



13 December 2018

Farm Accounts in England Results from the Farm Business Survey 2017/18

This release provides further detail behind the income results published on 31st October 2018. The results are sourced from the 2017/18 Farm Business Survey which covers the 2017 harvest and includes the 2017 Basic Payment. Figures are for March/February years with the most recent year shown therefore ending February 2018.

Detailed tables can be found [here](#). The results examine farm incomes, outputs and costs for farm types, farm sizes, regions and economic performance groups along with enterprise level gross margins, balance sheet data and flow of fund statements. Section 4 provides detailed analysis of diversified activities on farms and Section 5 has detailed analysis of farm succession arrangements.

Forecasts of income by farm type for the year ending February 2019 and covering the 2018 harvest will be published in February 2019. These can be found at:

<https://www.gov.uk/government/collections/farm-business-survey>

Key results

- In 2017/18, average Farm Business Income increased for all farm types except for specialist pig farms. The exchange rate was an influencing factor leading to price rises for a number of commodities and an increase in the value of the Basic Payment.
- On cereals and general cropping farms crop output increased, influenced by a combination of higher yields, prices and areas for most crops. This was offset to a certain extent by rises to input costs. The average income for these farm types increased by 49 percent and 33 percent respectively.
- Average income on dairy farms more than doubled to £119,700 per farm, driven by an average rise of 23 percent to the price of milk and higher volumes of production.
- On grazing livestock farms, increased incomes (36 percent for lowland and 5 percent for those in the LFA) were driven by firmer prices for cattle.
- On specialist pig farms average incomes almost halved. Increased revenue from pigs was offset by reduced crop output and a reduced closing valuation due to lower pig numbers and prices at the year end. Input costs increased, particularly for feed.
- Total income from diversified activities in 2017/18 was £680 million, an 8 percent increase from 2016/17. Across all farms, income from diversified enterprises accounted for 22 percent of total Farm Business Income in 2017/18 (£3,090 million) although there were wide variations between farms.
- For farm businesses that agreed to answer questions on succession, 43 percent had a nominated successor in 2017/18. This was slightly more than in previous years.

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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 farm succession.

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. 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 [survey details](#) section of this publication.

Detailed results

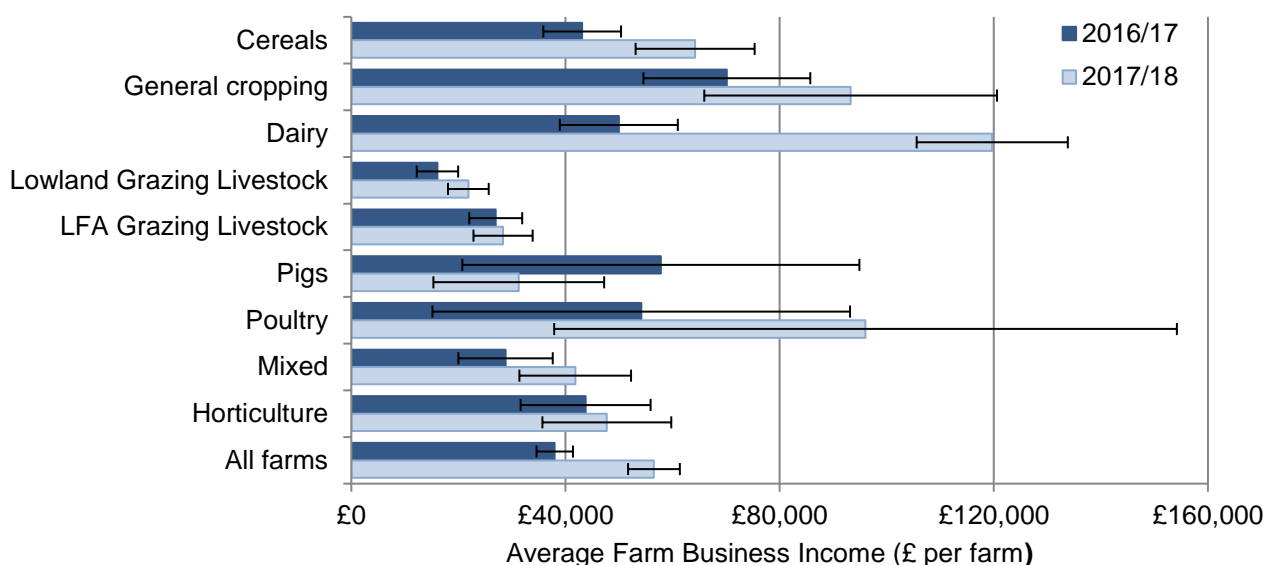
Figures are for March/February years with the most recent year shown ending February 2018. This covered the **2017** harvest and includes the Basic Payment due in the 2017/18 accounting year.

1 Overview across all farm types

Average Farm Business Income across all farm types was £56,500 in 2017/18, which was 49 percent higher than in 2016/17. A key driver was the exchange rate which helped increase farm gate prices for several commodities, including wheat, barley, oilseeds, beef and lamb. Across all farm types the average Basic Payment was 13 percent higher than the previous year, reflecting the strength of the Euro against the Pound when the exchange rate was determined in September 2017.

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 [here](#).

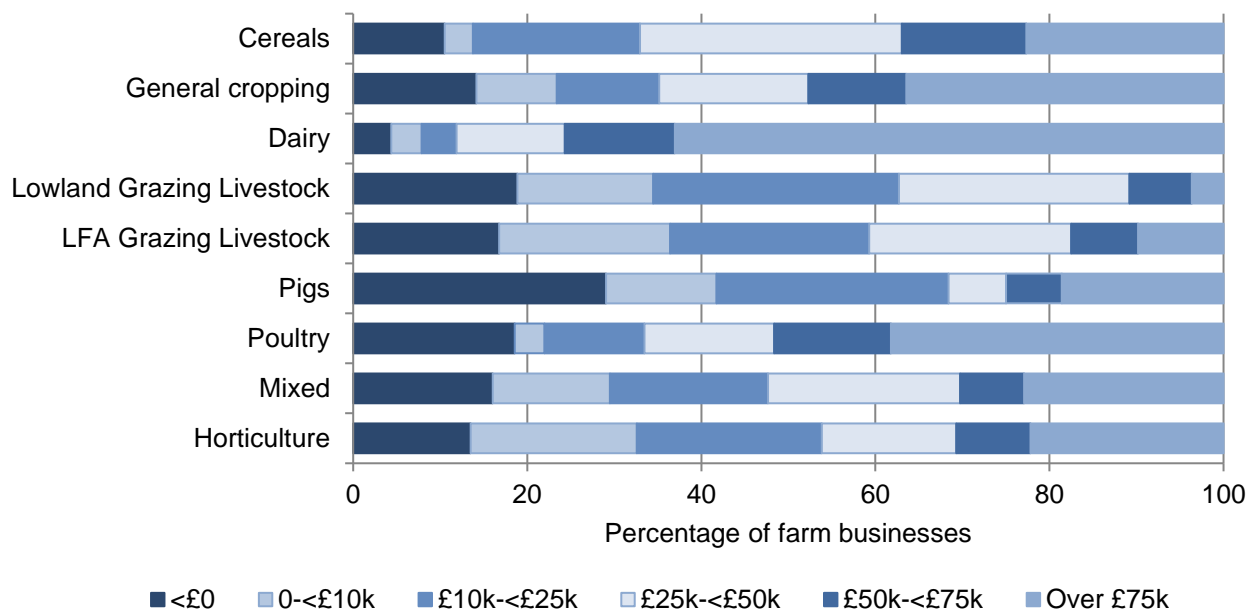
Figure 1: Average Farm Business Income by farm type with 95% confidence intervals - England, 2016/17 and 2017/18



Source: Farm Business Survey, England

Farm Business Income varies both between and within farm types (Figures 1 and 2). The variation in incomes within farm types reflects a number of factors such as farm size, location and soil type. Some farm types also undertake a diverse range of agricultural activities. For example, 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, England 2017/18



Source: Farm Business Survey, England

In 2017/18, at least 10 percent of farms in each farm type, except dairy, failed to make a profit. For dairy farms, 4 percent failed to make a profit whilst 63 percent had an income of more than £75,000.

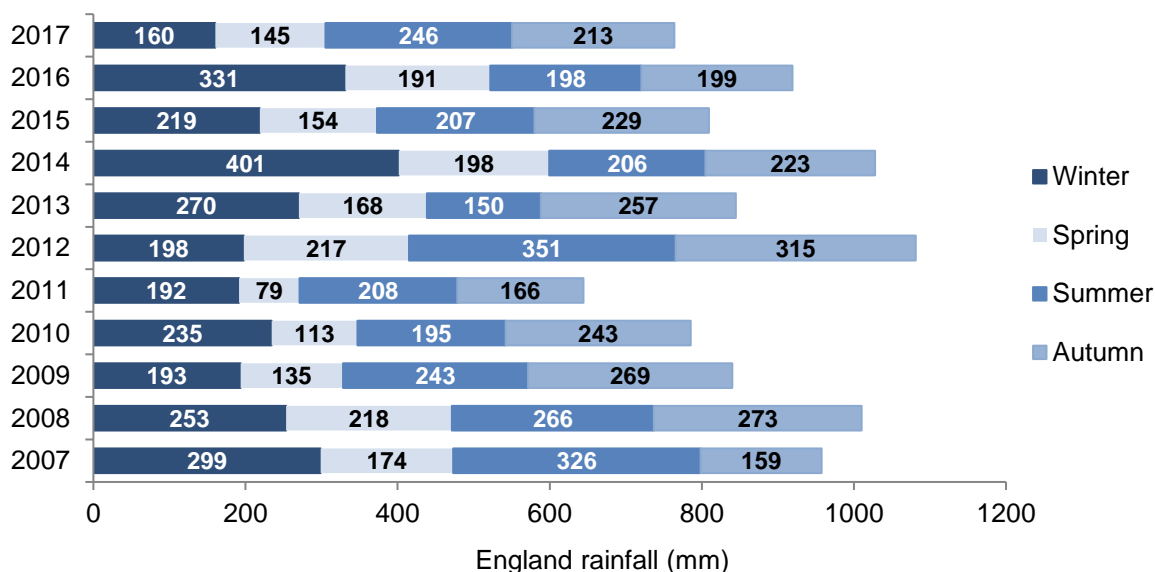
2 Weather

September and October 2016 were generally warm and sunshine totals for autumn 2016 were slightly above average¹ across much of the country. This led to a good flush of grass for the ewe tugging period and extended the grazing season. It also provided favourable conditions for planting and crop establishment in many regions, although very dry weather in October created difficulties with oilseed rape establishment and blackgrass control prior to cereal drilling in some areas, particularly the East of England.

November 2016 was the coldest since 2010, while rainfall was near or above average over much of England. By contrast, December was milder and drier than usual with only a quarter of the average rainfall in the South of England. Overall, England rainfall was 59 percent below average in December 2016 making it the equal-sixth driest December in a series from 1910. January 2017 rainfall was 24 percent below average and February 2017 2 percent above average. Figure 3 shows rainfall by season in England.

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

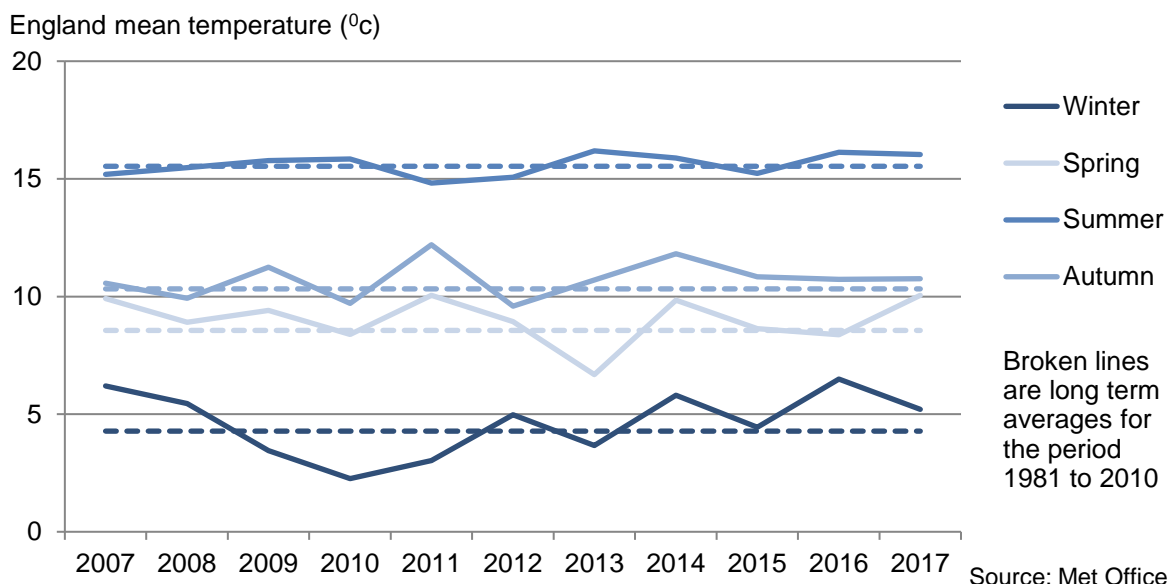
Figure 3: Annual rainfall (mm) - England, 2007 to 2017



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

Winter 2016/17 was rather dry and mild. December and January saw average and above average sunshine, although February tended to be dull in many parts of the country. In contrast to some recent winters, unsettled and stormy weather was relatively brief until the second half of February. The mild winter weather resulted in forward autumn sown crops and aided growth of winter forage crops.

Figure 4: Mean temperature (°C) - England, 2007 to 2017



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

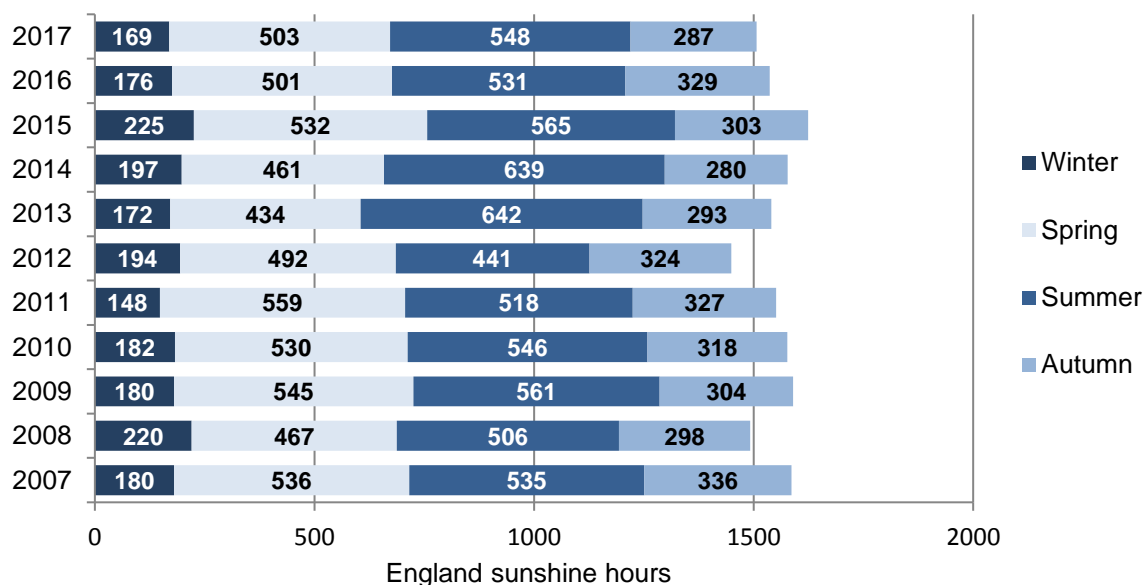
Overall, spring 2017 was warm and dry with above average sunshine in most areas. March and early April were generally warmer than average. However the second half of April was cooler with some cold nights and late frosts that affected the yields of some fruit crops in the South East. April was also drier than average in most parts of the country. Despite concerns about the low rainfall, spring cultivations and fertiliser and

spray applications were generally completed in good conditions. The dry weather also provided excellent conditions for lambing with farmers reporting lambing percentages on or above average. May saw predominantly warm weather, particularly at the start and end of the month, although it was wetter than usual in some parts of the South East.

Summer 2017 began with warm temperatures across the country, but June was also wetter than average with many places having more than twice their average rainfall. July saw more wet weather meaning the 2017 harvest, which started as one of the earliest in living memory, ended up being rather protracted. This led to significant drying costs for some cereal farms and impacted on straw baling across all regions, causing a reduction in quality straw for winter use. Although there was variation, overall average yields for cereals and oilseed rape were higher than the previous year and sugar beet yields were notably higher than 2016.

August was rather cool, apart from a warmer spell later in the month, and rainfall was generally above average. On the whole it was dull in the West and brighter in the East. Figure 5 shows hours of sunshine for England by season. Summer sunshine totals for England overall were 3 percent above average in June, 6 percent below average in July and 3 percent below average in August.

Figure 5: Hours of sunshine - England, 2007 to 2017



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

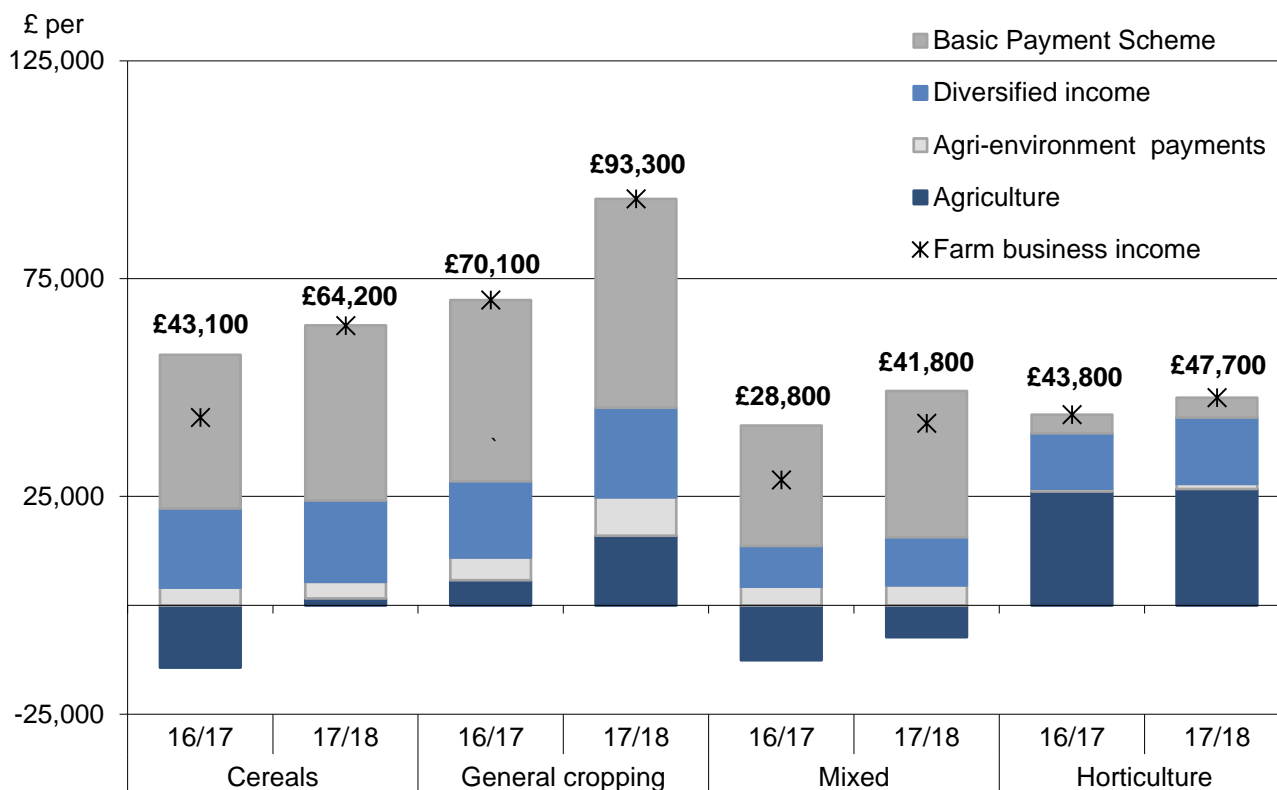
Source: Met Office

September 2017 with rather dull and wetter than average. Temperatures were close to average for most of the country, although southern areas were slightly cooler. October was also wet and mild, with warmer than average temperatures across the country (particularly for minimum temperatures). The wet and mild September/October resulted in a flush of autumn grass across much of England with stock generally being housed later than normal. While variable weather into October affected progress of autumn cultivations in some areas, early established cereal crops benefitted from the warm and damp conditions.

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: <https://www.gov.uk/government/statistics/farm-accounts-in-england>

Figure 6: Average Farm Business Income for cropping farms, broken down by cost centres 2016/17 and 2017/18



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.

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 basic payment. However, as the methodology² to allocate costs to each of these segments involves a degree of estimation, results should be interpreted with caution.



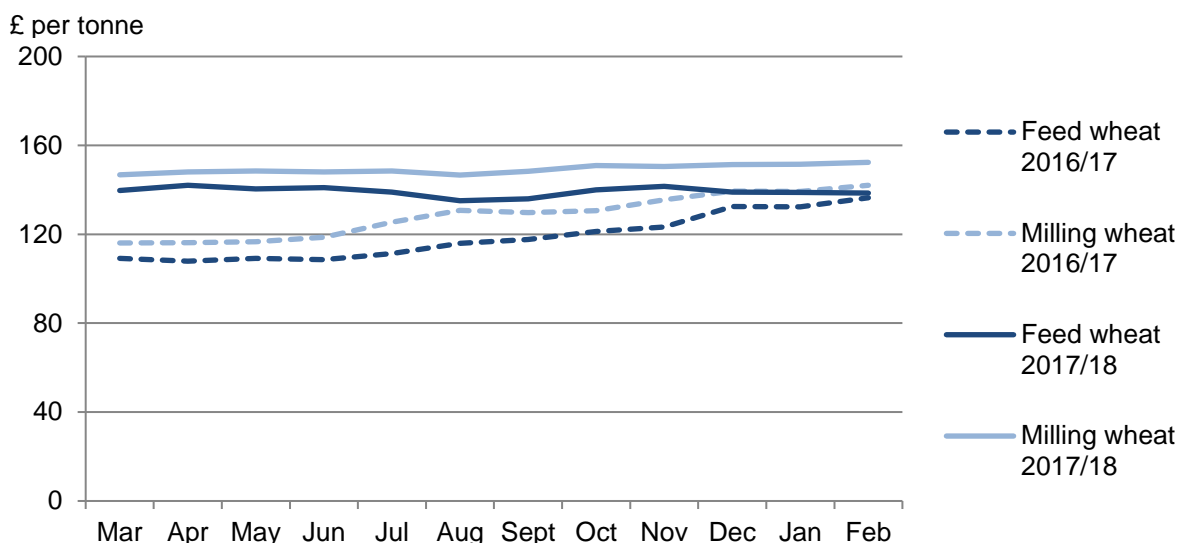
3.1 Cereal farms

On cereal farms, average Farm Business Income increased by 49 percent in 2017/18 to £64,200 (dataset [Table 5.1](#)). This was primarily due to increased output. A combination of higher prices for wheat and barley (Figure 7), driven by a weakening of sterling and increased average yields (Table A and dataset [Table 11](#)) due to more favourable growing conditions resulted in a 13 percent increase in crop output. Variable costs rose by 4 percent, with increases particularly to seed and contracting costs. Fixed costs rose by 1 percent (dataset [Table 5.2](#)). For the first time since 2012/13, cereal farms achieved a positive, albeit small, return from agriculture of

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

£1,600. Diversified activities, particularly renting out buildings, continue to form a major source of income along with the Basic Payment which increased by 12 percent in 2017/18.

Figure 7: Average wheat prices - England and Wales, March 2016 to February 2018



Source: Monthly Corn Returns

Source: Monthly Corn Returns

Table A: Average crop yields, 2012 to 2017 (tonnes per hectare)

	2012	2013	2014	2015	2016	2017
Wheat (England)	6.7	7.4	8.6	9.0	7.9	8.3
Winter Barley (England)	6.4	6.4	7.1	7.6	6.4	7.0
Spring Barley (England)	5.0	5.6	5.8	6.2	5.7	5.5
Winter Oilseed rape (England)	3.4	3.1	3.7	3.9	3.1	3.9
Potatoes (UK) ^a	38.0	45.6	47.4	49.2	44.9	49.1
Sugar beet (UK) ^b	62.1	69.9	79.8	74.1	71.2	83.4

Source: Defra statistics

(a) Following a review of methodology in 2017, figures have been revised back to 2011.

(b) Figures revised to reflect new information.

Comparing farm performance groups³, on average both low and medium performers failed to generate a positive income from farming⁴ activities in 2016/17 or 2017/18, although their losses in 2017/18 were reduced compared to the previous year (dataset [Table 7.2](#)).

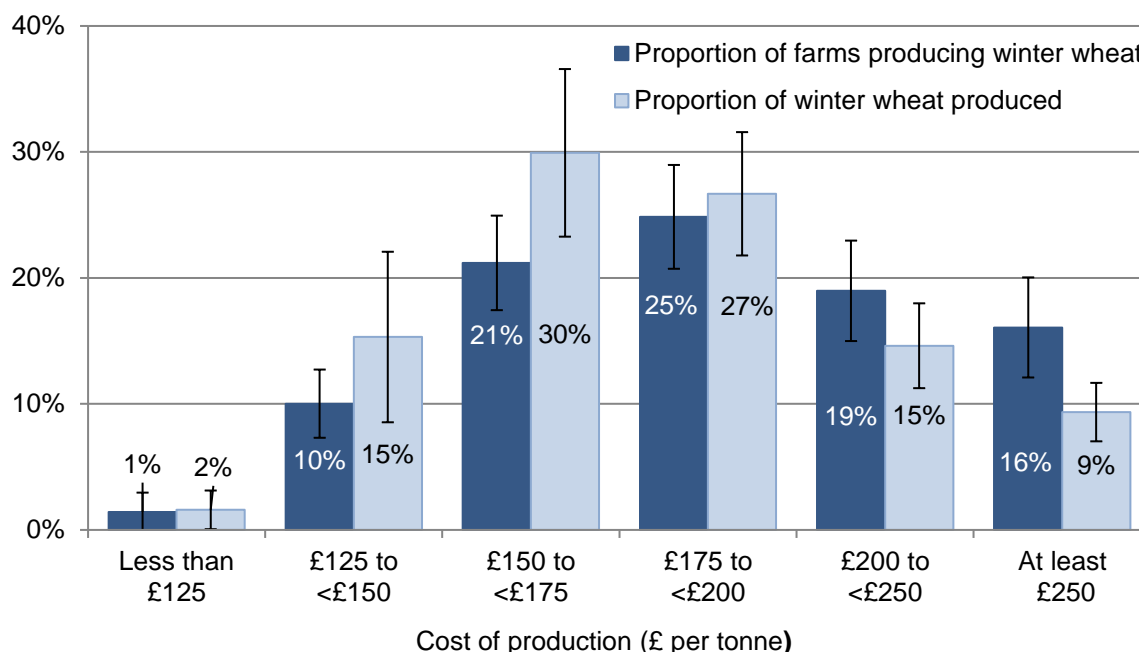
Figure 8 shows the proportion of winter wheat grown in England for the 2017 harvest within different bands of production costs⁵. Around 23 percent of growers either broke even or made a positive return from winter wheat in 2017/18. The average production cost for winter wheat was approximately £159 per tonne whilst the average selling price was around £141 per tonne.

³ Based on the ratio of outputs to inputs, including unpaid labour.

⁴ Excludes income from the Basic Payment Scheme, Agri-environment and diversified activities.

⁵ 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 8: Proportion of winter wheat produced by cost of production⁵, 2017 harvest



Source: Farm Business Survey, England

Note: This analysis covers only winter wheat and excludes wheat that is organic or in-conversion.

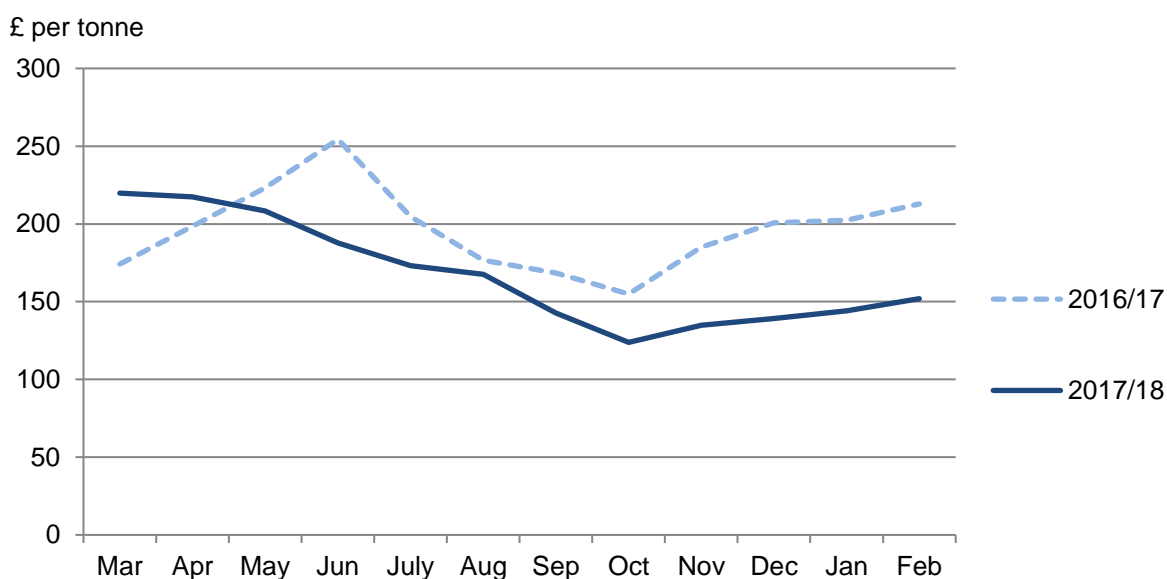
For the 2016 harvest the average cost of production was £164 per tonne whilst the average selling price was approximately £131 per tonne. In that year around 12 percent of growers covered their production costs.



3.2 General cropping farms

Average Farm Business Income on general cropping farms increased by 33 percent to £93,300 (dataset [Table 5.3](#)). Total crop output was 16 percent higher than in 2016/17, largely driven by increased areas, yields and prices for wheat and increased oilseed rape and sugar beet production. These increases were partially offset by a fall in the value of the 2017 potato crop; plentiful supplies due to higher yields and a rise in crop area resulted in lower prices (Figure 9). Input costs also rose but to a lesser extent. Variable costs rose by 14 percent, reflecting larger crop areas, while fixed costs increased by 9 percent (notably for regular labour, general farming and property costs). On average there was a positive return of £16,000 from the agricultural cost centre compared to £6,000 in 2016/17. Output from agri-environment activities rose (dataset [Table 5.3](#)) and the average Basic Payment went up by 15 percent, partially influenced by a larger average farm area.

Figure 9: Average potato maincrop prices, UK - March 2016 to February 2018



Source: Agriculture and Horticulture Development Board

When comparing farm performance groups, the average Farm Business Income for the lowest 25 percent remained negative in 2017/18, with increased losses compared to 2016/17. However, income for medium performers rose by around 20 percent to £70,800 (dataset [Table 7.4](#)). Income from the agricultural cost centre followed a similar pattern with the low performers failing to generate a positive income, again with greater average losses than in 2016/17, while medium performers made a positive return of £2,000 compared to an average loss of nearly £8,000 in 2016/17.



3.3 Mixed farms

For mixed farms the average Farm Business Income increased by 45 percent between 2016/17 and 2017/18 to £41,800 (dataset [Table 5.15](#)). A 21 percent increase in total farm business output was driven by higher crop and livestock output together with a 20 percent increase in the average Basic Payment. Output from diversified activities was also higher, particularly for building rental, although revenue from food processing and retailing fell (dataset [Table 5.16](#)). Variable costs rose by 16 percent and fixed costs went up by 20 percent. Whilst there was an increase in Farm Business Income, on average mixed farms failed to generate a positive return on their farming activities in 2017/18, although losses were reduced compared to 2016/17 ([Table 7.16](#)).

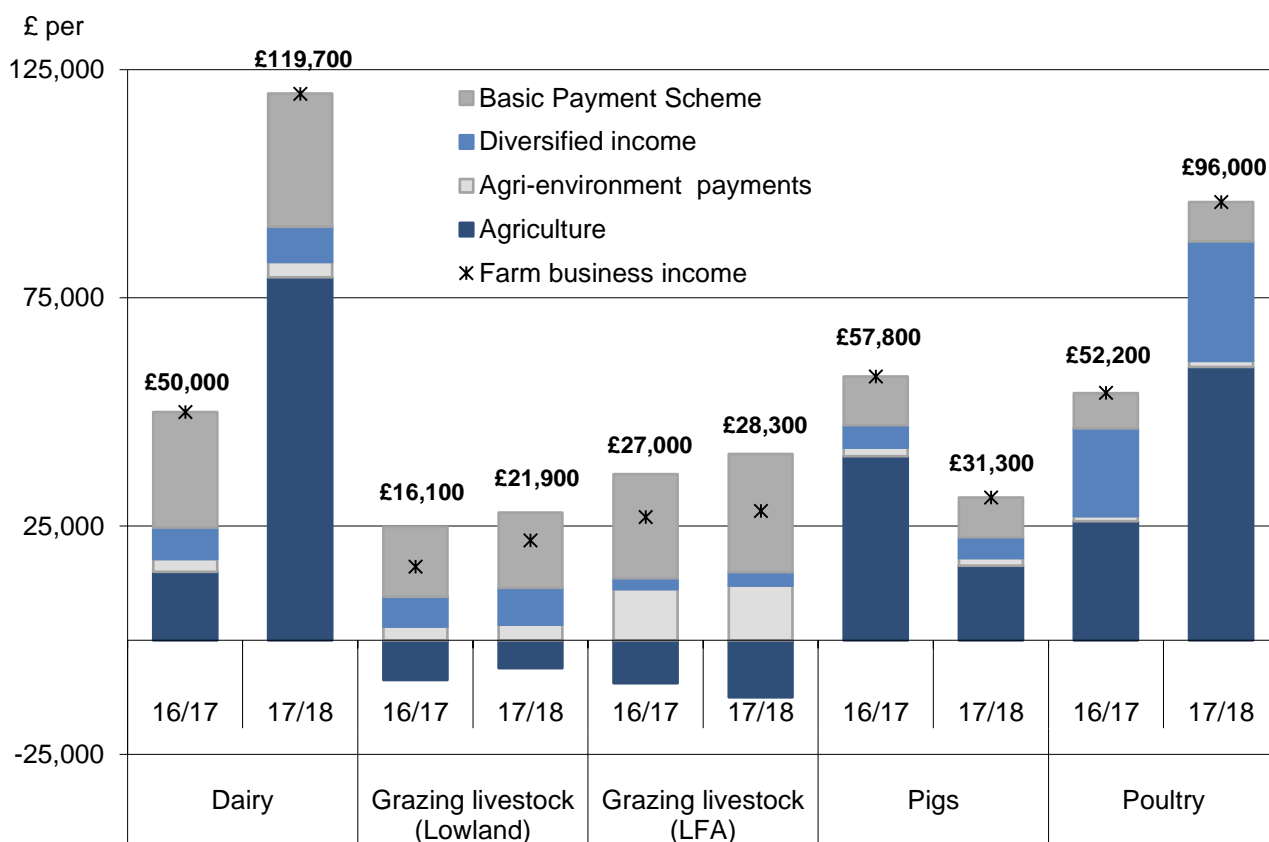


3.4 Horticulture farms

Farms in the horticulture sample cover the three main sectors of fruit, vegetables and non-edibles, grown both under cover and in the open. The incomes presented are the average across all of these sectors. Note that the nature of this sector and the size of the sample means that individual farms can strongly influence the results. On Horticulture farms average Farm Business Income increased by 9 percent in 2017/18 to £47,700 (dataset [Table 5.17](#)). Overall, agricultural output remained at a similar level to 2016/17. Reduced output from potatoes, glasshouse flowers, bulbs and nursery stock and contract work on other farms offset increases from other crops (dataset [Table 5.18](#)). Agricultural costs fell by 1 percent. Output from diversified activities, an important source of revenue for horticulture farms (Figure 6), increased by 4 percent with

food processing/retailing and building rental contributing most to the rise. The net income from this cost centre increased by 8 percent in 2017/18

Figure 10: Average Farm Business Income broken down by cost centre for livestock farms, 2016/17 and 2017/18



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 the average Farm Business income more than doubled to £119,700 in 2017/18 (dataset [Table 5.5](#)). Production increased by 8 percent (reflecting a rise in average dairy cow numbers rather than yield, Table B) whilst the average milk price was 29.6 pence per litre, 23 percent higher than in 2016/17 (Figure 11). Note that there is a wide variation in milk prices with some farmers receiving considerably more or less than the average. Agricultural costs (both variable and fixed) also rose. For variable costs this was notable for purchased feed, due to firmer cereal prices (Figure 12 and dataset [Table 5.6](#)) and increased cow numbers, while for fixed costs increases were most marked for labour, machinery running costs, general farming costs and rent. Income from agri-environment payments and diversified enterprises were also higher than a year earlier. The average Basic Payment increased by 13 percent in 2017/18, accounting for around a quarter of Farm Business Income (dataset [Table 5.5](#)).

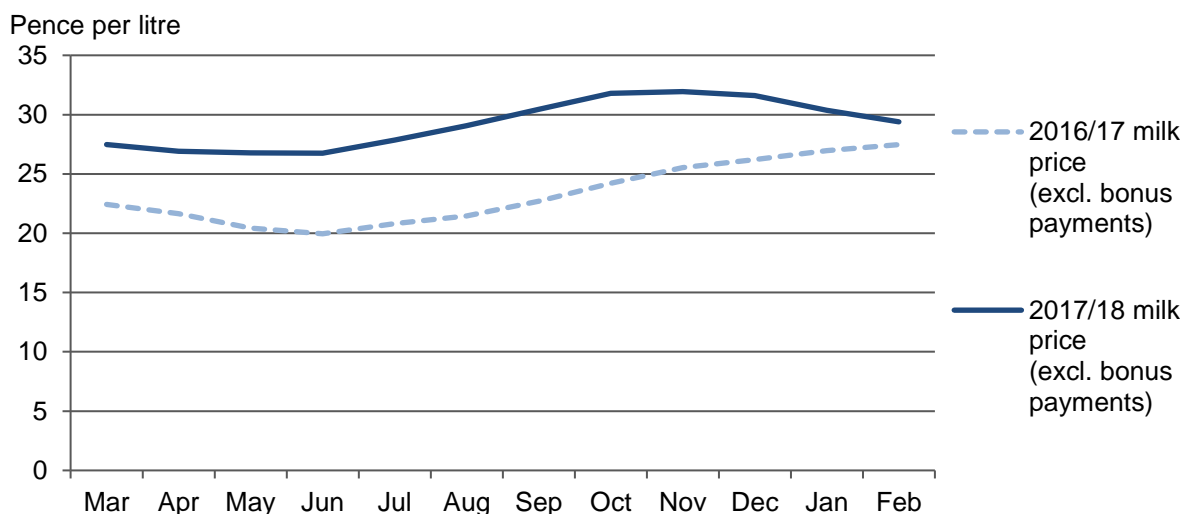
Table B: Average herd size for dairy cows ^(a) - England, 2012 to 2017

	2012	2013	2014	2015	2016	2017
Cattle Tracing scheme (all holdings)	82	84	89	89	90	93
Cattle Tracing Scheme (holdings with >= 10 dairy cows)	131	134	142	143	146	151
Farm Business Survey (specialist dairy farms)	156	165	172	172	174	189

Sources: 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

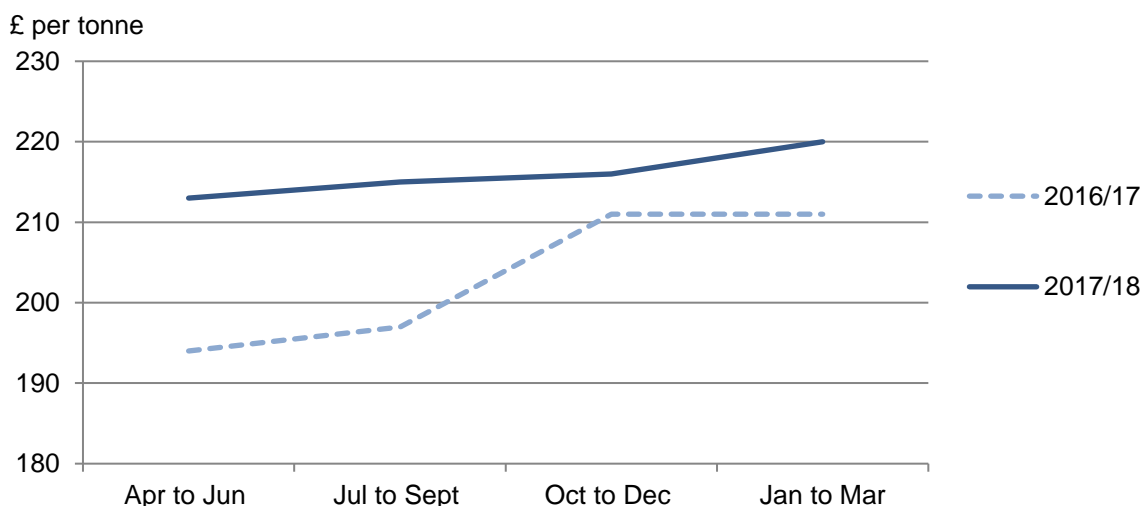
Figure 11: Average farm gate milk prices (UK) - March 2016 to February 2018



Source: Milk prices surveys Defra, RESAS, DAERA

In 2017/18 around two thirds of dairy farms averaged a Farm Business Income of over £75,000 while just 4 percent failed to make a profit (Figure 2). When analysed by performance bands, the lower performers failed to make a positive return on agriculture in 2016/17 and 2017/18, although their losses were significantly reduced in 2017/18 (dataset [Table 7.6](#)). The medium 50 percent of performers achieved an average income on their agricultural activities of £77,000, whilst the highest performing 25 percent achieved nearly £170,000.

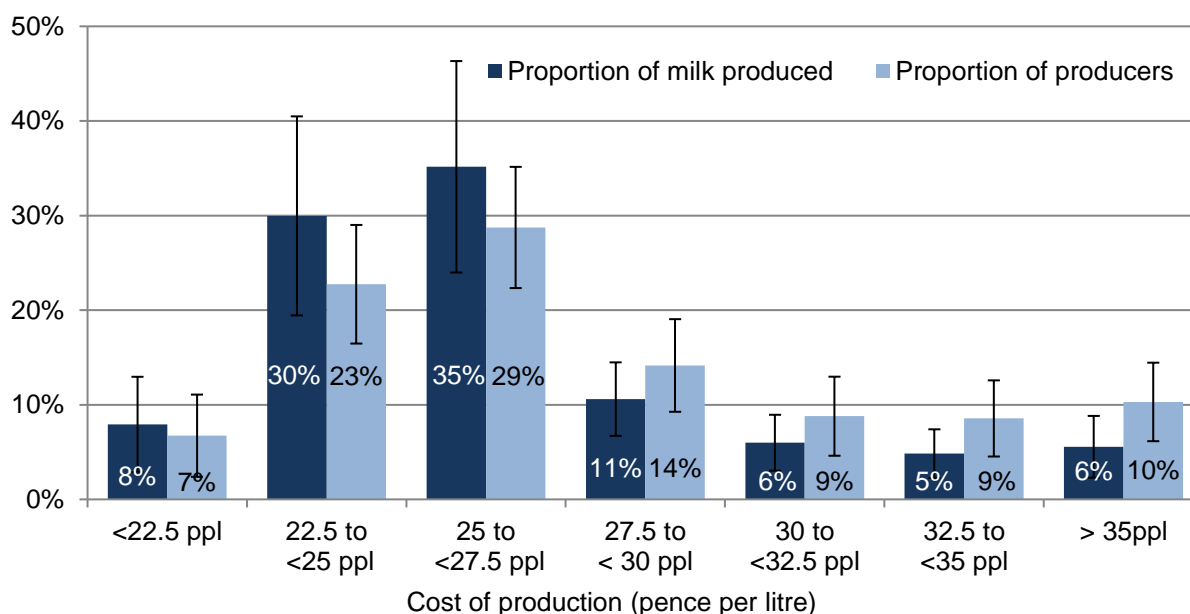
Figure 12: Average compound feed prices for cattle and calves - GB, 2016/17 to 2017/18



Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain

Based on enterprise data from the FBS, the average price for milk sold was 29.6 pence per litre in 2017/18 (24.1 pence per litre in 2016/17) whilst the average cost of production was 26.6 pence per litre (24.9 pence per litre in 2016/17). Note that the cost of production is on a full economic basis (see footnote to Figure 13) and is spread across all milk produced including any that is used on the farm. The distribution according to cost of production is shown in Figure 13. Around 58 percent of milk producers produced milk at a cost of less than 27.5 pence per litre, accounting for 73 percent of the milk produced in 2017/18.

Figure 13: Production costs ^(a) of milk - England, 2017/18



Source: Farm Business Survey, England

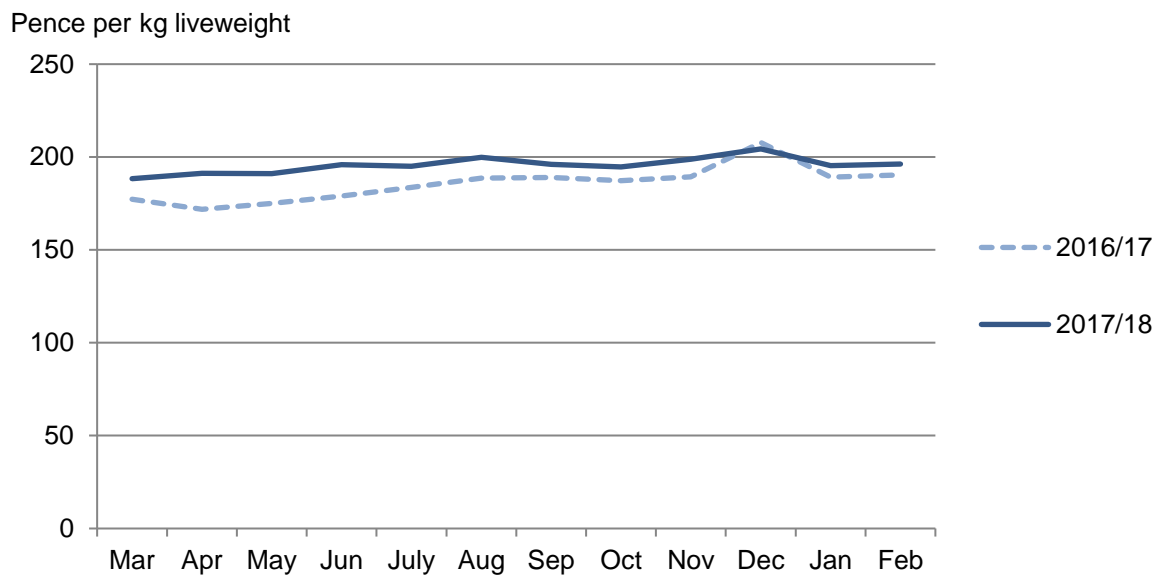
(a) Production costs shown here include all financial aspects of dairy enterprises such as any unpaid labour (including that of the farmer and spouse), herd depreciation and an estimated rental equivalent for land that is owned. An allowance is also made for non-milk revenue, most of which is from the 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)

On lowland grazing livestock farms average income increased by 36 percent to £21,900 (dataset [Table 5.7](#)). Cattle output, the main revenue source for this farm type, increased as the exchange rate and tighter supplies led to higher prices for finished cattle (Figure 13). Store prices were also higher than in 2016/17. Higher fat lamb prices (Figure 14) helped to increase sheep output although this was tempered by a smaller increase in value of stock than in the previous year. Agricultural costs rose by 1 percent, with greater feed costs largely offset by reduced crop costs resulting from a lower tillage area. Despite the increase in agricultural output, on average these farms failed to generate a positive return on their farming activities although their losses were reduced compared to the previous year (dataset [Table 5.7](#)). Output from diversified activities rose by 28 percent, primarily due to increases in food processing/retailing and building rental (for non-farm use). The average Basic Payment was 7 percent higher than a year earlier.

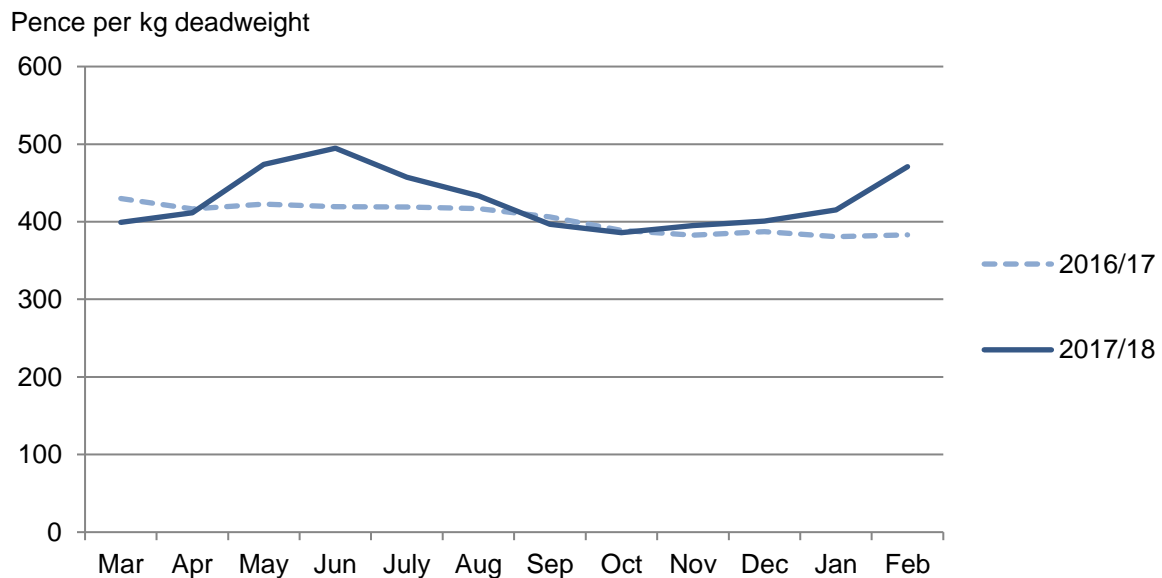
Figure 13: Average price for clean cattle (liveweight), GB - March 2016 to February 2018



Source: Agriculture and Horticulture Development Board (Meat Services)

On average, low performers failed to make a positive return from agriculture (dataset [Table 7.8](#)) in both 2016/17 and 2017/18. This group also failed to generate a positive return for the business as a whole in both years, although their losses were reduced in 2017/18 compared to the previous year. The top 25 percent of performers made an average of £9,600 on their agricultural activities in 2017/18 and had an overall income of £55,400.

Figure 14: Deadweight Standard Quality Quotation (SQQ)^(a) price, UK - March 2016 to February 2018



Source: Agriculture and Horticulture Development Board (Meat Services)

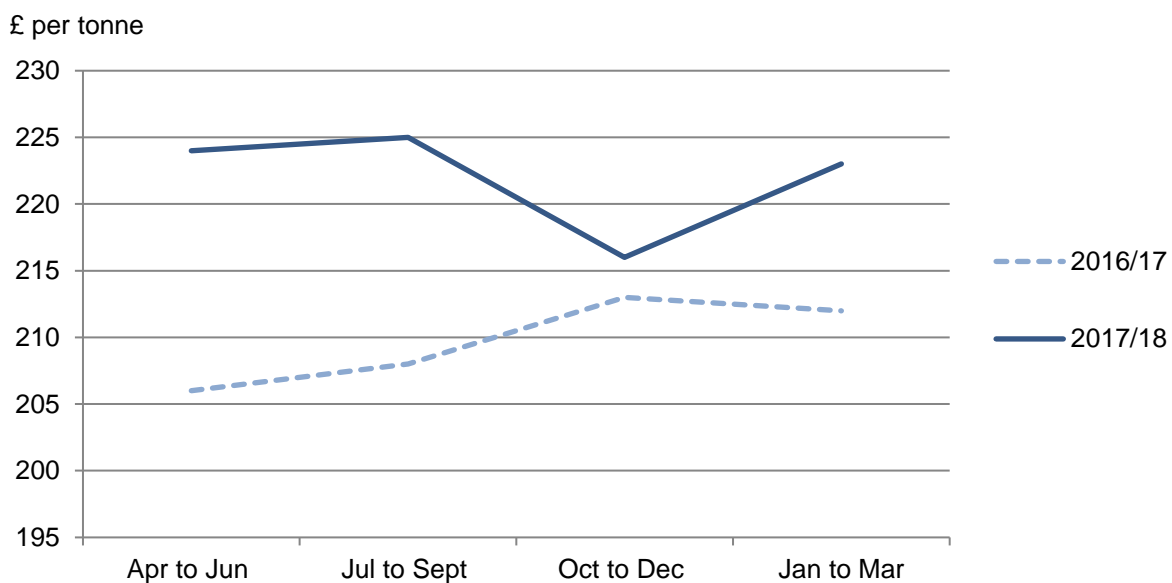
(a) The Deadweight SQQ is for lamb carcasses falling in the 12-21.5 kg weight bracket.



3.7 Grazing livestock farms (LFA)

For grazing livestock farms in the less favoured area (LFA), average Farm Business Income increased by 5 percent to £28,300 between 2016/17 and 2017/18. Farm business output rose by 7 percent due to increased output from agriculture, agri-environment schemes and a 13 percent rise in the average Basic Payment (dataset [Table 5.9](#)). Sheep and cattle output were both greater than a year earlier. Both sales and prices for fat lambs were higher than in 2016/17 (Figure 14) whilst revenue from ewes and hogs also increased despite prices being similar to or lower than the previous year. However, costs also rose in 2017/18, particularly for purchased feed (Figure 12 and Figure 15) and fodder, more than offsetting the increased output. This farm type again failed to make a positive return from the agricultural cost centre (dataset [Table 7.10](#)) with a greater average loss than in 2016/17.

Figure 15: Average compound feed prices for sheep^(a), GB - 2016/17 to 2017/18



Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain

(a) The above trends in sheep feed prices may not reflect those of individual compounds. They are weighted by the very seasonal production of compounds in each month. Summer prices are largely influenced by changes to the prices of finishing compounds, whereas winter prices are largely influenced by breeding compounds



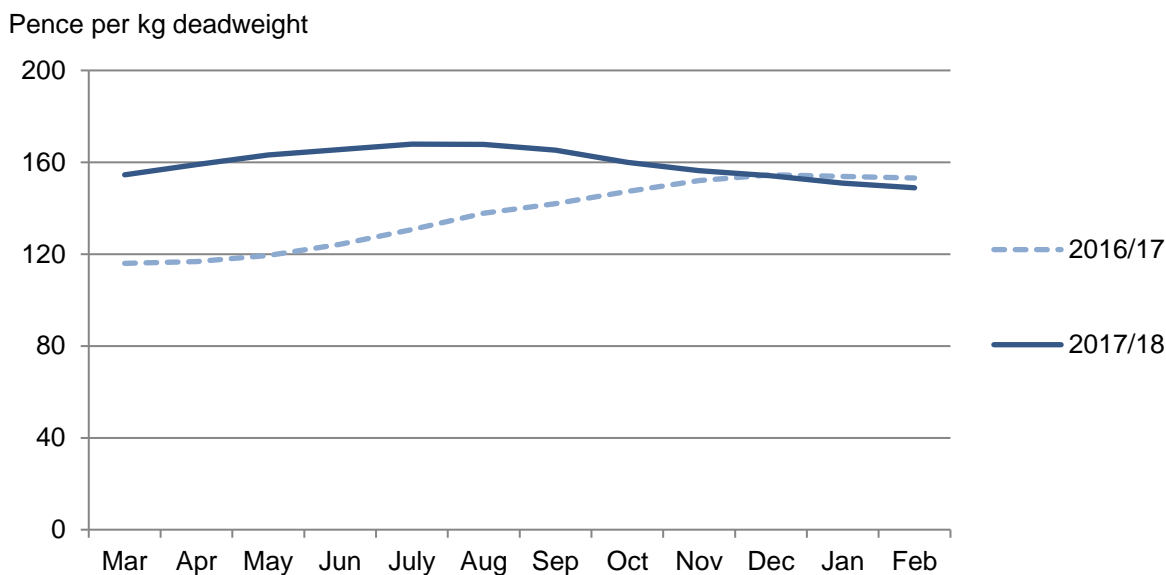
3.8 Specialist Pigs

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 46 percent in 2017/18 to £31,300 per farm (dataset [Table 5.11](#)). Agricultural output was 2 percent lower, largely due to reduced crop output due to a lower tillage area. Pig revenue increased by 8 percent in 2017/18 as lower throughput was offset by an increase in finished pig prices (Figure 16). However, there was a considerable fall in the closing valuation as both pig prices and numbers were lower than at the beginning of the year. The opposite occurred in 2016/17, meaning that this large change in the difference between opening and closing stocks offset the increased output. Both variable and fixed costs increased by 3 percent with the largest rises for purchased feed (Figure 17) and fodder and land and property costs, partially offset by reductions in crop and labour costs (dataset [Table 5.12](#)). The

average Basic Payment was lower than in 2016/17 reflecting a reduction in the average size of pig farms within the sample (Table C and dataset [Table 6.11](#)).

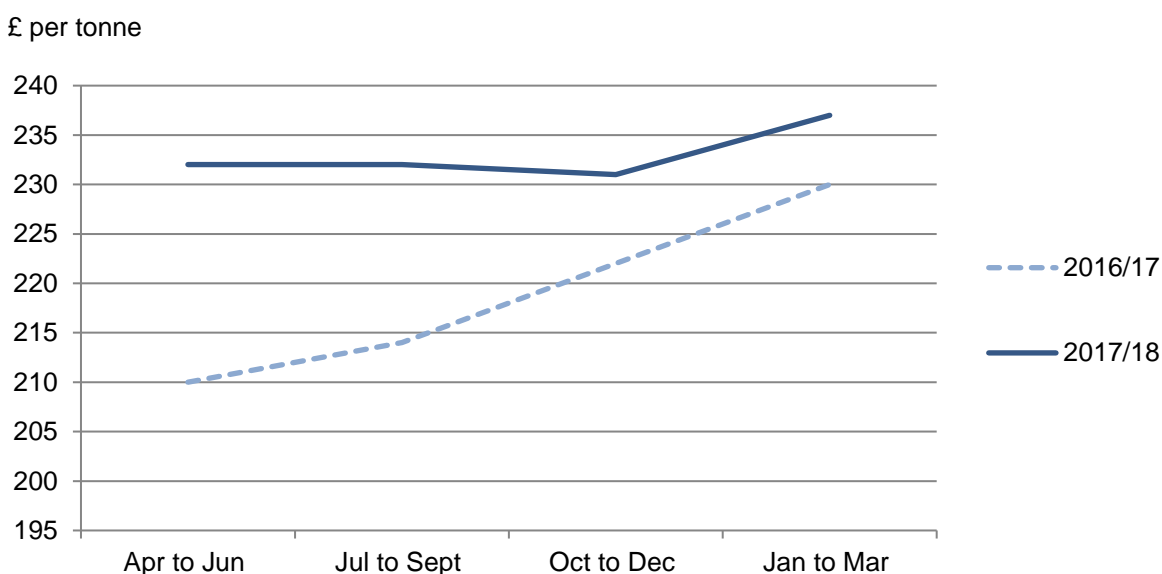
Figure 16: Deadweight Average Pig Price (APP), GB - March 2016 to February 2018



Source: Agriculture and Horticulture Development Board (Meat Services)

The All Pig Price (APP) series was introduced in April 2014. For more information measures see <https://pork.ahdb.org.uk/prices-stats/prices/>

Figure 17: Average compound feed prices for pigs, GB - 2016/17 to 2017/18



Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain



3.9 Specialist Poultry

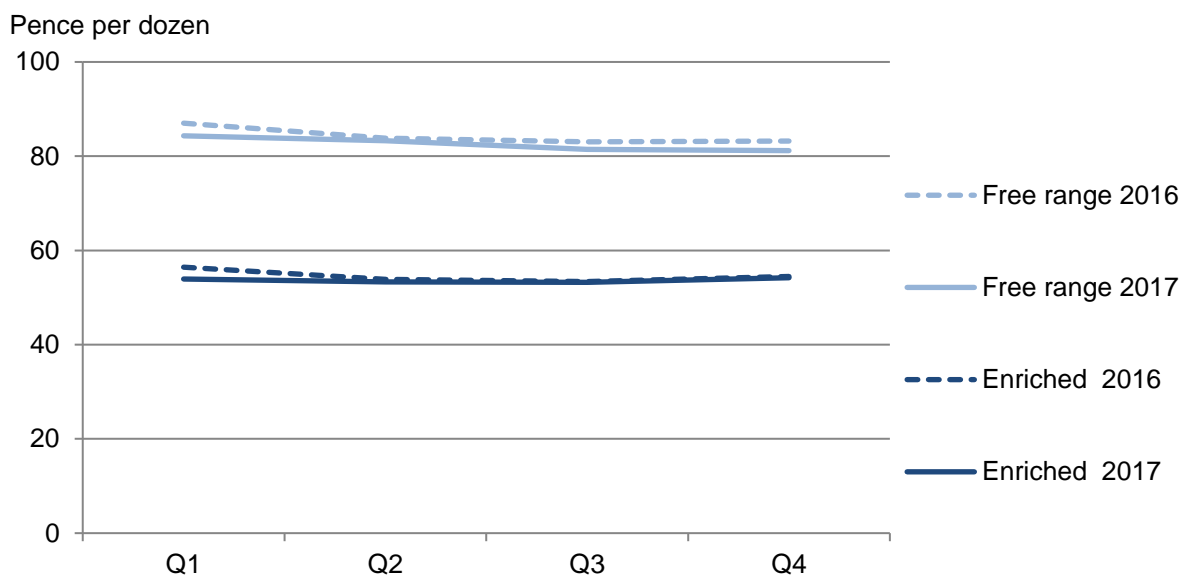
The relatively small size of the sector and of the sample in the survey means that our estimates for this farm type are subject to greater levels of uncertainty than in other sectors.

On specialist poultry farms average incomes increased by 77% to £96,000 (dataset [Table 5.13](#)). Output from eggs rose by 7% driven by an increase in price but, as in 2016/17, this is in contrast to the trends seen in UK statistics that show an increase in egg production and a small fall in prices (Figure 18). There was a substantial increase in output from birds

for poultry meat. However, the size of this increase should be treated with some caution as it is largely due to a change in the sample composition. For farms that were in the sample in both years there was a small increase in output. These rises were partially offset by increases to both variable and fixed costs. Income from diversification activities also increased (by 36 percent) largely driven by an increase in revenue from renewable energy. Note that these changes should be treated with caution because of the small sample size and the range of enterprises covered by this farm type. For example there are farms producing broilers, turkeys, ducks and geese and for laying flocks the systems cover organic and conventional free range enterprises as well as enriched cages.

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. A time series showing the impact of removing a particularly influential farm from the results can be found [here](#).

Figure 18: Quarterly Egg Packing Station prices, UK - 2016 and 2017



Source: Quarterly UK Egg Packing Station Survey

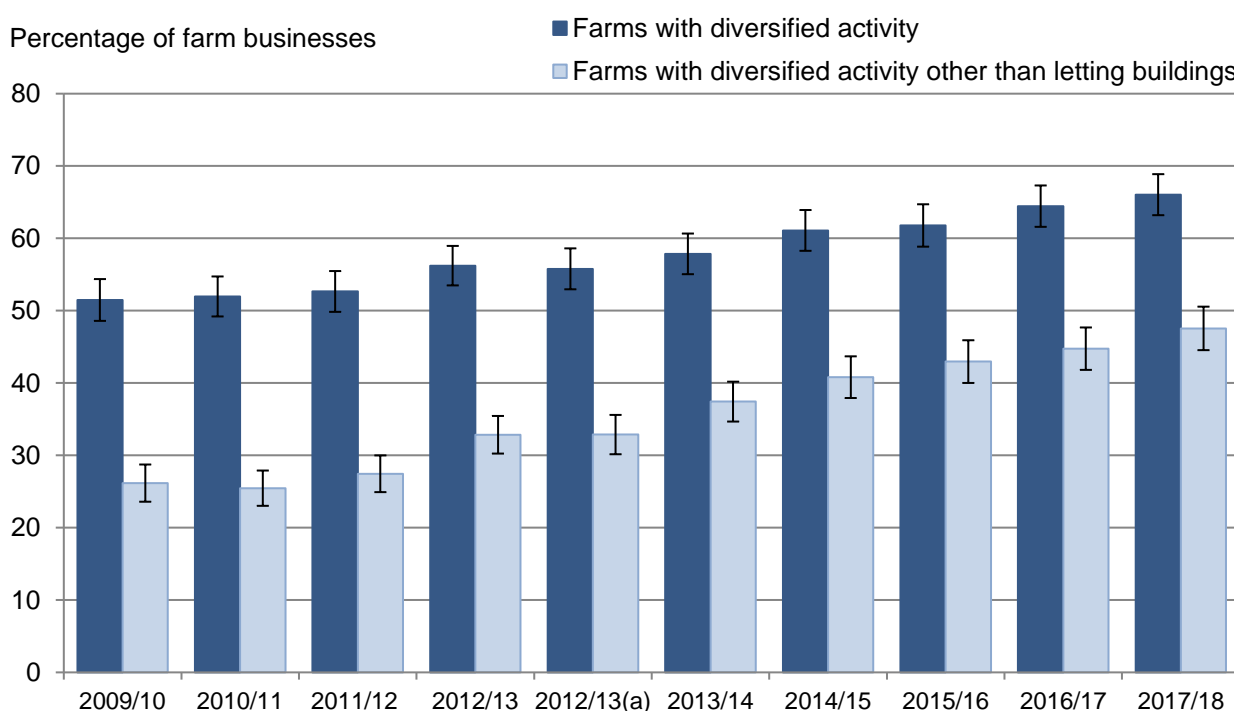
4 Diversification

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 non-agricultural work of an entrepreneurial nature on or off farm but which utilises farm resources.

Using this definition, 66 percent of farm businesses in England had some diversified activity in 2017/18, an increase of 2 percent from 2016/17. 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 48 percent in 2017/18 (Figure 19), 3 percent higher than in 2016/17. The proportion of farms generating solar energy in 2017/18 was 21 percent, similar to 2016/17 (20 percent). The proportion of farms generating other sources of renewable energy⁶ was 10 percent in 2017/18.

Figure 19: Percentage of farms with diversified activities, England - 2009/10 to 2017/18



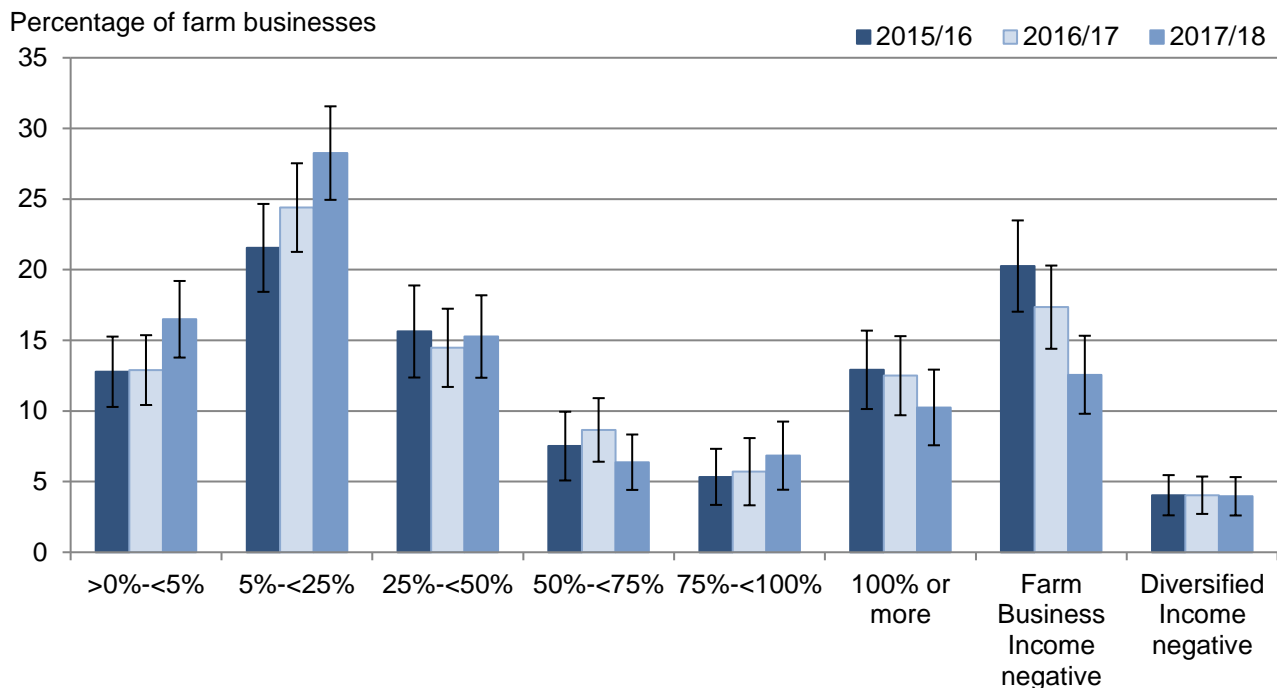
Source: Farm Business Survey, England

(a) Farm typology based on 2010 standard output coefficients. For 2009/10 to 2012/13 farm typology is based on 2007 standard output coefficients.

⁶ Other sources of renewable energy includes power generating, wind turbines, anaerobic digestion and renewable heat initiatives

Total income from diversified activities in 2017/18 was £680 million, an 8 percent increase from 2016/17 (£620 million). Across all farms, income from diversified enterprises accounted for 22 percent of total Farm Business Income in 2017/18 (£3,090 million) although there were wide variations between farms (Figure 20).

Figure 20: Distribution of farms according to proportion of Farm Business Income (FBI) from diversified enterprises, England - 2015/16 to 2017/18



Excludes farms with no diversified activities

Source: Farm Business Survey, England

For 39 percent of farm businesses with diversified activities, income from these activities accounted for at least a quarter of the total Farm Business Income (compared to 41 percent in 2016/17); for 23 percent of farm businesses, the income from diversification exceeded the income from the rest of the farm business (compared to 27 percent in 2016/17). For just under 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 income⁷ of £680 million was generated from diversified activities by 36,100 farms. These farms had an average diversified enterprise income of £18,700 (Table C). Those farms with food processing and retailing enterprises generated 25 percent of their total farm business income (£70 million of £270 million) from this activity, whilst those letting out buildings generated 24 percent (£450 million) of their total Farm Business Income (£1,880 million) from this activity. Those farms generating renewable energy (excluding solar power), generated 10 percent of their total income (£50 million of £440 million) from these activities compared to 8 percent in the previous year.

⁷ Revenue net of costs.

Table C: Income from diversified enterprises, England - 2017/18

	No. of farms	% of farms	Total Farm Business Income for these farms (£m)	Income of diversified enterprise (£m)	Average enterprise income ^(a) (£/farm)
Farm Business income (incl. diversification)	54,700		3,090		
Farms which engage in:					
Diversified enterprises (all kinds)	36,100	66%	2,400	680	18,700
letting buildings for non-farming use	24,400	45%	1,880	450	18,500
processing/retailing of farm produce	5,900	11%	270	70	11,600
sport and recreation	7,400	14%	600	30	3,900
tourist accommodation and catering	3,500	6%	240	20	7,000
solar energy	11,500	21%	910	20	2,100
other sources of renewable energy ^(b)	5,300	10%	440	50	8,600
other diversified activities	5,300	10%	370	30	6,200

Source: Farm Business Survey, England

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

(b) Other sources of renewable energy includes power generating, wind turbines, anaerobic digestion and renewable heat initiatives.

Although two thirds (66 percent) of farms had a diversified activity, the total value of diversified enterprise output (£1,250 million) was only 7 percent of total farm business output (£17,360 million). For farms that engaged in any diversified enterprise, average enterprise output from diversification was £34,500 (Table D). For those farms with diversified enterprises, the output for these enterprises (£1,250 million) equated to 9 percent of their total farm output (£13,620 million). Letting buildings for non-farming use accounted for 51 percent of diversified output, while the contribution from tourism, sport and recreation, solar energy and other diversified activities were much smaller. On average, processing/retailing of farm produce generated the greatest output per farm (£27,100), whilst other renewable energy sources (excluding solar) generated £24,800 per farm.

Table D: Value of output from diversified enterprises, England - 2017/18

	No. of farms	% of farms	Total farm business output for these farms (£m)	Output of diversified enterprise (£m)	Average diversified enterprise output ^(a) (£/farm)
Farm Business Output (incl. diversification)	54,700		17,360		
Farms which engage in:					
Diversified enterprises (all kinds)	36,100	66%	13,620	1,250	34,500
letting buildings for non-farming use	24,400	45%	10,650	640	26,000
processing/retailing of farm produce	5,900	11%	1,700	160	27,100
sport and recreation	7,400	14%	3,040	70	9,400
tourist accommodation and catering	3,500	6%	1,380	70	21,500
solar energy	11,500	21%	5,750	80	7,000
other sources of renewable energy ^(b)	5,300	10%	2,730	130	24,800
other diversified activities	5,300	10%	1,860	100	18,200

Source: Farm Business Survey, England

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

(b) Other sources of renewable energy includes power generating, wind turbines, anaerobic digestion and renewable heat initiatives.

5 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 participants (88 percent of farm businesses in 2017/18) provided information on succession arrangements (

Table E). This was slightly more than in previous years. However, for 9 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 4 percent, the decision maker was not available.

Table E: Percentage of farm business survey participants responding to farm succession questions, England - 2013/14 to 2017/18

	Percentage of farm businesses (%)			
	2013/14	2014/15	2015/16	2017/18
Willing to respond	85	85	85	88
Not willing/not appropriate	10	11	10	9
Decision maker not seen	5	5	4	4

Source: Farm Business Survey, England.

The succession questions were not included in the 2016/17 survey.

Based on unweighted responses from 1,889 farm businesses in 2013/14, 1,880 businesses in 2014/15, 1,805 businesses in 2015/16 and 1,762 businesses in 2017/18.

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 family⁸.
- b) The business will continue, but from outside the family⁹.
- 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, 43 percent had a nominated successor in 2017/18 (Table F). This was slightly more than in previous years. These farms were more likely to be larger farms and older farmers¹⁰. The

⁸ 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).

⁹ For example by third party sale, lease or contract farming arrangement of the whole farm business.

¹⁰ Farm type, business type, farm size and farmer age were all found to be significant terms in a binomial generalised linear model, but farmer age and farm size were dominant terms with a large impact on the probability of having a successor.

successor was largely from within the family (40 percent in 2017/18); with a further 1 percent stating that the business would continue outside of the family. The remaining 2 percent had a nominated successor but they would be unable to take over due to tenancy or other issues.

For a quarter of farm businesses (24 percent in 2017/18) there was no nominated successor. A further 24 percent of businesses stated it was too early to provide an answer and 9 percent were unsure of the intention at the time of asking (Table F).

Table F: Farm business succession arrangements - England, 2013/14 to 2017/18^(a)

	Percentage of farm businesses (%)			
	± 95% Confidence Interval (%)			
	2013/14	2014/15	2015/16	2017/18
Nominated successor	37	38	36	43
	±3	±3	±3	±3
<i>Of which:</i>				
Successor nominated within family	34	35	34	40
	±3	±3	±3	±3
Successor nominated but unable to take over due to tenancy or other issues	2	2	2	2
	±1	±1	±1	±1
Business will continue but outside family	1	1	1	2
	±0	±0	±1	±1
Too early in family/business circumstances to answer	29	28	29	24
	±3	±3	±3	±3
No nominated successor	27	27	26	24
	±3	±3	±3	±3
Respondent unsure of succession arrangements	8	7	9	9
	±2	±2	±2	±2

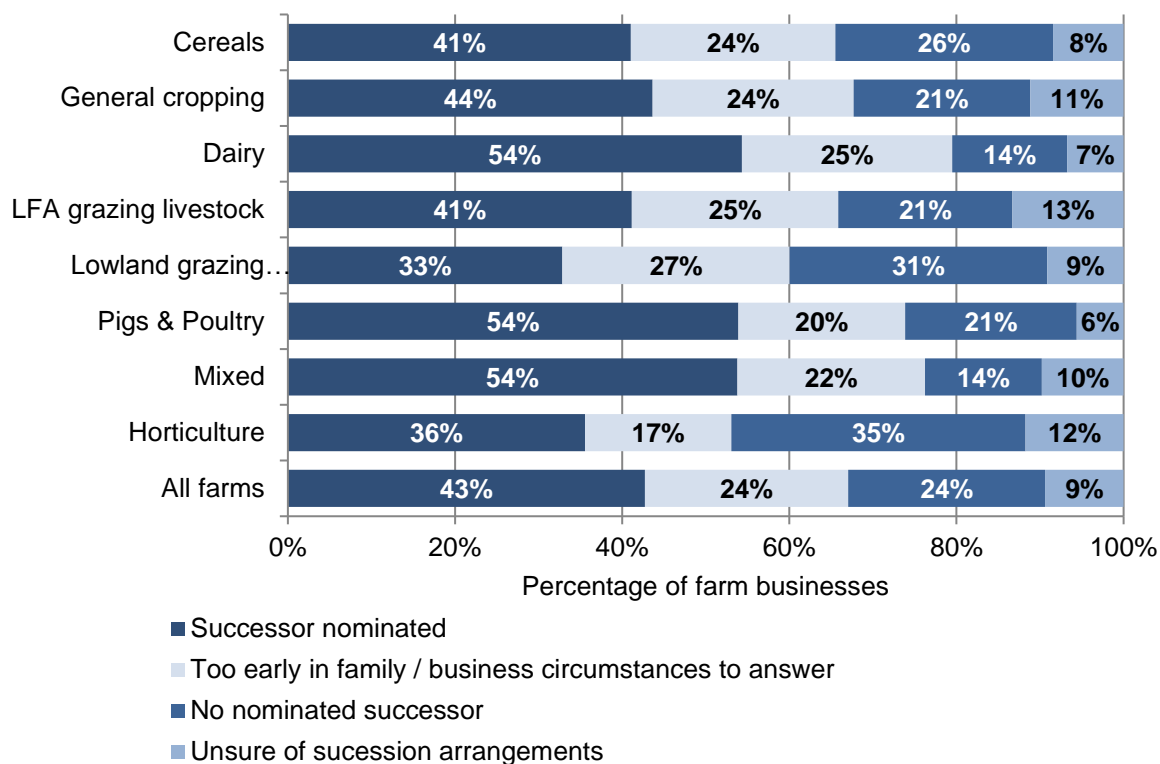
Source: Farm Business Survey, England.

The succession questions were not included in the 2016/17 survey.

(a) Based on responses from the 1603 farm businesses in 2013/14, 1,595 businesses in 2014/15, 1,540 businesses in 2015/16 and 1,545 businesses in 2017/18 that were willing to respond to the question: "is there a successor(s) nominated to succeed with running of business"

Dairy (54 percent), pigs & poultry (54 percent) and mixed farms (54 percent) were more likely than other farm types to have a nominated successor in 2017/18, similar to previous years (Figure 21). Horticulture (35 percent) and lowland grazing livestock (31 percent) were more likely to have no nominated successor than other farm types.

Figure 21: Succession arrangements by farm type, England - 2017/18^a

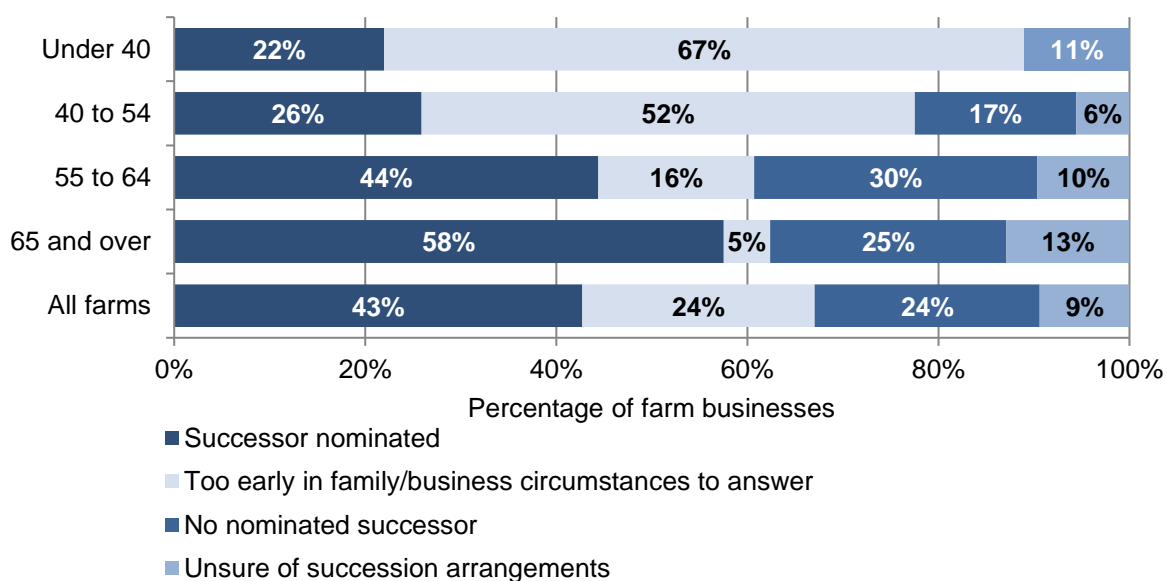


Source: Farm Business Survey, England

(a) Based on responses from 1,545 farm businesses in 2017/18.

As might be expected, older farmers (65 and over) were more likely (58 percent) to have a nominated successor (Figure 22). Farmers under 40 were more likely than older farmers to state that it was too early to answer (67 percent).

Figure 22: Succession arrangements by age of farmer, England - 2017/18^a



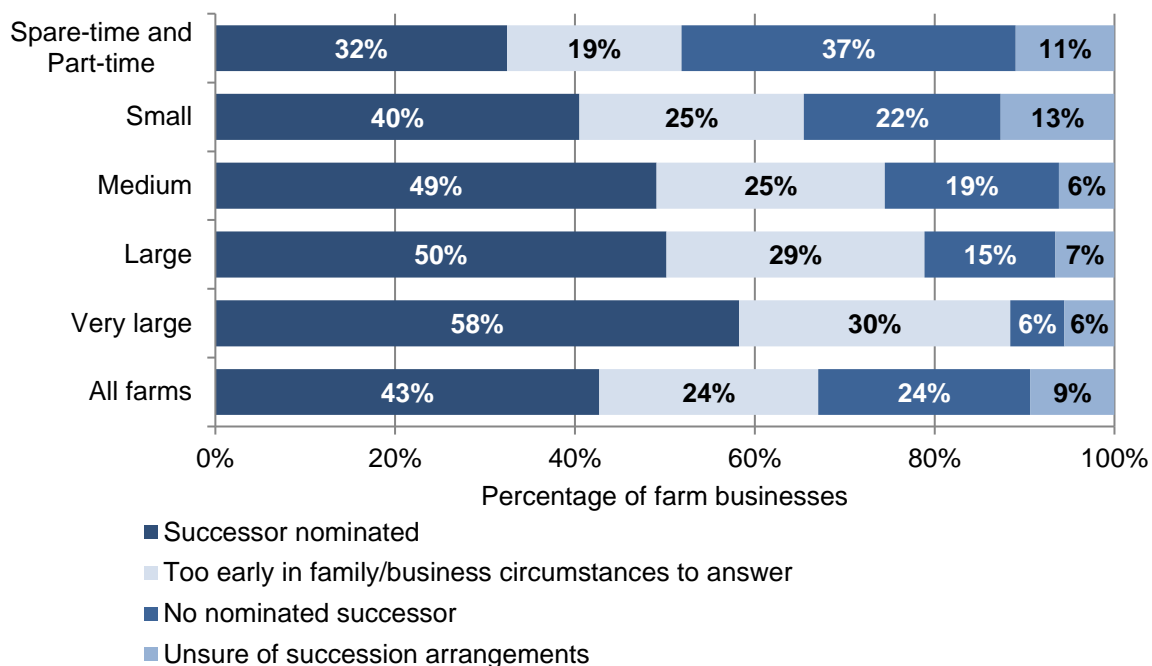
Source: Farm Business Survey, England

The 'No nominated successor' and 'Other' groups have been merged for farmers aged under 40 due to insufficient observations.

(a) Based on responses from 1,545 farm businesses in 2017/18.

Larger farms were more likely to have a nominated successor, and less likely to have no nominated successor (Figure 23), suggesting that larger farms might be more engaged with long term business planning.

Figure 23: Succession arrangements by size of farm, England - 2017/18 ^a



Source: Farm Business Survey, England.

(a) Based on responses from 1,545 farm businesses in 2017/18.

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 (95 percent in 2017/18) the successor already had a farming background (Table G), largely unchanged from previous years. This was defined as having substantial prior experience¹¹. For the remainder (5 percent in 2017/18) 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 to 2017/18^(a)

	Percentage of farm businesses (%)			
	±95% Confidence Interval (%)			
	2013/14	2014/15	2015/16	2017/18
Has a farming background	94 ±3	95 ±2	93 ±3	95 ±2
New to farming	6 ±3	5 ±2	7 ±3	5 ±2

Source: Farm Business Survey, England.

The succession questions were not included in the 2016/17 survey.

Based on responses from the 634 farm businesses in 2013/14, 635 businesses in 2014/15, 602 businesses in 2015/16 and 692 businesses in 2017/18 that reported that the business would continue from within or outside the family.

¹¹ For example, at least three years, which might include a period of higher education study, or a second generation farmer.

Survey details

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.

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 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 output¹² as recorded in the annual June Survey of Agriculture and Horticulture. In 2017, this accounted for approximately 54,700 farm businesses. In 2016 the sample was reduced from 1,800 to 1,750 farm businesses.

For further information about the Farm Business Survey please see:

<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/farm-business-survey>

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). [Table J](#) shows the distribution of the sample compared with the distribution of businesses from the 2017 June Survey of Agriculture and Horticulture. These initial weights are then adjusted (using calibration weighting¹³) so that they can produce unbiased estimates of a number of different target variables.

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. 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.

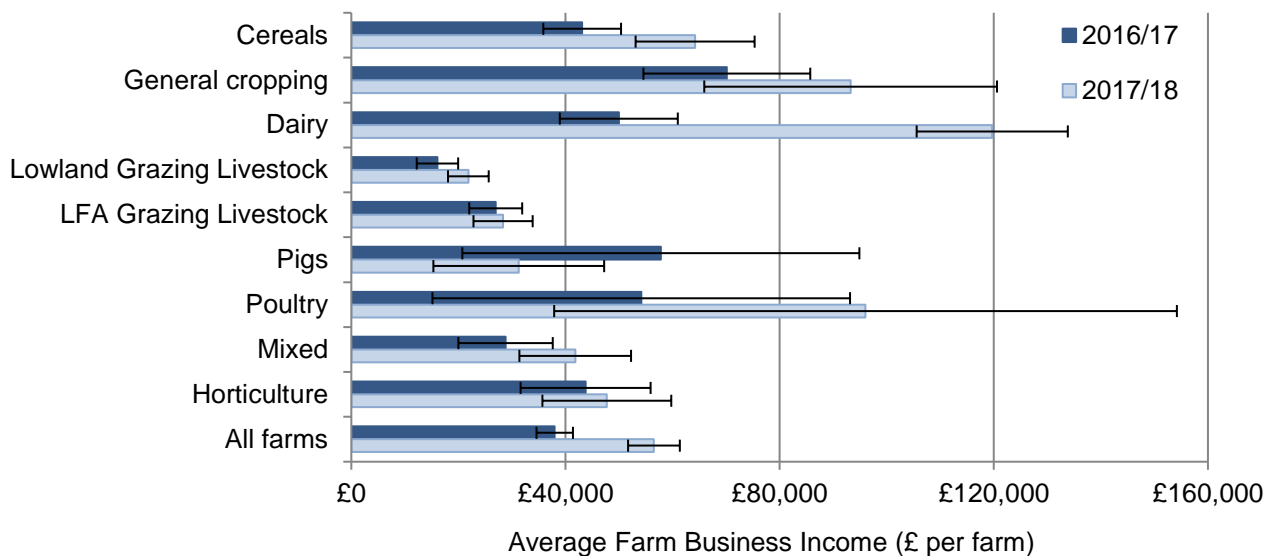
¹² For a definition of standard output please see the UK classification document here <https://www.gov.uk/farm-business-survey-technical-notes-and-guidance>

¹³ Further information on calibration weighting can be found here: <https://www.gov.uk/farm-business-survey-technical-notes-and-guidance>

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 24 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 24: Average Farm Business Income by farm type, with 95% confidence limits, England 2016/17 and 2017/18



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. There is also one very influential poultry farm in the sample. Table H shows the results for this farm type including and excluding the influential farm that has been in the survey since 2012/13.

Table H: Average Farm Business Income (£ per farm) for poultry farms, including and excluding outlier

	Average FBI		95% Confidence interval	
	Including outliers	Excluding outliers	Including outliers	Excluding outliers
2012/13	90,200	76,000	43,100	36,000
2013/14	157,200	99,800	110,800	34,200
2014/15	126,800	83,600	87,800	38,500
2015/16	106,700	56,100	98,000	29,000
2016/17	54,000	37,400	39,000	23,000
2017/18	96,000	67,600	58,200	24,600

Source: Farm Business Survey, England.

Availability of results

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

Defra statistical notices can be viewed on the Food and Farming Statistics pages on the Defra website at <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics>. 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 (<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 Alison Wray at fbs.queries@defra.gsi.gov.uk.

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Appendix 1: Classification of survey farms by type of farming and size of business

1. 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 I](#) 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 percent 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 percent 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 established¹⁴ 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 LFA, SDA and DA can be seen in [Figure 25](#) at the end of this appendix.

¹⁴ Council Directive 75/268/EEC.

8. 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 [Table J](#) 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. Economic performance for each farm is measured as the ratio between economic output (mainly sales revenue) and inputs (costs). The inputs for this calculation include an adjustment for unpaid manual labour. The higher the ratio, the higher the economic efficiency and performance. The farms are then ranked and allocated to performance bands based on economic performance percentiles:

- Low performance band - bottom 25 percent of economic performers
- Medium performance band - middle 50 percent of performers
- High performance band - top 25 percent of performers.

Table I: UK farm classification

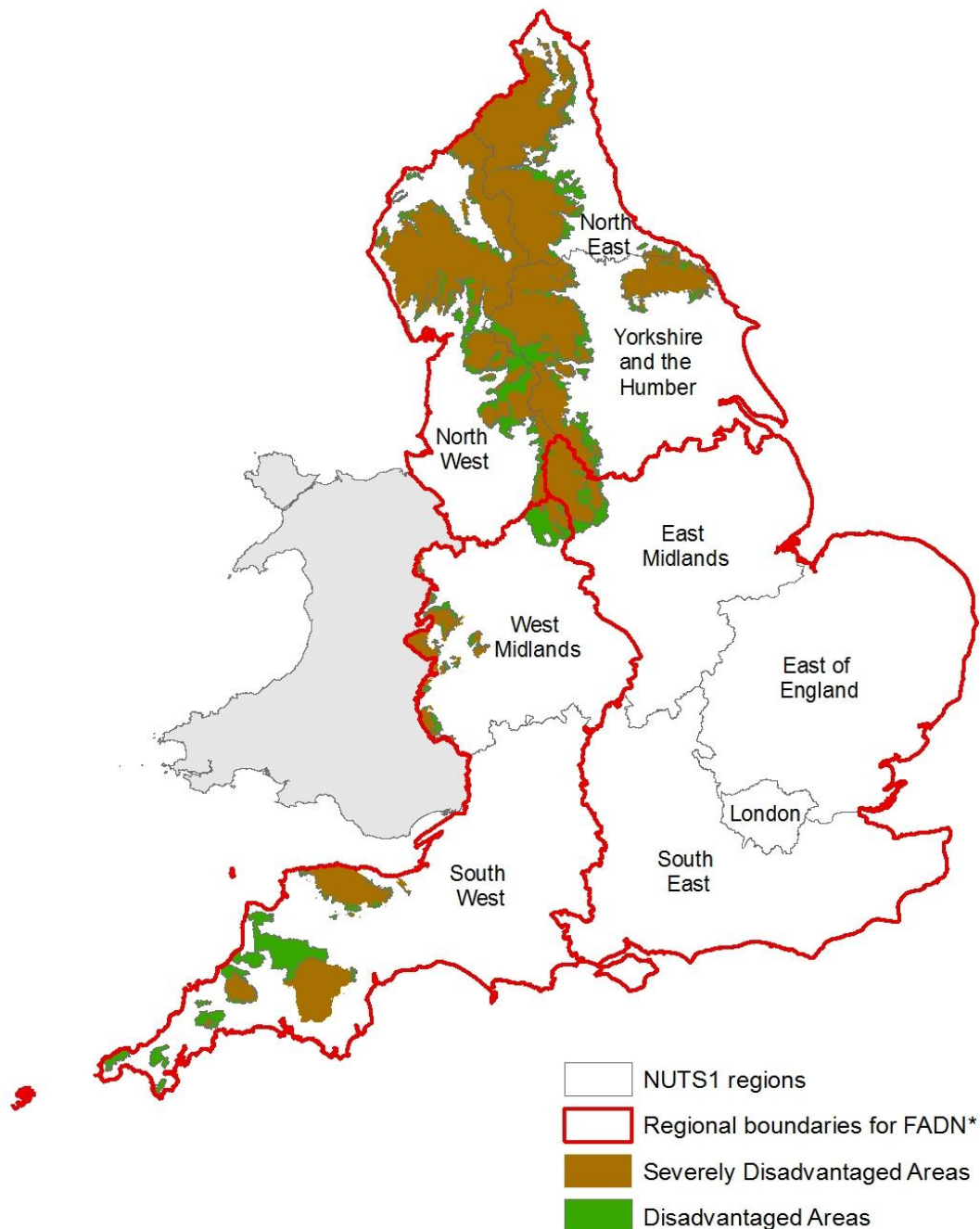
UK FARM CLASSIFICATION SYSTEM (REVISED 2010): COMPOSITION OF ROBUST, MAIN AND OTHER FARM TYPES BY CONSTITUENT EC TYPE

Robust types (a)	Main types	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.

Figure 25: Regional boundaries used within tables



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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Table J: Farm Business Survey 2017/18: Sample Characteristics - England by size groups^(a)

Type of Farming	Size	Number of Businesses in Sample	Number of Businesses at June Survey 2017	Average Size of Business by Standard Labour Requirement		Average Total Area (hectares)	
				Sample	June Survey 2017	Sample	June Survey 2017
Cereals	Part-Time	95	6,944	0.7	0.5	99	69
	Small	108	3,432	1.6	1.4	194	169
	Medium	63	1,538	2.5	2.4	281	273
	Large	78	2,186	5.6	5.7	594	629
	All Sizes	344	14,100	1.7	1.7	208	202
Genral Cropping	Part-Time	14	1,800	0.6	0.5	80	88
	Small	35	1,166	1.5	1.5	144	106
	Medium	21	715	2.5	2.4	234	162
	Large	80	1,810	9.9	10.1	521	433
	All Sizes	150	5,491	3.9	4.1	256	215
Dairy ^(b)	Part-Time	21	795	1.6	1.4	53	47
	Small	39	995	2.6	2.5	82	75
	Medium	179	4,234	6.8	6.9	182	173
	Large	239	6,024	5.9	5.4	159	140
	All Sizes	21	795	1.6	1.4	53	47
Lowland Grazing Livestock ^(c)	Part-Time	49	5,821	0.7	0.7	59	43
	Small	87	3,837	1.5	1.4	88	68
	Medium	71	1,492	2.5	2.4	103	111
	Large	89	1,637	5.1	5.4	220	244
	All Sizes	296	12,787	1.8	1.7	95	84
LFA Grazing Livestock ^(c)	Part-Time	17	2,671	0.8	0.6	53	59
	Small	53	1,927	1.5	1.4	105	127
	Medium	54	1,000	2.5	2.5	166	226
	Large	78	1,263	5.6	5.2	414	587
	All Sizes	202	6,861	2.5	1.9	177	200
Specialist Pigs	Part-Time	5	567	0.7	0.6	12	10
	Small	8	328	1.6	1.4	20	17
	Medium	8	196	2.5	2.6	59	30
	Large	47	612	14.8	13.4	134	130
	All Sizes	68	1,703	5.2	5.6	54	57
Specialist Poultry	Part-Time	8	372	0.5	0.5	48	14
	Small	11	265	1.5	1.5	22	25
	Medium	23	172	2.4	2.5	45	37
	Large	59	679	13.1	14.3	102	111
	All Sizes	101	1,488	6.6	7.2	68	63
Mixed	Part-Time	13	2,171	0.7	0.6	74	45
	Small	41	1,457	1.5	1.5	104	93
	Medium	41	861	2.5	2.4	154	140
	Large	79	1,685	6.4	6.5	346	344
	All Sizes	174	6,174	3.0	2.7	180	151
Horticulture	Part-Time	19	432	0.8	0.7	10	13
	Small	23	731	1.5	1.4	17	14
	Medium	17	414	2.3	2.4	14	18
	Large	129	1,168	16.0	19.0	66	104
	All Sizes	188	2,745	6.4	8.9	31	53
All Types	Part-Time	241	21,573	0.7	0.6	73	55
	Small	366	13,143	1.5	1.4	116	104
	Medium	337	7,383	2.5	2.4	157	155
	Large	818	15,274	7.7	8.3	305	320
	All Sizes	1,762	57,373	3.1	3.1	160	150

(a) The estimates shown in this publication are based on sample results weighted by type and by size.

(b) 'Part-Time' and 'Small' sizes merged due to very low respective sample numbers.

(c) Lowland Grazing Livestock and LFA Grazing Livestock farm types exclude specialist horse enterprises.

Appendix 2: Notes on Tables: Definitions of Terms

FBS Survey Terms

1. **Accounting years:** To ensure consistency in harvest/crop year and commonality of subsidies within any one FBS year, only farms which have accounting years ending between 31 December and 30 April inclusive are 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 Net Profit, in practice they are likely to differ because Net Profit is derived from financial accounting principles whereas Farm Business Income is derived from management accounting principles. For example in financial accounting output stocks are usually valued at cost of production, whereas in management accounting they are usually valued at market price. In financial accounting depreciation is usually calculated at historic cost whereas in management accounting it is often calculated at replacement cost.
3. **Farm corporate income represents** the return on own capital invested in the farm business, to risk and to entrepreneurship. It is derived by deducting unpaid labour, both manual and managerial, from Farm Business Income. This allows the profitability of sole traders and partnerships to be compared directly with that of companies. Currently we are able to deduct an estimate of unpaid manual labour but not of unpaid managerial labour and so the data are only approximate. However, we plan to undertake a research project to produce a method for deriving an estimate of unpaid managerial labour, so that we can produce better data for this measure in future.
4. **Farm investment income** represents the return on **all** capital invested in the farm business **whether borrowed or not**, to risk and to entrepreneurship. It is a general measure of the profitability of farming as an activity rather than of a particular business. It is derived by adding net interest payments to Farm Corporate Income. Since currently the data for Farm Corporate income are only approximate, so too are the data for Farm Investment Income.

5. **Net Farm Income (NFI)** is intended as a consistent measure of the profitability of tenant-type farming¹⁵ 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 capital¹⁶ 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.

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.

¹⁵ 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.

¹⁶ 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.

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 enterprise outputs. However, changes in the numbers of breeding livestock between the opening and closing valuation and the total valuation change of trading livestock are included. Unlike crop enterprise output, livestock enterprise output is calculated on an accounting year basis.

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

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

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

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

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.