



10 December 2015

Farm Accounts in England – Results from the Farm Business Survey 2014/15

This release provides further detail behind the income results published on 29th October 2015. The results are sourced from the 2014/15 Farm Business Survey (which covers the 2014 harvest). Figures are for March/February years with the most recent year shown therefore ending February 2015. The results examine farm incomes, outputs and costs for farm types, farm sizes and regions.

Data on the income of farm businesses is used in conjunction with other information on the agricultural sector to help inform policy decisions (e.g. Reform of Pillar 1 and Pillar 2 of Common Agricultural Policy) and to help monitor and evaluate current policies relating to agriculture in the United Kingdom. It also informs wider research into the economic performance of the agricultural industry. The data are provided to the EU as part of the Farm Accountancy Data Network (FADN) and are also used widely by the industry for benchmarking purposes.

Forecasts of income by farm type for the year ending February 2016 and covering the 2015 harvest will be published in January 2016. These can be found at <u>https://www.gov.uk/government/collections/farm-business-survey</u>

Key results

- In 2014/15, average Farm Business Income was lower across all robust farm types except grazing livestock farms. On lowland grazing livestock farms average incomes increased by 23 percent, albeit from a low base, whilst on Less Favoured Area (LFA) grazing livestock farms average incomes were similar to the previous year.
- For cropping farms, improved weather and a return to more usual cropping patterns saw an increased area of winter crops compared to the previous year and a substantial improvement in yields. However, the increased production was offset by lower commodity prices due to a strong pound and plentiful supplies on global markets.
- On dairy farms the lower average income was driven by a reduced value of output from milk production. Milk prices fell gradually throughout the year but for the first six months were higher than for the same period in 2013. This together with increased volumes partially offset the lower average price for the year as a whole.
- Average incomes on pig and specialist poultry farms fell due to a reduced output for pig and poultry meat.
- The higher value of the pound against the euro led to a lower Single Payment. It also had a negative impact on prices as domestic production had to compete with cheaper imports and alternative suppliers for export markets.

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Background

Farm Accounts in England is the primary publication from the Farm Business Survey. It provides information on farm incomes, outputs and costs for the various farm types, farm sizes, regions and economic performance. This publication also includes detailed information on farm diversification and succession plans.

The main income measure used is Farm Business Income. For non-corporate businesses, Farm Business Income represents the financial return to all unpaid labour on the farm (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 Income is essentially the same as Net Profit, which, as a standard financial accounting measure of income, is used widely within and outside agriculture.

Further information on the Farm Business Survey covering survey methodology, accuracy and reliability can be found in the <u>survey details</u> section of this publication.

Detailed tables covering income, outputs and costs can be found <u>here</u>. Enterprise level gross margins are also provided.

Detailed results

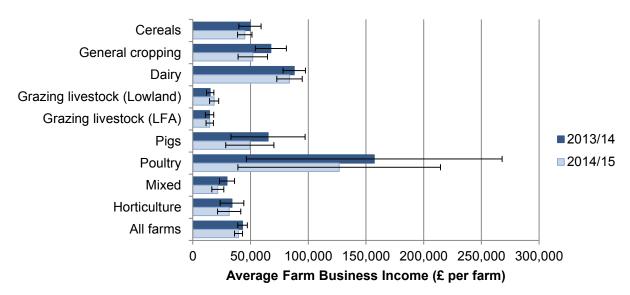
Figures are for March/February years with the most recent year shown ending February 2015. This covered the **2014** harvest and includes the Single Farm Payment due in the 2014/15 accounting year.

1 Overview across all farm types

Average Farm Business Income across all farm types was £39,600 in 2014/15, 8 percent lower than in 2013/14. The key driver behind this fall was lower farm gate values across most commodities, particularly cereals, oilseeds and milk as domestic markets responded to reduced global demand and the change in the exchange rate. Input costs were also lower, particularly feed, but in most cases the fall was not sufficient to offset the lower output. The value of the Single Payment was also lower as the pound strengthened against the euro.

Figure 1 shows average Farm Business Income by farm type together with 95% confidence intervals as error bars. These show the range of values that may apply to the figures. Further details on accuracy or results can be found <u>here</u>.

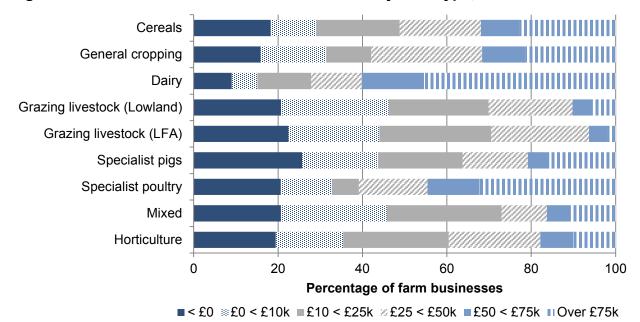
Figure 1: Average Farm Business Income by farm type with 95% confidence intervals, England 2013/14 and 2014/15



Source: Farm Business Survey, England

Farm Business Income varies both between (Figure 1) and within farm types (Figure 2). The variation in incomes within farm types reflects a number of factors such as size, location, soil type etc. Within some farm types there is also a wide range of agricultural activities undertaken; e.g. horticulture includes specialist glasshouse farms, specialist fruit, specialist hardy nursery stock and market garden vegetable producers who may experience large differences in their production costs and outputs.

Figure 2: Distribution of Farm Business Income by farm type, 2014/15



Source: Farm Business Survey, England

In the arable sector (cereals and general cropping farms) just under a third of farms made more than £50,000 although similar proportions made less than £10,000. Over a fifth of

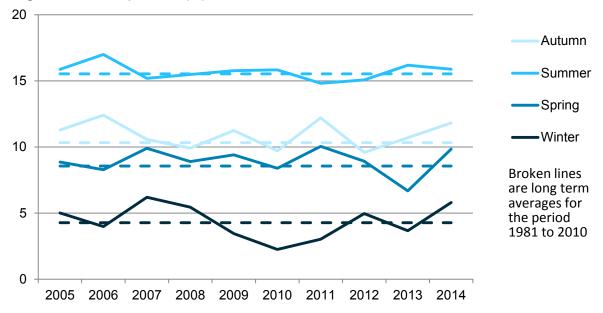
pig, poultry, mixed and grazing livestock farms failed to make a profit in 2014/15 compared to less than 10 percent of dairy farms. Moreover, around 70 percent of mixed and grazing livestock farms generated incomes below £25,000. Around 45 percent of dairy farms and almost a third of specialist poultry farms had an income of more than £75,000.

2 Weather

Autumn 2013 saw temperatures slightly above average¹ (Figure 3). Favourable weather conditions enabled good establishment of winter cereal and oilseed rape crops for the 2014 harvest. October was a wet month, the wettest since 2000 (Figure 4). The St Jude's Storm brought heavy rain and damaging winds to southern parts of England.

Figure 3: Mean temperature (⁰C), England 2005 - 2014

Seasons: Winter=Dec-Feb, Spring=Mar-May, Summer=June-Aug, Autumn=Sep-Nov



England mean temperature (°c)

Source: Met Office

The winter months were exceptionally stormy and were the wettest since 1910. Major flooding occurred, with the Somerset Levels remaining underwater for much of the winter period; flooding also affected parts of the River Thames. Temperatures were above average for December, January and February. Some later sown crops were affected by the wet weather and some re-drilling was necessary. The severe flooding in some regions resulted in sizeable areas of cereal crops being lost.

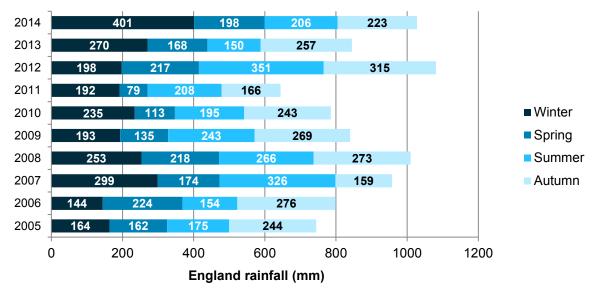
Spring 2014 saw above average temperatures throughout March, April and May. March was a dry month especially in East Anglia; April was dry for many areas but was very wet in some southern counties. May was wetter than average, particularly in the north east.

¹ Where average temperature and rainfall are referred to these relate to the period 1981-2010.

The warm spring resulted in good grass growth with dairy cows being turned out earlier than usual in some regions; ewes and lambs were also turned out soon after lambing.

Figure 4: Rainfall in England (mm), 2005 – 2014

Seasons: Winter=Dec-Feb, Spring=Mar-May, Summer=June-Aug, Autumn=Sep-Nov



Source: Met Office

Temperatures in June and July were above average, but August was the coldest since 1993. June and July were dry months for most of England, while August was wet for most areas. Harvesting of cereals started earlier in some regions with little need for crop drying. However, the cold and wet conditions in August impacted on the harvest in other areas with increased instances of downtime and crop drying.

Autumn 2014 was warmer than average, the third warmest on record since 1910. September was a particularly dry month which helped with the remaining harvest.

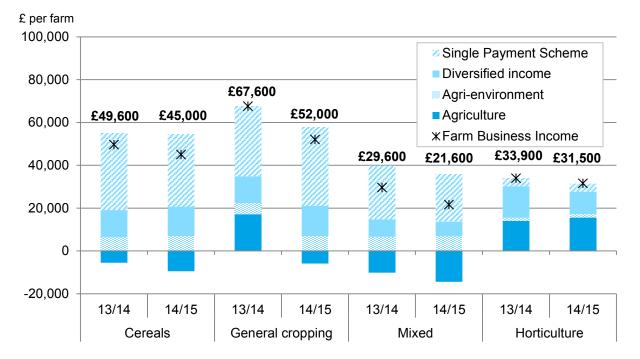
3 Results by Farm Type

The following section provides detailed results for each farm type. Where table numbers are referred to in the text, these can be found within the dataset spreadsheet at: <u>https://www.gov.uk/government/statistics/farm-accounts-in-england</u>

Farm Business Income can be considered as comprising income from four different 'segments' (i.e. cost centres) of the business: agriculture, agri-environment, diversification and the single payment. However, as the methodology² to allocate costs to each of these segments involves a degree of estimation, results should be interpreted with caution.

² Details of this methodology can be found at <u>https://www.gov.uk/farm-business-survey-technical-notes-and-guidance#fbs-documents</u>

Figure 5: Average Farm Business Income for cropping farms, broken down by cost centres 2013/14 and 2014/15



Source: Farm Business Survey, England

The figures in bold above each column are the average Farm Business Income per farm. Farm Business Income can be lower than the total height of the bars where average income from agriculture is below zero.

3.1 Cereal farms

On cereal farms, average Farm Business Income fell by just under 9 percent in 2014/15 to £45,000 (Table 5.2). This was largely driven by a small fall in crop output as a result of lower prices for cereals and oilseed rape, despite the return to more normal cropping rotations (Table 6.1) and higher yields (Table A below and Table 11) than those seen in 2013. Although average seed and fertiliser costs fell, crop protection costs were considerably higher in 2014, reflecting the increased area and demands of winter crops. It may also be partly due to the continuing battle to control blackgrass in some areas. In 2013, crop protection costs were lower as some winter crops were abandoned or replaced with spring crops. Overall, variable costs were similar across both years whilst fixed costs were slightly lower across a number of areas.

Within the performance groups, both low and medium performers on average failed to generate a positive income from farming³ activities in 2013/14 and 2014/15 (<u>Table 7.2</u>). Overall in 2014/15, around 60 per cent of cereal farms failed to generate a positive income from farming activities

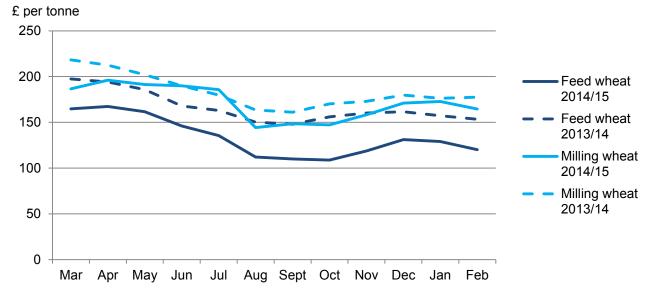
³ Excludes income from the Single Payment Scheme, Agri-environment and diversified activities.

		Yield	(tonnes per	hectare)	
Crop	2010	2011	2012	2013	2014
Wheat (England)	7.6	7.7	6.7	7.4	8.6
Winter Barley (England)	6.3	6.0	6.4	6.4	7.1
Spring Barley (England)	5.0	5.2	5.0	5.6	5.8
Winter Oilseed rape (England)	3.5	4.0	3.4	3.1	3.7
Maincrop Potatoes (UK)	44.0	43.0	31.0	42.0	42.0
Sugar beet (England)	55.0	75.0	61.0	72.0	80.0

Table A: Average Crop yields, 2010-2014

Source: Defra





Source: Defra

Figure 7 shows the proportion of winter wheat grown in England for the 2014 harvest within different bands of production costs⁴. The average production cost for winter wheat was approximately £157/tonne whilst the average selling price was just under £130 per tonne.

Around 12 percent of growers either broke even or made a positive return from winter wheat in 2014/15. For the 2013 harvest the average cost of production of winter wheat grown was just under £180/tonne whilst the average selling price was approximately £160 per tonne. In that year just over 25 percent of growers covered their costs of production.

⁴ The costs are on a full economic basis including an imputed charge for any unpaid labour (including that of the farmer and spouse), as well as an imputed rental charge for owner occupied land. The value of any straw has been deducted from the costs so that the data presented here reflects the price of grain required to break even. Note also that this analysis covers only winter wheat and excludes organic and in-conversion wheat.

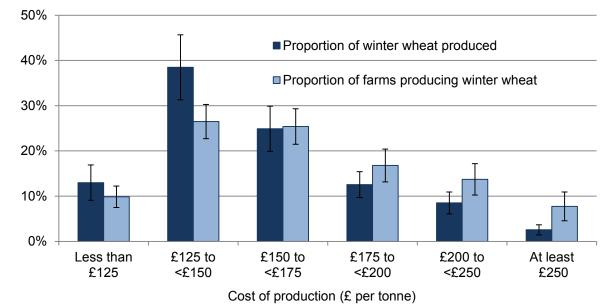


Figure 7: Proportion of winter wheat produced by cost of production³, 2014 harvest

Source: Farm Business Survey, England

3.2 General cropping farms

For the second year running, average incomes on general cropping farms fell by almost a quarter (Table 5.3) to £52,000. Although agricultural output per farm increased this was driven by an increase in tillage area of around 13 percent (Table 6.3) rather than an increase in output per hectare; the latter fell by around 2 percent. Lower output from potatoes and barley (spring and winter) was responsible for most of the fall, offset to some extent by sugar beet, field vegetables and winter wheat (Table 5.4). Sugar beet output increased by 36 percent due to a larger crop area (Table 6.3), higher yields and prices (Table 11) whilst for potatoes a small increase in yield (7 percent) was offset by lower prices (Table 14.1). At the farm level input costs increased to a greater extent than output. The greatest increases were for labour, contract charges, crop protection, other crop costs and general farming costs (Table 5.4).

When comparing farm performance groups (ratio of outputs to inputs) average Farm Business Income for the lowest 25% of performers fell from minus £3,200 in 2013/14 to minus £22,700 in 2014/15. For the highest 25% of performers the average income was only marginally lower at £143,400 compared to £145,400 in the previous year (see Table 7.4).

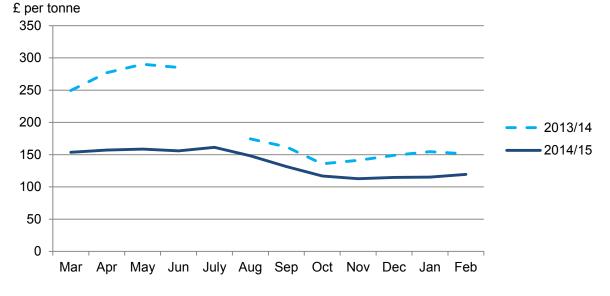


Figure 8: Average potato maincrop prices, UK - March 2013 to February 2015

There are no prices available for July 2013. Source: Potato Weekly, British Potato Council

3.3 Mixed farms

Average incomes on mixed farms fell by just over a quarter between 2013/14 and 2014/15 to around £21,600 (Table 5.15). Farm business output fell by around 20 percent driven largely by a lower output from agriculture. A lower output was generated across most of the agricultural enterprises but particularly so for milk, beef, poultry and spring barley production. Both fixed and variable costs were lower, with considerable reductions for purchased feed and machinery running costs. On average, mixed farms failed to generate a positive return from agriculture and by performance group the highest 25% of performers on average made a profit from the farming activities (Table 7.16), whilst on average the middle 50% and lowest 25% failed to generate a profit.

Some of the differences noted are likely to be due to a slightly different sample compared to last year. This is because relatively small changes to cropping and stocking on farms that don't have a strongly dominant enterprise (as these are) can result in individual farms switching designated farm types between years.

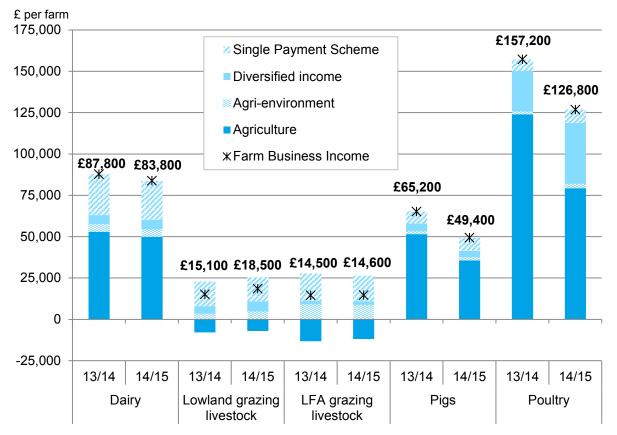
3.4 Horticulture farms

Farms in the horticulture sample cover the three main sectors of fruit, vegetables and nonedibles, grown both under cover and in the open. The incomes presented are the average across all of these sectors.

On horticulture farms, average incomes decreased by around 7 percent to £31,500 (Table 5.17). A marginal increase in agricultural output (1 percent) was the result of higher output from miscellaneous activities as crop output was unchanged compared to the previous year (Table 5.18). Within the horticultural crops there were large increases in output from soft fruit and strawberries and glasshouse flowers, bulbs and nursery stock which were offset by lower output from outdoor vegetables, outdoor flowers, bulbs and nursery stock

and top fruit. Some of this change in output can be accounted for by changes in crop area (Table 6.17). Agricultural input costs were broadly unchanged with a substantial fall in average seed costs being offset by an increase in other crop costs. This meant that on average the agricultural share of farm business income increased from £14,100 to £15,600. However, average output from diversified activities fell by almost a third and despite a fall in costs the average contribution to farm business income from this cost centre was 28 percent lower (Table 6.18). Note that the nature of this sector and the size of the sample means that individual farms can strongly influence the results.





Source: Farm Business Survey, England

The figures in bold above each column are the average Farm Business Income per farm. Farm Business Income can be lower than the total height of the bars where average income from agriculture is below zero.

3.5 Dairy farms

On dairy farms, average Farm Business Income fell by around 5 percent to £83,800 (Table 5.5). Milk prices fell gradually throughout the year but for the first six months were higher than for the same period in 2013. This, combined with higher volumes meant that agricultural output for the year as a whole (March to February) was only slightly lower (2%) than the previous year. Agricultural input prices also fell with lower feed and fertiliser costs partially offset by an increase in contracting, property costs and interest payments (table 5.6). The upward trend in herd size continued with an increase in average numbers from 165 to 172 cows (Table 6.5). The average milk yield per cow was similar to 2013/14 at 7,800 litres (Table 14.2).

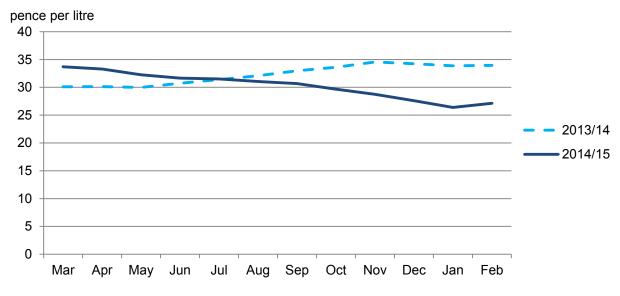
Table B: Average herd size for	dairy cows ^{(a}	ⁱ⁾ , England 2011-2014
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	2011	2012	2013	2014
Cattle Tracing scheme (all holdings)	79	82	84	89
Cattle Tracing Scheme (holdings with >= 10 dairy cows)	126	131	134	142
Farm Business Survey (specialist dairy farms)	148	156	165	172

Source: Cattle Tracing Scheme (CTS), Farm Business Survey England

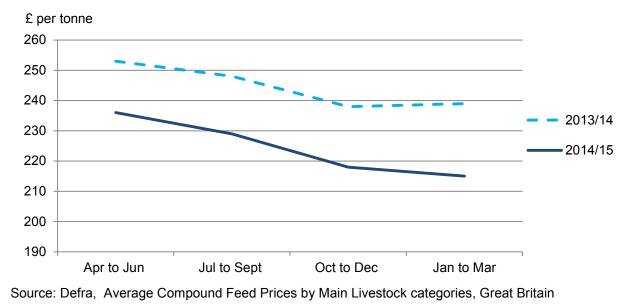
(a) Dairy cows are defined as female dairy cows over 2 years old with offspring from the CTS

Figure 10: Average farm gate milk prices (UK) - March 2013 to February 2015



Source: Milk prices surveys Defra, RERAD, DARD(NI)





Based on enterprise data from the FBS, the average price for milk sold was just under 30.8 pence per litre in 2014/15 whilst the average cost of production was 29.2 pence per litre. Note that the cost of production is on a full economic basis (see footnote to Figure 12) and is spread across all milk produced including any that is used on the farm. The distribution of milk production according to cost is shown in Figure 12. Around 70 percent of milk producers produced milk at a cost of less than 32.5 pence per litre, accounting for 80 percent of the milk produced in 2014/15.

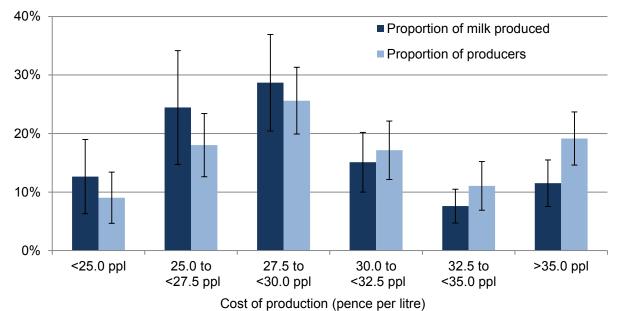


Figure 12: Production costs ^(a) of milk, 2014/15

Source: Farm business Survey, England

(a) Production costs shown here include all financial aspects of dairy enterprises such as any unpaid labour (including that of the farmer and spouse), herd depreciation and an estimated rental equivalent for land that is owned. An allowance is also made for non-milk revenue, most of which is from the sale of dairy calves, which is applied as a reduction to cost. This is to take into account the value of by-products from milk production. As a result, the production costs here represent the price that would have to be paid on all milk produced for dairy enterprises to break even.

3.6 Grazing livestock farms (lowland)

Average incomes increased on **lowland grazing livestock farms** by almost a quarter to £18,500, albeit this was from a low base. This was due to a higher output from both agrienvironment and diversified activities combined with a small improvement in the contribution from the agricultural cost centre together with slightly lower farm business costs (Table 5.7). In terms of agricultural enterprises, lower output from the beef enterprise was offset by an increase in sheep output. This reflected higher productivity due to improved grazing and weather conditions for the 2014 lamb crop as well as an increase in cull ewe prices. Farm business costs were broadly unchanged as lower variable costs, notably for seed and feed, were partially offset by higher fixed costs (Table 5.8). On average both low and medium performers failed to make a positive return from agriculture (Table 7.8) in both 2013/14 and 2014/15, with the low performers also failing to generate a positive return for the business as a whole.

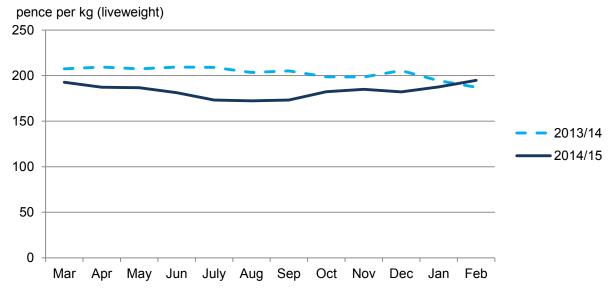
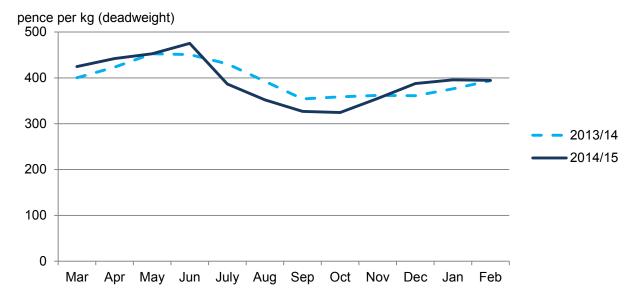


Figure 13: GB Average price for clean cattle (liveweight) – March 2013 to February 2015

Source: Agriculture and Horticulture Development Board (Meat Services)

Figure 14: UK Deadweight Standard Quality Quotation (SQQ)^(a) price – March 2013 to February 2015



Source: Agriculture and Horticulture Development Board (Meat Services)

(a) The Deadweight SQQ is for lamb carcasses falling in the 12-21.5 kg weight bracket.

3.7 Grazing livestock farms (LFA)

In the less favoured area (LFA), average incomes on grazing livestock farms were broadly unchanged in 2014/15 as farm business output and farm business costs fell by a similar amount. Output for the sheep enterprise was higher and partially offset the lower output from the beef enterprises (Table 5.10) but unlike lowland grazing livestock farms the contribution from the other cost centres was unchanged. Average output from contracting

activities was also lower. Agri-environment scheme and the Single Payment continue to be important sources of income on these farms. In terms of inputs, lower values for purchased feed and fodder represented the most substantial saving. On average, each of the performance groups failed to make a positive return from agriculture (<u>Table 7.10</u>) in 2014/15 whilst average Farm Business Income for the lowest 25% of performers was again below zero at minus £10,100.

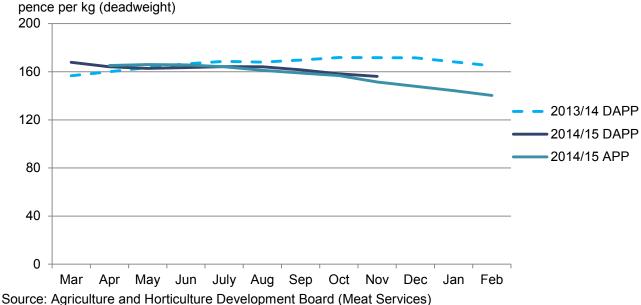
In 2013/14, closing valuations for the sheep flock were lower than opening valuations, thus reducing the enterprise output. This was reversed in 2014/15 as lamb and cull ewe prices were higher than the year before, thus increasing the valuation across the year and subsequently increasing enterprise output.

3.8 Specialist Pigs

The relatively small size of the sector and of the sample in the survey means that our estimates for this farm type are subject to greater levels of uncertainty than in other sectors.

On **specialist pig farms**, average Farm Business Income fell by almost a quarter in 2014/15 to £49,400 per farm (<u>Table 5.11</u>). Total output from agriculture was around 10 percent lower almost entirely due to a reduced output from the pig enterprise as values for finished pigs and cull sows fell (Figure 15). This fall in output was partially offset by lower agricultural input costs, both variable and fixed (<u>Table 5.12</u>). Cheaper feed accounted for much of the reduction in variable costs, driven by cheaper cereals and soya. In terms of fixed costs, lower labour and machinery costs were of a sufficient magnitude to offset an increase in building depreciation.





The All Pig Price (APP) series was introduced in April 2014. For more information on these measures see http://pork.ahdb.org.uk/media/73607/pigpricereporting_14-1-15.pdf

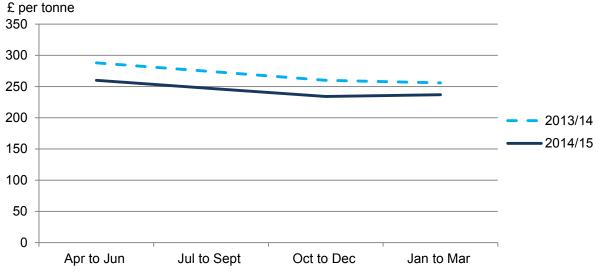


Figure 16: Average compound feed prices for pigs: 2013/14 to 2014/15

Source: Defra, Average Compound Feed Prices by Main Livestock categories, Great Britain

3.9 Specialist Poultry

The relatively small size of the sector and of the sample in the survey means that our estimates for this farm type are subject to greater levels of uncertainty than in other sectors.

For specialist poultry farms, average incomes fell by just under 20 percent from 2013/14 (Table 5.13). Although egg enterprise output increased this was more than offset by a reduced output for broilers and other poultry enterprises. Unlike other livestock farms there was no reduction in feed costs, with agricultural variable costs unchanged and a 4 percent increase in agricultural fixed costs (Table 5.14). However, these changes should be treated with caution because of the small sample. Removing a particularly influential farm from the analysis suggests that the average income fell by 16 percent between 2013/14 and 2014/15 from £99,800 to £83,600.

The nature of this sector means that the income of individual farms can change considerably from year to year. These fluctuations impact directly on industry totals, but also make the results more difficult to verify. This, along with the relatively small size of the sector and of the sample in the survey, means that our estimates are subject to greater levels of uncertainty than in other sectors. The 95% confidence intervals for the average Farm Business Income for poultry in 2014/15 are £40,000 - £215,000; we are 95% confident that this range contains the true average for poultry. The weighting methodology was changed in 2012/13 to improve the accuracy of the results for farms with poultry. The results from 2009/10 onwards are now presented using this revised methodology to improve comparability. For further information about the weighting methodology and the reliability of results please see the section on <u>survey details</u>.

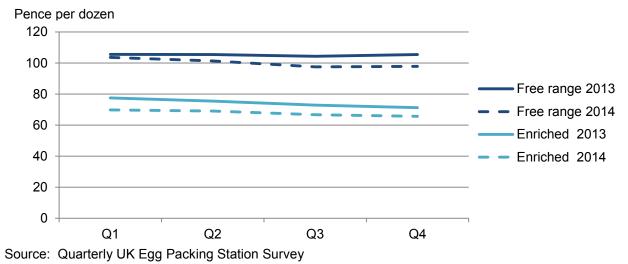


Figure 17: UK Quarterly Egg Packing Station prices- 2013 and 2014

4 Diversification

A possible and rational response to the changing position of agriculture in the UK economy is for farmers to seek to enhance their income from sources other than conventional farming production through diversifying their business activities. Diversification is widely thought to offer considerable scope for improving the economic viability of many farm businesses. Many farm diversification activities can also provide benefits for the wider rural economy and community by, for example, encouraging and providing additional job opportunities.

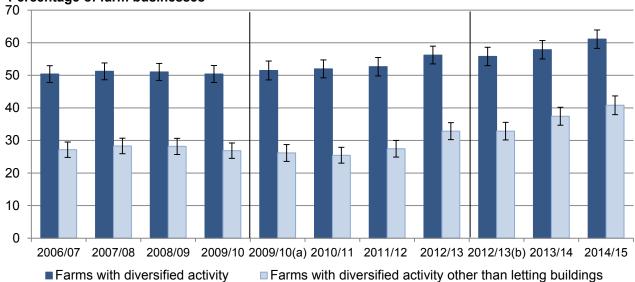
Most farm businesses engage in other activities in addition to those carried out on their own farm, even if only hire work for another farmer. However, the definition of diversified activity adopted here excludes agricultural work on another farm and is restricted to nonagricultural work of an entrepreneurial nature on or off farm but which utilises farm resources.

Using this definition, 61% of farm businesses in England had some diversified activity in 2014/15, an increase of 3% from 2013/14 and continuing the upward trend. The main diversified activity continues to be letting out buildings for non-agricultural use; when this is excluded, the proportion of farms with some other diversified activity was 41% for 2014/15 (Figure 18). Renewable energy generation is becoming more common on farms. In 2014/15 18 percent of farms were generating renewable energy⁵ (Table C), an increase of 5 percent from 2013/14.

Data on diversification is also collected through the Farm Structure Survey. This shows that in 2010 24,900 holdings had diversified activities other than letting farm buildings, around 24 percent of the total farm holdings population for England. These results are broadly comparable to the FBS results for 2010/11, but readers should note the different coverage of the two sources. See <u>Table 15.2</u> for more information. Diversification results for the 2013 Farm Structure Survey will be published in early 2016.

⁵ Renewable energy includes power generating, wind turbines, solar power, anaerobic digestion and renewable heat initiatives

Figure 18: Percentage of farms with diversified activities – England 2006/07 to 2014/15



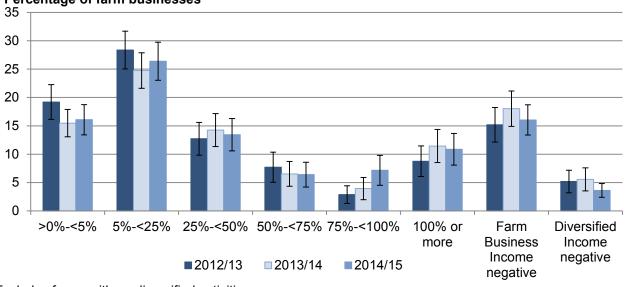
Percentage of farm businesses

Source: Farm Business Survey, England

- (a) In 2010/11 changes were made to the minimum size threshold (≥ 25,000€) and also to the classification of farms. These changes were backdated to 2009/10. Previous years are not directly comparable. Prior to the 2010/11 campaign, the coverage of the FBS was restricted to those farms of size ½ Standard Labour Requirement (SLR) or more.
- (b) Farm typology based on 2010 standard output coefficients. For 2009/10 to 2012/13 farm typology is based on 2007 standard output coefficients.

Total income from diversified activities in 2014/15 was £530 million a 9 percent increase from 2013/14 (£490m in 2013/14). Diversified enterprises accounted for 23 percent of total Farm Business Income in 2013/14 (£2,280 million) although there were wide variations between farms (Figure 19).

Figure 19: Distribution of farms according to proportion of Farm Business Income (FBI) from diversified enterprises — England 2012/13-2014/15



Percentage of farm businesses

Excludes farms with no diversified activities Source: Farm Business Survey, England

For 38 percent of businesses with diversified activities, income from these activities accounted for at least a quarter of the total Farm Business Income (compared to 36 percent in 2013/14); for 24 percent of businesses, the income from diversification exceeded the income from the rest of the farm business (compared to 22 percent in 2013/14). For a fifth of farm businesses with diversified activities their Farm Business Income and/or diversified income was negative. Farms without diversified enterprises have been excluded from this analysis.

A total of £530m was generated from diversified activities by 35,200 farms. These farms had an average diversified enterprise income of £15,200 (Table C). Those letting out buildings generated 31 percent (£380m) of their total farm income (£1,240m) from this activity whilst those farms with food processing and retailing enterprises generated a fifth of their total farm income (£40m of £180m) from this activity. Those farms generating renewable energy generated 6 percent of their total income (£40m of £680m) from these activities compared to 2 percent in the previous year.

	• <u> </u>	9	•	
No. of	% of	Total farm	Income of	Average
farms	farms	income for	diversified	enterprise
		these farms	enterprise	income(a)
		(£m)	(£m)	(£/farm)
57,500		2,280		
35,200	61%	1,690	530	15,200
23,500	41%	1,240	380	16,100
5,600	10%	180	40	6,400
7,000	12%	340	30	4,600
3,000	5%	120	20	7,700
10,500	18%	680	40	3,900
5,000	9%	190	20	4,600
	No. of farms 57,500 35,200 23,500 5,600 7,000 3,000 10,500	No. of farms % of farms 57,500 61% 35,200 61% 23,500 41% 5,600 10% 7,000 12% 3,000 5% 10,500 18%	No. of farms % of farms Total farm income for these farms (£m) 57,500 2,280 35,200 61% 1,690 23,500 41% 1,240 5,600 10% 180 7,000 12% 340 3,000 5% 120 10,500 18% 680	No. of farms % of farms Total farm income for these farms (£m) Income of diversified enterprise (£m) 57,500 2,280 35,200 61% 1,690 530 23,500 41% 1,240 380 5,600 10% 180 40 7,000 12% 340 30 3,000 5% 120 20 10,500 18% 680 40

Table C: Income from diversified enterprises — England 2014/15

Source: Farm Business Survey, England

(a) Average here refers to the mean calculated over farms which have that enterprise.

(b) Renewable energy includes power generating, wind turbines, solar power, anaerobic digestion and renewable heat initiatives.

Although more than half (61 percent) of all farms had a diversified activity, the total value of diversified enterprise output (£980m, table D) was only 6 percent of total farm business output (£16,680 million). For farms that engaged in any diversified enterprise, average enterprise output from diversification was £27,900. For those farms with diversified enterprises, the output for these enterprises (£980m) equated to 8 percent of their total farm output (£12,280m). Letting buildings for non-farming use accounted for 54 percent of diversified output, renewable energy accounted for 14 percent (10 percent in 2013/14), while the contributions from tourism, sport and recreation and other diversified activities were relatively minor. On average, letting buildings for non-farming use generated the greatest output per farm (£22,600), whilst sport and recreation enterprises generated £9,400 per farm.

Table D: Value of output from diversified enterprises - England 2014/15

	No. of	% of	Total farm	Output of	Average
	farms	farms	output for	diversified	diversified
			these farms	enterprise	enterprise
			(£m)	(£m)	output(a)
					(£/farm)
Farm Business Output (incl. diversification)	57,500	100%	16,680		
Farms which engage in:					
Diversified enterprises (all kinds)	35,200	61%	12,280	980	27,900
letting buildings for non-farming use	23,500	41%	8,940	530	22,600
processing/retailing of farm produce	5,600	10%	1,560	120	21,300
sport and recreation	7,000	12%	2,360	70	9,400
tourist accommodation and catering	3,000	5%	1,060	60	20,000
renewable energy (b)	10,500	18%	4,690	140	13,100
other diversified activities	5,000	9%	1,850	70	13,600

Source: Farm Business Survey, England

(a) Average here refers to the mean calculated over farms which have that enterprise.

(b) Renewable energy includes power generating, wind turbines, solar power, anaerobic digestion and renewable heat initiatives.

5 Farm succession

Succession arrangements determine the transfer of responsibility and/or business ownership to subsequent generations. The presence of a successor is a key factor in business continuity and can influence approaches to management decisions and investment.

Succession can be a sensitive area for discussion within a survey predominantly focussed on financial performance. The majority of FBS co-operators (85 percent of farm businesses Table E) provided information on succession arrangements. However, for 11 percent either the farmer preferred not to provide the information or the interviewer thought such a discussion inappropriate (e.g. due to prior knowledge of family circumstances). For a further 5 percent, the decision maker was not available.

Table E: Percentage of farm businesses responding to farm succession questions,England 2013/14 and 2014/15

	Percentage of farm businesses (%)		
	2013/14	2014/15	
Willing to respond	85	85	
Not willing/not appropriate	10	11	
Decision maker not seen	5	5	

Source: Farm Business Survey, England 2013/14 and 2014/15

Based on unweighted responses from 1889 farm businesses in 2013/14 and 1880 businesses in 2014/15

Farmers were asked if there was a successor nominated to succeed with the running of the business. Responses were restricted to the following options:

- a) Nominated successor from within the family⁶.
- b) The business will continue, but from outside the family 7 .
- c) No nominated successor.
- d) Unsure of the intention at that time.
- e) It was too early in the family circumstances or business situation for an answer to be given.
- f) Successor(s) had been nominated but were unable to take over due to tenancy or other restrictions/issues.

For those farm businesses that agreed to answer questions on succession, over a third (37 percent in 2013/14 and 38 percent in 2014/15) had a nominated successor (Table F). The successor was largely from within the family (34 percent of businesses in 2013/14 and 35 percent in 2014/15), with a further 1 percent (in both years) stating that the business would continue outside of the family. The remaining 2 percent (in both years) had a nominated successor who was unable to take over due to tenancy or other issues.

For over a quarter (27 percent in both years) of farm businesses there was no nominated successor. However, for 29 percent in 2013/14 and 28 percent in 2014/15 it was too early to provide an answer and a further 8 percent of farm businesses in 2013/14 and 7 percent in 2014/15 were unsure of the intention at the time of asking.

Table F: Farm business succession arrangements, England 2013/14 and 2014/15 ^(a)

	Percentage of farm businesses (%)		95% Confidence Interval (%)	
	2013/14	2014/15	2013/14	2014/15
Successor nominated within family	34	35	±3	±3
Successor nominated but unable to take over due to tenancy or other issues	2	2	±1	±1
Business will continue but outside family	1	1	±0	±0
Too early in family/business circumstances to				
answer	29	28	±3	±3
No nominated successor	27	27	±3	±3
Respondent unsure of succession arrangements	8	7	±2	±2

Source: Farm Business Survey, England 2013/14 and 2014/15.

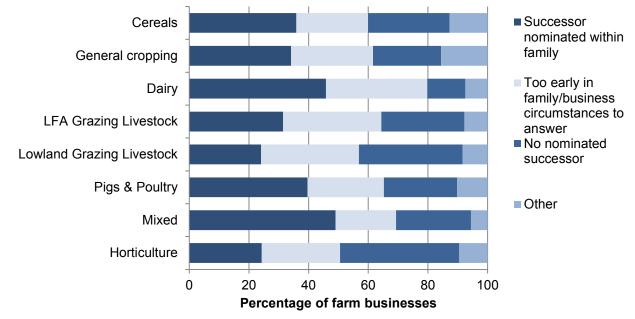
(a) Based on responses from the 1603 farm businesses in 2013/14 and 1595 businesses in 2014/15 that were willing to respond to the question: "is there a successor(s) nominated to succeed with running of business"

Dairy (46 percent) and mixed farms (49 percent) were more likely than other farm types to have a nominated successor from within the family in 2014/15 (Figure 20). Horticulture (40 percent) and lowland grazing livestock (35 percent) were more likely to have no nominated succesor than other farm types. Older farmers (65 and over) were more likely

⁶ Defined as direct family (e.g. husband, wife, son, daughter), family relative (e.g. brother, nephew, niece) or family "in-law" either via marriage or long term partnership (e.g. son/daughter-in law, if the daughter/son was not actively taking on the management of the business).

⁷ For example by third party sale, lease or contract farming arrangement of the whole farm business.

(51 percent) to have a nominated family successor from within the family (Figure 21). As might be expected farmers under 40 were more likely than older farmers to state that it was too early to answer.





(a) Based on responses from 1595 farm businesses in 2014/15

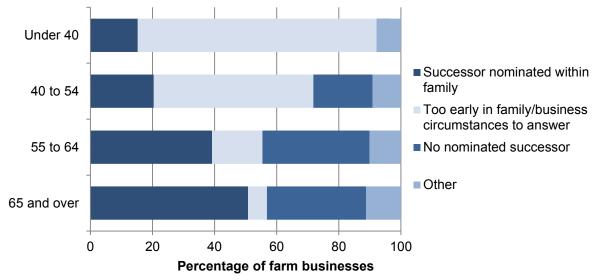


Figure 21: Succession arrangements by age of farmer, England 2014/15^a

(a) Based on responses from 1595 farm businesses in 2014/15

For those farmers that confirmed that the business would be continuing either from within or outside the family, the third question addressed the farming background of the successor. For the majority (94 percent in 2013/14 and 95 percent in 2014/15) the successor already had a farming background (Table G). This was defined as having

substantial prior experience⁸. For the remainder (6 percent of farm businesses in 2013/14 and 5 percent in 2014/15) the successor was new to farming. This included first generation farmers and those with a limited farming background.

Table G: Background of nominated successor, England 2013/14 and 2014/15^(a)

¥	Percentage of		95% Confidence		
		sinesses		Interval	
		(%)		(%)	
	2013/14	2014/15	2013/14	2014/15	
Has a farming background	94	95	±3	±2	
New to farming	6	5	±3	±2	

Source: Farm Business Survey, England 2013/14 and 2014/15

(a) Based on responses from the 634 farm businesses in 2013/14 and 635 businesses in 2014/15 that reported that the business would continue from within or outside the family.

⁸ e.g. three years, which might include a period of higher education study, or a second generation farmer.

Survey details Survey content and methodology

The Farm Business Survey (FBS) is an annual survey providing information on the financial position and physical and economic performance of farm businesses in England. The sample of around 1,900 farm businesses covers all regions of England and all types of farming with the data being collected by face to face interview with farmers. Results are weighted to represent the full population of farm businesses that have at least 25 thousand Euros of standard output⁹ as recorded in the annual June Survey of Agriculture and Horticulture. In 2014 there were around 57 and a half thousand farm businesses meeting this criteria¹⁰.

For further information about the Farm Business Survey please see: <u>https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey</u>

Data analysis

The results from the FBS relate to farms which have a standard output of at least 25,000 Euros. Initial weights are applied to the FBS records based on the inverse sampling fraction for each design stratum (farm type by farm size). <u>Table H</u> shows the distribution of the sample compared with the distribution of businesses from the 2014 June Survey of Agriculture and Horticulture. These initial weights are then adjusted (calibration weighting¹¹) so that they can produce unbiased estimates of a number of different target variables.

The weighting methodology was changed for Farm Accounts in England 2012/13 to improve the reliability of the results for farms with poultry. The change was two-staged. Specialist poultry farms were split into two groups (egg and poultrymeat producers) at the inverse sampling fraction stage. In addition, the FBS estimates of the total number of laying birds and total number of table birds are now calibrated to match those from the previous June Survey. This practice is already in place for other livestock types (as well as crop areas and farm counts) to draw strength from the increased robustness of the much larger sample of the June Survey. Results from 2009/10 have been calculated and presented using this improved methodology.

Accuracy and reliability of the results

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 surveying 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.

⁹ For a definition of standard output please see the UK classification document here <u>https://www.gov.uk/farm-business-survey-technical-notes-and-guidance</u>

¹⁰ Prior to the 2010/11 campaign, the coverage of the FBS was restricted to those farms of size ½ Standard Labour Requirement (SLR) or more. For a definition of SLR please see the UK classification document here: https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

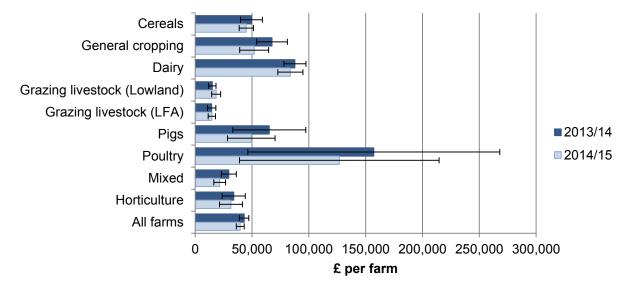
¹¹ Further information on calibration weighting can be found here: https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

These error bars show the range of values that may apply to the figures. They mean 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). 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.

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.

Figure 22 shows average Farm Business Income split by farm type, with 95% confidence limits as range bars around the averages. 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.

Figure 22: Average Farm Business Income by farm type, with 95% confidence limits, England 2013/14 and 2014/15



Source: Farm Business Survey, England

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. There is one very influential poultry farm in both 2013/14 and 2014/15. If this farm is excluded from the results, average Farm Business Income for poultry farms decreases by 16 percent between 2013/14 and 2014/15 from £99,800 to £83,600 per farm.

Revisions

Results for Farm Business Income by farm type for 2014/15 were first published on 29th October. Updated survey responses have since been received for 10 farms and have resulted in minor revisions to Farm Business Income for poultry, mixed and the all farm type estimate.

Farm type	2014/15 Published October 2015	2014/15 Published December 2015	95% Confidence Interval
At current prices			
Poultry	127,500	126,800	+/- 87,500
Mixed	21,500	21,600	+/- 5,200
All farm types	39,700	39,600	+/- 3,500

Availability of results

Detailed tables covering income, outputs and costs for each farm type can be found here <u>https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey</u>

Defra statistical notices can be viewed on the Food and Farming Statistics pages on the Defra website at <u>https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics</u>. This site also shows details of future publications, with pre-announced dates.

User engagement

As part of our ongoing commitment to compliance with the Code of Practice for Official Statistics (<u>http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</u>), 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.

Appendix 1: Classification of Survey Farms by Type of Farming and Size of Business

 A revised classification of farm types was introduced in 2010/11 based on Standard Outputs, which caused changes to the distribution of farms by farm type. Further details of the revised classification and its effect on the FBS sample can be found at:

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

- 2. At the same time, the lower size threshold for the Farm Business Survey was changed from 0.5 Standard Labour Requirements (in annual full-time equivalents) to a standard output of 25,000 euros. Therefore, the results published here relate to farms for which the total standard output from cropping and stocking activities is at least 25,000 euros.
- 3. The Standard Labour Requirement (SLR) of a farm represents the normal labour requirement, in Full Time Equivalents, for all the enterprises on a farm under typical conditions. The SLR for a farm is calculated from standard coefficients applied to each enterprise on the farm. The standard coefficients represent the input of labour required per head of livestock or per hectare of crops for enterprises of average size and performance.
- 4. Farms in the sample are grouped by type of farm based on the EC system of classification defined by Commission Regulation 1242/2008 (with minor modifications to adapt it to United Kingdom conditions). This classification system uses Standard Outputs per hectare of crop area and per head of livestock estimated over a 5 year period. For 2013/14 (in line with the EU regulation), Standard Outputs were recalculated for the period 2008-2012 (referred to as 2010 Standard Outputs). Results shown in this publication for 2012/13 have been recalculated using 2010 Standard Outputs for comparability. Further information about the impact of the change from 2007 to 2010 Standard Outputs can be found at:

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

5. The Standard Output (SO) is a financial measure used to classify farm type. Standard outputs measure the total value of output of any one enterprise - per head for livestock and per hectare for crops. For crops, this is the main product (e.g. wheat, barley, peas) plus any by-product that is sold, for example straw. For livestock it is the value of the main product (milk, eggs, lamb, pork) plus the value of any secondary product (calf, wool) minus the cost of replacement. Until 2010, standard gross margins were used for the classification of farms. Standard outputs and standard gross margins differ in that no variable costs are deducted in the derivation of standard outputs. Each farm is assigned a total SO by aggregating the SOs for its agricultural enterprises. The farm is classified into a 'particular' type of farming by evaluating the proportion of its total SO deriving from different enterprises. In the EC typology the particular types are grouped into seventeen principal types. The latter are not entirely suitable for use in the United Kingdom and alternative groupings have therefore been adopted for the Farm Business Survey. Table H at the end of this appendix shows how the constituent EC particular types are grouped to give twenty main types and nine robust types.

6. The varied nature of the definitions used for the EC particular types of farming does not permit a simple description to be given of all of the main types adopted in the Survey but the chief characteristics may be summarised as follows:

Cereals	Farms on which cereals, oilseeds, peas and beans harvested dry account for over two-thirds of their total SO (holdings with more than two-thirds of their total SO in set-aside are excluded from the survey results).
General cropping	Farms with over two-thirds of their total SO in arable crops (including field scale vegetables) or a mixture of arable and horticultural crops; and holdings where arable crops account for more than one-third of total SO and no other grouping accounts for more than one-third.
Dairy	Farms where the dairy enterprise, including followers, accounts for over two-thirds of their total SO.
LFA grazing livestock	Farms with more than two-thirds of their total SO in cattle and sheep except holdings classified as dairy. A farm is classified as in the LFA if 50% or more of its total area is in the EC Less Favoured Area (both Disadvantaged and Severely Disadvantaged).
Lowland grazing livestock	Farms with more than two-thirds of their total SO in cattle and sheep except holdings classified as dairy. A farm is classified as "lowland" if less than 50% of its total area is in the EC Less Favoured Area.
Specialist pigs	Farms on which pigs account for over two-thirds of their total SO.
Specialist poultry	Farms on which poultry account for over two-thirds of their total SO.
Mixed farms	Farms where crops account for one-third, but less than two- thirds of total SO and livestock accounts for one-third, but less than two-thirds of total SO. It also includes holdings with mixtures of cattle and sheep and pigs and poultry and holdings where one or other of these groups is dominant, but does not account for more than two-thirds of the total SO.

7. The Less Favoured Areas (LFA) classification was established¹² in 1975 as a means to provide support to mountainous and hill farming areas. Within the LFA are the Severely Disadvantaged Areas (SDA) and the Disadvantaged Areas (DA). The SDA are more environmentally challenging areas and largely upland in character. A map showing the

¹² Council Directive 75/268/EEC.

LFA, SDA and DA can be seen in <u>Figure 21</u> at the end of this appendix. Further information about LFA classification can be found at <u>http://archive.defra.gov.uk/rural/countryside/uplands/land-classification.htm</u>

 Farm business size in the United Kingdom is measured in Standard Labour Requirements (SLR) expressed in terms of full-time equivalents. Four size groups are defined for this report:

Part-time	(less than 1 SLR)
Small	(greater than or equal to 1 less than 2 SLRs)
Medium	(greater than or equal to 2 less than 3 SLRs)
Large	(greater than or equal to 3 SLRs)

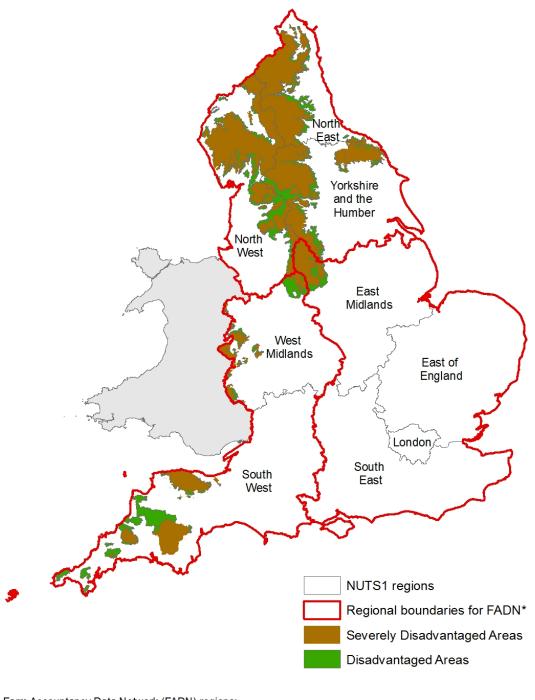
- 9. The average economic and physical sizes of farms as estimated from the FBS sample and as recorded in the June Survey are shown according to type of farming and size in <u>Table I</u> at the end of this appendix. Such comparisons cannot be exact because there are some differences of detail between classification procedure in the FBS and that used in the analyses of holdings in the June Survey. In the analyses of the June Survey, standard outputs are applied to the cropping and stocking as recorded on the survey day whilst in the FBS they are applied to the hectares of crop and average numbers of livestock over the year as a whole. Moreover, in the FBS, the minimum unit is a whole farm business, which may comprise more than one holding, while in the June Survey the holdings making up a farm may be treated separately.
- 10. Farms are allocated to performance bands according to the ratio of total farm output divided by total farm costs. Total costs for this calculation include an adjustment for unpaid manual labour. The farms are then ranked and allocated to groups representing the 25, 50 and 25 percentiles; equivalent to low, medium and high performance bands.

Table H: UK Farm Classification

UK FARM CLASSIFICATION SYSTEM (REVISED 2010): COMPOSITION OF ROBUST. MAIN AND OTHER FARM TYPES BY CONSTITUENT EC TYPE

Robust types (a)	Main types	JENT EC TYPE EC farm types			
1. Cereals	1. Cereals	151			
2. General cropping	2. General cropping	161, 162, 163, 166, 613, 614, 615, 616			
3. Horticulture	3. Specialist fruit	361			
	4. Specialist glass	211, 212, 213			
	5. Specialist hardy nursery stock	232			
	6. Other horticulture	221, 222, 223, 231, 233, 351, 352, 353, 354, 362, 363, 364, 365, 380, 611, 612			
4. Specialist pigs	7. Specialist pigs	511, 512, 513			
5. Specialist poultry	8. Specialist poultry	521, 522. 523			
6. Dairy	9. Dairy (LFA)	450 (LFA)			
	10. Dairy (Lowland)	450 (non-LFA)			
7. LFA grazing livestock	11. Specialist sheep (SDA)	481 (SDA)			
	12. Specialist beef (SDA)	460 (SDA)			
	13. Mixed grazing livestock (SDA)	470, 482, 483, 484 (SDA)			
	14. Various grazing livestock (DA)	460, 470, 481, 482, 483, 484 (DA)			
8. Lowland grazing livestock	15. Various grazing livestock (Lowland)	460, 470, 481, 482, 483, 484 (Lowland)			
9. Mixed	16. Cropping and dairy	831, 832			
	17. Cropping, cattle and sheep	833, 834			
	18. Cropping, pigs and poultry	841			
	19. Cropping and mixed livestock	842, 843, 844			
	20. Mixed livestock	530, 731, 732, 741, 742			
10. Non classifiable (b)	21. Non-classifiable holdings	900			

(a) EC Typology described in Commission Regulation 1242/2008.(b) Not included in Farm Business Survey results.



Farm Accountancy Data Network (FADN) regions: North: North East, North West, Yorkshire and the Humber West: West Midlands, South West East: East Midlands, East of England, South East and London

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Appendix 2: Notes on Tables: Definitions of Terms

FBS Survey Terms

 Accounting years: To ensure consistency in harvest/crop year and commonality of subsidies within any one FBS year, only farms which have accounting years ending between 31 December and 30 April inclusive are allowed into the survey. (For Scotland, accounting years up to 31 May are allowed).

The FBS accounting year for an individual farm in the survey is normally the same as the tax year for that business (for convenience in compiling the account). The tax year will normally be chosen by the farmer, not the tax authorities.

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

Business Outputs, Inputs, Costs and Income

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

Corporate Income. Since currently the data for Farm Corporate income are only approximate, so too are the data for Farm Investment Income.

5. Net Farm Income (NFI) is intended as a consistent measure of the profitability of tenant-type farming¹³ which allows farms of different business organisation, tenure and indebtedness to be compared. It represents the return to the farmer and spouse alone for their manual and managerial labour and on the tenant-type capital¹⁴ invested in the farm business.

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

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

- 6. **Cash income** is the difference between total revenue and total expenditure. Revenue is: receipts adjusted for debtors; and expenditure is: purchases adjusted for creditors. It is assumed, therefore, that all end of year debtor and creditor payments are settled in full, even though this may happen beyond the end of the accounting year. Cash income represents the cash return to the group with an entrepreneurial interest in the business (farmers and spouses, non-principal partners and directors and their spouses and family workers) for their manual and managerial labour and on all their investment in the business.
- 7. *Family farm income* is given in Tables 1.4, 2.4 and 3.4. It is a measure of farm income used by the European Commission. It is based upon actual tenure and indebtedness. However, it is a broader measure than net farm income in that it represents the return to all unpaid labour (farmers and spouses, non-principal partners and directors and their spouses and family workers). It also includes breeding livestock stock appreciation although it cannot be realised without reducing the productive capacity of the farm.

¹³ Tenant-type farming was never conceived of as including non-agricultural activities on farm (using farm resources) except perhaps for value added activities such as small-scale food processing, e.g. sales of farm produced butter and cream and retail sales of farm produced liquid milk. However, recent research has revealed that many of the more varied non-agricultural activities which have been increasing on farms over the years have been inadvertently included in the calculation of NFI, with the result that about three-quarters of non-agricultural activities on farm by value are currently included and one-quarter excluded, without any clear basis for this division. Although this means that the definition of NFI has become untenable on the current basis, it has been decided to continue with historical practice for reasons of continuity, rather than to change the definition, pending the introduction of a wider measure to include all on-farm business activities.

¹⁴ Tenant-type capital comprises livestock, machinery, crops in store, stocks of consumables, work in progress, orchards, other permanent crops, glasshouses, cash and other assets needed to run the business. It does not include land and buildings.

Cropping, Stocking and Labour Tables

- 8. *Utilised agricultural area* is the crop area, including fodder, set-aside land, temporary and permanent grass and rough grazing in sole occupation (but not shared rough grazing) i.e. the agricultural area of the farm. It includes bare land and forage let out for less than one year.
- 9. *Total area of farm* is the utilised agricultural area plus woodland and other areas of the farm not used for agriculture (e.g. buildings, roads, water, household gardens).
- 10. *Total tillage* comprises the utilised agricultural area, plus bare land and forage hired in from others in the accounting period, minus temporary and permanent grass and rough grazing in sole occupation (but not shared rough grazing).
- 11. *Total area farmed* comprises the total area of the farm minus woodlands and buildings, etc. plus net land hired in.
- 12. *Adjusted utilised agricultural area* comprises the utilised agricultural area with rough grazing in sole occupation converted to a permanent pasture equivalent.
- 13. **Stocking** figures are the average annual level of stocking based on estimated average livestock numbers on the farm for the year, including fractions for livestock on the farm for less than a year.
- 14. **Total livestock units** are used as an approximate measure of stocking intensity and are based on the estimated energy requirements of different species and ages of livestock. The factors used are set out in Appendix 2 of '*Farm Incomes in the United Kingdom 1999/00*'.
- 15. **Annual labour units (ALU)** are the estimated number of full time worker equivalents of persons working on the holding during the year. Part-time workers are converted to full-time equivalents in proportion to their actual working time related to that of a full-time worker. One ALU represents one person employed for 2,200 hours.

Outputs, Inputs and Farm Business Income Tables

16. *Agricultural output* is the main measure of individual crop and livestock output. It comprises:

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

subsidies). However, any difference between the opening valuation of any stocks of previous crops and their ultimate disposal value (sales, used on farm and any end-year stocks) is included in total farm output.

(b) **By-products, forage and cultivations**, which cover the value of output of the by-products of agricultural activity, sales of fodder, valuation changes for fodder and cultivations. It also covers revenue from the letting of bare land or forage on a short-term lease.

(c) *Livestock enterprise output* comprises the total sales of livestock and livestock products including *direct livestock subsidies* and production grants received, part of the valuation change (see below), produce consumed in the farmhouse and by labour and the value of milk and milk products fed on the farm (excluding direct suckling) adjusted for debtors at the beginning and end of the year (except for direct livestock subsidies) and transfers between enterprises; less purchases of livestock and livestock products from outside the farm business. Stock appreciation for breeding livestock (cattle, sheep and pigs - see paragraph 17) has been excluded from individual livestock between the opening and closing valuation and the total valuation change of trading livestock are included. Unlike crop enterprise output, livestock enterprise output is calculated on an accounting year basis.

(d) *Miscellaneous output covers* the value of output from those activities which are still within the agricultural cost centre but do not fall within either livestock or crop enterprise output. These will include revenue from wayleaves, agricultural hirework, sundry woodland sales, contract farming rent, miscellaneous insurance receipts and compensation payments.

17. *Agricultural costs* comprise payments and the estimated value of non-cash inputs, including home-grown feed and seed, adjusted for changes in stocks and creditors between the beginning and end of the year.

Total variable costs	These are taken to be costs of feed, veterinary fees and medicines, other livestock costs, seeds, fertilisers, crop protection and other crop costs.
Purchased concentrate feed and fodder	This represents expenditure on feeds and feed additives, including charges for agistment and rented keep.
<i>Home-grown concentrate feed and fodder</i>	This includes ex-farm value of all home produced cereals, beans, milk (excluding direct suckling), etc. fed on the farm both from the current and previous years' crops.
Veterinary fees and medicines	This consists of veterinary fees and the cost of all medicines.

- Other livestockThis comprises straw bought specifically for costs bedding
materials, breeding costs (including AI and stud fees),
miscellaneous dairy expenses, disinfectants, marketing and
storage costs of animal products, Milk Development Council levy
and other livestock costs not separately identified.
- Purchased and
home-grownThis comprises expenditure on purchased seeds, plants and
trees adjusted for changes in stocks. Home-grown seed from
the previous crop is included and charged at estimated market
price: any seeds from current crops and sown for a succeeding
crop are excluded, but are included in the closing valuation of
the crop and hence in enterprise output. This enables the value
of home-grown seed used in the production of the current crop
to be identified.
- **Fertilizers** This includes lime, fertilisers and other manures, and is adjusted for changes in stock. Fertilisers sown for next year's crops are treated as if they were still in store and are included in the closing valuation.
- **Crop protection** This includes costs of pre-emergent sprays, fungicides, herbicides, dusts and insecticides and other crop sprays.
- **Other crop costs** These comprise all crop inputs not separately specified, e.g. marketing charges, packing materials, British Potato Council levy, baling twine and wire (though not fencing wire).
- **Total fixed costs** These are the costs of labour, machinery, contract work, land and buildings, other general farming costs and depreciation.
- **Labour** (excluding farmer and spouse) This comprises wages and employer's insurance contributions, payments in kind, and salaried management. To calculate net farm income an imputed charge for unpaid labour is made, excluding that of the farmer and spouse, valued at the rate of comparable paid labour. The value of the manual labour of the farmer and spouse is not charged as an input in calculating net farm income (i.e. it is a component of net farm income).
- **Contract costs** These costs include expenditure on work carried out by agricultural contractors, including the costs of materials employed, such as fertilisers, unless these can be allocated to the specific heading. Costs of hiring machines to be used by the farm's own labour are also included. Expenditure on contract labour is only included here if it is associated with the hiring of a machine. Otherwise it is entered under (casual) labour.
- MachineryThese represent the cost of machinery and equipment repairs,running costsfuel and oil and car mileage expenses. It excludes depreciation.

Land and building inputs	For the calculation of farm business income these comprise any rent paid, insurance, rates and repairs to land and buildings incurred by the whole business. In the derivation of net farm income land and building costs also include an imputed rental charge for owner occupiers but exclude those costs associated with land ownership such as the insurance of farm buildings, and landlord-type repairs and upkeep.
Depreciation of machinery, glasshouses and permanent crops	Depreciation provisions in respect of machinery, glasshouses and permanent crops (e.g. orchards) are shown on a current cost basis. The rates of depreciation used (generally on a diminishing balance basis for machinery and straight line for glasshouses and permanent crops) are intended to reflect the degree of deterioration of the assets.
Other general farming costs	These consist of electricity, heating fuel, water for all farming purposes, insurance (excluding labour and farm buildings), bank charges, professional fees, vehicle licences, and other miscellaneous expenses not recorded elsewhere.
Interest payments	Interest charges on loans taken out for business purposes, net of interest receipts on monies invested temporarily outside the business, are deducted in the calculation of farm business income.
Depreciation of buildings and works	This is calculated on a current cost basis (generally on a straight line basis over 10 years) with an adjustment to allow for the effect of capital grants.

18. Breeding livestock stock appreciation represents the change in market prices of breeding cattle, sheep and pigs between the opening and closing valuations. It is not included in the calculation of farm business income but is shown separately within table 5.

Balance Sheet Tables

- 19. **Total fixed assets** include milk and livestock quotas, as well as land, buildings, breeding livestock, and machinery and equipment. For tenanted farmers, assets can include farm buildings, cottages, quotas, etc., where these are owned by the occupier.
- 20. *Liquid assets* comprise cash and sundry debtors.
- 21. *Bank term loans* and *other long and medium term loans* are loans which exceed 12 months.
- 22. **Net Worth** represents the residual claim or interest of the owner in the business. It is the balance sheet value of assets available to the owner of the business after all other claims against these assets have been met.

Yields and Implied Output Prices

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

Flow of Funds Statement

- 25. **The Flow of Funds Statement** demonstrates how funds have been generated by the business (source of funds) and where these funds have been spent (disposal of funds). It shows the importance of Net Farm Income as a source of funds compared to other sources such as sales of property, changes in loans outstanding and other funds introduced (e.g. from a private source). To derive the amount of cash funds generated by the business a number of adjustments are made to net farm income; specifically depreciation, imputed costs and unpaid labour costs are added back to net farm income. The total cash sources are completed by adding in sales of property, changes in loans outstanding and transfers into the business of funds from outside. The disposals show how the funds have been spent, for example purchase of property and quotas, capital expenditure and private drawings. The difference between the sources and disposals is a surplus if total sources are greater than total disposals and a deficit if total disposals are greater than total sources.
- 26. *The reconciliation of the flow of funds* shows how the surplus or deficit has been distributed in terms of financial assets and financial liabilities, i.e. the change between the opening and closing valuations in terms of bank balance, cash-in-hand, debtors and creditors.

Table I: Farm Business Survey 2014/15: Sample Characteristics – England by size groups ^(a)

Type of Farming	Size	Number of Businesses in Sample	Number of Businesses at June Survey 2014	Average Size of Business by Standard Labour Requirement		Average Total Area (hectares)	
				Sample	June Survey 2014	Sample	June Survey 2014
Cereals	Part-Time	102	6,610	0.7	0.6	98	74
	Small	116	3,868	1.5	1.4	178	167
	Medium	64	1,770	2.4	2.4	263	271
	Large	86	2,107	5.4	5.3	565	574
	All Sizes	368	14,355	1.8	1.7	205	197
Genral Cropping	Part-Time	15	1,293	0.7	0.5	77	94
	Small	37	1,488	1.5	1.5	125	92
	Medium	23	800	2.4	2.4	206	142
	Large	87	1,647	10.3	10.2	482	407
	All Sizes	162	5,228	3.9	4.1	227	199
Dairy	Part-Time	4	181	0.8	0.7	33	36
	Small	28	760	1.7	1.6	61	54
	Medium	49	1,128	2.5	2.5	76	77
	Large	205	4,470	6.4	6.5	179	169
	All Sizes	286	6,539	5.4	5.1	152	136
Lowland Grazing Livestock	Part-Time	44	5,156	0.8	0.7	63	51
	Small	90	4,044	1.5	1.4	88	78
	Medium	64	1,563	2.4	2.4	125	118
	Large	91	1,652	5.2	5.3	232	245
	All Sizes	289	12,415	1.8	1.8	102	94
LFA Grazing Livestock	Part-Time	17	2,398	0.8	0.7	64	59
	Small	67	2,021	1.6	1.4	115	114
	Medium	58	1,034	2.5	2.4	172	203
	Large	95	1,124	5.2	4.9	285	435
	All Sizes	237	6,577	2.2	1.9	140	163
Specialist Pigs	Part-Time	5	403	0.7	0.6	34	12
	Small	7	312	1.4	1.5	20	19
	Medium	8	181	2.4	2.4	50	31
	Large	48	567	13.8	13.7	108	103
	All Sizes	68	1,463	5.3	6.1	57	51
Specialist Poultry	Part-Time	10	312	0.4	0.5	12	20
	Small	13	313	1.6	1.5	20	28
	Medium	10	149	2.5	2.5	30	50
	Large	50	635	13.4	14.2	100	93
	All Sizes	83	1,409	7.1	7.1	58	58
Mixed	Part-Time	16	2,002	0.7	0.6	64	54
	Small	54	1,610	1.6	1.5	109	98
	Medium	46	980	2.4	2.4	134	144
	Large	85	1,668	5.8	6.7	283	346
	All Sizes	201	6,260	2.5	2.7	143	157
Horticulture	Part-Time	21	498	0.7	0.7	15	15
	Small	21	816	1.5	1.5	13	13
	Medium	17	724	2.3	2.4	10	18
	Large	127	1,257	16.4	16.8	66	86
	All Sizes	186	3,295	6.2	7.4	30	42
All Types	Part-Time	234	18,853	0.7	0.6	73	61
	Small	433	15,232	1.5	1.4	113	102
	Medium	339	8,329	2.4	2.4	152	149
	Large	874	15,127	7.6	8.0	271	286
	All Sizes	1,880	57,541	3.0	3.0	147	144

(a) The estimates shown in this publication are based on sample results weighted by type and by size.(b) Lowland grazing livestock and LFA grazing livestock farm types exclude specialist horse enterprises.