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Farm Business Income by type of farm in England, 2013/14

(Revised: text on horticulture farms)

Data on farm business incomes are used to monitor and evaluate Government and EU policies and to inform wider research into the economic performance, productivity and competitiveness of the agricultural industry. The data are provided to the EU as part of the Farm Accountancy Data Network (FADN) and are widely used by the industry for benchmarking.

This release provides survey results of Farm Business Income for 2013/14 covering the **2013 harvest** and including the 2013 Single Payment (which is included within total farm output and therefore contributes to Farm Business Income). These replace the forecast estimates published on 30 January 2014. All figures are for March/February years. A time series showing this and other measures of income can be found here.

This notice was revised on 11th December. The reduction in costs on horticulture farms should have been attributed to fixed costs not crop variable costs.

A more detailed analysis of the results will be published on 11 December 2014 in Farm Accounts in England see https://www.gov.uk/government/collections/farm-business-survey. Forecasts of income by farm type for the year ending February 2015 and covering the 2014 harvest will be published in January 2015.

Key results

- Average Farm Business Income fell on cereals, general cropping, mixed and grazing livestock farms in 2013/14 but increased on dairy, specialist pig and specialist poultry farms.
- For the cropping sector, the wet autumn of 2012 continued to influence profitability. Drilling was disrupted, leading to increased areas of lower yielding spring crops harvested in 2013. Crop prices were also lower due to weakening global markets.
- On dairy farms, the increased income was driven by a higher milk price (14 percent higher than in 2012/13) and increased production (8 percent higher than in 2012/13).
- Average incomes fell on grazing livestock farms (lowland and LFA). The cold, late spring following the wet autumn of 2012 led to higher feed costs and lower output from the sheep enterprises. In the LFA, output from beef was also lower than in 2012.
- The 2013 Single Payment was, on average, unchanged compared to the previous year. The impact of the weaker exchange rate was offset by the introduction of financial discipline.

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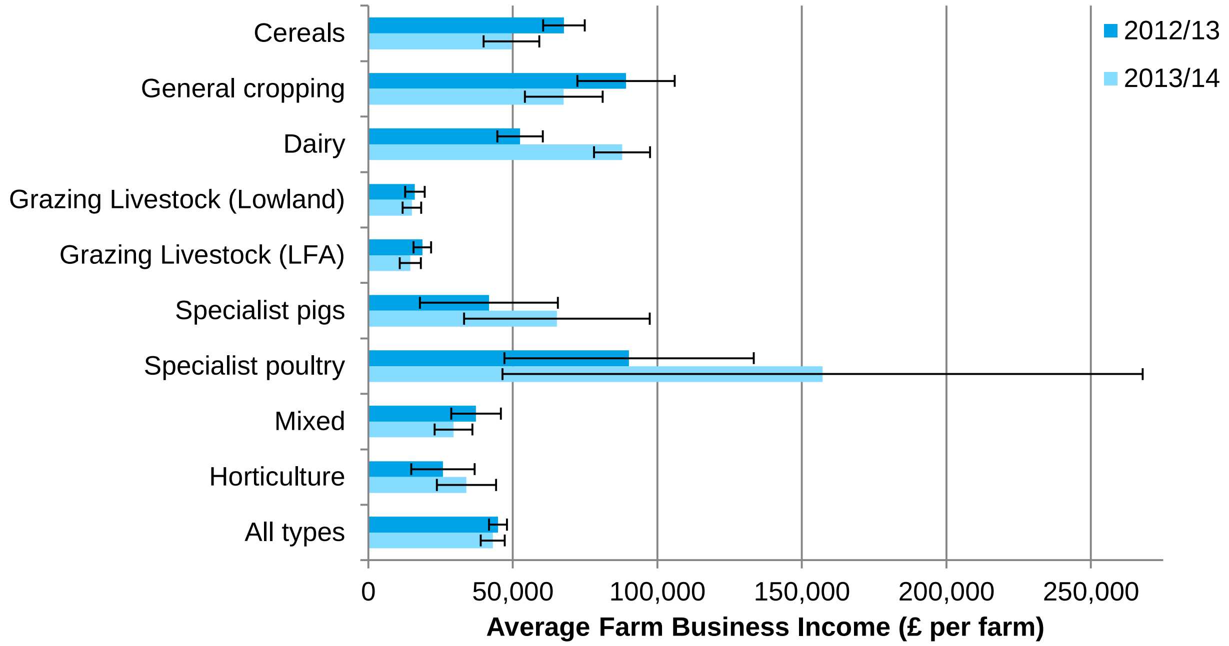
Figure 1: Average farm business income (£'s) by farm type, with 95% confidence limits, England 2012/13 and 2013/14



The 95% confidence limits are shown as ranges around the averages. For more guidance on how to interpret these results, please see *Accuracy and reliability of results* in the Technical Note at the end of this Notice.

Detailed results

On **cereal farms**, average Farm Business Income fell by 27 percent in 2013/14 to £49,500 Table 1) primarily due to a 6 percent fall in agricultural output and a similar increase in costs. The lower output reflects the reduced area from the major crops on this farm type (winter wheat, winter barley, winter oilseed rape) following the wet autumn of 2012 which disrupted drilling. These were replaced by lower yielding spring crops. In addition, cereal and oilseed prices fell as global supplies recovered due to record harvests in other countries. Whilst variable costs fell, particularly for fertiliser and agrochemicals, fixed costs increased, notably for labour and machinery (depreciation and running costs). Just over half of cereal farms failed to make a positive income from farming activities in 2013.

Average incomes on **general cropping farms** fell by almost a quarter (Table 1) to £67,600. Agricultural output fell by 6 percent driven by the reduced output of winter crops combined with a fall in output from potatoes and field vegetables. Sugar beet output increased due to both higher yields and prices. Despite higher yields for potato crops a substantial fall in prices led to a lower output for the 2013 crop. Total input costs were broadly similar to 2012/13 with lower values for fertilisers and agrochemicals but higher seed, machinery and rent costs.

On **dairy farms**, average Farm Business Income increased by more than two thirds to £87,800 (Table 1), returning to 2011/12 levels. Agricultural output was around 20 percent higher driven by both increased milk prices (14 percent higher than in 2012/13) and production (8 percent higher than in 2012/13). This was partially offset by increased input costs, particularly for feed due to increased levels of production and the prolonged winter. The upward trend in average herd size continued and the average milk yield per cow increased by approximately 4 percent to just over 7,900 litres.

Table 1: Average Farm Business Income per farm (£/farm)

Average farm business income per farm (£/farm)

Farm Type	2010/11	2011/12	2011/12 [(a)]	2012/13	2012/13[(b)]	2013/14	Annual % Change 2013/14 / 2012/13
At current prices							
Cereals	84,800	94,600	93,700	68,200	67,700	49,500	-27%
General cropping	111,700	100,800	100,500	91,500	89,200	67,600	-24%
Dairy	66,200	86,700	86,600	51,200	52,600	87,800	67%
Grazing livestock (Lowland)	21,400	32,200	32,000	16,300	16,100	15,100	-6%
Grazing livestock (LFA)	21,300	29,200	29,200	19,700	18,700	14,500	-22%
Specialist pigs	44,400	38,000	38,100	40,900	41,700	65,200 (d)	56%
Specialist poultry	68,200	41,400	46,400	94,200	90,200	157,200 (d)	74%
Mixed	50,900	66,200	74,100	38,100	37,300	29,500	-21%
Horticulture	48,000	55,300	52,800	30,100	25,800	33,900	31%
All types	**57,300**	**66,000**	**66,200**	**46,600**	**44,900**	**43,100**	**-4%**
In real terms at 2013/14 prices [(c)]							
Cereals	89,600	97,800	96,800	69,400	68,900	49,500	-28%
General cropping	118,000	104,200	103,900	93,100	90,700	67,600	-25%
Dairy	70,000	89,600	89,500	52,100	53,400	87,800	64%
Grazing livestock (Lowland)	22,600	33,300	33,100	16,500	16,400	15,100	-8%
Grazing livestock (LFA)	22,500	30,200	30,200	20,000	19,000	14,500	-24%
Specialist pigs	46,900	39,300	39,400	41,600	42,400	65,200 (d)	54%
Specialist poultry	72,100	42,800	48,000	95,700	91,700	157,200 (d)	71%
Mixed	53,700	68,500	76,600	38,700	37,900	29,500	-22%
Horticulture	50,700	57,200	54,600	30,600	26,300	33,900	29%
All types	**60,500**	**68,000**	**68,500**	**47,400**	**45,600**	**43,100**	**-5%**

Years ending in February

(a) Revised weighting framework separating specialist poulty meat from specialist poultry layers

(b) Farm typology based on 2010 standard output coefficients

(c) Uses GDP deflator

(d) The sample sizes for specialist pig and poultry farms are relatively small. There is one very influential poultry farm in 2012/13 and 2013/14. If this is excluded from the results, average income on poultry farms increases by 31% between 2012/13 and 2013/14 from £76,000 to £99,800 per farm.

Average incomes fell on **grazing livestock farms** in both lowland and less favoured areas (LFA) by 6 percent and 22 percent respectively (Table 1) to approximately £15,000. These falls reflect the continuing impact of the wet weather in autumn 2012 followed by the prolonged winter in early 2013 which delayed grass growth and turnout. On lowland grazing farms, there was an increase in both revenue and the closing valuation for the cattle enterprises due to firmer prices for most of 2013/14 compared to the previous year. This was offset by a fall in output from sheep enterprises and an increase in costs, particularly feed. In the LFA, output from both the beef and sheep enterprises was lower than in 2012/13. Fewer cattle were sold and lower stocking rates for both enterprises led to a fall in the closing valuation. Input costs increased, again primarily due to additional feed costs. Agri-environment scheme payments, an important source of income in the LFA, were broadly similar to the previous year, for both farm types.

Average incomes on **mixed farms** fell by just over 20 percent between 2012/13 and 2013/14 to around £29,500 (Table 1). Overall, agricultural output increased by 5 percent on these farms; output from pig and broiler enterprises increased substantially but this was partially offset by lower output from the cropping enterprises. Input costs increased by 8 percent with a number of items showing large increases, particularly feed and to a lesser extent machinery costs.

On **horticulture farms,** average incomes increased by just under a third to £33,900. Output from outdoor vegetables and horticultural crops, which account for the vast majority of output on these farms, was broadly unchanged but output from other cropping enterprises fell. Agricultural input costs fell by 3 percent driven mainly by reduced fixed costs.

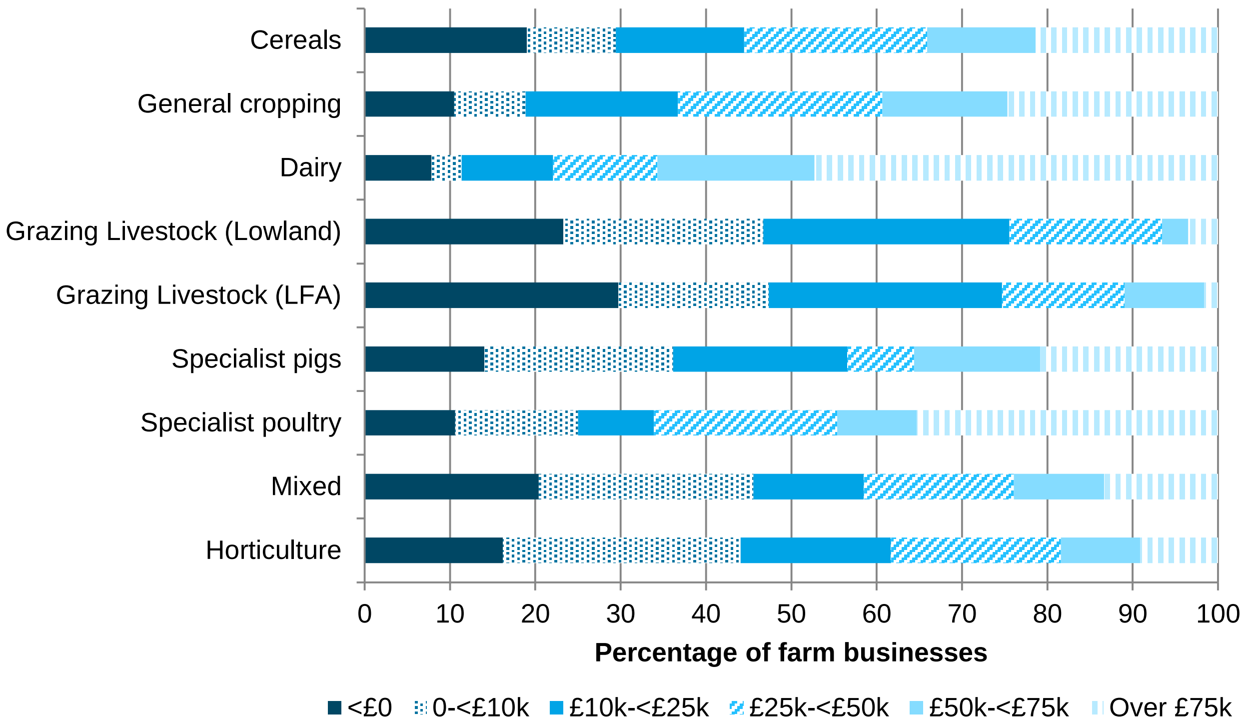
The FBS samples for both specialist pigs and specialist poultry farms are relatively small, meaning that individual farms can have a large influence on the results.

On **specialist pig farms** average Farm Business Income increased by over 50 percent in 2013/14 to £65,200 per farm (Table 1). Total output from agriculture enterprises increased by 5 percent, driven by a higher output from the pig enterprise but partially offset by a reduced output from the cropping enterprises. Although total input costs were unchanged, variable costs were lower whilst fixed costs increased, notably for labour and rent. Feed costs were unchanged.

For **specialist poultry farms** average incomes increased by almost 75 percent compared to 2012/13. However this increase should be treated with caution because of the small sample. Removing a particularly influential farm from the analysis suggests that the average income increased by 31percent between 2012/13 and 2013/14. The rise in income was driven by increased output from both the broiler and egg enterprises, but partially offset by increased costs. Although feed costs were unchanged, many other costs rose particularly those for labour, other livestock costs, machinery and rent.

For more information about the weighting and reliability of results please see the annex and technical note at the end of this release.

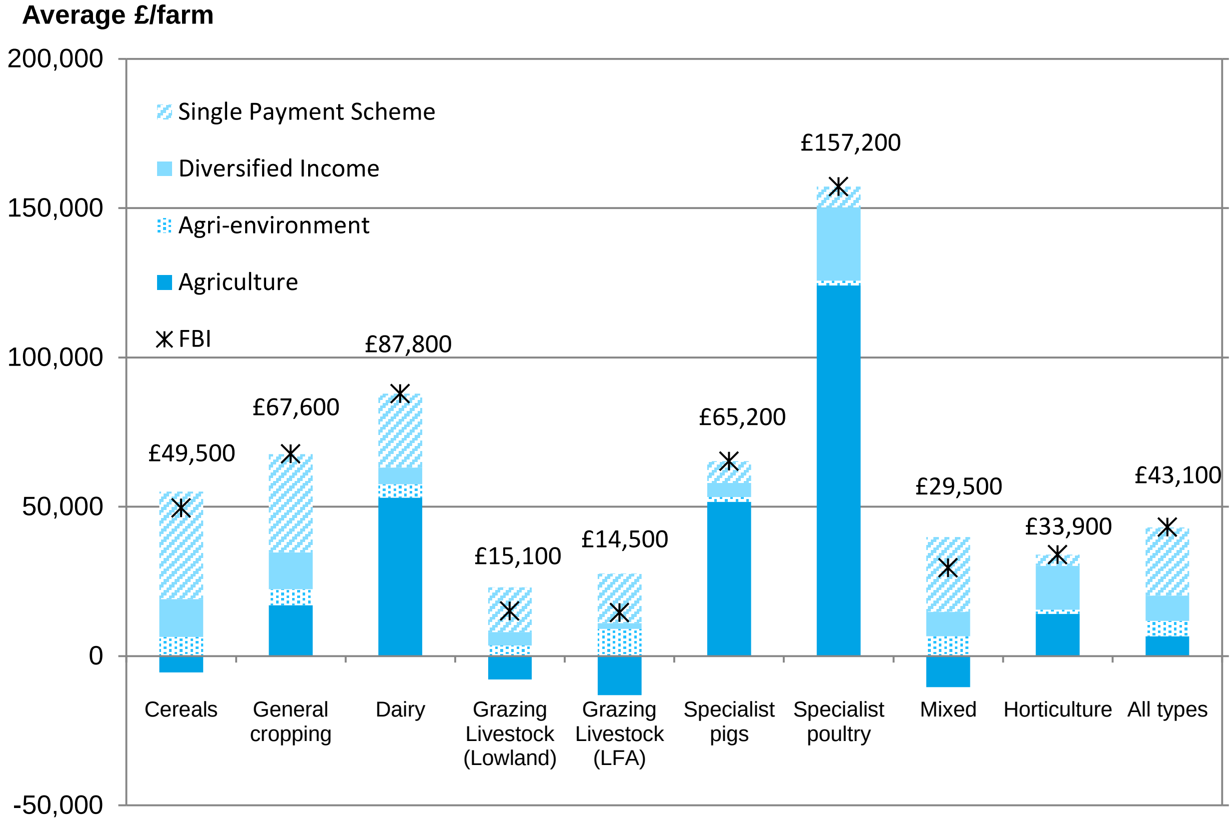
Figure 2: Distribution of Farm Business Income by farm type, 2013/14



The average values mask the considerable variability in incomes at the farm level both between and within farm types (Figure 2). Over a fifth of mixed and grazing livestock farms failed to make a profit in 2013/14. More than 20 percent of dairy farms had an income of less than £25,000 whilst over 45 percent had an income of more than £75,000. Around 20 percent of cereal farms failed to make a profit in 2013/14, compared to 9% in the previous year.

The variation in incomes within farm type reflects different production costs between farms which are influenced by a number of factors such as size, location, soil type etc. More detailed analysis of farm incomes based on farm performance is provided in Farm Accounts in England. This will be updated with 2013/14 data on 11 December 2014 and published here.

Figure 3: Farm Business Income by Cost Centre[1] 2013/14



[1] Data represent averages across all farms in the sample including those that do not have any income within some of the cost centres. The resulting Farm Business Income is shown by the star and in text at the top of each column.

Farm Business Income can be broken down by cost centre (Figure 3) to illustrate the relative contribution to average total Farm Business Income (shown as text at the top of each column). The underlying data can be found in Table 2 in the annex to this Notice. Further information about the methodology adopted for allocating costs across cost centres can be found in Appendix 3 of Farm Accounts in England.

In 2013/14 the Single Payment continued to account for a substantial proportion of average Farm Business Income for all farm types apart from horticulture, specialist pig and poultry farms. Across all farm types, the average Single Payment was around

£25,000, little changed from the previous year. Although the sterling rate of payment increased due to the weakening of the pound against the euro this was offset by the introduction of financial discipline by the EU Commission of just under 2.5 percent.

On average, cereals, mixed and grazing livestock farms (lowland and LFA) failed to make a positive return from agriculture. On LFA grazing livestock farms income from agri-environmental activities is particularly important, contributing just over £11,000 per farm to the average Farm Business Income whilst these activities are less significant for the intensive livestock and horticulture sectors.

Annex

Table 2 provides the data used in Figure 3 in the main body of this release.

Table 2 Farm Business Income by Farm Type and Cost Centre (£/farm)[2]

Farm Type	Agriculture	Agri-environment and other payments	Diversification out of agriculture	Single payment scheme	Farm business income
Cereals	-5,500	6,400	12,700	36,000	49,500
General cropping	17,100	5,300	12,400	32,900	67,600
Dairy	53,000	4,600	5,500	24,800	87,800
Grazing livestock (Lowland)	-7,900	3,500	4,500	15,000	15,100
Grazing livestock (LFA)	-13,200	9,100	2,000	16,600	14,500
Specialist pigs	51,600	1,600	4,700	7,300	65,200
Specialist poultry	124,100	1,600	24,600	6,900	157,200
Mixed	-10,400	6,600	8,100	25,200	29,500
Horticulture	14,100	1,400	14,700	3,800	33,900
All types	6,600	5,200	8,400	22,900	43,100

[2] Figures may not add to totals due to rounding

Availability of results

All Defra statistical notices can be viewed on the Gov.UK site at:
https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics.

Results from the Farm Business Survey including time series in spreadsheet format can be found at:
https://www.gov.uk/government/collections/farm-business-survey

Revisions

TABLE 3 Revisions to Farm Business Income by Type of Farm in England

Average farm business income per farm (£/farm)

Farm Type	2013/14 January 2014 Forecast	2013/14 October 2014 Outturn	95% Confidence Limits	% Change
At current prices				
Cereals	49,000	49,500	+/- 9,600	1%
General cropping	84,000	67,600	+/- 13,500	-20%
Dairy	101,000	87,800	+/- 9,700	-13%
Grazing livestock (Lowland)	19,000	15,100	+/- 3,200	-21%
Grazing livestock (LFA)	26,000	14,500	+/- 3,700	-44%
Specialist pigs	78,000	65,200	+/- 32,100	-16%
Specialist poultry	103,000	157,200	+/- 110,800	53%
Mixed	35,000	29,500	+/- 6,500	-16%

Forecasts of Farm Business Income for 2013/14 were published in January 2014. These forecasts were based on information available in early January 2014 for prices, animal populations, marketings, crop areas, yields and input costs and were intended as a broad indication of how incomes for each farm type were expected to move compared with 2012/13. The outturns published here are based on actual survey results from the Farm Business Survey 2013/14. These suggest lower than forecasted incomes for general cropping, dairy, lowland and LFA grazing livestock farms. On general cropping farms the fall in potato prices was more severe than expected contributing to a reduced enterprise output of nearly 20 percent. On grazing livestock farms output from the sheep sector was lower than forecast due to lower productivity and the impact of lower stocking rates on the closing valuations. Input costs, particularly for feed were also higher than forecast on dairy farms. Output was higher than expected on specialist poultry farms, but note that the sample size is relatively small for this farm type and the results subject to considerable variability (see page 3).

User engagement

As part of our ongoing commitment to compliance with the Code of Practice for Official Statistics (http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html), we wish to strengthen our engagement with users of these statistics and better understand the use made of them and the types of decisions that they inform. Consequently, we invite users to make contact to advise us of the use they do, or might, make of these statistics, and what their wishes are in terms of engagement. Feedback on this statistical release and enquiries about these statistics are also welcome.

Please contact Charles Mbakwe at fbs.queries@defra.gsi.gov.uk.

Technical Note

Survey coverage and weighting

The Farm Business Survey (FBS) is an annual survey providing information on the financial position and physical and economic performance of commercial farm businesses in England. It covers all types of farming in all regions of the country and includes owner-occupied, tenanted and mixed tenure farms. The FBS only includes farm businesses with a Standard Output of at least €25,000, based on activity recorded in the previous June Survey of Agriculture and Horticulture. In 2013, this accounted for approximately 58,000 farm businesses. Data are collected from a sample of around 1,900 farm businesses by face to face interviews with farmers, conducted by highly trained researchers.

Each record is given a weight to make the sample representative of the population. Initial weights are applied to the FBS records based on the inverse sampling fraction. These weights are then adjusted by calibrating certain totals to match published totals from other surveys[1]) so that they can be used to produce unbiased estimators of a number of different target variables.

[1] Further information on calibration weighting can be found in the 'Statistical Issues' document here http://webarchive.nationalarchives.gov.uk/20130315143000/http://www.defra.gov.uk/statistics/files/defra-stats-foodfarm-farmmanage-fbs-statissues_111123.pdf

The weighting methodology was changed for 2012/13 to improve the reliability of the results for farms with poultry. The change was two-staged. Poultry farms were split into two groups (egg and poultrymeat producers) at the inverse sampling fraction stage. In addition, the FBS estimates of total number of laying birds and total number of table birds are now calibrated to match those from the previous June Survey of Agriculture and Horticulture. This practice is already in place for other livestock counts (as well as crop areas and farm counts) to draw strength from the increased robustness of the much larger sample of the June Survey.

To date this change to the weighting has been applied from 2011/12 but it will retrospectively be applied from 2009/10 for the publication of Farm Accounts in England on 11th December, in order to remove the discontinuity.

More detailed information about the Farm Business Survey and the data collected can be found at https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

Farm type classification

The classification of farms for 2013/14 is based on 2010 standard output coefficients and backdated to 2012/13 for comparability. The results published here are therefore not directly comparable with those published in earlier years. Please see the explanatory document on our web site for further details of these changes.

Farm Business Income

For non corporate businesses, Farm Business Income represents the financial return to all unpaid labour (farmers and spouses, non-principal partners and their spouses and family workers) and on all their capital invested in the farm business, including land and buildings. For corporate businesses it represents the financial return on the shareholders capital invested in the farm business.

In essence Farm Business Income is the same as *Net Profit*, which as a standard financial accounting measure of income is used widely within and outside agriculture. Using the term *Farm Business Income* rather than *Net Profit*, gives an indication of the measure's farm management accounting rather than financial accounting origins, accurately describes its composition and is intuitively recognisable to users as a measure of farm income.

In common with other statistical surveys, the published estimates of income from the Farm Business Survey are subject to sampling error, as we are not measuring the whole population.

We show error bars based on 95% confidence intervals for mean Farm Business Income as a measure of uncertainty that may apply to the estimated means. These signify that we are 95% confident that this range contains the true value. They are calculated as the standard errors (se) multiplied by 1.96 to give the 95% confidence interval (95% CI).

- The smaller range of possible values that could apply to grazing livestock, dairy, cereal and mixed farms types reflects relatively large sample sizes and the relative homogeneity of these sectors in terms of the range of income levels across the farms in each of these types.

- The range of values that could apply to general cropping and horticulture farm types reflect a more diverse range of agricultural activities, e.g. general cropping is made up of arable crop and field scale vegetable producers, while horticulture includes specialist fruit producers, hardy nursery stock and fruit and vegetables grown in glasshouses. As a result these sectors are less homogeneous in terms of income levels.
- Confidence limits for specialist pig and poultry farms are affected by the relatively small samples and a huge range in scale of production. Figure 2 shows the presence of farms at opposite ends of the income scale.

For the Farm Business Survey, the confidence limits shown are appropriate for comparing groups within the same year only; they should not be used for comparing with previous years since they do not allow for the fact that many of the same farms will have contributed to the Farm Business Survey in both years.

Standard errors (and therefore confidence intervals) only give an indication of the sampling error. They do not reflect any other sources of survey errors, such as non-response bias.