

# ECONOMIC REPORT ON SCOTTISH AGRICULTURE

2013 Edition







# Economic Report on Scottish Agriculture 2013 Edition

Scottish Government Environment and Forestry Directorate Rural and Environment Science and Analytical Services

#### A NATIONAL STATISTICS PUBLICATION FOR SCOTLAND

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This is the 2013 edition of the Economic Report on Scottish Agriculture (ERSA) which has been compiled by the Rural and Environmental Science and Analytical Services division (RESAS) in the Scottish Government (SG). It presents an overall picture of Scottish agriculture using data from the various agricultural surveys that RESAS manage.

The format of ERSA has changed this year, bringing together related information to create a more thematic structure. It gives a geographic and financial overview of the industry, followed by chapters on each of the sectors, labour figures and UK comparisons. The various sections bring together the information on related subjects from three sets of data

- 2012 June Census and December survey of farms.
- the Farm Accounts Survey 2011-12 which collects statistics from the business accounts of around 500 farms in Scotland,
- total Income from Farming 2011 and 2012 estimates of the output values and associated input costs of Scottish agriculture which underpins the Scottish Agricultural Account which is submitted to the EC every year.

For ease of use by those familiar with the previous format, the statistical tables have remained relatively unchanged and where possible retain their numbering from last year. Additional tables, and more extensive versions of tables in the publication (i.e. containing more years) are also available in spreadsheet format from the following link:

We hope that you find the revised format of this publication helpful. We are always happy to hear your views on any of our statistics and publications – if you want to contact us, our details are on page ii.

We would also like to thank Scottish farmers for their continuing cooperation with all of our data collections.

Rural & Environment Science & Analytical Services (RESAS)
Scottish Government

June 2013

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#### 1. Introduction

#### 1.1 Overview of agriculture in Scotland

The total area of agricultural holdings in Scotland was 5.6 million hectares, equating to 73 per cent of Scotland's total land area. Just over half of this comprised rough grazing, with about a quarter taken up by grass, and about ten per cent used for crops or left fallow. The rest consisted of woodland, ponds, yards or other uses.

Amongst the crops grown in Scotland, excluding grass, cereals accounted for 80 per cent of the land area, with nearly three-quarters of that being barley (330,000 hectares). There were also considerable area growing wheat (101,000 hectares), oilseed rape (37,000 hectares) and potatoes (30,000 hectares). Amongst fruit and vegetables, a total of 885 hectares of strawberries were grown, mainly under cover, and was the largest source of income in horticulture (see section 4.1).

Livestock numbers continued to fall in 2012, with 6.74 million sheep, 1.79 million cattle and 363 thousand pigs all being less than in previous years. Poultry numbers were slightly up on 2011 but these tend to fluctuate. In June 2012 they were however at their highest number since 2005 (see section 5.1).

Total Income from Farming (TIFF) was estimated at £746 million in 2011, being made up of £2.80 billion in outputs and £602 million in support payments, offset by £2.66 billion in costs. The initial estimate of TIFF for 2012 was £635 million, though this figure will be revised in January 2014 (see section 3.1).

The Farm Accounts Survey of economically active farms showed that, after accounting for inflation, average income fell in 2011-12 by £1,000, to £45,000, and by £2,000 over the last five years. This is equivalent to a Farm Business Income (FBI) per unit of unpaid labour (those with an entrepreneurial interest in the farm business) of £31,000. Dairy farms generated the highest average income, with an average FBI of £80,000 per farm, though in each sector there was a wide range in results. Around a quarter of Scottish farm businesses surveyed did not generate enough income to remunerate unpaid labour invested in the business with the minimum agricultural wage (see sections 3.4 and 3.6).

Longer term trends, provided by the Net Farm Income (NFI) measure, show that average farm incomes have only recently returned to levels seen in the mid-1990s. Trends vary by farm type, and some, such as cattle and sheep, dairy and mixed farms have achieved the highest level of NFI seen over the last 20 years (see section 3.11).

#### 1.2 Revisions since initial publications

Headline results for each of the collections have already been published on the Scottish Government website at the following locations
June Census results
www.scotland.gov.uk/stats/bulletins/01003
December Survey results
www.scotland.gov.uk/stats/bulletins/01033
Total Income from Farming and Farm Accounts Survey results
www.scotland.gov.uk/stats/bulletins/01029

Since publication, revisions have been made to the June Census results. Please note that, given that the changes are small and do not have a large impact, we have not amended the original headline statistical publications, though they are included in this publication.

The initial estimate of TIFF is always updated the following year to include more complete data, including any revisions in previous years due to changes in methodology. In 2013 we published initial TIFF estimates for 2012, along with revised estimates for previous years. Where revisions have been made, they have been applied retrospectively to ensure comparability across years. The 2012 initial estimates will be revised in the January 2014 publication, along with previous years where necessary (see also Annex B).

#### 2. Geography and Structure

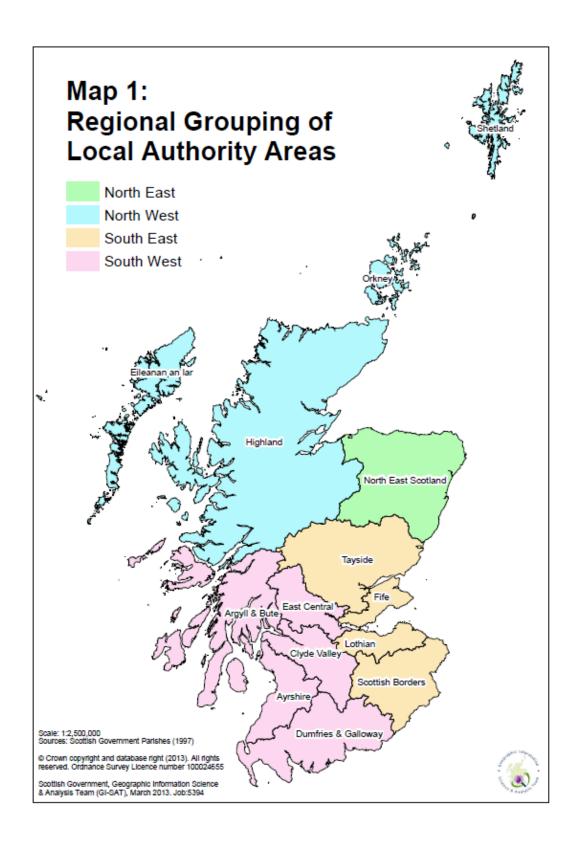
#### 2.1 Geographical areas (Map 1)

Each agricultural holding is allocated to one of the 891 parishes in Scotland. These parishes can then be aggregated up to the higher geographies like local authority (LA), regional grouping (groupings of LAs) and region. The table below presents which local authorities lie within each regional grouping and region.

Most parishes lie wholly within a single LA area. However, it is important to note that not all parishes lie wholly within a single LA boundary. In these cases, where the parish straddles LA boundaries, the whole parish is assigned to the LA in which the majority of the parish's area is located.

Regions, Regional Groupings and Local Authority Areas

Region	Regional grouping	Local Authority
North West	Shetland	Shetland
	Orkney	Orkney
	Eileanan an Iar	Eileanan an Iar
	Highland	Highland
North East	NE Scotland	Aberdeen City
		Aberdeenshire
		Moray
South East	Tayside	Angus
		Dundee City
		Perth & Kinross
	Fife	Fife
	Lothian	East Lothian
		City of Edinburgh
		Midlothian
		West Lothian
	Scottish Borders	Scottish Borders
South West	East Central	Clackmannan
		Falkirk
		Stirling
	Argyll & Bute	Argyll & Bute
	Clyde Valley	East Dunbartonshire
		East Renfrewshire
		City of Glasgow Inverclyde
		North Lanarkshire
		Renfrewshire
		South Lanarkshire
		West Dunbartonshire
	Ayrshire	East Ayrshire
		North Ayrshire
	Dumfries & Galloway	South Ayrshire Dumfries & Galloway



#### 2.2 Less Favoured Area (LFA) (Map 2 and table C3)

A holding is classified as Less Favoured Areas (LFA) if 50 per cent or more of its land is assessed as being disadvantaged for subsidy purposes. Map 2 shows the distribution of agricultural land that is classified as LFA. It can be seen that the vast majority of Scotland's agricultural land is classified as 'severely disadvantaged' LFA, reflecting the large areas of upland farmland in Scotland, which are only able to support low intensity farming. Non-LFA land tends to be located to the east of the country in coastal areas.

Table C3 shows a breakdown of land use by whether it is LFA or not. It shows that in 2012 there were 5.34 million hectares of land located on LFA holdings, accounting for 86 per cent of all agricultural land in Scotland (including common grazing). The vast majority of rough grazing (99 per cent or 3.63 million hectares) was located on LFA holdings, with high proportions of grass (79 per cent or 1.05 million hectares), woodland (88 per cent or 390,530 hectares) and other land (89 per cent or 146,869 hectares) also being located on these holdings.

Table C3 also shows that crops were mainly located on non-LFA holdings. In particular, almost 80 per cent of crops (excluding grass and fallow) (456,555 hectares), were on non-LFA holdings. The only crops mainly located on LFA holdings were other crops for stock-feeding (73 per cent on LFA holdings or 10,852 hectares) and turnips, swedes and beet for stock-feeding (53 per cent on LFA holdings or 2,600 hectares).

#### 2.3 Land use by regional grouping (Table C4)

Table C4 presents land use by the 14 regional groupings and four agricultural regions (as presented in Map 1). Chart 2.1 highlights that Highland had the largest proportion of Scotland's agricultural land with 2.13 million hectares (34 per cent) followed by Grampian (11 per cent) and Tayside (ten per cent). These regional groupings also accounted for the largest proportion of grass and rough grazing in Scotland. Regarding farmed woodland, most was located in the Highlands (38 per cent), Grampian (14 per cent) and Argyll & Bute (11 per cent), while island regions such as Shetland, Orkney and Eileanan an Iar had very small areas of woodland.

Chart 2.1 shows that while Highland understandably had the highest area of agricultural land, Grampian and Tayside had the largest proportion of crop and fallow land in Scotland (31 per cent and 22 per cent respectively). The other regional groupings with considerable areas of crops and fallow were Scottish Borders, Fife and Lothian. See section 4.1 for more detailed breakdown of these areas.

By contrast very small areas of land were used for crops and fallow on Shetland, Eileanan an lar and in Argyll and Bute. These areas all accounted for less than one per cent of Scotland's crops and fallow land.

40% Percentage of Total Scottish Area 30% 20% 10% 0% Argyll & Bute Highland Fife Lothian Scottish **3orders** Clyde Valley Ayrshire **Dumfries &** Tayside Central Orkney Grampian Eileanan Shetland an lar Regional grouping ■ Total agricultural area ■ Total grass and rough grazing Total crops and fallow ■ Woodland

Chart 2.1: Distribution of total agricultural area and other land-types by regional grouping, June 2012

### 2.4 Distribution of Holdings and Agricultural Area by Farm Size and Region (Tables C5-C6)

The distribution of agricultural area in Scotland is highly skewed, with a relatively small number of very large holdings accounting for a high proportion of area. There were 4,464 holdings (eight per cent of the total) which were 200 hectares or over in size, accounting for 4.24 million hectares of area (76 per cent of the total). Conversely, there were 27,236 holdings (52 per cent of the total) which were less than ten hectares in size, accounting for 91,567 hectares of area (1.6 per cent of the total). These patterns can be seen by comparing chart 2.2 and 2.3.

The farm size distribution differs across Scotland. The regional groupings where very large holdings, of 200 hectares and over, were most prevalent were Scottish Borders (23 per cent), Argyll and Bute (20 per cent) and Tayside (14 per cent). Just over half (51 per cent) of holdings over 200 hectares were cattle and sheep (LFA) farms with extensive areas of rough grazing.

The regional groupings with the highest proportion of smaller holdings, of under ten hectares, were Eileanan An Iar (Western Isles) (83 per cent) and Highland (62 per cent), reflecting the high number of small crofts in these areas.

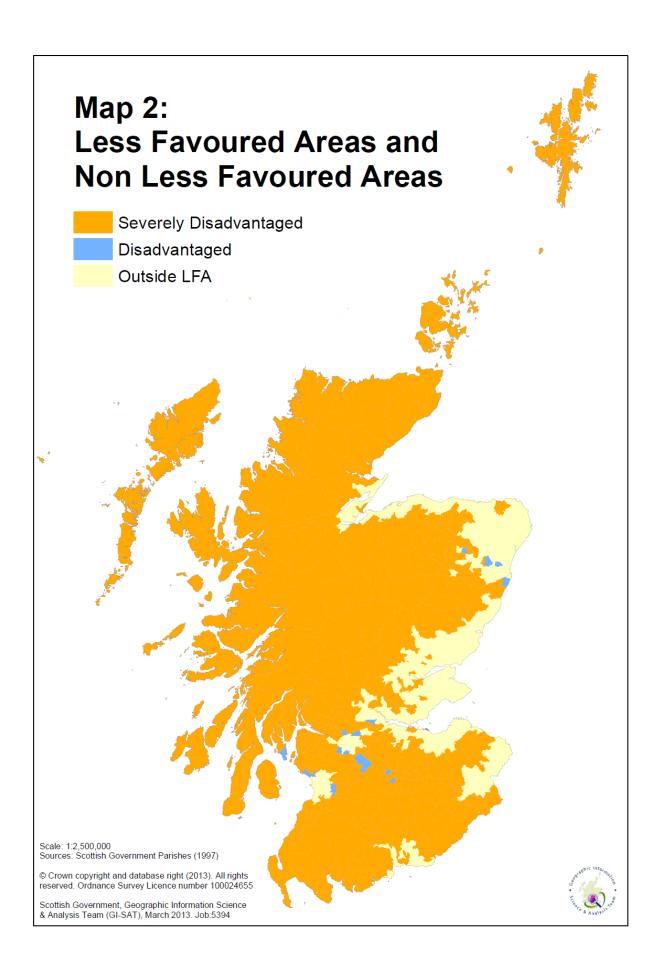


Chart 2.2 illustrates this with holdings in the North West, where the Highlands and Eileanan An Iar are located, being skewed with far more smaller holdings than larger ones in comparison to other regions. It also has some particularly large holdings, as illustrated in chart 2.3.

Chart 2.2: Number of holdings by region and holding size, June 2012

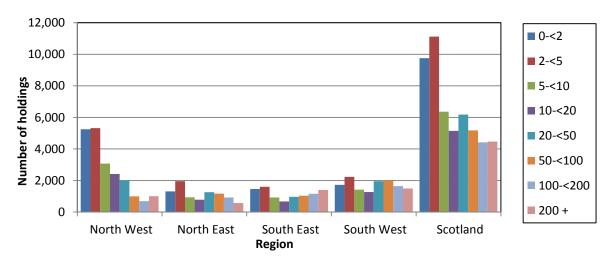
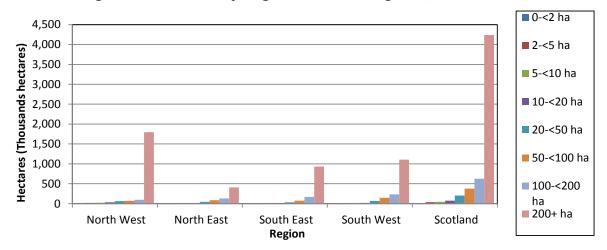


Chart 2.3 Agricultural area by region and holding size, June 2012



#### 2.5 Overview of farm types (Map 3 and table C1)

Using results from the June Agricultural Census, holdings are classified into farm types, which are allocated if the relative contribution of a specific farming activity accounts for at least two-thirds of a holding's total Standard Gross Margin (SGM) value. SGMs represent the farm-gate worth generated by a holding's crops and livestock and is calculated by applying multipliers (in £s) to all crop areas and livestock units. These multipliers are applied uniformly across Scotland, and take into account average output values, variable costs and subsidy levels. The multipliers used in this publication are based on a five year average, centred around the year 2000 and these have been applied to the 2012 crop areas and livestock units of holdings.

There are ten basic farm types (cereals, general cropping, horticulture, specialist pigs, specialist poultry, dairy, LFA cattle and sheep, lowland cattle and sheep, mixed and other). 'Other' relates to holdings where two-thirds of the SGM is identified as something other than crops or livestock, such as grass or horses, whereas 'mixed' is where no product accounts for two-thirds. However the same calculation can be used to subdivide the categories further, and so this publication also includes analysis of specialist grass and forage, a subset of 'other', and specialist beef farms and specialist sheep farms, both subsets of the cattle and sheep farm-type.

This SGM methodology is implemented in line with EC requirements. Please note that next year's ERSA will feature analysis by a new measure called Standard Outputs, which will be based on more recent output and cost information and will also reflect changes to subsidies which were introduced in 2005. See Annex B for more details.

The geographic distribution of these farm types is presented in Map 3. It should be noted that this map shows a generalised view by parish rather than by holding, with a parish being allocated a farm type if the SGM total within the parish for that type exceeds the total SGM for each of the other types. We have also included the 'specialist grass and forage' farm type in table C1 as it relates to a large number of holdings, although this farm type does not feature much in Map 3 as this activity has a relatively low SGM value.

Map 3 shows that the vast majority of Scotland's agricultural area was covered by LFA (Less Favoured Areas) cattle and sheep holdings. These were mostly located in upland areas of the Highlands and Islands, Orkney, Shetland, western Tayside, southern Ayrshire and parts of Argyll & Bute, East Central, Scottish Borders and Dumfries & Galloway and reflects the fact that livestock grazing is the only suitable use for much of this land. Dairy livestock holdings were mostly located in lowland areas such as Dumfries & Galloway, Ayrshire, the Clyde Valley and parts of Argyll & Bute and East Central.

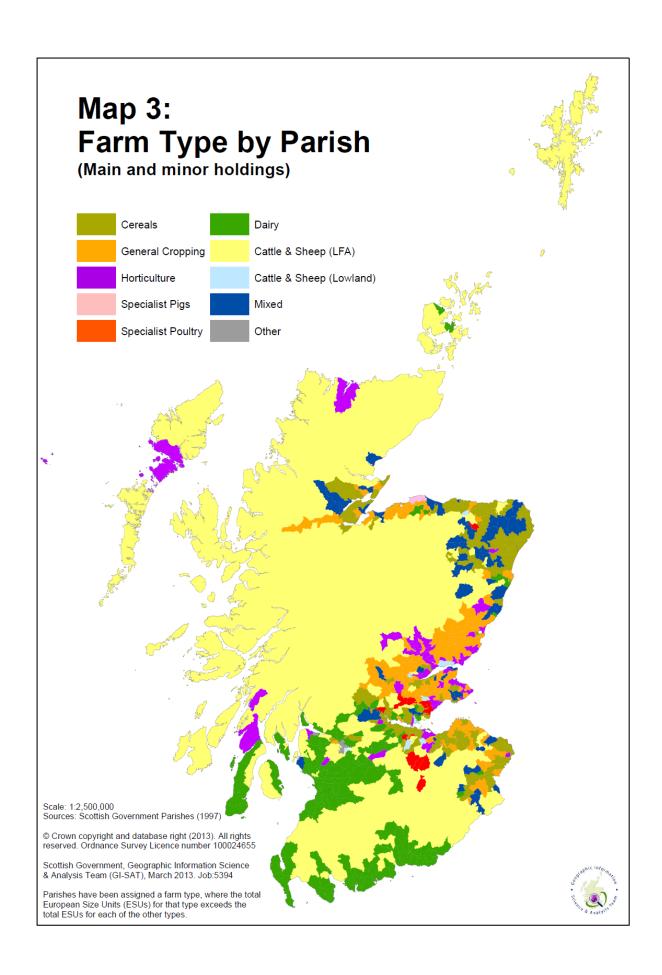
Areas specialising in cereal crops were mostly located to the east of the country in places such as Grampian, Scottish Borders and Lothian, as well as parts of East Central and Fife. There also tended to be a higher concentration of general cropping holdings in Tayside and Fife and parts of the Scottish Borders, Lothian and the North East.

Smaller holdings that made up farm types such as horticulture, specialist pigs and specialist poultry were not represented clearly on the map due to the small area they make up. With a few exceptions these holdings were

generally dispersed around lowland areas, while mixed farming areas tended to be concentrated in the North East, the Scottish Borders, Lothian and East Central.

Table C23 presents information on each of the main farm types in Scotland, showing the total number of holdings, total agricultural area and total size in terms of SGMs (Standard Gross Margins) and SLRs (Standard Labour Requirements, see section 7.3). The most common farm type was 'specialist grass and forage' which totalled 22,242 holdings. This was followed by Less Favoured Area (LFA) Cattle and Sheep (13,546 holdings) and cereal holdings (3,884). General cropping, mixed, specialist poultry and lowland cattle and sheep farms were fairly prevalent (with around 2,000 holdings each) while horticulture, dairy and pig specialist holdings were the least common farm types.

The SGM total for Scotland, based on the methodology described earlier, was around £1,100 million, equating to £21,565 per holding. (This is a theoretical figure. For the actual value of agriculture in Scotland, please see the farm income statistics contained in section 3 of this publication.)



#### 2.6 Size of holdings by farm type (Table C7)

Table C7 and chart 2.4 show that farm size distribution also varied within each farm type. The majority of horticulture (81 per cent), specialist poultry (80 per cent), specialist pig (77 per cent), and cattle and sheep (lowland) (57 per cent) were below ten hectares in size. This reflects the intensive nature of production by these farm types. The majority of specialist grass and forage holdings (71 per cent) were also below ten hectares in size, these holdings tending to have little other agricultural activity.

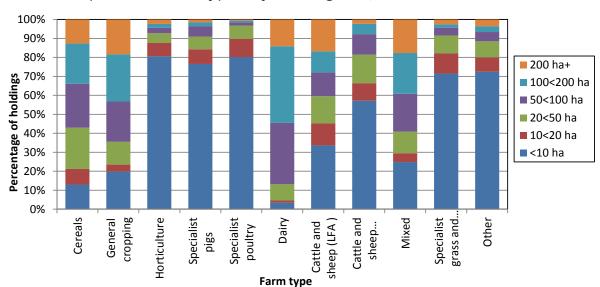


Chart 2.4: Specialist farm types by holding size, June 2012

The majority of dairy (87 per cent), general cropping (65 per cent), mixed (59 per cent) and cereal (57 per cent) holdings were 50 hectares or greater in size, reflecting the structure of these industries towards larger producers.

The distribution of cattle and sheep (LFA) holdings by farm size shows a varied mix, incorporating large extensive holdings, small holdings and crofts.

#### 2.7 Standard Gross Margins by farm type (Table C23, C26, C27)

(see note in section 2.5 for definition of SGM)

Chart 2.5 shows that horticulture holdings had the highest average SGM at £204,678. This was followed by dairy (£145,819), general cropping (£86,994) and mixed (£50,635). Those holdings falling under the 'other' category in table C27 (i.e. including specialist grass and forage holdings) had the lowest average SGM (£53). Farm types for lowland cattle and sheep (£11,292), specialist poultry (£12,605) and LFA cattle and sheep (£15,909) also had relatively low average SGM values. It should be noted, however, that for most farm types, these results are derived from a large number of holdings with a small amount of agricultural activity and a few very large holdings with a large amount of activity. This is illustrated in chart 2.5 by the dark blue dots.

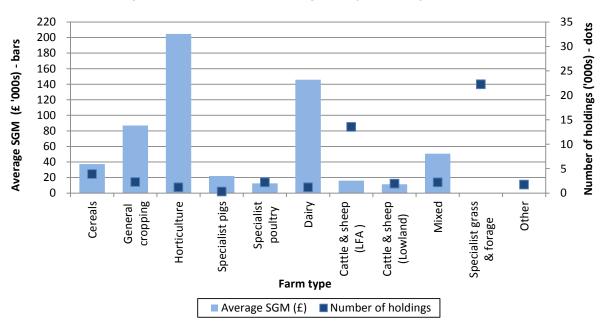


Chart 2.5: Average Standard Gross Margins by farm type, June 2012

It should also be noted that the average SGM for horticulture holdings has risen in the last year by 68 per cent from £76,749 to £204,678. From 2011, changes were made to our data collection in order to more accurately record soft fruit areas. This resulted in an increase in the recorded area of high-value strawberries and raspberries under glass which, in turn, resulted in an increase in SGMs for this sector. This methodological change is outlined in more detail in the census publication at www.scotland.gov.uk/stats/bulletins/01003

#### 3. Farm Income

There are two main farm income measures contained in this publication. They are closely related and provide complementary information. Total Income from Farming (TIFF) provides a national estimate of total income across all agricultural holdings, with a breakdown of the national value of farm outputs, costs and subsidies. Farm Business Income (FBI) provides a sectorial insight into the incomes of farm businesses for eight different farm types, with estimates of average incomes, outputs, costs and subsidies.

For example, a result of the differing way TIFF and FBI are calculated is that, as presented in section 4.2, the TIFF estimate of income from cereals totals cereal income across all farms-types, whereas FBI produces an estimate of income on cereal farms, including all income from those farms, whether from cereals, other crops or anything else.

For more detail please see <a href="https://www.scotland.gov.uk/stats/bulletins/01029">www.scotland.gov.uk/stats/bulletins/01029</a>

#### 3.1 Total Income from Farming (TIFF) (Table A1)

The total net income from farming is calculated using a range of data covering each factor of output and cost for Scottish agriculture. This means obtaining volume and price data for each type of crop and livestock, collecting data on income from other sources, and estimating the cost of each aspect of production, e.g. seed, feed, fuel, or labour.

Over the past ten years there has been a general upward trend in TIFF, which has increased by £192 million (43 per cent), from £443 million in 2003 to a provisional estimate of £635 million in 2012. The estimate for 2012 suggests that TIFF decreased by £111 million (15 per cent) from 2011, following an increase of £58 million (eight per cent) between 2010 and 2011.

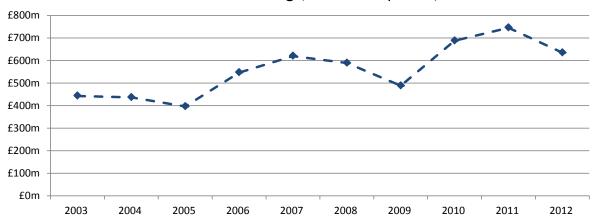


Chart 3.1: Total Income from Farming (at current prices) 2003 to 2012

Chart 3.2 shows the contributing components of TIFF, with output and total payments and subsidies showing the positive contribution and input costs, other costs and consumption of fixed capital showing the negative contribution.

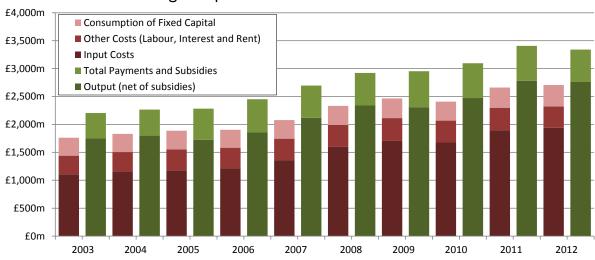


Chart 3.2: Contributing components of TIFF 2003 to 2012

Over the past ten years the output value (net of subsidies) from agricultural businesses has increased by £1,010 million (58 per cent), and total payments and subsides have increased £127 million (28 per cent). Over the same period, input costs have risen by £834 million (75 per cent), other costs (including labour, interest payments and rent) have increased by £48 million (14 per cent) and the level of consumption of fixed capital increased by £63 million (20 per cent).

The overall value of TIFF is small in comparison to the value of outputs and input costs and is therefore quite sensitive to small percentage changes in these larger values. Between 2011 and 2012, output values (net of subsidies) decreased by £22 million (one per cent) and input and other costs increased by £23 million (one per cent). The value of total payments and subsidies decreased by £44 million (seven per cent) and consumption of fixed capital increased by £23 million (six per cent). These changes resulted in a decrease in TIFF of £111 million (15 per cent) between 2011 and 2012.

#### 3.2 Farm business income (FBI) (Table B2)

The headline business-level measure of farm income in the UK is Farm Business Income (FBI). FBI represents the return to the whole farm business, i.e. the total income available to all unpaid labour and their capital invested in the business. Returns from diversified activities (non-agricultural activities that use farm resources, e.g. renting out farm cottages for tourism, income from small-medium scale wind turbines, etc.) are included in overall FBI (as they are in TIFF).

In Scotland, the data used to calculate FBI comes from the Farm Accounts Survey (FAS). The FAS represents economically active farms (using at least half the average labour requirement of a crop or livestock enterprise – see SLR definition in section 7.3). The FAS therefore excludes many small holdings. Horticulture, pigs and poultry farms are also excluded.

Scottish FBI figures are available from 2006-07, but data on diversified activities was only collected from 2007-08. Time series of FBI are provided from 2007-08 as the effect of diversified activities on overall farm income prior to that cannot be quantified. Unless stated otherwise time series are presented in 2011-12 prices, using the RPI (Retail Price Index) all items index, adjusted to represent the period covered by each year of the Farm Accounts Survey (FAS). This provides more reliable trends as the effects of inflation are accounted for. The Net Farm Income measure provides a longer time series and is presented by farm type in section 3.10. The difference between FBI and NFI is explained in the FAS methodology and quality note, along with other information on the survey methodology and quality of results, on the agriculture statistics web page<sup>1</sup>. More detailed data tables are also available in the 2011-12 FAS data tables<sup>2</sup> also on the agriculture statistics web page.

Chart 3.3 below shows that over the last five years, FBI declined to the lowest point in 2009-10, due mainly to a reduction in the FBI of specialist cereal and general cropping farms which was a result of increased spend on fertiliser and fuel costs and reduced prices for outputs in that year. This resulted in an average FBI value of £37,000 in 2009-10 (Table B2).

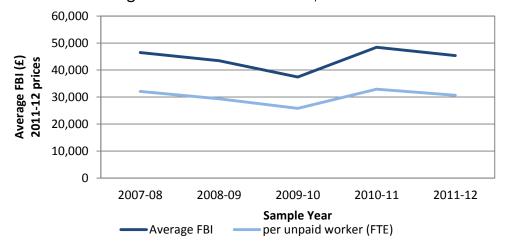


Chart 3.3: Average FBI of Scottish farms, 2007-08 to 2011-12

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<sup>&</sup>lt;sup>1</sup> www.Scotland.gov.uk/Topics/Statistics/Browse/Agriculture - Fisheries/Publications/FASmethod

<sup>&</sup>lt;sup>2</sup> www.Scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/FASdata

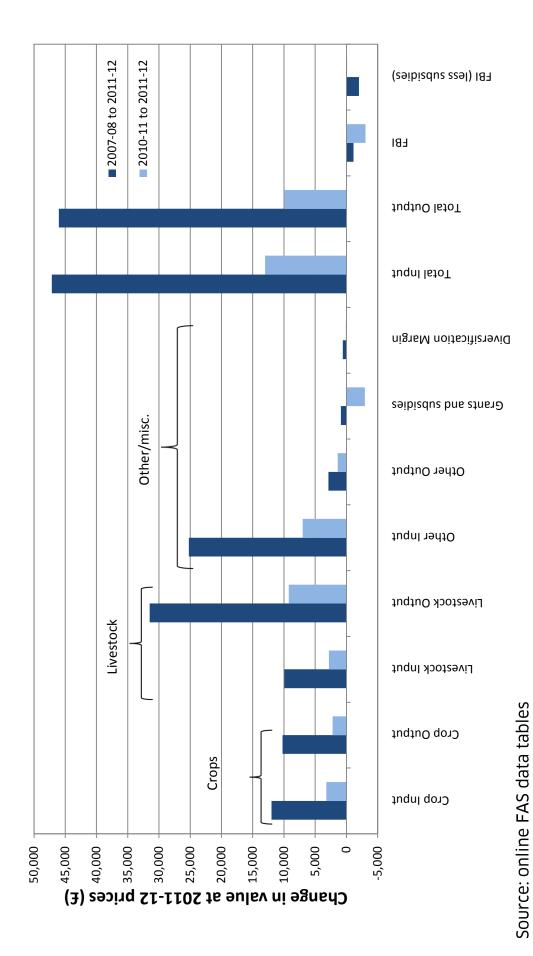
In 2010-11, as fertiliser costs returned to lower levels, the FBI of specialist cereal and general cropping farms recovered, with overall output values outstripping a modest rise in combined input costs. Lower input costs in 2010-11 were largely responsible for raising the overall average FBI to the highest level in the last five years, at £48,000 per farm.

In 2011-12 the average FBI of Scottish farms fell by around six per cent, to £45,000, compared to 2010-11. This decrease was mainly caused by a reduction in the value of grants and subsidies received by Scottish farmers.

Chart 3.4 shows the average changes to FBI components both in the last year and over the last five years, accounting for inflation. Over the last year, 2010-11 to 2011-12, the value of crop outputs has increased, but by slightly less than the input costs of growing crops. The value of livestock outputs has also increased, but by considerably more than the associated input costs, suggesting that income margins for livestock enterprises have improved. This apparent increase in livestock income outweighs the relatively small losses of crop income. Comparing livestock and crop enterprises in this way is not exact, as both are subject to further costs which cannot be separately identified as either crop or livestock expenses, such as costs of labour, machinery, buildings, depreciation, etc.

The changes in agricultural inputs and outputs alone effectively balance each other out, as both have risen by around £13,000. Looking at changes in the total input and output values (which include income from diversified activities and grants and subsidies), the overall effect is that increases in input costs have exceeded the increases in output values. While there has been no change in the average income received from diversified activities, the value of grants and subsidies has fallen by around £3,000. The value of FBI without grants and subsidies has remained unchanged over the last year.

Chart 3.4: 2011-12 Changes to FBI components: all farm types



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#### 3.3 Grants and subsidies (Table B2)

Chart 3.5 shows the overall impact of grants and subsidies on the average income of farm businesses. The trends of FBI remain largely unchanged, with the exception of the latest year (2011-12), when FBI without grants and subsidies showed no change on the previous year. In all of the last five years, the average FBI (in 2011-12 prices) has been below zero when grants and subsidies are removed.

Average FBI (£)

20,000

40,000

50,000

0

-10,000

-10,000

2008-09

Chart 3.5: Average FBI of Scottish farms without grants and subsidies, 2007-08 to 2011-12

#### 3.4 Income distributions (Tables B4, B8)

-20.000

Average FBI

Chart 3.6 shows the distribution of farm business incomes. Nine per cent of farms, or approximately one in ten, had a negative FBI. A further 49 per cent, about half, had an FBI below £40,000; so, while the average FBI is £45,000, the majority (58 per cent) of farms actually earn less than this. Eight per cent of farms achieved an FBI between £40,000 and £50,000 - close to the overall average income. The remaining 34 per cent, a third of all farm businesses, achieved an FBI of £50,000 or more with 11 per cent, one in ten, achieving an FBI of £100,000 or more.

2009-10

Sample Year

without grants and subsidies

2010-11

2011-12

Break even

Chart 3.6: FBI distribution 2011-12

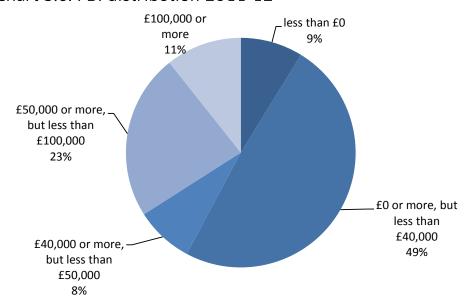
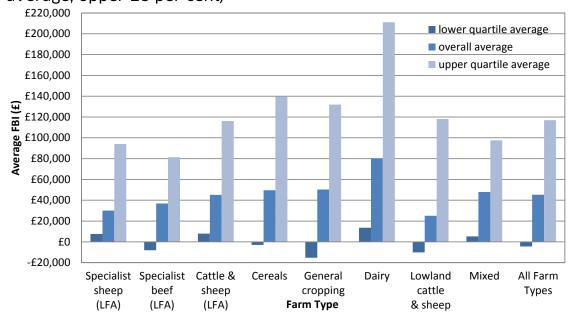


Chart 3.7 shows the average FBI of all farm types by quartile, i.e. the average for all farm businesses with the lowest 25 per cent of FBI values, the overall average, and the average of those farm businesses with the highest 25 per cent of FBI values. Across all farm types there was a considerable difference between higher and lower performing farms. The overall average FBI of farms in the lower quartile was -£5,000, the overall average was £45,000 and for those in the upper quartile it was £117,000 (more than twice the average FBI).

Chart 3.7: Average FBI by farm type and quartile (lowest 25 per cent, average, upper 25 per cent)



Lower quartile specialist beef (LFA), cereal, general cropping and lowland cattle and sheep farms all made an overall loss in terms of FBI.

For specialist sheep (LFA), cattle and sheep (LFA), dairy and mixed farms the average FBI of lower quartile farms ranged from one tenth to one quarter of the average for each farm type.

The average FBI for upper quartile farms ranged from two to five times the overall average for each farm type. There are many factors which contribute to the relative performance of a farm business, including: tenure of the farm (with tenant farms having relatively higher overheads); prices and duration of contract for produce; supply costs and efficiency of application of inputs; level of indebtedness; as well as the motivations for farming and preferences for methods of farming of individual farm owners/managers.

Chart 3.8 shows the differences in the relationship between output value and input costs which result in the differences in FBI. It can be seen, for example, for the higher earning specialist beef (LFA) farms, that output was 167 per cent of total inputs compared to 128 per cent for the sample average and 96 per cent for the lower quartile. This means that for every £1 spent on inputs, the higher earning specialist beef (LFA) farms produced £1.67 of output, compared to £1.28 for the sample average and £0.96 for the lower earning farms. This translates into an average FBI of £81,000 for the highest quartile farms, £37,000 for the sample average and a loss of -£8,000 for the lower earning farms.

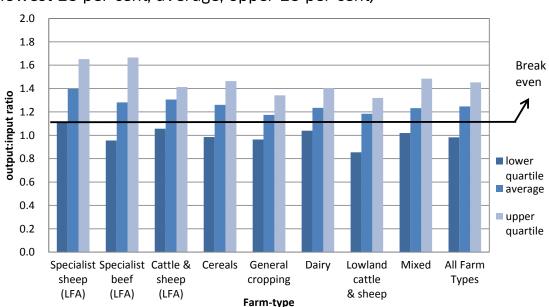


Chart 3.8: Average output:input ratio by farm type and quartile (lowest 25 per cent, average, upper 25 per cent)

It should be noted, however, that a higher output to input ratio does not necessarily lead to a higher FBI when comparing across farm type.

FBI depends on both the ratio between and the absolute levels of outputs and inputs. For example, whereas the upper quartile output:input ratio of specialist beef (LFA) farms, £1.67, was the highest of all farm types, the upper quartile of specialist beef (LFA) farms, £81,000, was lower than that of all other farm types. This was due to the relatively low absolute value of outputs and inputs.

#### 3.5 Enterprise gross margins (Table B12)

The purpose of enterprise analysis is to provide a basic assessment of financial performance of the main farm enterprises in Scotland. This allows individual farmers and others with an interest in the agricultural industry to compare individual enterprise performance against sector averages. As more results become available in future years it will also provide a useful guide to performance over time.

The performance of an enterprise is difficult to assess and relies on a number of factors that cannot be identified through this analysis, such as: natural constraints (e.g. quality of land, weather, etc.); reason for farming (e.g. financial, personal satisfaction, etc.); methods of farming (e.g. organic versus conventional production methods); fixed costs of the whole farm business; the interaction of other enterprises within the farm business and many other factors.

The results are presented as gross margins, as no account has been taken of fixed costs of the enterprises: those costs which are not attributed to a specific enterprise. These costs could vary greatly depending on the size or type of farm or enterprise. The results are from the 2011-12 Farm Accounts Survey (FAS), which centres on the 2011 crop year.

Results are provided as un-weighted group averages for each enterprise and within each enterprise (where sample size allows) to identify differences between relatively high performers (those achieving the 25 per cent highest gross margins), the average for the whole enterprise group and relatively low performers (those achieving the 25 per cent lowest gross margins). Enterprises have been classified as high or low performers based on their gross margins, though this does not necessarily mean that high performing enterprises are being managed more effectively. The intentions, attitudes, reasons for farming and factors outside the control of farmers and farm managers have not been considered in this analysis.

The analysis examines three measures of financial performance, the main measure is the enterprise gross margin per head or per hectare, which shows the gross income (before accounting for fixed costs) from a single unit of output (per head for livestock and per hectare for crops).

Additional measures are the overall enterprise gross margin, which shows the overall balance of the enterprise, and the output:input ratio, which shows how much gross return is achieved per pound (£) spent per single unit of output (head/hectare). Enterprise output includes the market value of the output retained on the farm.

The three measures each provide a different insight into the performance of the enterprise. Taken in isolation, these figures may provide a misleading impression of the performance of an enterprise relative to high, low or average performers, or to different enterprises. It is intended that each measure be taken into consideration when drawing comparisons based on this analysis.

Analysis for crop, dairy and beef, and sheep enterprises are presented in sections 4.4, 5.2 and 5.3 respectively. More detailed results, including sample size information, are available from the agriculture statistics web page, Enterprise Performance Analysis<sup>3</sup>.

#### 3.6 FBI per unpaid labour (Tables B1, B9)

FBI does not include imputed costs for the value of unpaid labour (farmer, spouse, other partners, directors and managers) who are, to some extent, dependent on the income of the farm business. The unpaid FTE (full-time equivalent) of a farm is the total number of hours worked by regular unpaid labour. One FTE is equivalent to 1,900 worked hours in a year. Chart 3.3 also shows the average FBI of Scottish farms per unit of unpaid labour.

Trends in FBI/FTE mirror those of overall FBI but at a reduced level, typically around two thirds of overall FBI. In 2011-12 the overall average FBI/FTE was £31,000. From Chart 3.3 it can be seen that the relative position of FBI and FBI/FTE has remained unchanged over the last five years, which shows that the overall average FTE of unpaid farm labour has remained unchanged and therefore, the factors influencing changes in FBI and FBI/FTE are the same.

FBI/FTE reveals more than FBI alone. When looking in more detail, for example by farm type (covered in later sections of this report), it can be seen that the average FTE varies. Therefore the finance available to remunerate unpaid labour, that is those with an entrepreneurial interest in the farm business, will also vary.

We can put the FBI/FTE into context by comparing it to the minimum agricultural wage (MAW) which farm owners are required to pay farm workers.

<sup>&</sup>lt;sup>3</sup> www.Scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/FASdata

Although the MAW may be less than what the person involved in this unpaid labour would expect to be paid, due to level of experience or qualifications, it is the legal minimum. It should also be noted that the income described by FBI should cover more than just the labour provided by the owner: there is also the unpaid management, provision for return on capital and provision of funds for further investment (beyond the depreciation charges included in costs). Comparison against the MAW is nonetheless a helpful indicator of the performance of farm businesses.

Chart 3.9 shows the distribution of FBI/FTE relative to the MAW. The MAW is updated every year and takes effect from  $1^{\rm st}$  October each year. Although data collected through the FAS spans calendar years, 2011-12 data are centred on 2011. For the purpose of this comparison a weighted MAW for the 2011 calendar year, of £6.55 per hour has been used. The average FBI/FTE of £31,000 is equivalent to an hourly wage for unpaid labour of £16.13, two and half times the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

From chart 3.9 we see that the majority of farms (55 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour. At the top end, 13 per cent generated an FBI/FTE between five and ten times the minimum agricultural wage, that is, between £32.75 and £65.50 per hour of unpaid labour, and four per cent generated more. In contrast, the income of 24 per cent of farms (one in four) equated to less than the minimum agricultural wage, per unit of unpaid labour.

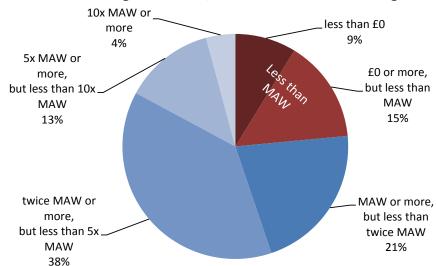


Chart 3.9: Average FBI/FTE, relative to minimum agricultural wage (MAW)

#### 3.7 TIFF per annual work unit (Tables A15, A16)

Table A15 provides information on a range of economic indicators related to Total Income From Farming (TIFF).

One measure that is similar to the FBI per FTE (unpaid labour) in section 3.5 is TIFF per annual work unit. This considers the return to farmers, partners, directors and others with an entrepreneurial interest in the farm business, against the labour they themselves have invested in the business.

This is done by estimating the amount of entrepreneurial labour invested, expressed in terms of full time equivalent, annual work units (AWU). TIFF is then divided by this total to provide TIFF per AWU. (AWU is effectively the same concept as the FTE in section 3.6, but AWU is calculated from Scotland-level census data on the number of entrepreneurial workers, whereas the FTE figure is calculated by converting FAS data, on hours of unpaid worked, into the equivalent number of people.)

Table A15 shows that in 2012, the total amount of entrepreneurial labour invested was 27,363 AWU. Dividing the TIFF figure of £635 million by this labour, provides an average TIFF per AWU estimate of £23,196.

Chart 3.10 shows that between 2003 and 2012 TIFF per AWU increased by £8,000 (55 per cent). This increase in TIFF per AWU mostly reflects the £193 million (44 per cent) increase in TIFF over the same period, as well as a decrease in entrepreneurial labour of 2,100 AWUs (seven per cent). In other words, in 2012 a larger TIFF was being generated by a lower amount of entrepreneurial labour, compared to 2003.

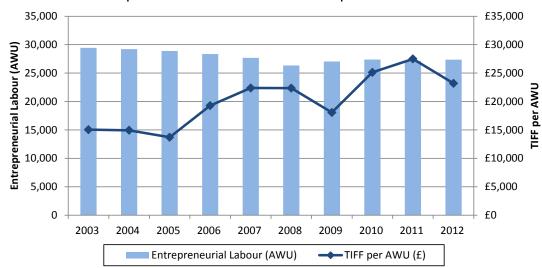


Chart 3.10: Entrepreneurial labour and TIFF per AWUs 2003 to 2012

Table A16 shows three different productivity indices, which are based on different definitions with respect to component inputs and outputs. All three measures show a higher productivity in 2011 compared to 2003, with a decline in 2012 back to levels similar to those of 2003 – mainly a result of poor crop yields.

## 3.8 Income from diversified activity (Tables B1, B5, B6, B7)

Approximately half of all farms (47 per cent) in 2011-12 received additional income from diversified activities (non-agricultural activities that use farm resources, e.g. renting out farm cottages for tourism, income from small-medium scale wind turbines, etc.). Chart 3.11 shows the main activities undertaken and the average income from each, taken from Farm Accounts Survey data. Of those farms engaged in diversified activities, the average income from such activities was £5,000. Almost half (49 per cent) of diversified activities were renting out buildings for uses other than tourist accommodation; this was also the activity that generated the highest average income, along with the use of land for the installation of mobile phone masts.

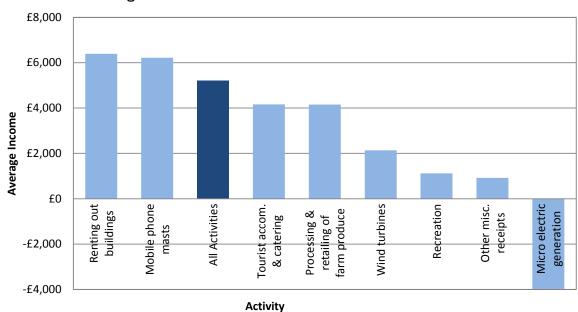
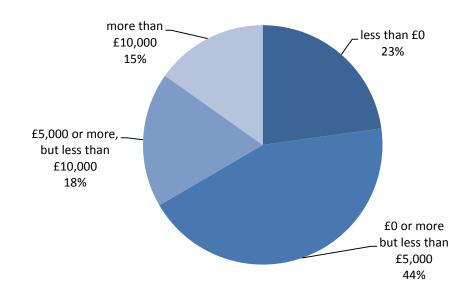


Chart 3.11: Average income from diversified activities

Of the other separately identified activities, processing and retailing of farm produce was the least common activity, with only two per cent of farms engaged in this activity. Micro electric generation was the only activity which made an average loss, which could be due to relatively high start-up costs compared to initial output.

Chart 3.12 shows the distribution of income from diversified activities. Around a quarter of farms with diversified activities (23 per cent) did not make a profit from their activities. 44 per cent made up to £5,000, with the remaining 33 per cent making more than £5,000.

Chart 3.12: Distribution of income from diversified activities, 2011-12



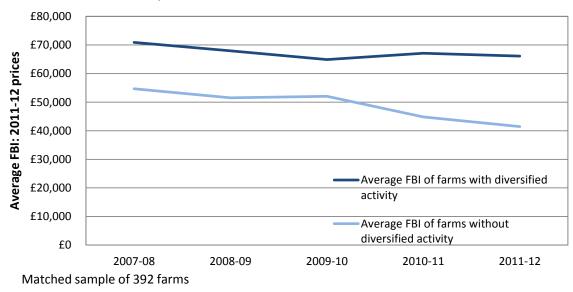
To examine trends in diversified activities, a matched sample of 392 farms was taken; this sample includes the same farms in each of the last five years, from 2007-08 to 2011-12. Over this period the percentage of farms engaged in diversified activities increased from 32 per cent to 46 per cent, suggesting that diversified activities are used more frequently now to supplement income from other agricultural activities.

The average number of diversified activities on farms with any such activity has remained largely unchanged, at 1.4, as has the share of overall FBI coming from diversified activities, at 13 per cent. Chart 3.13 shows, from the matched sample, the average FBI of those farms engaged in any diversified activity and those with no diversified activities.

The average FBI of farms engaged in diversified activities was considerably greater than that of those farms with no diversified activities, in 2011-12 FBI was £66,000 with diversified activity and £41,000 without. The average income from diversified activities does not account for this difference and the reason for the difference is not entirely clear. It could suggest that diversified activities are more likely to be found on farms where the owner is most interested in efficient use of resources and maximising profits.

Specialist sheep (LFA) and Cereal farms had the highest average incomes from diversified activities (table B1), at around £7,000 per farm. From the matched sample (table B7) it can be seen that in the last two years, the average income of farms with diversified activities has been more stable than those without, though both have shown a general decline over the last five years.

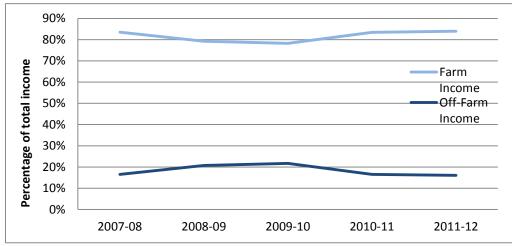
Chart 3.13: Comparison of average income of farms with and without diversified activities, 2007-08 to 2011-12



# 3.9 Off-farm income (Table B10)

Farm owners often supplement their income from agricultural activities with income from other sources. Off-farm income refers to these additional sources of income for farm owners and their spouses. They are presented here as values per unpaid labour FTE, though unpaid labour FTE may include regular labour other than the farmer and their spouse. Chart 3.14 shows the percentage of total income (agricultural income and off-farm income combined) that comes from agricultural activities, including diversified activities and grants and subsidies, and from off-farm income sources, such as employment and investments.

Chart 3.14: Contribution of farming and off-farm income to overall income, 2007-08 to 2011-12



Since 2007-08 the percentage of total income (FBI/FTE plus off-farm income/FTE) provided by agricultural activities has remained relatively unchanged at around 84 per cent. In 2009-10 this was as low as 78 per cent. Accounting for inflation, both sources of income have decreased on average over the last five years, FBI/FTE by around four per cent and OFI/FTE by around 18 per cent. Overall, in 2011-12, 60 per cent of off-farm income came from employment or self-employment, with the remaining 40 per cent coming from investments and pensions.

## 3.10 Balance sheets (Tables B11, A13, A14)

Chart 3.15 shows the average change between 2010-11 and 2011-12 (in actual prices) of assets, liabilities and net worth of Scottish farm businesses by tenure type and the overall average for all tenures. Overall, assets increased by around £59,000, or four per cent. While liabilities increased at a greater rate, nine per cent (£11,000), this is in line with the current balance of assets to liabilities and resulted in an overall increase of four per cent (£47,000) in net worth.

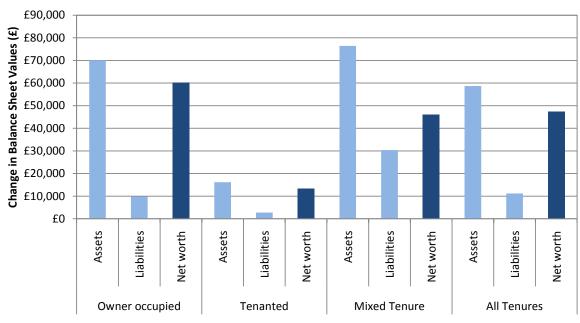


Chart 3.15: Change in assets, liabilities and net worth by tenure, 2011-12

Chart 3.16 summarises the closing valuations of Scottish farm businesses in 2011-12 by tenure type. In general, owner occupied farms had the highest net worth due to the greater value of assets. Tenanted farms had the lowest overall net worth, due to a low value of assets and a high value of liabilities relative to assets. The overall average net worth of Scottish farm businesses (all tenure types) in 2011-12 was £1.3 million.

£1,800,000 £1,600,000 £1,400,000 Closing Valuations (£) £1,200,000 £1,000,000 £800,000 £600,000 £400,000 £200,000 £0 Assets

Net worth

Liabilities

**All Tenures** 

Net worth

Net worth

Mixed Tenure

Chart 3.16: Assets, liabilities and net worth by tenure, 2011-12

Chart 3.17 shows total liabilities as a percentage of total assets for each farm type and tenure. Looking at all tenure types, cereal and general cropping farms had the lowest ratio of liabilities to assets, at six per cent and eight per cent respectively. Dairy farms had the highest ratio of liabilities to assets at 14 per cent, while those of other farm types lay between ten per cent and 12 per cent; the overall average was ten per cent.

**Tenanted** 

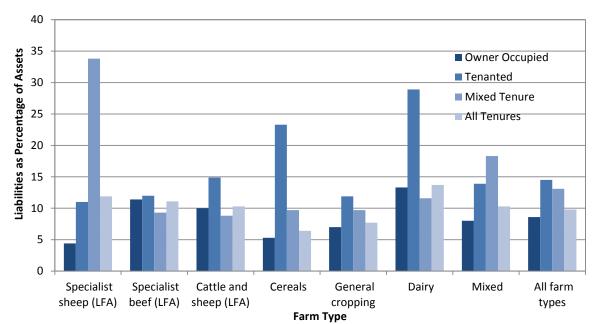


Chart 3.17: Liabilities as a percentage of assets, 2011-12

Liabilities

Owner occupied

Net worth

Assets

At a national level, using TIFF data, over the period 2003 to 2012 the net worth of Scottish agriculture has roughly tripled from £11.8 billion to £34.8 billion. This is primarily because of a large rise in the value of land and buildings over that period, which has risen from £10.8 billion in 2003 to £32.9 billion in 2012, with most of this rise occurring since 2007. Land value information is based on land prices from the Value Office Agency which has been supplemented with data from the Royal Institution of Chartered Surveyors (RICS).

The liabilities of Scottish agriculture have risen 24 per cent between 2003 and 2012 to £2.4 billion, representing six per cent of total asset value.

The amount farmers invested in buildings, plant, machinery and vehicles decreased by £34 million (16 per cent) from 2011 to 2012.

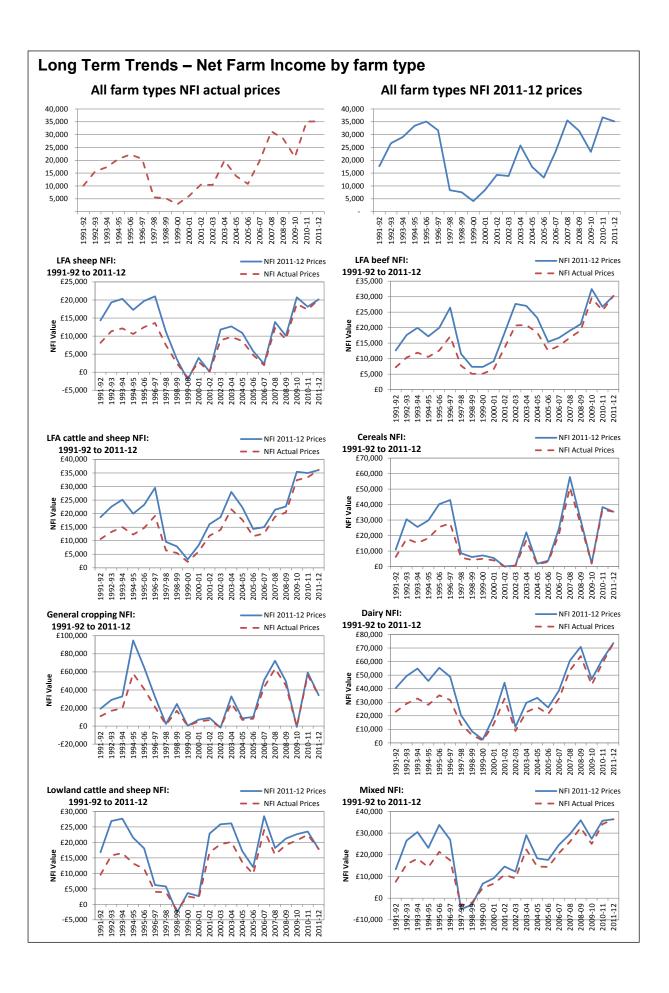
## 3.11 Long term trends - Net Farm Income (NFI)

While FBI is the headline business-level measure of farm income, it is a relatively new measure of income and only allows comparisons over the last five years. Net Farm Income (NFI) has a much longer time series available for comparing income levels and examining trends. This measure places all farms on a tenanted basis, with imputed rent costs applied to owner occupiers. It is quite a different measure from FBI, estimating the return only to the farmer and spouse for their managerial input to the farm business.

Looking at the general trend over the last 20 years in actual prices, for the average over all farm types, suggests that, while farm incomes are subject to a considerable level of fluctuation, they have more than tripled and are now at the highest levels recorded over the period. Farm incomes were at their lowest between 1997-98 and 2000-01, during the time of the ban on beef exports following outbreaks of bovine spongiform encephalopathy (BSE).

However, when accounting for inflation the picture is quite different. When the time series is converted into 2011-12 prices - the equivalent value of incomes in today's economy - we see that farm incomes have only recently returned to the levels seen in the mid-1990s. This trend is not uniform by farm type, though incomes for specialist sheep farms (LFA) have followed broadly similar trends.

Cattle and sheep farms (LFA), dairy farms and mixed farms saw a recovery to mid-1990s income levels around 2008-09 and, though income levels continue to fluctuate, have achieved the highest levels of the last twenty years. Specialist beef (LFA) farms show similar trends, though recent fluctuations have seen reduced income levels in the latest year compared to their peak in 2009-10.



Cereal and general cropping farm types experienced a prolonged period of low income between 1997-98 and 2003-04 (due to a combination of factors including poor growing conditions experienced during this period and high input costs). These farms have demonstrated larger scale fluctuations in recent years, compared to other farm types, reaching their peak in 2007-08. 2011-12 income levels for these farm types were close to those seen in the early 1990s.

Lowland cattle and sheep farms have seen a lot of fluctuation in income levels in the last ten years, both higher and lower than they are now, reaching a peak in 2006-07. 2011-12 incomes were close to those of 1995-96.

### 3.12 Farming costs (Table A1)

In 2012, initial TIFF estimates for the total costs incurred by agricultural businesses was £2.7 billion. These costs are made up of many different components. Costs for 2012 are very dependent upon data not available until later in 2013, and so those presented here should only be considered provisional estimates.

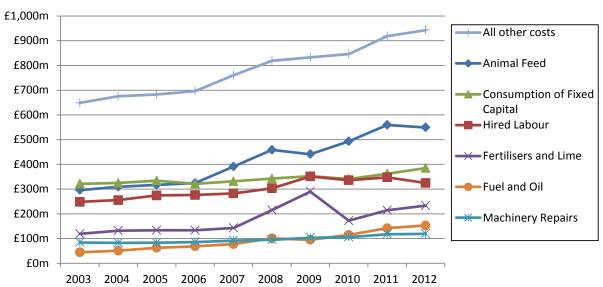


Chart 3.18: Total costs 2003 to 2012

In 2012, the largest costs were for: animal feed (£549 million or 20 per cent of the total); consumption of fixed capital (£385 million or 14 per cent), mainly on plant machinery, vehicles, buildings and works; hired labour (£325 million or 12 per cent); fertilisers and lime (£233 million or nine per cent); fuel and oil (£153 million or six per cent) and machinery repairs (£119 million or four per cent). All other costs, totalling £943 million accounted for 35 per cent of the total.

Over the past ten years, total costs have increased by £946 million (54 per cent) to £2.7 billion in 2012, with most of the increase (£802 million) occurring since 2006. Since 2003, the largest increases have occurred in animal feed (up £253 million or 86 per cent), fuel and oil (up £108 million or 243 per cent) and fertiliser and lime (up £114 million or 96 per cent).

### 3.12.1 Animal feed (Tables A1, A7)

Most of the animal feed costs are associated with the purchase of concentrate feed, especially for cattle and sheep. Over the past ten years, increasing trends in the cost of these concentrate feeds have contributed the most to the overall increase in animal feed costs.

In the last year, the provisionally estimated £10 million decrease in animal feed was mainly a result of a projected fall in poultry numbers.

#### 3.12.2 Fertiliser and lime (Tables A1, A8)

There has been substantial variation in the cost of fertilisers and lime over the past few years, as shown in Chart 3.18, which has had a considerable impact on recent trends in TIFF. Table A8 shows key components of the underlying price and quantity information used in the compilation of the fertiliser and lime valuation.

It should be noted that the vast majority of fertilisers are used in the first half of the calendar year. However, a substantial proportion of these fertilisers will have been purchased in the previous autumn/winter. This lag between purchases and usage has been accounted for in the TIFF valuation and should be borne in mind when comparing average annual prices in TIFF with monthly market prices.

Chart 3.19 shows a summary of fertiliser usage and average annual prices, expressed in terms of nutrient tonnes. Nutrient tonnes are used in order to account for different types of fertilisers which have different compositions in terms of nutrient content.

There has been a decreasing trend in the usage of fertilisers between 2003 and 2008. Although total usage is shown to have increased between 2008 and 2009, this does reflect a break in the data series, from which time administrative data from the Single Farm Payments (SFP) systems was used as the source of land use data. The SFP data showed higher areas of grassland, to which fertilisers are applied, compared to previous June Census information.

Compared to 2003, the quantity of fertiliser usage in 2012 was 92,000 tonnes (26 per cent) lower, however the average price was £555 per tonne

(218 per cent) higher. Over this period average prices started to increase in 2004, accelerating to a peak of £966 per tonne in 2009. In 2010, prices fell sharply before rising again in 2011 and 2012, although they remain lower than the peak in 2009.

400,000 1200 Average Price (£ per nutrient tonne) 350,000 1000 Quantity (nutrient tonnes) 300,000 800 250,000 600 200,000 150,000 400 100,000 200 50,000 0 0 2007 2003 2004 2005 2006 2008 2009 2011 2012 2010 Quantity (nutrient tonnes) Average Price (£ per nutrient tonne)

Chart 3.19: Quantity & average annual prices of fertilisers used 2003 to 2012

#### 3.12.3 Fuel (Tables A1, A9)

Red diesel is used as fuel by agricultural businesses. Red diesel is cheaper than conventional diesel, as it attracts lower rates of tax. The overall trend in red diesel prices has shown a steady increase since 2003, with a spike in prices during 2008. This reflects broader global trends in fuel prices.

In 2012, the estimated overall cost of fuel and oil increased by £24 million (three per cent), reflecting the three pence per litre (four per cent) increase in red diesel prices.

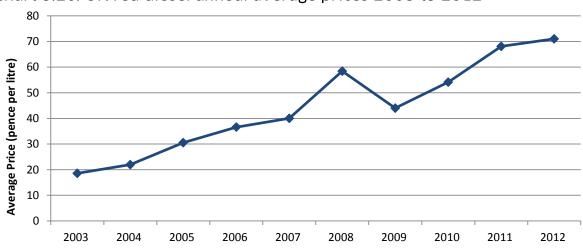


Chart 3.20: UK red diesel annual average prices 2003 to 2012

#### 3.12.4 Hired labour (Tables A1, A10)

Hired labour costs increased by £103 million (42 per cent) between 2003 and 2009, before falling by £26 million (eight per cent) between 2009 and 2012. These costs are calculated by taking into account the number of hired workers reported in the June Agricultural Census and information on earnings from the monthly Survey of Hours and Earnings of Agricultural Workers.

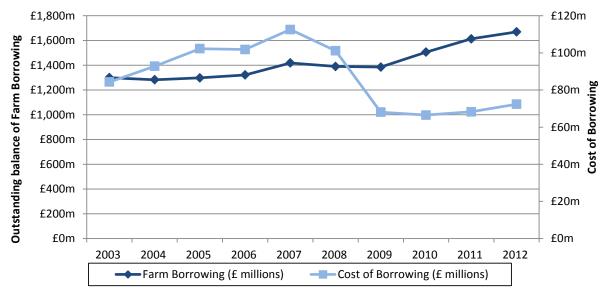
Between 2003 and 2012 there has been a gradual decline in the number of hired regular workers but an increase in the number of casual and seasonal workers, particularly since 2006. The lower labour costs in 2012 are a result of a slight decrease in the cost of casual and seasonal labour, following a peak in 2011.

#### 3.12.5 Net interest payments (Tables A1, A11)

Over the past ten years there has been a steady increase in the outstanding balance of farm borrowing, from £1.3 billion in 2003 to £1.7 billion in 2012. Over the same period, the corresponding cost of borrowing has varied, reflecting changes in underlying interest rates.

Recently, there was a large fall in the cost of borrowing (split into two components in table A1 - FISIM and interest) between 2008 and 2009 of £33 million (33 per cent) due to a decrease in the base rate of interest. The situation has been more stable since 2009, with an increase between 2011 and 2012 of £4.1 million (six per cent) due to a corresponding increase in the overall level of borrowing.

Chart 3.21: Outstanding balance of farm borrowing & cost of borrowing 2003 to 2012



#### 4. Crops

#### 4.1 Overview (Table C2)

In 2012 barley accounted for 332,000 hectares, wheat 101,000 hectares, oats 24,500 hectares, oilseed rape 36,600 hectares, potatoes 29,500 hectares, other vegetables (including vegetables for stockfeeding) 39,700 hectares and fruit 877 hectares. Chart 4.1 shows production trends of various crops, presented as indices.

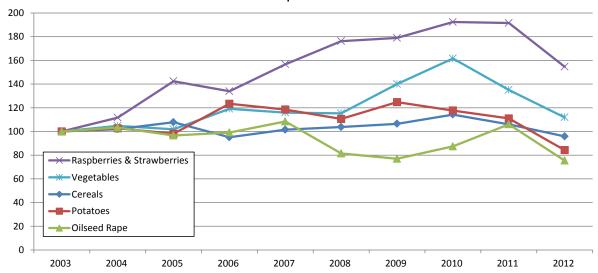


Chart 4.1: Production indices for crops 2003 to 2012

The most striking trend is the increase in fruit production of raspberries and strawberries, which has increased by 55 per cent over the past ten years (even with the fall in 2012), continuing a longer term trend. This is mostly due to increases in the area and yields of strawberries, with the proliferation of strawberries grown under protection having a big impact.

After steady increases between 2003 and 2010, the production of vegetables has decreased over the last two years. Poor weather in 2012 may mean that this is a temporary blip rather than a longer term trend.

The production of potatoes increased by 270,000 tonnes (26 per cent) between 2005 and 2006 and has generally remained higher compared to pre-2006 levels. The increase in 2006 was mostly due to very favourable growing and harvesting conditions, with very high yields accounting for most of the increase in production. Since 2006, a combination of good potato yields and increases in potato areas have contributed to higher production levels, but, as with other crops, it is expected that poor yields have had an effect on 2012 production.

There has been little variation in cereal production over the last ten years, which has ranged from 2.60 million tonnes in 2006 to 3.12 million tonnes in 2010. The 2012 harvest was 113,000 tonnes (four per cent) lower than the 2003 harvest at 2.62 million tonnes.

The production of oilseed rape, including that grown for industrial purposes on set-aside land, was 35,000 tonnes (25 per cent) lower in 2012 compared to 2003. Over the past ten years production has varied, reaching peaks of 153,000 tonnes in 2007 and 150,000 tonnes in 2011.

# 4.1.1 Distribution of crops by region (Table C4)

Chart 2.1 showed the regional distribution of use of agricultural land. In more detail, chart 4.2 shows that Grampian accounted for the largest proportion of barley (39 per cent) and oilseed crops (35 per cent). Scottish Borders had the largest area of wheat in Scotland (22,408 hectares or 22 per cent of the national total), with Tayside accounting for a similar proportion (21,733). Crops for stock-feeding were more likely to be grown in areas with high numbers of livestock such as Dumfries & Galloway (4,674 hectares or 24 per cent of the Scotland total) and Grampian (3,908 hectares or 20 per cent).

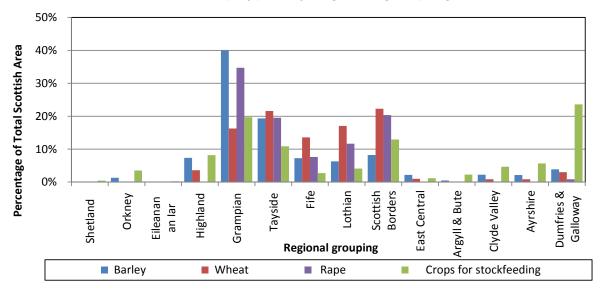
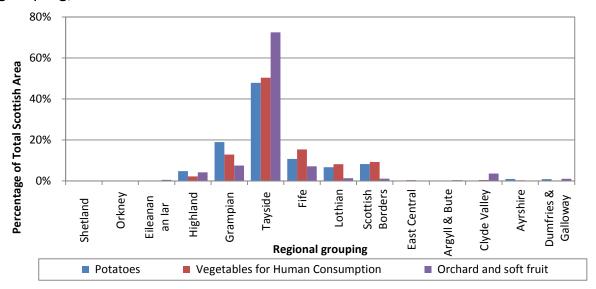


Chart 4.2: Distribution of crop types by regional grouping, June 2012

Regarding other crops, chart 4.3 shows that Tayside had 73 per cent (636 hectares) of the land used for orchard and soft fruit in Scotland. Tayside also accounted for around half (50 per cent or 7,772 hectares) of the land used in Scotland to grow vegetables for human consumption and nearly half (48 per cent or 14,147 hectares) of the area used for growing potatoes. Grampian, Fife, Scottish Borders and Lothian are the other regional groupings that contributed greatly to production of these crops.

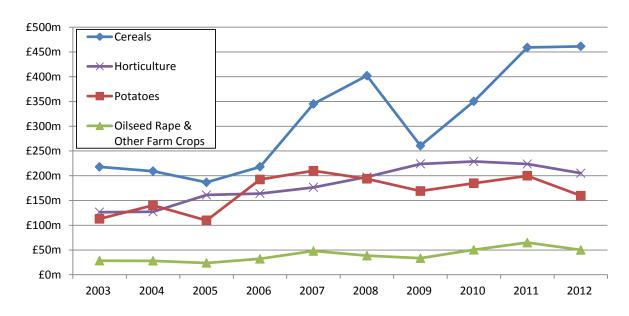
Chart 4.3: Distribution of potatoes, soft fruit and vegetables by regional grouping, June 2012



# 4.1.2 Income from crops (Tables A1, A2, A3, A4)

Over the past ten years the total output value of crops, excluding related subsidies, has increased by £390 million (80 per cent) to £876 million in 2012. There has been a general increasing trend in the value of horticulture (up £79 million or 62 per cent) and oilseed rape and other farm crops (up £22 million or 76 per cent), with decreases in 2012 due to poor weather, whilst the trends in cereals and potatoes have been more erratic over time.

Chart 4.4: Output value of crops (excluding subsidies) 2003 to 2012



Between 2003 and 2012 the value of cereals increased by £243 million (112 per cent), however this trend includes large increases of £184 million between 2006 and 2008 and £198 million between 2009 and 2011, as well

as a large decrease of £141 million between 2008 and 2009. These trends largely reflect market price movements, as production levels have not varied to this extent.

The value of potatoes increased by £47 million (41 per cent) between 2003 and 2012. Most of this increase occurred between 2005 and 2006, when production and market prices of potatoes both increased.

Provisional estimates for 2012 suggest that the output value of crops decreased by £71 million (eight per cent) from 2011, with poor weather having an impact on yields. The output value of potatoes, horticulture, oilseed rape and other farm crops all decreased over the last year, by £40 million (20 per cent), £18 million (eight per cent) and £15 million (23 per cent) respectively, while there was relatively little change in the value of cereals, which increased by £2 million (0.5 per cent).

Tables A2(i) to A2(iii) provide information on area, yield and production of a selection of crops. These production figures form the basis of TIFF crop valuations. It should be noted however that production is valued at the point it is used or sold off the farm, so there can be differences between calendar year production and output volumes. The TIFF calculation also includes end year stock valuations.

Statistics on crop areas come from the June Agricultural Census. A detailed description of area trends between 2003 and 2012 is available in the Statistical Publication dated 25<sup>th</sup> September 2012, titled 'Final Results From 2012 Agricultural Census', available at: <a href="https://www.scotland.gov.uk/stats/bulletins/01003">www.scotland.gov.uk/stats/bulletins/01003</a>

A detailed description of statistics on area, yield and production of cereals and oilseed rape was published on 20<sup>th</sup> December 2012 in a publication titled: 'Final Estimate of Cereal and Oilseed Rape Harvest 2012', available at: www.scotland.gov.uk/Publications/2012/12/5477

#### 4.2 Cereals

#### 4.2.1 Income from cereals (Table A3)

Chart 4.5 shows trends in the average annual output prices for cereals, used in the TIFF valuation. It is important to note that these calendar year prices span two crop production years and represent the value of cereals when they are used or sold off the farm. They also represent an average across different types of cereals used for animal feed, seed, human consumption and industrial purposes. These prices, which are obtained from the HGCA (Home Grown Cereals Authority) incorporate tonnages sold on forward contracts as well as cereals sold at spot prices.

Table A3 shows the utilisation of cereals for different purposes. In 2012, the majority of wheat (83 per cent) and oats (78 per cent) was used for human and industrial purposes, whilst the majority of barley (57 per cent) was used for animal feed.

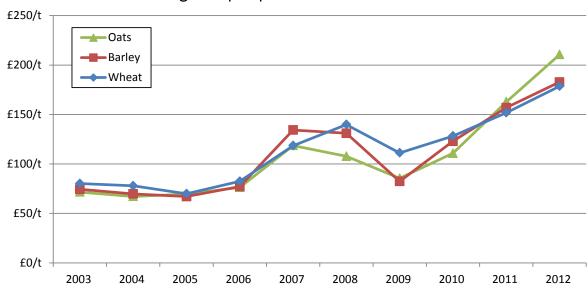


Chart 4.5: Annual average output prices for cereals 2003 to 2012

Cereal output prices were relatively stable between 2003 and 2006. In 2007, prices increased substantially, with barley showing the biggest increase from £77 per tonne to £134 per tonne (up 74 per cent). This increase incorporates the price spike following the 2007 harvest, but the average for 2007 also incorporates output tonnages earlier in the calendar year from the 2006 harvest, which attracted much lower prices. The average output prices remained high in 2008, with wheat showing a further increase of £21 per tonne (18 per cent). Average prices dropped quite markedly in 2009 before three years of increases. These average prices reflect global trends in supply and demand of cereals.

In 2012, total value of cereal output increased slightly, by 2 million (one per cent), compared to 2011, following an increase of £109 million (31 per cent) between 2010 and 2011. The output value of barley increased by £22 million (eight per cent), due to a £26 per tonne (17 per cent) increase in price, despite a 143,000 tonne (eight per cent) decrease in production. The output value of wheat decreased by £23 million (16 per cent), despite a £27 per tonne (18 per cent) increase in price, due to a decrease in production, which was down 284,000 tonnes (30 per cent). The value of oats increased by £3 million (16 per cent), driven by an increase in price of £48 per tonne (29 per cent), while production decreased by 14,000 tonnes (11 per cent).

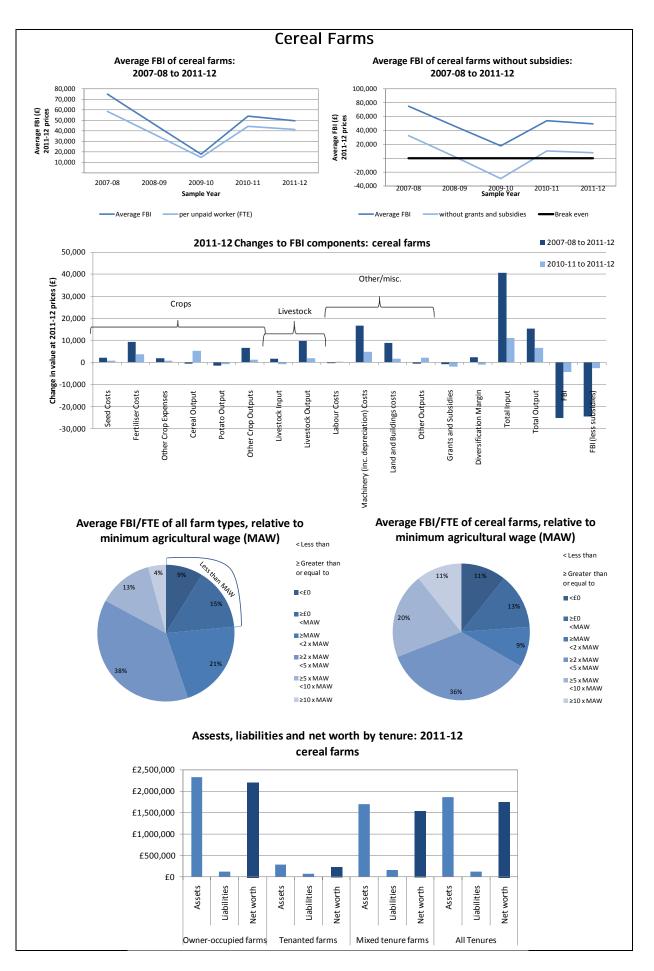
## 4.2.2 Cereal Farms FBI (Table B1)

Accounting for inflation, between 2007-08 and 2011-12 the average FBI of cereal farms decreased by around £25,000, from £75,000 to £50,000. FBI was at its lowest level in 2009-10, at £17,000. This decrease was due to a rise in input costs, especially fertiliser, and a fall in output value in 2009-10 caused by a reduction in cereal prices. Reduced numbers of livestock on cereal farms meant a reduction in the value of livestock output, despite relatively high prices, and contributed to the overall decline in FBI of cereal farms in 2009-10. Between 2009-10 and 2010-11 a recovery in cereal prices and a fall in fertiliser spend allowed a partial recovery of FBI. In 2011-12 the average FBI fell again, due to rises in fertiliser and machinery expenses, to £50,000. The average FBI/FTE unpaid worker was £41,000 in 2011-12.

Over the last five years (2007-08 to 2011-12) the increased value of input costs, especially fertiliser and machinery, coupled with a slight decrease in the output value of cereals has kept overall input costs above output values, causing a fall in FBI. In the last year input costs have again risen and while the output value of cereals has increased, it has not increased enough to balance the rise in input costs, resulting in a decline in FBI value. The increase in input costs has been combined with an average decrease in the value of grants and subsidies (down £2,000) to leave the FBI value of cereal farms at £50,000.

Trends in FBI compared to FBI without grants and subsidies are generally the same. Over the last five years, FBI without subsidies has been kept above zero, with the exception of 2009-10 when FBI without subsidies was -£29,000. In other years it has ranged from £2,000 in 2008-09 to £32,000 in 2007-08. In 2011-12 the average FBI without subsidies of cereal farms was £8,000.

The average FBI/FTE of £41,000 is equivalent to an hourly wage for unpaid labour of £21.75, just over three times the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.



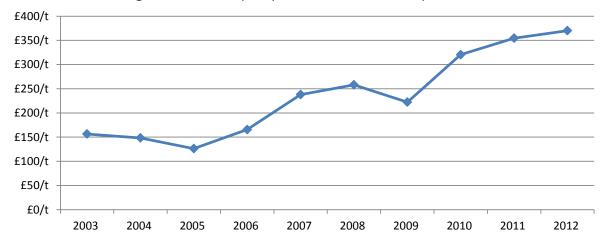
A good majority of farms (67 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour. At the top end, 20 per cent, or one in five farms, generated an FBI/FTE between five and ten times the minimum agricultural wage, that is, between £32.75 and £65.50 per hour of unpaid labour, and 11 per cent, or one in ten, generated more. In contrast, the income of 24 per cent of farms (about one in four) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of cereal farms of all tenures was £1,748,000; from £223,000 for tenanted farms, and £1,539,000 for mixed tenure farms to £2,200,000 for owner occupied farms. Comparing the balance between liabilities and assets, owner occupied farms had the lowest ratio of liabilities to assets at five per cent. This compares to ten per cent for mixed tenure farms and 23 per cent for tenanted farms. Overall, for all tenure types, liabilities are equal to six per cent of assets for cereal farms.

# 4.3 Other crops

# 4.3.1 Income from oilseed rape (Table A3)

Chart 4.6: Average annual output price for oilseed rape 2002 to 2012



The average output price for oilseed rape increased sharply from £126 per tonne in 2005 to £370 per tonne in 2012. The increase between 2011 and 2012 of £16 per tonne (four per cent) was accompanied by a decrease in production of 43,000 tonnes (29 per cent), leading to an overall decrease in the output value of £14 million (26 per cent).

# 4.3.2 Income from potatoes (Table A4)

Table A4 shows the components of the output valuation for potatoes. In 2012, main-crop ware potatoes accounted for an estimated 653,000 tonnes (66 per cent) of output, and seed potatoes 243,000 tonnes (25 per cent) – both these tonnages would be the lowest in the last decade.

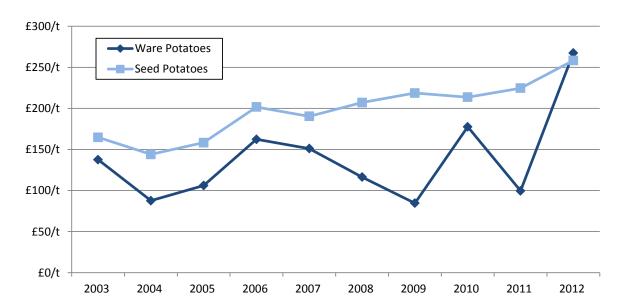


Chart 4.7: Average annual output prices for potatoes 2003 to 2012

The free-market price of ware potatoes was high for the 2012 crop at £268 per tonne, partially mitigating the effect of poor yields. It should be noted that since production is valued at the point it is used, the valuation for 2012 is partially based on prices received for the 2011 crop sold in the early part of 2012.

The price of seed potatoes has been more stable, with a general upward trend and only small year-to-year fluctuations, with a provisional price estimate of £258 per tonne in 2012.

In 2012, the overall output value of potatoes fell by £40 million (20 per cent), with poor yields being the main factor.

#### 4.3.3 Income from vegetables (Table A4)

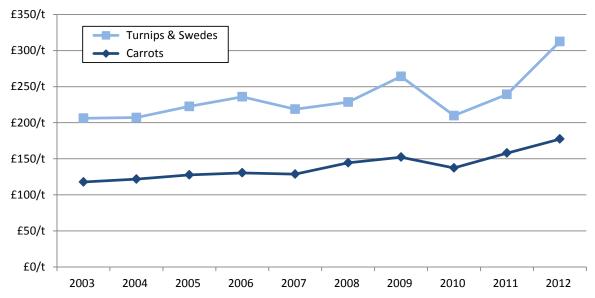
The valuation of vegetables is comprised of many different crops. Table A4 shows information for the key crops.

Over the past ten years the output value of vegetables has increased by £40 million (65 per cent) to £102 million in 2012. The output value of vegetables has not been as badly impacted by weather as some other crops, with provisional estimates indicating a six per cent decrease in value in 2012 following a period of stability, with improved prices partially counteracting lower yields.

Carrots were the most valuable vegetable crop in Scotland, with a value of £22.4 million in 2012. This was down from £23.4 million in 2011, but still almost double the 2003 value of £12.2 million, with increased areas (up 39 per cent) and prices (up 55 per cent) driving this longer term trend.

In 2012, turnips and swedes were the second largest vegetable crop in terms of production (53,000 tonnes) and value (£16.5 million). Higher prices partially offset by lower yields led to a slight increase in value between 2011 and 2012.

Chart 4.8: Average annual output prices for carrots and turnips and swedes 2003 to 2012



## 4.3.4 Income from fruit (Table A4)

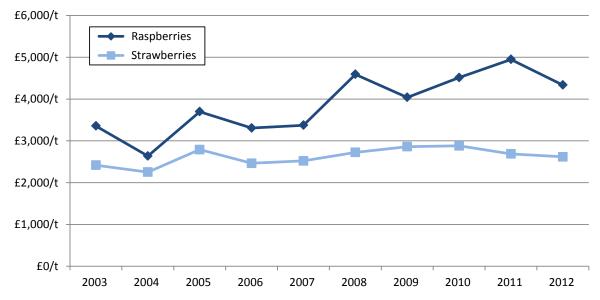
Over the past ten years the output value of soft fruit has increased by £25 million (69 per cent) to £62 million in 2012.

Table A4 shows that in 2012, strawberries accounted for £47 million (75 per cent) of the overall value of soft fruit and raspberries £9 million (14 per cent).

Over the past ten years the value of strawberries has increased by £23 million (94 per cent). This was mostly due to an 8,000 tonne (80 per cent) increase in production, along with an increase in average prices of £200 per tonne (eight per cent).

The value of raspberries decreased slightly by £0.9 million (nine per cent) over the same period, with estimated production at its lowest level in the last decade as a result of poor yields in 2012 and reduced area, despite price rises over the decade.

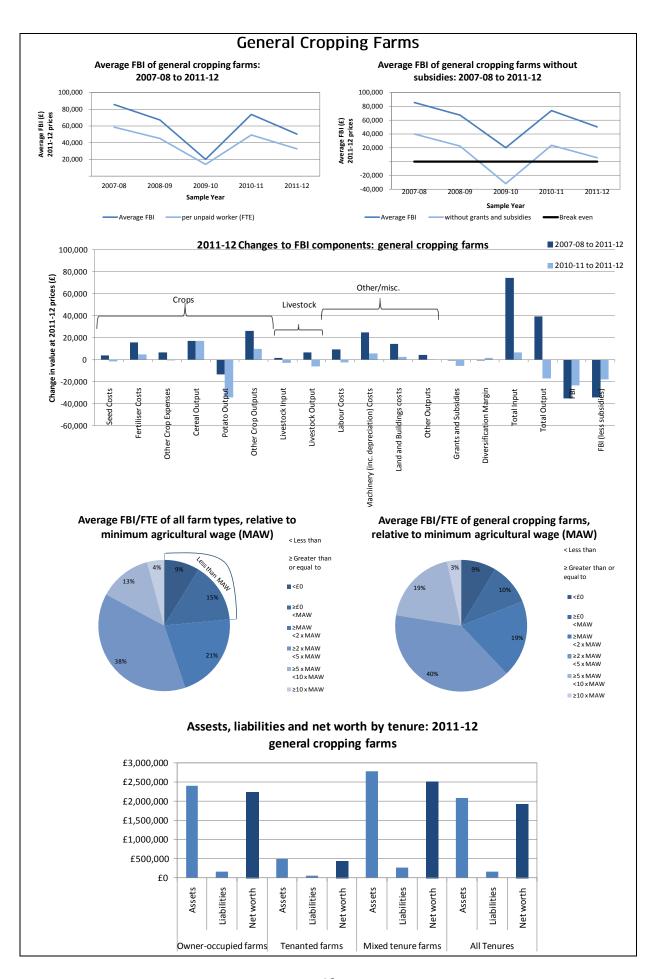
Chart 4.9: Average annual output prices for raspberries and strawberries 2003 to 2012



# 4.4 General Cropping Farms FBI (Table B1)

Accounting for inflation, between 2007-08 and 2011-12, the average FBI of general cropping farms decreased by around £35,000, from £86,000 to £50,000. FBI was at its lowest level in 2009-10, at £20,000. This decrease was due to both a reduction in output values of cereals and potatoes and a rise in input costs, especially of fertiliser and labour. The fall in output value in 2009-10 was caused by a reduction in cereal and potato prices, as well as a reduced area of potatoes grown on the sampled farms. Between 2009-10 and 2010-11 a recovery in cereal prices and a fall in fertiliser spend allowed a partial recovery of FBI, despite rising costs of other inputs. In 2011-12 the average FBI fell again, due to a large fall in potato output on sample farms, combined with rises in fertiliser and machinery expenses and the decreased value of grants and subsidies, to £50,000. The average FBI/FTE unpaid worker was £33,000 in 2011-12.

Over the last five years (2007-08 to 2011-12) the increased value of input costs, especially fertiliser and machinery, coupled with a decrease in the output value of potatoes has kept overall input costs above output values, causing a fall in FBI. In the last year input costs have again risen and while the output value of cereals has increased, it has not increased enough to balance the rise in input costs and fall in potato output. In addition, a decline in the output value of livestock and grants and subsidies (down £5,000) has added to the overall decline in FBI in the latest year.



Trends in FBI compared to FBI without grants and subsidies are generally the same. Over the last five years, FBI without subsidies has been kept above zero, with the exception of 2009-10 when FBI without subsidies was -£32,000. In other years it has ranged from £6,000 in 2011-12 to £40,000 in 2007-08.

The average FBI/FTE of £33,000 is equivalent to an hourly wage for unpaid labour of £17.21, around two and a half times the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

The majority of farms (62 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour. At the top end, 19 per cent generated an FBI/FTE between five and ten times the minimum agricultural wage, that is, between £32.75 and £65.50 per hour of unpaid labour, and three per cent, or one in ten, generated more. In contrast, the income of 19 per cent of farms (one in five) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of general cropping farms of all tenures was £1,923,000; from £442,000 for tenanted farms, and £2,231,000 for owner occupied farms to £2,507,000 for mixed tenure farms. Comparing the balance between liabilities and assets, owner occupied farms had the lowest ratio of liabilities to assets at seven per cent. This compares to ten per cent for mixed tenure farms and 12 per cent for tenanted farms. Overall, for all tenure types, liabilities were equal to eight per cent of assets for general cropping farms.

#### 4.5 Crop enterprises (Table B12)

Overall average gross margins for crop enterprises ranged from £612/hectare for spring oat enterprises to £1,150/hectare for winter oilseed rape and £3,391/hectare for potato enterprises (a combination of ware, seed and mixed potato enterprises). Winter oilseed rape and potato enterprises generated the largest gross margins of crop enterprises.

Where sample sizes were sufficient to allow comparison between high and low performing enterprises, gross margins of high performers in 2011-12 were around twice that of low performers, but for spring oats, high performers achieved margins around four times that of low performers, showing the latter to be less competitive.

On average, spring oats generated the lowest margins of crop enterprises, though high performers achieved higher gross margins than spring barley

enterprises. In all performance categories, winter oilseed rape enterprises were among the highest margins for crop enterprises.

For crop enterprises the differences in financial performance between high and low performing enterprises was due to high performers achieving: higher sales prices per tonne, which is expected to reflect generally higher quality; higher yields, producing a greater volume of output per hectare; and better management of variable costs.

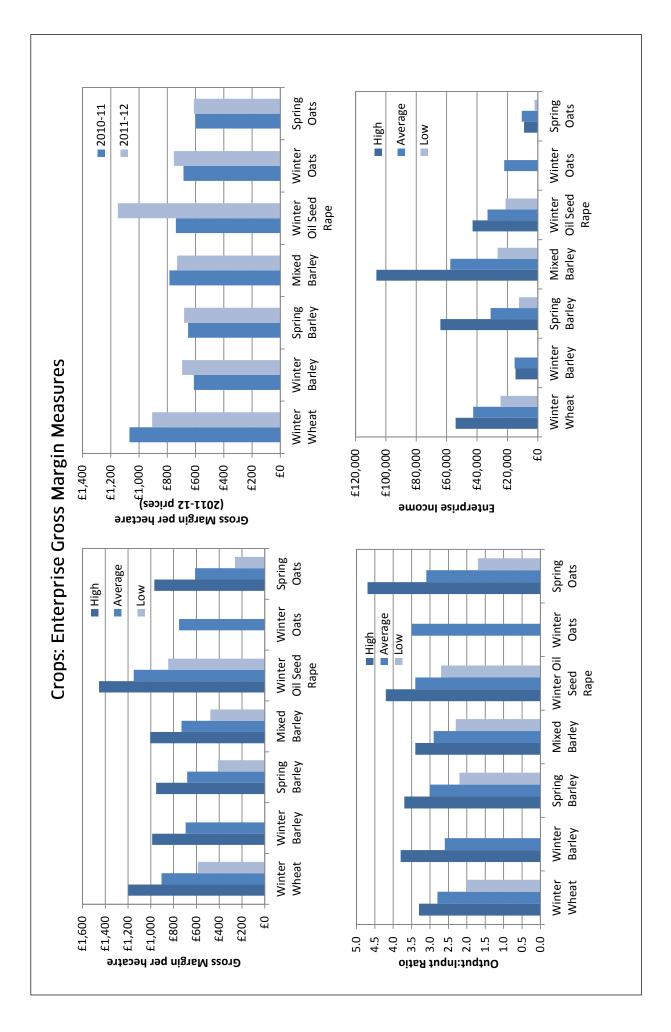
Potato, winter wheat and mixed barley have seen reductions in their overall average gross margin per hectare since 2010-11, down 21 per cent, 15 per cent and seven per cent respectively. For potato enterprises the reduced margins were caused by lower production levels (yields) and poorer prices achieved per tonne produced. For mixed barley and winter wheat enterprises, margins were brought down due to decreases in yields and increases in variable costs. Winter oilseed rape margins increased considerably, up 56 per cent, due to increased yields and output prices, despite rises in variable costs.

Taking account of the size of enterprises, potato (£117,000), winter wheat (£43,000) and mixed barley (£58,000) achieved the highest average overall gross margin. High performing mixed barley enterprises achieved a considerable advantage with overall enterprise gross margins £42,000 higher than those of high performers in other crop enterprises. Spring oats (£11,000) and winter barley (£15,000) achieved the lowest overall margins. Mixed barley and winter wheat performed relatively well in terms of enterprise income due to the larger typical size of these enterprises.

In contrast to gross margin results, the group average output:input ratios (the return achieved per £1 spent), was greatest for winter oats at 3.5, outperforming potato and winter oilseed rape enterprises. Of the high performing enterprises, spring oats achieved the greatest output:input ratio at 4.7. Winter and spring oats generated lower margins due to the relatively low value of oat outputs. Because input costs are also relatively low this allowed them to generate a greater rate of return. Average ratios range from 2.6 for winter barley to 3.5 for winter oats.

More detailed results, including sample size information, are available from the agriculture statistics web page, Enterprise Performance Analysis<sup>4</sup>.

<sup>4</sup> www.Scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/FASdata



### 5. Livestock

#### 5.1 Overview (Table C8)

Table C8 presents livestock numbers for each country in the UK and shows that at 1<sup>st</sup> June 2012 Scotland had 1.79 million cattle, 6.74 million sheep, 363,000 pigs and 14.7 million poultry.

## 5.1.1 Livestock by LFA/non LFA (Table C9)

Table C9 shows the balance between livestock on LFA and non-LFA holdings in Scotland. It shows that cattle and sheep tended to be located on LFA holdings, with 73 per cent of cattle and 90 per cent of sheep being located on holdings in these areas. In contrast pigs and poultry tended to be located on non-LFA holdings (83 per cent and 81 per cent respectively).

# 5.1.2 Income from livestock (Tables A1, A5)

Chart 5.1 shows that cattle was consistently the biggest earner for Scottish livestock, accounting for over £600 million or 60 per cent of outputs.

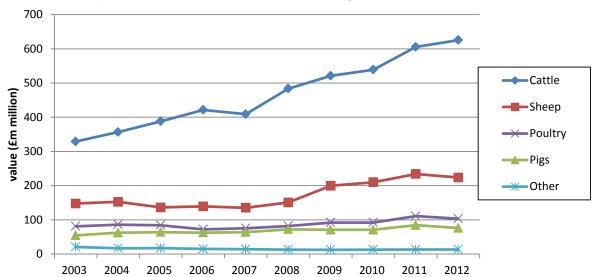


Chart 5.1 Output value of livestock (excluding subsidies) 2003-2012

Charts 5.2 and 5.3 illustrate the varying effect of quantity and price. The greatest volume produced was in beef, accounting for almost half of production by weight, with production of poultry-meat slightly ahead of pig-meat and lamb/mutton. Beef and lamb however both command a much higher price per kg, with the price of beef having risen 93 per cent in the last ten years.

Chart 5.2 Output volume of meat production (dressed carcass weight) 2003-2012

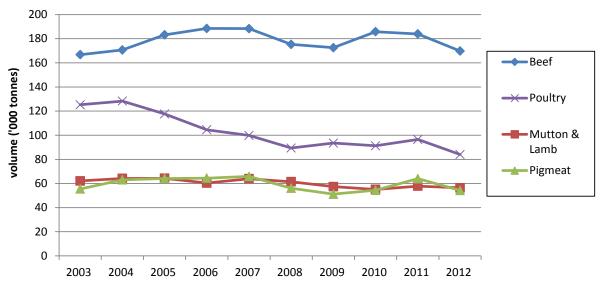
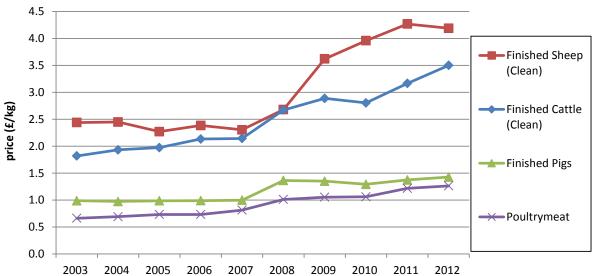


Chart 5.3 Annual average output price of finished livestock 2003-2012



More detail is given in the individual sections that follow.

#### 5.2 Cattle

Chart 5.4 shows that the number of cattle in Scotland has been steadily falling since a historical peak of 2.7 million in 1974. Prior to that it had risen slowly from a constant 1.2 million in the first three decades of the 20<sup>th</sup> century. Just over half of that increase had been lost by 2012.



Chart 5.4: Number of cattle in Scotland, 1883-2012

## 5.2.1 Distribution of dairy and beef herds (Table C10)

In 2012 there were 1.79 million cattle in Scotland. The greatest number of cattle were located in Dumfries & Galloway (416,277 cattle or 23 per cent of the total) while 346,422 were in Grampian (19 per cent). Ayrshire (187,101 or ten per cent), the Clyde Valley (146,160 or eight per cent), Scottish Borders (134,776 or eight per cent) and Highlands (127,387 or seven per cent) also had relatively high numbers of cattle.

Dairy cows totalled 182,184 in June 2012 of which three quarters were located across south western areas such as Dumfries & Galloway (74,530 or 41 per cent), Ayrshire (40,259 or 22 per cent) and the Clyde Valley (23,679 or 13 per cent). By contrast the largest numbers of beef cows, which totalled 452,438, were, with the exception of Dumfries & Galloway (85,317 or 19 per cent), concentrated in more northerly regions such as Grampian (89,995 or 20 per cent), Highland (48,850 or 11 per cent) and the Scottish Borders (44,151 or ten per cent).

50% 40% Percentage of total cows 30% 20% 10% 0% Scottish Ayrshire Argyll & Bute Lothian Borders Clyde Valley Highland Fife East Central & Galloway Shetland Orkney Grampian Eileanan **Dumfries** an lar Regional grouping

Chart 5.5: Distribution of cattle by regional grouping, June 2012

# 5.2.2 Size of dairy and beef herds (Tables C11, C12)

Chart 5.6 shows that the majority (61 per cent) of dairy cows were in herd sizes of 150 or more, totalling 111,187. A further 41,579 (23 per cent) were in herd sizes of between 100 and 149, with the remaining 29,418 (16 per cent) in herd sizes less than 100. This illustrates the concentrated distribution of the dairy sector.

Beef cows

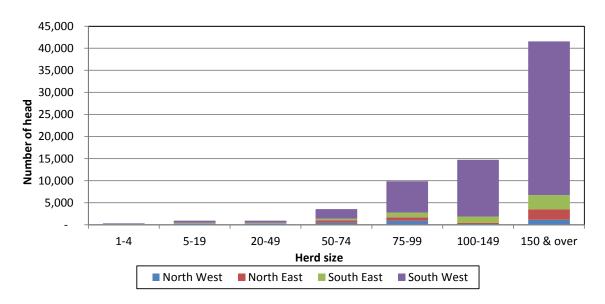


Chart 5.6: Dairy cows by region and herd-size group, June 2012

■ Dairy cows

In contrast there is a less skewed distribution of beef herd sizes as shown in chart 5.7. The largest proportion (29 per cent) of beef cows were in a herd size of 150 or more totalling 130,892 cows. The distribution among the medium-sized herd groups was broadly similar, with approximately 14 to 16 per cent of the total beef cows in each of the herd-size groups

20-49 (71,684 cows), 50-74 (71,536 cows) and 75-99 (64,630 cows). This distribution was fairly similar across the four regions.

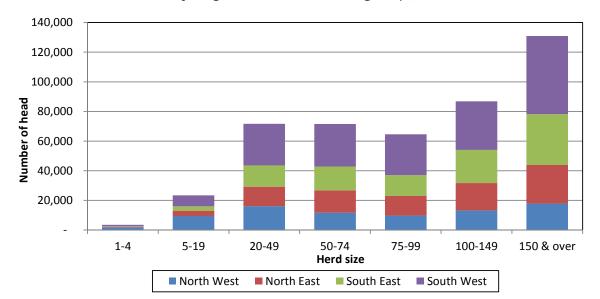


Chart 5.7: Beef cows by region and herd-size group, June 2012

#### 5.2.3 Income from cattle (Table A5)

Since 2003 the total output value of finished and store livestock, excluding related subsidies, has increased by £415 million (66 per cent) to £1,048 million in 2011, but then with the 2012 figures showing a decrease of £6 million from 2011.

The value of income from cattle, including store cattle but excluding related subsidies, has increased by £277 million (84 per cent) over this period, with increases in every year except 2007. There was a £67 million (12 per cent) increase in the value of finished cattle and calves from 2010 to 2011, and an increase in 2012 of £20 million (three per cent). As in the previous few years, this was due to price increases for finished and cull cattle, as well as an increase in the volume of meat production from cull cows and bulls.

Tables A5 and A6 provide the detail behind these livestock valuations including numbers of livestock, weight of meat production, average output prices and stock change valuations.

In 2011, the revised output value of store cattle and calves was £55.8 million, an increase of £9.7 million from 2010; this represented ten per cent of the cattle output total. Estimates for 2012 store cattle and calves show a further increase of £9.7 million from 2011, which represents 11 per cent of the cattle output total.

Total beef production in 2012 (including cull) was at 170,000 tonnes, a similar level to 2003, though in most intervening years the volume was higher. Chart 5.8 shows that finished beef production (excluding cull)

decreased in both 2011 and 2012, and at 147,000 tonnes was 12 per cent lower than in 2003.

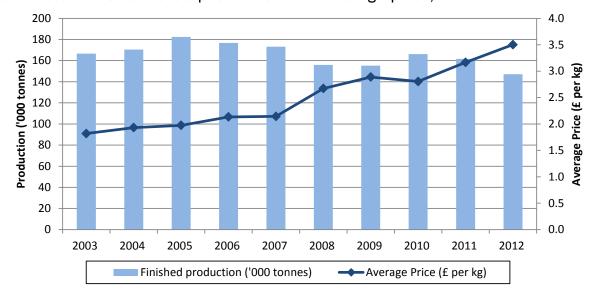


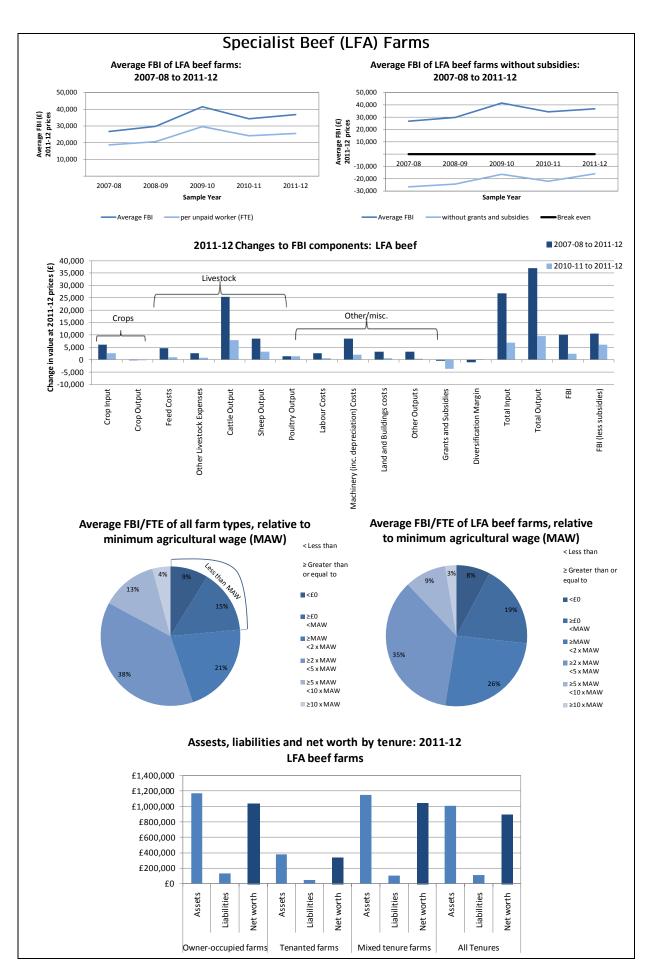
Chart 5.8: Finished cattle production and average price, 2003-2012

Clean finished cattle prices have been rising steadily throughout the past ten years, up from an average of £1.82/kg in 2003 to £3.17/kg in 2011, a rise of 74 per cent; most of this increase has occurred since 2008. Between 2011 and 2012 prices have risen by a further 11 per cent (£0.34/kg) to £3.50/kg. This trend has been the key factor in the large increase in the output value of cattle.

#### 5.2.4 Specialist beef FBI (Table B1)

Accounting for inflation, between 2007-08 and 2011-12 the average FBI of LFA beef farms has been on a general increase, from £27,000 in 2007-08 to £37,000 in 2011-12. FBI rose to a peak of £42,000 in 2009-10. This increase was due to a rise in output value in 2009-10, caused by a rise in prices for store and finished cattle and sheep in that year, despite a fall in livestock numbers on sample farms during that period. Between 2009-10 and 2010-11, although output values continued to rise, these were outstripped by rises in feed costs and other costs (such as machinery, fuel and land and buildings costs), causing FBI to fall to £34,000. In 2011-12 FBI rose again, to £37,000. The average FBI/FTE unpaid worker was £26,000 in 2011-12.

Over the last five years (2007-08 to 2011-12) the increased value of cattle output, as well as more modest rises in the value of sheep output, has kept overall output values above input costs, generating a rise in FBI. In the last year, this has again been the case, though to a relatively reduced level, resulting in an increase in FBI value.



All input costs have increased in the last year (crops, livestock and other costs), in particular crop and machinery costs (including depreciation). Both over the last five years and in the most recent year, there has been a decrease in the average value of grants and subsidies. The rise in cattle output value has been greater than the combined increase in input costs and reduced value of subsidies, meaning that LFA beef farms have still seen an overall increase in FBI.

Trends in FBI compared to FBI without grants and subsidies are generally the same. In each of the last five years, FBI without subsidies has been negative, ranging from -£27,000 in 2007-08 to -£16,000 in 2011-12.

The average FBI/FTE of £26,000 is equivalent to an hourly wage for unpaid labour of £13.46, about twice the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

Around half of farms (47 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour. At the top end, nine per cent generated an FBI/FTE between five and ten times the minimum agricultural wage; that is, between £32.75 and £65.50 per hour of unpaid labour, and three per cent generated more. In contrast, the income of 27 per cent of farms (about one in four) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of LFA beef farms of all tenures was £893,000; from £335,000 for tenanted farms, and £1,037,000 for owner occupied farms to £1,044,000 for mixed tenure farms. Comparing the balance between liabilities and assets, mixed tenure farms had the lowest ratio of liabilities to assets at nine per cent. This compares to 11 per cent for owner occupied and 12 per cent for tenanted farms. Overall, for all tenure types, liabilities were equal to 11 per cent of assets for LFA beef farms.

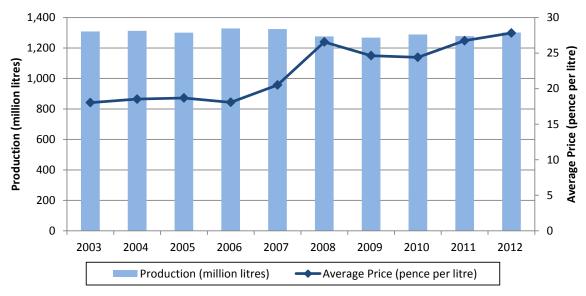
# 5.2.5 Income from milk and milk products (Table A6)

The production of milk and milk products accounted for an estimated £365 million of output in 2012, equivalent to just over half the output from beef. The value has increased by 53 per cent since 2003, with increases from 2006 to 2008 and again from 2009 onwards.

Milk production has been fairly steady in the last ten years, with a less than one per cent difference between 2012 production and the 2003 level. After a settled period between 2003 and 2005 where prices and production remained stable, production fell by 60 million litres between 2006 and 2009, but has now recovered to a level close to that of a decade ago.

The average price of milk reached 27.8p/litre in 2012, up from 26.8p/litre (eight per cent) in 2011 and 18.0p/litre (54 per cent) in 2003.

Chart 5.9 Milk (including milk products) production and average price 2003 to 2012



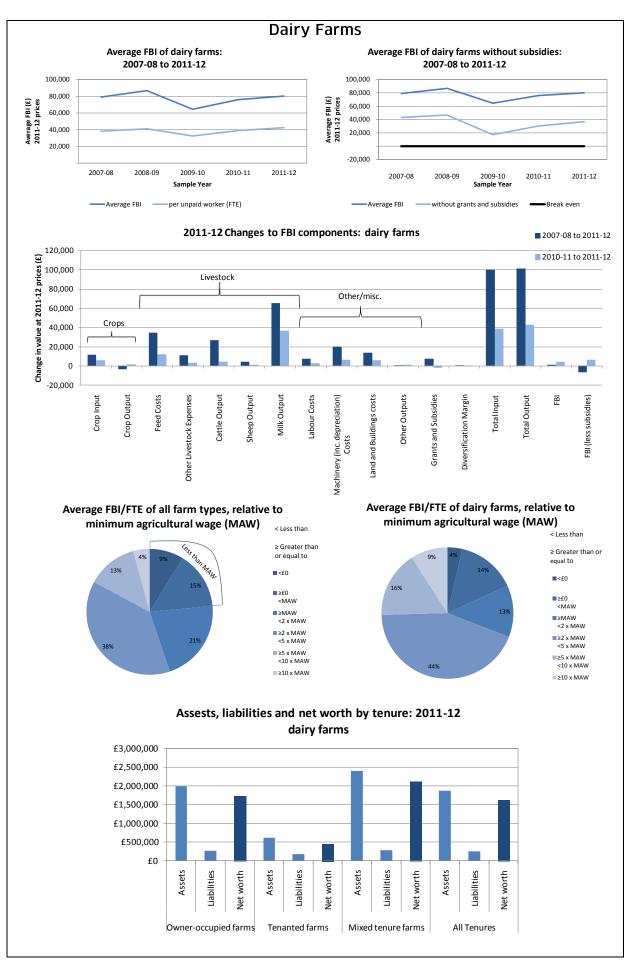
# 5.2.6 Specialist dairy FBI (Table B1)

Accounting for inflation, between 2007-08 and 2011-12 the average FBI of dairy farms has remained relatively unchanged at around £80,000. After an initial increase in 2008-09, caused by a rise in herd size and the value of milk outputs, FBI fell to its lowest level in 2009-10, at £65,000, due to a reduced output prices for milk. Between 2009-10 and 2010-11 a recovery in milk prices along with an increase in farm and herd size resulted in a partial recovery of FBI. In 2011-12 the average FBI rose again, due to a large increase in the value of milk output, which was due to both a rise in the dairy cow numbers in the sample and output prices for milk. This contributed to an average FBI of £80,000 in 2011-12. The average FBI/FTE unpaid worker was £42,000 in 2011-12.

Over the last five years (2007-08 to 2011-12) the increased value of milk output and, to a lesser extent, cattle output, has roughly balanced increased input costs for feed, machinery, land and buildings, labour and crops, to maintain the average FBI. In the last year dairy farms have seen increases in the same costs, but at a lower rate than increases in milk and cattle output values resulting in a slight increase in FBI.

Table B4 compares input and output performance across FBI quartiles for 2011-12 and reveals noticeable differences in key characteristics. Upper quartile (high performing) dairy farms had an average herd size of 227 cows with a yield per cow of 7,625 litres, which sold at 28.14 ppl.

Lower quartile farms averaged 146 cows producing 6,194 litres, selling at 26.83 ppl. This results in an average upper quartile FBI of £211,000 and lower quartile FBI of £14,000.



Trends in FBI compared to FBI without grants and subsidies are generally the same. Over the last five years, FBI without subsidies has been kept above zero in each year. In 2011-12 FBI without subsidies was £37,000.

The average FBI/FTE of £42,000 is equivalent to an hourly wage for unpaid labour of £22.34, over three times the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

A good majority of farms (69 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage (MAW), per hour of unpaid labour. At the top end, 16 per cent generated an FBI/FTE between five and ten times the MAW, that is, between £32.75 and £65.50 per hour of unpaid labour, and nine per cent, or one in ten, generated more. In contrast, the income of 18 per cent of farms equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of dairy farms of all tenures was £1,610,000; from £443,000 for tenanted farms, and £1,723,000 for owner occupied farms to £2,118,000 for mixed tenure farms. Comparing the balance between liabilities and assets, mixed tenure farms had the lowest ratio of liabilities to assets at 12 per cent. This compares to 13 per cent for owner occupied farms and 29 per cent for tenanted farms. Overall, for all tenure types, liabilities were equal to 14 per cent of assets.

# 5.2.7 Dairy and beef enterprises (Table B12)

Overall average gross margins for dairy and beef enterprises ranged from £105/head for beef forward store enterprises to £449/head for dairy followers and £983/head for dairy cow enterprises (equivalent to 14 pence per litre). Dairy enterprises, including followers and mixed, generated the highest margins of dairy and beef enterprises.

Where sample sizes were sufficient to allow comparisons between high and low performers, we can see that low performing dairy and beef enterprises generated considerably lower margins. Most low performing beef enterprises (forward stores, mixed and finishing) made an average loss, ranging from -£12/head for forward stores to -£103/head for mixed. High performing enterprises achieved gross margins between £270/head and £358/head.

High performing dairy cow enterprises made around twice the average gross margin compared to low performers at £1,284/head. At £731/head, high performing mixed dairy and beef enterprises made around five times the margin of low performing enterprises.

On dairy and beef enterprises the difference in financial performance was due to high performers achieving: higher sales prices per head, which is expected to reflect generally higher quality outputs; a greater increase in value due to improved technical performance; and better management of variable costs.

Dairy followers have seen reductions in their overall average gross margin per head since 2010-11, down 30 per cent. The reduction in margin was caused by lower sale values per head. Compared to 2010-11 the average margin for beef hill-herds more than doubled (increase of 116 per cent) to £163/head due to lower spend on variable costs and purchases, together with increased sale values and value added through the technical performance of the enterprise.

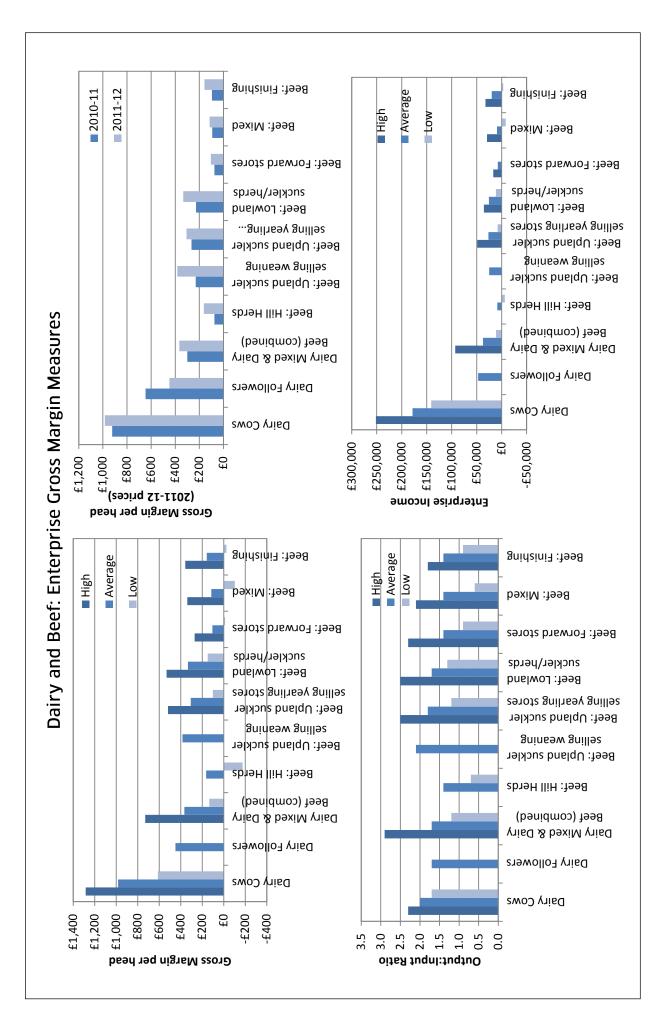
Margins for upland suckler herds selling at weaning and beef finishing enterprises also saw considerable increases in average margins over the year. For upland suckler herds, this was driven by increased sales prices and closing valuations that reflect the overall rise in market prices, set against an average reduction of spend on variable costs and appreciation of breeding livestock. For finishing enterprises this was due to increased sale values and a relative improvement in the value added to stocks, despite an increased spend on variable costs.

Taking account of the size of enterprises, dairy cow (£178,000), dairy followers (£47,000) and mixed dairy enterprises (£37,000) achieved the highest overall gross margins. Beef forward stores (£8,000) and mixed (£9,000) achieved the lowest.

In contrast to gross margin results, the group average output:input ratios, the return achieved per £1 spent, was greatest for beef upland suckler herds selling at weaning, at 2.1, outperforming dairy enterprises due to relatively lower variable costs. Beef hill-herd, finishing, mixed and forward store enterprises had the lowest ratio, at 1.4.

More detailed results, including sample size information, are available from the agriculture statistics web page, Enterprise Performance Analysis<sup>5</sup>.

www.Scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/FASdata



# 5.3 Sheep

The number of sheep in Scotland has gone through a series of fluctuations in the past 125 years, with peaks in the thirties, the sixties and the nineties. The 2012 figure of 6.7 million was the lowest since 1947.



Chart 5.10: Number of sheep in Scotland, 1883-2012

# 5.3.1 Distribution of sheep (Table C10)

There were 6.74 million sheep in Scotland at 1<sup>st</sup> June 2012. Areas with highest numbers of sheep were the Scottish Borders (1.19 million or 18 per cent of the total), Dumfries and Galloway (998,088 or 15 per cent), the Highlands (858,546 or 13 per cent), Tayside (627,331 or nine per cent) and Grampian (600,054 or nine per cent).

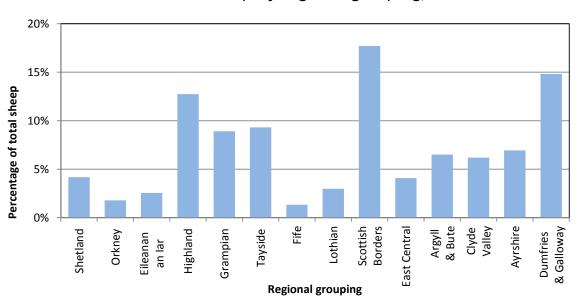


Chart 5.11: Distribution of sheep by regional grouping, June 2012

# 5.3.2 Size of sheep flocks (Table C14)

There were 2.62 million breeding ewes in Scotland in June 2012, with the majority (1.51 million or 58 per cent) in flock sizes of 500 or more breeding ewes, and 754,334 (29 per cent) in flock sizes or 1,000 or more. These larger flock sizes were mostly located in the South East and South West.

Of the 12,662 holdings with breeding ewes, the majority (7,472 or 59 per cent) had flock sizes of less than 100 breeding ewes. However, these holdings only accounted for 234,401 (nine per cent) of breeding ewes in Scotland. Most of these holdings with smaller flock sizes were located in the North West.

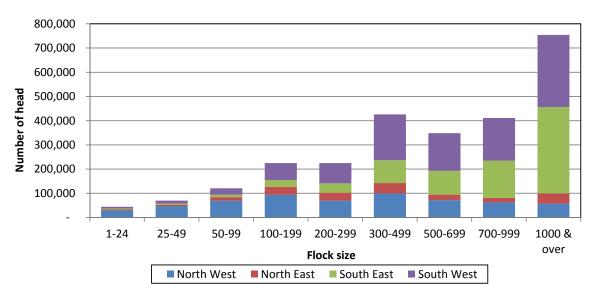


Chart 5.12: Breeding sheep, by size group and region, June 2012

#### 5.3.3 Income from sheep (Table A5)

Since 2003, the value of income from sheep, including store sales but excluding related subsidies, has increased by £87 million (59 per cent). Between 2003 and 2008 values remained fairly steady, ranging between £135 million and £153 million but have risen significantly in recent years – by £83 million since 2008. Between 2010 and 2011, finished sheep output rose £24 million (12 per cent), mainly due to continued higher prices and a further increase in the number of sheep slaughtered. Initial figures for 2012 show a slight fall of £11 million (four per cent) due to a fall in prices relative to the high of 2011.

The estimated output value of store sheep in 2011 was £23.4 million, up six per cent on the previous year due to price rises, but with a similar sized fall in 2012.

The volume of mutton and lamb production over the past ten years has been mixed, with increases in one year being reversed the following year.

Lamb production, shown in Chart 5.13, was 11 per cent lower in 2012 than in 2003, at 46,000 tonnes.

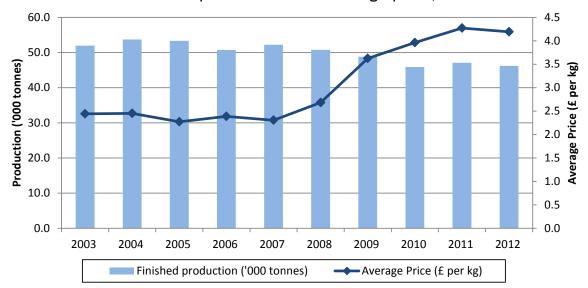
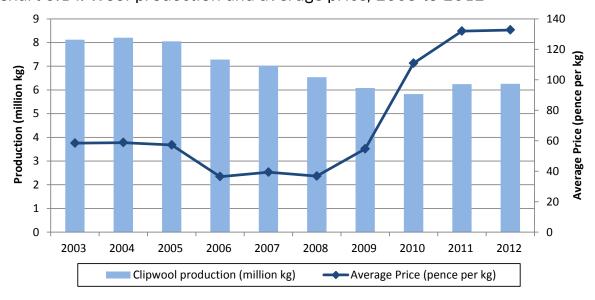


Chart 5.13: Finished lamb production and average price, 2003-2012

The average prices for clean finished sheep have shown the biggest increases in livestock, increasing from an average of £2.44/kg to £4.27/kg, a rise of 75 per cent between 2003 and 2011. As with cattle, most of these increases have been in the years since 2008, with a 35 per cent increase between 2008 and 2009 alone. Tight global sheep meat supplies, an increased demand for lamb for export and decreasing sheep production have all contributed to the rise in prices, as well as to the rise in output value in recent years. However, prices fell throughout 2012, possibly due to the industry levelling off after several years of high growth.

# 5.3.4 Income from wool (Table A6) Chart 5.14: Wool production and average price, 2003 to 2012



Income from wool only accounted for about £8.3 million, compared to £202 million from lamb and mutton. Income from wool has however more than trebled since 2008, due to a considerable increase in price, and is 75 per cent up on the 2003 value of £4.7 million.

# 5.3.5 Specialist sheep (LFA) FBI (Table B1)

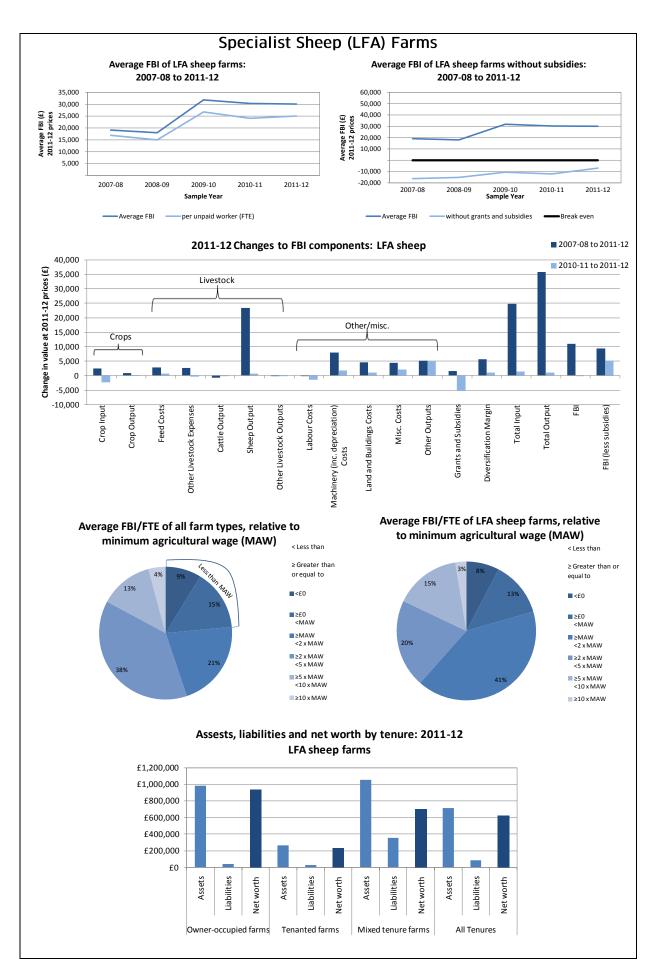
Accounting for inflation, between 2007-08 and 2011-12 the average FBI of LFA sheep farms increased by around £11,000, from £19,000 to £30,000. FBI rose to a peak of £32,000 in 2009-10. This increase was due to a rise in output value due to a rise in prices for store and finished cattle and sheep in that year, despite a fall in sheep and cattle numbers on the sampled farms during that period. Since 2009-10 the average FBI fell slightly from its peak of £32,000 to £30,000 and has remained at the same level in 2011-12. The average FBI/FTE unpaid worker was £25,000 in 2011-12.

Over the last five years (2007-08 to 2011-12) the increased value of sheep output has kept overall output values above input costs, generating a rise in FBI. In the last year there has been relatively little change in average output value or input cost, resulting in a static FBI value. Livestock inputs and outputs have remained largely unchanged, on the whole other costs have increased (though labour costs decreased by around £1,000 on average) but not as much as the value of outputs other than crops and livestock. Crop outputs have also remained largely unchanged but spend on input costs for crops have decreased. The increase in value of other outputs and the increased margin from crops (due to falling expenditure) has been balanced against an average decrease in the value of grants and subsidies (down £5,000) to leave the FBI value of LFA sheep farms unchanged at £30,000.

Trends in FBI compared to FBI without grants and subsidies are generally the same, though between 2010-11 and 2011-12 FBI decreased slightly whereas FBI without subsidy increased slightly, reflecting a reduction in the average value of subsidies for LFA sheep farms in that period. In each of the last five years, FBI without subsidies has been negative, ranging from -£15,000 in 2007-08 to -£7,000 in 2011-12.

The average FBI/FTE of £25,000 is equivalent to an hourly wage for unpaid labour of £13.18, about twice the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

A minority of farms (38 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour.



At the top end, 15 per cent generated an FBI/FTE between five and ten times the minimum agricultural wage, that is, between £32.75 and £65.50 per hour of unpaid labour, and three per cent generated more. In contrast, the income of 21 per cent of farms (one in five) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of LFA sheep farms of all tenures was £627,000; from £234,000 for tenanted farms, and £698,000 for mixed tenure farms to £939,000 for owner occupied farms. Comparing the balance between liabilities and assets, owner occupied farms had the lowest ratio of liabilities to assets at four per cent. This compares to 11 per cent for tenanted and 34 per cent for mixed tenure farms. Overall, for all tenure types, liabilities were equal to 12 per cent of assets for LFA sheep farms.

# 5.3.6 Sheep enterprises (Table B12)

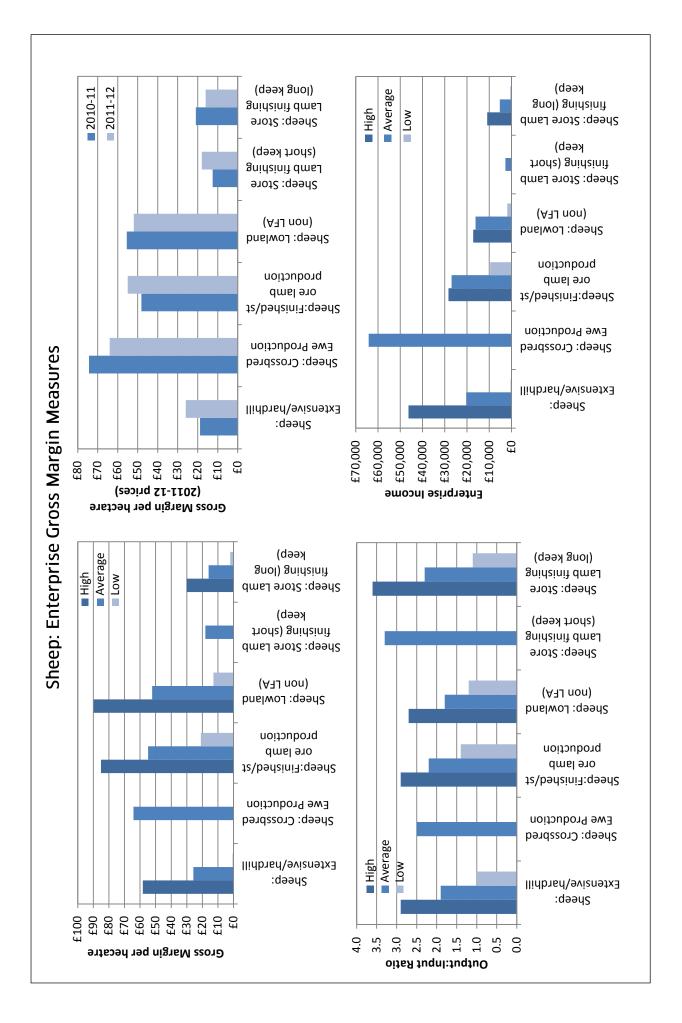
Overall average gross margins for sheep enterprises ranged from £12/head and £16/head for store lamb finishing enterprises (long keep and short keep respectively) to £55/head for store lamb production and £64/head for crossbred ewe production.

Where sample sizes were sufficient to allow comparisons between high and low performers, we can see that low performing sheep enterprises generated considerably lower margins. Although average margins for low performing enterprises were all positive, these were as low as £1/head and £2/head for extensive/hard-hill and long keep finishing.

High performing enterprises produced margins around twice that of the overall average for each enterprise type. The highest margins were achieved for high performing lowland (non-LFA) and store lamb production enterprises at £90/head and £85/head respectively.

For sheep enterprises, variable costs were relatively similar between high and low performing enterprises. Differences in gross margins were due mostly to the value added to stocks and higher sales prices per head, which is expected to reflect generally higher quality outputs.

Crossbred ewe production enterprises have seen reductions in their overall average gross margin per head since 2010-11, down 14 per cent. The reduction in margin was caused by increased spend on variable costs, a slight reduction in value added through technical performance and lower sales prices per head. Long keep finishing enterprises also saw reduced gross margins over the year (down 19 per cent), which was due to increased spend on purchases but lower value added to stocks. Compared to 2010-11 the average margin for extensive/hardhill enterprises increased by 37 per cent, due to increased value added through technical performance.



Taking account of the size of enterprises, crossbred ewe production (£64,000) and store lamb production (£27,000) achieved the highest average overall gross margins. Short keep store lamb finishing (£2,000) and long keep store lamb finishing enterprises (£5,000) achieved the lowest average overall gross margins.

In contrast to gross margin results, the group average output:input ratios (the return achieved per £1 spent), was greatest for short keep store lamb finishing enterprises at 2.6, outperforming crossbred ewe and store lamb production enterprises due to relatively lower variable costs. Lowland (non-LFA) and extensive/hard-hill enterprises had the lowest ratios, at 1.8 and 1.9 respectively.

More detailed results, including sample size information, are available from the agriculture statistics web page, Enterprise Performance Analysis<sup>6</sup>.

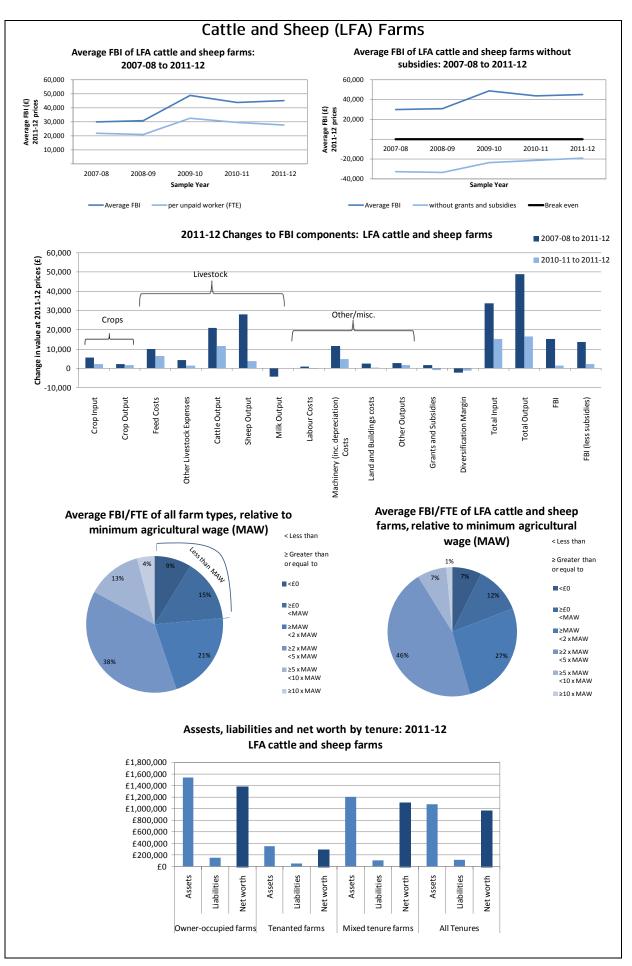
#### 5.3.7 Cattle and Sheep (LFA) FBI (Table B1)

Accounting for inflation, between 2007-08 and 2011-12 the average FBI of LFA cattle and sheep farms has been on a general increase, from £31,000 in 2007-08 to £45,000 in 2011-12. FBI rose to a peak of £49,000 in 2009-10. This increase was due to a rise in output value of sheep in 2009-10, caused by a rise in prices and quantity on sample farms. Between 2009-10 and 2010-11, output values continued to rise but were outstripped by rises in feed and other livestock expenses. Combined with a decrease in the value of grants and subsidies FBI fell to £44,000 in 2010-11. In 2011-12 FBI rose slightly, to £45,000. The average FBI/FTE unpaid worker was £28,000 in 2011-12, a fall of six per cent due to an average increase in FTE unpaid workers on LFA cattle and sheep farms.

Over the last five years (2007-08 to 2011-12) both output values and input values have increased. The increased value of cattle and sheep output, has kept overall output values above input costs, generating a rise in FBI. In the last year, this has again been the case, though to a relatively reduced level, resulting in an increase in FBI value. Milk output values have decreased over the last five years, which is in part due to the reclassification of some LFA cattle and sheep farms as dairy farms. All input costs have increased or remained static in the last year (crops, livestock and other costs), in particular feed and machinery costs (including depreciation). In the most recent year, there has been a decrease in the average value of grants and subsidies. The rise in cattle and sheep output value has been greater than the combined increase in input costs and reduced value of subsidies, meaning that LFA beef farms have still seen an overall increase in FBI.

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<sup>&</sup>lt;sup>6</sup> www.Scotland.gov.uk/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/FASdata



Trends in FBI compared to FBI without grants and subsidies are generally the same. In each of the last five years, FBI without subsidies has been negative, ranging from -£34,000 in 2007-08 to -£19,000 in 2011-12.

The average FBI/FTE of £28,000 is equivalent to an hourly wage for unpaid labour of £14.58, just over twice the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

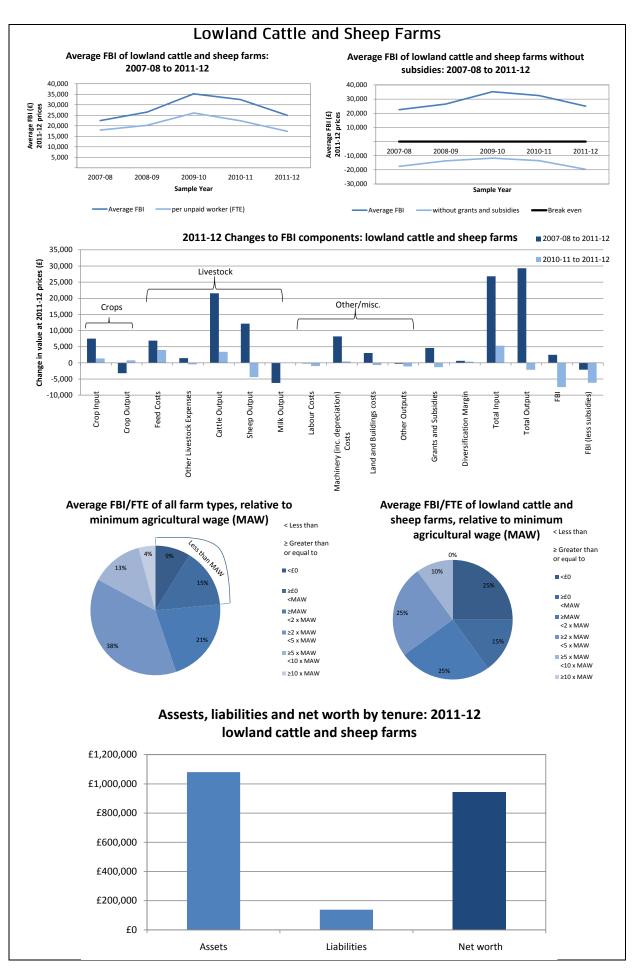
About half of farms (54 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage (MAW), per hour of unpaid labour. At the top end, seven per cent generated an FBI/FTE between five and ten times the MAW, that is, between £32.75 and £65.50 per hour of unpaid labour, and one per cent generated more. In contrast, the income of 19 per cent of farms (about one in five) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of LFA beef farms of all tenures was £969,000; from £300,000 for tenanted farms, and £1,101,000 for mixed tenure farms to £1,384,000 for owner occupied farms. Comparing the balance between liabilities and assets, mixed tenure farms had the lowest ratio of liabilities to assets at nine per cent. This compares to ten per cent for owner occupied and 15 per cent for tenanted farms. Overall, for all tenure types, liabilities were equal to ten per cent of assets for LFA beef farms.

#### 5.3.8 Lowland cattle and sheep (FBI) (Table B1)

Accounting for inflation, between 2007-08 and 2011-12 the average FBI of LFA cattle and sheep farms has increased slightly, from £22,000 in 2007-08 to £25,000 in 2011-12. FBI rose to a peak of £35,000 in 2009-10. This increase was mainly due to rises in the value of grants and subsidies and income from diversified activities, as well as rises in sheep output values, balanced by a large fall in milk output (due to a reclassification of one of the sample farms to the mixed farm type). Lowland cattle and sheep farms are more susceptible to changes in sample composition due to the relatively low number of farms in the sample compared to other farm types. In the following two years, the FBI of lowland cattle and sheep farms fell slightly and has returned to around the same level as in 2007-08. In 2011-12 the average FBI was £25,000. The average FBI/FTE unpaid worker was £17,000 in 2011-12.

Over the last five years (2007-08 to 2011-12) the output value of cattle and sheep has increased at a greater rate than input costs for livestock, crops and other costs to generate an increase in FBI of around £3,000, despite reduced output values from crops and milk.



In the last year, an increase in the output value of cattle has not been enough to offset rising feed costs and a decrease in sheep output value. This has meant that FBI fell over this period, from £32,000 to £25,000. Overall outputs (including crops, grants and subsidies and income from diversified activities) fell over the last year, while input costs (driven by increased feed costs) increased.

Trends in FBI compared to FBI without grants and subsidies are generally the same. In each of the last five years, FBI without subsidies has been negative, ranging from -£12,000 in 2009-10 to -£20,000 in 2011-12.

The average FBI/FTE of £17,000 is equivalent to an hourly wage for unpaid labour of £9.14, roughly one and a half times the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

A minority of farms (35 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour. At the top end, ten per cent generated an FBI/FTE between five and ten times the minimum agricultural wage, that is, between £32.75 and £65.50 per hour of unpaid labour, and none generated more than this. In contrast, the income of 40 per cent of farms (two in five) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of lowland cattle and sheep farms of all tenures was £942,000. Overall, for all tenure types, liabilities are equal to 13 per cent of assets for lowland cattle and sheep farms. Due to small sample sizes a breakdown by tenure type has not been included in the balance sheet results.

# 5.4 Pigs

# 5.4.1 Distribution of pigs (Table C10)

There were 363,439 pigs at 1<sup>st</sup> June 2012. Chart 5.16 shows that just under two thirds of these were located in Grampian (234,641 pigs or 65 per cent). Tayside, Lothian, Highland and Scottish Borders each accounted for between four per cent and ten per cent of total pigs in Scotland.

# 5.4.2 Pig herd size (Tables C15, C16)

The pig sector is highly concentrated. On 1<sup>st</sup> June 2012, there were 47 holdings with more than 250 female breeding pigs, accounting for eight per cent of holdings with breeding pigs. However, these holdings accounted for 27,278 or 86 per cent of the total number of female breeding pigs (31,881). Conversely, there were a large number of holdings (403 or 72 per cent of the total) with fewer than five female breeding pigs, accounting for just 768 or 2.4 per cent of female breeding pigs.

The structure is similar with regard to fattening pigs, with 135 holdings with herds of 200 and over accounting for 218,731 (97 per cent) of the 225,987 fattening pigs in Scotland. As with breeding pigs, there were a large number of holdings (596, or 69 per cent), with herds of fewer than ten, accounting for 0.8 per cent of the total number of fattening pigs.

# 5.4.3 Income from pigs (Table A6)

The value of income from pigs increased by £22 million (39 per cent) between 2003 and 2012; the 2012 value was £76 million. Over the whole period pig values have seen several rises, in 2004, 2008 and 2011, with consolidation in the other years. However, between 2011 and 2012 the estimated value fell by £8 million (ten per cent), due to a fall in numbers.

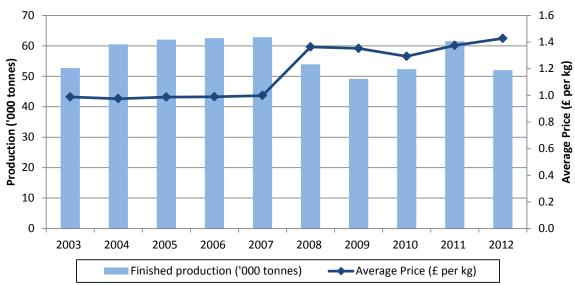


Chart 5.15: Finished pig production and average price, 2003-2012

Between 2003 and 2012 total pig-meat production fell by 1,100 tonnes (two per cent). Excluding cull, production in 2012 was at 52,000 tonnes,

15 per cent down on 2011 and similar to 2003 and the lower levels of 2008 to 2010, after being around 60,000 in the other intervening years.

Over the past ten years there have been increases in the price of finished pigs, up from an average of £0.99/kg in 2003 to £1.37/kg in 2011, a 39 per cent rise, with a further rise of four per cent to £1.43/kg from 2011 to 2012. Most of the increase occurred between 2007 and 2008.

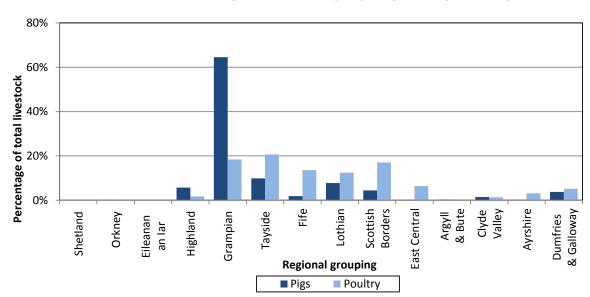


Chart 5.16: Distribution of pigs and poultry by regional grouping, June 2012

# 5.5 Poultry

# 5.5.1 Distribution of poultry (Table C10)

There were 14.69 million poultry on agricultural holdings in Scotland on 1<sup>st</sup> June 2012. Chart 5.16 shows that the majority (72 per cent) of poultry were located in the East of Scotland, in Tayside, Grampian, Scottish Borders, Fife and Lothians, with each regional grouping accounting for between 12 per cent and 21 per cent of the Scottish total.

#### 5.5.2 Poultry flock size (Tables C17, C18)

The poultry sector is highly concentrated. On 1<sup>st</sup> June 2012, there were 122 holdings with more than 1,000 fowls for laying eggs for eating, accounting for 2.1 per cent of total holdings. However, these holdings accounted for 4.36 million or 98 per cent of fowls laying eggs for eating. Conversely, there were a large number of holdings (4,572 or 77 per cent of those with fowls for laying eggs) with fewer than 20 laying fowls, accounting for just 36,407 or 0.8 per cent of fowls laying eggs for eating.

There was also a similar pattern for breeding fowls, with 32 holdings (2.4 per cent of the total) accounting for 861,744 or 91 per cent of the 947,138 breeding fowls in Scotland.

# 5.5.3 Income from poultry (Table A6)

Income from poultry increased by £30 million (36 per cent) between 2003 and 2011, with most of the increase (£19 million) occurring between 2010 and 2011, due to a combination of higher prices and an increased volume of meat production. Initial estimates for 2012 show a decrease of £7 million (seven per cent) from the 2011 figure, due to a reduction in meat production, offset by higher prices, however, between 2010 and 2012 income still rose by 12 per cent.

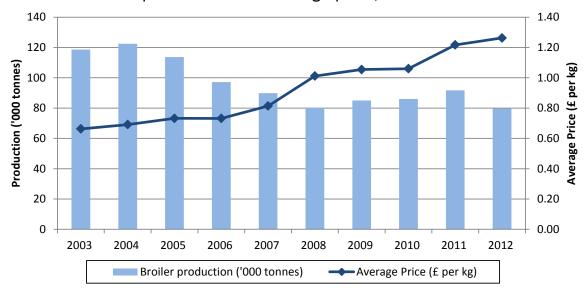


Chart 5.17: Broiler production and average price, 2003-2012

Poultry production decreased by 29,000 tonnes (23 per cent) between 2003 and 2011, and although production levels stabilised in recent years, provisional 2012 data show a fall of 12,000 tonnes (13 per cent) from 2011 to 84,000 tonnes. Broiler production made up 80,000 tonnes of this. Broiler production fell markedly from 122,000 tonnes in 2004 to 80,000 tonnes in 2008, similar to its current level after a small increase in the intervening years.

Poultry-meat prices have increased by 84 per cent between 2003, up from an average of £0.66/kg in 2003 to £1.22/kg in 2011; estimates suggest a further increase in price in 2012 to £1.26/kg.

# 5.5.4 Income from eggs (Tables A6)

Income from eggs was estimated at £75 million in 2012, equivalent to about three-quarters of the value of poultry-meat produced. Income from eggs has more than doubled since 2003, having risen steadily since 2005. Egg production increased steadily between 2003 and 2009, from 868 million eggs to 933 million eggs, an increase of 65 million eggs (eight per cent), before increasing more substantially to 1,081 million eggs in 2012, an increase of 213 million eggs (25 per cent) since 2003. In addition, there has been a change in the production method used to

produce these eggs – in 2003, nearly two-thirds (64 per cent) of all eggs were produced in laying cages, whereas in 2012 production was split evenly between laying cages (49 per cent) and free range (47 per cent). Since 2003, prices have risen from 39p/dozen to 69p/dozen (80 per cent) for eggs produced in laying cages and from 65p/dozen to 95p/dozen (46 per cent) for free range eggs.

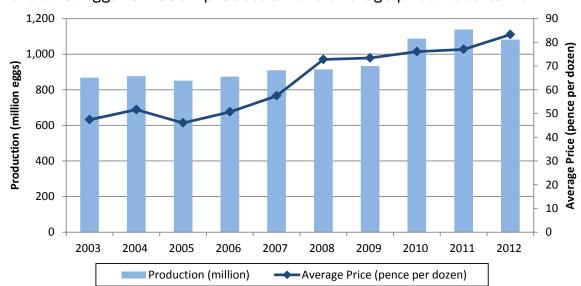


Chart 5.18: Eggs for food - production and average price 2003 to 2012

#### 5.6 Other livestock

Other livestock collected in the census consisted mainly of horses, deer, goats and camelids. The number of horses has increased by about 50 per cent over the last ten years to 37,300, with very few used for agricultural purposes. The number of farmed deer fell slightly in the first half of the decade, and has remained at around 6,000 since. Data on camelids (alpacas, llamas, etc.) have been collected since 2010, with numbers increasing to 945 in 2012.

Income from other livestock and other livestock products, which also includes income from stud farms, game and honey, is estimated in TIFF at £17 million.

# 5.7 Mixed farms FBI (Table B1)

Accounting for inflation, between 2007-08 and 2011-12 the average FBI of mixed farms has fluctuated between £43,000 and £50,000. Over the last five years (2007-08 to 2011-12) the average increase of £5,000 (from £43,000 in 2007-08 to £48,000 in 2011-12) has been driven by increases in the value of livestock output. While crop outputs have also risen these have been outweighed by increased input costs of crops on mixed farms. Grants and subsidies and income from diversified activities have increased marginally over the last five years. Over the period other costs have also increased, though not enough to offset the rise in livestock

output value, noticeably machinery costs (including depreciation) and land and buildings costs as well as other, non-specified, input costs.

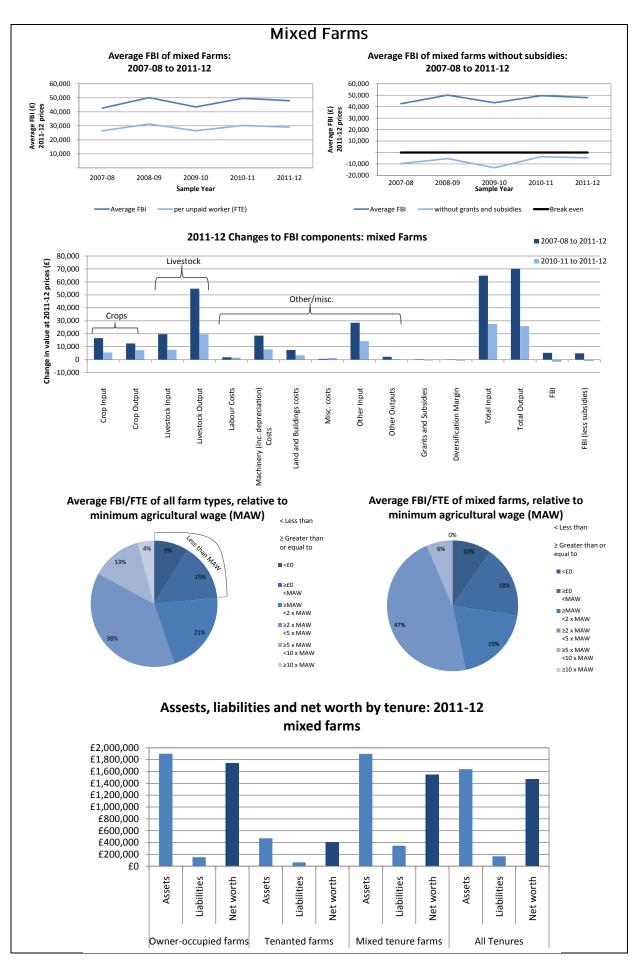
In the last year, both livestock and crop output values increased to a greater extent than input costs. However, the increase in output values have been outweighed by increases in other costs, such as machinery and land and buildings costs as well as other, non-specified, input costs. This has meant that FBI fell over the last year, by £2,000 on average. In 2011-12 the average FBI was £48,000. The average FBI/FTE unpaid worker was £29,000 in 2011-12.

Trends in FBI compared to FBI without grants and subsidies are generally the same. In each of the last five years, FBI without subsidies has been negative, ranging from -£4,000 in 2010-11 to -£13,000 in 2009-10. In 2011-12 the average FBI without subsidies was -£5,000 on mixed farms.

The average FBI/FTE of £29,000 is equivalent to an hourly wage for unpaid labour of £15.29, just over twice the minimum agricultural wage in Scotland. It should be noted that other costs may need to be covered from the FBI and not all unpaid labour will be remunerated equally. There will also be differences in systems of farming and overheads between farms.

About half of farms (53 per cent) generated an FBI/FTE equivalent to at least twice the minimum agricultural wage, per hour of unpaid labour. At the top end, six per cent generated an FBI/FTE between five and ten times the minimum agricultural wage, that is, between £32.75 and £65.50 per hour of unpaid labour, and none generated more than this. In contrast, the income of 28 per cent of farms (around one in four) equated to less than the minimum agricultural wage, per unit of unpaid labour.

The average net worth of mixed farms of all tenures was £1,472,000; from £407,000 for tenanted farms, and £1,551,000 for mixed tenure farms to £1,797,000 for owner occupied farms. Comparing the balance between liabilities and assets, owner occupied farms had the lowest ratio of liabilities to assets at eight per cent compared to 14 per cent for tenanted and 18 per cent for mixed tenure farms. Overall, for all tenure types, liabilities were equal to ten per cent of assets for mixed farms.



# 6. Payments and Subsidies (Tables A1, A12)

In 2012, total payments and subsidies included in the TIFF figure were £580 million. Table A12(i) provides a breakdown of this total, with Single Farm Payments at £443 million accounting for the majority (76 per cent), followed by Less-Favoured Area Support Scheme (LFASS) payments at £67 million (12 per cent). The next largest amounts were for payments under Rural Priorities (£34 million or six per cent) and the Scottish Beef Calf Scheme (£24 million or four per cent).

Not all payments and subsidies made to farmers are included in the TIFF total. Table A12(ii) shows a further £43 million (provisional figure) paid to farmers in 2012, mostly under Rural Priorities (£34 million) and the FEOGA Processing and Marketing Scheme (£7 million). These payments were primarily for capital improvements and for non-agricultural activities, which fall outwith the scope of the TIFF definition.

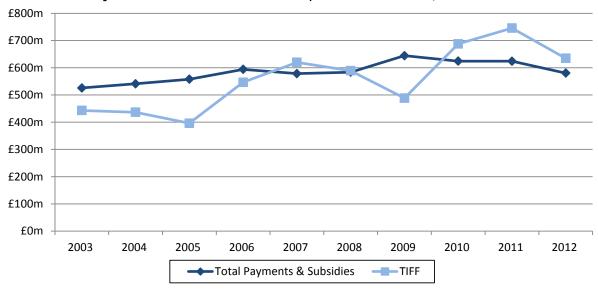
It should be noted that the totals under various schemes shown in Tables A12(i) and A12(ii) only represent payments made to the agriculture sector, so exclude any payments to other sectors such as forestry. They also exclude broader non-agricultural payments under the Scottish Rural Development Programme.

Chart 6.1 illustrates trends in payments and subsidies included within the TIFF total for the past ten years. In 2005, de-coupling of payments and subsidies took place under reforms of the Common Agricultural Policy (CAP). Payments previously tied directly to crop and livestock production were mostly consolidated into the Single Farm Payment. Since 2005, cattle subsides have included payments under the Scottish Beef Calf Scheme, ranging between £18 million and £24 million. There were also payments under the 'Over 30 Month Scheme' (up to 2006) and 'Older Cattle Disposal Scheme' (up to 2008), related to the disposal of older cattle which were prevented from entering the food chain, in order to minimise the risk to public health related to BSE.

Total payments and subsidies included in TIFF have increased by £55 million (ten per cent) between 2003 and 2012. The value of Single Farm Payments fell to £443 million due to changes in the euro exchange rate.

Chart 6.1 also shows that since 2010, the total value of TIFF has been higher than the value of total payments and subsidies. Years where TIFF was lower suggest that without these payments and subsidies, the net income to farmers would have been negative.

Chart 6.1: Payments and subsidies compared with TIFF, 2003 to 2012



# 7. Labour

# 7.1 Overview (Tables C19, C21)

There were a total of 68,428 people working on agricultural holdings at 1<sup>st</sup> June 2012. This was made up of 27,581 working occupiers (comprising 40 per cent of the total workforce), 13,376 working spouses (20 per cent), 13,487 full time regular staff (20 per cent), 7,492 part time regular staff (11 per cent) and 6,492 casual and seasonal staff (9 per cent).

Over half of the total agricultural workforce was located in Grampian (11,350 or 17 per cent), Highland (10,087 or 15 per cent), Tayside (8,433 or 12 per cent) and Dumfries and Galloway (7,050 or 10 per cent). These totals represent the number of people employed or working on 1<sup>st</sup> June 2012, but do not take into account differing working patterns or certain seasonal labour.

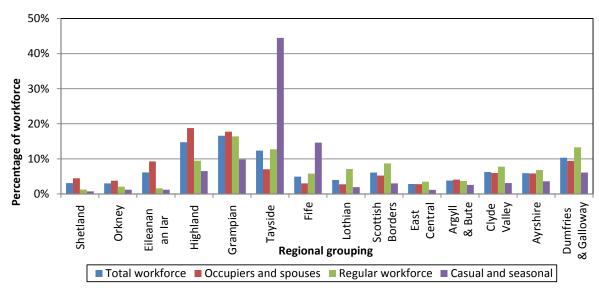


Chart 7.1: Distribution of the workforce by regional grouping, June 2012

#### 7.2 Structure of the workforce

# 7.2.1 Occupiers and spouses (Tables C20, C21)

Around 52 per cent of holdings in Scotland had a working occupier (27,581 holdings) while 25 per cent had a working spouse (13,376). For working occupiers this figure ranged from 44 per cent in Eileanan an Iar to 67 per cent in Shetland and for working spouses from 15 per cent in Eileanan an Iar to 33 per cent in Dumfries and Galloway. It should be noted however, that if an occupier or spouse was working on more than one holding, then they would only be recorded against one of these holdings.

In terms of the total workforce, occupiers and spouses made up 60 per cent of the total in Scotland. This percentage was lower in areas where agriculture activities relying more heavily on employed labour (for example, horticulture) were prevalent, such as Tayside (34 per cent), Fife

(36 per cent) and Lothian (41 per cent), but higher in areas such as Orkney (75 per cent), Highland (76 per cent), Shetland (86 per cent) and Eileanan an lar (90 per cent) where less labour intensive agricultural practices tended to prevail.

Table C20 shows the age and working pattern for working occupiers and spouses. It can be seen that 35 per cent of occupiers (9,575) were working full time on the holding while the other 65 per cent (18,006) were part time. In comparison only 14 per cent of spouses (1,856) worked full time while 86 per cent (11,520) worked part time.

Regarding the age of occupiers, chart 7.2 shows that over half (55 per cent or 15,279) were 55 years old or older and only 11 per cent (3,041) were under 41 years old. Working spouses tended to be younger with less than half being 55 or over (48 per cent or 6,452).

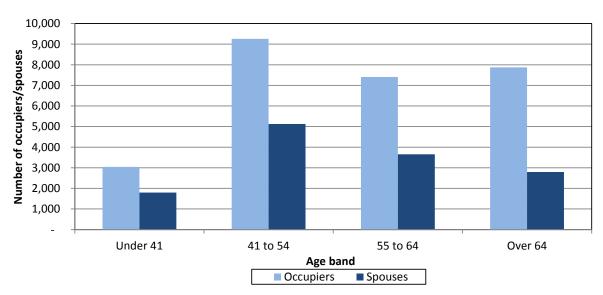


Chart 7.2: Age of occupiers and spouses, June 2012

# 7.2.2 Regular employees (Table C21)

There were a total of 20,979 regular employees (excluding occupiers and spouses) on agricultural holdings (13,487 full-time and 7,492 part-time) in Scotland in 2012. As with the total workforce, chart 7.1 shows that over half of regular employees were in Grampian (3,439 or 16 per cent), Dumfries & Galloway (2,788 or 13 per cent), Tayside (2,670 or 13 per cent) and Highland (1,982 or nine per cent).

#### 7.2.3 Casual and seasonal staff (Table C21)

Of the total 6,492 casual and seasonal staff in Scotland, just under half (45 per cent or 2,889) were located in Tayside.

Tayside and Fife were characterised by having a large casual and seasonal component to their workforce (34 and 28 per cent of the total workforce

respectively), supporting the seasonal demand for harvesting fruit and vegetables.

# 7.3 Standard Labour Requirements (Tables C23, C26, C28)

Standard Labour Requirements (SLR) represent the notional amount of labour required by a holding to carry out all of its agricultural activity and is also used as a measure of farm size. Standard Labour Requirements are derived at an aggregate level for each agricultural activity. The total SLR for each farm is calculated by multiplying its crop areas and livestock numbers by the appropriate SLR coefficients and then summing the results for all agricultural activity on that farm. One SLR equates to 1,900 working hours per year.

The SLR coefficients used in this publication are based on values in the year 2000 and have been applied to the 2012 crop areas and livestock units of holdings.

The total SLR for Scotland was 44,690 full time equivalent workers, averaging 0.81 per holding. The SLR full-time equivalent total was less than the total labour figure reported in section 7.1, due to the fact that the labour total (67,797 people) is a headcount (i.e. a part-time worker working for a year would equate to less than one SLR).

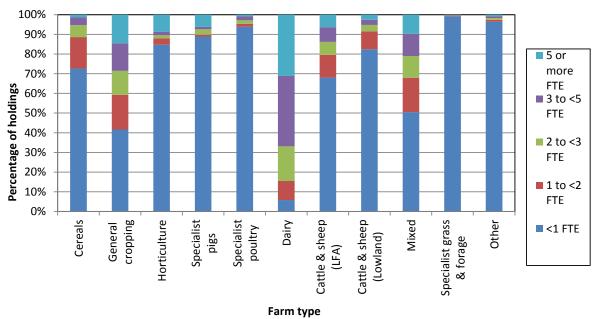


Chart 7.3: Standard Labour Requirements by farm type, June 2012

Chart 7.3 shows the SLR distribution by farm type. It shows that just six per cent of dairy holdings had an SLR of less than one full-time equivalent (FTE) and 67 per cent had an SLR of three or more. General cropping (58 per cent) was the only other farm type where the majority of holdings had an SLR of one or more. Farm types which had the

highest proportions of holdings with less than one SLR, and thus can be viewed as requiring less labour in general over the year, were specialist grass and forage (99 per cent), specialist poultry (94 per cent), specialist pig (89 per cent) and horticulture (85 per cent). However, it should be noted that holdings with more than one SLR for farm types such as specialist pig, specialist poultry and horticulture account for a large proportion of output in these sectors, due to their highly concentrated production. Please note also that, although a large number of people were employed in horticulture, many of these were casual and seasonal labour and consequently this will not equate to a large SLR, which is a measure of labour requirement over the whole year.

40% 30% **Percentage of Scotland Total** 20% 10% 0% Dairy General cropping Horticulture Mixed Cattle and sheep Other Specialist grass Specialist poultry Specialist pigs Cattle and shee and forage (Lowland) Farm type ■ Standard Gross Margins ■ Standard Labour Requirements

Chart 7.4: Distribution of total Standard Gross Margins and Standard Labour Requirements by farm type, June 2012

Looking at the total contribution each farm type made to total SGM in Scotland, chart 7.4 shows that mixed, and cattle and sheep (LFA) holdings accounted for the largest shares of SGM (21 per cent and 19 per cent respectively) followed by general cropping (17 per cent), dairy (15 per cent), horticulture (13 per cent) and cereal farms (ten per cent). All other farm types each contributed two per cent or less to total SGM.

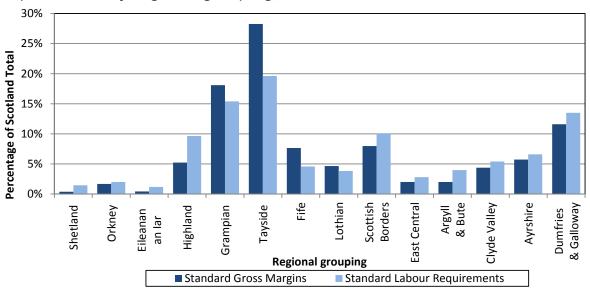
Chart 7.4 also shows the share of national SLRs by farm type. Cattle and sheep (LFA) holdings accounted for 39 per cent of total SLRs compared to their 19 per cent share of SGM. This means that this farm type had a much higher labour requirement in proportion to its total SGM.

By contrast, most other farm types, including general cropping, horticulture, mixed, dairy and cereals holdings had a higher share of Scotland's SGM total in comparison to their share of SLR.

Table C26 and Chart 7.5 show that Tayside and Grampian contributed most to Scotland's total SGM, 28 per cent and 18 per cent respectively, followed by Dumfries and Galloway (12 per cent). All other regional groupings each contributed less than ten per cent of the total This partly reflects the farm type distributions in these regional groupings as well as the size of these geographical areas.

Chart 7.5 also shows the geographic distribution of SLRs. Regional groupings with a lower share of SLRs compared to SGMs, such as Grampian, Tayside, Fife and Lothian, had higher proportions of farm types such as general cropping, cereal and horticulture. In a number of cases, regional groupings with a higher share of SLRs compared to SGM, such as Highland, Scottish Borders and Argyll & Bute had a higher proportion of Cattle and Sheep (LFA) holdings

Chart 7.5: Distribution of total Standard Gross Margins and Standard Labour Requirements by regional grouping, June 2012



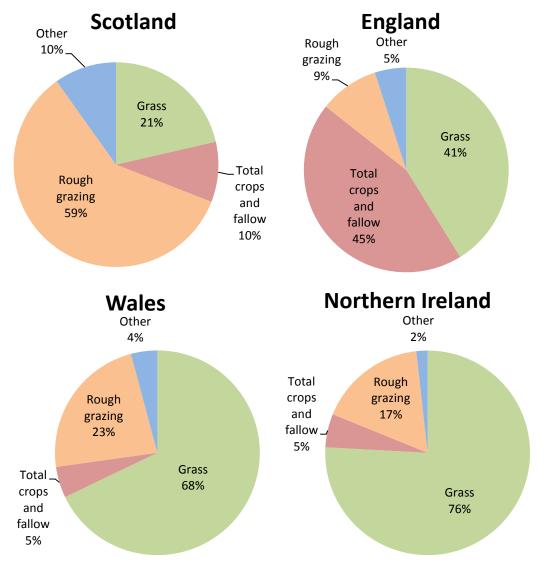
# 8. Comparison with Other Nations

#### 8.1 Land use

The total agricultural area in Scotland, including common grazing, totalled 6.19 million hectares in 2012, representing 79 per cent of the total land area in Scotland. This proportion of total land cover is slightly higher than England (72 per cent) and Northern Ireland (73 per cent) but lower than Wales (84 per cent).

The majority (59 per cent) of agricultural land in Scotland was covered by rough grazing and common grazing (3.66 million hectares), a far higher proportion than in other UK countries due to large areas of upland agricultural land in Scotland being suitable only for livestock grazing (Chart 8.1). In contrast grass covered 21 per cent of agricultural land in Scotland (1.33 million hectares), a far lower proportion than elsewhere in the UK.

Chart 8.1: Agricultural area for each UK country by land use, June 2012



It should be noted that in the 2012 June Agricultural Census statistical publication the total agricultural area was reported as 5.60 million hectares; however, common grazing land, which comprised a further 583,686 hectares, was excluded from this figure.

Total crops and fallow land made up 588,873 hectares in Scotland (ten per cent of total agricultural area), similar to the proportions in Wales (five per cent) and Northern Ireland (five per cent) but much lower in comparison with the proportion of crops and fallow land in England (45 per cent).

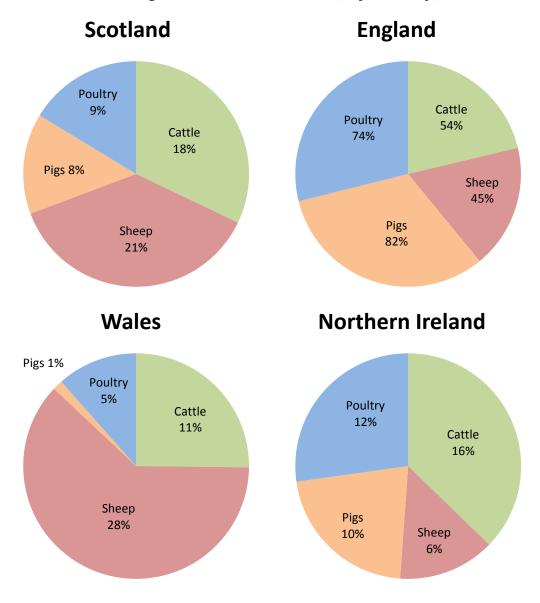
Total crops and fallow land in Scotland (588,873 hectares) made up 12 per cent of the UK total (4.9 million hectares). The following crops in Scotland accounted for much higher proportions of the UK total; spring barley (289,222 hectares or 47 per cent of the UK total) and potatoes (29,536 or 19 per cent). The large area of spring barley can be partially accounted for by the demand of the whisky industry in Scotland, with spring barley the key ingredient for malting, though most barley in Scotland is used for animal feed. Conversely, the following crops accounted for much lower proportions of the UK total; oilseed crops (36,611 hectares or five per cent), wheat (100,637 hectares or five per cent), orchard and soft fruit (877 or three per cent).

#### 8.2 Livestock

Chart 8.2 shows the share each country had of the UK population for each of the main livestock groups. Please note, it does not show the share of each nation's livestock – percentages within each pie chart do not add to 100. Rather it allows us to see which livestock sector each nation was relatively dominant in.

Scotland had a higher UK share of cattle (18 per cent) and sheep (21 per cent) compared to pigs (eight per cent) and poultry (nine per cent).

Chart 8.2: Percentage share of UK livestock, by country, June 2012

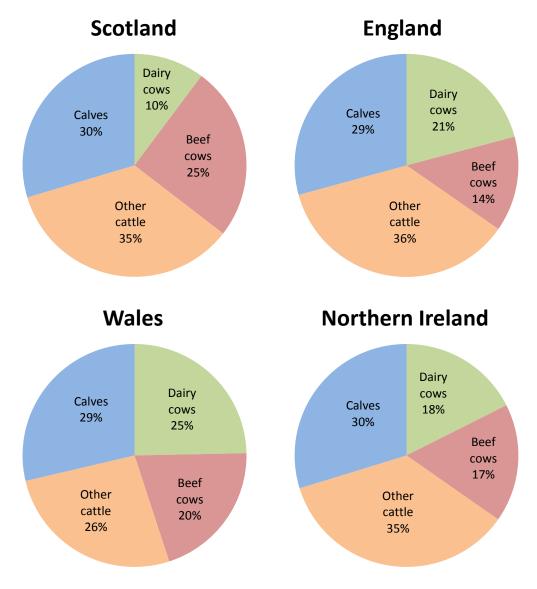


Northern Ireland had a similar share to Scotland for cattle, pigs and poultry but with a much lower share for sheep. Compared to Scotland, Wales had a higher share of sheep and a lower share of other livestock groups (including a particularly low number of pigs).

England naturally had the highest share of all livestock groups but with a profile opposite to Scotland, with a larger share of the pig and poultry populations in comparison to cattle and sheep.

Chart 8.3 shows the proportion of different types of cattle within each country. In Scotland, the number of beef cows (constituting 25 per cent of total cattle in Scotland) was larger than the number of dairy cows (ten per cent), whereas in England the profile was the opposite, with the number of beef cows (14 per cent) being smaller than the number of dairy cows (21 per cent). In Northern Ireland and Wales the beef and dairy herds were more equal in size.

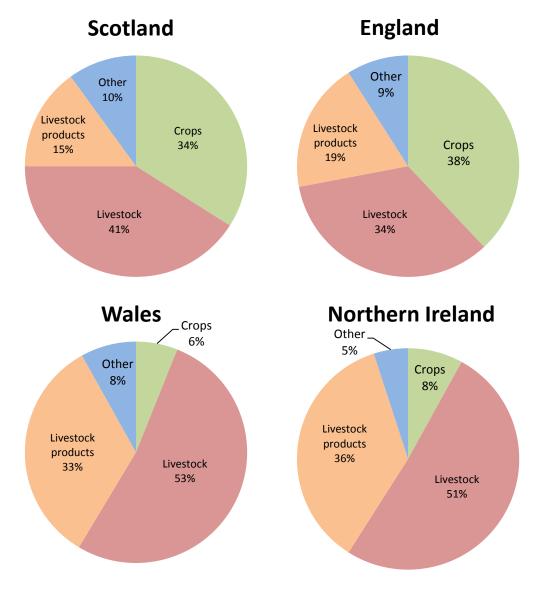
Chart 8.3: Cattle type, by country, June 2012



# 8.3 Output from farming

Chart 8.4 shows the comparative importance of each sector to a country's total output. While a large proportion of Scottish output came from livestock, Scotland also had significant cereal, horticulture and potato sectors. England also had a reasonably equal division between livestock and crops. However in both Wales and Northern Ireland there was a particularly high reliance on livestock and livestock products.

Chart 8.4: Comparison of relative importance of sector to total output, by country, 2012



# **Tables**

Table A1 Output, input and income, 2008 to 2012

					£ million
OUTPUT	2008	2009	2010	2011	2012 (prov)
Caraclas					u · · /
Cereals: Wheat	136.3	85.6	120.6	145.9	122.8
Barley	252.6	163.3	213.2	292.9	315.2
Oats	12.3	11.3	16.0	19.7	22.8
Triticale	0.8	0.4	0.5	0.6	0.4
1. Total cereals	402.1	260.6	350.3	459.1	461.3
Cereals net of subsidies	402.1	260.6	350.3	459.1	461.3
Other crops:					
Potatoes	193.7	168.9	184.7	199.9	159.6
Oilseed rape	29.7	24.1	39.5	53.0	39.4
Other farm crops	9.1	9.8	10.8	12.0	10.8
2. Total other crops	232.5	202.9	235.1	264.9	209.7
Other crops net of subsidies	232.3	202.4	235.1	264.9	209.7
Horticulture:					
Vegetables	85.4	109.4	111.4	109.4	102.4
Fruit	78.1	79.9	84.2	81.4	62.1
Flowers and nursery stock	34.1	34.4	33.3	32.7	40.6
·					
3. Total horticulture	197.5	223.8	228.9	223.6	205.1
Finished livestock:					
Finished cattle and calves	457.4	485.2	514.8	571.9	583.7
Finished sheep and lambs	138.2	181.6	187.8	210.8	202.3
Finished pigs	72.3	70.7	70.7	84.5	76.1
Poultry	81.9	92.0	92.2	110.7	103.4
Other livestock	12.9	12.6	13.0	13.3	13.3
4. Total finished livestock	762.7	842.0	878.5	991.1	978.8
Finished livestock net of subsidies <sup>(7)</sup>	736.2	818.6	856.5	968.9	955.0
Store livestock:					
Store cattle	37.8	41.7	32.1	37.9	44.4
Store calves	14.6	17.7	14.0	17.9	21.1
Store sheep	12.6	18.1	22.1	23.4	21.4
5. Total store livestock	65.0	77.4	68.2	79.2	86.9
Livestock products:					
Milk and milk products	341.9	314.5	317.0	344.8	364.8
Eggs for food	55.5	57.1	68.9	73.1	75.0
Clipwool	2.4	3.3	6.5	8.2	8.3
Other livestock products	4.3	4.5	5.1	4.9	3.9
6. Total livestock products	404.1	379.3	397.4	431.0	452.0
Livestock products net of subsidies	404.1	379.3	397.4	431.0	452.0
Capital formation:					
Cattle	30.7	52.6	51.9	34.7	68.2
Sheep	11.9	18.4	29.1	24.1	29.4
Pigs	1.2	1.9	2.0	1.6	1.7
Poultry	15.0	14.6	15.8	17.0	14.6
7. Total capital formation	58.9	87.5	98.7	77.3	113.9
Other agricultural activities:					
Contract work	85.9	84.6	90.2	97.9	98.9
Leasing of quotas	0.0	0.0	0.0	0.0	0.0
8. Total other agricultural activities	85.9	84.6	90.2	97.9	98.9
9. Total non-agricultural activities	157.1	175.1	147.4	180.9	178.4
10. GROSS OUTPUT AT BASIC PRICES	2,365.8	2,333.3	2,494.7	2,804.9	2,784.9
(1+2+3+4+5+6+7+8+9)					
Gross output at basic prices net of subsidies <sup>(7)</sup>	2,339.0	2,309.4	2,472.7	2,782.7	2,761.2

Table A1(ctd) Output, input and income, 2008 to 2012

					£ million
					2012
INPUT (1)	2008	2009	2010	2011	(prov)
11. Total feedstuffs	458.5	441.0	493.2	559.3	549.2
12. Total seeds	64.5	67.2	72.5	78.4	85.9
13. Total fertilisers and lime	214.8	289.8	172.3	214.1	233.0
Farm maintenance:					
Occupier	50.1	60.7	65.1	75.6	78.7
Landlord	6.9	6.6	6.2	6.3	6.0
14. Total farm maintenance	57.0	67.4	71.3	81.9	84.7
Miscellaneous expenditure:					
Machinery repairs	94.7	103.2	105.9	117.2	119.0
Fuel and oil	100.8	94.9	115.0	142.0	152.8
Other machinery expenses	22.9	22.6	25.3	23.7	24.0
Veterinary expenses and medicines	48.6	51.1	53.3	56.5	56.3
Crop protection	65.9	65.1	66.9	69.8	71.1
Contract work	85.9 0.0	84.6 0.0	90.2	97.9 0.0	98.9 0.0
Leasing of quotas Other farm costs	300.0	311.6	324.5	351.0	356.3
15. Total miscellaneous expenses	718.8	733.2	781.1	858.0	878.4
•					
16. FISIM (Financial Intermediation Services Indirectly Measured)	25.9	26.8	28.0	28.9	30.5
17. Total Non-Agricultural Activities	57.9	78.7	59.1	76.2	79.3
18. GROSS INPUT <sup>(2)</sup> (11+12+13+14+15+16+17)	1,597.4	1,704.1	1,677.5	1,896.9	1,941.0
19. GROSS VALUE ADDED(3) (10-18)	768.4	629.2	817.1	908.0	844.0
Gross value added net of subsidies(7)	741.6	605.3	795.1	885.8	820.2
Consumption of fixed capital:					
Plant machinery and vehicles	133.3	144.1	151.8	158.6	158.2
Building and works	129.4	122.7	104.3	103.3	106.8
Cattle	46.9	49.1	41.0	54.6	72.1
Sheep	21.0	19.3	27.6	28.5	31.1
Pigs	1.9	2.0	1.6	2.1	1.9
Poultry	9.9	15.4	14.2	15.1	14.8
20. Total consumption of fixed capital	342.3	352.6	340.5	362.2	384.9
21. NET VALUE ADDED (at basic price)(19-20)	426.0	276.6	476.6	545.9	459.1
Net value added (at basic price) net of subsidies <sup>(7)</sup>	399.3	252.7	454.6	523.7	435.3
Other subsidies:	440.4	500.0	470.5	400.0	440.0
Single Farm Payment Less-Favoured Areas Support Scheme	443.4 58.9	509.9 63.0	479.5 63.7	483.0 66.4	443.3 66.9
Land Management Contract Menu Scheme	20.0	17.8	17.1	6.6	0.3
Land Managers Options	0.0	0.4	0.9	3.5	6.9
Rural Stewardship Scheme	17.3	13.0	7.8	4.0	0.8
Rural Priorities	0.0	4.4	22.2	31.8	34.0
Environmentally Sensitive Areas	3.6	2.7	1.5	0.6	0.2
Other Agri Environmental Schemes <sup>(4)</sup>	13.6	9.3	6.9	6.0	4.2
Other	0.0	0.0	2.8	0.0	0.0
22. Total other subsidies	556.8	620.6	602.5	601.8	556.6
Total payments and subsidies <sup>(7)</sup>	583.6	644.4	624.5	624.0	580.4
23. NET VALUE ADDED AT FACTOR COST <sup>(5)</sup> (21+22)	982.8	897.2	1,079.1	1,147.7	1,015.7
24. Hired labour <sup>(6)</sup>	303.1	351.3	336.0	347.6	324.9
25. Interest	75.2	41.3	38.5	39.4	41.8
26. Net rent	15.4	16.3	16.7	15.1	14.2
27. TOTAL INCOME FROM FARMING	589.1	488.4	687.9	745.6	634.7
(23-(24+25+26))	309.1	700.7	001.9	743.0	004.7

Also known as Intermediate Consumption.
 Also known as Total Intermediate Consumption.
 Formerly known as Gross Product.
 Includes Countryside Premium Scheme, Farm Wo Includes Countryside Premium Scheme, Farm Woodland Scheme, Farm Woodland Premium Scheme, Organic Aid Scheme and elements of Habitats and Heather Moorland Schemes.

Formerly known as Net Product.
Also known as Compensation of Employees.
Revised due to error in "livestock net of subsidies" line in January publication. See Livestock commentary for details. (7)

Table A2 (i) Area of cereals(1), root crops and horticultural crops, 2008 to 2012

'000 ha

	Average					
	2008-12	2008	2009	2010	2011	2012 (prov)
Wheat	106.7	113.8	92.5	111.4	115.4	100.6
Winter barley	47.8	57.6	45.1	47.9	45.5	42.8
Spring barley	268.8	262.3	287.0	242.4	262.9	289.2
Total barley	316.6	319.9	332.2	290.3	308.4	332.0
Oats	22.5	21.7	22.3	23.0	21.7	23.7
Triticale	0.7	1.1	0.6	0.7	0.6	0.6
Oilseed rape	34.7	33.6	29.0	36.0	38.4	36.6
Potato – early ware(2)	0.2	0.4	0.2	0.1	0.2	0.2
Potato – maincrop ware <sup>(2)</sup>	19.1	18.3	19.8	19.6	19.5	18.5
Potato – seed <sup>(2)</sup>	11.3	11.2	11.6	11.6	11.5	10.8
Vining peas	6.0	4.5	6.3	6.5	6.3	6.6
Tomatoes (ha)	3.5	4.3	2.9	3.1	3.9	3.3
Raspberries	0.5	0.5	0.6	0.5	0.5	0.4
Strawberries	0.9	0.9	0.9	0.9	0.9	0.9

Table A2 (ii) Estimated yield of cereals<sup>(1)</sup>, root crops and horticultural crops, 2008 to 2012 tonnes per ha

		-		_	_	
	Average 2008-12	2008	2009	2010	2011	2012 (prov)
Wheat	8.1	8.7	8.3	8.6	8.3	6.7
Winter barley	7.1	7.6	7.0	7.2	7.3	6.5
Spring barley	5.6	5.7	5.8	5.8	5.8	5.0
Total barley	5.9	6.0	6.0	6.0	6.1	5.2
Oats	5.5	5.3	5.9	6.3	5.6	4.6
Triticale	5.4	5.8	6.8	5.2	5.5	3.6
Oilseed rape	3.5	3.4	3.7	3.4	3.9	2.9
Potato – early ware <sup>(2)</sup>	23.5	19.2	21.0	25.6	28.5	23.1
Potato – maincrop ware <sup>(2)</sup>	44.9	47.7	49.9	47.6	44.2	35.3
Potato - seed <sup>(2)</sup>	26.9	27.1	29.2	27.7	28.1	22.5
Vining peas	4.1	3.8	4.3	4.6	4.2	3.5
Tomatoes	181.5	180.7	179.7	181.9	183.3	181.7
Raspberries	6.6	8.6	7.3	5.6	6.1	5.1
Strawberries	20.9	19.5	19.8	23.2	23.0	19.1

Table A2 (iii) Estimated production<sup>(3)</sup> of cereals<sup>(1)</sup>, root crops and horticultural crops, 2008 to 2012 '000 tonnes

	Average 2008-12	2008	2009	2010	2011	2012 (prov)
Wheat	867.7	987.3	767.7	953.2	957.0	673.3
Winter barley	341.1	435.1	314.5	345.6	333.6	276.5
Spring barley	1,511.7	1,500.1	1,668.2	1,410.3	1,533.0	1,446.9
Total barley	1,852.8	1,935.2	1,982.8	1,755.9	1,866.6	1,723.5
Oats	124.5	114.5	132.6	145.1	121.8	108.2
Triticale	3.9	6.4	4.1	3.6	3.5	2.0
Oilseed rape	120.6	114.9	108.6	123.3	149.6	106.4
Potato – early ware <sup>(2)</sup>	5.0	7.8	5.2	3.4	4.4	4.2
Potato – maincrop ware <sup>(2)</sup>	861.5	872.1	989.2	932.5	860.4	653.2
Potato – seed <sup>(2)</sup>	305.6	301.9	339.1	322.1	321.9	243.2
Vining peas	24.8	16.9	27.1	30.3	26.6	23.0
Tomatoes	0.6	0.8	0.5	0.6	0.7	0.6
Raspberries	3.4	4.7	4.2	3.0	3.2	2.1
Strawberries	19.5	17.9	18.7	21.6	21.4	17.8

<sup>(1)</sup> Crop yield estimates are taken mainly from the Cereal Production Survey. Some estimation from industry experts has been included in the yield and production estimates for Winter Barley, Oats, Triticale and Oilseed Rape.

<sup>(2)</sup> The yield and production figures are partly based on Scottish Agricultural College and the British Potato Council estimates.

<sup>(3)</sup> Production is valued at the point it is used or sold off the farm, so there can be differences between production volumes presented here and output volumes presented in subsequent tables.

Table A3 Output and utilisation of cereals and oilseed rape, 2008 to 2012<sup>(1)</sup>

	Unit	2008	2009	2010	2011	2012 (prov)
Wheat <sup>(2)</sup>						
Wneat <sup>(2)</sup> Human and industrial	'000 tonnes	666.6	595.0	703.4	626.6	680.9
Seed <sup>(3)</sup>	000 torines	11.7	12.0	15.7	13.5	13.5
			_	-		124.2
Feed and other <sup>(4)</sup>		243.7 <b>922.0</b>	211.0	295.2	248.9	
Total marketings	" "	65.3	<b>818.0</b> -50.4	<b>1,014.3</b> -61.0	<b>889.0</b> 68.0	<b>818.6</b> -145.3
Stock change  Total quantity of output		987.3	-50.4 <b>767.7</b>	953.2	957.0	673.3
Total qualitity of output		901.3	101.1	955.2	957.0	073.3
Market price(5)	£ per tonne	139.78	111.21	128.27	151.81	178.58
Market value	£ millions	128.88	90.97	130.10	134.96	146.18
Stock change <sup>(6)</sup>	"	7.42	-5.42	-9.49	10.91	-23.36
Total value of output	ıı ı	136.30	85.55	120.61	145.87	122.82
Barley <sup>(2)</sup>						
Human and industrial	'000 tonnes	603.2	556.0	652.6	686.5	694.7
Seed®	"	46.7	46.9	44.1	41.4	38.5
Feed and other <sup>(4)</sup>	п	1,150.3	1,368.8	1,262.3	1,153.0	965.4
Total marketings	п	1,800.2	1,971.6	1,959.0	1,880.9	1,698.6
Stock change	п	135.0	11.2	-203.1	-14.3	24.8
Total quantity of output	п	1,935.2	1,982.8	1,755.9	1,866.6	1,723.5
1,		,	,	,	,	,
Market price	£ per tonne	131.07	82.37	123.00	156.92	182.84
Market value	£ millions	235.96	162.40	240.95	295.14	310.57
Stock change <sup>(6)</sup>	11	16.67	0.87	-27.78	-2.28	4.67
Total value of output	ıı ı	252.62	163.27	213.17	292.86	315.24
Oats <sup>(2)</sup>						
Human and industrial	'000 tonnes	91.8	102.8	106.2	110.6	80.7
Seed <sup>(3)</sup>	"	3.3	3.5	3.7	3.9	3.6
Feed and other <sup>(4)</sup>	п	18.3	14.0	40.9	14.0	19.3
Total marketings	п	113.4	120.3	150.9	128.5	103.5
Stock change	п	1.1	12.3	-5.8	-6.6	4.7
Total quantity of output	п	114.5	132.6	145.1	121.8	108.2
Market price	£ per tonne	107.77	85.55	110.84	162.81	210.65
Market value	£ millions	12.22	10.29	16.72	20.92	21.81
Stock change <sup>(6)</sup>	L ITIIIIOTIS	0.12	1.04	-0.69	-1.17	1.03
Total value of output	п	12.34	11.33	16.03	19.75	22.84
. Star variate or output		12.04	. 1.00	10.00	15.75	22.04
Oilseed rape <sup>(2)</sup>						
Total marketings	'000 tonnes	114.9	108.6	123.3	149.6	106.4
Market price	£ per tonne	258.10	222.30	320.50	354.47	370.00
Total value of output	£ millions	29.66	24.14	39.53	53.04	39.38

<sup>(1)</sup> Output data are for calendar years (except Oilseed rape) and so reflect the influence of two crop years. Oilseed rape data are for Crop year.

Note Wheat & Barley stock-change was omitted from the calculation of TIFF in 2011 (Table A1) - see cereals commentary for details.

<sup>(2)</sup> Includes all production whether sold off or consumed on the national farm.

<sup>(3)</sup> Excludes seed retained on farm of origin or sold farm-to-farm.

<sup>(4)</sup> Includes sales to animal feed manufacturers, feed and seed retained on farm of origin or sold farm-to-farm.

<sup>(5)</sup> Average market returns net of marketing expenses, feed and seed retained on farm of origin or sold farm-to-farm are valued at opportunity cost, assumed to be the ex-farm feed price.

<sup>(6)</sup> Value of the physical increase in on-farm stocks over the course of the year.

Table A4 Output and utilisation of potatoes, vegetables and fruit, 2008 to 2012<sup>(1)</sup>

	Unit	2008	2009	2010	2011	2012 (prov)
Potatoes <sup>(2)</sup>						
Earlies	'000 tonnes	7.8	5.2	3.4	4.4	4.2
Maincrop ware(4)	"	872.1	989.2	932.5	860.4	653.2
Seed <sup>(6)</sup>	"	301.9	339.1	322.1	321.9	243.2
Stockfeed <sup>(5)</sup>	"	111.0	126.2	118.8	107.8	81.9
Total potatoes	ıı ıı	1,292.8	1,459.6	1,376.7	1,294.6	982.6
Earlies	£ per tonne	356.3	300.3	321.6	262.5	498.3
Maincrop ware	"	116.4	84.6	177.6	99.6	267.5
Seed <sup>(6)</sup>	п	207.2	218.8	213.7	224.7	258.4
Earlies	£ millions	2.8	1.6	1.1	1.2	2.1
Seed <sup>(6)</sup>	"	60.0	66.4	71.4	69.8	68.3
Maincrop ware	"	136.0	90.1	117.6	131.3	130.8
Stockfeed <sup>(5)</sup>	"	0.7	0.7	0.7	0.9	1.4
Stockchange	"	-5.7	10.3	-6.2	-3.4	-43.0
Total value of output	"	193.7	168.9	184.7	199.9	159.6
Vegetables						
Carrots	'000 tonnes	128.5	146.3	190.7	148.2	126.5
Turnips & Swedes	"	67.4	70.9	75.2	64.4	52.8
Brussel Sprouts	"	12.5	11.5	12.2	14.8	12.5
Peas	"	16.9	27.1	30.3	26.6	23.0
Other Vegetables	"	57.7	88.1	88.4	77.7	59.9
Total Vegetables	"	283.0	343.9	396.8	331.7	274.7
Carrots	£ per tonne	144.4	152.2	137.3	157.9	177.3
Turnips & Swedes	"	228.6	264.2	209.9	239.3	312.5
Brussel Sprouts	"	893.6	809.1	820.1	1,047.5	1,086.8
Peas	II II	277.5	338.5	290.3	305.0	331.7
Carrots	£ millions	18.6	22.3	26.2	23.4	22.4
Turnips & Swedes	"	15.4	18.7	15.8	15.4	16.5
Brussel Sprouts	"	11.2	9.3	10.0	15.5	13.6
Peas	"	4.7	9.2	8.8	8.1	7.6
Other Vegetables	"	35.5	50.0	50.6	47.0	42.2
Total Value of Output	"	85.4	109.4	111.4	109.4	102.4
Fruit						
Raspberries	'000 tonnes	4.7	4.2	3.0	3.2	2.1
Strawberries	"	17.9	18.7	21.6	21.4	17.8
Other Fruit	"	4.6	5.0	5.2	5.1	4.4
Total Fruit	"	27.2	28.0	29.9	29.7	24.2
Raspberries	£ per tonne	4,590.7	4,040.3	4,514.6	4,948.6	4,335.4
Strawberries	п	2,726.0	2,862.5	2,881.2	2,688.5	2,619.6
Raspberries	£ millions	21.5	17.1	13.7	15.7	8.9
Strawberries	п	48.8	53.6	62.3	57.5	46.6
Other Fruit	ıı ı	7.8	9.3	8.1	8.2	6.7
Total Value of Output	ıı ı	78.1	79.9	84.2	81.4	62.1

<sup>(1)</sup> Output data are for calendar years and so reflect the influence of two crop years.

<sup>(2)</sup> Includes all production whether sold off or consumed on the national farm.

<sup>(3)</sup> Value of the physical increase in on-farm stocks over the course of the year.

<sup>(4)</sup> Includes farmyard consumption.

<sup>(5)</sup> Potatoes used on farm as stockfeed and so does not equate to Potato Marketing Board stockfeed support scheme.

<sup>(6)</sup> Includes seed retained on the farm of origin or sold farm-to-farm. Valued at opportunity cost, assumed to be the ex-farm seed price

Table A5 Output and prices of cattle and sheep, 2008 to 2012

	2008	2009	2010	2011	2012 (prov)
Finished cattle:	2000	2009	2010	2011	(prov)
Number ('000 head)	454	446	467	460	415
Weight of meat ('000 tonnes)	155.9	155.3	166.1	161.7	147.1
Average price (£ per kg)	2.67	2.89	2.80	3.17	3.50
Value of output (£m)	405.0	437.1	460.6	506.2	509.6
value of eatpat (211)	100.0	10711	100.0	000.2	000.0
Cows and bulls:					
Number ('000 head)	59	52	57	64	65
Weight of meat ('000 tonnes)	19.4	17.2	19.6	22.2	22.7
Average price (£ per head)	653.9	697.0	684.2	850.6	910.1
Value of output (£m)	37.8	35.4	39.0	54.1	59.3
Finished calves:					
Number ('000 head)	2	2	2	2	2
Weight of meat ('000 tonnes)	0.0	0.1	0.1	0.1	0.1
Value of output (£m)	0.3	0.3	0.3	0.3	0.4
,					
Subtract MLC levy	1.8	1.7	1.8	2.2	2.0
Stock change (£m)(1)	-10.4	-9.4	-5.3	-8.8	-7.3
Other receipts (£m)(2)	26.5	23.4	22.0	22.2	23.8
TOTAL VALUE OF OUTPUT (£m)	457.4	485.2	514.8	571.9	583.7
Store cattle:					
Number ('000 head)	65	60	50	51	54
Average price (£ per head)	619.1	738.5	691.0	790.4	879.7
Value of output (£m)	37.8	41.7	32.1	37.9	44.4
Store calves:					
Number ('000 head)	31.0	29.8	29.6	30.3	30.5
Average price (£ per head)	497.06	619.01	514.61	631.28	723.79
Value of output (£m)	14.6	17.7	14.0	17.9	21.1
Finished sheep:					
Number ('000 head)	2,619	2,480	2,310	2,368	2,313
Weight of meat ('000 tonnes)	50.8	48.8	45.9	47.1	46.2
Average price (£ per kg)	2.68	3.62	3.96	4.27	4.19
Value of output (£m)	131.1	171.1	175.4	194.2	186.8
Ewes and rams:					
Number ('000 head)	419	316	305	325	313
Weight of meat ('000 tonnes)	10.7	8.6	9.2	10.7	10.2
Average price (£ per head)	32.0	51.9	60.3	68.0	60.0
Value of output (£m)	12.4	15.4	17.2	20.8	17.5
Stock change (£m) <sup>(1)</sup>	-5.3	-4.9	-4.8	-4.1	-2.0
Other receipts (£m)	0.0	0.0	0.0	0.0	0.0
TOTAL VALUE OF OUTPUT (£m)	138.2	181.6	187.8	210.8	202.3
Store sheep:	10012	101.0	107.0	210.0	202.0
Number ('000 head)	406	339	337	347	342
Average price (£ per head)	33.6	56.7	69.8	71.9	66.9
Value of output (£m)	12.6	18.1	22.1	23.4	21.4
value of output (EIII)	12.0	10.1	22.1	23.4	21.4

<sup>(1)</sup> Value of the physical increase in on-farm stocks over the course of the year.(2) Comprising Scottish Beef Calf Scheme and Older Cattle Disposal Scheme.

Table A6 Output and prices of pigs, poultry and livestock products, 2008 to 2012

	2008	2009	2010	2011	2012 (prov)
Finished pigs:	2000	2000	2010	2011	(5104)
Number ('000 head)	798	627	667	775	667
Weight of meat ('000 tonnes)	53.9	49.1	52.3	61.5	52.0
Average price (£ per kg)	1.36	1.35	1.29	1.37	1.43
Value of output (£m)	73.5	66.4	67.7	84.5	74.2
Sows and boars:					
Number ('000 head)	14	12	15	18	16
Weight of meat ('000 tonnes)	2.1	2.0	2.1	2.5	2.3
Average price (£ per head)	65.93	69.27	60.66	59.39	58.71
Value of output (£m)	0.9	0.8	0.9	1.1	1.0
Stock change (£m)(1)	-2.2	3.4	2.1	-1.1	0.9
TOTAL VALUE OF OUTPUT (£m)	72.3	70.7	70.7	84.5	76.1
Poultry:					
Chickens: Weight of meat	80	85	86	92	80
('000 tonnes) Other table poultry: Weight of	9.1	8.5	5.2	4.8	4.3
meat ('000 tonnes)		0.0	0.2		
Chickens: Average price (p per kg)	101.15	105.42	106.00	121.68	126,28
Value of output (£m)	83.2	91.4	92.4	112.7	101.8
Stock change (£m)(1)	-1.3	0.6	-0.2	-2.0	1.6
TOTAL VALUE OF OUTPUT (£m)	81.9	92.0	92.2	110.7	103.4
Eggs:					
Packing station throughput -	503	482	398	390	527
laying cages (million eggs)					
Packing station throughput -	321	367	502	637	509
free range (million eggs)					
Packing station throughput -					
other (million eggs)	91	84	188	113	46
Average price - laying cages	53	54	55	56	69
(p per dozen)					
Average price - free range	91	89	87	86	95
(p per dozen)					
TOTAL VALUE OF OUTPUT (£m)	55.5	57.1	68.9	73.1	75.0
Milk (including milk products):					
Production (million litres)	1,276	1,268	1,289	1,278	1,301
Average price (p per litre)	26.57	24.63	24.41	26.75	27.82
TOTAL VALUE OF OUTPUT (£m)	341.9	314.5	317.0	344.8	364.8
Wool:	_	_			2
Clipwool (million kg)  Average receipts (p per kg)	7 36.76	6 54.65	6 110.83	131.92	6 132.67
TOTAL VALUE OF OUTPUT (£m)	2.4	3.3	6.5	8.2	8.3

<sup>(1)</sup> Value of the physical increase in on-farm stocks over the course of the year.

Table A7 Annual average hay and straw prices, 2008 to 2012<sup>(1)</sup>

£/tonne	2008	2009	2010	2011	2012 (prov)
Hay	72	86	101	105	90
Barley straw	22	33	43	52	51
Oat straw	39	53	63	60	59

<sup>(1)</sup> Average of growers' prices paid by a representative sample of merchants throughout Scotland.

Table A8 Prices and Quantities of fertiliser and lime used by Scottish farmers, 2008 to 2012

			2008	2009	2010	2011	2012 (prov)
Price - £	per tonne	of nutrient					
Compound	ds		576	911	551	641	722
Straights	Nitrates	(N)	710	895	562	783	890
	Phosphat	:e (P <sub>2</sub> O <sub>s)</sub>	880	1,221	512	788	859
	Potash	(K <sub>2</sub> O)	500	946	559	543	573
	Lime	(CaCO <sub>3</sub> )	41	41	39	39	39
Quantity I	Jsed - '00	0 tonnes o	f nutrien	t			
	Nitrates	(N)	147	162	158	155	154
	Phosphat	:e (P <sub>2</sub> O <sub>s)</sub>	51	50	51	48	48
	Potash	(K <sub>2</sub> O)	66	67	67	62	62
	Lime	(CaCO <sub>3</sub> )	602	522	550	518	508

Table A9 Annual average prices of red diesel in UK, 2008 to 2012

p/litre	2008	2009	2010	2011	2012 (prov)
Red Diesel	58.4	44.0	54.1	68.1	71.0

Table A10 Average weekly earnings of regular full-time hired workers, 2008 to 2012

	2008	2009	2010	2011	2012 (prov)
Hours worked number:					
Ordinary hours	40.2	41.3	39.8	39.5	39.0
Seasonal overtime hours	8.8	6.6	6.3	7.0	6.7
Total hours worked	49.1	47.9	46.1	46.6	45.8
Earnings £:					
Regular cash earnings(1)	304.22	351.02	335.53	332.32	341.83
Seasonal overtime <sup>(2)</sup>	84.89	65.12	60.65	72.42	65.71
Bonuses	3.85	0.16	1.34	0.83	1.05
Total cash earnings	392.96	416.30	397.52	405.57	408.59
Benefits	6.37	5.91	25.92	20.50	17.10
Total earnings	399.33	422.21	423.44	426.07	425.69

<sup>(1)</sup> Shepherds' dog allowances are not included in earnings.(2) Includes cash in lieu which is not shown individually.

Table A11 Total Bank Advances to Agriculture at 31st May, 2008 to 2012

		2008	2009	2010	2011	2012 (prov)
Advances to Agriculture	Current Real Terms (2012 Prices)	1,390 1,438	1,385 1,440	1,506 1,497	1,614 1,524	1,670 1,670
Index 2011 = 100	Current Real Terms (2012 Prices)	83.2 86.1	83.0 86.2	90.2 89.6	96.6 91.3	100.0 100.0

Table A12 (i) Agricultural payments and subsidies<sup>(1)</sup> included in the aggregate account, 2008 to 2012 £ million

					£ million
	2008	2009	2010	2011	2012 (prov)
Included in Commodity Output (Table 1)					
Cattle:					
Scottish Beef Calf Scheme	20.4	23.4	22.0	22.2	23.8
Other Cattle Schemes	6.0	~	~	~	~
Cattle total	26.5	23.4	22.0	22.2	23.8
Sheep Schemes	~	~	~	~	~
Arable Area Payments Scheme	0.3	0.5	~	~	~
Dairy Schemes	~	~	~	~	~
Included in Other Subsidies (Table A1):					
Single Farm Payment Scheme	443.4	509.9	479.5	483.0	443.3
Less-Favoured Area Support Scheme	58.9	63.0	63.7	66.4	66.9
Land Management Contract Menu Scheme	20.0	17.8	17.1	6.6	0.3
Land Managers Options	~	0.4	0.9	3.5	6.9
Rural Stewardship Scheme	17.3	13.0	7.8	4.0	0.8
Rural Priorities	~	4.4	22.2	31.8	34.0
Chernobyl Compensation Payments	0.0	0.0	0.0	~	~
Other Compensation Payments	~	~	~	~	~
Environmentally Sensitive Areas Payments	3.6	2.7	1.5	0.6	0.2
Countryside Premium Scheme	2.6	1.8	0.8	0.2	0.0
Organic Aid Scheme	4.7	2.6	2.1	1.7	0.7
Farm Woodland Scheme	0.5	0.4	0.4	0.4	0.3
Farm Woodland Premium Scheme	4.3	3.3	2.6	2.3	2.0
Farmland Premium Scheme	1.4	1.2	1.2	1.4	1.3
EU Dairy Payment Other	~ ~	~ ~	2.6 0.2	~ ~	~ ~
TOTAL INCLUDED IN OTHER SUBSIDIES	556.8	620.6	602.5	601.8	556.6
TOTAL OTHER PAYMENTS AND SUBSIDIES	583.6	644.4	624.5	624.0	580.4

Table A12 (ii) Agricultural other payments and subsidies (2) not included in the aggregate account, 2008 to 2012

	2008	2009	2010	2011	2012 (prov)
Animal Diseases Compensation	0.3 23.3	0.3 23.5	0.2 26.0	0.1 41.1	0.5 42.9
Other Grants (Mainly Capital)					
Agriculture Business Development Scheme (8)	2.3	-0.1	~	~	~
Crofting Community Development Scheme	0.3	~	~	~	~
Farm Business Development Scheme	8.0	8.1	~	~	~
Farm and Conservation Grant Scheme (EC)	~	~	~	~	~
Crofting Buildings Grants and Loans Scheme (CBGLS) <sup>(4)</sup>	1.8	1.8	~	~	~
Crofting Counties Agricultural Grants Scheme (CCAGS)	3.9	3.7	1.5	1.4	1.5
FEOGA Processing and Marketing Scheme	6.9	5.4	5.9	6.5	7.0
Land Managers Options	~	0.0	0.2	0.2	0.5
Rural Priorities	~	4.6	18.3	33.0	34.0
Other	~	~	~	~	~
TOTAL	23.5	23.8	26.2	41.3	43.4
OVERALL TOTAL OF OTHER PAYMENTS AND SUBSIDIES (included in tables A12 (i) and A12 (ii))	607.1	668.2	650.7	665.3	623.8

<sup>(1)</sup> Subsidies paid to farmers to support non-agricultural or capital improvements excluded from table A12(i).

<sup>(2)</sup> Including marketing grants.
(3) For 2009, represents repayments to EU as a result of recoveries against applicants who breached their terms and conditions.

<sup>(4)</sup> Approved Expenditure on Grants and Loans.

Table A13 Estimated balance sheet for Scottish agriculture at current prices, 2008 to 2012<sup>(1)(3)</sup>

					£ million
	2008	2009	2010	2011	2012 (prov)
ASSETS:					
Fixed:					
Land and buildings(2)	24,995	28,615	31,720	33,845	32,920
Plant and machinery	665	715	785	740	770
Farm vehicles	75	85	90	90	100
Farm cars	60	65	65	60	70
Breeding livestock	925	1,160	1,090	1,430	1,275
Total fixed assets	26,715	30,640	33,745	36,170	35,135
Current:					
Trading livestock	515	630	570	660	645
Crops and stores	305	225	280	280	310
Financial	1,190	1,125	1,100	1,135	1,100
Total current assets	2,005	1,980	1,950	2,070	2,050
TOTAL ASSETS	28,720	32,620	35,695	38,240	37,185
LIABILITIES:					
Long term:					
Bank loans	515	585	690	785	800
Other	350	325	320	330	325
Total long term	865	915	1,010	1,115	1,125
Oh and Assume					
Short term: Bank	835	775	735	730	705
Other	565	555	575	605	585
Total short term	1,400	1,330	1,310	1,335	1,290
Total Short term	1,400	1,330	1,510	1,333	1,290
TOTAL LIABILITIES	2,270	2,245	2,320	2,450	2,415
NET WORTH	26,455	30,375	33,375	35,790	34,770
Net worth as %					
of total assets	92	93	94	94	94

<sup>(1)</sup> Rounded to the nearest £5 million. Individual items may not sum to total.

Table A14 Investment by farmers, 2008 to 2012

	2008	2009	2010	2011	2012 (prov)
Investment by Farmers <sup>(1)</sup>	250.8	235.0	286.4	219.2	185.1

<sup>(1)</sup> Investment by farmers in buildings, plant, machinery and vehicles.

<sup>(2)</sup> The value of land and buildings does not include the domestic share of dwellings, but does include the business share ie the value of the proportion of the farmhouse used for business purposes.

<sup>(3)</sup> The value of land and buildings has been estimated from Farm Accounts data, due to a lack of land sales data.

Table A15 Major Economic Indicators of Scottish Agriculture, 2008 to 2012

£ million	2008	2009	2010	2011	2012
Current Prices					
A. Net Value Added					
at Factor Cost <sup>(1)</sup>	983	897	1,079	1,148	1,016
B. Returns to all Labour <sup>(2)</sup>	892	840	1,024	1,093	960
C. TIFF <sup>(3)</sup>	589	488	688	746	635
Stockchange due to					
Volume in Outputs	-1	-4	-52	-12	-7
Stockchange due to Volume in Inputs	8	-1	-1	1	0
Capital Formation		-1	-'	'	0
in Livestock	59	88	99	77	114
minus Consumption of Capital in Livestock	80	86	84	100	120
Capital III Livestock		00	0-1	100	120
D. Sub Total	-14	-3	-39	-34	-14
E. Adjusted TIFF <sup>(5)</sup> (C-D)	603	491	727	779	649
Depreciation	263	267	256	262	265
Capital Grants	24	24	26	41	43
Change in Borrowings	29	227	465	499	256
F. Sub Total	315	517	747	802	564
G. Capital Investment <sup>(6)</sup>	234	217	262	193	157
H. Cash Available (E+F-G)	684	792	1,211	1,388	1,055
Annual Work Units of					
Entrepreneurial Labour <sup>(4)</sup>	26,352	27,029	27,377	27,120	27,363
TIFF per AWU (£)	22,355	18,068	25,127	27,492	23,196
Real Terms					
Net Value Added					
at Factor Cost	779	715	822	831	713
TIFF	467	389	524	540	445
Cash Flow	542	631	922	1,005	741
TIFF per AWU (£)	17,724	14,398	19,138	19,906	16,276
Indices 2000 =100					
Net Value Added					
at Factor Cost	132	121	139	140	120
TIFF	194	162	218	224	185
Cash Flow	187	217	317	346	255
TIFF per AWU (£)	226	184	245	254	208
1) Net Value Added at Factor Cost (form		a Nat Duad			

<sup>1)</sup> Net Value Added at Factor Cost (formerly known as Net Product) is a measure of the value added by the agricultural industry to all goods and services from outside agriculture after provision has been made for depreciation.

<sup>(2)</sup> Represents Net Value Added at Factor Cost less Rent and Interest payments and so is equivalent to the total returns to labour inputs.

<sup>(3)</sup> TIFF (Total Income From Farming) represents the return, to all those with an entrepreneurial interest in agricultural production, for their labour, management skills and own capital invested after providing for depreciation.

<sup>(4)</sup> The total volume of labour provided by those with an entrepreneurial interest in terms of full-time equivalents.

<sup>(5)</sup> After adjustments for input and output stock changes due to volume (including breeding livestock). Adjustments are also made to convert the effect of subsidies included within the calculation of TIFF from an accruals to a cash paid basis.

<sup>(6)</sup> The value of work carried out by entrepreneurial labour in the creation of new capital is deducted from the total value of capital investment.

Table A16 Productivity indices, 2008 to 2012<sup>(1)</sup>

	2008	2009	2010	2011	2012 (prov)
Final output (gross output less transactions within the agricultural industry)	104	106	105	108	98
Net value added per AWU of all labour	129	125	117	124	95
Final output per unit of all inputs (including fixed capital and labour)	110	109	106	108	99

<sup>(1)</sup> Indices at basic prices (including direct subsidies on products)

Table B1 FAS summary by farm type: 2011-12

	Measure	Specialist Sheep (LFA)	Specialist Beef (LFA)	Cattle and Sheep (LFA)	Cereal	General Cropping	Dairy	Lowland Cattle and Sheep	Mixed	All Types
Average	Output (£)	61,991	113,503	127,629	191,499	290,422	375,376 342,052	114,890	199,425	177,350
	Subsidy and payments (£)	36,951	52,789	64,246	41,599	44,794	43,424	44,676	52,617	48,354
	Diversified income (£) FBI (£)	6,982	1,286	940 45,159	6,703	3,941	3,456	1,037	2,046	3,333 45,366
	FBI/FTE (£)	25,040	25,567	27,705	41,319	32,699	42,437	17,365	29,059	30,653
	Output: Input ratio	1.40	1.28	1.31	1.26	1.17	1.23	1.18	1.23	1.25
	Off farm income (£)	5,754	9,062	10,765	8,966	9,057	5,717	13,245	9,390	8,736
	Off farm income/FTE (£)	4,795	6,293	6,604	7,471	5,881	3,025	9,198	5,691	5,902
Balance Sheets (All Tenures)	Balance Sheets       Net worth (£) closing valuation (CV)         (All Tenures)       Liabilities as % of assets (CV)	626,856	893,152	969,280	1,748,429	1,923,125	1,609,984	942,392	1,471,531	1,259,820 9.8
Hourly income	Average hourly income (£) Minimum agricultural wage (£) Average hourly income as % of MAW	13.18 6.55 201.2	13.46 6.55 205.4	14.58 6.55 222.6	21.75 6.55 332.0	17.21 6.55 262.8	22.34 6.55 341.0	9.14 6.55 139.5	15.29 6.55 233.5	16.13 6.55 246.3
Quartiles	FBI upper quartile (£) FBI lower quartile (£) Output: Input ratio upper quartile Output: Input ratio lower quartile	94,098 7,548 1.7	81,354 -8,128 1.7	116,130 7,911 1.4	139,860 -2,901 1.5	131,958 -15,316 1.3	211,170 13,516 1.4 1.0	118,126 -10,073 1.3 0.9	97,590 5,240 1.5	116,996 -4,486 1.5 1.0

Full-Time equivalent (FTB) is 1,900 hours.
Off farm Income is only collected for farmers and their spouse as the midpoint of the range in which their income falls. The minimum agricultural wage (MAW) is the weighted average for 2011 calendar year.

Table B2 FAS summary by year: 2007-08 to 2011-12 (2011-12 prices)

	Measure	2007-08	2008-09	2009-10	2010-11	2011-12
Average	Output (£) Input (£) Subsidy and payments (£) Diversified income (£) FBI (£) FBI/FTE (£) FBI without subsidy and payments Output: Input ratio Off farm income1 (£) Off farm income1 (£)	132,782 136,514 47,471 2,762 46,503 32,071 -968 10,454 7,209	149,747 158,131 48,431 3,395 43,440 29,351 -4,991 11,393 7,698	144,806 165,196 53,861 37,431 25,814 -16,430 10,413 7,181	164,544 170,661 51,312 3,234 48,431 32,946 -2,881 1.3 9,633 6,553	177,350 183,671 48,354 3,333 45,366 30,653 -2,988 1.2 8,700 5,878
Balance Sheets (All Tenures)	Balance Sheets         Net worth (£) closing valuation (CV)           (All Tenures)         Liabilities as % of assets (CV)	862,811	924,025	1,292,969	1,269,396	1,259,820

Full-Time equivalent (FTE) is 1,900 hours Off farm Income is only collected for farmers and their spouse as the midpoint of the range in which their income falls.

Table B3: Average cropping and stocking, output, inputs, and Farm Business Income by type of farm: 2011-12

Type of farm	Specialist Sheep (LFA)	Specialist Beef (LFA)	Cattle and Sheep (LFA)	Cereals	General Cropping	Dairy	Lowland Cattle and Sheep	Mixed	All Farm Types
Number of farms in sample	39	116	68	84	58	55	20	62	502
Average size of business (SLR)	3	2	4	2	3	5	2	3	3
Average size of farm (hectares)	668	188	471	160	199	156	137	183	272
Area of cereals (hectares)	0	7	10	100	105	7	9	58	38
Area of potatoes (hectares)	0	0	0	1	21	0	0	1	3
Area of oilseed rape (hectares)	0	0	0	9	10	0	0	2	3
Area of other crops (hectares)	0	0	0	2	13	0	0	1	2
Area of fodder	0	1	3	3	2	9	4	3	3
Area of grass	81	105	125	39	41	121	97	92	86
Number of ewes	527	170	586	16	51	53	248	115	212
Number of suckler cows	5	91	65	7	18	6	63	59	43
Number of dairy cows	0	0	0	0	0	144	0	2	14
Output yield per dairy cow (ltrs)	-	-	-	-	-	6,974	-	-	-
Revenue value pence per litre	-	-	-	-	-	27.08	- 100	-	-
Number of other cattle	9	136	98	42	52	182	120	151	97
Headcount of unpaid labour	1.6	1.9	2.1	1.6	2.2	2.3	2.1	2.2	2.0
Number of unpaid workers	1.2	1.4	1.6	1.2	1.5	1.9	1.4	1.7	1.5
(FTE)									
Average output £ per farm									
Total crop output	1,285	6,827	9,394	143,084	232,275	10,324	9,023	68,569	62,881
Total livestock output	44,243	97,832	109,575	26,581	35,891	358,134	101,013	121,937	101,442
Miscellaneous output	16,463	8,844	8,661	21,834	22,256	6,918	4,854	8,919	13,028
Total average output	61,991	113,503	127,629	191,499	290,422	375,376	114,890	199,425	177,350
Subsidy and Payments	36,951	52,789	64,246	41,599	44,794	43,424	44,676	52,617	48,354
Average inputs - £ per farm									
Crop expenses	4,661	17,053	15,153	53,099	81,593	29,665	17,766	38,628	32,569
Livestock expenses	20,011	39,775	50,602	12,271	18,799	153,855	48,227	55,563	44,700
Other input costs	51,205	73,932	81,901	124,846	188,409	158,532	69,606	111,949	106,402
Total average inputs	75,877	130,760	147,656	190,217	288,800	342,052	135,598	206,140	183,671
Diversification Margin	6,982	1,286	940	6,703	3,941	3,456	1,037	2,046	3,333
of which: Diversification Output	8,046	2,899	4,584	10,053	13,062	5,276	2,737	4,149	6,438
Diversification Input	1,064	1,614	3,644	3,351	9,121	1,820	1,700	2,103	3,105
FARM BUSINESS INCOME (FBI)	30,047	36,817	45,159	49,583	50,357	80,205	25,005	47,948	45,366
FBI per unpaid labour (FTE)	25,040	25,567	27,705	41,319	32,699	42,437	17,365	29,059	30,653
Output:Input ratio (including subsidies)	1.40	1.28	1.31	1.26	1.17	1.23	1.18	1.23	1.25
Output:Input ratio (excluding subsidies)	0.91	0.88	0.87	1.04	1.02	1.11	0.85	0.98	0.98
Off farm income (OFI)	5,754	9,062	10,765	8,966	9,057	5,717	13,245	9,390	8,736
OFI per unpaid labour (FTE)	4,795	6,293	6,604	7,471	5,881	3,025	9,198	5,691	5,902

Full-Time equivalent (FTE) is 1,900 hours.

Off farm income is only collected for farmers and their spouse as the midpoint of the range in which their income falls.

Table B4: Farm business income, outputs and inputs performance bands by quartile: 2011-12

Type of farm	Specia	list Sheep	(LFA)	Specia	alist Beef (	LFA)	Catle a	ind sheep	(LFA)	
Performance band	Lower 25%	Average	Upper 25%	Lower 25%	Average	Upper 25%	Lower 25%	Average	Upper 25%	
Number of farms in sample	10	39	10	29	116	29	17	68	17	
Average size of business (SLR)	2	3	7	2	2	2	3	4	7	
Average size of farm (hectares)	517	668	2,279	173	188	201	543	471	635	1
Area of cereals (hectares)	1	000	2,219	7	7	8	8	10	29	
Area of potatoes (hectares)	0		0	0	0			0	0	
Area of oilseed rape (hectares)	0	0	0	0	0	0	0	0	0	
Area of other crops (hectares)	0	0	0	0	0	0	4	0	0	
Area of fodder	1	0	0	1	1	1	1	3	4	
Area of grass	55	81	117	99	105	114	88	125	241	
Number of ewes	511	527	1,458	137	170	135	562	586	935	
Number of suckler cows	2	5	28	92	91	98	48	65	145	
Number of dairy cows	0	0	0	0	0	0	0	0	0	
Output yield per dairy cow (Itrs)										
Output value pence per litre										
Number of other cattle	8	9	33	137	136	180	59	98	226	
Headcount of unpaid labour	2.0	1.6	2.1	2.2	1.9	1.5	1.8	2.1	2.8	
Number of unpaid labour (FTE)	1.2	1.2	1.5	1.6	1.4	1.3	1.3	1.6	2.2	
Average output £ per farm										
Total crop output	1,211	1,285	806	7,957	6,827	8,203	8,407	9,394	26,299	
Total livestock output	37,048	44,243	110,148	93,395	97,832	131,623	71,917	109,575	235,894	
Miscellaneous output	8,935	16,463	7,039	24,478	8,844	3,925	9,586	8,661	6,664	
Total average output	47,194	61,991	117,993	125,831	113,503	143,750	89,910	127,629	268,856	
Subsidy and Payments	26,494	36,951	109,302	49,320	52,789	58,856	58,229	64,246	126,786	
Average inputs – £ per farm										
Crop expenses	5,369	4,661	4,556	22,803	17,053	17,730	7,472	15,153	34,739	
Livestock expenses	20,665	20,011	51,137	54,003	39,775	36,280	45,995	50,602	99,372	
Other input costs	41,229	51,205	88,546	106,443	73,932	68,135	86,325	81,901	146,812	
Total average inputs	67,263	75,877	144,239	183,249	130,760	122,144	139,792	147,656	280,923	
Diversification Margin	1,122	6,982	11,043	-30	1,286	893	-436	940	1,411	
of which: Diversification Output	2,527	8,046	12,947	1,287	2,899	1,618	5,621	4,584	9,166	
Diversification Input	1,405	1,064	1,904	1,317	1,614	726	6,057	3,644	7,755	
FARM BUSINESS INCOME (FBI)	7,548	30,047	94,098	-8,128	36,817	81,354	7,911	45,159	116,130	
FBI per unpaid labour (FTE)	6,563	25,040	64,451	-5,048	25,567	61,168	6,085	27,705	51,844	
Output:Input ratio (including subsidies)	1.1	1.4	1.7	1.0	1.3	1.7	1.1	1.3	1.4	
Output:Input ratio (excluding subsidies)	0.7	0.9	0.9	0.7	0.9	1.2	0.6	0.9	1.0	
ı										
Off farm income (OFI)	9,923	5,754	8,750	6,429	9,062	11,439	8,163	10,765	11,750	

Full-Time equivalent (FTE) is 1,900 hours.

Off farm Income is only collected for farmers and their spouse as the midpoint of the range in which their income falls.

	Cereals		Gene	ral Croppi	ng		Dairy		Lowland	d Cattle an	d Sheep
Lower	Average	Upper	Lower	Average	Upper	Lower	Average	Upper	Lower	Average	Upper
25%		25%	25%		25%	25%		25%	25%		25%
21	84	21	15	58	15	14	55	14	5	20	5
2	2	2	4	3	4	4	5	7	1	2	9
169	160	189	212	199	221	156	156	237	63	137	558
94 3	100 1	135 0	106 26	105 21	132 18	8	7 0	10 0	6 0	9	10 0
8	9	27	9	10	11	0	0	0	0	0	0
1	2	5	22	13	13	2	0	0	0	0	0
4	3	1	2	2	2	11	9	16	1	4	23
46	39	18	47 65	41	41	118	121	172	45	97	342
30 5	16 7	7 3	65 22	51 18	33 15	17 0	53 6	92 8	173 14	248 63	1,241 176
0	0	0	0	0	0	146	144	227	0	0	0
						6,194	6,974	7,625			
						26.83	27.08	28.14			
40	42	27	65	52	34	162	182	257	31	120	284
1.4 1.0	1.6 1.2	2.0 1.3	2.0 1.6	2.2 1.5	2.8 1.7	2.5 2.2	2.3 1.9	2.6 2.1	2.2 1.4	2.1 1.4	2.2 1.8
1.0	1.2	1.0	1.0	1.0	1.7		1.0	2.1	17	17	1.0
111,861	143,084	249,859	287,154	232,275	279,358	11,838	10,324	17,557	4,527	9,023	12,372
23,238 16,922	26,581 21,834	20,772 99,027	53,191 22,310	35,891 22,256	30,619 161,877	308,358 4,468	358,134 6,918	609,783 7,918	34,400 1,860	101,013 4,854	327,197 16,248
152,021	191,499	<b>369,658</b>	<b>362,655</b>	290,422	471,854	<b>324,664</b>	375,376	<b>635,258</b>	40,787	114,890	355,817
00.440	44 500	50 40 <b>7</b>	40.000	44.704	40.400	00 707	40.404	00.000	40.057	44.070	100 115
38,440	41,599	59,487	43,680	44,794	43,128	30,707	43,424	82,899	19,657	44,676	130,445
45,338	53,099	84,850	112,282	81,593	84,853	26,893	29,665	43,101	8,438	17,766	52,557
13,505	12,271	10,674	36,048	18,799	17,142	150,838	153,855	244,454	17,289	48,227	129,992
138,748	124,846	206,260	276,506	188,409	283,646	164,804	158,532	233,507	43,628	69,606	186,601
197,590	190,217	301,784	424,836	288,800	385,642	342,535	342,052	521,063	69,355	135,598	369,150
4,228	6,703	12,498	3,185	3,941	2,617	680	3,456	14,075	-1,162	1,037	1,014
6,443	10,053	15,237	6,265	13,062	4,859	1,322	5,276	16,229	2,639	2,737	2,209
2,215	3,351	2,739	3,080	9,121	2,242	643	1,820	2,153	3,801	1,700	1,195
-2,901	49,583	139,860	-15,316	50,357	131,958	13,516	80,205	211,170	-10,073	25,005	118,126
-2,872	41,319	109,266	-9,694	32,699	77,168	6,287	42,437	99,608	-7,407	17,365	64,199
1.0	1.3	1.5	1.0	1.2	1.3	1.0	1.2	1.4	0.9	1.2	1.3
0.8	1.0	1.3	0.9	1.0	1.2	0.9	1.1	1.2	0.6	0.9	1.0
13,286	8,966	1,707	17,603	9,057	22,760	6,084	5,717	5,718	11,500	13,245	17,000
13,154	7,471	1,333	11,141	5,881	13,310	2,830	3,025	2,697	8,456	9,198	9,239

Table B4: Farm business income, outputs and inputs performance bands by quartile: 2011-12 (continued)

Type of farm		Mixed		,	All Farm Ty	pes
	Lower	Average	Upper	Lower	Average	Upper
	25%		25%	25%		25%
Number of farms in sample	16	62	16	126	502	126
Average size of business (SLR)	3	3	3	3	3	5
Average size of farm (hectares)	283	183	192	269	272	454
Area of cereals (hectares)  Area of potatoes (hectares)	67 1	58 1	78 1	43 5	38	52 2
Area of polatoes (nectares)  Area of oilseed rape (hectares)	0	2	3	3	3	5
Area of other crops (hectares)	4	1	0	5	2	2
Area of fodder	2	3	3	4	3	4
Area of grass	123	92	96	86	86	127
Number of ewes	62	115	96	188	212	463
Number of suckler cows	80	59	68	46	43	73
Number of dairy cows	0	2	4	20	14	19
Output yield per dairy cow (ltrs)						
Output value pence per litre						
Number of other cattle	142	151	155	97	97	136
Headcount of unpaid labour	1.5	2.2	2.9	1.9	2.0	2.3
Number of unpaid labour (FTE)	1.0	1.7	2.1	1.4	1.5	1.7
Average output £ per farm						
Total crop output	73,109	68,569		81,620	62,881	84,641
Total livestock output	116,921		136,825	101,231	101,442	170,343
Miscellaneous output	10,500	8,919		14,221	13,028	33,343
Total average output	200,530	199,425	235,336	197,071	177,350	288,327
Subsidy and Payments	70,717	52,617	60,957	48,178	48,354	81,915
Average inputs – £ per farm						
Crop expenses	41,712	38,628		43,569	32,569	42,401
Livestock expenses	68,456	55,563		56,869	44,700	66,430
Other input costs	156,996		109,356	150,394	106,402	149,692
Total average inputs	267,164	206,140	201,150	250,832	183,671	258,523
Diversification Margin	1,157	2,046	2,448	1,096	3,333	5,277
of which: Diversification Output	1,962	4,149		3,210	6,438	8,198
Diversification Input	805	2,103	2,990	2,113	3,105	2,921
FARM BUSINESS INCOME (FBI)	5,240	47,948	97,590	-4,486	45,366	116,996
FBI per unpaid labour (FTE)	5,402	29,059		-3,323	30,653	68,021
Output:Input ratio (including subsidies)	1.0	1.2	1.5	1.0	1.2	1.5
Output:Input ratio (excluding subsidies)	0.8	1.0	1.2	0.8	1.0	1.1
Off farm income (OFI)	10,217	9,390		8,875	8,736	9,188
OFI per unpaid labour (FTE)	10,533	5,691	2,268	6,574	5,902	5,342

Full-Time equivalent (FTE) is 1,900 hours.

Off farm Income is only collected for farmers and their spouse as the midpoint of the range in which their income falls.

Table B5: Number of diversified activities and average income in FAS sample (2011-12 prices): 2007-08 to 2011-12

	200	7-08	200	8-09	200	9-10	201	0-11	201	1-12
	Number	Average Income (£)								
All	192	7,644	256	6,781	280	7,240	305	5,865	329	5,225
Processing and retailing of	"	"	6	402	7	3,098	11	290	7	4,151
farm produce										
Recreation	19	1,608	22	1,269	20	1,388	19	2,180	19	1,120
Renting out buildings - not	110	7,214	154	6,462	170	6,053	173	5,954	162	6,393
including tourist accommodation										
Tourist Accomodation and	14	2,458	21	3,055	18	3,388	16	1,275	16	4,159
Catering										
Mobile Phone Masts	15	7,661	16	6,390	20	6,886	23	6,706	25	6,219
Wind Turbines	ш	"	6	9,852	11	32,445	28	4,789	29	2,139
Micro Electric Generation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12	-3,975
Other Miscellaneous receipts	6	13,976	11	14,192	20	14,406	28	5,711	47	923

<sup>&</sup>quot; cell values have been suppressed due to small sample sizes.

Micro Electric Generation was not recorded as a separate category until 2011-12.

Table B6: Percentage distribution of income from diversified activities (sample farms with diversified activities): 2007-08 to 2011-12

	2007-08	2008-09	2009-10	2010-11	2011-12
£0 or less	6.8	12.1	12.5	19.7	22.8
up to £2,500	32.3	25.4	28.2	25.6	25.2
up to £5,000	26.6	26.6	20.4	19.7	18.5
up to £7,500	9.9	12.9	11.1	10.8	11.9
up to £10,000	7.8	7.8	11.4	9.8	6.4
more than £10,000	16.7	15.2	16.4	14.4	15.2
Total number of activities	192	256	280	305	329

Table B7: Diversified activity and incomes (matched sample) at 2011-12 prices: 2007-08 to 2011-12

	2007-08	2008-09	2009-10	2010-11	2011-12
Total number of farms in matched sample	392	392	392	392	392
Percentage of farms engaged in diversified activity	32%	41%	45%	46%	46%
		4170	45%		
Average number of diversified activities on farms with any diversified activity	1.3	1.3	1.3	1.4	1.4
Average diversified income of farms with diversified activity	£8,984	£7,373	£7,904	£8,043	£8,315
Average diversified income of farms with diversified activity (% of FBI)	13%	11%	12%	12%	13%
Average FBI of farms with diversified activity	£70,899	£67,946	£64,881	£67,115	£66,094
Average FBI of farms without diversified activity	£54,665	£51,500	£52,025	£44,836	£41,447

Table B8: Percentage distribution of farms according to farm business incomes: 2011-12

				Farm Busi	ness Incom	e in 2011-12	2		
Type of farm	Less than £0	£0 to £4,999	£5,000 to £9,999	£10,000 to £19,999	£20,000 to £29,999	£30,000 to £39,999	£40,000 to £49,999	£50,000 to £99,999	£100,000 and over
Specialist Sheep (LFA)	3.2	2.4	1.4	28.7	26.1	25.4	2.1	6.4	4.3
Specialist Beef (LFA)	8.4	7.9	6.5	16.8	12.2	11.9	6.2	24.4	5.5
Cattle and Sheep (LFA)	9.4	3.1	1.9	17.6	15.5	6.1	13.8	24.8	7.8
Cereals	12.5	3.8	4.8	16.6	7.7	10.2	3.1	26.2	15.1
General cropping	7.1	3.1	0.0	3.2	14.9	18.9	12.3	22.9	17.6
Dairy	3.0	1.5	3.0	5.3	4.5	15.3	12.0	34.7	20.8
Lowland cattle and sheep	33.9	0.0	6.8	15.9	9.1	2.3	13.6	11.5	6.9
Mixed	8.4	2.0	8.1	13.8	11.1	6.2	9.3	30.2	10.8
All farm types	9	4	4	15	13	13	8	23	11

Table B9: Percentage distribution of farms according to farm business incomes per unpaid labour (FTE), relative to the minimum agricultural wage (MAW): 2011-12

		Fa	rm Business I	ncome in 2011	I-12	
Type of farm	<£0	0£≤ WAW>	≥MAW <2 x MAW	≥2 x MAW <5 x MAW	>5 x MAW <10 x MAW	≥10 x MAW
Specialist sheep (LFA)	7.7	12.8	41.0	20.5	15.4	2.6
Specialist beef (LFA)	7.8	19.0	25.9	35.3	9.5	2.6
Cattle and sheep (LFA)	7.4	11.8	26.5	45.6	7.4	1.5
Cereals	10.7	13.1	9.5	35.7	20.2	10.7
General cropping	8.6	10.3	19.0	39.7	19.0	3.5
Dairy	3.6	14.6	12.7	43.6	16.4	9.1
Lowground cattle and sheep	25.0	15.0	25.0	25.0	10.0	0.0
Mixed	9.7	17.7	19.4	46.8	6.5	0.0
All farm types	8.8	14.7	21.3	38.1	13.0	4.2

Minimum Agricultural Wage is £6.55 per hour (weighted average for 2011 calendar year)

 $<sup>\</sup>geq$  greater than or equal to

<sup>&</sup>lt; less than

Table B10: Sources and levels of non-farming income (2011-12 prices): 2007-08 to 2011-12

Farm type	Sample year	Number of farms in sample (OFI)	FBI per unpaid labour (FTE)	OFI (farmer and spouse)	OFI per unpaid labour (FTE)	% of OFI from employment and/or self employment	% of OFI from investments, pensions and other
Specialist Sheep LFA	2007-08	31	16,928	11,476	10,156	45	55
	2008-09	37	14,996	13,495	11,246	65	35
	2009-10	41	26,733	8,549	7,184	80	20
	2010-11	41	24,051	6,806	5,401	75	25
	<b>2011-12</b>	39	<b>25,039</b>	<b>5,800</b>	<b>4,833</b>	<b>85</b>	<b>15</b>
Specialist Beef (LFA)	2007-08	105	18,696	9,886	6,913	40	60
	2008-09	106	20,681	11,947	8,296	50	50
	2009-10	114	29,661	11,399	8,142	50	50
	2010-11	114	24,187	9,947	7,005	55	45
	<b>2011-12</b>	<b>116</b>	<b>25,567</b>	<b>9,100</b>	<b>6,319</b>	<b>55</b>	<b>45</b>
Cattle and Sheep (LFA)	2007-08	63	21,863	13,522	9,870	55	45
	2008-09	65	20,992	11,504	7,826	65	35
	2009-10	61	32,549	12,605	8,403	70	30
	2010-11	61	29,595	12,774	8,631	75	25
	<b>2011-12</b>	<b>68</b>	<b>27,705</b>	<b>10,800</b>	<b>6,626</b>	<b>80</b>	<b>20</b>
Cereals	2007-08	58	58,506	12,044	9,410	25	75
	2008-09	78	36,712	12,610	10,008	50	50
	2009-10	77	14,761	11,399	9,421	45	55
	2010-11	77	44,272	10,680	8,754	45	55
	<b>2011-12</b>	<b>84</b>	<b>41,319</b>	<b>9,000</b>	<b>7,500</b>	50	<b>50</b>
General Cropping	2007-08	36	58,663	7,499	5,137	40	60
	2008-09	54	45,184	9,292	6,236	30	70
	2009-10	54	14,125	7,782	5,442	35	65
	2010-11	54	49,252	7,957	5,305	40	60
	<b>2011-12</b>	58	<b>32,699</b>	<b>9,100</b>	<b>5,909</b>	<b>30</b>	<b>70</b>
Dairy	2007-08	58	38,206	7,727	3,733	40	60
	2008-09	55	41,125	7,964	3,775	65	35
	2009-10	51	32,579	6,028	3,045	60	40
	2010-11	51	38,958	5,759	2,953	55	45
	<b>2011-12</b>	<b>55</b>	<b>42,437</b>	<b>5,700</b>	<b>3,016</b>	<b>60</b>	<b>40</b>
Lowland Cattle and Sheep	2007-08	12	17,993	14,203	11,363	55	45
	2008-09	16	20,239	15,044	11,484	70	30
	2009-10	17	26,083	18,853	13,965	90	10
	2010-11	17	22,412	19,161	13,214	95	5
	<b>2011-12</b>	<b>20</b>	<b>17,365</b>	<b>13,200</b>	<b>9,167</b>	<b>85</b>	<b>15</b>
Mixed	2007-08	63	26,481	10,113	6,281	35	65
	2008-09	67	31,330	10,840	6,775	55	45
	2009-10	69	26,518	11,290	6,884	50	50
	2010-11	69	30,250	9,423	5,746	55	45
	<b>2011-12</b>	<b>62</b>	<b>29,059</b>	<b>9,400</b>	<b>5,697</b>	<b>65</b>	<b>35</b>
All Types	2007-08	426	32,071	10,454	7,209	40	60
	2008-09	478	29,351	11,393	7,698	55	45
	2009-10	486	25,814	10,413	7,181	60	40
	2010-11	486	32,946	9,633	6,553	60	40
	<b>2011-12</b>	<b>502</b>	<b>30,653</b>	<b>8,700</b>	<b>5,878</b>	<b>60</b>	<b>40</b>

Off farm Income is only collected for farmers and their spouse as the midpoint of the range in which their income falls.

OFI per unpaid labour FTE shows what finance is available to the farmer and their spouse that could supplement FBI per unpaid labour, it does not necessarily used for this purpose.

Table B11: Average opening and closing balance sheets by tenure and type of farm: 2011-12

Tenure of farm	Type of farm	Specialis	-	•	ist beef FA)		nd sheep FA)	Cer	eals	
							Valuation	ı (£/farm)		
		Opening	Closing	Opening		Opening			Closing	
Owner-occupied	Sample Size	22		5	52		25		4	
farms	Total assets	934,252	982,321	1,127,842	1,169,982	1,444,561	1,538,000	2,257,354	2,324,270	
	Total external liabilities	41,666	43,359	123,601	133,140	139,511	153,875	105,046	123,996	
	Net worth	892,586	938,962	1,004,241	1,036,841	1,305,049	1,384,125	2,152,309	2,200,274	
	Liabilities as a percentage	4.5	4.4	11.0	11.4	9.7	10.0	4.7	5.3	
	of assets									
Tenanted	Sample Size	8	3	3	0	2	0	1	2	
farms	Total assets	264,259	263,070	376,754	381,118	334,558	351,982	271,365	290,502	
	Total external liabilities	19,394	29,032	48,386	45,841	55,992	52,330	60,679	67,748	
	Net worth	244,865	234,038	328,368	335,277	278,567	299,652	210,685	222,754	
	Liabilities as a percentage	7.3	11.0	12.8	12.0	16.7	14.9	22.4	23.3	
	of assets									
Mixed tenure	Sample Size	9	)	34		23		35		
farms	Total assets	877,052	1,053,668	1,102,949	1,151,247	1,162,544	1,207,784	1,653,665	1,703,674	
	Total external liabilities	215,603	355,896	91,862	107,476	96,809	106,839	171,797	164,907	
	Net worth	661,449	697,772	1,011,087	1,043,771	1,065,735	1,100,944	1,481,868	1,538,767	
	Liabilities as a percentage	24.6	33.8	8.3	9.3	8.3	8.8	10.4	9.7	
	of assets									
All Tenures	Sample Size	3	9	11	6	6	8	8	1	
	Total assets	663,509	711,656	969,300	1,004,546	1,021,293	1,080,789	1,811,457	1,867,336	
	Total external liabilities	59,135	84,800	103,461	111,394	103,977	111,509	105,513	118,907	
	Net worth	604,374	626,856	865,838	893,152	917,317	969,280	1,705,944	1,748,429	
	Liabilities as a percentage	8.9	11.9	10.7	11.1	10.2	10.3	5.8	6.4	
	of assets									

<sup>&</sup>quot; Cell values have been suppressed due to small sample sizes.

General o	cropping	Da	iry	Low cattle an		Mix	red	All farm types		
Valuation	(£/farm)	Valuation	(£/farm)	Valuation		Valuation	(£/farm)		n (£/farm)	
Opening	Closing	Opening		Opening	Closing	Opening	Closing	Opening	Closing	
2	4	2	5	"	ı	3-	ı	22	20	
2,284,629	2,399,098	1,885,649	1,987,510	"	п	1,841,998	1,899,688	1,639,496	1,709,565	
154,902	168,221	259,421	264,476	"	п	146,372	152,916	138,018	147,870	
2,129,727	2,230,877	1,626,228	1,723,035	ıı ı	ıı	1,695,626	1,746,772	1,501,477	1,561,695	
6.8	7.0	13.8	13.3	ıı .	п	7.9	8.0	8.4	8.6	
1	0	(	6	ıı	ı	10	3	10	3	
475,230	501,449	551,328	623,417	" "		459,265	472,707	383,001	399,157	
72,149	59,881	137,392	180,118	"	II .	67,883	65,900	55,319	58,057	
403,082	441,567	413,936	443,298	ıı ı	II	391,383	406,808	327,682	341,100	
15.2 11.9 24.9 28.9		ıı .	п	14.8	13.9	14.4	14.5			
1	7	23		ı	l	18	3	16	6	
2,718,153	2,775,459	2,316,132	2,395,961	"	II .	1,784,293	1,899,166	1,541,793	1,618,221	
273,211	268,549	257,156	278,301	"	II .	290,867	347,278	181,696	212,111	
2,444,942	2,506,910	2,058,975	2,117,660	п	II.	1,493,425	1,551,888	1,360,097	1,406,110	
10.1	9.7	11.1	11.6	II .	п	16.3	18.3	11.8	13.1	
5	1	5	4	18	В	62	2	48	9	
1,993,963	2,083,836	1,770,473	1,865,280	1,030,316	1,080,764	1,581,167	1,640,059	1,337,817	1,396,475	
154,711	160,712	242,987	255,296	139,172	138,372	155,469	168,528	125,443	136,655	
1,839,252	1,923,125	1,527,485	1,609,984	891,144	942,392	1,425,699	1,471,531	1,212,374	1,259,820	
7.8	7.7	13.7	13.7	13.5	12.8	9.8	10.3	9.4	9.8	

Table B12 Enterprise performance summary table: 2010-11 and 2011-12

Enterprise		Enterprise	Enterprise Gross Margin	u	Overall E	Overall Enterprise Gross Margin	s Margin		Output: Input Ratio	atio
	2010-11 Average¹	Lower 25%	2011-12 Average	011-12 Average   Upper 25%	Lower 25%	2011-12 Average	Upper 25%	Lower 25%	2011-12 Average	11-12 Average Upper 25%
	Crop EGM (£ hectare)	Cattle	Cattle EGM (£ head)	ad)	Crop	Crop Overall EGM (£)	(3) 1		Crop	
Winter Wheat	1,068	287	206	1,198	24,500	42,505	54,132	2.0	2.8	3.3
Winter Barley	611	=	969	988	=	15,328	14,736	=	2.6	3.8
Spring Barley	652	412	681	953	12,405	31,064	64,139	2.2	3.0	3.7
Mixed Barley Winter Oil Seed Rape	739	847	1,150	1,006	21,244	33,124	42,942	2.7	3.4	5.4 4.2
Winter Oats	685	=	753	=	=	22,154	=	=	3.5	=
Spring Oats Ware Potatoes	598 4,270	261	612 3,391	696	2,086	10,549 117,356	9,091	1.7	3.1	4.7
	Cattle EGM									
	(£ head)	Crop	Crop EGM (£ hectare)	are)	Cattl	Cattle Overall EGM (£)	M (£)		Cattle	
Dairy Cows	923	613	983	1,284	140,783	178,241	251,732	1.7	2.0	2.3
Dairy Followers	646	=	449	=	=	46,951	=	=	1.7	=
Dairy Mixed & Dairy Beef (combined)	300	135	366	731	11,072	37,313	92,812	1.2	1.7	2.9
Beef: Hill Herds	75	-175	163	=	-6,364	8,642	=	0.7	1.4	=
Beef: Upland suckler selling weaning		=	383	=	=	25,010	=	=	2.1	=
Beef: Upland suckler selling yearling stores		101	307	519	8,177	26,569	48,825	1.2	6. i	2.5
Beet: Lowland suckler/herds	227	149	333	532	11,620	25,631	35,450	E. C	7. ,	2.5
Beet: Forward stores	97	21-	20L	270	-863	019,7	16,655	n.0	4	
Beef: Mixed Beef: Finishing	96	-103	158	358	-3,116	19,847	32,129	6.0 6.0	<u>+</u> +.	- <del>1</del> 8.
	Sheep EGM									
	(£ head)	Shee	Sheep EGM (£ head)	ad)	Shee	Sheep Overall EGM (£)	M (£)		Sheep	
Sheep: Extensive/hardhill	19	-	26	89	420	20,331	46,250	1.0	1.9	2.9
Sheep: Crossbred Ewe Production	74	=	64	=	=	64,167	=	=	2.5	=
Sheep: Finished/store lamb production	48	21	22	85	9,606	26,921	28,310	1.4	2.2	2.9
Sheep: Lowland (non LFA)	55	13	52	06	1,922	16,180	17,204	1.2	1.8	2.7
Sheep: Store Lamb finishing (short keep)	13	=	18	=	=	2,765	=	=	3.3	=
Sheep: Store Lamb finishing (long keep)	21	2	16	30	592	5,291	10,915	<del></del>	2.3	3.6

Performance categories are based on distributions of gross margin results. " removed due to low sample size.  $1\ {\rm At}\ 2011-12\ {\rm prices}$ 

Table C1 Number of holdings by regional grouping, region and farm type, June 2012

Holdings

	Cereals	General cropping	Horticulture	Specialist pigs	Specialist poultry	Dairy	Cattle & sheep (LFA)	Cattle & sheep (Lowland)	Mixed	Specialist grass & forage	Other	Total
					0.10			101		0.000	=00	
North West:	550	491	551	96	612	79 *	7,313	101	507	9,882	568	20,750
Shetland	7	16	30		53		1,153	0	37	536	15	1,856
Orkney	141	42	24	18	101	24	658	0	64	891	49	2,012
Eileanan an Iar	56	182	182	*	117	7	2,363	*	105	3,312	132	6,480
Highland	346	251	315	54	341	*	3,139	*	301	5,143	372	10,402
North East:	1,542	404	151	64	456	46	1,024	644	809	3,400	366	8,906
NE Scotland	1,542	404	151	64	456	46	1,024	644	809	3,400	366	8,906
South East:	1,250	1,233	221	81	479	77	1,209	630	507	3,211	335	9,233
Tayside	388	802	105	17	161	14	390	221	203	1,246	132	3,679
Fife	244	198	49	19	103	23	52	149	90	537	66	1,530
Lothian	298	105	37	17	77	25	150	123	66	568	66	1,532
Scottish Borders	320	128	30	28	138	15	617	137	148	860	71	2,492
South West:	542	135	245	83	651	961	4,000	539	367	5,749	464	13,736
East Central	151	23	15	7	83	35	310	112	63	686	55	1,540
Argyll & Bute	15	15	52	7	78	63	859	7	34	802	48	1,980
Clyde Valley	131	26	79	13	148	194	826	97	61	1.528	158	3,261
Ayrshire	103	29	40	16	141	281	693	132	77	1,222	101	2,835
Dumfries	142	42	59	40	201	388	1,312	191	132	1,511	102	4,120
& Galloway	2	"-					1,012	.01	102	1,011	102	1,120
Scotland	3,884	2,263	1,168	324	2,198	1,163	13,546	1,914	2,190	22,242	1,733	52,625

Table C2 Crops, grass and rough grazings for each United Kingdom country, June 2012

	Scotland	England	Wales	Northern Ireland	United Kingdom
Number of holdings <sup>(1)</sup>	52,625	103,804	41,277	24,285	221,991
Crops, fallow and set-aside:	hectares	hectares	hectares	hectares	hectares
Wheat	100,637	1,856,229	25,614	9,395	1,991,875
Triticale	554	12,559	nc	57	13,169
Barley: Winter	42,816	328,796	7,731	5,323	384,666
Spring	289,222	293,991	14,094	20,211	617,518
Total	332,039	622,787	21,825	25,533	1,002,184
Oats (including mixed grain)(2)	24,480	95,870	4,230	1,879	126,459
Rape for oilseed (including flax <sup>(3)</sup> and linseed)	36,611	740,459	5,628	813	783,511
Potatoes	29,536	112,150	2,935	4,150	148,771
Peas for combining	682	23,511	na	nc	24,193
Beans for combining <sup>(4)</sup>	3,789	91,189	895	nc	95,873
Maize	1,913	143,066	10,802	1,937	157,718
Turnips, swedes and beet for stockfeeding	4,934	19,053	na	446	24,434
Other crops for stockfeeding <sup>(5)(6)</sup>	12,976	19,637	8,737	4,207	45,556
Vegetables for human consumption	15,430	106,340	437	1,260	123,467
Orchard and soft fruit	877	30,339	773	1,531	33,521
Bulbs, other flowers and nursery stock	1,174	10,748	281	116	12,319
All other crops	7,764	152,070	2,971	1,695	164,499
Fallow land	15,478	136,106	609	1,196	153,388
Total crops and fallow	588,873	4,172,113	85,737	54,215	4,900,938
Grass:					
Under 5 years	428,538	656,213	138,001	133,862	1,356,614
5 years and over	896,649	3,207,517	1,049,087	645,962	5,799,215
Total grass	1,325,187	3,863,730	1,187,088	779,824	7,155,829
Total crops, fallow and grass	1,914,059	8,035,843	1,272,825	834,039	12,056,767
Rough grazing:					
Sole right grazing	3,080,483	483,370	222,972	138,842	3,925,667
Common grazing <sup>(7)</sup>	583,686	398,947	180,305	36,845	1,199,782
Total rough grazing	3,664,168	882,317	403,277	175,687	5,125,449
Total crops, fallow, grass and rough grazing	5,578,228	8,918,160	1,676,102	1,009,726	17,182,216
Woodland	445,425	308,375	62,616	11,043	827,460
Other land	164,147	157,547	10,201	7,058	338,953
Total agricultural area <sup>(7)</sup>	6,187,800	9,384,082	1,748,919	1,027,827	18,348,628
Total land area®	7,880,780	13,043,220	2,078,008	1,412,972	24,414,981
% land agricultural	79%	72%	84%	73%	75%

<sup>(1)</sup> Refers only to holdings actively engaged in agriculture but non-commercial holdings in England.

<sup>(2)</sup> Includes rye for England and Wales and triticale for Wales.

<sup>(3)</sup> Flax not collected for Scotland in 2012.

<sup>(4)</sup> Wales figures includes peas for combining

<sup>(5)</sup> Includes lupins.

<sup>(6)</sup> Wales figures includes turnip swedes and beet for stock feeding

<sup>(7)</sup> Inclusion of common grazing land brings total agricultural area in Scotland to a higher level than that published in the June agricultural census publication.

<sup>(8)</sup> As at December 2010. Data source: UK Standard Area Measurements (SAM), published by Office for National Statistics, May 2011.

na Information not available.

nc Information not collected.

Table C3 Agricultural area by Less Favoured Area category, June 2012

	LFA <sup>(1)</sup>	Non-LFA	Total
Number of holdings	36,279	16,346	52,625
Crops, fallow and set-aside:	hectares	hectares	hectares
Wheat	7,182	93,455	100,637
Triticale	113	440	554
Barley: Winter	4,857	37,960	42,816
Spring	75,619	213,603	289,222
Total	80,476	251,563	332,039
Oats (including mixed grain)	6,802	17,678	24,480
Rape for oilseed (including linseed)	1,749	34,861	36,611
Potatoes	1,973	27,563	29,536
Peas for combining	77	605	682
Beans for combining	370	3,419	3,789
Turnips, swedes and beet for stockfeeding	2,600	2,335	4,934
Other crops for stockfeeding <sup>(2)</sup>	10,852	4,037	14,889
Vegetables for human consumption	728	14,702	15,430
Orchard and soft fruit	93	784	877
Bulbs, flowers and nursery stock	281	893	1,174
All other crops	3,542	4,221	7,764
Fallow land: 5 years or less	3,188	8,118	11,306
more than 5 years	3,045	1,127	4,171
Total crops and fallow	123,073	465,800	588,873
Grass:			
Under 5 years	276,142	152,395	428,538
5 years and over	772,395	124,254	896,649
Total grass	1,048,537	276,649	1,325,187
Total crops, fallow and grass	1,171,610	742,449	1,914,059
Rough grazing:			
Sole right grazing	3,046,391	34,091	3,080,483
Common grazing	583,686	0	583,686
Total rough grazing	3,630,077	34,091	3,664,168
Total crops, fallow, grass and rough grazing	4,801,687	776,541	5,578,228
Woodland	390,530	54,895	445,425
Other land	146,869	17,278	164,147
Total agricultural area	5,339,086	848,714	6,187,800

<sup>(1)</sup> A holding is classified as LFA if 50% or more of its land is assessed as being disadvantaged or severely disadvantaged for subsidy purposes.

<sup>(2)</sup> Includes lupins and maize.
\* data suppressed to prevent disclosure of individual holdings.

Table C4 Number of holdings with crops and grass and area of crops and grass by regional grouping and region, June 2012

	North V			West		Nor	th East		South Ea	ast
	Total	Shetland	Orkney	Eileanan an Iar	Highland	Total	Grampian	Total	Tayside	Fife
Crops and fallow:	holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings
Wheat	120	*	*	*	110	563	563	1,616	603	316
Triticale	*	*	*	0	*	8	8	21	10	0
Barley: Winter	68	0	14		54	601	601	829	272	166
Spring	1,140	*	464	*	647	2,858	2,858	2,688	1,311	464
Total	1,150	*	468	*	653	2,930	2,930	2,829	1,330	494
Oats (including mixed grain)	428	24	29	138	237	325	325	529	192	125
Rape for oilseed and linseed	*	*	0	*	*	450	450	718	281	106
Potatoes	856	62	121	293	380	512	512	1,313	841	217
Peas and beans for combining	14	0	0	7	7	19	19	216	49	54
Turnips, swedes and beet for stockfeeding	404	36	44	32	292	510	510	255	116	45
Other crops for stockfeeding <sup>(1)</sup>	409	69	128	32	180	303	303	487	200	45
Vegetables for human consumption	604	48	44	216	296	253	253	805	478	148
Orchard and soft fruit	198	*	*	46	143	75	75	158	93	25
Bulbs, flowers and nursery stock	47	*	*	14	27	39	39	72	46	10
•		20	150	55	l .	672	672	879	325	132
All other crops	551		150		326	l	l			
Fallow land: 5 years or less	590	14	36	149	391	1,006	1,006	1,011	465	216
more than 5 years	516	14 <b>206</b>	46 <b>673</b>	176 <b>741</b>	280	256	256	225	104	48 <b>655</b>
Total crops and fallow	3,421	206	6/3	/41	1,801	3,756	3,756	3,856	1,722	000
Grass and rough grazing:										
Grass under 5 years old	5,336	257	931	1,372	2,776	5,120	5,120	4,286	1,775	698
Grass 5 years old and over	13,854	1,420	1,477	4,272	6,685	5,975	5,975	6,592	2,450	1,043
Sole right grazing	10,267	1,274	926	2,559	5,508	3,332	3,332	3,043	1,212	504
Common grazing	1,039	160	20	311	548	6	6	0	0	0
Total grass and rough grazing	20,988	2,004	1,950	6,614	10,420	8,261	8,261	8,319	3,249	1,368
Woodland	2,231	54	56	149	1,972	2,427	2,427	2,922	945	424
Other land	5,509	703	791	744	3,271	3,970	3,970	4,094	1,595	650
Total agricultural area	21,758	2,016	2,032	6,787	10,923	8,911	8,911	9,230	3,676	1,530
Crops and fallow:	h t	<i>t</i> t	<i>t</i> t		h t	<i>tt</i>	h t	h t	<i>tt</i>	/ <i>t</i>
Wheat	hectares 3,627	hectares *	hectares *	hectares *	hectares 3,596	hectares 16,352	hectares 16,352	hectares 74,977	hectares 21,733	
Triticale	*	*	*	0	*	10,332	10,332	188	73	0
Barley: Winter	1,023	0	25		998	18,360	18,360	20,939	5,934	3,824
•	27,761	*	4,262	*	23,401	112,411	112,411	115,448	58,302	· ′
Spring Total	28,784	*	4,286	*	24,399	130,771		136,387	64,235	24,130
Oats (including mixed grain)	2,736	25	108	286	2,318	4,342	130,771 4,342	13,657	4,822	3,600
Rape for oilseed and linseed	2,730	× 25	0	200 *	2,310	12,708	12,708	21,653	7,151	2,796
•	1 506	10		0.0	1 111	ı	1		1	
Potatoes	1,506	18	38	36	1,414	5,618	5,618	21,751	14,147	3,173
Peas and beans for combining	82	0	0	0	81	205	205	3,654	707	723
Turnips, swedes and beet for stockfeeding	876	12	55	10	799	1,934	1,934	1,399	624	226
Other crops for stockfeeding <sup>(1)</sup>	1,567	73	639	40	816	1,975	1,975	4,677	1,532	316
Vegetables for human consumption	379	6	14	19	340	1,991	1,991	12,847	7,772	2,380
Orchard and soft fruit	42	*	*	5	37	66	66	721	636	63
Bulbs, flowers and nursery stock	34		100	2	31	402	402	599	546	11
All other crops	1,083	13	192	17	861	1,877	1,877	3,292	1,454	442
Fallow land: 5 years or less	1,634	18	112	257	1,248	3,355	3,355	4,703	2,270	1,099
more than 5 years  Total crops and fallow	2,572 <b>46,481</b>	6 <b>269</b>	165 <b>5,641</b>	140 <b>813</b>	2,261 <b>39,758</b>	597	597	601 <b>301,107</b>	195 <b>127,896</b>	54 52 684
iotai Giopa and Iallow	<del>-10,40</del> 1	209	3,041	613	39,130	182,295	182,295	301,107	121,090	52,684
Grass and rough grazing:										
Grass under 5 years old	63,159	1,028	19,969	1,836	40,326	129,329	129,329	105,751	35,244	
Grass 5 years old and over	185,331	25,580	30,888	24,930	103,934	76,206	76,206	194,678	67,676	
Sole right grazing	1,565,821	55,564	32,620	61,877	1,415,761	213,697	213,697	527,483	343,690	4,906
Common grazing <sup>(2)</sup>	568,380	65,877	2,278	215,993	284,232	5,028	5,028	0	0	0
Total grass and rough grazing	2,382,691	148,048	85,755	304,635	1,844,252	424,261	424,261	827,911	446,610	36,217
Woodland	168,381	37	79	594	167,671	63,221	63,221	81,800	37,678	4,830
Other land	77,340	1,358	1,006	775	74,201	21,394	21,394	18,776	10,056	1,783
Total agricultural area	2,674,893	149,713	92,481	306,817	2,125,882	691,170		1,229,594		95,513

<sup>(1)</sup> See Table C3, note 2.
(2) See Table C2, note 7.
\* data suppressed to prevent disclosure of individual holdings.

South East South West									
	Scottish		East	Argyll &	Clyde		Dumfries		
Lothian	Borders	Total	Central	Bute	Valley	Ayrshire	& Galloway	Scotland	
holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings	Crops and fallow:
306	391	327	*	*	51	63	163	2,626	Wheat
*	*	22	*	*	6	*	11	54	Triticale
133	258	186	19	0	30	28	109	1,684	Barley: Winter
401	512	1,528	204	96	343	341	544	8,214	Spring
420	585	1,569	209	96	352	344	568	8,478	Total
37	175	233	98	8	38	12	77	1,515	Oats (including mixed grain)
137	194	37	16	0	01	^	14	1,279	Rape for oilseed and linseed
116 39	139 74	127 38	11 25	22 0	21	32	41 *	2,808 287	Potatoes  Peas and beans for combining
19	75	130	13	12	24	40	41	1,299	Turnips, swedes and beet for stockfeeding
49	193	598	29	49	101	90	329	1,797	Other crops for stockfeeding <sup>(1)</sup>
89	90	156	12	39	32	31	42	1,818	Vegetables for human consumption
16	24	96	5	14	41	13	23	527	Orchard and soft fruit
*	*	43	*	12	*	8	10	201	Bulbs, flowers and nursery stock
141	281	447	61	*	107	75	*	2,549	All other crops
179	151	306	54	25	102	55	70	2,913	Fallow land: 5 years or less
38	35	211	20	23	78	46	44	1,208	more than 5 years
593	886	2,728	332	232	631	531	1,002	13,761	Total crops and fallow
									Grass and rough grazing:
670	1,143	4,684	585	391	*	*	1,664	19,426	Grass under 5 years old
1,070	2,029	10,702	1,127	1,420	2,493	2,269	3,393	37,123	Grass 5 years old and over
412	915 0	5,521 68	509 0	1,273 59	1,139	987	1,613 0	22,163	Sole right grazing
0 <b>1,351</b>	2,351	13,154	1,439	1, <b>979</b>	3,057	2,709	3,970	1,113 <b>50,722</b>	Common grazing  Total grass and rough grazing
1,351	2,351	13,154	1,439	1,979	3,057	2,709	3,970	50,722	lotal grass and rough grazing
474	1,079	3,731	473	489	3,055	2,702	1,239	11,311	Woodland
647	1,202	6,160	680	1,021	833	688	1,956	19,733	Other land
1,532	2,492	13,800	1,540	2,039	3,263	2,839	4,119	53,699	Total agricultural area
hectares	hectares	hectares	hectares	hectares	hectares	hectares	hectares	hectares	Crops and fallow:
17,165	22,408	5,682	*	*	822	865	2,996	100,637	Wheat
*	*	256	*	*	88	*	135	554	Triticale
3,488	7,693	2,495	267	0	304	211	1,713	42,816	Barley: Winter
17,326	19,514	33,603	6,942	1,607	7,088	6,797	11,169	289,222	Spring
20,815	27,207	36,097	7,209	1,607	7,392	7,008	12,882	332,039	Total
671	4,564	3,745	2,199	25	529	54	938	24,480	Oats (including mixed grain)
4,262	7,444	694	305	0	*	*	300	36,611	Rape for oilseed and linseed
1,990	2,442	661	46	12	33	292	279	29,536	Potatoes
749	1,475	530	289	0	*	*	*	4,471	Peas and beans for combining
99	451	726	82	52	119	242	231	4,934	Turnips, swedes and beet for stockfeeding
714	2,116	6,669	152	398	798	878	4,443	14,889	Other crops for stockfeeding <sup>(1)</sup>
1,264	1,431	215	63	6	69	47	29	15,430	Vegetables for human consumption
12	10	48	2	3	32	2	9	877	Orchard and soft fruit
400	050	139	075	21	400	10	91	1,174	Bulbs, flowers and nursery stock
438 656	958 678	1,512 1,615	275 405	45	482 728	184 140	297	7,764 11,306	All other crops Fallow land: 5 years or less
227	125	402	403 77	24	211	58	33	4,172	more than 5 years
49,119	71,408	58,990	12,077	2,292	11,456	9,864	23,301	588,873	Total crops and fallow
ŕ		,	·	Í	,	,	,	ĺ	-
10.470	40.000	120.000	14.550	0.604	*	*	E0 00E	400 500	Grass and rough grazing:
13,472	42,806	130,299	14,552	8,631	77 900	00 040	59,085	428,538	Grass 5 years old and over
25,084 30,903	84,836 147,984	440,434 773,482	36,370 104,941	59,182 340,436	77,820 76,955	98,240	168,822 161,254	896,649 3,080,483	Grass 5 years old and over Sole right grazing
30,903	147,984	773,482 10,278	104,941 0	8,939	* to,900	89,896 *	161,254 0	583,686	Sole right grazing  Common grazing <sup>(2)</sup>
69,459		1,354,493	155,863	417,189	154,775	188,135		4,989,355	Total grass and rough grazing
9,281	30,012	132,023	16,112	47,050	16,229	16,509	36,123	445,425	Woodland
2,845	4,092	46,637	5,471	18,903	5,940	6,038	10,286	164,147	Other land
130,704	381,138	1,592,143	189,522	485,433	188,401	220,546	458,871	6,187,800	Total agricultural area

Table C5 Number of holdings and area by regional grouping, region and size of holding, June 2012<sup>(1)</sup>

	0-<2	2-<5	5-<10 hectares	10-<20 hectares	20-<50 hectares	50-<100 hectares	100-<200 hectares	200 +	Total
N - utla M/a -t	holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings	holdings
North West	5,250	5,321	3,074	2,410	2,005	993	688	1,009	20,750
Shetland	165	300	323	331	381	163	116	77	1,856
Orkney	386	376	228	270	335	214	124	79	2,012
Eileanan an Iar	2,300	2,036	1,071	705	230	73	24	41	6,480
Highland	2,399	2,609	1,452	1,104	1,059	543	424	812	10,402
North East	1,314	1,956	938	786	1,256	1,164	925	567	8,906
NE Scotland	1,314	1,956	938	786	1,256	1,164	925	567	8,906
South East	1,465	1,607	927	676	963	1,039	1,159	1,397	9,233
Tayside	560	611	333	241	441	491	493	509	3,679
Fife	355	272	141	94	139	190	209	130	1,530
Lothian	219	341	180	116	160	163	175	178	1,532
Scottish Borders	331	383	273	225	223	195	282	580	2,492
South West	1,729	2,234	1,421	1,273	1,957	1,984	1,647	1,491	13,736
East Central	193	255	169	160	234	200	181	148	1,540
Argyll & Bute	228	282	205	206	259	243	166	391	1,980
• • • • • • • • • • • • • • • • • • • •	376	615	370	325	548	530	296	201	3,261
Clyde Valley	311	499	288	282	429	455	359	212	2,835
Ayrshire									
Dumfries & Galloway	621	583	389	300	487	556	645	539	4,120
Scotland	9,758	11,118	6,360	5,145	6,181	5,180	4,419	4,464	52,625
	hectares	hectares	hectares	hectares	hectares	hectares	hectares	hectares	hectares
North West	6,164	16,740	21,936	34,072	63,996	70,478		1,796,500	
Shetland	175	1,032	2,413	4,667	12,595	11,440	15,927	35,586	83,835
	395	1,032	1,617	3,921				39,519	90,203
Orkney					10,991	15,249	17,291		
Eileanan an Iar	2,736	6,154	7,670	9,684	6,661	4,997	3,465	49,457	90,825
Highland	2,858	8,333	10,235	15,800	33,749	38,792	59,943	1,671,939	1,841,650
North East	1,468	6,205	6,683	11,427	41,889	84,372	129,136	404,962	686,142
NE Scotland	1,468	6,205	6,683	11,427	41,889	84,372	129,136	404,962	686,142
South East	1,525	5,112	6,598	9,603	32,018	75,676	167,798	931,264	1,229,594
Tayside	587	1,922	2,362	3,491	14,631	35,679	69,812	493,754	622,239
Fife	359	851	1,018	1,334	4,666	14,019	29,294	43,973	95,513
Lothian	235	1,101	1,303	1,639	5,459	11,820	25,958	83,189	130,703
Scottish Borders	345	1,238	1,916	3,139	7,262	14,157	42,734	310,348	381,138
South West	1,789	7,225	10,122	18,215	65,193	144,001	231,042	1,104,279	1,581,865
East Central	201	807	1,203	2,321	7,659	14,273	25,322	137,736	189,522
Argyll & Bute	245	915	1,476	2,937	8,416	17,616	23,965	420,923	476,494
Clyde Valley	414	1,990	2,619	4,645	18,140	38,396	40,501	109,924	216,627
Ayrshire	327	1,622	2,037	4,038	14,887	32,692	49,587	135,163	240,352
Dumfries	603	1,892	2,788	4,274	16,091	41,024	91,667	300,533	458,871
& Galloway	000	1,002	2,700	19£1-T	10,001	11,02-1	01,007	000,000	100,071
Scotland	10,946	35,283	45,338	73,317	203,096	374,527	624,603	4,237,005	5,604,114

<sup>(1)</sup> This table includes the area of farm woodlands and other farm land but excludes the area of common grazings (cf. table C2).

Table C6 Number of holdings with crops and grass and area of crops and grass by region and size group, June 2012

	North West		North	East	South	n East	South	West	Scotland		
Hectares	Holdings	Hectares	Holdings	Hectares	Holdings	Hectares	Holdings	Hectares	Holdings	Hectares	
<2	4,204	4,558	1,178	1,306	1,202	1,256	1,362	1,377	7,946	8,496	
2-<5	3,893	12,329	1,573	4,973	1,311	4,171	1,690	5,447	8,467	26,920	
5-<10	2,338	16,559	813	5,720	773	5,499	1,155	8,279	5,079	36,057	
10-<20	1,884	26,676	701	10,242	544	7,893	1,103	15,837	4,232	60,649	
20-<50	1,578	49,489	1,218	40,692	942	31,749	1,975	66,689	5,713	188,618	
50-<100	786	55,492	1,129	81,597	1,095	79,580	2,054	149,477	5,064	366,147	
100-<200	438	60,569	874	121,415	1,243	179,087	1,538	211,337	4,093	572,407	
200 & over	210	69,300	376	121,885	855	292,301	521	171,279	1,962	654,766	
Total	15,331	294,971	7,862	387,830	7,965	601,535	11,398	629,723	42,556	1,914,059	

Table C7 Number of holdings by size group and farm type, June 2012

Holdings

Hectares	Cereals	General cropping	Horticulture	Specialist pigs	Specialist poultry	Dairy	Cattle & sheep (LFA)	Cattle & sheep (Lowland)	Mixed	Specialist grass & forage		Total
Under 10	503	447	941	248	1,763	40	4,549	1,094	544	15,895	1,256	27,280
10-<20	320	84	82	25	210	13	1,587	177	102	2,369	131	5,100
20-<50	845	272	60	22	155	100	1,934	288	249	2,111	146	6,182
50-<100	899	482	34	17	38	376	1,699	207	437	906	85	5,180
100-<200	825	561	24	7	19	470	1,500	104	471	384	54	4,419
200 & over	492	417	27	5	13	164	2,277	44	387	577	61	4,464
Total	3,884	2,263	1,168	324	2,198	1,163	13,546	1,914	2,190	22,242	1,733	52,625

Table C8 Number of livestock for each United Kingdom country, June 2012

Number

					Number
				Northern	United
	Scotland	England	Wales	Ireland	Kingdom
Cattle:					
Dairy cows <sup>(1)</sup>	182,184	1,120,536	274,686	285,369	1,862,775
Dairy heifers in calf for the first time	40,672	nc	nc	65,447	na na
Beef cows <sup>(1)</sup>	452,438	742,260	226,150	279,195	1,700,043
Beef heifers in calf for the first time	43,518	nc	nc	40,864	na
Bulls for service	21,656	nc	nc	19,016	na na
Other dairy and beef heifers for breeding	130,753		nc	83,195	
Prime cattle <sup>(2)</sup>	386,940	nc			na
		nc	nc	368,504	na
Cattle under one year	530,309	1,572,050	319,182	483,856	2,905,397
Total cattle®	1,788,470	5,373,118	1,113,140	1,625,446	9,900,174
Sheep:					
Ewes for breeding	2,623,656	5,445,748	4,169,279	806,092	13,044,775
Rams for service	86,694	177,720	101,017	26,476	391,907
Other sheep one year old and over for breeding	666,114	1,042,098	nc	131,362	na
Others <sup>(4)</sup>	87,668	531,369	75,222	14,986	709,245
Lambs	3,271,842	7,414,952	4,552,665	989,956	16,229,415
Total sheep	6,735,974	14,611,887	8,898,183	1,968,872	32,214,916
Pigs:	04 004	054.475	4 474	00.004	405.004
Female breeding herd: Total	31,881	351,175	4,474	38,331	425,861
Gilts 50kg and over for breeding	5,265	71,800	581	4,273	81,919
Boars for service	1,308	13,685	415	664	16,072
Barren Sows for fattening	941	nc	282	700	na
Other pigs: 20kg and over <sup>(5)</sup>	225,987	2,288,291	18,371	249,675	2,782,324
Under 20kg	98,057	936,925	5,123	133,281	1,173,386
Total	363,439	3,225,216	23,494	382,956	3,995,105
Total pigs	363,439	3,661,876	28,665	426,924	4,480,904
Poultry:					
Fowls in laying flock: Hens in 1st laying season	3,038,307	nc	nc	2,556,099	na
Moulted hens	44,295	nc	nc	642	na
Total	3,082,602	nc	1,598,311	2,556,741	na
Pullets being reared for laying	1,379,620	na na	313,551	1,089,206	na
Fowls for breeding	1,054,325	na na	408,699	1,641,094	na na
Total laying and breeding fowls	5,516,547	33,508,797	2,320,561	5,287,041	46,632,946
Broilers/other table fowls		74,271,691			
	9,074,234		5,752,630	13,459,392	102,557,947
Other poultry <sup>(6)(7)</sup> <b>Total poultry</b>	103,207 <b>14,693,988</b>	10,150,313 <b>117,930,801</b>	175,034 <b>8,248,225</b>	441,749 <b>19,188,182</b>	10,870,303 <b>160,061,196</b>
				10,100,102	
Goats and kids	3,783	83,938	6,948	3,133	97,802
Deer	6,121	20,967	1,000	3,064	31,152
Horses:					
Horses used in agriculture or horticulture	860	nc	nc	nc	na
All other horses and ponies	36,425	nc	nc	nc	na na
Total horses	37,285	214,745	51,055	12,007	315,092
	,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,,,,,,,
Camelids:					
Alpacas	585	12,916	nc	nc	na
Llamas	283	2,035	nc	nc	na
Other camelids	77	nc	nc	nc	na
Total camelids	945	na	nc	nc	na
Other livestock	1,290	4,275	nc	nc	na

<sup>(1)</sup> Cows and heifers in milk and cows in calf but not in milk.

na Information not available.

<sup>(2)</sup> Male and female cattle one year old and over, not for breeding.

nc Information not collected.

<sup>(3)</sup> In England and Wales data is obtained from the Cattle Tracing System and in Northern Ireland data from the Animal and Public Health Information System is used.

<sup>(4)</sup> Includes draft and cast ewes, and wethers in England and Wales.

<sup>(5)</sup> Includes barren sows for fattening in England.

<sup>(6)</sup> Includes turkeys, ducks, geese and guinea fowl.

<sup>(7)</sup> Includes ostriches in England and Wales.

Table C9 Number of livestock by Less Favoured Area<sup>(2)</sup> category, June 2012

Numbe

	LFA <sup>(1)</sup>	Non-LFA	Total
Cattle:			
Dairy cows <sup>(3)</sup>	123,808	58,376	182,184
Dairy heifers in calf for the first time	27,027	13,645	40,672
Beef cows <sup>(3)</sup>	369,207	83,231	452,438
Beef heifers in calf for the first time	33,799	9,719	43,518
Bulls for service	16,903	4,753	21,656
Other dairy and beef heifers for breeding	95,357	35,396	130,753
Prime cattle <sup>(4)</sup>	227,476	159,464	386,940
Cattle under one year	409,396	120,913	530,309
Total cattle	1,302,973	485,497	1,788,470
Sheep:			
Ewes for breeding	2,380,261	243,395	2,623,656
Rams for service	77,071	9,623	86,694
Other sheep one year old and over for breeding	603,831	62,283	666,114
Others <sup>(5)</sup>	75,665	12,003	87,668
Lambs	2,893,885	377,957	3,271,842
Total sheep	6,030,713	705,261	6,735,974
Pigs:			
Female breeding herd: Total	6,206	25,675	31,881
Gilts 50kg and over for breeding	750	4,515	5,265
Boars for service	510	798	1,308
Barren sows for fattening	284	657	941
Other pigs: 20kg and over	35,278	190,709	225,987
Under 20kg	17,598	80,459	98,057
Total	52,876	271,168	324,044
Total pigs	60,626	302,813	363,439
Poultry:			
Fowls in laying flock: Hens in 1st laying season	1,314,837	1,723,470	3,038,307
Moulted hens	31,429	12,866	44,295
Total	1,346,266	1,736,336	3,082,602
Pullets being reared for laying	206,576	1,173,044	1,379,620
Fowls for breeding	258,353	795,972	1,054,325
Broilers and other table fowls	955,766	8,118,468	9,074,234
Other poultry <sup>(6)</sup>	82,641	20,566	103,207
Total poultry	2,849,602	11,844,386	14,693,988
Total poultry	2,049,002	11,044,300	14,093,966
Goats and kids	2,465	1,318	3,783
Deer	4,869	1,252	6,121
Horses:			
Horses used in agriculture or horticulture	525	335	860
All other horses and ponies	20,320	16,105	36,425
Total horses	20,845	16,440	37,285
Camelids:			
Alpacas	375	210	585
Llamas	*	*	283
Other camelids	*	*	77
Total camelids	589	356	945
Other livestock	737	553	1,290

<sup>(1) &</sup>amp; (2) See notes to table C3.

<sup>(3)</sup> See note 1 to table C8.

<sup>(4)</sup> See note 2 to table C8.

<sup>(5)</sup> See note 4 to table C8.

<sup>(6)</sup> See note 6 to table C8.

<sup>\*</sup> data suppressed to prevent disclosure of individual holdings.

			North	West		No	orth East		Sou	ıth East	
				Eileanan							
	Total	Shetland	Orkney	an lar	Highland	Total	Grampian	Total	Tayside	Fife	
Dairy cattle:											
Dairy cows <sup>(1)</sup>	136	9	32	12	83	101	101	144	34	39	
Heifers in calf for the first time	152	8	29	36	79	107	107	137	36	43	
Other female cattle <sup>(2)</sup>	77	7	20	13	37	76	76	116	30	37	
Total dairy cattle	276	10	46	55	165	175	175	205	57	53	
Beef cattle:											
Beef cows <sup>(1)</sup>	2,658	149	500	411	1,598	1,558	1,558	1,564	586	208	
Heifers in calf for the first time	1,223	57	293	140	733	870	870	855	329	122	
Other female cattle for breeding(3)	1,633	81	308	237	1,007	893	893	1,096	400	153	
Prime cattle <sup>(4)</sup>	1,747	94	502	192	959	1,818	1,818	1,595	588	255	
Total beef cattle	3,188	172	553	519	1,944	2,329	2,329	2,070	799	310	
Other cattle:	^				<u> </u>	<b>_</b>	<b>_</b>				
Bulls	1,522	90	433	84	915	1,333	1,333	1,382	503	200	
Cattle under one year old	2,635	154	512	394	1,575	1,757	1,757	1,694	627	242	
Total cattle	3,266	179	561	535	1,991	2,393	2,393	2,123	814	321	
Total outlie	0,200		551		1,001	,		_,0	"	02.	
Sheep:											
Ewes for breeding	6,121	1,108	438	2,065	2,510	1,305	1,305	1,857	632	173	
Other sheep one year old and over for	4,888	921	310	1,622	2,035	758	758	1,412	487	110	
breeding	1,000	021	0.0	1,022	2,000	'00	'00	',''-	107	''	
Rams for service	4,532	874	367	1,466	1,825	1,106	1,106	1,571	534	139	
Lambs	5,995	1,065	454	1,971	2,505	1,420	1,420	1,932	661	188	
Other sheep not for breeding	2,788	485	235	1,066	1,002	533	533	700	248	83	
Total sheep	6,950	1,204	528	2,285	2,933	1,717	1,717	2,220	751	239	
iotai siieep	0,330	1,204	320	2,203	2,900	',' ''	','''	2,220	'3'	209	
Pigs:											
Female breeding herd <sup>(5)</sup>	168	11	27	25	105	118	118	120	35	16	
All other non-breeding pigs	358	27	45	55	231	281	281	258	81	46	
Total pigs	399	29	55	65	250	295	295	279	85	49	
Poultry:											
Fowls for producing eggs	2,176	258	315	408	1,195	935	935	1,137	388	218	
Fowls for breeding <sup>(6)</sup>	1,181	137	194	232	618	515	515	533	182	93	
Broilers and other table fowls and	1,066	154	209	152	551	572	572	552	190	101	
other poultry	1,000	104	200	102	001	0,2	012	002		'0'	
Total poultry	2,401	296	350	440	1,315	1,106	1,106	1,337	463	253	
Goats and kids	197	19	48	11	119	164	164	175	73	35	
Deer	19	0	*	0	*	13	13	23	14	*	
Horses:											
Horses used in agriculture or horticulture	66	12	5	14	35	31	31	61	22	9	
All other horses and ponies	1,359	184	180	130	865	1,462	1,462	1,912	626	327	
Total horses	1,400	191	182	142	885	1,480	1,480	1,938	634	333	
Camelids	28	*	*	*	20	24	24	30	8	*	
Other livestock	39	*	7	*	27	38	38	57	16	12	

<sup>(1)</sup> Cows and heifers in milk and cows in calf but not in milk.

<sup>(2)</sup> Female dairy cattle one year old and over for breeding.

<sup>(3)</sup> Female beef cattle one year old and over for breeding.

<sup>(4)</sup> Male and female cattle one year old and over, not for breeding.

<sup>(5)</sup> Sows in pig, gilts in pig and other sows for breeding.

<sup>(6)</sup> Hens laying eggs to hatch layer and table chicks and cocks. \*data suppressed to prevent disclosure of individual holdings.

So	South East South West								
	Scottish		East	Argyll &	Clyde		Dumfries	<u> </u>	
Lothian	Borders	Total	Central	Bute	Valley	Ayrshire	& Galloway	Scotland	
									Dairy cattle:
40	31	1,108	50	86	225	311	436	1,489	Dairy cows <sup>(1)</sup>
36	22	1,033	46	76	214	299	398	1,429	Heifers in calf for the first time
33	16	976	41	76	210	276	373	1,245	Other female cattle <sup>(2)</sup>
53	42	1,294	65	114	270	352	493	1,950	Total dairy cattle
									Beef cattle:
198	572	3,173	299	539	647	582	1,106	8,953	Beef cows <sup>(1)</sup>
101	303	1,803	174	251	387	344	647	4,751	Heifers in calf for the first time
132	411	2,402	202	429	472	454	845	6,024	Other female cattle for breeding(3)
230	522	3,240	301	377	672	699	1,191	8,400	Prime cattle <sup>(4)</sup>
285	676	4,318	420	648	875	866	1,509	11,905	Total beef cattle
									Other cattle:
171	508	3,121	250	425	598	645	1,203	7,358	Bulls
233	592	3,964	325	586	791	816	1,446	10,050	Cattle under one year old
296	692	4,598	429	669	932	927	1,641	12,380	Total cattle
	212								Sheep:
236	816	3,379	315	703	630	586	1,145	12,662	Ewes for breeding
162	653	2,502	226	584	459	411	822	9,560	Other sheep one year old and over for
									breeding
194	704	2,911	268	602	536	503	1,002	10,120	Rams for service
254	829	3,416	330	698	638	595	1,155	12,763	Lambs
103	266	1,204	119	304	186	192	403	5,225	Other sheep not for breeding
301	929	3,865	370	777	717	690	1,311	14,752	Total sheep
									Pigs:
27	42	153	15	27	26	23	62	559	Female breeding herd <sup>(5)</sup>
57	74	315	41	44	61	58	111	1,212	All other non-breeding pigs
58	87	355	43	51	67	61	133	1,328	Total pigs
	0.	555		0.	<b>.</b>		100	1,020	iotal pigo
									Poultry:
172	359	1,653	197	254	327	313	562	5,901	Fowls for producing eggs
97	161	858	112	125	165	142	314	3,087	Fowls for breeding <sup>(6)</sup>
95	166	816	97	122	170	158	269	3,006	Broilers and other table fowls and
									other poultry
205	416	1,899	224	288	395	356	636	6,743	Total poultry
	0.5	645		9.5		= 4			O a target lists
31	36	215	23	26	44	51	71	751	Goats and kids
*	*	28	*	6	*	8	8	83	Deer
									Horses:
7	23	93	*	*	20	23	38	251	Horses used in agriculture or horticulture
354	605	2,253	*	*	584	483	719	6,986	All other horses and ponies
357	614	2,304	287	190	593	493	741	7,122	Total horses
*	11	54	5	6	14	9	20	136	Camelids
10	19	102	16	17	13	21	35	236	Other livestock
10	19	102	10	17	13	21	33	230	Other IIVestock

			North \	Vest		Nor	th East		South Eas	st	
				Eileanan							
	Total	Shetland	Orkney	an lar	Highland	Total	Grampian	Total	Tayside	Fife	
Dairy cattle:											Г
Dairy cows <sup>(1)</sup>	4,969	456	2,689	68	1,756	9,987	9,987	15,269	3,995	4,218	
Heifers in calf for the first time	1,023	89	517	55	362	2,410	2,410	4,186	991	1,230	
Other female cattle(2)	945	96	419	28	402	2,156	2,156	3,935	1,056	1,495	
Total dairy cattle	6,937	641	3,625	151	2,520	14,553	14,553		6,042	6,943	
Beef cattle:					,	ĺ	,	ĺ	·	ĺ	
Beef cows <sup>(1)</sup>	79,788	1,781	26,385	2,772	48,850	89,995	89,995	104,467	34,524	12,654	
Heifers in calf for the first time	6,866	187	2,290	294	4,095	10,254	10,254	9,093	3,714	1,035	
Other female cattle for breeding <sup>(3)</sup>	12,421	302	3,274	788	8,057	17,522	17,522	20,343	6,830	2,458	1
Prime cattle <sup>(4)</sup>	41,455	481	21,725	608	18,641	116,602	116,602	77,518	24,231	12,709	
Total beef cattle	140,530	2,751	53,674	4,462	79,643	234,373	234,373		69,299	28,856	
Other cattle:	140,000	2,701	30,074	7,702	73,040	204,070	204,070	211,721	03,233	20,000	
Bulls	3,653	120	1,294	103	2,136	3,902	3,902	4,700	1,530	568	
Cattle under one year old	73,999	1,830	26,692	2,389	43,088	93,594	93,594	107,524	35,505	14,740	
Total cattle	225,119	5,342	85,285	7,105	127,387	346,422	346,422	347,035	112,376	51,107	
Total Cattle	225,119	5,342	05,205	7,105	121,301	340,422	340,422	347,035	112,370	51,107	
Sheep:											
Ewes for breeding	599,984	122,753	43,638	75,653	357,940	217,698	217,698	786,466	242,224	31,639	
Other sheep one year old and over	150,746	29,691	10,813	17,664	92,578	52,475	52,475	210,585	65,567	6,630	
for breeding											
Rams for service	21,013	3,940	1,748	3,076	12,249	8,305	8,305	24,500	7,489	1,065	
Lambs	627,358	118,708	60,671	65,854	382,125	311,252	311,252	1,067,098	300,361	49,344	
Other sheep not for breeding	32,082	5,701	3,578	9,149	13,654	10,324	10,324	21,127	11,690	1,275	
Total sheep	1,431,183	280,793	120,448	171,396	858,546	600,054	600,054	2,109,776	627,331	89,953	
Pigs:											
Female breeding herd®	1,906	24	75	58	1,749	20,151	20,151	8,161	3,462	404	
All other non-breeding pigs	19,889	153	611	198	18,927	214,490	214,490	78,224	32,373	6,118	1
Total pigs	21,795	177	686	<b>256</b>	20,676	234,641	234,641	86,385	35,835	6,522	
						ŕ	ĺ			,	
Poultry: Fowls for producing eggs	137,718	3,669	6,339	4,811	122,899	660,753	660 752	3,001,534	204 422	1,232,488	
		375				26,456					1
Fowls for breeding®	4,393		901	745	2,372	· '	26,456		176,693	139,422	
Broilers and other table fowls and	130,235	1,569	3,417	1,221	124,028	2,018,803	2,018,803	5,833,350	2,574,616	620,169	
other poultry  Total poultry	272,346	5,613	10,657	6,777	249 299	2,706,012	2 706 012	9,357,340	3 035 742	1 992 079	
		,									ı
Goats and kids	973	79	203	41	650	717	717	848	350	189	
Deer	1,329	0	*	0	*	1,462	1,462	1,577	670	*	
Horses:											
Horses used in agriculture or horticulture	185	59	7	26	93	127	127	301	71	170	
_		1,274	698	296	l				1	2,000	
All other horses and ponies	5,651			296 <b>322</b>	3,383	7,545	7,545		3,560		
Total horses	5,836	1,333	705	322	3,476	7,672	7,672	11,667	3,631	2,170	
Camelids	155	*	*	*	91	221	221	148	32	*	
Other livestock	138		19		105	146	146	463	249	45	

<sup>(1)</sup> Cows and heifers in milk and cows in calf but not in milk.

<sup>(2)</sup> Female dairy cattle one year old and over for breeding.

<sup>(3)</sup> Female beef cattle one year old and over for breeding.(4) Male and female cattle one year old and over, not for breeding.

<sup>(5)</sup> Sows in pig, gilts in pig and other sows for breeding.

<sup>(6)</sup> Hens laying eggs to hatch layer and table chicks and cocks. \* data suppressed to prevent disclosure of individual holdings.

	Souti	n East			So	outh West				
		Scottish		East	Argyll &	Clyde		Dumfries		
	Lothian	Borders	Total	Central	Bute	Valley	Ayrshire	& Galloway	Scotland	
										Dairy cattle:
	3,227	3,829	151,959	5,761	7,730	23,679	40,259	74,530	182,184	Dairy cows <sup>(1)</sup>
	691	1,274	33,053	1,199	1,842	5,732	8,565	15,715	40,672	Heifers in calf for the first time
	814	570	35,719	1,815	2,202	6,640	9,584	15,478	42,755	Other female cattle(2)
	4,732	5,673	220,731	8,775	11,774	36,051	58,408	105,723	265,611	Total dairy cattle
										Beef cattle:
	13,138	44,151	178,188	12,438	20,469	29,622	30,342	85,317	452,438	Beef cows <sup>(1)</sup>
	1,109	3,235	17,305	1,527	1,951	3,493	2,915	7,419	43,518	Heifers in calf for the first time
	2,300	8,755	37,712	2,740	4,738	6,337	6,496	17,401	87,998	Other female cattle for breeding <sup>(3)</sup>
	12,199	28,379	151,365	10,948	5,837	26,950	33,686	73,944	386,940	Prime cattle <sup>(4)</sup>
	28,746	84,520	384,570	27,653	32,995	66,402	73,439	184,081	970,894	Total beef cattle
	570	0.000	0.404	000	000	4 050	4 750	4 400	04.050	Other cattle:
	579	2,023	9,401	632	963	1,650	1,753	4,403	21,656	Bulls
	14,719	42,560 <b>134,776</b>	255,192	15,228	22,336	42,057	53,501	122,070	530,309	Cattle under one year old
	48,776	134,770	869,894	52,288	68,068	146,160	187,101	416,277	1,788,470	Total cattle
										Sheep:
	74,418	438,185	1,019,508	109,472	190,854	157,047	180,731	381,404	2,623,656	Ewes for breeding
	18,087	120,301	252,308	25,752	46,655	42,354	42,619	94,928	666,114	Other sheep one year old and over
										for breeding
	2,522	13,424	32,876	3,572	6,462	5,373	5,449	12,020	86,694	Rams for service
	102,813	614,580	1,266,134	132,322	188,981	207,925	233,262	503,644	3,271,842	Lambs
	2,326	5,836	24,135	3,466	5,385	4,350	4,842	6,092	87,668	Other sheep not for breeding
	200,166	1,192,326	2,594,961	274,584	438,337	417,049	466,903	998,088	6,735,974	Total sheep
										Pigs:
	2,986	1,309	1,663	54	100	505	76	928	31,881	Female breeding herd <sup>(5)</sup>
	25,121	14,612	18,955	319	850	4,606	644	12,536	331,558	All other non-breeding pigs
	28,107	15,921	20,618	373	950	5,111	720	13,464	363,439	Total pigs
								·		Davidson
	00.617	1 400 006	660.017	2.400	10.610	E4 000	011 000	000 001	4 460 000	Poultry:
	83,617 73,872	1,400,996 132,469	662,217 501,020	3,409 54,464	10,613 532	54,032 131,613	311,282 107,262	282,881 207,149	4,462,222 1,054,325	Fowls for producing eggs Fowls for breeding <sup>®</sup>
	1,670,760	967,805	1,195,053	880,998	1,472	5,368	39,577	267,638	9,177,441	Broilers and other table fowls
	1,070,700	907,003	1,195,055	000,990	1,412	3,300	39,377	207,038	3,177,441	and other poultry
ŀ	1,828,249	2,501,270	2,358,290	938,871	12,617	191,013	458,121	757,668	14,693,988	Total poultry
	174	135	1,245	91	127	170	340	517	3,783	Goats and kids
				0.						
	*	*	1,753	*	484	*	101	649	6,121	Deer
										Horses:
	24	36	247	*	*	69	59	74	860	Horses used in agriculture or horticulture
	2,838	2,968	11,863	*	*	3,569	2,758	2,930	36,425	All other horses and ponies
	2,862	3,004	12,110	1,681	970	3,638	2,817	3,004	37,285	Total horses
	*	30	421	39	115	85	33	149	945	Camelids
	103	66	543	63	151	49	66	214	1,290	Other livestock

Table C11 Number of holdings with dairy cows<sup>(1)</sup> and number of dairy cows by region and size group, June 2012

Herd	North	West	North	East	South	East	South	West	Scotl	and
size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-4	62	105	23	41	24	40	90	159	199	345
5-19	24	247	5	37	17	172	43	482	89	938
20-49	14	477	18	548	11	350	60	2,188	103	3,563
50-74	*	*	*	*	16	1,069	114	7,106	157	9,846
75-99	*	*	*	*	17	1,432	146	12,883	168	14,726
100-149	9	1,129	19	2,390	27	3,214	282	34,846	337	41,579
150 & over	10	1,914	21	5,986	32	8,992	373	94,295	436	111,187
Total	136	4,969	101	9,987	144	15,269	1,108	151,959	1,489	182,184

<sup>(1)</sup> Cows and heifers in milk and cows in calf but not in milk.

Table C12 Number of holdings with beef cows<sup>(1)</sup> and number of beef cows by region and size group, June 2012

Herd	North	West	North East		South East		South	West	Scotland	
size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-4	759	1,860	180	422	137	318	376	880	1,452	3,480
5-19	897	9,409	304	3,633	243	2,981	675	7,370	2,119	23,393
20-49	506	16,093	395	13,083	424	14,377	841	28,131	2,166	71,684
50-74	192	11,689	246	15,092	262	16,037	471	28,718	1,171	71,536
75-99	113	9,741	153	13,182	163	14,079	321	27,628	750	64,630
100-149	110	13,175	156	18,513	186	22,312	273	32,823	725	86,823
150 & over	81	17,821	124	26,070	149	34,363	216	52,638	570	130,892
Total	2,658	79,788	1,558	89,995	1,564	104,467	3,173	178,188	8,953	452,438

<sup>(1)</sup> Cows and heifers in milk and cows in calf but not in milk.

Table C13 Number of holdings with prime cattle<sup>(1)</sup> and number of prime cattle by region and size group, June 2012

	North	West	North East		South East		South West		Scotland	
Herd size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-4	752	1,479	330	680	328	692	732	1,550	2,142	4,401
5-19	414	4.111	406	4.462	400	4.390	854	9.503	2,142	22,466
20-49	311	9.898	420	13.610	369	12.098	744	24.041	1.844	59.647
50-74	118	7,200	216	13.137	188	11.574	345	21,092	867	53,003
75-99	69	5,922	131	11,363	122	10,476	173	14,788	495	42,549
100-149	55	6,385	137	16,707	88	10,553	187	21,980	467	55,625
150 & over	28	6,460	178	56,643	100	27,735	205	58,411	511	149,249
Total	1,747	41,455	1,818	116,602	1,595	77,518	3,240	151,365	8,400	386,940

<sup>(1)</sup> Male and female cattle one year old and over, not for breeding.

<sup>\*</sup> means data suppressed to prevent disclosure of individual holdings.

Table C14 Number of holdings with breeding ewes and number of breeding ewes by region and size group, June 2012

Flock	North	West	North	East	South East		South West		Scotland	
size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-24	2,318	29,312	377	3,742	416	4,020	682	7,257	3,793	44,331
25-49	1,356	47,351	153	5,611	127	4,587	342	12,072	1,978	69,621
50-99	995	69,714	206	14,491	133	9,549	367	26,695	1,701	120,449
100-199	670	93,884	228	32,938	190	27,982	477	70,091	1,565	224,895
200-299	290	69,717	135	33,020	156	38,044	343	83,938	924	224,719
300-499	252	99,138	114	43,364	241	94,223	486	189,000	1,093	425,725
500-699	121	71,481	39	23,032	168	98,059	261	156,049	589	348,621
700-999	77	62,428	23	19,061	185	153,270	214	176,202	499	410,961
1000 & over	42	56,959	30	42,439	241	356,732	207	298,204	520	754,334
Total	6,121	599,984	1,305	217,698	1,857	786,466	3,379	1,019,508	12,662	2,623,656

Table C15 Number of holdings with female breeding pigs<sup>(1)</sup> and number of female breeding pigs by region and size group, June 2012

Herd	North	West	North	East	South	East	South	West	Scotl	and
size	Holdings	Number								
1-4	143	255	66	135	74	153	120	225	403	768
5-49	20	182	13	206	*	*	*	*	86	1,013
50-99	0	0	*	*	*	*	0	0	8	594
100-249	*	*	*	*	6	823	*	*	15	2,228
250 & over	*	*	28	18,480	13	6,690	*	*	47	27,278
Total	168	1,906	118	20,151	120	8,161	153	1,663	559	31,881

<sup>(1)</sup> Sows and gilts in pig and other sows for breeding.

Table C16 Number of holdings with fattening pigs<sup>(1)</sup> and number of fattening pigs by region and size group, June 2012

Herd	North	West	North East		South East		South West		Scotland	
size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-9	191	573	96	283	126	370	183	540	596	1,766
10-199	24	652	33	2,153	33	1,139	39	1,546	129	5,490
200 & over	12	12,412	81	143,021	36	50,966	6	12,332	135	218,731
Total	227	13,637	210	145,457	195	52,475	228	14,418	860	225,987

<sup>(1)</sup> Non-breeding pigs, 20kg liveweight and over, excluding Barren Sows.

<sup>\*</sup> means data suppressed to prevent disclosure of individual holdings.

Table C17 Number of holdings with fowls for food by region and size group, June 2012

Flock	North	West	North East		South East		South West		Scotland	
size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-19	1,762	14,368	727	5,531	813	6,423	1,270	10,085	4,572	36,407
20-49	329	9,124	129	3,489	197	5,410	277	7,805	932	25,828
50-99	40	2,499	24	1,579	32	2,108	44	2,769	140	8,955
100-999	38	9,133	29	6,469	34	6,591	34	9,247	135	31,440
1000 & over	7	102,594	26	643,685	61	2,981,002	28	632,311	122	4,359,592
Total	2,176	137,718	935	660,753	1,137	3,001,534	1,653	662,217	5,901	4,462,222

Table C18 Number of holdings with breeding fowls<sup>(1)</sup> and number of breeding fowls by region and size group, June 2012

Flock	North	West	North East		South East		South West		Scotland	
size	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1-4	356	814	150	325	138	285	236	506	880	1,930
5-9	115	707	41	236	41	268	63	404	260	1,615
10-19	41	558	23	285	18	216	30	375	112	1,434
20-49	*	*	10	253	*	*	18	517	51	1,371
50-999	*	*	*	*	*	*	6	390	16	1,061
1000-9999	0	0	0	0	*	*	*	*	10	77,983
10000 and	0	0	*	*	16	422,867	*	*	32	861,744
over										
Total	531	2,774	229	23,594	229	469,822	372	450,948	1,361	947,138

<sup>(1)</sup> Female laying eggs to hatch layer and table chicks.
\* means data suppressed to prevent disclosure of individual holdings.

Table C19 Number of occupiers, spouses and employees by Less Favoured Area category, June 2012

Number

Favoured Area Category, June 2012			Number
	LFA <sup>(1)</sup>	Non-LFA	Total
Working occupiers:			
Full-time	6,279	3,296	9,575
Part-time: Half time or more	3,018	982	4,000
Less than half time	10,418	3,588	14,006
Total working occupiers	19,715	7,866	27,581
Occupiers not working on the holding	496	309	805
Working wife/husband of occupier:			
Full-time	1,320	536	1,856
Part-time: Half time or more	1,614	573	2,187
Less than half time	6,530	2,803	9,333
Total working wife/husband of occupier	9,464	3,912	13,376
Spouses not working on the holding	840	563	1,403
Full-time employees:			
Male: Partners	1,408	968	2,376
Hired	3,356	4,215	7,571
Family	1,199	720	1,919
Female: Partners	193	134	327
Hired	304	679	983
Family	205	106	311
Total full-time employees	6,665	6,822	13,487
Part-time employees:			
Male: Partners	470	231	701
Hired	1,334	998	2,332
Family	1,341	457	1,798
Female: Partners	230	135	365
Hired	585	761	1,346
Family	697	253	950
Total part-time employees	4,657	2,835	7,492
Casual and seasonal employees:			
Male	1,502	2,851	4,353
Female	331	1,808	2,139
Total casual and seasonal employees	1,833	4,659	6,492
Total employees	13,155	14,316	27,471
Total workforce (including occupiers and spouses)	42,334	26,094	68,428

<sup>(1)</sup> A holding is classified as LFA if 50% or more of its land is assessed as being disadvantaged or severely disadvantaged for subsidy purposes.

Table C20 Number of occupiers and spouses by age group, June 2012

Number

	Under 41	41 to 54	55 to 64	Over 64	Total
Working occupiers:					
Full-time	797	3,333	2,751	2,694	9,575
Part-time: Half time or more	382	1,275	1,050	1,293	4,000
Less than half time	1,862	4,653	3,605	3,886	14,006
Total working occupiers	3,041	9,261	7,406	7,873	27,581
Occupiers not working on the holding	180	141	159	325	805
Working wife/husband of occupier:					
Full-time	185	649	547	475	1,856
Part-time: Half time or more	248	831	619	489	2,187
Less than half time	1,365	3,646	2,490	1,832	9,333
Total working wife/husband of occupier	1,798	5,126	3,656	2,796	13,376
Spouses not working on the holding	374	377	309	343	1,403

Table C21 (i) Number of holdings<sup>(1)</sup> with occupiers, spouses and employees by regional grouping and region, June 2012

**North West North East South East** Eileanan **Total** Shetland Orkney an lar Highland Total Grampian **Total Tayside Fife** Working occupiers: Full-time 1,836 1,112 1,932 1,932 2,263 Part-time: Half time or more 1,752 Less than half time 6,747 2.250 3,230 2,300 2,300 1,987 10,335 1,239 2,831 5,269 4,840 4,840 4,873 1,921 **Total working occupiers** Occupiers not working on the holding Working wife/husband of occupier Full-time Part-time: Half time or more 1,829 1,709 3,450 1,709 1,702 Less than half time Total working wife/husband of occupier 4,495 2,413 2,433 2,433 2,476 Spouses not working on the holding Full-time employees: Male: **Partners** Hired 1,358 Family Female: Partners Hired Family Total full-time employees 1,082 1,082 2,037 Part-time employees: Male: Partners Hired Family Female: Partners Hired Family 1,031 1,127 Total part-time employees Casual and seasonal employees: Male Female Total casual and seasonal employees **Total employees** 1,809 1,131 1,676 1.676 2,720 1,039 **Total workforce** 10,928 1,279 1,033 2,983 5,633 5,188 5,188 5,539 2,190 (including occupiers and spouses)

<sup>(1)</sup> Except for totals, holdings with employees in more than one category are counted more than once. \*data suppressed to prevent disclosure of individual holdings

South	h East			S	outh We	est			
	Scottish		East	Argyll &	Clyde		Dumfries		
Lothian	Borders	Total	Central	Bute	Valley	Ayrshire	& Galloway	Scotland	
									Working occupiers:
346	651	3,544	351	416	744	777	1,256	9,575	Full-time
92	170	1,017	94	190	199	191	343	4,000	Part-time: Half time or more
310	569	2,972	300	519	685	558	910	14,006	Less than half time
748	1,390	7,533	745	1,125	1,628	1,526	2,509	27,581	Total working occupiers
	","	1,555		.,0	',===	1,525	_,,,,,		iotai iioitaiig oodapioid
21	40	193	16	34	49	37	57	805	Occupiers not working on the holding
									Working wife/husband of occupier
63	91	768	63	95	142	199	269	1,856	Full-time
52	156	732	67	112	137	152	264	2,187	Part-time: Half time or more
251	506	2,472	258	339	536	515	824	9,333	Less than half time
366	753	3,972	388	546	815	866	1,357	13,376	Total working wife/husband of occupier
61	84	372	34	46	93	78	121	1,403	Spouses not working on the holding
									Full-time employees:
85	141	768	81	63	155	180	289	1,892	Male: Partners
232	419	1,228	107	144	213	225	539	3,531	Hired
69	126	669	58	67	151	141	252	1,610	Family
12	14	139	*	*	28	36	58	301	Female: Partners
46	37	129	16	17	34	25	37	425	Hired
14	22	124	*	*	35	33	36	287	Family
346	609	2,365	216	245	479	487	938	6,244	Total full-time employees
									Part-time employees:
21	37	213	18	22	50	45	78	577	Male: Partners
79	166	674	55	83	138	108	290	1,695	Hired
36	61	488	61	68	122	93	144	1,506	Family
9	22	139	21	13	34	27	44	334	Female: Partners
48	63	224	28	39	43	34	80	716	Hired
28	46	305	33	33	80	49	110	823	Family
178	321	1,678	171	218	369	296	624	4,638	Total part-time employees
									Casual and seasonal employees:
61	121	624	54	92	107	130	241	1,565	Male
15	28	130	7	29	28	32	34	432	Female
66	135	702	58	108	128	146	262	1,766	Total casual and seasonal employees
441	818	3,647	364	445	768	719	1,351	9,852	Total employees
860	1,588	8,195	840	1,244	1,755	1,642	2,714	29,850	Total workforce
									(including occupiers and spouses)

			North \	West		No	rth East	5	South Eas	st
				Eileanan						
	Total	Shetland	Orkney	an lar	Highland	Total	Grampian	Total	Tayside	Fife
Working occupiers:										
Full-time	1,836	175	389	160	1,112	1,932	1,932	2,263	887	379
Part-time: Half time or more	1,752	234	170	421	927	608	608	623	257	104
Less than half time	6,747	830	437	2,250	3,230	2,300	2,300	1,987	777	331
Total working occupiers	10,335	1,239	996	2,831	5,269	4,840	4,840	4,873	1,921	814
Occupiers not working on the holding	300	14	19	99	168	171	171	141	54	26
Working wife/husband of occupier										
Full-time	395	49	81	36	229	347	347	346	128	64
Part-time: Half time or more	650	88	121	86	355	377	377	428	149	71
Less than half time	3,450	440	338	843	1,829	1,709	1,709	1,702	676	269
Total working wife/husband	4,495	577	540	965	2,413	2,433	2,433	2,476	953	404
of occupier	4,495	377	340	303	2,410	2,400	2,400	2,470	333	
Spouses not working on the holding	398	18	31	124	225	305	305	328	128	55
Full-time employees:										
Male: Partners	265	18	65	10	172	470	470	674	286	110
Hired	690	*	104	*	559	1,164	1,164	3,361	1,191	583
Family	257	14	57	25	161	321	321	543	200	100
Female: Partners	29	0	9	*	*	57	57	91	40	20
Hired	80	0	*	0	*	126	126	542	151	99
Family	66	*	*	7	42	36	36	76	25	10
Total full-time employees	1,387	41	249	65	1,032	2,174	2,174	5,287	1,893	922
Part-time employees:										
Male: Partners	128	*	27	*	76	133	133	170	85	18
Hired	331	15	36	25	255	379	379	748	287	108
Family	654	106	61	164	323	319	319	263	104	46
Female: Partners	62	6	16	0	40	76	76	77	33	10
Hired	138	*	12	*	117	223	223	479	212	75
Family	293	68	27	59	139	135	135	178	56	35
Total part-time employees	1,606	215	179	262	950	1,265	1,265	1,915	777	292
Casual and seasonal employees:										
Male	477	35	67	64	311	458	458	2,525	1,768	503
Female	148	11	11	14	112	180	180	1,632	1,121	445
Total casual and seasonal	625	46	78	78	423	638	638	4,157	2,889	948
employees	2.640	200	E06	405	2.405	4.077	4.077	11 250	5 EEO	2 160
Total employees	3,618	302	506	405	2,405	4,077	4,077	11,359	5,559	2,162
Total workforce (including occupiers and spouses)	18,448	2,118	2,042	4,201	10,087	11,350	11,350	18,708	8,433	3,380

<sup>\*</sup> data suppressed to prevent disclosure of individual holdings

South	East			Sout	h West				
	Scottish		East	Argyll &	Clyde		Dumfries		
Lothian	Borders	Total	Central	Bute	Valley	Ayrshire	& Galloway	Scotland	
									Working occupiers:
346	651	3,544	351	416	744	777	1,256	9,575	Full-time
92	170	1,017	94	190	199	191	343	4,000	Part-time: Half time or more
310	569	2,972	300	519	685	558	910	14,006	Less than half time
748	1,390	7,533	745	1,125	1,628	1,526	2,509	27,581	Total working occupiers
21	40	193	16	34	49	37	57	805	Occupiers not working on the holding
									Working wife/husband of occupier
63	91	768	63	95	142	199	269	1,856	Full-time
52	156	732	67	112	137	152	264	2,187	Part-time: Half time or more
251	506	2,472	258	339	536	515	824	9,333	Less than half time
366	753	3,972	388	546	815	866	1,357	13,376	Total working wife/husband
000	100	0,572	000	040	010		1,007	10,070	of occupier
61	84	372	34	46	93	78	121	1,403	Spouses not working on the holding
									Full-time employees:
110	168	967	102	83	189	237	356	2,376	Male: Partners
742	845	2,356	248	240	423	392	1,053	7,571	Hired
93	150	798	65	80	179	173	301	1,919	Family
16	15	150	*	*	33	40	59	327	Female: Partners
205	87	235	22	38	75	42	58	983	Hired
16	25	133	*	*	39	35	39	311	Family
1,182	1,290	4,639	450	466	938	919	1,866	13,487	Total full-time employees
									Part-time employees:
25	42	270	23	36	61	55	95	701	Male: Partners
119	234	874	76	94	172	165	367	2,332	Hired
41	72	562	74	76	146	103	164	1,798	Family
10	24	150	24	15	36	28	47	365	Female: Partners
86	106	506	43	47	186	108	122	1,346	Hired
32	55	344	36	38	88	55	127	950	Family
313	533	2.706	276	<b>306</b>	<b>689</b>	513	922		Total part-time employees
313	300	2,700	270	300	003	310	322	7,432	Total part-time employees
									Casual and seasonal employees:
92	162	893	67	131	152	191	352	4,353	Male
34	32	179	9	36	47	43	44	2,139	Female
126	194	1,072	76	167	199	234	396	6,492	Total casual and seasonal
1,621	2,017	8,417	802	939	1,826	1,666	2 194	27,471	employees Total employees
1,021	2,017	0,417	002	939	1,020	1,000	3,184	21,411	Total employees
2,735	4,160	19,922	1,935	2,610	4,269	4,058	7,050	68,428	Total workforce (including occupiers
									and spouses)

Table C22 Number of holdings with full-time employees and number of full-time employees by region and size group, June 2012

	North West		North East		South East		South West		Scotland	
Employees	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number	Holdings	Number
1	455	455	625	625	1,010	1,010	1,317	1,317	3,407	3,407
2	184	368	243	486	500	1,000	599	1,198	1,526	3,052
3	61	183	94	282	227	681	209	627	591	1,773
4	25	100	45	180	107	428	103	412	280	1,120
5-6	21	115	41	222	91	490	75	398	228	1,225
7 & over	14	166	34	379	102	1,678	62	687	212	2,910
Total full-time employees	760	1,387	1,082	2,174	2,037	5,287	2,365	4,639	6,244	13,487

Table C23 Number and area of holdings by Main farm type, total from Standard Gross Margins<sup>(1)</sup> and Standard Labour Requirements<sup>(2)</sup>, June 2012

Main farm type	Holdings	Hectares	Total from Standard Gross Margins (£) <sup>(3)</sup>	Standard Labour Requirements
Cereals	3,884	431,525	145,203,007	3,328
General cropping	2,263	321,305	196,867,445	5,839
Horticulture	1,168	26,701	239,064,423	4,705
Specialist pigs	324	11,426	7,131,445	257
Specialist poultry	2,198	24,124	27,705,737	678
Dairy	1,163	154,786	169,587,466	5,302
Cattle and sheep (LFA)(4)	13,546	2,811,155	215,500,671	17,571
Cattle and sheep (Lowland)	1,914	60,297	21,612,835	1,208
Mixed	2,190	298,243	110,891,658	4,181
Specialist grass and forage	22,242	1,388,049	1,182,239	1,197
Other	1,733	76,502	115,122	424
Total	52,625	5,604,114	1,134,862,048	44,690

<sup>(1)</sup> The Standard Gross Margin represents the unit value (less variable costs) of the crops (per hectare) and livestock (per unit) on holdings.

http://www.scotland.gov.uk/Publications/2005/06/2290402/04320

<sup>(2) 1</sup> Standard Labour Requirement = 1900 hours per year.

<sup>(3)</sup> The total amounted generated (in £) using the individual SGMs on each farm type listed. The individual SGM for crops and livestock are listed here:

<sup>(4)</sup> See note (1) to table C3.

 Table C24 Number of holdings by European Size Unit and farm type, June 2012

Holdings

		European size unit <sup>(1)</sup>							
Farm type	<4	4-<8	8-<16	16-<40	40+	Total			
Cereals	909	538	634	832	971	3,884			
General cropping	592	45	80	329	1,217	2,263			
Horticulture	833	92	53	57	133	1,168			
Specialist pigs	*	*	7	*	32	324			
Specialist poultry	2,012	8	7	38	133	2,198			
Dairy	37	9	14	49	1,054	1,163			
Cattle and sheep (LFA)	7,652	1,192	1,308	2,037	1,357	13,546			
Cattle and sheep (Lowland)	1,293	172	149	168	132	1,914			
Mixed	706	125	212	386	761	2,190			
Specialist grass and forage	22,190	37	*	*	0	22,242			
Other	*	*	*	*	0	1,733			
Total	38,232	2,224	2,478	3,901	5,790	52,625			

<sup>(1) 1</sup> European Size Unit = 1200 Standard Gross Margins. SGMs represent the value (less variable costs) of the crops and livestock on holdings.

Table C25 Number of holdings by European Size Unit, regional grouping and region,
June 2012

Holdings

		Europe	an size un	it <sup>(1)</sup>		
	<4	4-<8	8-<16	16-<40	40+	Total
North West:	18,248	794	671	594	443	20,750
Shetland	1,640	110	68	*	*	1,856
Orkney	1,481	104	133	174	120	2,012
Eileanan an Iar	6,351	90	27	*	*	6,480
Highland	8,776	490	443	379	314	10,402
North East:						
NE Scotland	5,636	442	572	980	1,276	8,906
South East:	5,242	351	436	957	2,247	9,233
Tayside	1,973	139	191	418	958	3,679
Fife	915	58	57	134	366	1,530
Lothian	920	60	64	151	337	1,532
Scottish Borders	1,434	94	124	254	586	2,492
South West:	9,106	637	799	1,370	1,824	13,736
East Central	1,058	83	86	179	134	1,540
Argyll & Bute	1,399	129	142	174	136	1,980
Clyde Valley	2,308	155	191	288	319	3,261
Ayrshire	1,870	119	160	262	424	2,835
Dumfries & Galloway	2,471	151	220	467	811	4,120
Scotland	38,232	2,224	2,478	3,901	5,790	52,625

<sup>(1) 1</sup> European Size Unit = 1200 Standard Gross Margins. SGMs represent the value (less variable costs) of the crops and livestock on holdings.

<sup>\*</sup> means data suppressed to prevent disclosure of individual holdings.

<sup>\*</sup> means data suppressed to prevent disclosure of individual holdings.

Table C26 Number of holdings, total and average from Standard Gross Margin<sup>(1)</sup>, total and average Standard Labour Requirement<sup>(2)</sup> by regional grouping and region, June 2012

		Standard Gr	oss Margins (£)	Standard Labo	ur Requirements
	Holdings	Total from SGM	Total from SGM (average £ per holding)	Total SLR	Average SLR per holding
North West:	20,750	87,440,307	4,214	6,371	0.307
Shetland	1,856	4,325,407	2,330	650	0.350
Orkney	2,012	19,018,221	9,452	890	0.443
Eileanan an Iar	6,480	4,734,470	731	520	0.080
Highland	10,402	59,362,209	5,707	4,311	0.414
North East:					
Grampian	8,906	205,350,941	23,058	6,879	0.772
South East:	9,233	550,687,552	59,643	17,031	1.845
Tayside	3,679	320,597,616	87,143	8,768	2.383
Fife	1,530	86,814,425	56,741	2,044	1.336
Lothian	1,532	52,790,497	34,459	1,706	1.113
Scottish Borders	2,492	90,485,014	36,310	4,513	1,811
South West:	13,736	291,383,248	21,213	14,409	1.049
East Central	1,540	22,561,385	14,650	1,246	0.809
Argyll & Bute	1,980	22,744,093	11,487	1,774	0.896
Clyde Valley	3,261	49,690,333	15,238	2,411	0.739
Ayrshire	2,835	64,963,295	22,915	2,945	1.039
Dumfries & Galloway	4,120	131,424,142	31,899	6,033	1.464
Scotland	52,625	1,134,862,048	21,565	44,690	0.849

<sup>(1)</sup> The Standard Gross Margin represents the value (less variable costs) of the crops and livestock on holdings.

Table C27 Number of holdings by Main farm type, total from Standard Gross Margins<sup>(1)</sup> and average (total from SGM) per holding type June 2002, 2007 and 2012

		2002			2007			2012	
	Holdings	Total from SGM £	Total from SGM (average £ per holding)	Holdings	Total from SGM (£)	Total from SGM (average £ per holding)	Holdings	Total from SGM (£)	Total from SGM (average £ per holding)
Cereals	4,029	144,240,903	35,801	3,519	130,437,673	37,067	3,884	145,203,007	37,385
General cropping	2,402	188,423,979	78,445	2,255	187,539,447	83,166	2,263	196,867,445	86,994
Horticulture <sup>(2)</sup>	872	16,700,558	19,152	967	20,911,970	21,626	1,168	239,064,423	204,678
Specialist pigs	147	13,957,683	94,950	175	8,880,561	50,746	324	7,131,445	22,011
Specialist poultry	913	29,585,663	32,405	1,253	27,418,915	21,883	2,198	27,705,737	12,605
Dairy	1,684	181,961,248	108,053	1,425	180,846,453	126,910	1,163	169,587,466	145,819
Cattle and sheep (LFA)	14,877	245,527,292	16,504	13,847	233,066,759	16,832	13,546	215,500,671	15,909
Cattle and sheep (Lowland)	1,611	18,378,511	11,408	1,606	21,282,470	13,252	1,914	21,612,835	11,292
Mixed	2,507	125,153,348	49,922	2,287	120,314,492	52,608	2,190	110,891,658	50,635
Other <sup>(3)</sup>	21,147	4,799,207	227	24,031	6,099,845	254	23,975	1,297,361	54
Total	50,189	968,728,393	19,302	51,365	936,798,586	18,238	52,625	1,134,862,048	21,565

<sup>(1)</sup> The Standard Gross Margin represents the value (less variable costs) of the crops and livestock on holdings.

<sup>(2) 1</sup> Standard Labour Requirement = 1900 hours per year.

<sup>(2)</sup> From 2011 onwards the June census asks for more detail on soft fruit grown under glass. These are a higher value than fruit grown in the open hence the horticulture SGM has increased.

<sup>(3)</sup> Includes specialist grass and forage holdings

Table C28 Number of holdings by Standard Labour Requirements<sup>(1)</sup> and farm type, June 2012

Holdings

Farm type	Very small (< 1 FTE)	Small (1 to < 2 FTE)	Medium (2 to < 3 FTE)	Large (3 to < 5 FTE)	Very large (5 or more FTE)	Total
Cereals	2,823	619	237	151	54	3,884
General cropping	943	398	277	317	328	2,263
Horticulture	990	37	19	21	101	1,168
Specialist pigs	288	*	9	*	20	324
Specialist poultry	2,064	*	39	*	20	2,198
Dairy	68	112	205	416	362	1,163
Cattle and sheep (LFA)	9,217	1,565	888	1,014	862	13,546
Cattle and sheep (Lowland)	1,578	174	63	49	50	1,914
Mixed	1,106	383	242	246	213	2,190
Specialist grass and forage	22,071	63	30	41	37	22,242
Other	1,672	16	16	15	14	1,733
Total	42,820	3,402	2,025	2,317	2,061	52,625

<sup>(1) 1</sup> Standard Labour Requirement = 1900 hours per year.

FTE means full-time equivalent.

\* means data suppressed to prevent disclosure of individual holdings.

# Collection of Cattle Data through the Cattle Tracing System

#### **Background**

Statistical data on cattle populations have historically been collected through the June census and December survey in Scotland. In order to reduce the burden on survey respondents, from June 2013 onwards these data will be obtained through the Cattle Tracing System (CTS), an administrative data source held by the British Cattle Movement Service (BCMS) which records cattle movements across Great Britain. CTS data have been used to obtain cattle figures for England and Wales since 2007.

CTS is the most comprehensive source of cattle information in Great Britain, meeting the provisions of Council Regulation 17560/2000/EC which establishes a system for the identification and registration of cattle. Keepers must report all cattle births, deaths and movements on CTS, which stores the information against the animal's identification number. Strict sanctions are imposed on cattle that have not been registered on CTS within twenty-seven days of their birth, so CTS coverage is extremely high.

A number of measures are in place to check and adjust tracing information. These include:

- on-farm inspections
- providing regular statements of CTS information to cattle keepers for confirmation
- automatic scans for incomplete movements which are either rectified by the system or brought to the attention of the cattle keeper for correction.

The Rapid Analysis and Detection of Animal-related Risks system (RADAR) performs additional processing on CTS data. In order to obtain complete life histories for all registered animals RADAR performs quality checks on CTS data and imputes any missing information. By tracking individual animals throughout their lives it is possible to determine which animals are present on a given holding, and hence the size and composition of the cattle population at any given time.

#### Advantages of using CTS

The following advantages have been identified in using the CTS data

- Reduce the data collection burden on farmers
- Reduce the data processing burden on central government
- Provide full survey coverage, rather than only a sample of minor holdings in June and no minor holdings in December.
- Obtain complete data, rather than have to impute data for any nonrespondents to the census (about 30 per cent of holdings). Historically dairy farms have had particularly poor response rates.

 Obtain more detailed information on births, fallen stock, export and imports, useful for economic modelling of agriculture, which were not collected on the census.

#### Comparison of data

On CTS individual animals must be registered by keepers and the animal is given a unique ID number. Alongside births and deaths, any time an animal is moved onto or off a location the activity must be registered. The population figure for a given date is a total number of cattle present on any Scottish holding on that date. In contrast, the June census is sent out to individual holdings on an annual basis and occupiers are asked to provide totals for the number of animals that they have responsibility for on the holding as of 1<sup>st</sup> June. The population total is a sum of the cattle census values. In theory these numbers should therefore be the same. However, this is not the case.

In order to assess the feasibility and effect of using CTS data to obtain Scottish cattle statistics, cattle population figures from CTS were compared to those from the census, with differences analysed for likely explanations. Data from the two sources are relatively consistent, with the CTS recording around three per cent more cattle than the June census (table 1), with less of a difference evident for the December survey.

Table A1. Scottish cattle population at  $\mathbf{1}^{\text{st}}$  June from census and CTS data: 2008-12

-000 12				
	June	CTS data	Difference	Percentage
	survey			difference
2008	1,854,749	1,910,381	55,632	3.0
2009	1,812,405	1,869,059	56,654	3.1
2010	1,825,087	1,883,925	58,838	3.2
2011	1,803,937	1,858,802	54,865	3.0
2012	1,788,470	1,840,119	51,649	2.9

Table A2. Scottish cattle population at 1<sup>st</sup> December from survey (scaled up to include minor holdings) and CTS data: 2008-12

	_			
	December	CTS data	Difference	Percentage
	survey			difference
2008	1,786,376	1,825,565	39,189	2.2
2009	1,764,869	1,809,329	44,460	2.5
2010	1,776,908	1,805,083	28,175	1.6
2011	1,741,035	1,757,551	16,516	0.9
2012	1,732,547	1,755,442	22,895	1.3

# **Explanation of differences**

Although the June census covers all agricultural holdings in Scotland, each year approximately 30 per cent of holdings that are surveyed do not return a census form. In order to maintain the records for these holdings, estimates of their census values are calculated based on the most recent information available for them, sometimes several years old, updated with trends in other similar holdings. With 100 per cent inclusion in the CTS data, it is unsurprising that the disparity between data sources is greater among holdings that have had their census data imputed.

Another contributing factor is a difference in the way that cattle on landless holdings are recorded. While CTS requires all cattle in Scotland to be recorded, landless holdings are not represented on the census, so any cattle on these 'holdings' will not be counted or included in the census' population figure. A large proportion of the variation between the cattle population figures on the two sources appears to be accounted for by this fact.

The figures from the June census are reliant on the farmer recording information accurately. Ideally, if records are not kept up-to-date, cattle should be counted so that precise numbers can be ascertained, but in some cases cattle numbers may be estimated. On the other hand it is clear from the need for systems such as RADAR to 'fill in gaps' that the CTS data are not always 100 per cent complete, so there may be some areas in which CTS holding-level data are not quite accurate. The extent to which the Scotland-level data are incomplete however should be minimal.

In general these factors suggest that the differences are due to greater accuracy in the CTS data. All future publications will therefore include data from CTS, including time series for previous years.

### Changes to Farm Typology and Introduction of Standard Outputs

#### General background

Every ten years, in order to reflect changes in agriculture across Europe, the European Commission (EC) updates its methodology for classifying farm types and, within that, how the values attached to individual crops and livestock on farms are calculated. These updates are delivered through the EC Farm Structure Survey (FSS).

The FSS is part of a wider suite of EC regulations with which the Scottish Government (SG) must comply. For the FSS compliance, datasets are submitted to Eurostat and are compiled in line with strict specifications laid out in European Regulations. These datasets are validated by Eurostat before they are used as part of any EC-wide analysis.

Because the FSS compiles data on the structure of agriculture across Europe, it does not always fully align with the specific needs of individual member states (MS), meaning that separate builds and typologies need to be maintained. The EC Regulation 1166/2008 (which details the methodological changes required through FSS from 2010 to 2019) made some progress towards standardising the FSS classifications, although these will still not be fully compatible with all the needs of individual MS.

This annex details changes that will be made to the SG statistical processes throughout 2013 and beyond, as a result of implementing the new EC methodologies detailed in the above regulation.

#### What is different under the new EC methodology and typology?

- 1. A new method for attributing values (multipliers) to crops and livestock on a farm holding. These multipliers are called Standard Outputs (SO) and replace the Standard Gross Margin (SGM) methodology that was used previously.
- 2. A change in how grassland is valued and also the introduction of non-agricultural horses into the Total Output Value (TOV) needed for allocating the farm type.
- 3. Some new sub-thresholds for allocating farm types based on their mix of crops and livestock.
- 4. A new hierarchy of EC farm type labels; resulting in 11 distinct high-level farm types for use in Scotland.

These four changes are considered in turn in the following sections.

# 1. Changing to Standard Outputs (SO) from Standard Gross Margins (SGM)

The first stage in allocating a farm type to a holding is to estimate the Total Output Value (TOV) of the crops and livestock that are present on each holding in Scotland. This TOV is calculated by using multipliers to attribute a value per unit of livestock or per hectare of crop. These values are then summed to produce a TOV for each holding.

The multipliers could be based on either the Standard Gross Margin (SGM) or Standard Output (SO) methodology. Details are below.

The contribution that different types of crops and livestock make to the TOV for the holding is what determines the general farm type of the holding. More detailed thresholds can then be applied to allocate farms into more specific categories of activity if needed.

# Standard Gross Margin (SGM)

Standard Gross Margin (SGM) represents the estimated farm-gate worth generated by a holding's crops and livestock after some costs have been deducted (for example, veterinary and medical costs, crop protection etc.). It is calculated by applying individual multipliers (in £s) to each hectare of crop and each unit of livestock. Since 1985, SGM has been the preferred measure for calculating TOV and was still in use in the FSS covering the period 2000 to 2009.

#### Standard Output (SO)

This now replaces the Standard Gross Margin (SGM) method. The only difference between an SO and SGM is that SO represents the estimated farm-gate worth of crops and animals without taking any account of the costs incurred in production. This means that the new SO multipliers are now all higher than the equivalent SGM values.

#### How are the multipliers calculated?

The SO multipliers are applied uniformly across Scotland, and take into account the average output values of crops and livestock across a number of years.

The SOs to be implemented are based on five-year averages, centred on 2007 (i.e. using a range of data from 2005 to 2009 inclusive). The aim of using a five-year average is to dampen the impact of price spikes or events such as disease outbreaks or severe weather.

Data (primarily from surveys and market reports) are used to calculate average values for crops and livestock. Please note – the SO values that are created are 'notional' values; the SO does not represent the actual market or 'spot price' value of agriculture in any given year.

# Why make the change?

The reason that the EC have changed the methodology, to use SO, is to avoid having a negative SGM value (details of how this can occur are below). A negative SGM would cause difficulties in the calculation that is used to determine farm type, therefore the change to SO is required in order to allow the established system of allocating farm types to continue.

After de-coupling was introduced in 2005, support payments to farmers were no longer tied to the volume of goods they produced. This meant that, for classification purposes, support payments could no longer be attributed to a specific crop or animal. In effect, the support became generic or 'un-hypothecated'.

Because the de-coupled support is un-hypothecated, it means that it can no longer be included in the TOV for a specific crop or animal. This means that in some cases, the costs involved in producing, for example, a sheep/lamb for market could be higher than the market value (once support payments are excluded), resulting in a negative SGM. To address this, the Standard Output methodology is now to be used.

#### What methodology was used in this publication?

The methodology used in this publication is based on the FSS regulations that cover the 2000 to 2009 period. This annex presents the initial results arising from implementing the latest methodology; covering the period 2010 to 2019.

Table B1 gives a comparison between SGM and SO multipliers for a selection of outputs.

Table B1: Selected items; Standard Gross Margin comparison with Standard Output

	Standard Gross Margin (£) (SGM)	Standard Output (£) (SO)
Crops (£ per hectare) Wheat Barley Oats Potatoes	668 560 570 2,371	995 712 809 6,026
Forage (£ per hectare) Rough grazing Grassland - under five years old Grassland - over five years old	1 1 1	1 214 191
Livestock (£ per head) Horses Cattle - dairy herd Cattle - beef herd Sheep - breeding Pigs - breeding Poultry - laying hens	218 807 300 22 262 3	304 1,460 312 34 627 11

#### Notes:

- i. SGM takes the output value of crops and livestock on a holding and deducts variable costs (feed, vets & meds etc.)
- ii. SO takes the output value of crops and livestock on a holding and makes no deduction for any costs.
- iii. A change to the methodology from the EC in 2010 dictates that forage (grassland) is now to be separately valued. This explains the large increase in the SO for 'grassland' compared with the notional value of £1 under the SGM methodology.
- iv. SO values shown here are an <u>estimate</u> of the average annual value for a hectare of crop or head of animal.
- v. They are based on a five-year average, covering 2005 to 2009 inclusive. Market price data is used wherever possible.
- vi. Breeding livestock generally have the 'worth' of the offspring included in the value.
- vii. Foot & Mouth Disease (FMD) was present in 2007 and this will have impacted on some of these aggregate values.

# 2. Additional items to be valued using Standard Outputs (SO). Forage and grassland

Grassland is valued differently under the new EC methodology. Previously, grassland was simply given a notional value of £1 per hectare. This has now been replaced with a valuation per hectare based on the actual estimated input costs associated with that type of land. This vastly increases the value per hectare of both temporary and permanent grassland in Scotland, with temporary grassland now being valued at £214 per hectare and permanent grassland at £191 per hectare.

Because of the prevalence of grassland in Scotland, this means that when looking at the value attributed to crops and livestock on holdings, grassland carries significantly more weight than before, and therefore, is far more important in value terms than previously.

The impact of this is that most holdings that used to be classified as 'other' farm type are now classified as 'specialist field crops' under the EC typology. However, as 'specialist field crops' also contains 'specialist cereals' and 'general field cropping', in order to avoid a conflict with cereals and potato holdings, the farm types used in Scotland have been expanded to create a 'general cropping; various field crops' category. This is to avoid holdings with potatoes being given the same farm type as holdings with a mix of crops, but a prevalence of grassland.

This is especially important for projects that rely on farm types to draw sample frames. There are also a number of holdings that move into the 'mixed cropping' or 'general cropping; various field crops' farm type, whereas previously they might have been 'cereals' or 'specialist general cropping' farm types.

#### Non-agricultural horses

The other change that applies is that non-agricultural horses (NAH) are now to be included in the TOV of a holding's activities, with regard to allocating farm type.

Non-agricultural horses have always been <u>counted</u> in the statistics we produce, but have never been included in the TOV of a holding's activities (primarily because they are non-agricultural). However, the EC now stipulate that non-agricultural horses should be included in the TOV. Because of the relatively high value of horses, this impacts on the farm type for a number of holdings, especially where there is a mix of relatively lower value crops and/or livestock.

An additional check has been implemented in the Scottish typology to ensure this change does not artificially inflate the number of cattle & sheep holdings; if more than 50 per cent of the activity on a 'grazing livestock'

holding is derived from non-agricultural horses the holding is given a farm type of 'mixed – various grazing livestock'.

- 3. Changes to thresholds used to allocate farms to specific farm types. Currently, if the relative contribution of a specific farming activity accounts for at least two-thirds of a holding's TOV, then this threshold is used to allocate an initial farm type to be attached to the holding. Sub-thresholds are then applied to allocate a more precise farm type based on specific activity, such as 'rearing and fattening' etc.
- (i) There are various refinements to some sub-thresholds that are used to allocate farms into different sub-classifications. The reason for these adjustments is simply to allow a more detailed classification of activities; they do not have a large impact on the farm type allocated.

More detail on the new and old farm type hierarchies is available in Tables B2 and B3.

(ii) The biggest threshold change is how forage counts towards a holding's TOV; if there is forage present and livestock present, then the value of the forage counts alongside the livestock valuation (i.e. it is effectively counted as part of the livestock towards TOV. If no livestock are present but forage crops are present, then the assumption is that this crop is for sale, and the forage value counts as general cropping towards the TOV.

# 4. A new farm type hierarchy for FSS and how this is implemented into farm types used in Scotland.

There are currently ten basic (or 'general') farm types in use in Scotland (cereals, general cropping, horticulture, specialist pigs, specialist poultry, dairy, LFA cattle & sheep, lowland cattle & sheep, mixed, and other).

'Other' relates to holdings where two-thirds of TOV is identified as something other than crops or livestock, such as grass or horses, whereas 'mixed' is where no dominant activity accounts for two-thirds of the TOV.

However, additional thresholds and calculations can be applied to subdivide the categories further, and so there are more detailed farm types that can be used, such as 'specialist grass and forage' (a subset of 'other'), and 'specialist beef' farms and 'specialist sheep' farms, both subsets of the cattle & sheep farm type.

The new EC typology produces nine basic (or 'general') farm types. However, as stated in the introduction, outwith meeting compliance requirements of the FSS, member states use specific typologies in order to meet their own policy and stakeholder needs.

It should be noted that the underlying process to create any data submitted to the EC is always fully compliant with EC regulations. Creating 'Scottish' farm types within that framework does not jeopardise any EC compliance requirements. Two simple examples of this are shown here;

- (i) One of the new general EC farm types is 'granivores'. In Scotland we split this into two general types; 'pigs' and 'poultry'.
- (ii) The FSS typology does not cater for any Less-Favoured Area (LFA) designation. Naturally, the prevalence of LFA-designated areas in Scotland makes it an important indicator, therefore in Scotland, given the prevalence of animals that exist in the LFA areas, we specifically create a general farm type for this purpose ('LFA cattle & sheep' and by association, 'non-LFA cattle & sheep').

The following tables show details of the new and old farm type hierarchies;

Table B2: New EC farm type hierarchy (EC Regulation RI/CC 1500).

General type	Medium (principle) type	Low (particular) type		
Specialist field	Specialist cereals, oilseeds Specialist cereals (not rice), oilse			
crops	and protein crops	and protein crops		
		Specialist rice		
		Cereals, oilseeds, protein crops and		
		rice combined		
	General field cropping	Specialist root crops		
		COP and root crops combined		
		Specialist field vegetables		
		Specialist tobacco		
		Specialist cotton		
		Various field crops combined		
Specialist	Specialist horticulture indoor	Specialist vegetables indoor		
horticulture	Specialist horticulture	Specialist flowers and ornamentals		
	outdoor	indoor		
	Other horticulture	Mixed indoor specialist		
		Specialist vegetables outdoor		
		Specialist flowers and ornamentals		
		outdoor		
		Mixed outdoor specialist		
		Specialist mushrooms		
		Specialist nurseries		
		Various horticulture		
Specialist	Specialist vineyards	Specialist quality wine		
permanent crops	Specialist fruit and citrus fruit	Specialist wine		
	Specialist olives	Specialist tables grapes		
	Various permanent crops	Other vineyards		
	combined	Specialist fruit (not citrus, tropical or nuts)		
		Specialist citrus fruit		
		Specialist nuts		
		Specialist tropical fruits		
		Specialist fruit, citrus, tropical fruits		
		& nuts: mixed production		
		Specialist olives		
		Various permanent crops combined		
Specialist grazing	Specialist dairying	Specialist dairying		
livestock	Specialist cattle - rearing and	Specialist cattle		
	fattening			
	Cattle - dairying, rearing and	Cattle		
	fattening combined			
	Sheep, goats and other	Specialist sheep		
	grazing livestock	Sheep and cattle combined		
		Specialist goats		
		Various grazing livestock		

Specialist	Specialist pigs	Specialist pig rearing		
granivores	Specialist poultry	Specialist pig fattening		
	Various granivores combined	Pigs rearing and fattening combined		
		Specialist layers		
		Specialist poultry		
		Layers and poultry		
		Various granivores combined		
Mixed Cropping	Mixed Cropping	Horticulture and permanent crops		
		combined		
		Horticulture and field crops		
		combined		
		Field crops and vineyards combined		
		Field crops and permanent crops		
		combined		
		Mixed cropping, mainly field crops		
		Other mixed cropping		
Mixed livestock holdings	Mixed livestock, mainly grazing livestock	Mixed livestock, mainly dairying		
	Mixed livestock, mainly	Mixed livestock, mainly non-dairying		
	granivores	grazing livestock		
		Mixed livestock, granivores and		
		dairying		
		Mixed livestock, granivores and non-		
		dairying grazing livestock		
Mixed Crops - livestock	Field crops - grazing livestock combined	Field crops combined with dairying		
	Various crops and livestock combined	Dairying combined with field crops		
		Field crops combined with non-		
		dairying grazing livestock		
		Non-dairying grazing livestock		
		combined with field crops		
		Field crops and granivores combined		
		Permanent crops and grazing		
		livestock combined		
		Apiculture		
		Various mixed crops and livestock		
Non-classified	Non-classified holdings	Non-classified holdings		
holdings				

Table B3: Scottish farm type hierarchy (pre-EC Regulation RI/CC 1500).

General type	Medium (principle) type	Low (particular) type
Cereals	Cereals	Cereals
cerears	cerears	Oilseed rape and linseed
		Cereals + oilseed rape + peas, beans
		+ set aside
General Cropping	General Cropping	Potatoes
deficial cropping	deficial cropping	Cereals + root vegetables
		Peas, beans + vegetables
		General crops
		Mixed crops + vegetables
		Mixed crops + fruit
		Crops + mixed other
Horticulture	Specialist fruit	Orchard fruit + soft fruit (except
		strawberries)
	Specialist glass	Glass houses
		Non-tomato glass
		Glass (tomato + non-tomato)
	Other horticulture	Mixed vegetables
		Mixed vegetables + glass
		Flowers + trees
		Flowers, trees + non-tomato glass
		Mixed vegetables, flowers, trees
		Mixed vegetables, glass, flowers,
		trees
		Mixed vegetables + fruit
		Mixed crops, vegetables, fruit
		(majority veg)
		Mixed crops, vegetables, fruit
	Specialist mushrooms	Specialist mushrooms
Specialist Pigs	Specialist pigs	Breeding pigs
opecianot i igo	Specialist pigs	Pigs for eating
		General pigs
Specialist Poultry	Specialist poultry	Hens, pullets for laying + cocks
Specialist Footily	Specialist poolitiy	Other poultry for eating
		General poultry
Dairy	Dairy (LFA)	Dairy cows in milk and calf
Dall y	Daily (LFA)	Dairy and female cows except beef
		,
	Dainy (Lowland)	COWS
	Dairy (Lowland)	Dairy cows in milk and calf
		Dairy and female cows except beef
Cattle and I	Considiation (CDA)	cows
Cattle and sheep	Specialist sheep (SDA)	Ewes
(LFA)	Specialist beef (SDA)	Beef cows in milk and calf
		Beef cows
	Mixed cattle and sheep (SDA)	Cattle general
		Cattle general
		Cattle and ewes
continued on next		Mixed cattle and sheep
page		Goats

Cattle and sheep	Cattle and sheep (DA)	Beef cows in milk and calf		
(LFA) continued		Beef cows		
		Cattle general		
		Cattle general		
		Ewes		
		Cattle and ewes		
		Mixed cattle and sheep		
		Goats		
Cattle and sheep	Cattle and sheep (Lowland)	Beef cows in milk and calf		
(Lowland)		Beef cows		
,		Cattle general		
		Cattle general		
		Ewes		
		Cattle and ewes		
		Mixed cattle and sheep		
		Goats		
Mixed	Cropping and dairy	Crops and dairy cattle		
		Dairy cattle and crops		
	Cropping, cattle and sheep	Rough grazing and fodder		
	Cropping, pigs and poultry	Crops, pigs and poultry		
	Cropping and mixed livestock	Fruit, cropping and mixed livestock		
		Cropping and mixed livestock		
	Mixed livestock	Sheep and dairy cattle		
		Mixed sheep, cattle and poultry		
		Mixed poultry and dairy cattle		
		Mixed poultry and non-dairy cattle		
		Mixed poultry, sheep, cattle and		
		other		
		Mixed pigs and poultry		
		Mixed pigs and poultry		
Other	Specialist set-aside	Set-aside		
	Specialist grass and forage	Root vegetables for fodder		
		Grass under five years, crops and		
		root vegetables for fodder		
		Grass and rough grazing		
		Crops, grazing and fodder		
		Mainly grass, rough grazing and		
		fodder		
		Fodder and rough grazing		
		Rough grazing and (less) fodder		
	Specialist horses	Horses		
	Non-classifiable - fallow	Bare, fallow land		
SDA – severely disad	Non-classifiable - other	Other		

SDA – severely disadvantaged area DA – disadvantaged area

# Impact of new EC methodology and typology.

The switch to using SO and implementing a new farm typology does not radically alter the statistics produced from the June Agricultural Census (JAC). This is because the JAC results are based primarily on actual data, reported through the Single Application Form (SAF) and also on the JAC survey forms.

The methodological changes detailed in this Annex do however affect the estimation that is used to impute for non-response in the JAC, <u>but the impact is minimal</u> as demonstrated in the following table.

Table B4: Impact of typology changes on June census; 2011

·	<u> </u>		Difference	% difference
	New 2011	Previous 2011	new v old	new v old
Land (ha)				_
Wheat	115,408	115,412	-4	0.00%
Barley	308,338	308,425	-87	-0.03%
Rough grazing	3,119,241	3,119,241	0	0.00%
Agri-woodland	426,101	426,101	-0	0.00%
Other land	139,298	139,298	-0	0.00%
All grassland	1,357,569	1,357,551	19	0.00%
Fallow land	15,059	15,056	3	0.02%
Total agricultural area	5,625,092	5,625,159	-67	0.00%
Livestock				
Pigs	389,998	389,995	3	0.00%
Poultry	8,074,475	8,077,846	-3,371	-0.04%
Cattle	1,803,302	1,803,937	-635	-0.04%
Sheep	6,796,728	6,801,134	-4,406	-0.06%

It is important to note that the following tables show the movements between farm types due to implementing the new typology. They do not represent a genuine change in farming activity on the farm.

The most notable change is to the distribution of holdings by farm type. This is to be expected given that the new typology effectively updates the farm type labels to better reflect the state of agriculture across Europe.

Tables B5 and B6 show the movements at the most aggregate farm type level (the 'general' farm type). Table B7 presents the detailed movements that underpin the data in tables B5 and B6. Results are based on preliminary investigations, with further validation work being carried out throughout 2013.

Table B5: 2010 farm types under current and new typologies.

Current farm types	Number of	New farm types (11)	Number of
in use (10)	holdings in		holdings in
	2010		2010
Cereals	3,679	Cereals	2,332
General cropping	2,393	Specialist general cropping	1,123
Horticulture	1,089	Horticulture	614
Specialist pigs	288	Specialist pigs	277
Specialist poultry	2,036	Specialist poultry	799
Dairy	1,263	Dairy	1,163
Cattle & sheep (LFA)	13,781	Cattle & sheep (LFA)	14,868
Cattle & Sheep (Lowland	d) 1,910	Cattle & sheep (Lowland)	2,449
Mixed	2,132	Mixed	5,346
Other	23,743	Various field crops and	21,687
		forage	
		Unclassified	1,656
Total holdings	52,314	Total holdings	52,314

Table B6: Changes by farm type (number of holdings): 2010.

	Change in
	holdings
Cereals	-1,347
Specialist general cropping	-1,270
Horticulture	-475
Specialist pigs	-11
Specialist poultry	-1,237
Dairy	-100
Cattle & sheep (LFA)	1,087
Cattle & sheep (Lowland)	539
Mixed	3,214
Various field crops and forage	-400
and unclassified	
Net movement	0

As detailed previously, these EC farm types also need to be sensible for use in Scottish agriculture so, as far as is possible, the new EC farm types have been aligned with the current Scottish farm types to provide as consistent a series as possible.

The following table (B7) shows the detailed movements within farm types as a result of converting to the new methodology, again based on our preliminary investigations.

Table B7: Detail of changes in farm types – 2010.

					··· - <b>J</b>  -	Old ty	/pes				
New types	Cereal	General cropping	Horticulture	Pigs	Poultry	Dairy	LFA cattle & sheep	Lowland cattle & sheep	Mixed	Other	Total
Cereals	2,296	29	-	-	-	-	-	-	7	-	2,332
Gen crop	120	993	-	-	-	-	-	-	1	9	1,123
Horticultr.	-	28	585	-	-	-	-	-	1	-	614
Pigs	4	1	1	192	1	-	1	3	74	-	277
Poultry	-	-	-	-	715	-	2	-	82	-	799
Dairy	-	-	-	-	-	1,140	4	4	15	-	1,163
LFA C & S	42	29	31	7	187	100	13,455	-	524	493	14,868
n-LFA C & S	19	11	9	4	108	21	-	1,702	279	296	2,449
Mixed	527	288	415	63	590	2	300	197	1,123	1,841	5,346
GC:F&VC	671	1,014	48	22	435	-	18	3	26	19,450	21,687
Unclassf.	-	_	-	-	-	-	1	1	-	1,654	1,656
Total	3,679	2,393	1,089	288	2,036	1,263	13,781	1,910	2,132	23,743	52,314

### Interpreting Table B7.

Taking 'cereals' for example, as a result of implementing the new typology;

- (i) There are 2,296 holdings that do not change farm type
- (ii) Reading across the table, there are 36 holdings that move farm type into 'cereals'; 29 from 'general cropping' and 7 from 'mixed'.
- (iii) Reading down the table, there are 1,383 holdings that move out from the 'cereals' farm type and into various new farm types; 527 from 'cereals' into 'mixed'; 671 from 'cereals' into 'general cropping; various field crops' and so on.

#### Main drivers behind changing farm types.

- (a) The revaluing of grassland and forage is a crucial driver behind these changes. Grassland is now worth significantly more under the new typology and therefore carries far more weight in determining a holding's farm type. Given the prevalence of grassland in Scotland it is not surprising that it is causing some holdings to move into a different farm type under the new methodology.
- (b) The treatment of grassland and forage as a separate saleable commodity where no livestock are present is also a factor. Coupled with (a) this change in the typology methodology means more holdings are now typed as general cropping; various field crops, (as the forage and grazing counts towards the cropping element of TOV) although please note that the bulk of these holdings are what were previously typed as 'other'.
- (c) Similarly, where livestock are present, the value of any associated grazing or forage now counts towards the livestock element of the TOV of

the holding. This means that more holdings are now typed as livestock (cattle and sheep, 17,317 under the new typology compared with 15,691 under the old system).

(d) Tied to the previous point, the inclusion of non-agricultural horses in the TOV of a holding is also increasing the number of livestock holdings (although note that there is an additional check in place to ensure that a holding that is mostly non-agricultural horses does not receive a farm type of 'cattle and sheep').

It is worth re-iterating here that it is important to note that these tables show the movements between farm types due to implementing a new methodology for allocating farm typology. The movements do not represent a genuine change in farming activity on the farm.

#### **Next steps**

Work to implement these methodological changes and assessment of their impact on other statistical outputs will continue through the remainder of 2013. Year-on-year comparisons will also be conducted in order to observe any genuine changes in farming activity.

Along with implementing the new typology into the 2010 to 2013 June census results, we will also be assessing any impacts on the annual Estimates of Farm Income statistics; which incorporate the Total Income from Farming (TIFF) series and the Farm Business Income (FBI) statistics.

An update on these and more detail on the new typology methodology will be made available on-line as the year progresses.

#### The Agricultural Census of 1912

An agricultural census has probably been run in Scotland each year since at least the middle of the 19<sup>th</sup> Century. Charts 5.4 and 5.10 of this publication show the number of cattle and sheep each year since 1883, but this article goes back one hundred years from the data of the publication, to look at the census of 1912.

The year 1912 was the year that the Titanic sank, Scott and his companions died in the Antarctic, and in the Balkans the precursors to the First World War were getting underway. In Scotland Mingulay was abandoned, the Dewar Report told of poor health-care provision in the Highlands, Celtic won the cup and Rangers the league.

The results of the agricultural census were published on 30<sup>th</sup> June 1913, in a two-part 'Report to the Board of Agriculture for Scotland', with the second part published two months later. The Board was based at the north-east corner of St Andrew Square in Edinburgh, now home to an investment company. The report was printed by Neill & Co, who were still in business until 1973, and was for sale for five-pence at the Stationery Office.

### A product of its time, the report began

"Gentlemen, I have the honour to submit the First Part of the Agricultural Statistics for Scotland, 1912".

#### Part II is even more deferential, beginning

"Gentlemen, I beg to submit the Second Part of the Agricultural Statistics for Scotland, 1912".

The second part contained statistics on the returns of the crop yields, similar to our Scottish Farm Income Estimates publication nowadays. Data had been received from the end of June up to mid-September 2012, with provisional results being available one week later and a Preliminary Abstract published at the end of October. The two-part report that appeared in June 1913 was therefore the equivalent of ERSA, providing further detailed analysis of the initial results, but with 'very considerable modifications' following 'special investigations'.

The census consisted of data from 77,662 holdings of over one acre, excluding holdings consisting only of mountain and heath land (rough grazing), and was apparently assumed to be a 100 per cent response. This compares to 52,625 holdings in 2012, but the results scaled up from returns from only 20,100. In 1912 the total area of Scotland, estimated at 15 million acres (5.9 million hectares, compared to 5.6 million in 2012), included 1.3 million hectares of arable land and only 600,000 hectares of permanent grass, though it would seem that the coverage and definitions have perhaps changed since then.

Crops grown in 1912 show that bere (similar to barley) was still a major crop (over 10,000 acres) and identified separately from it. Vetches, lucerne and kohl-rabi were also considered worth a mention, though the latter two with less than 50 acres each. The table shows some of the categories for comparison with 2012, with oats and turnips showing the biggest drops.

The most noticeable difference in the livestock section of the report relates

Crops grown ('000 hectares)	
1912	

1 0 1	,	
	1912	2012
Barley & bere	77.6	332.0
Wheat	25.2	100.6
Oats	387.1	23.7
Rye	2.8	-
Beans	3.6	3.8
Peas	0.5	0.7
Potatoes	60.6	29.5
Turnips & swedes	177.9	4.4
Cabbage	2.2	2.0
Vetches	3.1	-
Small/soft fruit	2.9	8.0
Turnips & swedes Cabbage Vetches	177.9 2.2 3.1	4.4 2.0 -

to horses. Reported on first, there were 148,000 horses for agricultural purposes and 205,000 altogether (compared to 860 out of 37,000 in 2012. nowadays just reported in 'other livestock'). Cattle were still down at 1.2 million prior to its rise in the 1940s (1.8 million in 2012), sheep were at 7.0 million (6.7 million in 2012) and pig numbers were still relatively low at 159,000 (363,000 in 2012). No data were reported for poultry or other livestock.

Part II helpfully gives us a summary of the weather that year, which was characterised by 'the drought and warmth of April and May, and the cold, wet summer', however there were excellent conditions for harvest in September before the bad weather set in again. Data are reported for the timing of the harvest, which was about a month later than usual due to the poor August weather, and also took longer to gather.

Yields were down, particularly on the very successful 1911 harvest. Reported in 'bushels per acre', wheat yield was the equivalent of 2.6 t/ha, barley 2.1 t/ha, oats 1.7 t/ha, and potato yields were 14 t/ha, considerably lower than today (7, 5, 5 and 33 respectively in 2012). However, the weather south of the border must have been worse as yields for nearly all crops were greater in Scotland than England or Wales, though with Ireland (then part of the UK) faring very well. The most valuable crop in Scotland was oats, valued at £5.09 million, with hay at £2.91 million and potatoes at £2.89 million.

In keeping with the deferential openings, both parts of the report end

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"I have the honour to be,
     Gentlemen,
          Your obedient servant,
               John M Ramsay
               Superintendent of Statistics and Intelligence"
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