only to those businesses calculated to generate more than €25,000 of Standard Output (see footnote 8) which excludes 5,885 very small but commercial 'holdings' within the LFA as recorded by the June Survey.

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;

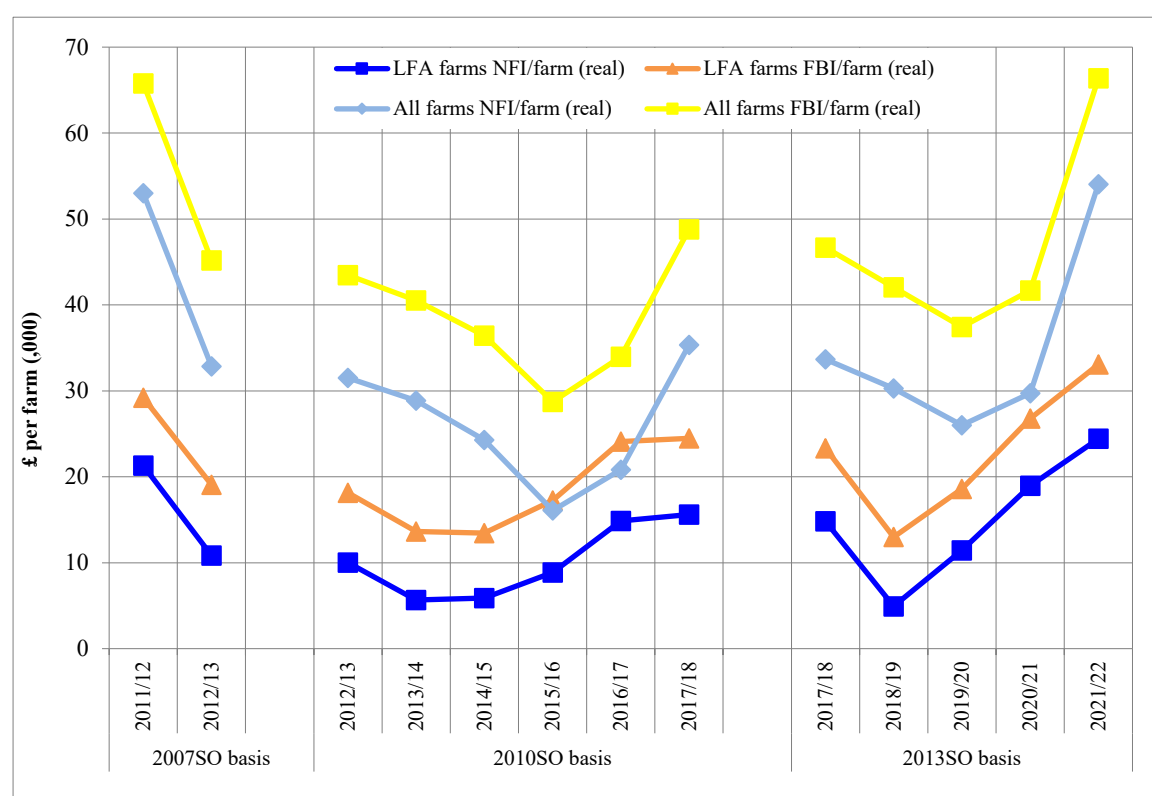
2. *SDA Beef*- farms where more than two thirds of the total SO is accounted by beef cattle, and 50% or more of the total area of the farm is in the LFA, of which 50% or more is in the SDA;
3. *SDA Cattle and Sheep*- farms that are neither specialist sheep or cattle but where more than two thirds of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

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. 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 2011/12 to 2021/22 (England in real^b terms)



Source: *Farm Accounts in England, 2021/22*, Defra

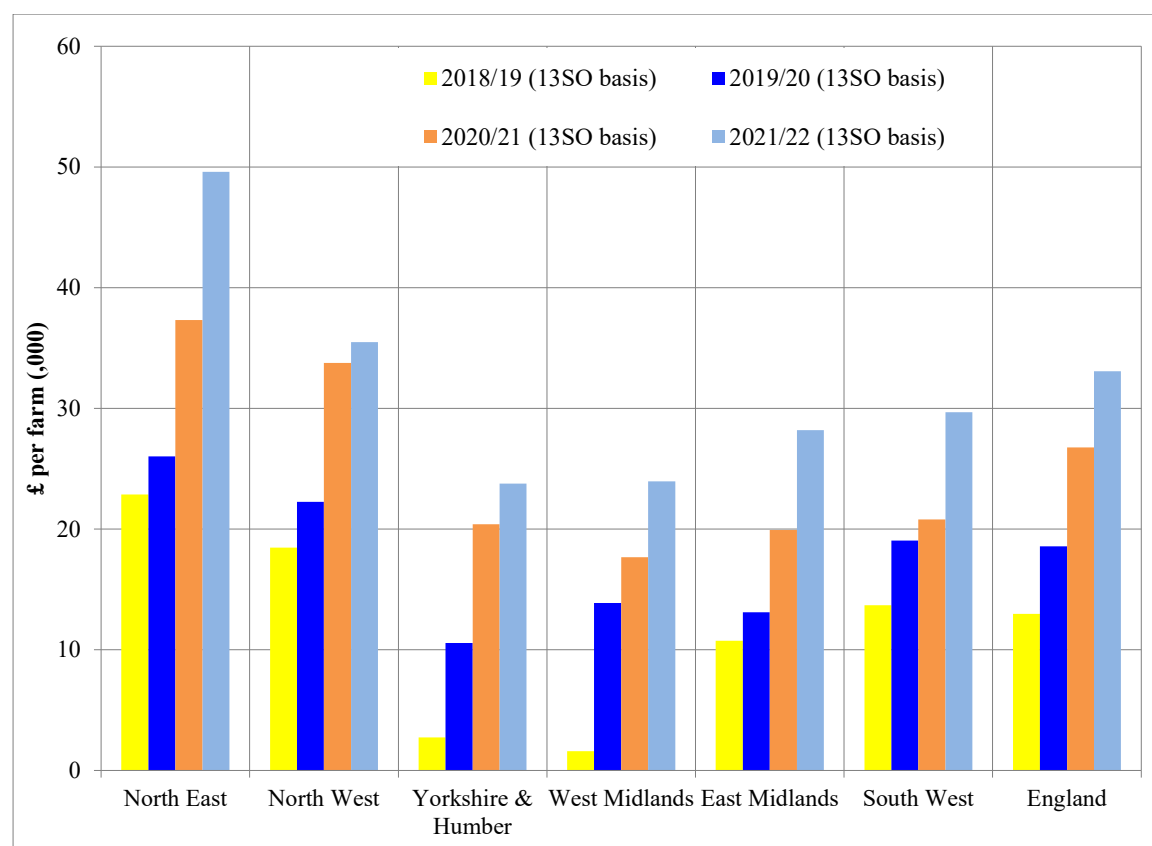
Notes: a: defined as Upland Grazing Farms

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, 2017/18 and 2021/22 were not shared to the same extent with their upland counterparts although the LFA farms did experience upturns at those points.

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

Figure 2 LFA Farm Business Income per farm, by region (2018/19 to 2021/22)



Source: - Government Office Reports, 2021/22, [RBR](#).

Notes: Data in real terms (by RPI)

4. The Average LFA Farm in 2021/22

Although the average LFA farm in the FBS sample in 2021/22 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 6,300 LFA farms in England (excluding the smallest farms - those with a Standard Output of less than 25,000 euros). The average farm area is 173 ha plus common grazing. This area includes some 7.5 ha under woodland, buildings and roads and 50 ha rough grazing. A small area (2.6 ha) of land is rented out (net of land rented in) giving a total of 163 ha farmed (excluding common grazing). The adjusted area (see Appendix 9. Definition of Terms, for a full description of adjusted area) of the on-farm rough grazing equates to 16 ha adjusted area which, plus 11 ha of adjusted common grazing, gives a total adjusted area farmed of 143 ha. The average farm is part owned (81 ha) and part rented (92 ha) and most of the farm (104 ha) is in permanent grass. The average LFA farmer is 59 years old, and has 23 beef cows and 404 breeding ewes.

Cattle and Sheep youngstock and fatstock make up the total to 78 cattle and 802 sheep on the farm, making a total of 89 Grazing Livestock Units (GLUs) ⁹.

4.1 The average LFA Farm account

The average LFA Grazing Livestock farm in England in 2021/22 is represented by the set of accounts shown in Table 3. This table reports the average farm accounts for the whole sample of 203 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 65% of their total revenue (output) from the agriculture cost centre, with 20% coming from the Basic Payment, and 10% 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 £47,555 per farm (a 28% increase on the previous year). However, since the production agriculture side of the farm business is assumed to incur most of the fixed costs (84%) the average LFA farm is shown to only generate an Agricultural Business Income of £161 per farm in 2021/22 – a 102% improvement on the figure of -£6,624 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 agriculture production activities to generate a headline Farm Business Income (FBI) (or profit) of £42,881 per farm in 2021/22, a 29% improvement on the previous year. This income covers the opportunity costs of the unpaid labour (provided by the farmer and partners) of £30,337 per farm and as a result, Farm Corporate Income registers at £12,544 per farm (a 147% increase on the £5,076 in 2020/21). Adjusting for the net interest payments made by the farm, the Farm Investment Income (which represents the return on risk and entrepreneurship on all capital invested in the farm business whether borrowed or not) is £15,566, up by 99% compared with the previous year’s figure of £7,806.

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).

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).

¹⁰ 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.

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 adjustments is shown in Table 3, giving an average NFI of £31,667 per farm, up 34% from £23,608 in 2020/21.

In the case of LFA grazing farms there is still a substantial number of tenanted farms. In the FBS North Region, where 65% 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 51% compared to a national average of 68% across all farm types (Defra 2021). 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 Hill farm support

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 2019 but some farms have been invited (by Natural England, and where appropriate criteria are met) to roll the scheme forward.

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

Derivation of farm income measures		Cost Centre (£ per farm)												Farm Business (£ per farm)				
		Agriculture			Agri-environment and other payments			Diversification out of agriculture			Basic Payment Scheme							
		2020/21	2021/22	% change	2020/21	2021/22	% change	2020/21	2021/22	% change	2020/21	2021/22	% change	2020/21	2021/22	% change		
% contribution of cost centre revenue to total:		62%	65%		10%	10%		5%	5%		24%	20%						
1	Total output (Revenue)	79,384	96,433	21%	13,045	15,375	18%	5,988	7,183	20%	30,445	29,976	-2%	128,862	148,967	16%		
2	Variable costs	42,148	48,878	16%	91	34	-63%	204	325	59%	4	3	-	42,446	49,239	16%		
3=1-2	Total Gross margin	37,236	47,555	28%	12,954	15,341	18%	5,783	6,858	19%	30,442	29,974	-2%	86,415	99,728	15%		
4	Fixed costs	44,347	48,170	9%	2,564	3,001	17%	2,883	2,975	3%	3,748	3,477	-7%	53,542	57,623	8%		
5=2+4	Total Costs	86,494	97,048	12%	2,655	3,035	14%	3,087	3,300	7%	3,751	3,479	-7%	95,988	106,862	11%		
6	Profit/(loss) on sale of fixed assets	486	776	60%										486	776	60%		
7=1-5+6	Farm Business Income	-6,624	161	102%	10,390	12,340	19%	2,900	3,883	34%	26,694	26,497	-1%	33,360	42,881	29%		
8	Adjustment for unpaid manual labour	26,488	28,347	7%	551	633	15%	1,245	1,358	9%	0	0	-	28,284	30,337	7%		
9=7-8	Farm Corporate Income	-33,113	-28,185	15%	9,839	11,707	19%	1,655	2,525	53%	26,694	26,497	-1%	5,076	12,544	147%		
10	Interest payments (net of interest received)	2,476	2,755	11%	65	90	37%	90	98	8%	98	80	-19%	2,730	3,023	11%		
11=9+10	Farm Investment Income	-30,636	-25,430	17%	9,904	11,797	19%	1,745	2,623	50%	26,792	26,577	-1%	7,806	15,566	99%		
% contribution of cost centre costs to total:		90%	91%		3%	3%		3%	3%		4%	3%						
2020/21 Sample size (unweighted) 202 Number (weighted) 6,818 2021/22 Sample size (unweighted) 203 Number (weighted) 6,348				12	Imputed rent									11,684	13,132	12%		
				13	Ownership charges									323	3,913	1112%		
				18	Director's remuneration									0	142	-		
				16	Unpaid labour of principal farmer and spouse									23,464	25,178	7%		
				17=11-12+13+18+16										Net Farm Income		23,608	31,667	34%
				19	Holding gains not included in farm income									9,278	58,444	530%		
				20	Breeding Livestock Appreciation (BLSA)									6,629	7,492	13%		
				21	Revaluation of machinery, permanent crops, glasshouse, quota									739	1,315	78%		
				22	Revaluation of land									1,909	49,637	2501%		
				23	Manager's paid managerial input									74	104	41%		
				24=17-16+23										Management and Investment Income		218	6,593	2928%

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, the agricultural enterprises on an average LFA farm just about break-even. The high-medium and top quartiles do return positive agricultural incomes but not so for the lowest two quartiles. The low-medium quartile manages to offset these agricultural losses by the incomes earned through environmental and diversification activities and the BPS, but the lowest quartile is unable to recoup these losses and returns a minimal FBI (and a negative NFI). In general, the better performing farms are larger and make greater incomes from their agri-environmental 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

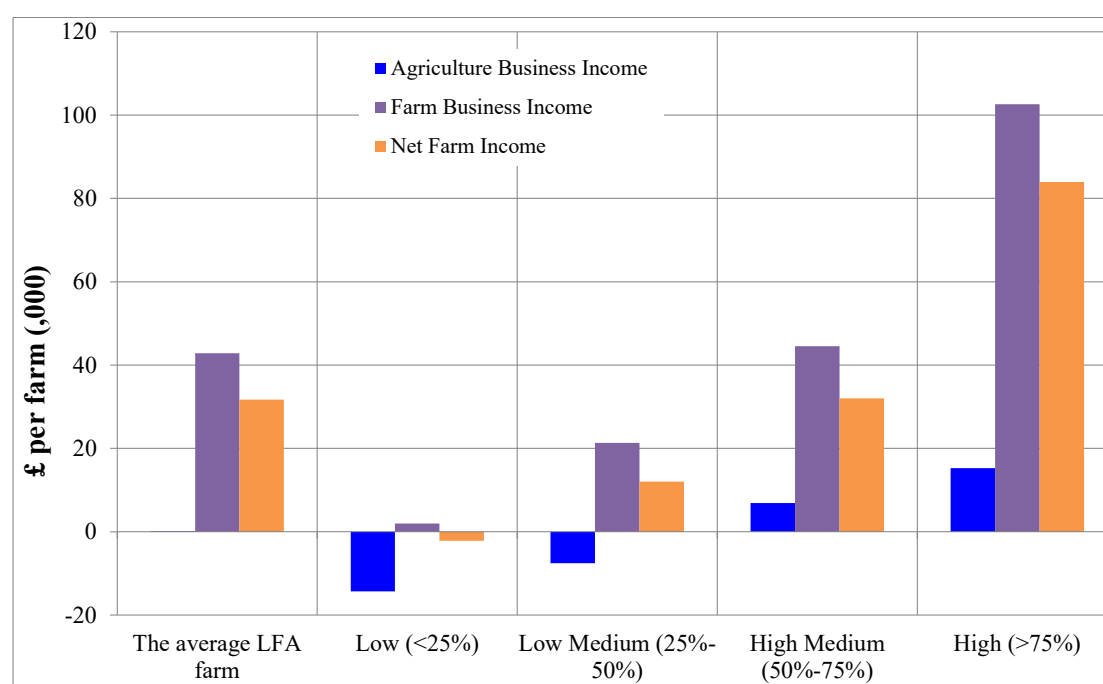


Figure 4 presents similar data on farm business performance by quartile, though here on the basis of Farm Business Income (FBI) per Grazing Livestock Unit (GLU) which

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

Figure 4 LFA Farm Business Performance by FBI/GLU quartile

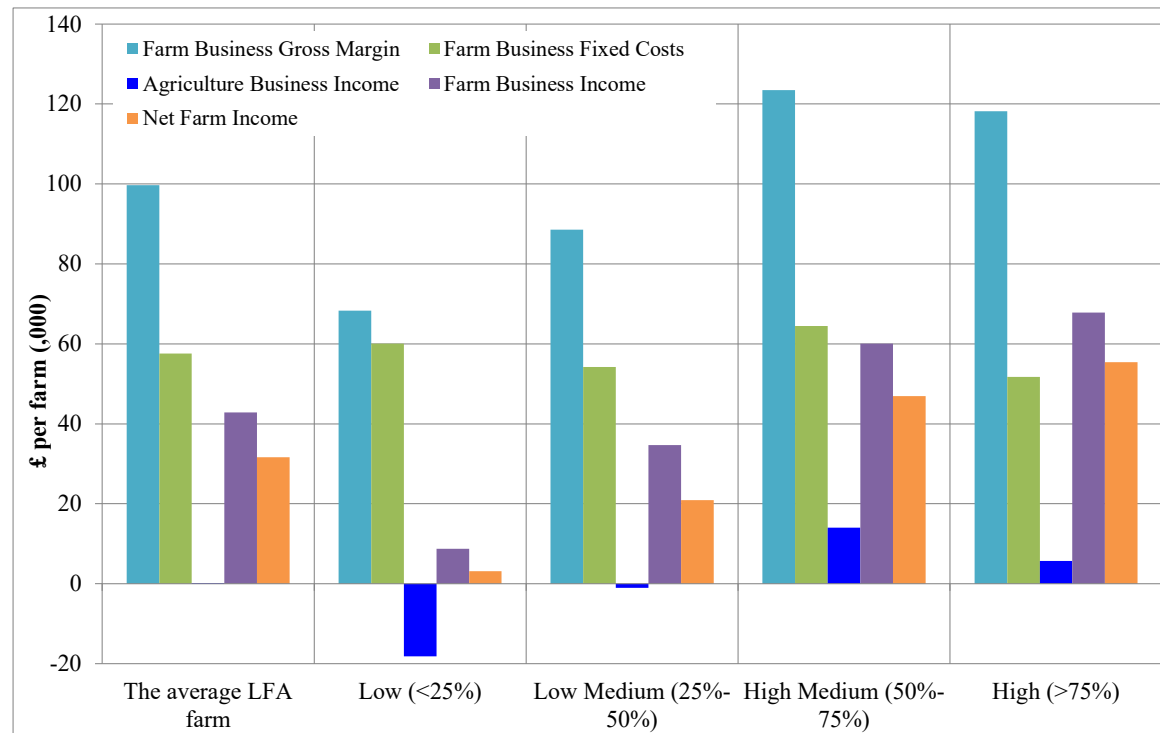
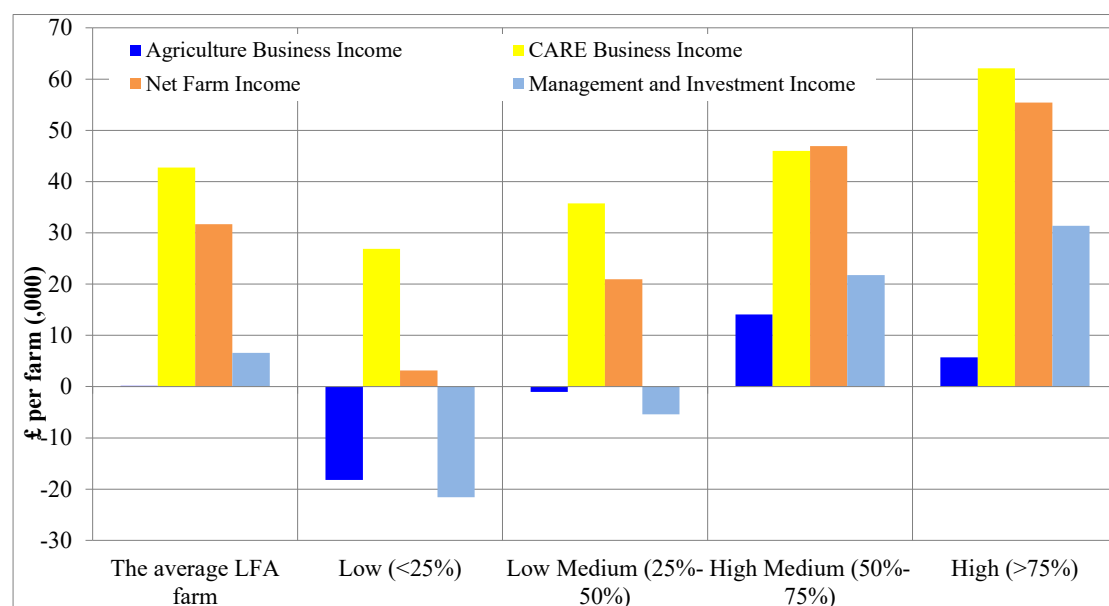


Figure 5 demonstrates how the CARE Business Income can rescue most farms from the ABI losses to return a positive NFI, if not MII. The improvement in ABI performance is seen to be the result of both better gross margins (revenues minus variable costs) and lower fixed costs per GLU exhibited by these 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 livestock groups appear to be the most profitable at the NFI and MII level despite all having a negative ABI. 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

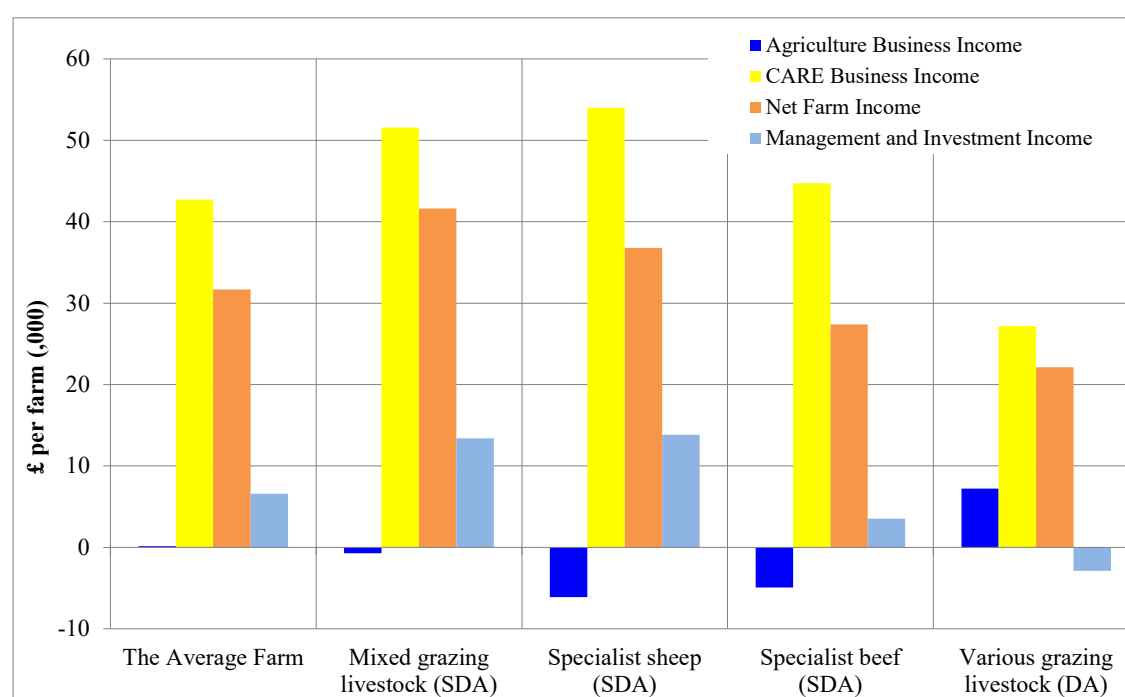


Figure 7 shows the business performance by size, measured here by the Standard Labour Requirement (SLR)¹¹ and illustrates that size is important to these farms' earning ability, although as previously seen it is the CARE income that rescues all farms from economic failure. This figure dramatically demonstrates 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 9. 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.

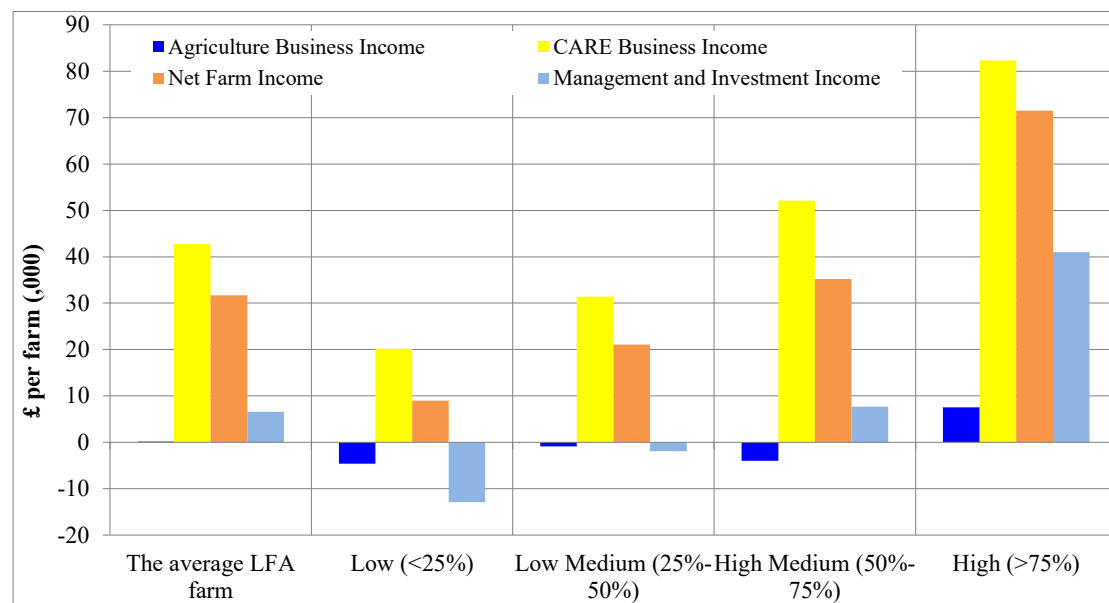
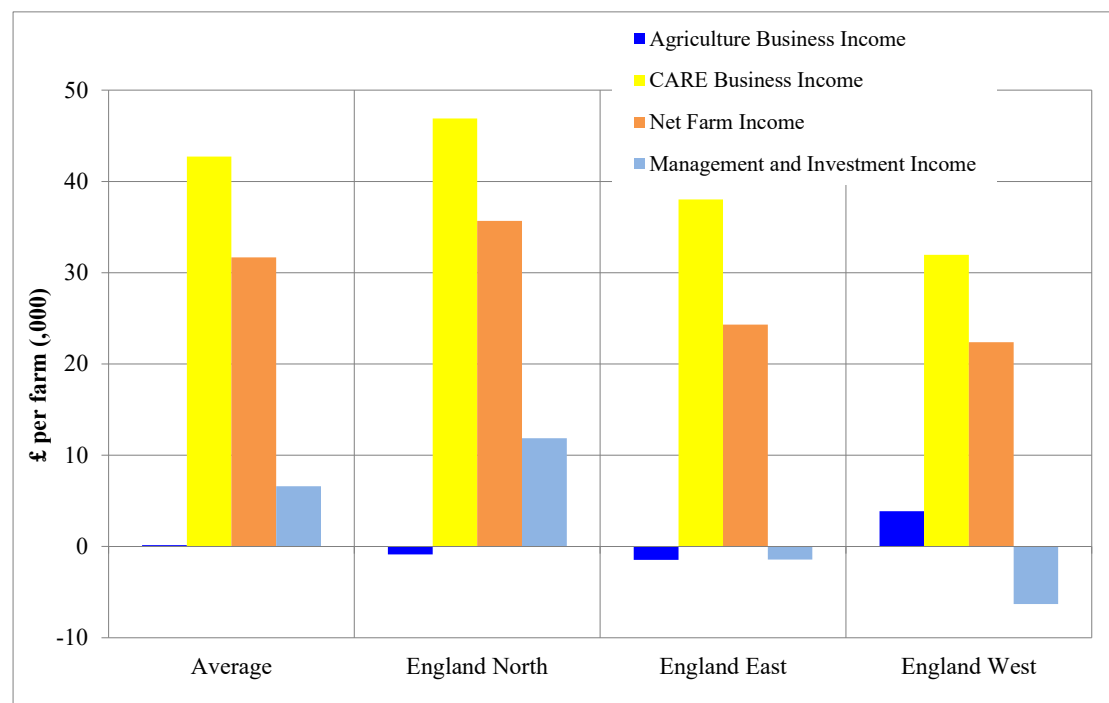
Figure 7 LFA business performance by size (SLR) quartile

Figure 8 shows the same business performance measures by FBS 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 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 FBS 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

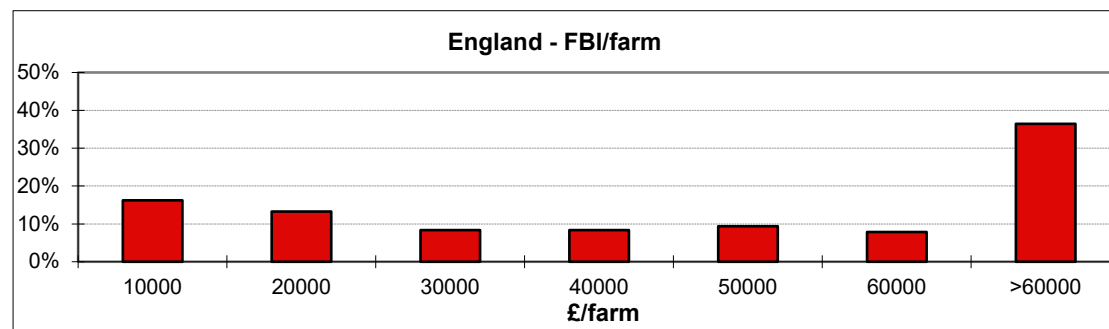


Figure 10 Frequency Distribution of NFI/farm of LFA farms in England

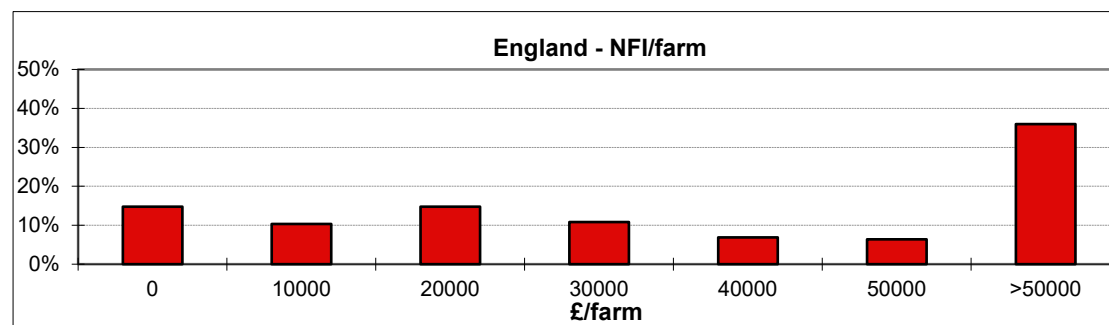
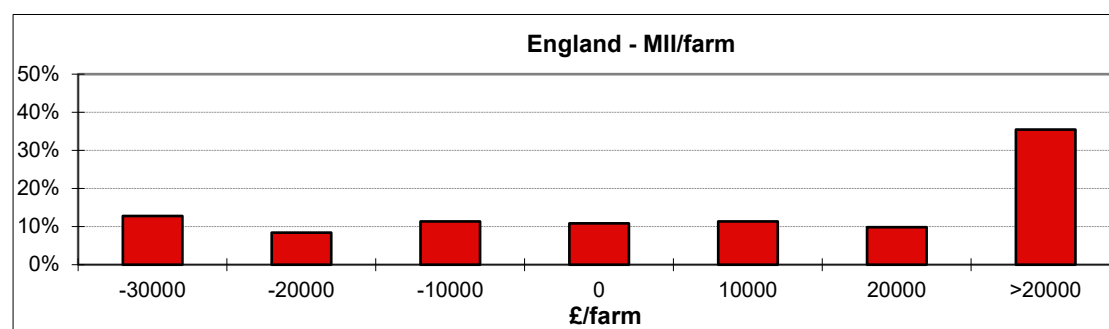


Figure 11 Frequency Distribution of MII/farm on LFA farms in England



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 2020 and 2021 lambing

	All Upland flocks		Change	
	2020 lambing	2021 lambing	£/ewe	%
<i>Number of farms in FBS</i>	94	95		
<i>Number of farms in FBS population</i>	2,888	2,822		
<i>Flock size (no. ewes)</i>	516	507	-9.2	-2%
(£ per ewe)				
Enterprise Output (excl. BLSA)	122.3	139.1	16.8	14%
BLSA	13.2	13.7	0.5	4%
Total Variable costs	53.3	59.9	6.6	12%
Concentrates	19.9	23.7	3.8	19%
Purchased fodder and keep	3.8	3.6	-0.2	-5%
Veterinary and medicines	9.3	9.4	0.1	1%
Other livestock costs	14.2	14.8	0.6	4%
Forage variable costs	6.1	8.5	2.4	39%
Gross Margin (excl. BLSA) / Ewe	69.0	79.2	10.2	15%
Gross Margin range	-12 to 179	-9 to 180		
Total Fixed costs	80.0	83.1	3.1	4%
Total costs	133.3	142.9	9.6	7%
Enterprise NM (excluding BLSA)	-11.0	-3.8	7.2	65%
Enterprise NM after F&S labour (excl BLSA)	-43.9	-38.9	5.0	11%
Stocking rate (GLUs/total adj ha)	0.66	0.69	0.03	4%
Lambing rate (born and reared/average no. ewes)	1.49	1.42	-0.1	-4%

Table 5 SDA upland sheep flock performance by flock size 2021 lambing

2021 lambing	All flocks	<300 ewes	300-600 ewes	>600 ewes
<i>Number of farms in FBS sample</i>	95	32	31	31
<i>Number of farms in FBS population</i>	2,822	1,135	1,034	632
<i>Flock size (no. ewes)</i>	507	194	444	1183
<i>(£ per ewe)</i>				
Enterprise Output (excluding BLSA)	139.1	142.3	125.4	146.4
BLSA	13.7	15.2	14.1	13.0
Total Variable costs, of which:	59.9	54.8	60.2	61.0
Concentrates	23.7	21.2	24.9	23.6
Purchased fodder and keep	3.6	4.2	5.5	2.3
Veterinary and medicines	9.4	9.0	9.1	9.5
Other livestock costs	14.8	14.2	13.8	15.5
Forage variable costs	8.5	6.3	6.9	10.1
Gross Margin (excluding BLSA) / Ewe	79.2	87.5	65.1	85.4
Total Fixed costs	12.3	14.4	21.8	5.6
Total costs	26.0	29.5	35.9	18.7
Net Margin (excluding BLSA) / Ewe	-3.8	-8.1	-14.9	4.5
Net Margin after F&S labour (excl BLSA)	-38.9	-76.7	-63.4	-12.1
Stocking rate (GLUs/total adj ha)	0.69	0.79	0.61	0.70
Lambing rate (born and reared/average no. ewes)	1.42	1.44	1.33	1.48

Table 6 SDA hill sheep flock performance 2020 and 2021 lambing

	All Hill flocks		Change	
	2020 lambing	2021 lambing	£/ewe	%
<i>Number of farms in FBS sample</i>	69	66		
<i>Number of farms in FBS population (weighted)</i>	2,252	1,914		
<i>Flock size (no. ewes)</i>	445	469	23	5%
<i>(£ per ewe)</i>				
Enterprise Output (excl. BLSA)	87.1	105.2	18.1	21%
BLSA	11.4	12.5	1.1	10%
Total Variable costs	44.4	48.5	4.1	9%
Concentrates	17.3	19.3	1.9	11%
Purchased fodder and keep	5.0	5.2	0.2	4%
Veterinary and medicines	7.6	8.2	0.6	8%
Other livestock costs	10.2	10.8	0.7	6%
Forage variable costs	4.4	5.1	0.7	16%
Gross Margin (excl. BLSA) / Ewe	42.7	56.7	14.0	33%
Gross Margin range	-16 to 149	-62 to 276		
Total Fixed costs	73.3	79.5	6.2	8%
Total costs	117.7	128.0	10.3	9%
Net Margin (excl. BLSA) / Ewe	-30.6	-22.8	7.8	25%
Net Margin after F&S labour (excl. BLSA)	-62.9	-55.7	7.2	11%
Stocking rate (GLUs/total adj ha)	0.54	0.51	-0.03	-6%
Lambing rate (born and reared/average no. ewes)	1.16	1.21	0.1	5%

Table 7 SDA hill sheep flock performance by flock size 2021 lambing

2021 lambing	All flocks	<300 ewes	300-600 ewes	>600 ewes
<i>Number of farms in FBS sample</i>	66	19	26	21
<i>Number of farms in FBS population</i>	1,914	653	847	413
<i>Flock size (no.ewes)</i>	469	166	443	999
(£ per ewe)				
Enterprise Output (excl. BLSA)	105.2	129.9	105.4	98.6
BLSA	12.5	11.7	12.2	13.1
Total Variable costs, of which:	48.5	59.6	47.2	46.9
Concentrates	19.3	30.4	19.8	15.9
Purchased fodder and keep	5.2	3.2	3.3	7.5
Veterinary and medicines	8.2	6.9	8.2	8.5
Other livestock costs	10.8	12.8	10.3	10.8
Forage variable costs	5.1	6.3	5.6	4.2
Gross Margin (excl. BLSA) / Ewe	56.7	70.2	58.2	51.8
Total Fixed costs	27.9	43.4	14.8	35.7
Total costs	40.4	55.0	27.0	48.8
Net Margin (excl. BLSA) / Ewe	-22.8	-37.0	-9.2	-31.5
Net Margin after F&S labour (excl. BLSA)	-55.7	-112.7	-48.2	-47.5
Stocking rate (GLUs/total adj ha)	0.51	0.67	0.58	0.41
Lambing rate (born and reared/average no. ewes)	1.21	1.37	1.19	1.18

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 2020/21 and 2021/22

	All herds		change	
	2020/21	2021/22	£/cow	%
<i>Number of farms in FBS sample</i>	141	137		
<i>Number of farms in FBS population</i>	3,718	3,323		
<i>Herd size (no.cows)</i>	40	41	1	3%
(£ per cow)				
Enterprise Output (excl. BLSA)	463	471	8	2%
BLSA	71	89	18	25%
Total Variable costs	218	238	20	9%
Concentrates	61	63	2	3%
Purchased fodder and keep	16	18	2	13%
Veterinary and medicines	30	29	-1	-3%
Other livestock costs	66	69	3	5%
Forage variable costs	45	60	15	33%
Gross Margin (excl. BLSA) / Cow	245	233	-12	-5%
Gross Margin range	-3,046 to 1,690	-218 to 790		
Total Fixed costs	442	460	18	4%
Total costs	660	698	38	6%
Enterprise NM (excl. BLSA)	-197	-227	-30	-15%
Enterprise NM after F&S labour (excl. BLSA)	-365	-394	-29	-8%

LFA Suckler cow results, for 2020/21 and 2021/22, 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 2021/22

2021/22 calving period	All herds	<30 cows	30-60 cows	>60 cows
<i>Number of farms in FBS sample</i>	137	49	46	42
<i>Number of farms in FBS population</i>	3,323	1,649	980	693
<i>Herd size (no.cows)</i>	41	18	43	93
<i>(£ per cow)</i>				
Enterprise Output (excl. BLSA)	471	459	474	475
BLSA	89	82	77	99
Total Variable costs, of which:	238	237	243	235
Concentrates	63	67	67	58
Purchased fodder and keep	18	26	21	13
Veterinary and medicines	29	28	31	27
Other livestock costs	69	65	74	68
Forage variable costs	60	52	51	69
Gross Margin (excl. BLSA) / Cow	233	222	230	240
Total Fixed costs	460	510	456	440
Total costs	698	748	699	675
Enterprise NM (excl. BLSA)	-227	-289	-225	-200
Enterprise NM after F&S labour (excl. BLSA)	-394	-561	-423	-300

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 203 English LFA grazing farms includes 19 fully organic farms. Within this there are 15 organic suckler herds, 9 organic upland flocks and 6 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 £148/cow less than the non-organic output and despite £106/cow less being spent on variable costs (particularly concentrates and purchased fodder) the gross margin for organic sucklers is £42/cow less than the non-organic average. As can be seen from the spread of GMs there is considerable variation across farms. Organic fixed costs are higher than the non-organics, by £35/cow, giving the non-organic farms a £77/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 £114/cow lower for organic herds than the non-organic herds (albeit negative in both cases). The stocking rate for the organic farms is slightly lower, at 0.70 GLU/total adjusted area, than the non-organic farms (0.71 GLU/total adjusted area) (including commons and all land rented in).

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

2021/22	All Suckler herds	
	Non-organics	Organics
<i>Number of farms in FBS sample</i>	122	15
<i>Number of farms in FBS population</i>	3,165	158
Herd size (no.cows)	40	52
(£ per cow)		
Enterprise Output (excluding BLSA)	480	332
BLSA	88	95
Total Variable costs	245	139
Concentrates	66	16
Purchased fodder and keep	19	9
Veterinary and medicines	28	35
Other livestock costs	70	56
Forage costs	62	23
Gross Margin (excluding BLSA)	236	194
Gross Margin range	-218 to 790	30 to 480
Total Fixed costs	458	493
Total costs	703	631
Enterprise NM (excluding BLSA)	-222	-299
Enterprise NM after F&S labour (excl BLSA)	-387	-502
Stocking rate (GLUs/total adj ha)	0.71	0.70

Table 11 compares organic and non-organic Upland SDA flocks to the GM and NM level. Enterprise output is £8/ewe lower for organics (at £131/ewe) than that of the non-organics. Variable costs are £21/ewe lower for organic flocks (at £40/ewe) than the non-organics. The resultant gross margin is £91/ewe for organic flocks and £79/ewe for the non-organic flocks. Fixed costs are £103/ewe for organic flocks and £83/ewe for non-organics – this results in net margins (after farmer and spouse labour) of -£36/ewe for organic flocks and -£39/ewe for non-organic flocks.

Table 11 SDA flock performance Organic and Non-organic

2021 lambing	Upland SDA Flocks	
	Non-organic	Organic
<i>Number of farms in FBS sample</i>	86	9
<i>Number of farms in FBS population</i>	2754	68
Flock size (no. ewes)	507	516
(£ per ewe)		
Enterprise Output (excluding BLSA)	139.3	131.1
BLSA	13.7	11.9
Total Variable costs	60.4	39.8
Concentrates	24.0	12.5
Purchased fodder and keep	3.7	2.2
Veterinary and medicines	9.3	10.8
Other livestock costs	14.8	11.7
Forage costs	8.6	2.6
Gross Margin (excluding BLSA) / Ewe	78.9	91.3
Gross Margin range	-9 to 180	11 to 139
Total Fixed costs	82.6	102.6
Total costs	142.9	142.4
Enterprise NM (excluding BLSA)	-3.6	-11.3
Enterprise NM after F&S labour (excl BLSA)	-39.0	-35.5
Stocking rate (GLUs/total adj ha)	0.69	0.62
Lambing rate (born and reared/average no. ewes)	1.43	1.42

*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 19 fully organic farms and the 184 non-organic LFA grazing farms in the sample. This table shows that the overall difference in profit favours the organic farms by £4,693 in Farm Business Income, by £22,916 in Farm Corporate Income and by £27,590 in Farm Investment Income. After the appropriate adjustments these profit figures translate to a Net Farm Income (NFI) of £36,526, which is £5,014 higher than the non-organic LFA grazing farms, and a Management and Investment Income (MII) profit of £13,814, which is £7,453 better than the non-organic farms' MII of £6,361. The greater FBI of organic farms is down to the higher profitability (by FBI) of the non-production cost centres more than offsetting the (greater) loss of the Agriculture cost centre. 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 209ha, organic farms are 33% larger, in area terms, than the non-organics (157ha) and while a large portion of this is rough grazing very little of it is common land. Organic LFA farms are 42% owner occupied, against 51% for the non-organics, and actually use 9% more labour (at 1.7 agricultural 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 13 Land use, stocking, outputs & variable costs - Organic vs Non-organic

2021/22	LFA Non-organics	LFA Organics
Number (unweighted)	184	19
Number (weighted)	6,151	197
Total Area (includes woodland and roads etc) (ha)	171.9	207.9
Area Farmed (ha)	161.9	195.3
Net Land Hired In (ha)	-2.6	-2.4
Utilised Agricultural Area (ha)	164.5	197.8
<i>Of which</i> Total main products and set-aside (ha)	1.8	1.8
Grass, fodder crops and rough grazing (ha)	162.6	196.0
<i>Of which</i> rough grazing (unadjusted) (ha)	49.4	58.1
Adjusted rough grazing (sole occupation)	15.3	21.4
Adjusted rough grazing (shared)	11.5	0.2
Total Adjusted Utilised Agriculture Area (ha)	130.3	161.0
Area owner occupied (ha)	78.8	138.3
Area tenanted (ha)	93.1	69.5
Average age of farmer (years)	59	62
Agricultural labour units (ALU)	1.6	1.5
Standard Output size units (2010SO)	98,980	119,151
Standard Output size group (2010SO)	7.1	7.5
<u>Land Use</u>		
Temporary Grassland Area (ha)	6.2	15.1
Permanent Grassland Area (ha)	103.4	117.3
<u>Stocking</u>		
Total Beef cows	21.9	46.1
Total Cattle	76.1	129.0
Ewes (LFA and lowland)	407.8	292.9
Total Sheep	809.6	568.3
<u>Livestock Units</u>		
Total Cattle LU	44.7	78.1
Total Sheep LU	43.6	30.1
Grazing LU (cattle, sheep, horses and others)	88.8	108.7
 Outputs & Variable Costs		
Farm Business Output	148,290	170,078
of which: Output from agriculture	96,638	90,027
Agri environment payment	14,953	28,522
Diversified output	7,047	11,421
Basic Payment	29,652	40,108
Livestock Enterprise Output	87,142	83,667
of which: Cattle Enterprise Output	32,354	46,964
Sheep Enterprise Output	54,420	36,200
Crop Enterprise Output	5,149	3,244
Non agriculture, no other category output	4,343	3,116
 <u>Variable Costs</u>		
Farm Business Variable costs	49,493	41,320
of which: Agriculture Variable Costs	49,130	41,019
Agriculture Crop Costs	6,539	3,270
Agriculture Livestock Costs	35,432	26,400
of which: Purchased Fodder & Feed	19,041	9,190
Home Produced Fodder & Feed	1,282	2,274
Veterinary and medicines	5,319	5,082
Other Livestock Costs	9,792	9,854
Agriculture Contract Costs	4,542	8,317
Agriculture Casual Labour	2,571	3,029

8. References

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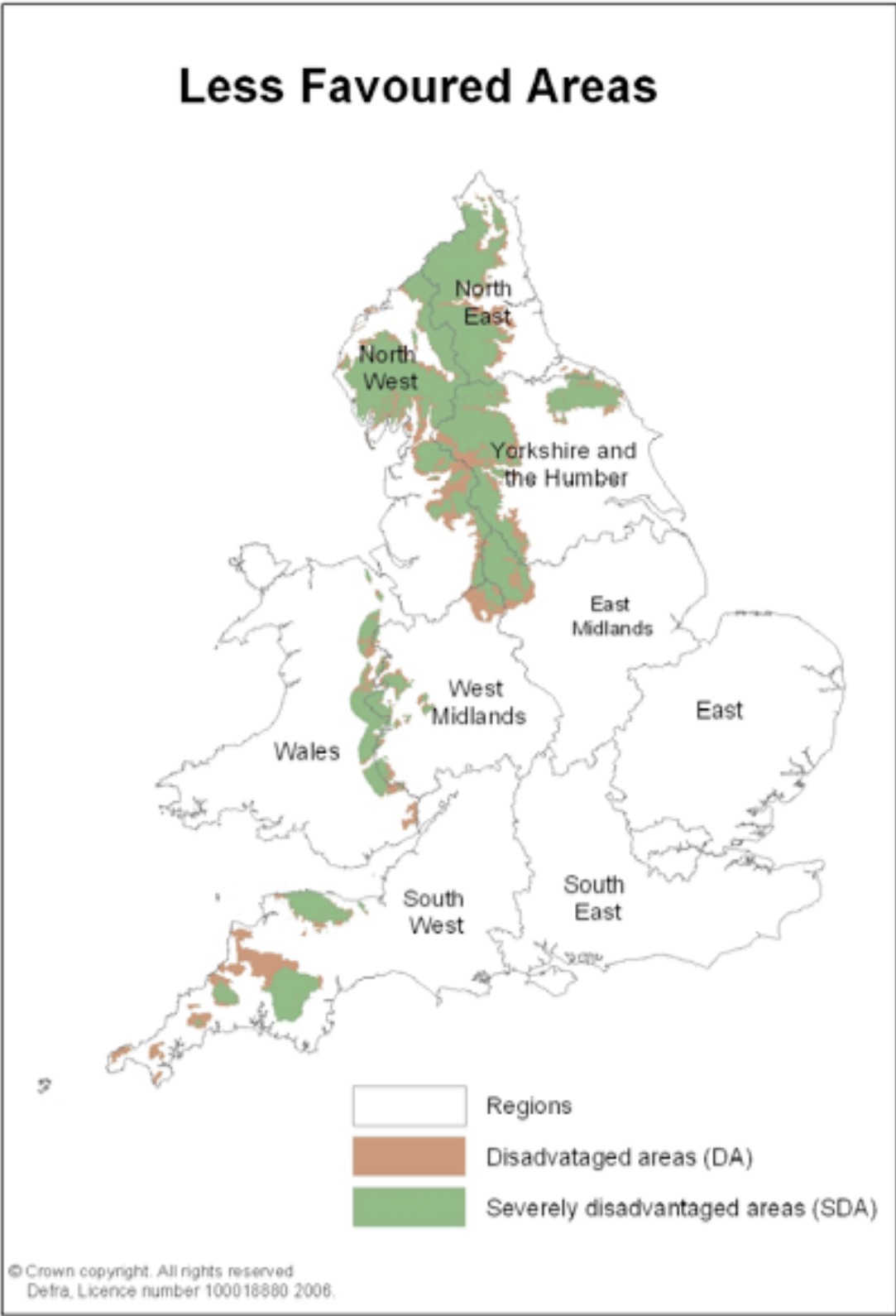
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Hill Farming in England, 2006/7, RBR

Government Office Reports, 2020/21, 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 (SDA) farm 2021/22		Cost Centre (£ per farm)				Farm Business (£ per farm) 2021/22
		Agriculture 2021/22	Agri-environment and other payments 2021/22	Diversification out of agriculture 2021/22	Basic Payment Scheme 2021/22	
Derivation of farm income measures:						
Total output	(a)	105,378	19,676	9,749	35,338	170,141
Variable costs	(b)	53,094	132	542	5	53,773
Total Gross margin	(c=a-b)	52,284	19,544	9,207	35,333	116,368
Fixed costs	(d)	54,528	4,311	4,219	3,983	67,040
Total Costs	(e=b+d)	107,622	4,443	4,761	3,988	120,813
Profit/(loss) on sale of fixed assets	(f)	1,539				1,539
Farm Business Income	(g=a-e+f)	-704	15,233	4,988	31,351	50,867
Adjustment for unpaid manual labour	(h)	31,490	973	1,766	0	34,228
Farm Corporate Income	(i=g-h)	-32,194	14,260	3,222	31,351	16,639
Interest payments (net of interest received)	(j)	2,843	57	123	75	3,098
Farm Investment Income	(k=i+j)	-29,351	14,317	3,345	31,426	19,736
Derivation of Net Farm Income:						
		Imputed rent (l)				10,604
		Ownership charges (m)				4,103
		Director's remuneration (n)				81
		Unpaid labour of principal farmer and spouse (o)				28,315
		Net Farm Income (p=k-l+m+n+o)				41,632
		Holding gains not included in farm income (q)				44,171
		Breeding Livestock Appreciation (BLSA) (r)				8,624
		Revaluation of machinery, permanent crops, glasshouse & quota (s)				1,645
		Revaluation of land (t)				33,902
		Manager's paid managerial input (u)				86
		Management and Investment Income (v=p-o+u)				13,403
The average farm						
Number (unweighted)	69					
Number (weighted)	1,529					

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

The average Specialist beef (SDA) farm 2021/22		Cost Centre (£ per farm)				Farm Business (£ per farm) 2021/22
		Agriculture 2021/22	Agri-environment and other payments 2021/22	Diversification out of agriculture 2021/22	Basic Payment Scheme 2021/22	
Derivation of farm income measures:						
Total output	(a)	108,382	13,467	14,042	29,103	164,994
Variable costs	(b)	50,814	0	42	1	50,857
Total Gross margin	(c=a-b)	57,568	13,467	14,000	29,103	114,137
Fixed costs	(d)	62,626	2,343	6,221	3,286	74,476
Total Costs	(e=b+d)	113,440	2,344	6,263	3,287	125,333
Profit/(loss) on sale of fixed assets	(f)	140				140
Farm Business Income	(g=a-e+f)	-4,917	11,123	7,779	25,816	39,801
Adjustment for unpaid manual labour	(h)	26,150	589	2,764	0	29,502
Farm Corporate Income	(i=g-h)	-31,067	10,535	5,015	25,816	10,299
Interest payments (net of interest received)	(j)	3,079	144	133	130	3,487
Farm Investment Income	(k=i+j)	-27,988	10,679	5,148	25,946	13,786
Derivation of Net Farm Income						
		Imputed rent (l)				16,611
		Ownership charges (m)				5,651
		Director's remuneration (n)				504
		Unpaid labour of principal farmer and spouse (o)				24,070
		Net Farm Income (p=k-l+m+n+o)				27,399
		Holding gains not included in farm income (q)				63,506
		Breeding Livestock Appreciation (BLSA) (r)				6,862
		Revaluation of machinery, permanent crops, glasshouse & quota (s)				1,923
		Revaluation of land (t)				54,720
		Manager's paid managerial input (u)				201
		Management and Investment Income (v=p-o+u)				3,530
The average farm						
Number (unweighted)	31					
Number (weighted)	646					

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

The average Specialist sheep (SDA) farm 2021/22		Cost Centre (£ per farm)				Farm Business (£ per farm) 2021/22
		Agriculture 2021/22	Agri-environment and other payments 2021/22	Diversification out of agriculture 2021/22	Basic Payment Scheme 2021/22	
Derivation of farm income measures:						
Total output	(a)	82,455	24,696	4,878	35,476	147,504
Variable costs	(b)	47,377	2	312	2	47,694
Total Gross margin	(c=a-b)	35,077	24,694	4,565	35,475	99,811
Fixed costs	(d)	42,122	3,959	2,229	4,526	52,837
Total Costs	(e=b+d)	89,500	3,961	2,542	4,527	100,530
Profit/(loss) on sale of fixed assets	(f)	944				944
Farm Business Income	(g=a-e+f)	-6,101	20,734	2,336	30,949	47,918
Adjustment for unpaid manual labour	(h)	26,385	587	803	0	27,775
Farm Corporate Income	(i=g-h)	-32,486	20,147	1,533	30,949	20,143
Interest payments (net of interest received)	(j)	3,234	94	87	115	3,531
Farm Investment Income	(k=i+j)	-29,252	20,241	1,620	31,064	23,674
Derivation of Net Farm Income						
		Imputed rent (l)				14,006
		Ownership charges (m)				3,938
		Director's remuneration (n)				87
		Unpaid labour of principal farmer and spouse (o)				23,100
		Net Farm Income (p=k-l+m+n+o)				36,793
		Holding gains not included in farm income (q)				68,427
		Breeding Livestock Appreciation (BLSA) (r)				8,086
		Revaluation of machinery, permanent crops, glasshouse & quota (s)				1,043
		Revaluation of land (t)				59,298
		Manager's paid managerial input (u)				119
		Management and Investment Income (v=p-o+u)				13,812
The average farm						
Number (unweighted)	41					
Number (weighted)	1,863					

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

The average Various grazing livestock (DA) farm 2021/22		Cost Centre (£ per farm)				Farm Business (£ per farm) 2021/22
		Agriculture	Agri-environment and other payments	Diversification out of agriculture	Basic Payment Scheme	
Derivation of farm income measures:		2021/22	2021/22	2021/22	2021/22	
Total output	(a)	98,443	5,544	5,426	22,237	131,649
Variable costs	(b)	46,755	4	270	3	47,032
Total Gross margin	(c=a-b)	51,687	5,540	5,156	22,234	84,617
Fixed costs	(d)	44,795	1,545	1,846	2,349	50,536
Total Costs	(e=b+d)	91,551	1,549	2,116	2,352	97,568
Profit/(loss) on sale of fixed assets	(f)	314				314
Farm Business Income	(g=a-e+f)	7,206	3,995	3,310	19,885	34,395
Adjustment for unpaid manual labour	(h)	28,464	456	1,142	0	30,062
Farm Corporate Income	(i=g-h)	-21,258	3,538	2,167	19,885	4,333
Interest payments (net of interest received)	(j)	2,220	93	80	41	2,433
Farm Investment Income	(k=i+j)	-19,038	3,631	2,247	19,926	6,766
Derivation of Net Farm Income						
Imputed rent (l)						13,128
Ownership charges (m)						3,280
Director's remuneration (n)						126
Unpaid labour of principal farmer and spouse (o)						25,088
Net Farm Income (p=k-l+m+n+o)						22,132
Holding gains not included in farm income (q)						58,422
Breeding Livestock Appreciation (BLSA) (r)						6,441
Revaluation of machinery, permanent crops, glasshouse & quota (s)						1,145
Revaluation of land (t)						50,837
Manager's paid managerial input (u)						75
Management and Investment Income (v=p-o+u)						-2,880
The average farm						
Number (unweighted)	62					
Number (weighted)	2,310					

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

2021/22	The average farm	Mixed grazing livestock (SDA)	Specialist sheep (SDA)	Specialist beef (SDA)	Various grazing livestock (DA)
Number of farms in the group	203	69	41	31	62
Number (weighted)	6,348	1,529	1,863	646	2,310
Utilisable Agricultural Area (UAA) (ha)	165	194	211	143	116
Average adjusted UAA (ha)	131	138	150	122	115
Average adjusted sole grazing (ha)	15	22	30	10	1
Average herd size	23	33	8	54	20
Average flock size	404	434	541	187	335
Output					
<u>Farm Output</u>	149,573	171,082	147,785	165,642	132,285
Farm Business Output	148,967	170,141	147,504	164,994	131,649
of which: Output from agriculture	96,433	105,378	82,455	108,382	98,443
Agri environment payment	15,375	19,676	24,696	13,467	5,544
Diversified output	7,183	9,749	4,878	14,042	5,426
Basic Payment	29,976	35,338	35,476	29,103	22,237
Livestock Enterprise Output	87,034	93,460	77,107	97,967	87,730
of which: Cattle Enterprise Output	32,808	40,316	7,532	69,768	37,886
(incl Livestock disease compensation)	102	30	0	212	200
Sheep Enterprise Output	53,854	52,709	69,189	28,010	49,473
Poultry Enterprise Output	212	26	263	64	335
Pigs Enterprise Output	11	0	0	55	14
Other Livestock Enterprise Output	150	408	123	70	23
Crop Enterprise Output	5,090	4,559	1,665	5,207	8,170
of which: Crop Subsidies	0	0	0	0	0
Main Crops	2,447	2,195	0	2,716	4,511
Forage & by-products	2,666	2,358	1,641	2,431	3,763
Cultivations output	-23	7	24	59	-104
Non agriculture, no other category output	4,305	7,347	3,683	5,208	2,542
Disposal Previous Crops	4	13	0	0	1
Farm Business Output	148,967	170,141	147,504	164,994	131,649
Variable Costs					
Farm Business Variable costs	49,239	53,773	47,694	50,857	47,032
of which: Agriculture Variable Costs	48,878	53,094	47,377	50,814	46,755
Agri environment Variable Costs	34	132	2	0	4
Diversified income Variable Costs	325	542	312	42	270
BPS Variable Costs	3	5	2	1	3
Agriculture Crop Costs	6,437	7,260	4,429	7,414	7,239
of which: Seed	575	596	286	461	826
Fertilizer	4,717	5,426	3,708	5,567	4,824
Crop Protection	445	492	194	514	596
Other Crop Costs	701	745	242	872	994
Agriculture Livestock Costs	35,152	38,739	35,991	37,081	31,561
of which: Purchased Fodder Feed	18,735	20,637	20,417	20,135	15,727
Home Produced Fodder Feed	1,312	1,904	0	1,815	1,839
Veterinary and medicines	5,311	5,531	6,262	3,971	4,774
Other Livestock Costs	9,794	10,667	9,313	11,160	9,222
Agriculture Contract Costs	4,660	4,113	4,255	4,193	5,478
Agriculture Casual Labour	2,585	2,863	2,684	2,126	2,450
Agriculture, no other category Variable Costs	44	119	17	0	27
Farm Business Gross Margin	99,728	116,368	99,811	114,137	84,617
Agriculture Gross Margin	47,555	52,284	35,077	57,568	51,687
Agri Environment Gross Margin	15,341	19,544	24,694	13,467	5,540
Diversified Gross Margin	6,858	9,207	4,565	14,000	5,156
BPS Gross Margin	29,974	35,333	35,475	29,103	22,234

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

	The Average LFA Farm	Mixed grazing livestock (SDA)	Specialist sheep (SDA)	Specialist beef (SDA)	Various grazing livestock (DA)
2021/22					
Number (unweighted)	203	69	41	31	62
Number (weighted)	6,348	1,529	1,863	646	2,310
Utilisable Agricultural Land (UAA) (ha)	165	194	211	143	116
Average adjusted UAA (ha)	131	138	150	122	115
Average adjusted sole grazing (ha)	15	22	30	10	1
Average herd size	23	33	8	54	20
Average flock size	404	434	541	187	335
Gross Margin					
Farm Business Gross Margin	99,728	116,368	99,811	114,137	84,617
Agriculture Gross Margin	47,555	52,284	35,077	57,568	51,687
Agri Environment Gross Margin	15,341	19,544	24,694	13,467	5,540
Diversified Income Gross Margin	6,858	9,207	4,565	14,000	5,156
BPS Gross Margin	29,974	35,333	35,475	29,103	22,234
Fixed Costs					
Farm Business Fixed Costs	57,623	67,040	52,837	74,476	50,536
of which: Agriculture Fixed Costs	48,170	54,528	42,122	62,626	44,795
Agri Environment Fixed Costs	3,001	4,311	3,959	2,343	1,545
Diversified Income Fixed Costs	2,975	4,219	2,229	6,221	1,846
BPS Fixed Costs	3,477	3,983	4,526	3,286	2,349
Agriculture Paid Labour	7,424	6,848	8,026	11,488	6,184
Of which Fixed Labour Costs	4,839	3,985	5,342	9,362	3,734
(-) Casual Labour Costs (a Variable Cost)	2,585	2,863	2,684	2,126	2,450
Agriculture Machinery Costs	18,607	22,828	15,687	23,994	16,662
of which: Machinery Running Costs	9,698	12,002	8,080	12,405	8,722
Agriculture Depreciation Tenants Capital	8,909	10,826	7,607	11,589	7,940
Agriculture General Farming Costs	11,767	12,388	10,861	13,443	11,617
of which: Agriculture Bank & Professional Fees	2,301	2,258	2,048	2,772	2,401
Agriculture Other General Costs	6,711	7,287	5,578	7,593	6,996
Net Interest Payments	2,755	2,843	3,234	3,079	2,220
Bad Debts Write-offs	0	0	0	0	0
Agriculture Property Costs	10,636	11,542	8,257	12,314	11,487
Non Agriculture Other Fixed Costs	2,321	3,784	1,976	3,512	1,297
Profit/loss sale of fixed assets	776	1,539	944	140	314
Agriculture Net Margin (AGRICULTURE BUSINESS INCOME)					
	161	-704	-6,101	-4,917	7,206
Unpaid manual labour	28,347	31,490	26,385	26,150	28,464
Of Which Unpaid Farmer and Spouse	23,513	26,335	21,797	21,197	23,678
Unpaid Partner	4,834	5,155	4,588	4,953	4,786
Agriculture Economic Profit (AGRICULTURE CORPORATE INCOME)					
	-28,185	-32,194	-32,486	-31,067	-21,258
Agriculture Net Interest Payment (added back)	2,755	2,843	3,234	3,079	2,220
AGRICULTURE INVESTMENT INCOME					
	-25,430	-29,351	-29,252	-27,988	-19,038
Farm Net Margin (FARM BUSINESS INCOME)					
	42,881	50,867	47,918	39,801	34,395
Farm Economic Profit (FARM CORPORATE INCOME)					
	12,544	16,639	20,143	10,299	4,333
FARM INVESTMENT INCOME					
	15,566	19,736	23,674	13,786	6,766
NET FARM INCOME					
	31,667	41,632	36,793	27,399	22,132
Holding gains not included in farm income	58,444	44,171	68,427	63,506	58,422
BLSA	7,492	8,624	8,086	6,862	6,441
Revaluation of Machinery, permanent crops etc.	1,315	1,645	1,043	1,923	1,145
Revaluation of Land	49,637	33,902	59,298	54,720	50,837
MANAGEMENT AND INVESTMENT INCOME					
	6,593	13,403	13,812	3,530	-2,880

Table 20 Balance sheet by main farm type

	The Average LFA Farm	Mixed grazing livestock (SDA)	Specialist sheep (SDA)	Specialist beef (SDA)	Various grazing livestock (DA)
2021/22					
Number (unweighted)	203	69	41	31	62
Number (weighted)	6,348	1,529	1,863	646	2,310
Average Farmed Area (ha)	162.9	198.6	205.0	143.2	111.0
Adjusted Utilisable Agricultural Area (ha)	131.3	138.0	149.6	122.1	114.7
Utilisable Agricultural Area (ha)	165.5	193.7	211.1	143.2	116.3
Grazing Livestock Units	89.4	101.7	69.7	127.3	86.6
Ewes (head)	404	434	541	187	335
Beef Cows (head)	22	31	8	53	18
Occupied Area (ha)	80.6	74.3	102.5	94.0	63.5
Tenanted Area (ha)	92.4	124.0	125.3	53.6	55.7
Percentage of Land Owned (%)	46.6	37.5	45.0	63.7	53.3
Assets					
Fixed Assets	1,077,268	1,030,853	996,702	1,387,836	1,086,086
Of which: Agricultural Land	834,977	751,979	751,017	1,091,578	885,840
Woodland	6,134	8,799	2,819	7,406	6,687
Total Buildings	28,103	28,579	27,075	40,372	25,186
Total Improvements	13,727	11,124	29,516	8,421	4,200
BPS Entitlements	27,955	32,757	33,782	26,166	20,578
Machinery	77,829	96,826	62,949	109,892	68,289
Breeding Livestock	84,524	99,885	88,610	86,046	70,637
Miscellaneous Business Assets	4,018	904	934	17,955	4,668
Current Assets	104,082	120,859	101,066	117,977	91,523
of which: Trading Livestock	37,292	42,596	16,904	71,557	40,638
Crops	645	728	0	2,670	544
Forage	3,979	4,543	2,559	7,122	3,873
Cultivation	620	792	316	917	669
Stores	4,818	5,853	2,744	5,211	5,697
Liquid Assets	56,727	66,347	78,543	30,500	40,103
Of which: Cash at Bank and In Hand	42,546	52,106	57,887	16,966	31,002
Debtors	9,486	12,369	11,829	11,749	5,054
Suspended	0	0	0	0	0
BPS debtors	4,696	1,872	8,827	1,785	4,047
Total Assets (£/farm)	1,181,350	1,151,712	1,097,767	1,505,813	1,177,609
Of which: Total Landlord-type Capital	882,941	800,481	810,426	1,147,777	921,914
Tenant Type Capital	298,409	351,231	287,341	358,036	255,695
Loans					
Total Long Term Loans	80,944	69,617	70,159	106,275	90,053
Of which: Bank Loans	43,915	45,178	39,567	38,909	47,986
Institutional Loans	30,751	22,013	28,111	66,724	28,601
Of which: AMC	26,492	12,477	25,913	56,055	27,965
Building Societies	755	1,395	0	4,116	0
Other Institutional Loans	3,504	8,141	2,197	6,553	636
Family Loans	6,214	2,157	2,482	641	13,466
Other Loans	65	268	0	0	0
Current Liabilities	24,064	20,081	28,148	36,425	19,949
Of which: Hire Purchase	5,110	6,163	6,145	9,236	2,424
Leasing	3	12	0	4	0
Other Current Liabilities	18,951	13,906	22,003	27,185	17,525
Of which Creditors	8,309	8,252	8,709	10,341	7,456
Bank Overdraft	10,596	5,584	13,294	16,562	10,069
Others	46	70	0	281	0
Total Liabilities	105,008	89,698	98,307	142,700	110,001
Closing Net Worth	1,076,342	1,062,014	999,460	1,363,113	1,067,608
Opening Net Worth	997,899	990,688	915,331	1,294,982	986,156
Change in New Worth	78,443	71,326	84,129	68,131	81,452

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

	The Average LFA Farm	Mixed grazing livestock (SDA)	Specialist sheep (SDA)	Specialist beef (SDA)	Various grazing livestock (DA)
2021/22					
Number (unweighted)	203	69	41	31	62
Number (weighted)	6,348	1,529	1,863	646	2,310
Total Area (includes woodland and roads etc) (ha)	173.0	198.3	227.7	147.6	119.1
Area Farmed (ha)	162.9	198.6	205.0	143.2	111.0
Net Land Hired In (ha)	-2.6	4.9	-6.1	0.1	-5.3
Utilised Agricultural Area (ha)	165.5	193.7	211.1	143.2	116.3
Of which Total main products (ha)	1.8	1.7	0.0	1.6	3.4
Grass, fodder crops and rough grazing (ha)	163.7	192.0	211.1	141.6	112.8
Of which rough grazing (unadjusted) (ha)	49.6	77.8	91.3	31.1	2.6
Adjusted rough grazing (sole occupation)	15.5	22.1	29.7	10.0	1.1
Adjusted rough grazing (shared)	11.1	12.6	27.0	0.0	0.6
Total Adjusted Utilised Agriculture Area (ha)	131.3	138.0	149.6	122.1	114.7
Area owner occupied (ha)	80.6	74.3	102.5	94.0	63.5
Area tenanted (ha)	92.4	124.0	125.3	53.6	55.7
Average age of farmer (years)	59	58	62	63	56
Agricultural labour units (ALU)	1.6	1.7	1.5	1.7	1.5
Standard Output (2013SO)	99,607	113,140	84,661	117,946	97,574
Standard Output size group (2013SO)	7.1	7.4	6.9	7.1	7.1
Land Use					
Temporary Grassland Area (ha)	6.4	6.2	1.1	4.1	11.5
Permanent Grassland Area (ha)	103.8	111.3	111.5	105.5	92.2
Stocking					
Total Dairy Cows	0	2	0	0	0
Total Beef cows	23	31	8	54	20
Total Cattle	78	97	21	180	82
Ewes (LFA and lowland)	404	434	541	187	335
Of which LFA Ewes	389	434	531	181	301
Lowland Ewes	16	0	10	6	34
Total Sheep	802	838	1,068	388	679
Livestock Units					
Total Cattle LU	46	57	12	106	48
Of which Beef Cows LU	17	23	6	40	15
Other Cattle LU	26	28	5	61	31
Dairy Cows and Heifers	3	6	1	5	2
Total Sheep LU	43	44	57	21	37
Of which Ewe LU	29	30	39	14	24
Grazing LU (cattle, sheep, horses and others)	89	102	70	127	87
Total LU	89	102	70	127	87
Financial Performance per GLU					
Farm Business Output per GLU (£/GLU)	1,666	1,672	2,117	1,296	1,520
Farm Business Variable Costs (£/GLU)	551	529	684	399	543
Farm Business Gross Margin (£/GLU)	1,115	1,144	1,432	897	977
Farm Business Fixed Costs (£/GLU)	644	659	758	585	584
Farm Business Income (£/GLU)	480	500	688	313	397
Farm Corporate Income (£/GLU)	140	164	289	81	50
Farm Investment Income (£/GLU)	174	194	340	108	78
Holding Gains Not In Income (£/GLU)	654	434	982	499	675
of which Land Revaluation (£/GLU)	555	333	851	430	587
Net Farm Income (£/GLU)	354	409	528	215	256
Management and Investment Income (£/GLU)	74	132	198	28	-33
Agriculture Net Margin (Agriculture business income) (£/GLU)	2	-7	-88	-39	83
Agriculture Economic Profit (Agriculture corporate income) (£/GLU)	-315	-316	-466	-244	-245
Agriculture Investment Income (£/GLU)	-284	-289	-420	-220	-220

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

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

2021/22	The average LFA Farm	England North	England East	England West
Number of farms in the group	203	131	20	52
Number (weighted)	6,348	4,358	538	1,451
Utilisable Agricultural Area (UAA) (ha)	165	190	130	105
Average adjusted UAA (ha)	131	146	106	95
Average adjusted sole grazing (ha)	15	19	13	4
Average herd size	23	21	24	28
Average flock size	404	471	256	259
Output				
Farm Output	149,573	157,838	135,628	129,923
Farm Business Output	148,967	157,141	135,152	129,541
of which: Output from agriculture	96,433	99,839	89,917	88,620
Agri environment payment	15,375	16,702	13,761	11,988
Diversified output	7,183	6,772	9,331	7,622
Basic Payment	29,976	33,829	22,143	21,311
Livestock Enterprise Output	87,034	90,868	80,309	78,015
of which: Cattle Enterprise Output	32,808	27,379	47,867	43,529
(incl Livestock disease compensation)	102	0	197	372
Sheep Enterprise Output	53,854	62,968	32,280	34,485
Poultry Enterprise Output	212	299	77	0
Pigs Enterprise Output	11	9	50	0
Other Livestock Enterprise Output	150	214	36	1
Crop Enterprise Output	5,090	4,826	3,201	6,582
of which: Crop Subsidies	0	0	0	0
Main Crops	2,447	2,352	19	3,632
Forage & by-products	2,666	2,533	3,057	2,922
Cultivations output	-23	-58	125	27
Non agriculture, no other category output	4,305	4,141	6,407	4,019
Disposal Previous Crops	4	3	0	5
Farm Business Output	148,967	157,141	135,152	129,541
Variable Costs				
Farm Business Variable costs	49,239	52,844	42,709	40,834
of which: Agriculture Variable Costs	48,878	52,436	41,891	40,783
Agri environment Variable Costs	34	46	9	6
Diversified income Variable Costs	325	359	803	43
BPS Variable Costs	3	3	5	2
Agriculture Crop Costs	6,437	6,743	3,324	6,674
of which: Seed	575	534	176	846
Fertilizer	4,717	5,018	2,302	4,710
Crop Protection	445	412	421	552
Other Crop Costs	701	780	425	567
Agriculture Livestock Costs	35,152	37,740	32,409	28,396
of which: Purchased Fodder Feed	18,735	20,713	19,111	12,653
Home Produced Fodder Feed	1,312	805	27	3,314
Veterinary and medicines	5,311	6,053	3,684	3,686
Other Livestock Costs	9,794	10,169	9,587	8,744
Agriculture Contract Costs	4,660	4,804	4,238	4,383
Agriculture Casual Labour	2,585	3,131	1,919	1,192
Agriculture, no other category Variable Costs	44	18	1	137
Farm Business Gross Margin	99,728	104,297	92,443	88,707
Agriculture Gross Margin	47,555	47,403	48,026	47,838
Agri Environment Gross Margin	15,341	16,655	13,752	11,982
Diversified Gross Margin	6,858	6,412	8,527	7,579
BPS Gross Margin	29,974	33,827	22,137	21,309

Table 23 Fixed costs and farm income measures by England region

2021/22	The Average LFA Farm	England North	England East	England West
Number (unweighted)	203	131	20	52
Number (weighted)	6,348	4,358	538	1,451
Utilisable Agricultural Land (UAA) (ha)	165	190	130	105
Average adjusted UAA (ha)	131	146	106	95
Average adjusted sole grazing (ha)	15	19	13	4
Average herd size	23	21	24	28
Average flock size	404	471	256	259
Gross Margin				
Farm Business Gross Margin	99,728	104,297	92,443	88,707
Agriculture Gross Margin	47,555	47,403	48,026	47,838
Agri Environment Gross Margin	15,341	16,655	13,752	11,982
Diversified Income Gross Margin	6,858	6,412	8,527	7,579
BPS Gross Margin	29,974	33,827	22,137	21,309
Fixed Costs				
Farm Business Fixed Costs	57,623	59,320	55,875	53,176
of which: Agriculture Fixed Costs	48,170	49,316	49,470	44,246
Agri Environment Fixed Costs	3,001	3,091	1,909	3,136
Diversified Income Fixed Costs	2,975	2,801	2,308	3,747
BPS Fixed Costs	3,477	4,112	2,188	2,047
Agriculture Paid Labour	7,424	8,824	4,565	4,282
Of which Fixed Labour Costs	4,839	5,693	2,646	3,089
(-) Casual Labour Costs (a Variable Cost)	2,585	3,131	1,919	1,192
Agriculture Machinery Costs	18,607	19,089	19,484	16,834
of which: Machinery Running Costs	9,698	9,794	9,029	9,661
Agriculture Depreciation Tenants Capital	8,909	9,296	10,455	7,173
Agriculture General Farming Costs	11,767	11,673	11,907	11,997
of which: Agriculture Bank & Professional Fees	2,301	2,276	2,154	2,431
Agriculture Other General Costs	6,711	6,609	7,555	6,702
Net Interest Payments	2,755	2,787	2,198	2,865
Bad Debts Write-offs	0	0	0	0
Agriculture Property Costs	10,636	10,702	11,543	10,102
Non Agriculture Other Fixed Costs	2,321	2,159	3,891	2,223
Profit/loss sale of fixed assets	776	1,041	-10	273
Agriculture Net Margin (AGRICULTURE BUSINESS INCOME)	161	-872	-1,454	3,865
Unpaid manual labour	28,347	26,827	30,694	32,042
Of Which Unpaid Farmer and Spouse	23,513	22,539	23,649	26,387
Unpaid Partner	4,834	4,288	7,046	5,655
Agriculture Economic Profit (AGRICULTURE CORPORATE INCOME)	-28,185	-27,699	-32,149	-28,176
Agriculture Net Interest Payment (added back)	2,755	2,787	2,198	2,865
AGRICULTURE INVESTMENT INCOME	-25,430	-24,912	-29,950	-25,311
Farm Net Margin (FARM BUSINESS INCOME)	42,881	46,018	36,558	35,805
Farm Economic Profit (FARM CORPORATE INCOME)	12,544	17,374	3,767	1,293
FARM INVESTMENT INCOME	15,566	20,385	6,197	4,571
NET FARM INCOME	31,667	35,668	24,310	22,380
Holding gains not included in farm income	58,444	57,828	33,133	69,685
BLSA	7,492	7,995	4,861	6,957
Revaluation of Machinery, permanent crops etc.	1,315	1,367	1,580	1,059
Revaluation of Land	49,637	48,466	26,692	61,669
MANAGEMENT AND INVESTMENT INCOME	6,593	11,873	-1,415	-6,295

Table 24 Balance sheet by England region

2021/22	The Average LFA Farm	England North	England East	England West
Number (unweighted)	203	131	20	52
Number (weighted)	6,348	4,358	538	1,451
Average Farmed Area (ha)	162.9	183.8	142.2	108.0
Adjusted Utilisable Agricultural Area (ha)	131	146	106	95
Utilisable Agricultural Area (ha)	165	190	130	105
Grazing Livestock Units	89	91	87	87
Ewes (head)	404	471	256	259
Beef Cows (head)	21.8	19.7	22.4	27.8
Occupied Area (ha)	80.6	84.9	63.1	74.4
Tenanted Area (ha)	92.4	114.5	69.8	34.3
Percentage of Land Owned (%)	47	43	47	68
Assets				
Fixed Assets	1,077,268	1,018,742	885,812	1,324,092
Of which: Agricultural Land	834,977	760,843	663,174	1,121,388
Woodland	6,134	5,521	9,031	6,897
Total Buildings	28,103	28,027	33,020	26,509
Total Improvements	13,727	17,719	2,196	6,014
BPS Entitlements	27,955	31,586	20,655	19,758
Machinery	77,829	80,290	90,370	65,787
Breeding Livestock	84,524	91,583	67,367	69,690
Miscellaneous Business Assets	4,018	3,173	0	8,049
Current Assets	104,082	108,130	82,391	99,971
of which: Trading Livestock	37,292	33,381	36,418	49,360
Crops	645	570	0	1,110
Forage	3,979	3,761	4,778	4,339
Cultivation	620	196	3,234	925
Stores	4,818	4,776	4,085	5,218
Liquid Assets	56,727	65,446	33,876	39,018
Of which: Cash at Bank and In Hand	42,546	48,771	26,598	29,767
Debtors	9,486	10,932	3,819	7,245
Suspended	0	0	0	0
BPS debtors	4,696	5,744	3,459	2,006
Total Assets (£/farm)	1,181,350	1,126,871	968,202	1,424,063
Of which: Total Landlord-type Capital	882,941	812,111	707,420	1,160,808
Tenant Type Capital	298,409	314,761	260,782	263,255
Loans				
Total Long Term Loans	80,944	76,934	63,239	99,558
Of which: Bank Loans	43,915	41,748	10,090	62,972
Institutional Loans	30,751	28,276	42,761	33,731
Of which: AMC	26,492	23,374	34,897	32,742
Building Societies	755	1,100	0	0
Other Institutional Loans	3,504	3,802	7,865	989
Family Loans	6,214	6,910	10,388	2,572
Other Loans	65	0	0	283
Current Liabilities	24,064	25,554	22,272	20,256
Of which: Hire Purchase	5,110	5,754	5,486	3,035
Leasing	3	4	0	2
Other Current Liabilities	18,951	19,795	16,786	17,219
Of which Creditors	8,309	8,539	5,563	8,639
Bank Overdraft	10,596	11,257	11,223	8,380
Others	46	0	0	200
Total Liabilities	105,008	102,488	85,510	119,814
Closing Net Worth	1,076,342	1,024,384	882,692	1,304,249
Opening Net Worth	997,899	942,719	840,568	1,222,007
Change in Net Worth	78,443	81,664	42,124	82,243

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

	The Average LFA Farm	England North	England East	England West
2021/22				
Number (unweighted)	203	131	20	52
Number (weighted)	6,348	4,358	538	1,451
Total Area (includes woodland and roads etc.) (ha)	173.0	199.3	132.9	108.7
Area Farmed (ha)	162.9	183.8	142.2	108.0
Net Land Hired In (ha)	-2.6	-6.1	12.1	2.5
Utilised Agricultural Area (ha)	165.5	189.9	130.1	105.4
Of which Total main products and set-aside (ha)	1.8	1.7	0.0	3.0
Grass, fodder crops and rough grazing (ha)	163.7	188.2	130.1	102.4
Of which rough grazing (unadjusted) (ha)	49.6	62.8	37.2	14.7
Adjusted rough grazing (sole occupation)	15.5	19.5	13.3	4.2
Adjusted rough grazing (shared)	11.1	15.6	0.0	1.9
Total Adjusted Utilised Agriculture Area (ha)	131.3	146.5	106.2	95.0
Area owner occupied (ha)	80.6	84.9	63.1	74.4
Area tenanted (ha)	92.4	114.5	69.8	34.3
Average age of farmer (years)	59	59	56	59
Agricultural labour units (ALU)	1.6	1.6	1.5	1.5
Standard Output (2013SO)	99,607	100,282	97,283	98,441
Standard Output size group (2013SO)	7.1	7.1	7.2	7.2
Land Use				
Temporary Grassland Area (ha)	6.4	7.3	0.0	6.3
Permanent Grassland Area (ha)	103.8	110.8	104.9	82.7
Stocking				
Total Dairy Cows	0	1	0	0
Total Beef cows	23	21	24	28
Total Cattle	78	69	97	98
Ewes (LFA and lowland)	404	471	256	259
Of which LFA Ewes	389	451	256	250
Lowland Ewes	16	20	0	9
Total Sheep	802	931	504	525
Livestock Units				
Total Cattle LU	46	40	57	58
Of which Beef Cows LU	17	16	18	21
Other Cattle LU	26	22	36	35
Dairy Cows and Heifers	3	3	4	3
Total Sheep LU	43	50	27	28
Of which Ewe LU	29	33	20	18
Grazing LU (cattle, sheep, horses and others)	89	91	87	87
Total LU	89	91	87	87
Financial Performance per GLU				
Farm Business Output per GLU (£/GLU)	1,666	1,735	1,559	1,489
Farm Business Variable Costs (£/GLU)	551	584	493	469
Farm Business Gross Margin (£/GLU)	1,115	1,152	1,066	1,019
Farm Business Fixed Costs (£/GLU)	644	655	644	611
Farm Business Income (£/GLU)	480	508	422	411
Farm Corporate Income (£/GLU)	140	192	43	15
Farm Investment Income (£/GLU)	174	225	71	53
Holding Gains Not In Income (£/GLU)	654	639	382	801
of which Land Revaluation (£/GLU)	555	535	308	709
Net Farm Income (£/GLU)	354	394	280	257
Management and Investment Income (£/GLU)	74	131	-16	-72
Agriculture Net Margin (Agriculture business income) (£/GLU)	2	-10	-17	44
Agriculture Economic Profit (Agriculture corporate income) (£/GLU)	-315	-306	-371	-324
Agriculture Investment Income (£/GLU)	-284	-275	-345	-291

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

	The Average LFA Farm	Band 1 (Part time)	Band 2 (Small)	Band 3 (Medium)	Band 4 (Large)
2021/22					
Number of farms in the group	203	14	66	38	81
Number (weighted)	6,348	990	2,747	1,050	1,302
Utilisable Agricultural Area (UAA) (ha)	165	77	114	166	365
Average adjusted UAA (ha)	131	62	95	136	275
Average adjusted sole grazing (ha)	15	4	11	11	40
Average herd size	23	5	15	26	56
Average flock size	404	105	272	420	973
Output					
Farm Output	149,573	62,639	100,392	160,126	329,554
Farm Business Output	148,967	62,557	99,831	159,847	328,068
of which: Output from agriculture	96,433	36,901	60,080	96,568	230,392
Agri environment payment	15,375	6,047	10,084	22,130	30,797
Diversified output	7,183	6,094	6,772	6,903	8,665
Basic Payment	29,976	13,515	22,895	34,247	58,214
Livestock Enterprise Output	87,034	31,118	53,606	85,046	213,428
of which: Cattle Enterprise Output	32,808	14,877	19,843	34,098	73,808
(incl Livestock disease compensation)	102	223	50	199	60
Sheep Enterprise Output	53,854	16,027	33,554	50,212	139,003
Poultry Enterprise Output	212	0	178	736	63
Pigs Enterprise Output	11	0	12	0	27
Other Livestock Enterprise Output	150	213	20	0	527
Crop Enterprise Output	5,090	3,273	2,669	3,341	12,535
of which: Crop Subsidies	0	0	0	0	0
Main Crops	2,447	0	261	992	10,409
Forage & by-products	2,666	3,317	2,383	2,332	2,279
Cultivations output	-23	-44	24	18	-152
Non agriculture, no other category output	4,305	2,511	3,805	8,180	4,412
Disposal Previous Crops	4	0	0	0	17
Farm Business Output	148,967	62,557	99,831	159,847	328,068
Variable Costs					
Farm Business Variable costs	49,239	18,599	30,145	52,697	117,269
of which: Agriculture Variable Costs	48,878	18,162	29,587	52,596	117,099
Agri environment Variable Costs	34	5	43	3	66
Diversified income Variable Costs	325	429	512	94	100
BPS Variable Costs	3	4	2	3	3
Agriculture Crop Costs	6,437	2,852	3,124	5,260	18,183
of which: Seed	575	354	169	255	1,948
Fertilizer	4,717	2,112	2,451	4,181	12,745
Crop Protection	445	111	261	262	1,316
Other Crop Costs	701	275	243	561	2,173
Agriculture Livestock Costs	35,152	12,903	21,313	39,263	83,192
of which: Purchased Fodder Feed	18,735	7,381	11,658	22,705	42,072
Home Produced Fodder Feed	1,312	0	164	845	5,173
Veterinary and medicines	5,311	2,045	3,609	5,244	12,308
Other Livestock Costs	9,794	3,476	5,883	10,468	23,639
Agriculture Contract Costs	4,660	2,085	3,277	5,737	8,990
Agriculture Casual Labour	2,585	310	1,849	2,194	6,695
Agriculture, no other category Variable Costs	44	13	23	143	39
Farm Business Gross Margin	99,728	43,958	69,686	107,150	210,800
Agriculture Gross Margin	47,555	18,739	30,493	43,971	113,293
Agri Environment Gross Margin	15,341	6,042	10,041	22,126	30,731
Diversified Gross Margin	6,858	5,665	6,260	6,809	8,565
BPS Gross Margin	29,974	13,512	22,893	34,244	58,210

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

	The Average LFA Farm	Band 1 (Part time)	Band 2 (Small)	Band 3 (Medium)	Band 4 (Large)
2021/22					
Number (unweighted)	203	14	66	38	81
Number (weighted)	6,348	990	2,747	1,050	1,302
Utilisable Agricultural Land (UAA) (ha)	165	77	114	166	365
Average adjusted UAA (ha)	131	62	95	136	275
Average adjusted sole grazing (ha)	15	4	11	11	40
Average herd size	23	5	15	26	56
Average flock size	404	105	272	420	973
Gross Margin					
Farm Business Gross Margin	99,728	43,958	69,686	107,150	210,800
Agriculture Gross Margin	47,555	18,739	30,493	43,971	113,293
Agri Environment Gross Margin	15,341	6,042	10,041	22,126	30,731
Diversified Income Gross Margin	6,858	5,665	6,260	6,809	8,565
BPS Gross Margin	29,974	13,512	22,893	34,244	58,210
Fixed Costs					
Farm Business Fixed Costs	57,623	28,815	40,051	59,576	122,152
of which: Agriculture Fixed Costs	48,170	23,781	32,255	48,477	107,006
Agri Environment Fixed Costs	3,001	1,462	2,119	4,218	5,588
Diversified Income Fixed Costs	2,975	1,952	2,937	2,602	3,184
BPS Fixed Costs	3,477	1,620	2,741	4,280	6,374
Agriculture Paid Labour	7,424	620	2,294	9,473	23,241
Of which Fixed Labour Costs	4,839	310	445	7,280	16,546
(-) Casual Labour Costs (a Variable Cost)	2,585	310	1,849	2,194	6,695
Agriculture Machinery Costs	18,607	9,935	13,530	17,074	40,076
of which: Machinery Running Costs	9,698	5,688	7,157	9,209	19,955
Agriculture Depreciation Tenants Capital	8,909	4,248	6,373	7,865	20,121
Agriculture General Farming Costs	11,767	7,913	9,563	10,895	21,566
of which: Agriculture Bank & Professional Fees	2,301	1,904	1,952	1,941	3,912
Agriculture Other General Costs	6,711	4,258	5,778	6,343	11,603
Net Interest Payments	2,755	1,752	1,833	2,611	6,052
Bad Debts Write-offs	0	0	0	0	0
Agriculture Property Costs	10,636	4,591	6,379	10,399	25,509
Non Agriculture Other Fixed Costs	2,321	1,031	2,338	2,830	3,309
Profit/loss sale of fixed assets	776	458	848	500	1,244
Agriculture Net Margin (AGRICULTURE BUSINESS INCOME)	161	-4,583	-914	-4,005	7,532
Unpaid manual labour	28,347	21,375	25,006	31,661	40,000
Of Which Unpaid Farmer and Spouse	23,513	19,638	21,334	26,467	29,691
Unpaid Partner	4,834	1,737	3,672	5,193	10,309
Agriculture Economic Profit (AGRICULTURE CORPORATE INCOME)	-28,185	-25,959	-25,920	-35,666	-32,469
Agriculture Net Interest Payment (added back)	2,755	1,752	1,833	2,611	6,052
AGRICULTURE INVESTMENT INCOME	-25,430	-24,207	-24,088	-33,055	-26,417
Farm Net Margin (FARM BUSINESS INCOME)	42,881	15,601	30,483	48,074	89,892
Farm Economic Profit (FARM CORPORATE INCOME)	12,544	-7,987	3,794	13,925	48,187
FARM INVESTMENT INCOME	15,566	-6,016	5,901	16,723	54,644
NET FARM INCOME	31,667	8,960	21,068	35,177	71,492
Holding gains not included in farm income	58,444	64,845	45,781	40,144	102,292
BLSA	7,492	1,862	4,954	8,242	17,988
Revaluation of Machinery, permanent crops etc	1,315	587	951	1,206	2,945
Revaluation of Land	49,637	62,395	39,876	30,695	81,359
MANAGEMENT AND INVESTMENT INCOME	6,593	-12,890	-1,926	7,670	40,970

**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 28 Balance sheet by SLR size band

2021/22	The Average LFA Farm	Band 1 (Part time)	Band 2 (Small)	Band 3 (Medium)	Band 4 (Large)
Number (unweighted)	203	14	66	38	81
Number (weighted)	6,348	990	2,747	1,050	1,302
Average Farmed Area (ha)	162.9	67.8	103.7	170.9	378.4
Adjusted Utilisable Agricultural Area (ha)	165	77	114	166	365
Utilisable Agricultural Area (ha)	131	62	95	136	275
Grazing Livestock Units	89	36	57	95	207
Ewes (head)	404	105	272	420	973
Beef Cows (head)	21.8	5.3	13.7	24.5	53.3
Occupied Area (ha)	80.6	59.3	72.7	73.4	128.9
Tenanted Area (ha)	92	21	44	116	246
Percentage of Land Owned (%)	47	74	62	39	34
Assets					
Fixed Assets	1,077,268	762,644	884,793	936,642	1,912,354
Of which: Agricultural Land	834,977	661,296	716,378	674,364	1,385,850
Woodland	6,134	6,853	4,332	5,648	10,958
Total Buildings	28,103	17,521	20,436	29,837	52,762
Total Improvements	13,727	1,688	7,616	31,426	21,969
BPS Entitlements	27,955	12,728	21,267	33,706	52,926
Machinery	77,829	34,470	55,340	72,312	175,652
Breeding Livestock	84,524	27,725	54,526	88,757	203,732
Miscellaneous Business Assets	4,018	363	4,897	592	8,504
Current Assets	104,082	65,859	60,841	124,879	222,578
of which: Trading Livestock	37,292	21,135	18,859	44,627	87,667
Crops	645	0	41	231	2,821
Forage	3,979	2,143	2,428	4,112	9,028
Cultivation	620	0	318	609	1,763
Stores	4,818	2,147	3,487	4,549	10,539
Liquid Assets	56,727	40,433	35,708	70,752	110,760
Of which: Cash at Bank and In Hand	42,546	30,583	28,850	53,255	77,835
Debtors	9,486	5,662	5,568	9,326	22,528
Suspended	0	0	0	0	0
BPS debtors	4,696	4,189	1,290	8,170	10,397
Total Assets (£/farm)	1,181,350	828,503	945,634	1,061,522	2,134,932
Of which: Total Landlord-type Capital	882,941	687,358	748,762	741,275	1,471,540
Tenant Type Capital	298,409	141,145	196,872	320,247	663,392
Loans					
Total Long Term Loans	80,944	45,704	57,432	73,332	178,162
Of which: Bank Loans	43,915	23,088	26,705	55,944	93,683
Institutional Loans	30,751	16,996	20,616	15,704	80,834
Of which: AMC	26,492	16,996	16,715	14,544	69,237
Building Societies	755	0	0	13	3,670
Other Institutional Loans	3,504	0	3,901	1,146	7,926
Family Loans	6,214	5,620	9,961	1,684	3,645
Other Loans	65	0	149	0	0
Current Liabilities	24,064	11,351	19,389	15,963	53,753
Of which: Hire Purchase	5,110	2,580	3,330	4,062	12,649
Leasing	3	0	0	0	16
Other Current Liabilities	18,951	8,771	16,059	11,901	41,088
Of which Creditors	8,309	4,161	4,931	6,679	20,979
Bank Overdraft	10,596	4,610	11,128	5,119	19,969
Others	46	0	0	102	140
Total Liabilities	105,008	57,056	76,821	89,294	231,915
Closing Net Worth	1,076,342	771,447	868,813	972,228	1,903,017
Opening Net Worth	997,899	711,145	811,568	911,430	1,738,002
Change in Net Worth	78,443	60,302	57,245	60,798	165,016

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

2021/22	The Average LFA Farm	Band 1 (Part time)	Band 2 (Small)	Band 3 (Medium)	Band 4 (Large)
Number (unweighted)	203	14	66	38	81
Number (weighted)	6,348	990	2,747	1,050	1,302
Total Area (includes woodland and roads etc) (ha)	173.0	80.0	116.6	189.8	375.3
Area Farmed (ha)	162.9	67.8	103.7	170.9	378.4
Net Land Hired In (ha)	-2.6	-9.2	-10.6	5.1	13.2
Utilised Agricultural Area (ha)	165.5	77.0	114.4	165.9	365.2
Of which Total main products and set-aside (ha)	1.8	0.0	0.2	0.9	7.5
Grass, fodder crops and rough grazing (ha)	163.7	77.0	114.1	165.0	357.7
Of which rough grazing (unadjusted) (ha)	49.6	19.2	30.6	40.4	130.4
Adjusted rough grazing (sole occupation)	15.5	3.7	11.1	10.9	40.3
Adjusted rough grazing (shared)	11.1	1.1	6.7	33.2	12.5
Total Adjusted Utilised Agriculture Area (ha)	131.3	61.5	94.9	136.4	275.1
Area owner occupied (ha)	80.6	59.3	72.7	73.4	128.9
Area tenanted (ha)	92.4	20.7	43.9	116.4	246.4
Average age of farmer (years)	59	63	58	60	57
Agricultural labour units (ALU)	1.6	1.0	1.2	1.8	2.6
Standard Output (2013SO)	99,607	40,826	62,387	107,888	229,119
Standard Output size group (2013SO)	7.1	6.2	6.8	7.5	8.4
Land Use					
Temporary Grassland Area (ha)	6.4	1.0	2.4	2.4	23.8
Permanent Grassland Area (ha)	103.8	47.4	69.7	127.1	213.2
Stocking					
Total Dairy Cows	0	0	0	0	2
Total Beef cows	23	5	15	26	55
Total Cattle	78	36	47	85	176
Ewes (LFA and lowland)	404	105	272	420	973
Of which LFA Ewes	389	87	250	414	962
Lowland Ewes	16	18	22	5	11
Total Sheep	802	209	521	829	1,978
Livestock Units					
Total Cattle LU	46	22	27	51	102
Of which Beef Cows LU	17	4	11	19	41
Other Cattle LU	26	18	15	29	53
Dairy Cows and Heifers	3	0	2	2	8
Total Sheep LU	43	12	29	44	105
Of which Ewe LU	29	8	20	29	68
Grazing LU (cattle, sheep, horses and others)	89	36	57	95	207
Total LU	89	36	57	95	207
Financial Performance per GLU					
Farm Business Output per GLU (£/GLU)	1,666	1,746	1,761	1,682	1,582
Farm Business Variable Costs (£/GLU)	551	519	532	554	566
Farm Business Gross Margin (£/GLU)	1,115	1,227	1,230	1,127	1,017
Farm Business Fixed Costs (£/GLU)	644	804	707	627	589
Farm Business Income (£/GLU)	480	435	538	506	433
Farm Corporate Income (£/GLU)	140	-223	67	146	232
Farm Investment Income (£/GLU)	174	-168	104	176	264
Holding Gains Not In Income (£/GLU)	654	1,810	808	422	493
of which Land Revaluation (£/GLU)	555	1,741	704	323	392
Net Farm Income (£/GLU)	354	250	372	370	345
Management and Investment Income (£/GLU)	74	-360	-34	81	198
Agriculture Net Margin (Agriculture business income) (£/GLU)	2	-128	-16	-42	36
Agriculture Economic Profit (Agriculture corporate income) (£/GLU)	-315	-724	-457	-375	-157
Agriculture Investment Income (£/GLU)	-284	-676	-425	-348	-127

*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 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

2021/22	The Average LFA farm	Performance Band		
		Low	Medium	High
Number of farms in the group	203	37	107	59
Number (weighted)	6,348	1,581	3,140	1,627
Utilisable Agricultural Area (UAA) (ha)	165	82	153	270
Average adjusted UAA (ha)	131	72	126	199
Average adjusted sole grazing (ha)	15	7	13	29
Average herd size	23	16	25	27
Average flock size	404	229	402	579
<u>Output</u>				
Farm Output	149,573	76,275	149,271	221,414
Farm Business Output	148,967	76,103	148,447	220,806
of which: Output from agriculture	96,433	50,534	101,790	130,712
Agri environment payment	15,375	5,019	11,038	33,815
Diversified output	7,183	5,473	6,435	10,289
Basic Payment	29,976	15,077	29,185	45,990
Livestock Enterprise Output	87,034	44,701	91,475	119,616
of which: Cattle Enterprise Output	32,808	17,910	37,369	38,488
(incl Livestock disease compensation)	102	226	43	94
Sheep Enterprise Output	53,854	26,605	53,663	80,713
Poultry Enterprise Output	212	0	376	101
Pigs Enterprise Output	11	20	9	5
Other Livestock Enterprise Output	150	166	60	308
Crop Enterprise Output	5,090	2,559	6,231	5,347
of which: Crop Subsidies	0	0	0	0
Main Crops	2,447	275	3,935	1,683
Forage & by-products	2,666	2,276	2,365	3,627
Cultivations output	-23	8	-70	36
Non agriculture, no other category output	4,305	3,274	4,076	5,750
Disposal Previous Crops	4	0	7	0
<u>Farm Business Output</u>	148,967	76,103	148,447	220,806
<u>Variable Costs</u>				
Farm Business Variable costs	49,239	30,973	54,463	56,911
of which: Agriculture Variable Costs	48,878	30,800	53,965	56,631
Agri environment Variable Costs	34	0	66	5
Diversified income Variable Costs	325	172	429	273
BPS Variable Costs	3	1	4	2
Agriculture Crop Costs	6,437	3,794	7,384	7,180
of which: Seed	575	345	665	623
Fertilizer	4,717	2,849	5,224	5,555
Crop Protection	445	250	619	298
Other Crop Costs	701	350	876	704
Agriculture Livestock Costs	35,152	22,762	38,347	41,030
of which: Purchased Fodder Feed	18,735	12,206	20,751	21,189
Home Produced Fodder Feed	1,312	309	1,862	1,226
Veterinary and medicines	5,311	3,447	5,468	6,820
Other Livestock Costs	9,794	6,799	10,265	11,794
Agriculture Contract Costs	4,660	3,184	4,950	5,535
Agriculture Casual Labour	2,585	950	3,252	2,886
Agriculture, no other category Variable Costs	44	110	32	1
<u>Farm Business Gross Margin</u>	99,728	45,130	93,984	163,895
Agriculture Gross Margin	47,555	19,735	47,825	74,081
Agri Environment Gross Margin	15,341	5,018	10,972	33,810
Diversified Gross Margin	6,858	5,301	6,006	10,017
BPS Gross Margin	29,974	15,076	29,181	45,987

Table 31 Fixed costs and farm income measures by performance ratio

2021/22	The Average LFA Farm	Performance band		
		Low	Medium	High
Number (unweighted)	203	51	95	57
Number (weighted)	6,348	1,550	3,186	1,612
Utilisable Agricultural Land (UAA) (ha)	165	140	149	222
Average adjusted UAA (ha)	131	119	125	155
Average adjusted sole grazing (ha)	15	18	10	25
Average herd size	23	22	22	27
Average flock size	404	331	371	540
<u>Gross Margin</u>				
Farm Business Gross Margin	99,728	81,599	92,042	132,352
Agriculture Gross Margin	47,555	39,369	44,173	62,113
Agri Environment Gross Margin	15,341	10,283	13,580	23,685
Diversified Income Gross Margin	6,858	5,653	6,961	7,814
BPS Gross Margin	29,974	26,294	27,328	38,741
<u>Fixed Costs</u>				
Farm Business Fixed Costs	57,623	51,603	54,681	69,227
of which: Agriculture Fixed Costs	48,170	44,505	45,304	57,358
Agri Environment Fixed Costs	3,001	1,759	3,456	3,297
Diversified Income Fixed Costs	2,975	2,264	2,565	4,471
BPS Fixed Costs	3,477	3,075	3,357	4,100
Agriculture Paid Labour	7,424	3,962	6,724	12,139
Of which Fixed Labour Costs	4,839	1,562	4,099	9,454
(-) Casual Labour Costs (a Variable Cost)	2,585	2,400	2,625	2,684
Agriculture Machinery Costs	18,607	18,746	17,333	20,991
of which: Machinery Running Costs	9,698	9,659	9,288	10,548
Agriculture Depreciation Tenants Capital	8,909	9,088	8,045	10,443
Agriculture General Farming Costs	11,767	12,037	11,690	11,659
of which: Agriculture Bank & Professional Fees	2,301	2,282	2,248	2,424
Agriculture Other General Costs	6,711	6,360	6,810	6,851
Net Interest Payments	2,755	3,394	2,632	2,384
Bad Debts Write-offs	0	0	0	0
Agriculture Property Costs	10,636	9,822	10,393	11,901
Non Agriculture Other Fixed Costs	2,321	2,338	1,790	3,353
Profit/loss sale of fixed assets	776	416	738	1,198
Agriculture Net Margin (AGRICULTURE BUSINESS INCOME)	161	-4,719	-393	5,952
Unpaid manual labour	28,347	29,381	28,581	26,889
Of Which Unpaid Farmer and Spouse	23,513	25,565	23,293	21,974
Unpaid Partner	4,834	3,816	5,288	4,915
Agriculture Economic Profit (AGRICULTURE CORPORATE INCOME)	-28,185	-34,100	-28,975	-20,937
Agriculture Net Interest Payment (added back)	2,755	3,394	2,632	2,384
AGRICULTURE INVESTMENT INCOME	-25,430	-30,706	-26,343	-18,553
Farm Net Margin (FARM BUSINESS INCOME)	42,881	30,412	38,099	64,323
Farm Economic Profit (FARM CORPORATE INCOME)	12,544	-1,027	7,736	35,098
FARM INVESTMENT INCOME	15,566	2,659	10,617	37,761
NET FARM INCOME	31,667	20,794	26,555	52,229
Holding gains not included in farm income	58,444	44,072	59,121	70,928
BLSA	7,492	5,190	7,836	9,027
Revaluation of Machinery, permanent crops etc	1,315	1,365	1,164	1,564
Revaluation of Land	49,637	37,517	50,121	60,336
MANAGEMENT AND INVESTMENT INCOME	6,593	-6,123	1,680	28,532

Table 32 Balance Sheet by performance ratio

	The Average	Performance band		
2021/22	LFA Farm	Low	Medium	High
Number (unweighted)	203	37	107	59
Number (weighted)	6,348	1,581	3,140	1,627
Average Farmed Area (ha)	162.9	82.5	154.6	257.3
Utilisable Agricultural Area (ha)	165.5	81.9	153.2	270.4
Adjusted Utilisable Agricultural Area (ha)	131.3	72.4	125.8	199.1
Grazing Livestock Units	89.4	53.3	95.0	113.7
Ewes (head)	404	229	402	579
Beef Cows (head)	22	15	23	26
Occupied Area (ha)	81	48	72	129
Tenanted Area (ha)	92	37	85	161
Percentage of Land Owned (%)	46.6	56.5	46.0	44.4
<u>Assets</u>				
Fixed Assets	1,077,268	818,716	985,274	1,506,226
<i>Of which Agricultural Land</i>	834,977	644,900	750,845	1,182,188
Woodland	6,134	4,375	6,489	7,157
Total Buildings	28,103	32,484	23,019	33,659
Total Improvements	13,727	5,559	8,157	32,420
BPS Entitlements	27,955	13,710	27,039	43,573
Machinery	77,829	55,341	81,425	92,751
Breeding Livestock	84,524	55,507	84,126	113,502
Miscellaneous Business Assets	4,018	6,840	4,174	976
Current Assets	104,082	52,700	103,648	154,871
<i>of which Trading Livestock</i>	37,292	20,873	41,775	44,599
Crops	645	72	629	1,233
Forage	3,979	2,330	4,539	4,502
Cultivation	620	376	874	368
Stores	4,818	3,618	5,394	4,875
Liquid Assets	56,727	25,431	50,438	99,294
Of which Cash at Bank and In Hand	42,546	19,367	38,393	73,098
Debtors	9,486	4,185	8,220	17,081
Suspended	0	0	0	0
BPS debtors	4,696	1,879	3,825	9,116
Total Assets (£/farm)	1,181,350	871,417	1,088,922	1,661,096
<i>Of which Total Landlord-type Capital</i>	882,941	687,318	788,510	1,255,425
Tenant Type Capital	298,409	184,098	300,412	405,672
<u>Loans</u>				
Total Long Term Loans	80,944	105,501	69,577	79,015
<i>Of which Bank Loans</i>	43,915	40,840	42,384	49,860
Institutional Loans	30,751	49,033	23,670	26,649
Of which AMC	26,492	42,984	21,514	20,071
Building Societies	755	0	533	1,917
Other Institutional Loans	3,504	6,049	1,623	4,661
Family Loans	6,214	15,628	3,393	2,506
Other Loans	65	0	131	0
Current Liabilities	24,064	22,251	27,334	19,515
<i>Of which Hire Purchase</i>	5,110	5,612	4,570	5,663
Leasing	3	0	0	13
Other Current Liabilities	18,951	16,639	22,763	13,839
Of which Creditors	8,309	5,131	9,457	9,183
Bank Overdraft	10,596	11,440	13,249	4,655
Others	46	68	58	0
Total Liabilities	105,008	127,752	96,911	98,530
Closing Net Worth	1,076,342	743,665	992,011	1,562,567
Opening Net Worth	997,899	685,982	925,614	1,440,687
Change in Net Worth	78,443	57,683	66,397	121,880

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

2021/22	The Average	Performance band		
	LFA Farm	Low	Middle	High
Number (unweighted)	203	51	95	57
Number (weighted)	6,348	1,550	3,186	1,612
Total Area (includes woodland and roads etc) (ha)	173.0	144.6	159.6	226.8
Area Farmed (ha)	162.9	138.5	140.4	231.1
Net Land Hired In (ha)	-2.6	-1.9	-8.8	9.3
Utilised Agricultural Area (ha)	165.5	140.4	149.2	221.8
<i>Of which Total main products (ha)</i>	<i>1.8</i>	<i>1.6</i>	<i>2.6</i>	<i>0.4</i>
Grass, fodder crops and rough grazing (ha)	163.7	138.7	146.6	221.4
Of which rough grazing (unadjusted) (ha)	49.6	38.7	33.7	91.7
Adjusted rough grazing (sole occupation)	15.5	17.6	9.8	24.6
Adjusted rough grazing (shared)	11.1	5.4	10.0	19.0
Total Adjusted Utilised Agriculture Area (ha)	131.3	119.3	125.3	154.8
Area owner occupied (ha)	80.6	78.8	73.4	96.8
Area tenanted (ha)	92.4	65.8	86.2	130.1
Average age of farmer (years)	59	58	59	61
Agricultural labour units (ALU)	1.6	1.4	1.5	1.8
Standard Output size units (2013SO)	99,607	89,166	93,899	120,929
Standard Output size group (2013SO)	7.1	7.0	7.1	7.3
<u>Land Use</u>				
Temporary Grassland Area (ha)	6.4	2.5	9.0	5.3
Permanent Grassland Area (ha)	103.8	95.1	93.5	132.7
<u>Stocking</u>				
Total Dairy Cows	0	0	0	1
Total Beef cows	23	22	21	26
Total Cattle	78	77	72	89
Ewes (LFA and lowland)	404	331	371	540
Of which LFA Ewes	389	329	349	525
Lowland Ewes	16	3	23	15
Total Sheep	802	660	734	1,074
<u>Livestock Units</u>				
Total Cattle LU	46	46	43	52
Of which Beef Cows LU	17	17	16	19
Other Cattle LU	26	27	24	29
Dairy Cows and Heifers	3	3	3	3
Total Sheep LU	43	35	40	57
Of which Ewe LU	29	23	27	39
Grazing LU (cattle, sheep, horses and others)	89	81	83	110
Total LU	89	81	83	110
<u>Financial Performance per GLU</u>				
Farm Business Output per GLU (£/GLU)	1,666	1,566	1,676	1,722
Farm Business Variable Costs (£/GLU)	551	562	566	520
Farm Business Gross Margin (£/GLU)	1,115	1,004	1,110	1,202
Farm Business Fixed Costs (£/GLU)	644	635	660	629
Farm Business Income (£/GLU)	480	374	460	584
Farm Corporate Income (£/GLU)	140	-13	93	319
Farm Investment Income (£/GLU)	174	33	128	343
Holding Gains Not In Income (£/GLU)	654	542	713	644
of which Land Revaluation (£/GLU)	555	462	605	548
Net Farm Income (£/GLU)	354	256	320	474
Management and Investment Income (£/GLU)	74	-75	20	259
Agriculture Net Margin (Agriculture business income) (£/GLU)	2	-58	-5	54
Agriculture Economic Profit (Agriculture corporate income) (£/GLU)	-315	-420	-349	-190
Agriculture Investment Income (£/GLU)	-284	-378	-318	-168

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

Table 34 LFA Suckler herd margins by herd size

2021/22	Enterprise Output and Gross margin per cow, GLU & ha			
	All herds	<30 cows	30-60 cows	>60 cows
Number of farms	137	49	46	42
Number of farms (weighted)	3,323	1,649	980	693
Area Farmed (UAA + net hired in) (ha)	193	135	172	361
Utilisable Agricultural Area (ha)	188	133	164	353
Adjusted UAA (ha)	158	117	142	280
Grazing Livestock Units (farm)	112	63	106	235
Grazing Livestock Units (enterprise)	41	18	43	93
Forage area (enterprise) (ha)	58	33	62	112
Stocking rate (GLUs/total adj ha)	0.7	0.5	0.7	0.8
Cows per herd	41	18	43	93
Total Cattle	117	65	116	245
Breeding Flock	409	249	353	869
<u>Output per cow</u>				
Enterprise Output (excluding BLSA)	471	459	474	475
BLSA	89	82	77	99
Concentrates	63	67	67	58
Purchased fodder and keep	18	26	21	13
Veterinary and medicines	29	28	31	27
Other livestock costs	69	65	74	68
Seed	4	3	2	6
Fertilizer	46	41	40	53
Sprays	3	2	3	3
Other crop costs	7	6	6	8
Total Variable costs	238	237	243	235
Gross Margin (excluding BLSA) / Cow	233	222	230	240
Gross margin (excluding BLSA) / forage ha	164	119	161	198
Gross Margin (excluding BLSA) / GLU	231	216	230	238
Enterprise Gross margin (excluding BLSA)	9,511	3,921	9,904	22,252
<u>Measures of Income</u>				
Farm Business Income	48,789	35,411	50,257	78,533
Farm Corporate Income	16,400	8,093	15,009	38,122
Agricultural Economic Profit	-31,712	-29,016	-32,255	-37,356
Agri-environment Economic Profit	15,463	14,214	15,175	18,840
Diversified Economic Profit	3,013	635	4,693	6,294
BPS Economic Profit	29,636	22,260	27,396	50,344
Farm Investment Income	20,409	10,625	18,203	46,798
Net Farm Income	36,721	26,829	39,260	56,660
MII	11,014	4,045	10,434	28,411
Enterprise NM/cow (excluding BLSA)	-227	-289	-225	-200
Enterprise NM/cow after F&S labour (excl. BLSA)	-394	-561	-423	-300

Table 35 Upland SDA flock margins by flock size

Upland SDA Flocks (flock lambing % usually >100)	Enterprise Output and Gross margin per ewe, GLU and ha			
	All flocks	<300 ewes	300-600 ewes	>600 ewes
2021 lamb crop				
Number of farms	95	32	31	31
Number of farms (weighted)	2,822	1,135	1,034	632
Area Farmed (UAA + net hired in) (ha)	170	80	161	351
Utilisable Agricultural Area (ha)	177	101	163	340
Total adj. area farmed inc. commons (ha)	152	73	137	321
Grazing Livestock Units (farm)	104	58	83	225
Grazing Livestock Units (enterprise)	65	24	54	159
Forage area (enterprise) (ha)	103	40	105	217
Stocking rate (GLUs/total adj ha)	0.69	0.79	0.61	0.70
Cows per herd	27	20	16	57
Total Cattle	88	62	64	174
Breeding Flock	507	194	444	1,183
Total Sheep	999	379	854	2,369
<u>Output per ewe</u>				
Enterprise Output (excluding BLSA)	139	142	125	146
BLSA	14	15	14	13
Concentrates	24	21	25	24
Purchased fodder and keep	4	4	6	2
Veterinary and medicines	9	9	9	10
Other livestock costs	15	14	14	15
Seed	1	0	0	1
Fertilizer	7	5	6	8
Sprays	0	1	0	0
Other crop costs	1	1	1	1
Total Variable costs	60	55	60	61
Gross Margin (excluding BLSA) / Ewe	79	88	65	85
Gross margin (excluding BLSA) / forage ha	388	424	277	466
Gross Margin (excluding BLAS) / GLU	616	693	539	637
Enterprise Gross margin (excluding BLSA)	40,159	16,958	28,921	101,050
<u>Measures of Income (per farm)</u>				
Farm Business Income	47,629	26,001	39,972	100,577
Farm Corporate Income	15,077	-382	3,885	62,819
Agricultural Economic Profit	-25,344	-22,927	-31,585	-19,062
Agri-environment Economic Profit	9,346	4,552	8,955	18,915
Diversified Economic Profit	2,099	1,941	-508	6,643
BPS Economic Profit	28,977	16,052	27,024	56,323
Farm Investment Income	18,350	1,744	7,449	67,734
Net Farm Income	35,943	18,637	28,419	80,696
MII	9,422	-4,973	-502	52,978
Enterprise NM/ewe (excluding BLSA)	-4	-8	-15	4
Enterprise NM/ewe after F&S labour (excl BLSA)	-39	-77	-63	-12
Lambs born & reared/ewe	1.42	1.44	1.33	1.48

Table 36 Hill SDA flock margins by flock size

Hill SDA Flocks (flock lambing % usually <100) 2021 lambing	Enterprise Output and Gross margin per ewe, GLU and ha			
	All flocks	<300 ewes	300-600 ewes	>600 ewes
Number of farms	66	19	26	21
Number of farms (weighted)	1,914	653	847	413
Area Farmed (UAA + net hired in) (ha)	201	102	150	460
Utilisable Agricultural Area (ha)	193	101	143	441
Total adj. area farmed inc. commons (ha)	165	80	129	374
Grazing Livestock Units (farm)	84	53	75	154
Grazing Livestock Units (enterprise)	50	21	48	102
Forage area (enterprise) (ha)	126	52	89	318
Stocking rate (GLUs/total adj ha)	0.51	0.67	0.58	0.41
Cows per herd	21	18	21	28
Total Cattle	66	60	53	103
Breeding Flock	469	166	443	999
Total Sheep	851	339	805	1,754
<u>Output per ewe</u>				
Enterprise Output (excluding BLSA)	105	130	105	99
BLSA	13	12	12	13
Concentrates	19	30	20	16
Purchased fodder and keep	5	3	3	7
Veterinary and medicines	8	7	8	8
Other livestock costs	11	13	10	11
Seed	0	0	0	0
Fertilizer	4	5	4	3
Sprays	0	0	1	0
Other crop costs	1	1	0	1
Total Variable costs	49	60	47	47
Gross Margin (excluding BLSA) / Ewe	57	70	58	52
Gross margin (excluding BLSA) / forage ha	211	226	289	163
Gross Margin (excluding BLAS) / GLU	528	557	538	509
Enterprise Gross margin (excluding BLSA)	26,554	11,654	25,768	51,727
<u>Measures of Income (per farm)</u>				
Farm Business Income	46,696	21,668	41,755	96,405
Farm Corporate Income	16,423	-5,600	14,045	56,126
Agricultural Economic Profit	-37,983	-30,606	-32,320	-61,265
Agri-environment Economic Profit	21,111	5,834	15,519	56,735
Diversified Economic Profit	3,290	4,123	4,249	2
BPS Economic Profit	30,006	15,048	26,596	60,653
Farm Investment Income	19,967	-3,593	16,424	64,487
Net Farm Income	36,093	14,023	36,946	69,241
MII	12,000	-9,268	11,493	46,673
Enterprise NM/ewe (excluding BLSA)	-23	-37	-9	-31
Enterprise NM/ewe after F&S labour (excl BLSA)	-56	-113	-48	-47
Lambs born & reared/ewe	1.21	1.37	1.19	1.18

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

Table 37 LFA Sucklers

2021/22						
	No farms in sample	Sample		Premium		
		137		43		
	No farms	3323		1010		
Production information						
Average cow numbers		41		41		
Enterprise grazing livestock units *		41		43		
Calves per cow		0.94		1.01		
Herd replacement rate (%)		18%		17%		
Adjusted forage area (including commons)		57.81		51.93		
Stocking rate (cows per adj. forage ha.)		0.71		0.79		
Stocking rate (GLUs per adj. forage ha.)		0.71		0.82		
Enterprise Output	Total	per cow	per adj	Total	per cow	per adj
	(£)	(£)	for ha	(£)	(£)	for ha
			(£)			(£)
Suckler calves †	23166	568	401	27647	670	532
Less Herd Depreciation	3930	96	68	2301	56	44
Total Output (A)	19235	472	333	25346	614	488
Variable Costs						
Concentrates	2558	63	44	1146	28	22
Coarse fodder	751	18	13	621	15	12
Vet and Medicines	1164	29	20	1018	25	20
Other livestock costs	2815	69	49	2669	65	51
Total Variable Costs (B)	7288	179	126	5455	133	105
Gross Margin before forage (A-B) = (C)	11948	293	207	19891	481	383
Forage Variable Costs	897	22	16	958	23	18
Gross Margin after forage (A-B) = (C)	11050	271	191	18933	458	365
Prices						
Calf price (£/calf) *	789			809		
Cull cow price (£/cow)	955			1031		
Replacement heifer/cow price (£/head)	1273			1221		
Forage Costs						
Fertilizer (£/ha)	12			14		
Seed (£/ha)	1			1		
Spray (£/ha)	1			1		
Other crop costs (£/ha)	2			2		
Total (£/ha)	16			18		
Unadjusted forage area excluding commons	57.94			53.50		
* excludes stock away on agistment						
† Calf price is as sold off the cow or a transfer value at weaning						

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

Table 38 Finished cattle from suckler bred calves or stores

2021/22		Sample	Premium	
	No farms in sample	43	18	
	No farms	1108	369	
Production information				
Enterprise grazing livestock units *		37	44	
Adjusted forage area (including commons)		44.27	45.01	
Stocking rate (GLUs per adj. forage ha.)		0.83	0.98	
Enterprise Output	Total (£)	per adj, for. ha (£)	Total (£)	per adj for ha (£)
Cattle output	40371	912	56613	1258
Total Output (A)	40371	912	56613	1258
Variable Costs				
Concentrates	13423	303	12168	270
Coarse fodder	531	12	704	16
Vet and Medicines	1013	23	1293	29
Other livestock costs	4966	112	5647	125
Total Variable Costs (B)	19933	450	19812	440
Gross Margin before forage (A-B) = (C)	20438	462	36800	818
Forage Variable Costs (D)	799	18	803	18
Gross Margin after forage (C-D) = (E)	19639	444	35997	800
Prices				
Dairy heifer transfer or sale price £	na		na	
Finished cattle price £	1367		1402	
Store cattle price £	974		1118	
Forage Costs				
Fertilizer (£/ha)	14		13	
Seed (£/ha)	2		2	
Spray (£/ha)	1		1	
Other crop costs (£/ha)	1		1	
Total (£/ha)	18		18	
Unadjusted forage area excluding commons	43.42		43.26	
* excludes stock away on agistment				

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

Table 39 Store cattle from suckler bred calves or stores

2021/22	No farms in sample	Sample	Premium	
	No farms	99	33	
	No farms	2568	853	
Production information				
Enterprise grazing livestock units *		23	19	
Adjusted forage area (including commons)		33.16	21.91	
Stocking rate (GLUs per adj. forage ha.)		0.71	0.88	
Enterprise Output	Total (£)	per adj. for. ha (£)	Total (£)	per adj. for. ha (£)
Cattle output	20843	628	24186	1104
Total Output (A)	20843	628	24186	1104
Variable Costs				
Concentrates	5536	167	5225	238
Coarse fodder	480	14	397	18
Vet and Medicines	734	22	676	31
Other livestock costs	2679	81	3087	141
Total Variable Costs (B)	9429	284	9386	428
Gross Margin before forage (A-B) = (C)	11414	344	14800	676
Forage Variable Costs (D)	297	9	220	10
Gross Margin after forage (C-D) = (E)	11117	335	14580	666
Prices				
Dairy heifer transfer or sale price £	na		na	
Finished cattle price £	1306		1264	
Store cattle price £	1015		1051	
Forage Costs				
Fertilizer (£/ha)	7		8	
Seed (£/ha)	1		1	
Spray (£/ha)	0		0	
Other crop costs (£/ha)	1		1	
Total (£/ha)	9		10	
Unadjusted forage area excluding commons	30.89		18.79	
* excludes stock away on agistment				

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

Table 40 Upland SDA flocks

2021 lamb crop	Sample			Premium		
No farms in sample	95			38		
No farms	2822			919		
Production information						
Average ewe numbers	507			573		
Enterprise grazing livestock units *	65			77		
Lambs reared per ewe	1.42			1.67		
Flock replacement rate (%)	27%			27%		
Adjusted forage area (including commons)	100.5			95.7		
Stocking rate (ewes per adj. forage ha.)	5.0			6.0		
Stocking rate (GLUs per adj. forage ha.)	0.6			0.8		
Enterprise Output	Total	per ewe	per adj for ha	Total	per ewe	per adj for ha
	(£)	(£)	(£)	(£)	(£)	(£)
Lambs †	78805	156	784	112527	196	1176
Wool	266	1	3	390	1	4
Less Flock Depreciation	8575	17	85	7684	13	80
Total Output (A)	70495	140	702	105233	184	1100
Variable Costs						
Concentrates	11996	24	119	12010	21	125
Coarse fodder	1833	4	18	1786	3	19
Vet and Medicines	4739	9	47	5430	9	57
Other livestock costs	7485	15	74	10103	18	106
Total Variable Costs (B)	26053	52	258	29329	51	307
Gross Margin before forage (A-B) = (C)	44442	88	444	75904	133	793
Forage Variable Costs (D)	2681	5	27	3076	5	32
Gross Margin after forage (C-D) = (E)	41761	83	417	72828	128	761
Prices	£/hd	% sales		£/hd	% sales	
Fat Lamb price	107	69		112	81	
Store Lamb price	85	21		94	10	
Ewe Lamb price	127	10		137	9	
Draft ewe price	112			157		
Cull ewe price (£/ewe)	83			96		
Wool price (£/kg)	0.22			0.25		
Replacement price (£/head)	124			130		
Forage Costs						
Fertilizer (£/ha)	21			26		
Seed (£/ha)	2			3		
Spray (£/ha)	1			1		
Other crop costs (£/ha)	2			3		
Total (£/ha)	27			32		
Unadjusted forage area excluding commons	103.4			100.7		
* excludes stock away on agistment						
† includes all enterprise output except wool						

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

Table 41 Hill SDA flocks

2020 lamb crop		Sample		Premium			
	No farms in sample	66		25			
	No farms	1914		669			
Production information							
	Average ewe numbers	469		395			
	Enterprise grazing livestock units *	50.3		49.8			
	Lambs reared per ewe	1.21		1.52			
	Flock replacement rate (%)	27%		28%			
	Adjusted forage area (including commons)	97.2		67.1			
	Stocking rate (ewes per adj. forage ha.)	4.8		5.9			
	Stocking rate (GLUs per adj. forage ha.)	0.5		0.7			
Enterprise Output		Total	per ewe	per adj for ha	Total	per ewe per adj for ha	
		(£)	(£)	(£)	(£)	(£)	
	Lambs †	58709	125	604	67693	171	1010
	Wool	180	0	2	265	1	4
	Less Flock Depreciation	9596	20	99	4635	12	69
	Total Output (A)	49294	105	507	63323	160	945
Variable Costs							
	Concentrates	9039	19	93	9044	23	135
	Coarse fodder	2427	5	25	1472	4	22
	Vet and Medicines	3824	8	39	3618	9	54
	Other livestock costs	5074	11	52	4336	11	65
	Total Variable Costs (B)	20364	43	209	18470	47	276
	Gross Margin before forage (A-B) = (C)	28930	62	298	44853	113	669
	Forage Variable Costs (D)	1413	3	15	1548	4	23
	Gross Margin after forage (C-D) = (E)	27517	59	283	43305	109	646
Prices		£/hd	% sales		£/hd	% sales	
	Fat Lamb price	105	62		110	83	
	Store Lamb price	76	26		94	11	
	Ewe Lamb price	108	12		132	6	
	Draft ewe price	95			147		
	Cull ewe price (£/ewe)	70			89		
	Wool price (£/kg)	0.26			0.32		
	Replacement price (£/head)	115			109		
Forage Costs							
	Fertilizer (£/ha)	11			16		
	Seed (£/ha)	1			2		
	Spray (£/ha)	1			3		
	Other crop costs (£/ha)	2			2		
	Total (£/ha)	15			23		
	Unadjusted forage area excluding commons	125.8			85.9		
* excludes stock away on agistment							
† includes all enterprise 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. 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 farming¹² 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 capital¹³ 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. [1 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.

<i>Total variable costs</i>	These are taken to be costs of feed, veterinary fees and medicines, other livestock costs, seeds, fertilisers, crop protection and other crop costs.
<i>Purchased concentrate feed and fodder</i>	This represents expenditure on feeds and feed additives, including charges for agistment.
<i>Home-grown concentrate feed and fodder</i>	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.
<i>Veterinary fees and medicines</i>	This consists of veterinary fees and the cost of all medicines.
<i>Other livestock costs</i>	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.

<i>Purchased and home-grown seeds</i>	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.
<i>Fertilisers</i>	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.
<i>Crop protection</i>	This includes costs of pre-emergent sprays, fungicides, herbicides, dusts and insecticides and other crop sprays.
<i>Other crop costs</i>	These comprise all crop inputs not separately specified, e.g. marketing charges, packing materials, crop levies, baling twine and wire (though not fencing wire).
<i>Total fixed costs</i>	These are the costs of labour, machinery, contract work, land and buildings, other general farming costs and depreciation.
<i>Labour (excluding farmer and spouse)</i>	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).
<i>Contract costs</i>	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.

<i>Machinery running costs</i>	These represent the cost of machinery and equipment repairs, fuel and oil and car mileage expenses. It excludes depreciation.
<i>Land and building inputs</i>	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.
<i>Depreciation of machinery, glasshouses and permanent crops</i>	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.
<i>Other general farming costs</i>	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.
<i>Interest payments</i>	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.
<i>Depreciation of buildings and works</i>	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

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