Department for Environment Food & Rural Affairs

13 December 2019

Farm Accounts in England
Results from the Farm Business Survey 2018/19

This release provides further detail behind the income results published on 31st October 2019. The results are sourced from the 2018/19 Farm Business Survey which covers the 2018 harvest and includes the 2018 Basic Payment. Figures are for March/February years with the most recent year shown ending February 2019. The release also includes analysis of diversified activities on farms and of farm succession arrangements.

Key results

- In 2018/19, average Farm Business Income was lower for dairy, grazing livestock, both lowland and those in Less Favoured Areas, pig and poultry farms. The weather was a key influencing factor for incomes across farm types; a very cold, late spring and extremely hot, dry summer.
- Average income for cereal farms increased by 8 percent to £67,300 and for general cropping farms by 22 percent to £106,400. The weather conditions led to reduced yields on both types of farms although these were mitigated by higher prices for some crops, particularly cereals.
- On dairy farms, average income decreased by 33 percent to £79,700, driven by higher input costs, particularly feed influenced by the lack of grazed forage due to the weather conditions and increased cereal prices. This more than offset a 7 percent increase in output from milk.
- Notable increases to feed costs were also a major influence on average incomes for grazing livestock farms, which fell by 39 percent for lowland farms to £12,500 and 42 percent for those in Less Favoured Areas to £15,500.
- The average Basic Payment across all farm types was virtually unchanged on 2017 reflecting the very similar Euro / Sterling exchange rates in the September of each year (2017 and 2018) when the payment rates are determined.
- Total income from diversified activities in 2018/19 was £740 million, a 6 percent increase from 2017/18.
- For farm businesses that agreed to answer questions on succession, 44 percent had a nominated successor in 2018/19. This was slightly higher than in previous years.

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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.

Forecasts of income by farm type for the year ending February 2020 and covering the 2019 harvest will be published in February 2020. These can be found at: https://www.gov.uk/government/collections/farm-business-survey

Contents

Background

Farm Accounts in England is the primary publication from the Farm Business Survey (FBS). 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 (FBI). For non-corporate businesses, FBI 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. FBI is essentially the same as Net Profit, which, as a standard financial accounting measure of income, is used widely within and outside agriculture.

From 2018/19, the classification of farms is based on 2013 standard output coefficients. 2017/18 results have been recalculated and presented in this release to allow comparability between 2017/18 and 2018/19. The results published here are therefore not directly comparable with those published in earlier years which are based on previous standard output coefficients.

Further information on the FBS 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 2019. This covered the **2018** harvest and includes the Basic Payment due in the 2018/19 accounting year.

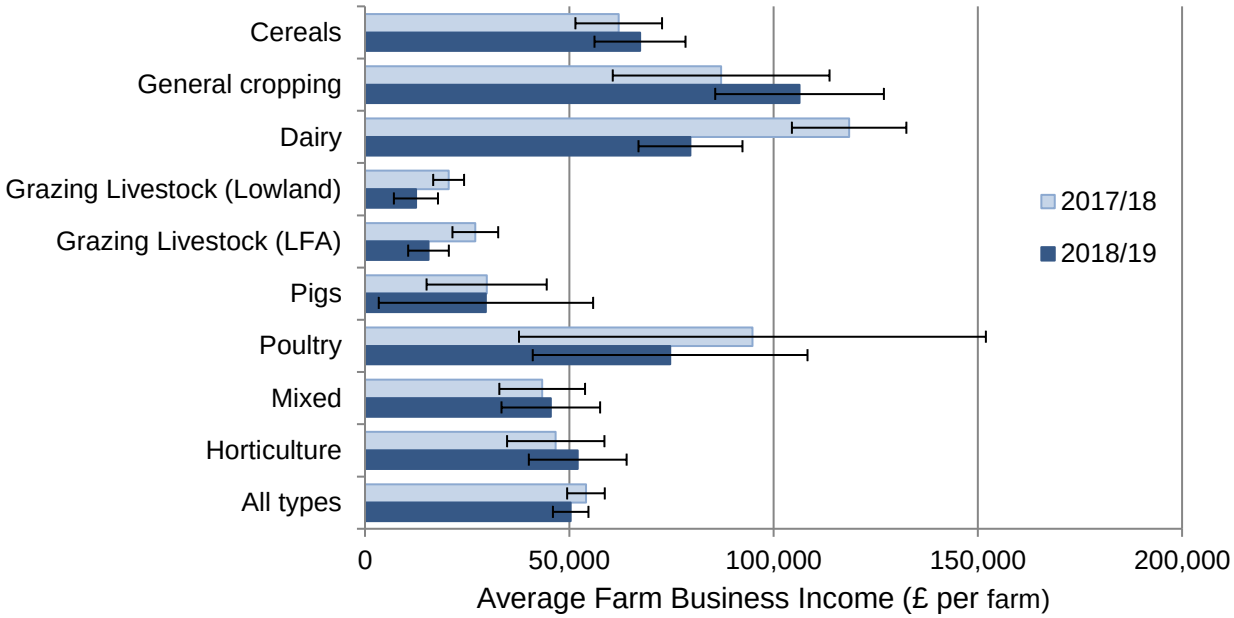
1 Overview across all farm types

Average FBI across all farm types was £50,400 in 2018/19; a 7 percent decrease compared to 2017/18. A key influencing factor was the weather: the very cold, late spring (the "beast from the east") and the extremely hot, dry summer. The challenging conditions generally reduced crop yields although this was offset to some extent by price rises for many crops. These increased prices had a knock on effect for livestock farms who, in addition to contending with the difficult conditions, experienced substantially higher feed costs with many also needing to purchase more feed.

In recent years, the reduced strength of the pound increased Basic Payment rates and helped drive up income for some farm types. However, in 2018 the average payment across all farm types barely changed compared to 2017 due to the very similar Euro / Sterling exchange rates in the September of each year (2017 and 2018) when the payment rates are determined.

Figure 1 shows average FBI 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 FBI by farm type with 95% confidence intervals - England, 2017/18 and 2018/19

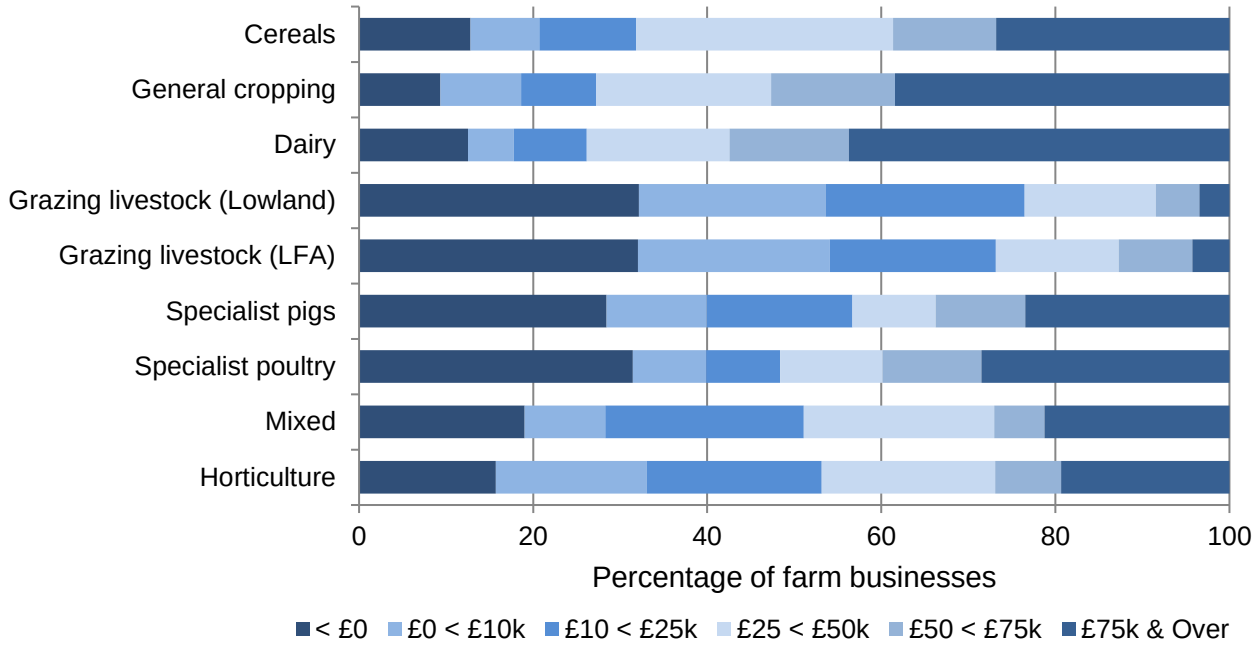


Source: Farm Business Survey, England

FBI 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 FBI by farm type, England 2018/19



Source: Farm Business Survey, England

In 2018/19, at least 10 percent of farms in each farm type, except general cropping, failed to make a profit. At 44 percent of farms, dairy had the largest proportion of farms with an income of more than £75,000.

2 Weather

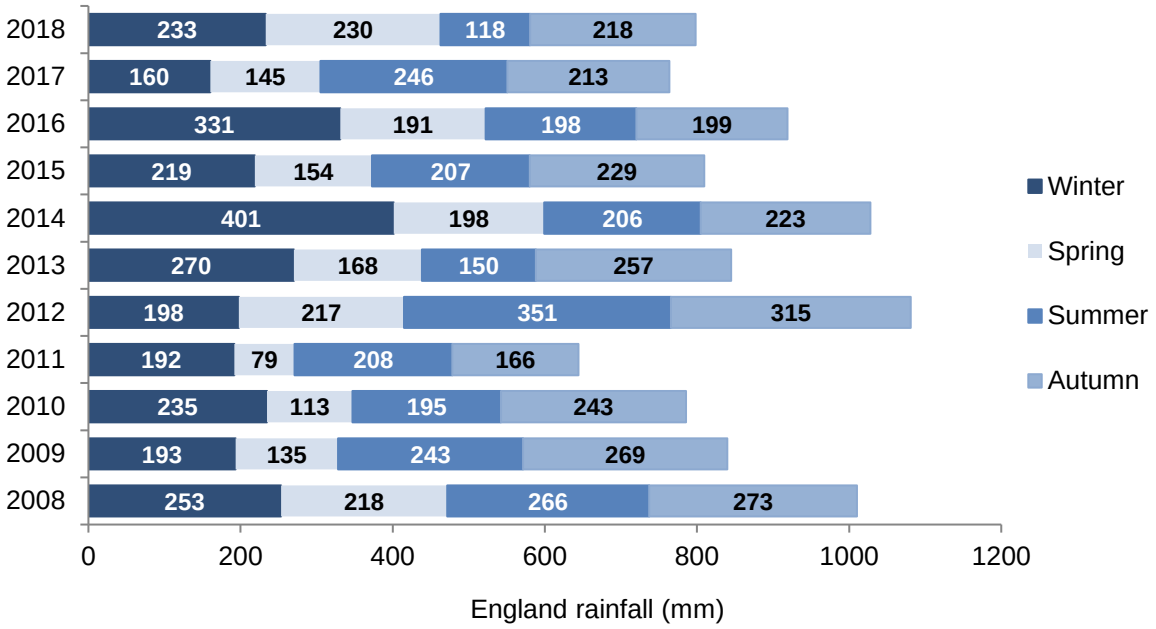
Autumn 2017 was generally rather unsettled with sunshine totals in September and October below average[1] across England as a whole, although mean temperatures were close to the long term average. Many parts of the country had below average rainfall although others (for example parts of Cornwall) had significantly more. As a result some farmers housed their cows much earlier than usual, increasing straw and feed costs. The variable weather also affected the progress of autumn cultivations and drilling of the 2018 crop in certain areas. However, where crops were established they progressed well in the mild, damp conditions.

November 2017 was sunnier than average in most regions with around a third more hours of sunshine overall. While there was a brief mild spell around half way through the month, colder weather towards the end of November brought frosts and even snow in some areas. The mean temperature for November was slightly below the long term average. Overall, England rainfall was about a third below the average in November 2017.

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

On the whole, winter 2017/18 was rather unsettled with mild spells (especially in Southern areas) but also some widespread frosts. December and January had close to average sunshine with the mean temperatures just above the long term average. However, rainfall was higher than usual in both months (Figure 3 shows rainfall by season in England) leading to a mixed picture for autumn sown crops. Those on lighter soils generally looked well, while for some on heavier soils there was poor establishment and lack of progress. Overall, February was a sunny month with around a third more hours of sunshine than average, the mean temperature was also above average.

Figure 3: Annual rainfall (mm) - England, 2008 to 2018



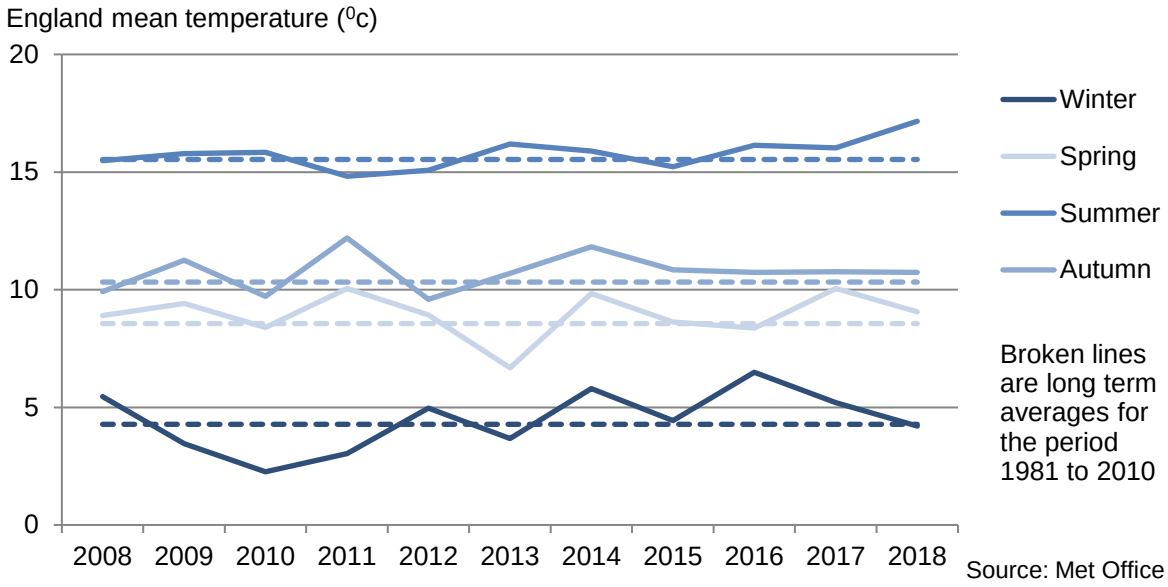
Seasons: Winter = Dec - Feb, Spring = Mar - May, Summer = June - Aug, Autumn = Sep - Nov.
Source: Met Office

The early part of spring 2018 was rather unsettled with spells of very cold, wintry weather. March began with an exceptionally cold easterly airstream which brought widespread snow and below freezing daytime temperatures in many places. A milder, wetter period mid-month was followed by more snow; overall it was the coldest March since 2013 which presented challenges for all areas of agriculture. Conditions for lambing were very difficult and there were notable losses of sheep and lambs under drifted snow, milk collections were disrupted by heavy snowfall in some areas while low temperatures restricted grass growth, putting pressure on conserved forage stocks. Fruit crops also suffered due to the cold conditions while buds were forming. In terms of snow/rainfall, it was the wettest March since 1981, with the resulting field conditions delaying spring cultivations and sowing and impacting on spray and fertiliser applications.

April was generally unsettled; it was mostly cold for the first half of the month when a brief warm spell was followed by more cold weather. Rainfall and mean temperature were both around the average. May began cool and unsettled but soon became sunny and warm. Rainfall was less than usual while sunshine hours were around a third more than the average, making it the second sunniest May (after 1989) in a series from 1929. The mean

temperature for May was above the long term average, equalling the warmest Mays (1992 and 2008) in a series from 1910. Figure 4 shows mean temperature by season.

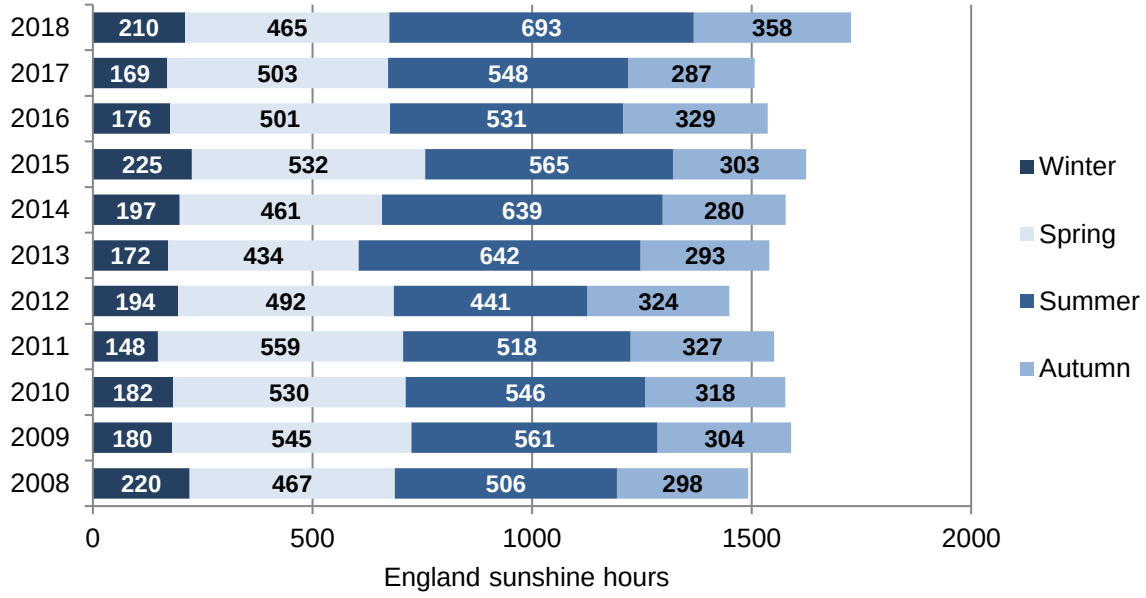
Figure 4: Mean temperature (^{0}C) - England, 2008 to 2018



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

Summer 2018 was dominated by warm and largely sunny weather, with only short unsettled spells. June was largely warm and settled. There was only around a quarter of the usual levels of rain; it was particularly dry in the South where some regions had their driest June for over 100 years. July was also warmer and sunnier than average (Figure 5 shows hours of sunshine by season), although the second half of the month was less settled.

Figure 5: Hours of sunshine - England, 2008 to 2018



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

The conditions led to one of the earliest harvests on record with some farmers starting nearly two weeks earlier than usual. Crop drying costs are generally lower than usual with the majority of crops needing little drying due to the dry harvest conditions. However, average yields were generally lower for cereals and other arable crops. The dry weather also resulted in low silage yields and a reduced number of cuts, which in turn increased forage prices. A shortage of summer grazing due to the drought was another major issue for some livestock farmers.

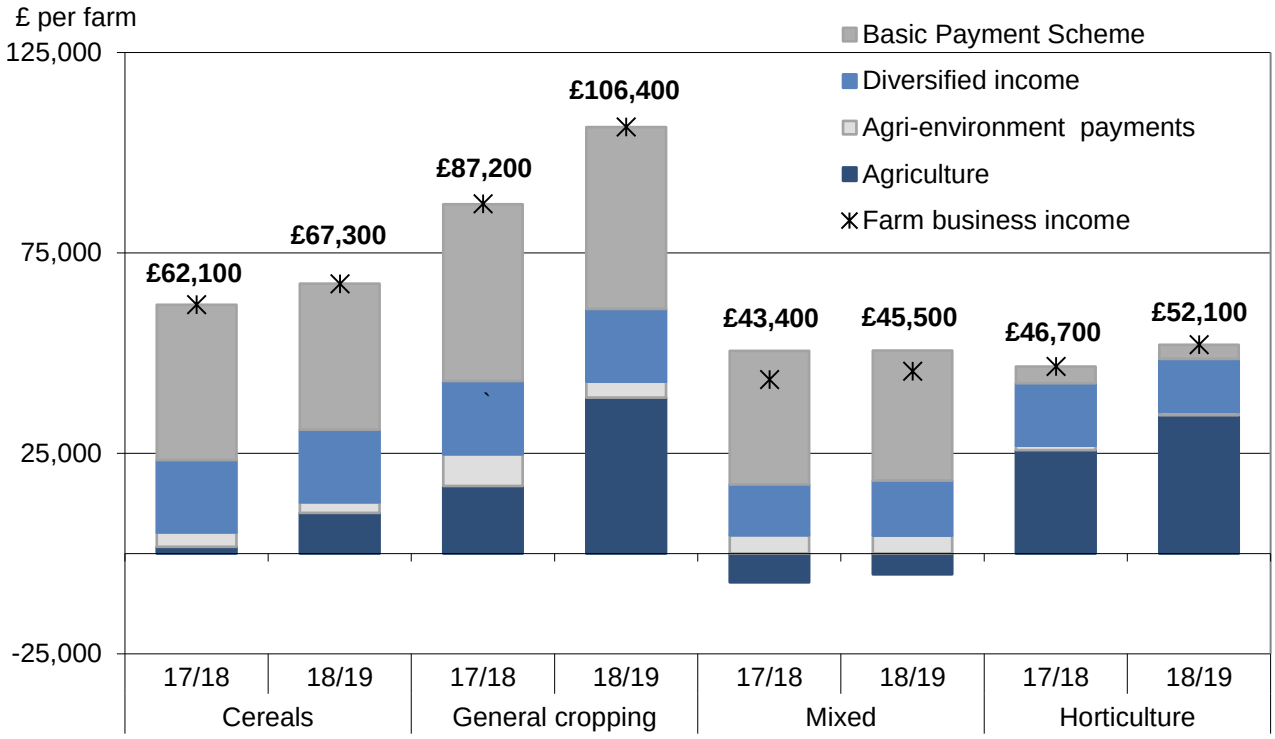
While August began warm and dry (particularly in the South) it was mostly a rather unsettled month. Rainfall and sunshine were both not far from the average although it was wetter locally in the South East, and sunshine was above normal in East Anglia but below normal in the West, particularly Cornwall.

September 2018 began warm with plenty of sunshine for many areas although this was followed by more unsettled conditions in the middle of the month. Much of England had a dry October with sunshine generally above normal. Conditions across the two months allowed some farmers to make a third or, in some cases, even a fourth cut of silage. However, lack of forage was still a concern for many farmers as they approached autumn / winter with reduced stocks. Overall, October rainfall was around three quarters of the average and, despite the early harvest, autumn drilling was delayed in some areas while growers waited for rain before work to prepare suitable seedbeds for 2019 crops.

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 FBI for cropping farms, broken down by cost centres 2017/18 and 2018/19



Source: Farm Business Survey, England

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

FBI 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 methodology[2] to allocate costs to each of these segments involves a degree of estimation, results should be interpreted with caution.

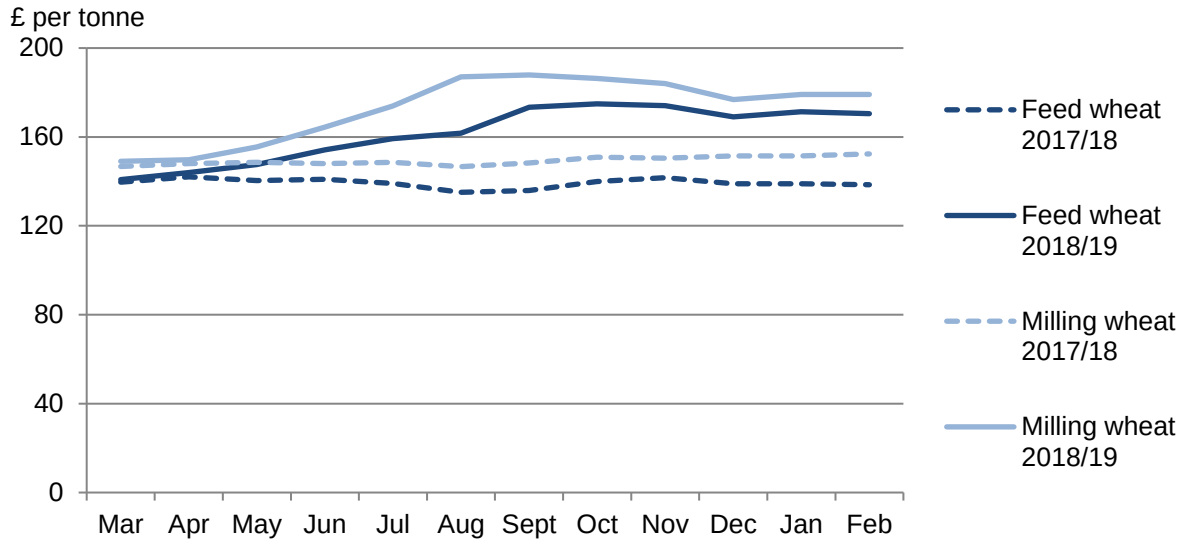
3.1 Cereal farms

On cereal farms, average FBI increased by 8 percent in 2018/19 to £67,300 (dataset Table 5.1). Despite reduced yields (Table A and dataset Table 11) due to the cold late spring and the hot dry summer, total crop output increased by 1 percent driven primarily by increases to cereal prices (Figure 7); the result of global weather conditions raising concerns of a reduced harvest. Variable costs fell by 3 percent with particular decreases in fertilisers and crop protection. Fixed costs fell by 1 percent (dataset Table 5.2). Overall, cereal farms achieved a positive return on their agricultural activities of £10,200 (Figure 6) compared to £1,700 in 2017/18. The Basic Payment, while

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

remaining a major income source, fell by 6 percent to £36,400 in 2018/19, reflecting a decrease in average farmed area. Average income from diversified activities changed little compared to 2017/18, accounting for just over a quarter of total FBI.

Figure 7: Average wheat prices - England and Wales, March 2017 to February 2019



Source: Monthly Corn Returns

Table A: Average crop yields, 2012 to 2018 (tonnes per hectare)

	2013	2014	2015	2016	2017	2018
Wheat (England)	7.4	8.6	9.0	7.9	8.3	7.8
Winter Barley (England)	6.4	7.1	7.6	6.4	6.9	6.8
Spring Barley (England)	5.6	5.8	6.2	5.7	5.5	5.0
Winter Oilseed rape (England)	3.1	3.7	3.9	3.1	3.9	3.4
Potatoes (UK)	45.6	47.4	49.2	44.9	49.1	41.6
Sugar beet (UK)	69.9	79.8	74.1	71.2	83.4	69.3

Source: Defra statistics

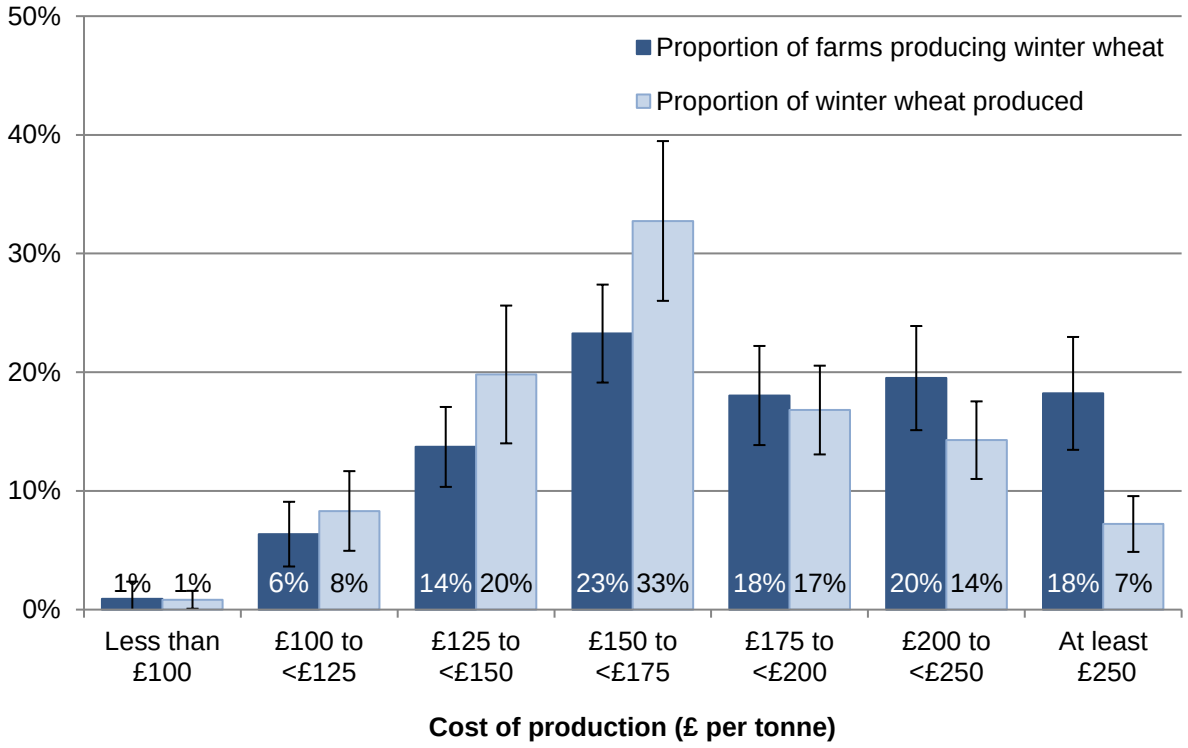
Comparing farm performance groups[3], on average low performers failed to generate a positive income from farming[4] activities in either 2017/18 or 2018/19 and their losses increased slightly. Medium performers moved from a negative income for the agricultural cost centre in 2017/18 to a positive average income of £6,000 in 2018/19 (dataset Table 7.2).

[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.

Figure 8 shows the proportion of winter wheat grown in England for the 2018 harvest within different bands of production costs[5]. The average production cost for winter wheat was approximately £175 per tonne whilst the average selling price was around £165 per tonne.

Figure 8: Proportion of winter wheat produced by cost of production[5], 2018 harvest



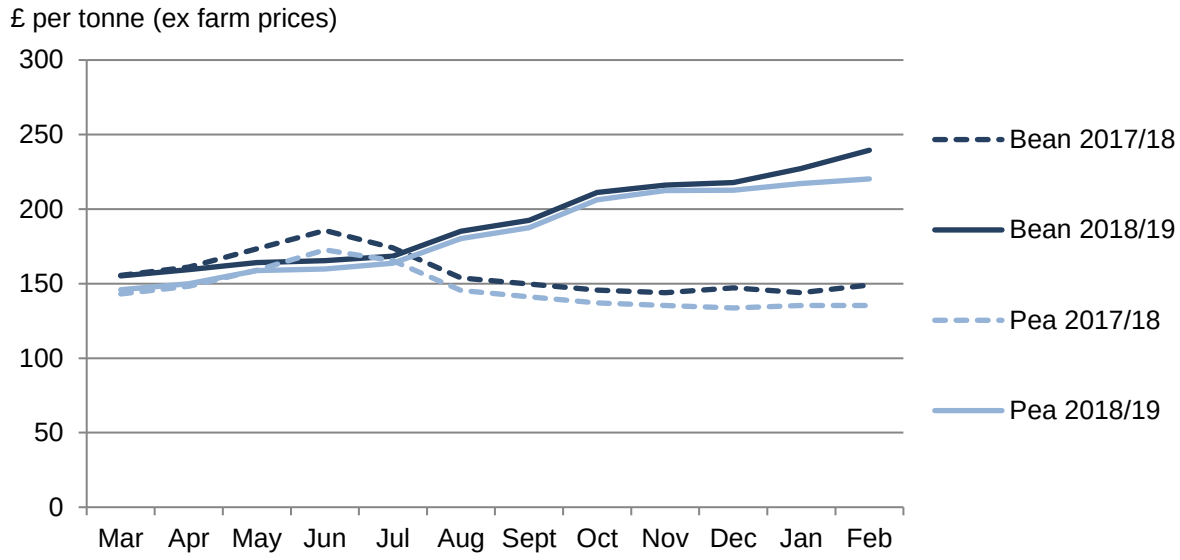
Source: Farm Business Survey, England
Note: This analysis covers only winter wheat and excludes wheat that is organic or in-conversion.

3.2 General cropping farms

Average FBI on general cropping farms increased by 22 percent to £106,400 (dataset Table 5.3). As with cereal farms, the challenging weather conditions reduced yields, particularly for potatoes, sugar beet and field beans. However, the lower yields were offset by price rises (most notably for potatoes, peas and field beans, Figures 9 and 10) resulting in an increase in total crop output of 12 percent compared to 2017/18. Agricultural costs, variable and fixed, both rose by 3 percent. For variable costs, increases to fertilisers, casual labour and contract costs contributed most to the rise, while the main drivers for fixed costs were machinery costs and rent. On average there was a positive return of £38,900 from the agricultural cost centre compared to £16,900 in 2017/18. The average Basic Payment went up by 3 percent while the average income from agri-environment activities nearly halved compared to 2017/18 (dataset Table 5.3).

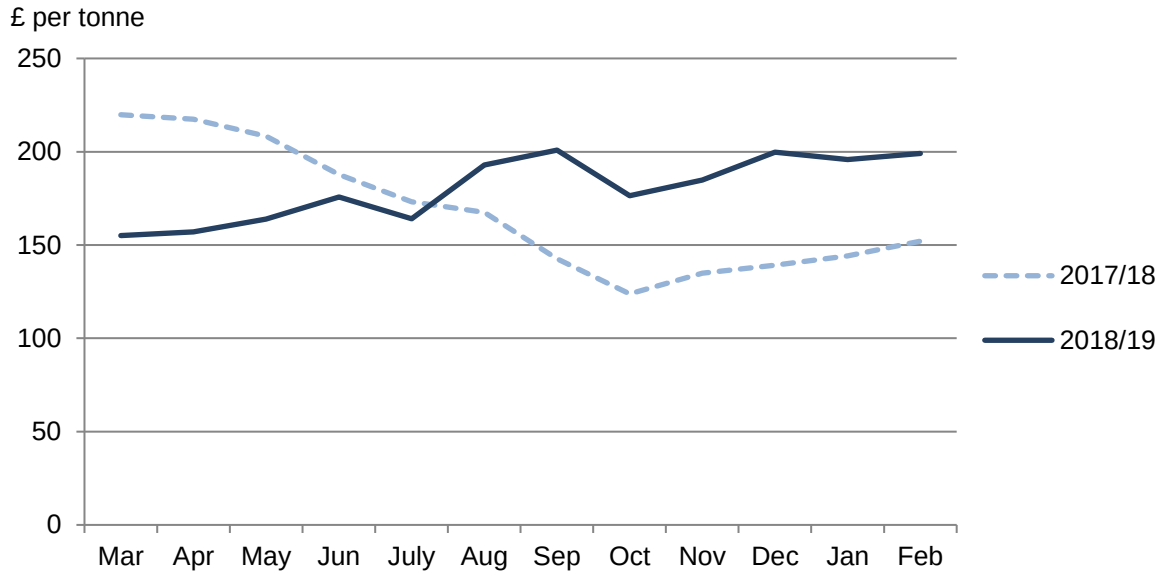
[5] The costs are on a full economic basis including an imputed charge for any unpaid labour (including that of the farmer and spouse), as well as an imputed rental charge for owner occupied land. The value of any straw has been deducted from the costs so that the data presented here reflects the price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

Figure 9: Average field bean and pea prices - GB, March 2017 to February 2019



Source: Agriculture and Horticulture Development Board

Figure 10: Average potato maincrop prices, UK - March 2017 to February 2019



Source: Agriculture and Horticulture Development Board

When comparing farm performance groups, the average FBI for the lowest 25 percent remained negative in 2018/19 although their losses decreased compared to 2017/18. However, income for medium performers rose by around two thirds to £102,800 (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 reduced average losses compared to 2017/18, while medium performers made a positive return of £36,400 compared to an average loss of about £500 in 2017/18.

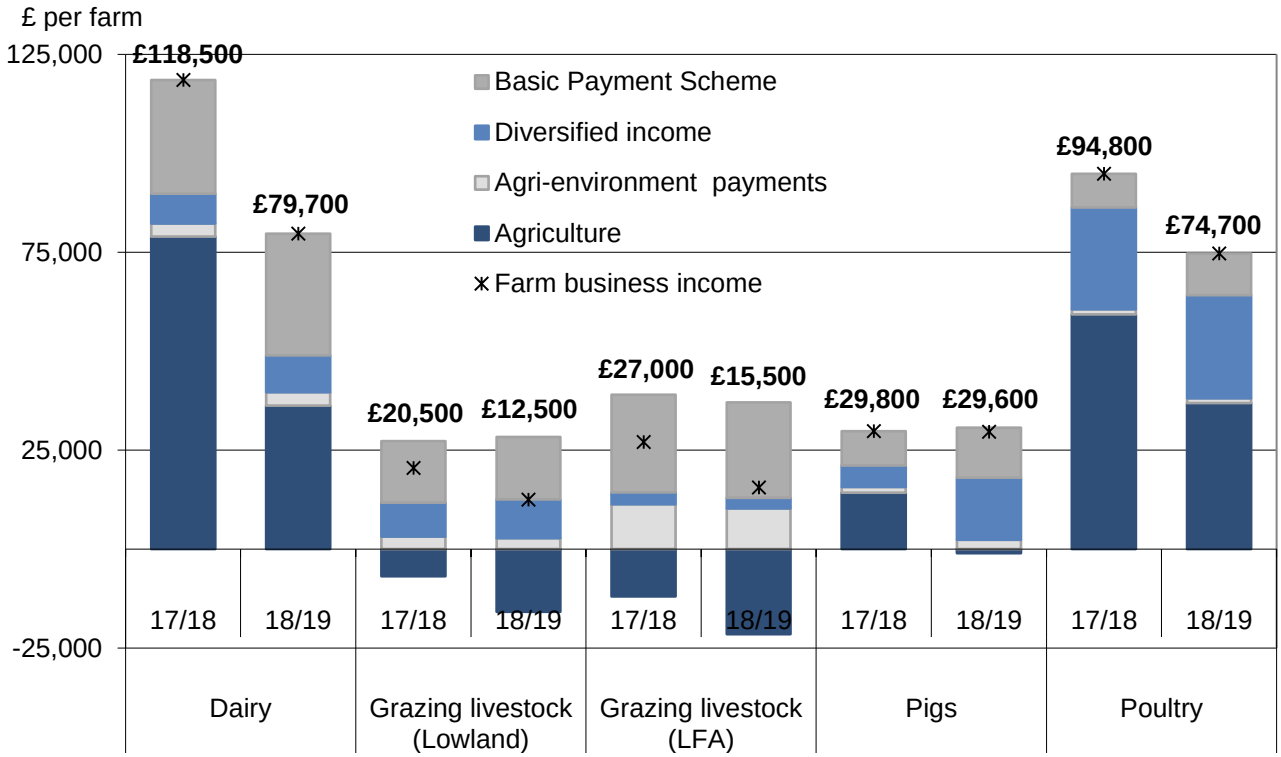
3.3 Mixed farms

Average FBI on Mixed farms increased by 5 percent to £45,500 in 2018/19 (dataset Table 5.15). These type of farms reflect the enterprises found in the other more specialised farm types. As for some other farm types, there was a rise in total farm business costs. At farm business level, both fixed and variable costs were higher, 7 and 16 percent respectively, with particular increases for purchased feed, other livestock costs, machinery running costs and land and property costs. These were offset by a 10 percent rise in total farm business output driven by higher livestock and crop output, together with a small increase in diversification activities (dataset Table 5.16). The average Basic Payment was 3 percent lower than in 2017/18. Whilst there was an increase in FBI, on average mixed farms failed to generate a positive return on their farming activities in 2018/19, although losses were reduced compared to 2017/18 (Table 5.15).

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 income increased by 12 percent in 2018/19 to £52,100 (dataset Table 5.17). Overall agricultural output remained at a similar level to 2017/18. Increased output from glasshouse and outdoor flowers and nursery stock, potatoes and glasshouse vegetables offset decreases for other crops, most notably top and soft fruit and outdoor vegetables (dataset Table 5.18). Overall, agricultural costs fell by 1 percent, with increases to regular labour and general farming costs tempered by reductions for crop protection, casual labour and other crop costs. Income from diversified activities, an important source of revenue for horticulture farms, fell by 15 percent compared to the previous year and accounted for a quarter of total FBI.

Figure 11: Average FBI broken down by cost centre for livestock farms, 2017/18 and 2018/19



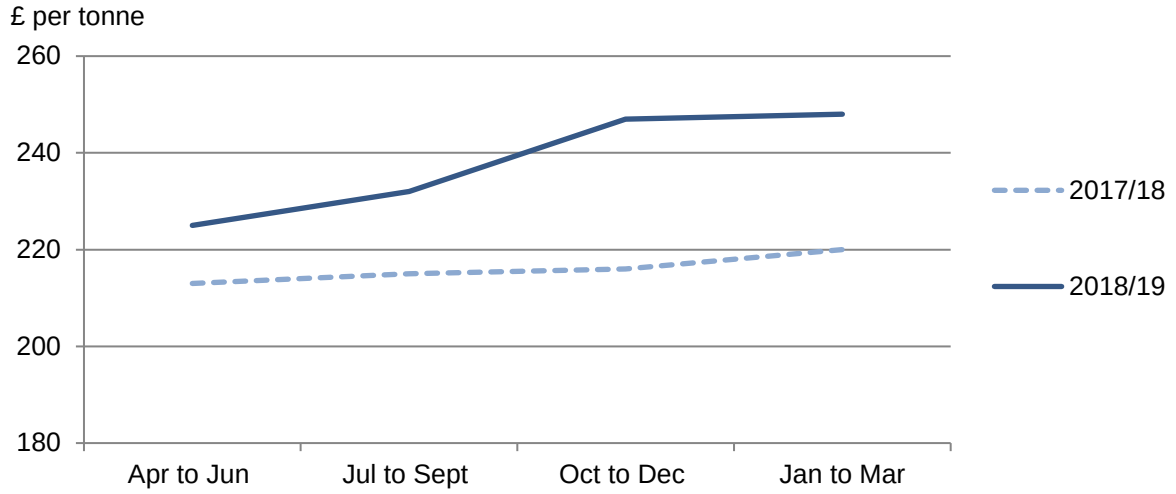
Source: Farm Business Survey, England

The figures in bold above each column are the average FBI per farm. FBI 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 FBI fell by a third to £79,700 (dataset Table 5.5) in 2018/19 with increased costs a key driver. Variable costs rose by 16 percent driven primarily by substantial increases to purchased feed and fodder which rose by 22 percent. This is the knock on impact from the higher cereal prices and increased feed required during the very cold spring and summer drought (Figure 12 and dataset Table 5.6). Fixed costs went up by 16 percent, most markedly for labour and machinery. In comparison, output from milk and milk products rose by 7 percent driven by a small increase in production (reflecting an increase in milk production rather than a rise in dairy cow numbers, Table B) and an average FBS milk price of 30.3 pence per litre, 2 percent higher than in 2017/18. Figure 13 shows data from milk price surveys. It is important to note the wide variation in milk prices with some farmers receiving considerably more or less than the average. The average Basic Payment increased by 7 percent in 2018/19, accounting for 39 percent of FBI (dataset Table 5.5). Income from diversification activities increased by just under a quarter while there was little change to average income from agri-environment activities.

Figure 12: Average compound feed prices for cattle and calves - GB, 2017/18 to 2018/19



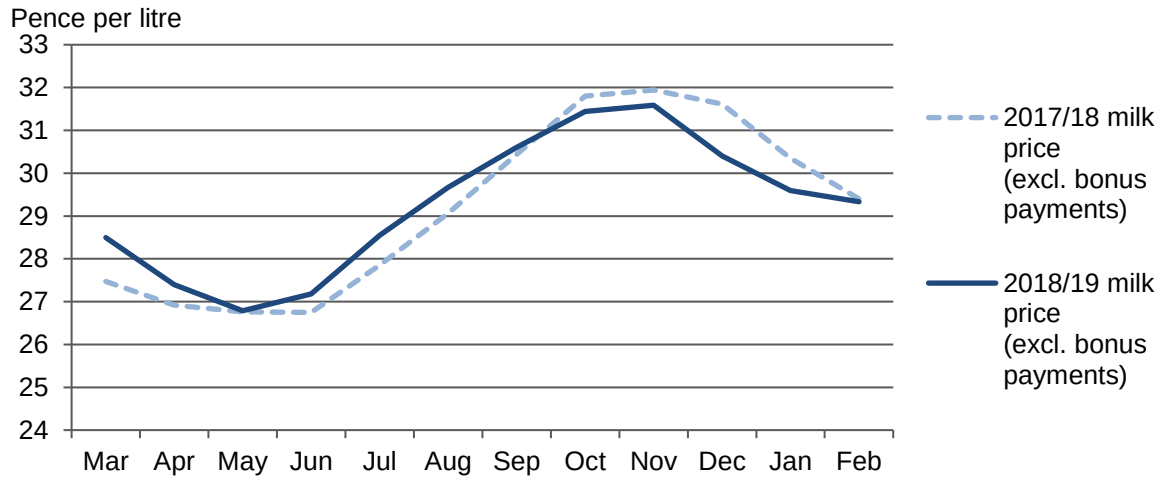
Source: Defra, Average Compound Feed Prices by main livestock categories, Great Britain

Table B: Average herd size for dairy cows [(a)] - England, 2013 to 2018

	2013	2014	2015	2016	2017[(b)]	2017[(c)]	2018
Cattle Tracing scheme (all holdings)	84	89	89	90	93	93	97
Cattle Tracing Scheme (holdings with >= 10 dairy cows)	134	142	143	146	151	151	156
Farm Business Survey (specialist dairy farms)	165	172	172	174	189	187	188

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.
(b) Farm Business Survey data based on 2010 Standard Outputs.
(c) Farm Business Survey data based on 2013 Standard Outputs.

Figure 13: Average farm gate milk prices (UK) - March 2017 to February 2019

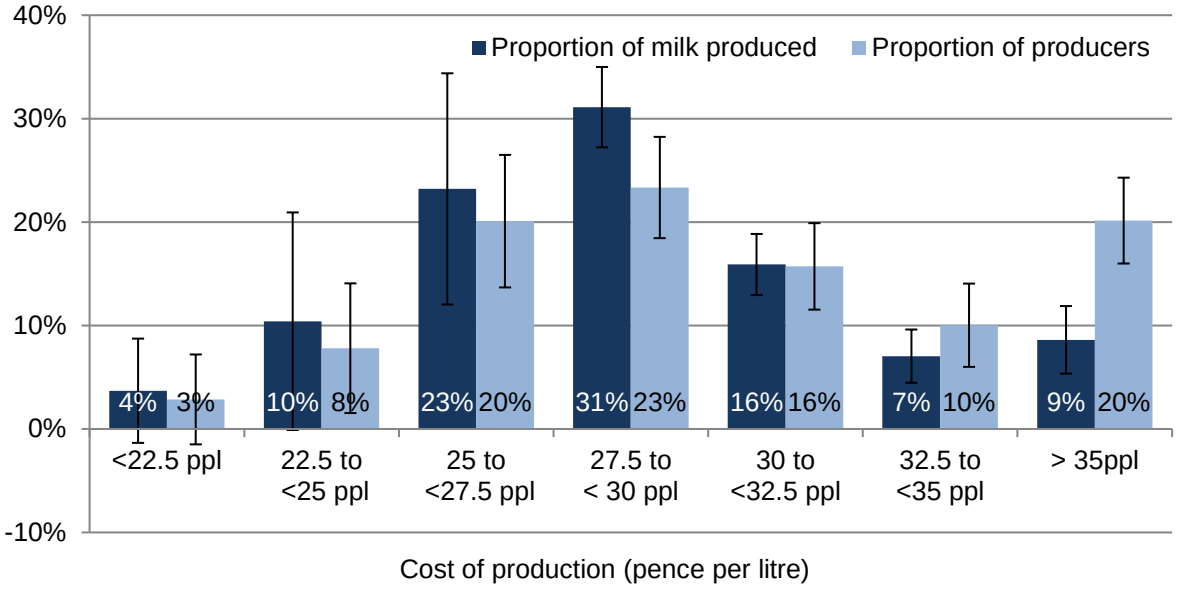


Source: Milk prices surveys Defra, RESAS, DAERA

In 2018/19, 44 percent of dairy farms averaged a FBI of over £75,000 while 13 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 both 2017/18 and 2018/19 with substantially increased losses in 2018/19 (dataset Table 7.6). The medium 50 percent of performers achieved an average income on their agricultural activities of £21,400, whilst the highest performing 25 percent achieved £132,500.

Based on enterprise data from the FBS, the average price for milk sold was 30.3 pence per litre in 2018/19 (29.6 pence per litre in 2017/18) whilst the average cost of production was 29.0 pence per litre. Note that the cost of production is on a full economic basis (see footnote to Figure 14) 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 14. Around 31 percent of milk producers produced milk at a cost of less than 27.5 pence per litre, accounting for 37 percent of the milk produced in 2018/19.

Figure 14: Production costs [(a)] of milk - England, 2018/19



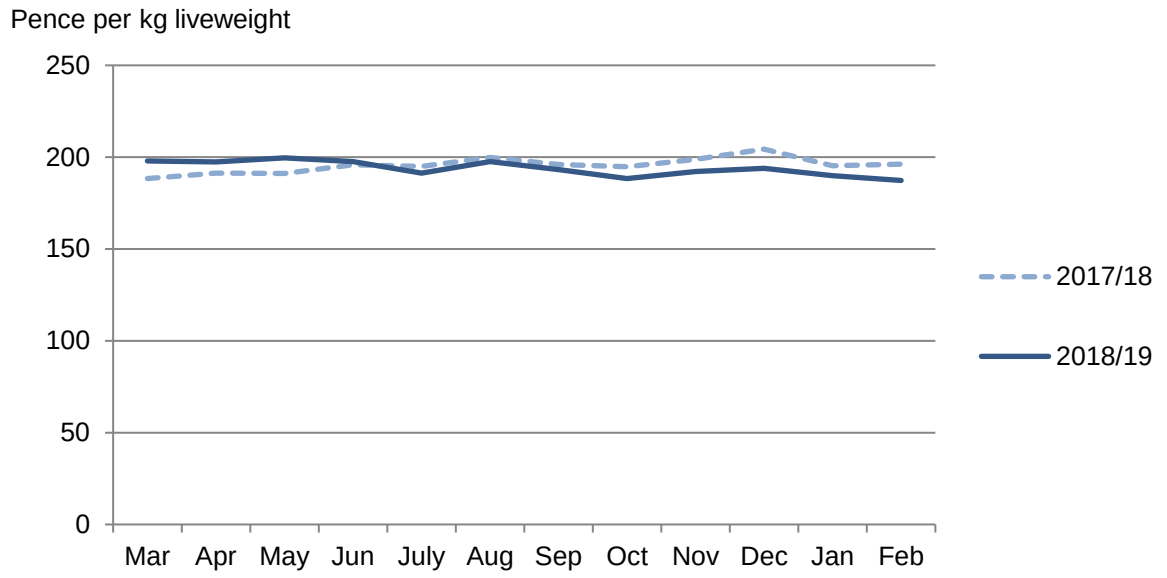
Source: Farm Business Survey, England

(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 fell by 39 percent to £12,500 (dataset Table 5.7). Increased costs for both purchased and home grown fodder were a major contributing factor driving a rise in variable costs of nearly a quarter. Fixed costs also went up, most notably for machinery. These increases were only partially offset by a 5 percent rise in agricultural output which was buoyed by a rise in crop output, particularly for by-products, forage and cultivations. Revenue from sheep and cattle remained at a similar level to 2017/18; store cattle prices were on average lower than the previous year and while prices for finished cattle and lambs started the period strongly they returned to more typical levels as the year progressed (Figures 15 and 16). This farm type again failed to make a positive return from the agricultural cost centre with a greater average loss than in 2017/18 (dataset Table 5.7). Income from diversified activities rose by 14 percent, primarily due to increases in food processing / retailing and recreation. The average Basic Payment was virtually unchanged on the previous year.

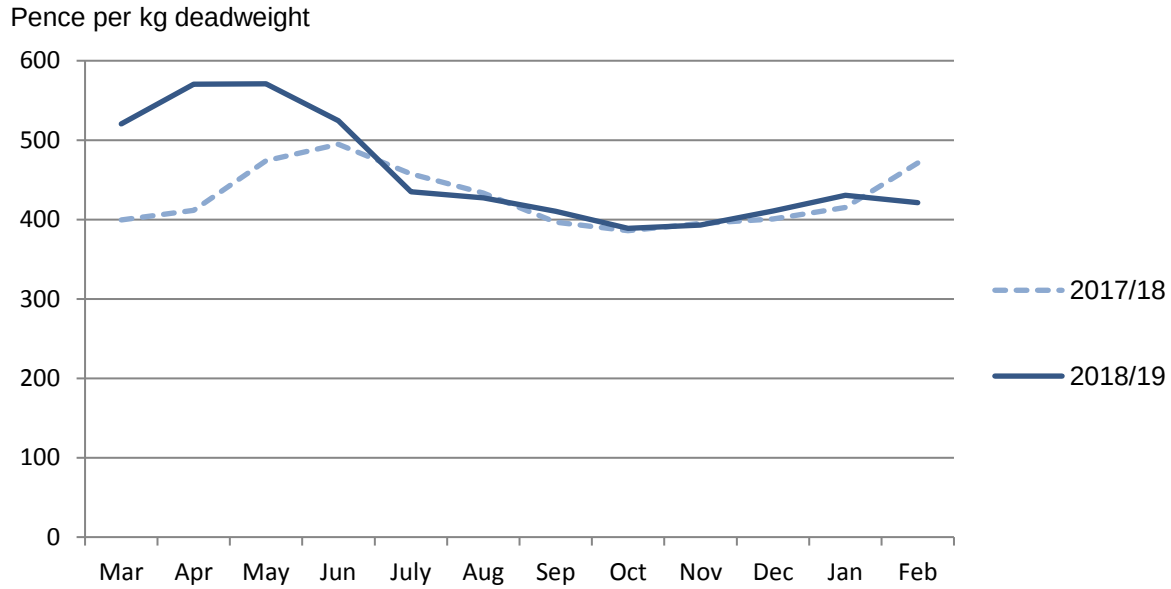
Figure 15: Average price for clean cattle (liveweight), GB - March 2017 to February 2019



Source: Agriculture and Horticulture Development Board (Meat Services)

When analysed by performance bands, all groups failed to make a positive return from agriculture (dataset Table 7.8) in 2018/19. Low performers also failed to generate a positive return for the business as a whole in both 2017/18 and 2018/19, with increased losses in 2018/19 compared to the previous year. The top 25 percent of performers made an average loss of around £100 on their agricultural activities in 2018/19 but had an overall income of £49,200.

Figure 16: Deadweight Standard Quality Quotation (SQQ)[(a)] price, UK - March 2017 to February 2019



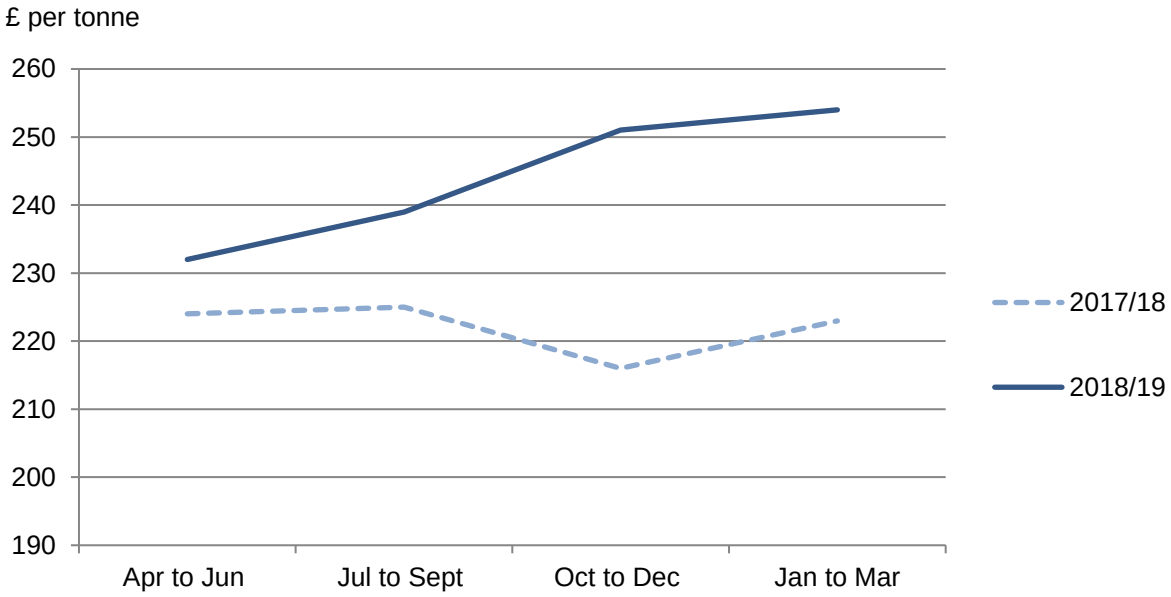
Source: Agriculture and Horticulture Development Board (Meat Services)

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

3.7 Grazing livestock farms (Less Favoured Area)

For Less Favoured Area (LFA) Grazing Livestock farms the average income fell by 42 percent to £15,500 between 2017/18 and 2018/19. A fall in agricultural output of 5 percent was largely driven by lower average prices compared to 2017/18, particularly for store cattle, ewes and ewe hogs. For sheep, average stocking numbers per farm also fell, in part reflecting the challenging weather conditions (very cold spring and extremely hot summer). The fall in output was compounded by an increase in overall agricultural costs of 6 percent; for variable costs this was most notable for purchased feed and fodder (Figure 17). Agricultural fixed costs rose by 5 percent with increased machinery costs the primary driver. The average Basic Payment decreased very slightly (2 percent) (dataset Table 5.9). Income from agri-environment schemes, which accounted for two thirds of FBI on this farm type, fell by 9 percent in 2018/19 (dataset Table 5.9).

Figure 17: 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

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

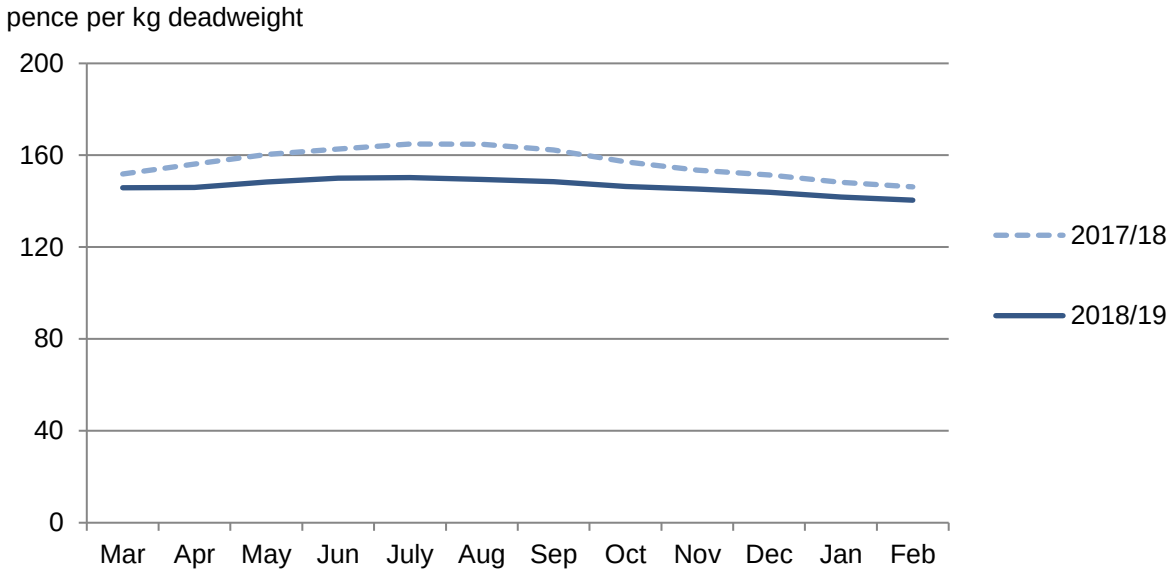
3.8 Specialist Pigs

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. Individual farms can have a large influence on the results. Results for specialist pig farms including and excluding outliers can be found here.

Average income on specialist pig farms was broadly unchanged in 2018/19 at £29,600 (dataset Table 5.11). It is important to note that this figure is largely due to a change in the sample composition due to new farms joining the survey. The average income for farms that were in the sample in both of the last two years halved from £34,100 to £16,600 in

2018/19 (see Table I and Figure 27 in Survey Details for more information on the impact of the change in sample composition). In 2018/19, agricultural output was 35 percent higher reflecting increased pig output, despite generally lower pig prices (Figure 18). For those pig farms who also grow crops there were notable rises to output for wheat, barley, crop by-products, forage and cultivations. The increase in output was largely offset by considerably higher agricultural input costs; both fixed and variable costs rose by around 40 percent. Feed accounted for much of the rise in variable costs (Figure 19). In terms of fixed costs, labour, machinery, general farm costs and land and property costs all increased substantially. Whilst FBI changed little overall, on average pig farms failed to generate a positive return on the agricultural cost centre in 2018/19 (dataset Table 5.11).

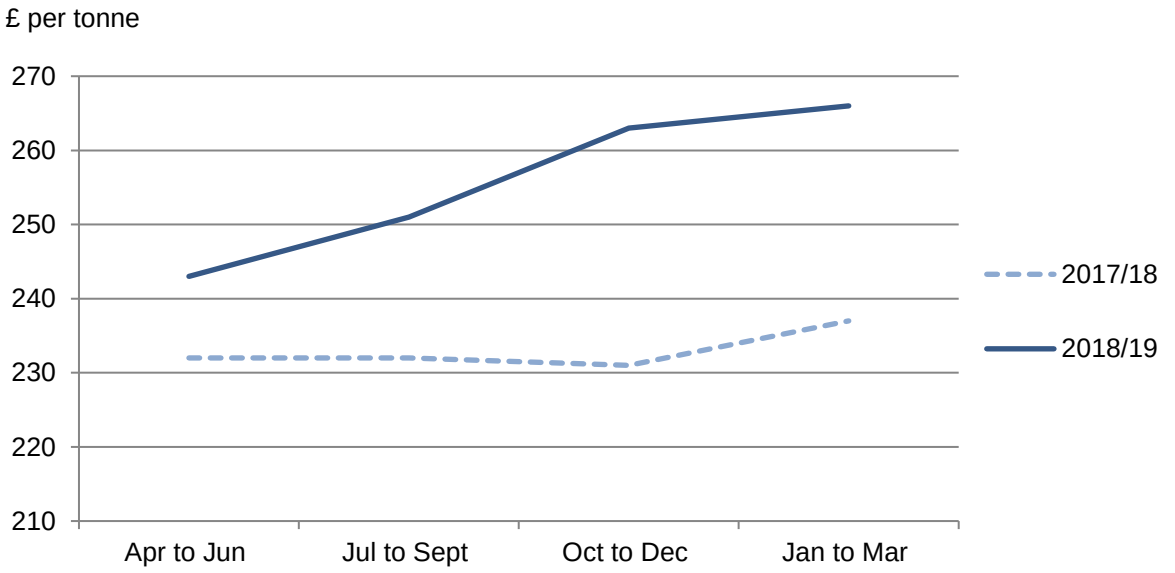
Figure 18: Deadweight Average Pig Price (APP), GB - March 2017 to February 2019



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 19: Average compound feed prices for pigs, GB - 2017/18 to 2018/19



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

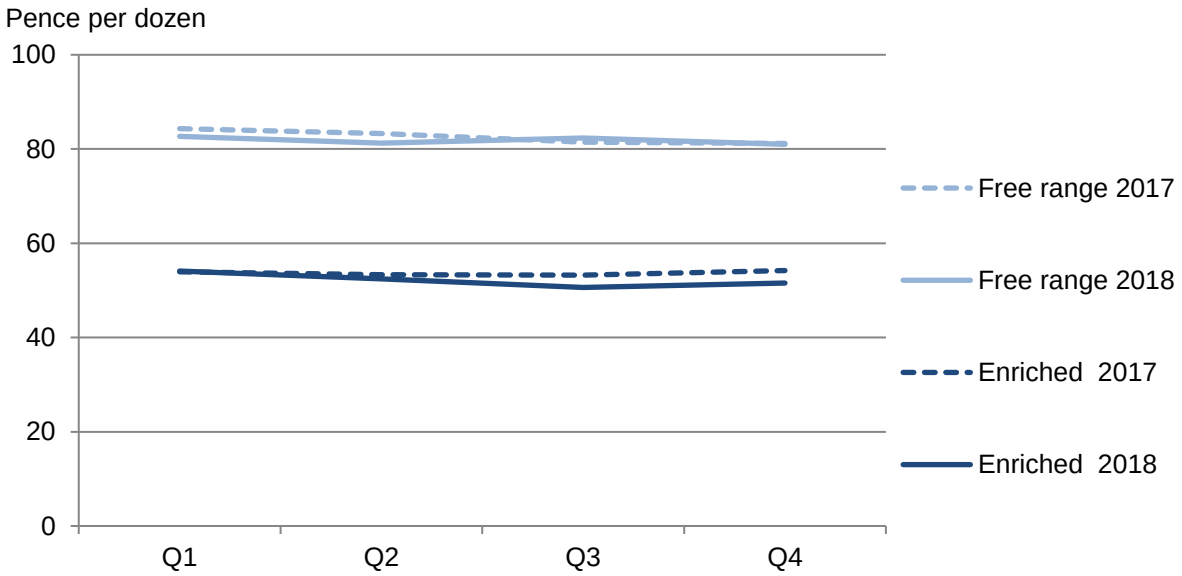
3.9 Specialist Poultry

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 income fell by 21 percent compared to 2017/18 to £74,700 (dataset Table 5.13). While there was little change to output from eggs compared to 2017/18 (Figure 20 shows egg packing prices for the period), for meat there was a 6 percent decrease; closing valuations for poultry meat were lower than opening valuations, a factor in reducing enterprise output. The reduction in livestock output was partially offset by a rise in revenue from crops, particularly wheat, influenced by increases to price and the average area. Unlike most other farm types, both variable and fixed costs reduced, notably for veterinary fees and medicines, other livestock costs, rent and depreciation of buildings. Income from diversification activities was unchanged on the previous year, accounting for just over a third of the average income for this type of farm.

Note that these changes for specialist poultry farms 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. In previous years, the average income for specialist poultry farms had been influenced by an extremely large farm; in 2018/19 it is no longer influential.

Figure 20: Quarterly Egg Packing Station prices, UK - 2017 and 2018



Source: Quarterly UK Egg Packing Station Survey

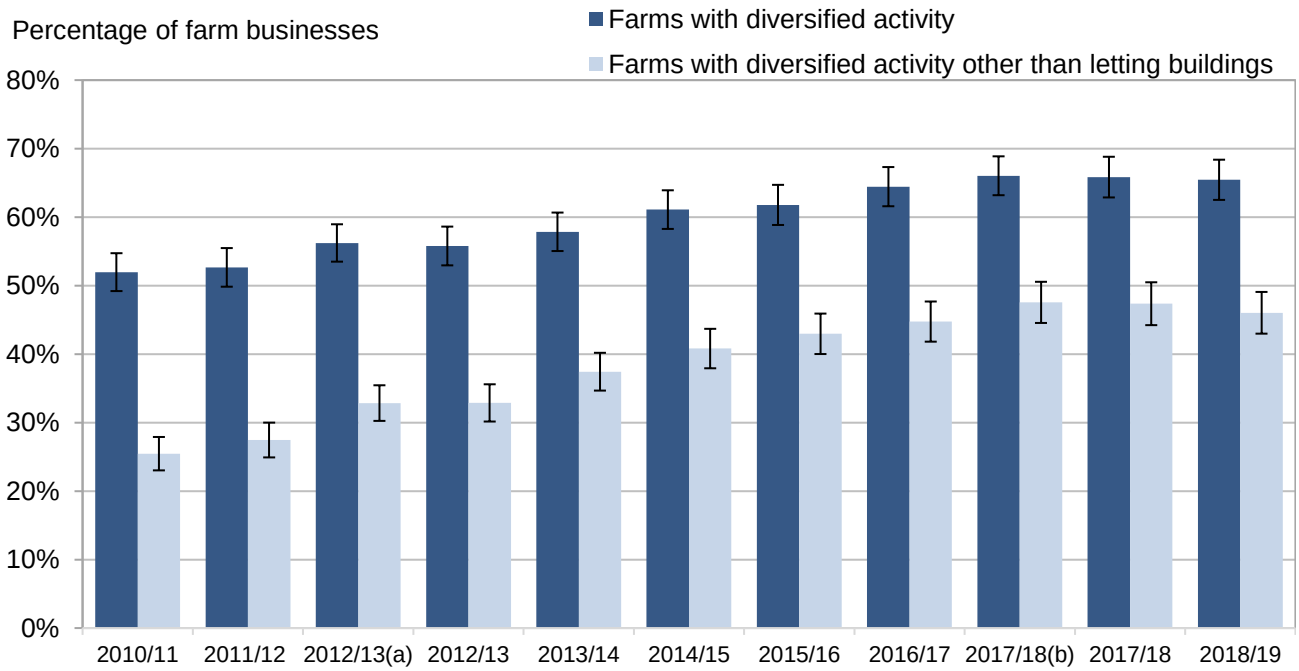
4 Diversification

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, 65 percent of farm businesses in England had some diversified activity in 2018/19, near identical to 2017/18. The main diversified activity is letting out buildings for non-agricultural use; when this is excluded, the proportion of farms with some other diversified activity was 46 percent in 2018/19 (Figure 21), 1 percent lower than in 2017/18. The proportion of farms generating solar energy in 2018/19 was 20 percent, 1 percent lower than 2017/18, while those generating other sources of renewable energy[6] accounted for 10 percent of farms in 2018/19, matching the 2017/18 proportion.

Figure 21: Percentage of farms with diversified activities, England - 2010/11 to 2018/19



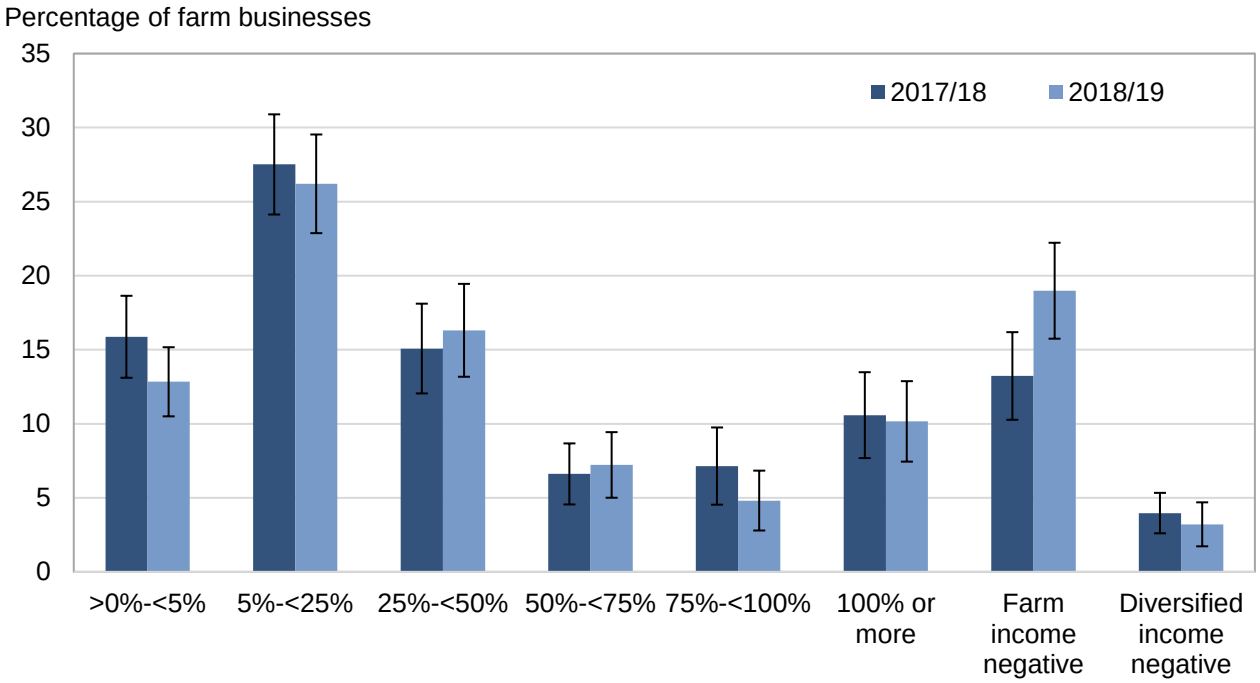
Source: Farm Business Survey, England

(a) For 2009/10 to 2012/13(a) farm typology is based on 2007 standard output coefficients.
(b) For 2012/13 to 2017/18(b) farm typology is based on 2010 standard output coefficients. 2017/18 onwards farm typology is based on 2013 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 2018/19 was £740 million (dataset Table 15.13), a 6 percent increase from 2017/18 (£699 million). Across all farm types, income from diversified enterprises accounted for 26 percent of total FBI in 2018/19 (£2,876 million) although there were wide variations between farms (Figure 22).

Figure 22: Distribution of farms according to proportion of FBI from diversified enterprises, England - 2017/18 to 2018/19



Source: Farm Business Survey, England

Excludes farms with no diversified activities. 2016/17 survey results have not been included due to change in typology to 2013 standard output coefficients. 2017/18 results have been recalculated on 2013 standard output coefficients for comparability.

For 39 percent of farm businesses with diversified activities, income from these activities accounted for at least a quarter of their total FBI, matching the 2017/18 proportion. For 22 percent of farm businesses, the income from diversification was greater than 50 percent of their total income, exceeding the combined income from other sources of the farm business (compared to 24 percent in 2017/18). For just over a fifth (22 percent) of farm businesses with diversified activities, their FBI and/or diversified income was negative. Farms without diversified enterprises have been excluded from this analysis.

A total income[7] of £740 million was generated from diversified activities by 37,400 farms. These farms had an average diversified enterprise income of £19,800 (Table C). Those farms with food processing and retailing enterprises generated 25 percent of their total FBI (£89 million of £353 million) from this activity, whilst those letting out buildings generated 26 percent (£454 million) of their total FBI (£1,753 million) from this activity. Those farms generating renewable energy (excluding solar power), generated 12 percent of their total income (£56 million of £487 million) from these activities compared to 11 percent in the previous year.

[7] Revenue net of costs.

Table C: Income from diversified enterprises, England - 2018/19

	No. of farms	% of farms	Total FBI for these farms (£m)	Income of diversified enterprise (£m)	Average enterprise income[a] (£/farm)
Farm Business income (incl. diversification)	57,100		2,876		
Farms which engage in:					
Diversified enterprises (all kinds)	37,400	65%	2,287	740	19,800
letting buildings for non-farming use	25,200	44%	1,753	454	18,000
processing/retailing of farm produce[b]	5,800	10%	353	89	15,300
sport and recreation	7,100	12%	540	37	5,200
tourist accommodation and catering	3,700	7%	216	33	9,000
solar energy	11,600	20%	918	31	2,700
other sources of renewable energy[c]	5,800	10%	487	56	9,600
other diversified activities	5,900	10%	318	39	6,600

Source: Farm Business Survey, England

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

(b) Results influenced by sample composition, see below for more details

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

Although just under two thirds (65 percent) of farms had a diversified activity, the total value of diversified enterprise output (£1,360 million) was only 7 percent of total farm business output (£18,202 million). For farms that engaged in any diversified enterprise, average enterprise output from diversification was £36,400 (Table D). For those farms with diversified enterprises, the output for these enterprises (£1,360 million) equated to 10 percent of their total farm output (£14,172 million). Letting buildings for non-farming use accounted for 46 percent of diversified output, while the contribution from tourism, sport and recreation, solar energy and other diversified activities was much smaller. On average, processing/retailing of farm produce generated the greatest output per farm (£36,400), whilst other renewable energy sources (excluding solar) generated £21,400 per farm.

Table D: Value of output from diversified enterprises, England - 2018/19

	No. of farms	% of farms	Total farm business output for these farms (£m)	Output of diversified enterprise (£m)	Average enterprise output[a] (£/farm)
Farm Business Output (incl. diversification)	57,100		18,202		
Farms which engage in:					
Diversified enterprises (all kinds)	37,400	65%	14,172	1,360	36,400
letting buildings for non-farming use	25,200	44%	10,843	630	25,100
processing/retailing of farm produce[b]	5,800	10%	1,841	212	36,400
sport and recreation	7,100	12%	2,810	107	15,100
tourist accommodation and catering	3,700	7%	1,332	89	23,900
solar energy	11,600	20%	5,888	79	6,800
other sources of renewable energy[c]	5,800	10%	3,035	125	21,400
other diversified activities	5,900	10%	2,102	117	19,900

Source: Farm Business Survey, England

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

(b) Results influenced by sample composition, see below for more details

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

Note on processing / retailing of farm produce

Income/output figures for this enterprise have been influenced by several outliers within the data set with unusually high values. Table E shows the results of the analysis above if these influential values are removed.

Table E: Comparison of income/output values from processing/retailing of farm produce including and excluding outliers

	Total FBI for these farms (£m)	Income of diversified enterprise (£m)	Average enterprise income[a] (£/farm)	Total farm business output for these farms (£m)	output of diversified enterprise (£m)	Average enterprise output[a] (£/farm)
Including Outliers	353	89	15,310	1,841	212	36,363
Excluding Outliers	343	80	13,885	1,799	178	30,959

Source: Farm Business Survey, England

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

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 co-operators (88 percent of farm businesses in 2018/19) provided information on succession arrangements (Table F). This was the same as the previous year. However, for 8 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 F: Percentage of farm business survey participants responding to farm succession questions, England - 2013/14 to 2018/19

	Percentage of farm businesses (%)				
	2013/14	2014/15	2015/16	2017/18[(a)]	2018/19
Willing to respond	85	85	85	88	88
Not willing/not appropriate	10	11	10	9	8
Decision maker not seen	5	5	4	4	4

Source: Farm Business Survey, England.

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

(a) 2017/18 data have been revised to reflect 2013 standard output coefficients.

Based on unweighted responses from 1,889 farm businesses in 2013/14, 1,880 businesses in 2014/15, 1,805 businesses in 2015/16, 1,762 businesses in 2017/18 and 1,768 in 2018/19.

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 family[8].
b) The business will continue, but from outside the family[9].
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 (44 percent in 2018/19) had a nominated successor (Table G). This was slightly more than in previous years. These farms were more likely to be larger farms and older

[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.

farmers[10]. The successor was largely from within the family (42 percent in 2018/19); with a further 1 percent stating that the business would continue outside of the family. The remaining 2 percent had a nominated successor who would be unable to take over due to tenancy or other issues.

For a quarter of farm businesses (25 percent in 2018/19) there was no nominated successor. A further 22 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 G).

Table G: Farm business succession arrangements - England, 2013/14 to 2018/19[(a)]

	Percentage of farm businesses (%) ± 95% Confidence Interval (%)					
	2013/14	2014/15	2015/16	2017/18	2017/18[(b)]	2018/19
Nominated successor	37 ±3	38 ±3	36 ±3	43 ±3	42 ±3	44 ±3
Of which:						
Successor nominated within family	34 ±3	35 ±3	34 ±3	40 ±3	39 ±3	42 ±3
Successor nominated but unable to take over due to tenancy or other issues	2 ±1	2 ±1	2 ±1	2 ±1	2 ±1	2 ±1
Business will continue but outside family	1 ±0	1 ±0	1 ±1	2 ±1	1 ±1	1 ±0
Too early in family/business circumstances to answer	29 ±3	28 ±3	29 ±3	24 ±3	24 ±3	22 ±3
No nominated successor	27 ±3	27 ±3	26 ±3	24 ±3	24 ±3	25 ±3
Respondent unsure of succession arrangements	8 ±2	7 ±2	9 ±2	9 ±2	10 ±2	9 ±2

Source: Farm Business Survey, England.

The succession questions were not included in the 2016/17 survey. 2013/14 to 2017/18 results based on 2010 standard output coefficients.

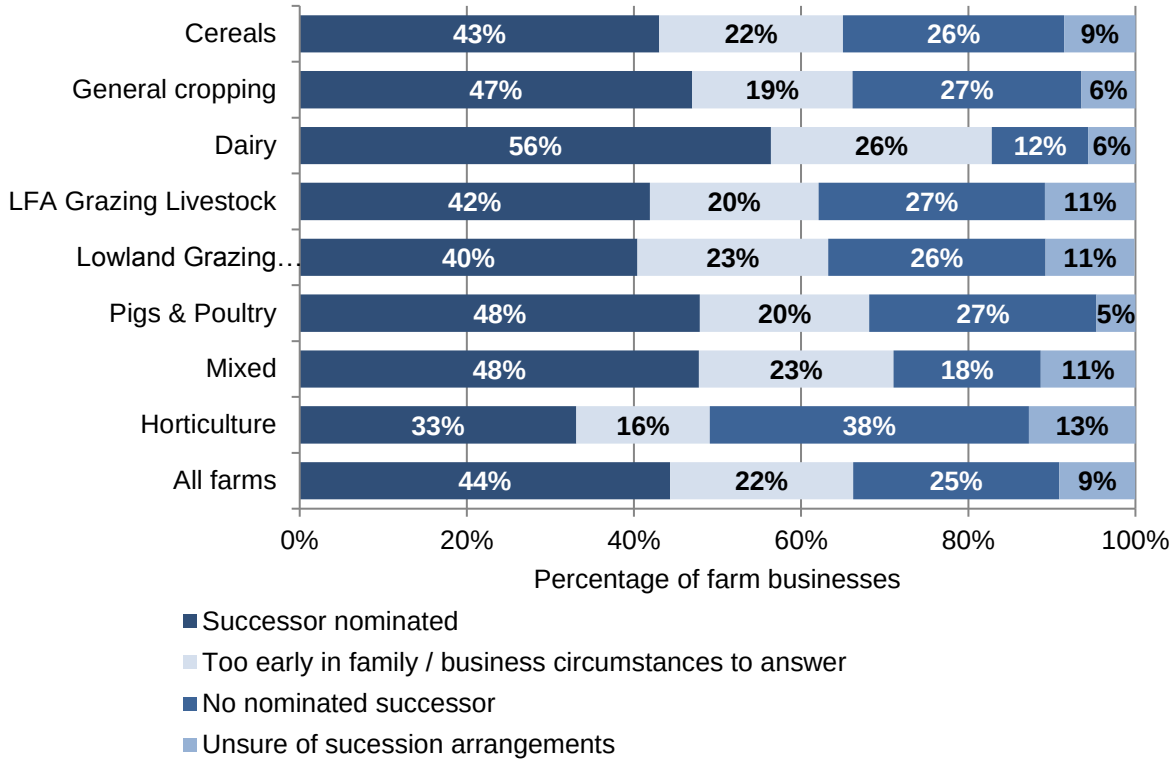
(a) Based on responses from the 1603 farm businesses in 2013/14, 1,595 businesses in 2014/15, 1,540 businesses in 2015/16, 1,545 businesses in 2017/18 and 1,562 businesses in 2018/19 that were willing to respond to the question: "is there a successor(s) nominated to succeed with running of business"

(b) 2017/18 data have been revised to reflect 2013 standard output coefficients

Dairy (56 percent), pigs & poultry (48 percent) and mixed farms (48 percent) were more likely than other farm types to have a nominated successor in 2018/19, similar to previous years (Figure 23). Horticulture and lowland grazing livestock farms were least likely to have to have a nominated successor.

[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.

Figure 23: Succession arrangements by farm type, England - 2018/19[(a)]

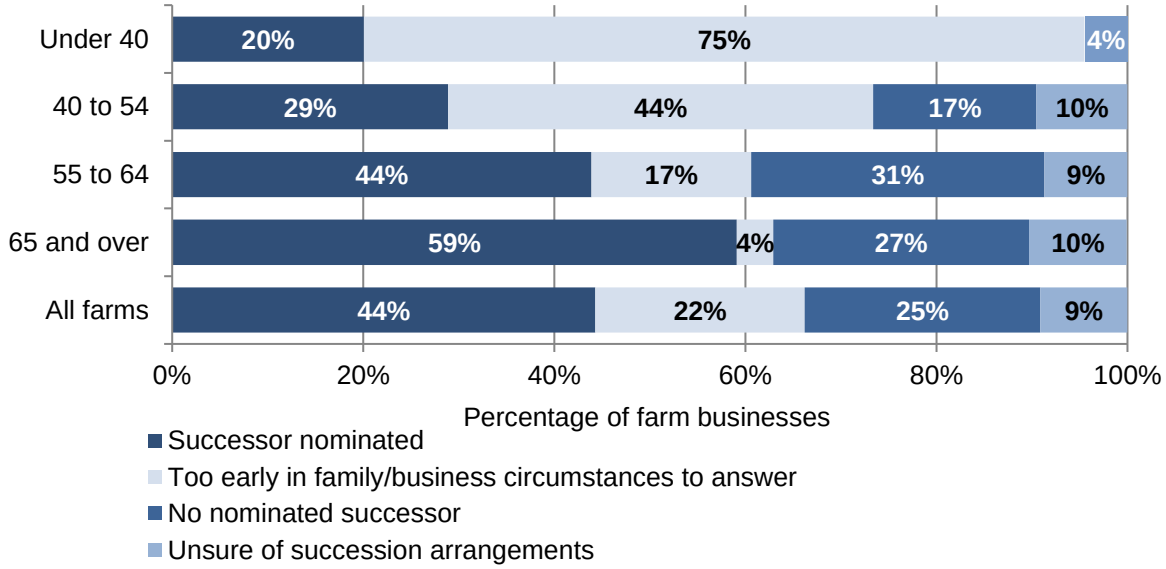


Source: Farm Business Survey, England

(a) Based on responses from 1,562 farm businesses in 2018/19.

As might be expected, older farmers (65 and over) were more likely (59 percent) to have a nominated successor (Figure 24). Farmers under 40 were more likely than older farmers to state that it was too early to answer (75 percent).

Figure 14: Succession arrangements by age of farmer, England - 2018/19[(a)]



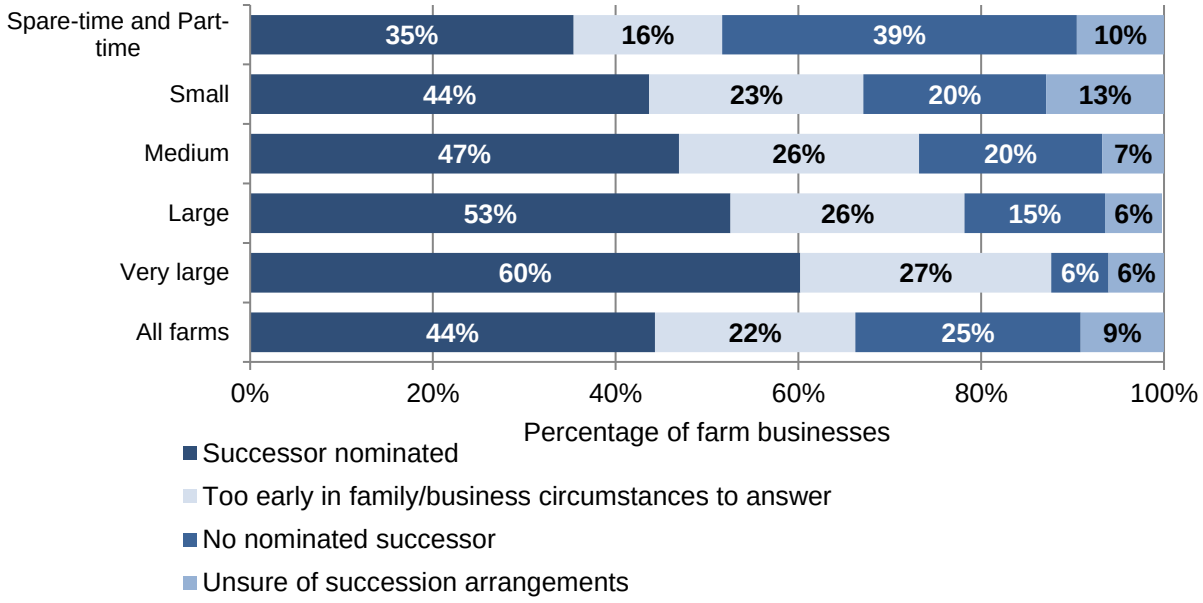
Source: Farm Business Survey, England

(a) Based on responses from 1,562 farm businesses in 2018/19.

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

Larger farms were more likely to have a nominated successor, and less likely to have no nominated successor (Figure 25), suggesting that larger farms might be more engaged with long term business planning.

Figure 25: Succession arrangements by size of farm, England - 2018/19[(a)]



Source: Farm Business Survey, England.

(a) Based on responses from 1,562 farm businesses in 2018/19.

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 2018/19) the successor already had a farming background (Table H), largely unchanged from previous years. This was defined as having substantial prior experience[11]. For the remainder (6 percent in 2018/19) the successor was new to farming. This included first generation farmers and those with a limited farming background.

Table H: 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	2017/18[(b)]	2018/19
Has a farming background	94	95	93	95	95	94
	±3	*±2*	*±3*	*±2*	*±3*	*±3*
New to farming	6	5	7	5	5	6
	±3	*±2*	*±3*	*±2*	*±3*	*±3*

Source: Farm Business Survey, England.

The succession questions were not included in the 2016/17 survey. 2013/14 to 2017/18 results based on 2010 standard output coefficients.

(a) Based on responses from the 634 farm businesses in 2013/14, 635 businesses in 2014/15, 602 businesses in 2015/16, 692 businesses in 2017/18 and 710 in 2018/19 that reported that the business would continue from within or outside the family.

(b) 2017/18 data have been revised to reflect 2013 standard output coefficients

[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 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 output[12] as recorded in the annual June Survey of Agriculture and Horticulture. In 2018, this accounted for approximately 57,100 farm businesses. In 2016 the sample was reduced from 1,800 to 1,750 farm businesses.

For further information about the FBS 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 K shows the distribution of the sample compared with the distribution of businesses from the 2018 June Survey of Agriculture and Horticulture. These initial weights are then adjusted (using calibration weighting[13)] 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 FBS are subject to sampling error, as we are not surveying the whole population. We show error bars based on 95% confidence intervals for mean FBI 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

[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

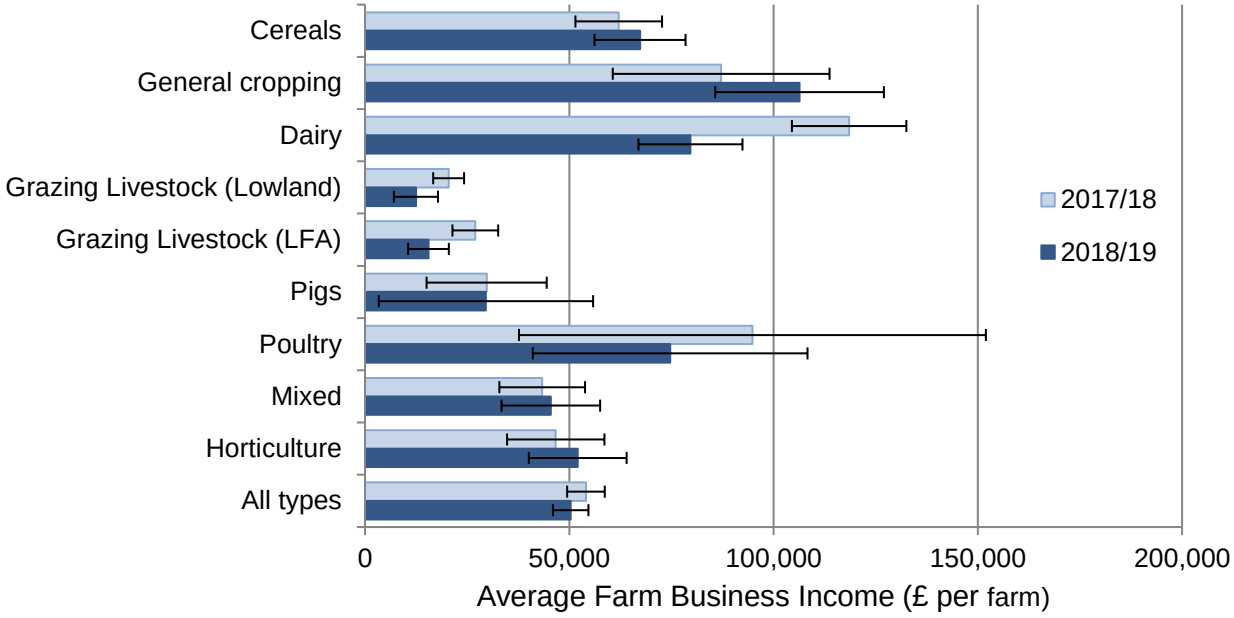
[13] Further information on calibration weighting can be found here: https://www.gov.uk/farm-business-survey-technical-notes-and-guidance

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 FBS, 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 FBS in both years.

Figure 26 shows average FBI 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 26: Average FBI by farm type, with 95% confidence limits, England 2017/18 and 2018/19



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.

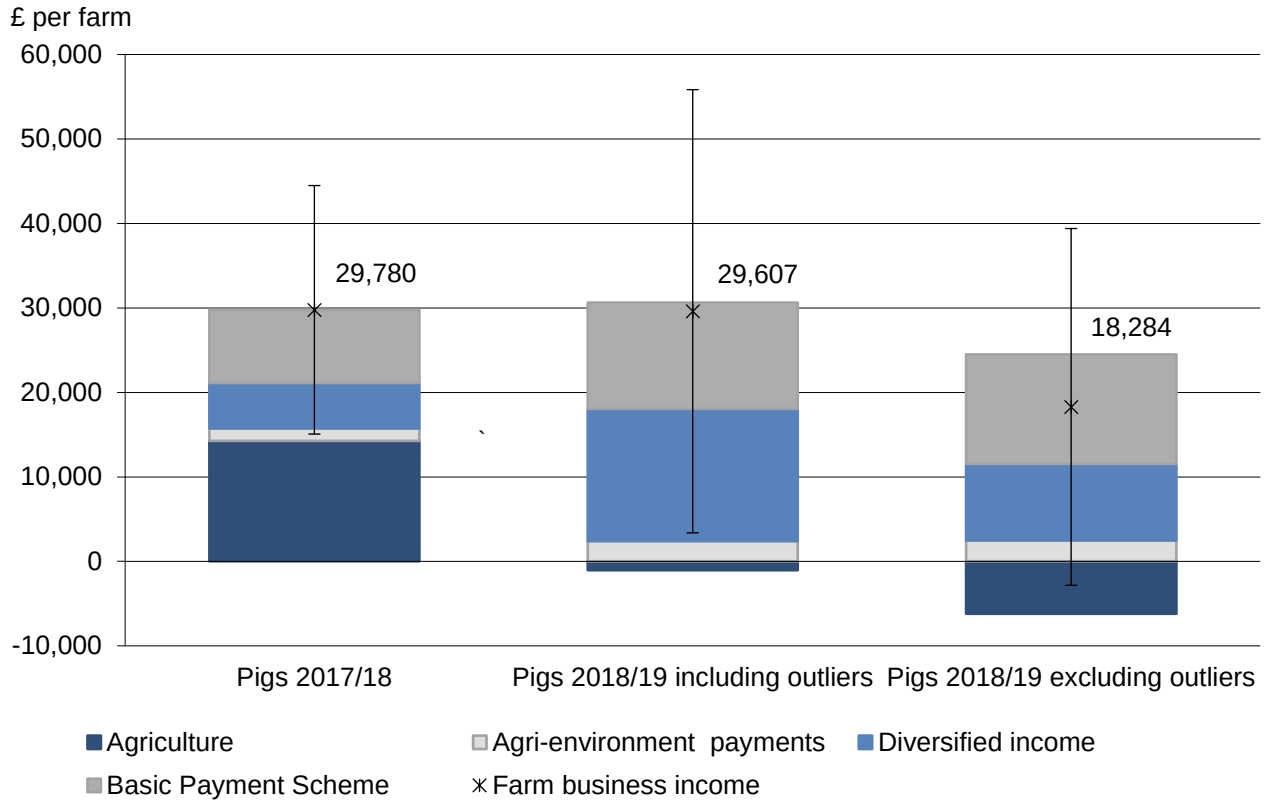
Confidence limits for specialist pig and poultry farms are affected by the relatively small samples and a huge range in scale of production. There are also a small number of very influential pig farms in the sample. Table I and Figure 27 show the results for this farm type including and excluding a few influential farms that joined the survey in 2018/19, and the impact these farms have within each cost centre.

Table I: Average FBI for Pigs farms, including and excluding outlier

	Agriculture	Agri-environment	Diversified	Basic Payment Scheme	FBI	95% CI for FBI
2017/18	14,300	1,500	5,400	8,700	29,800	14,700
2018/19 incl. outliers	-1,000	2,401	15,700	12,600	29,600	26,200
2018/19 excl. outliers	-6,200	2,500	9,100	12,900	18,300	21,100

Source: Farm Business Survey

Figure 27: Average FBI by Cost Centre for Specialist pig farms, including and excluding outliers



Source: Farm Business Survey

National Statistics status

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards. The statistics last underwent a full assessment [Assessment Report 271 Statistics on Agriculture] against the Code of Practice for Statistics in 2014. Since the last review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics across the FBS.

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.gov.uk.

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 FBS was changed from 0.5 Standard Labour Requirements (SLR) (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 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). From 2018/19, the classification of farms is based on 2013 standard output coefficients. 2017/18 results have been recalculated and presented in this release to allow comparability between 2017/18 and 2018/19. The results published here are therefore not directly comparable with those published in earlier years which are based on previous standard output coefficients.

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 FBS. Table J 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 established[14] 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 28 at the end of this appendix.

[14] Council Directive 75/268/EEC.

8 Farm business size in the United Kingdom is measured in 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 K 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.

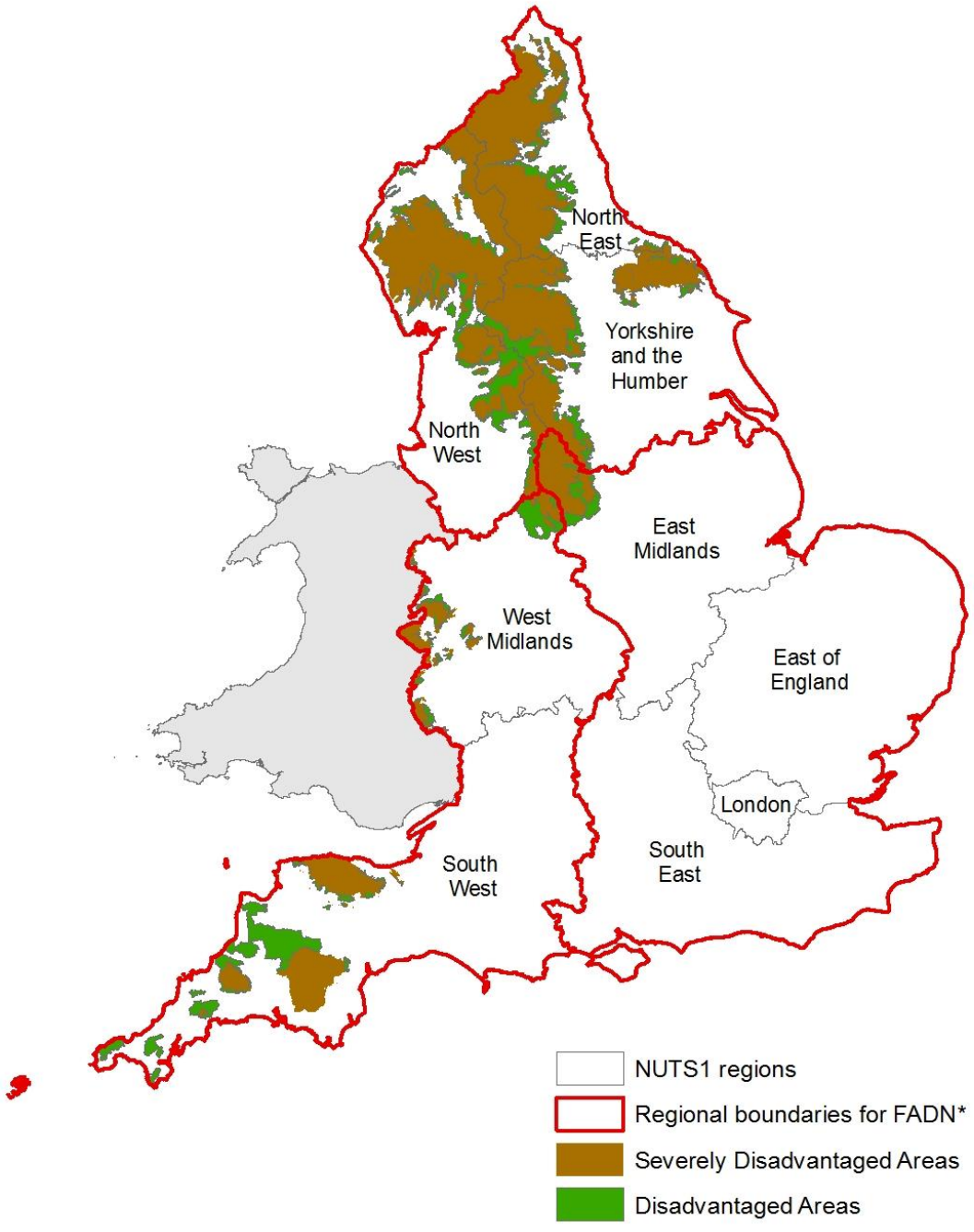
Table J: UK farm classification

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 28: 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

Table K: Farm Business Survey 2018/19: Sample Characteristics - England by size groups[a]

Type of Farming	Size	Number of Businesses in Sample	Number of Businesses at June Survey 2018	Average Size of Business by Standard Labour Requirement		Average Total Area (hectares)	
				Sample	June Survey 2018	Sample	June Survey 2018
Cereals	Part-Time	96	6,965	0.7	0.5	83	70
	Small	104	3,379	1.5	1.4	168	171
	Medium	60	1,545	2.5	2.4	273	276
	Large	92	2,100	5.4	5.7	561	632
	All Sizes	352	13,989	1.5	1.7	170	202
General Cropping	Part-Time	17	1,998	0.6	0.5	63	90
	Small	28	1,184	1.5	1.5	127	113
	Medium	17	801	2.4	2.5	200	153
	Large	90	1,928	9.5	9.3	458	404
	All Sizes	152	5,911	3.7	3.8	212	206
Dairy[b]	Part-Time Small	22	738	1.4	1.4	49	47
	Medium	40	908	2.6	2.5	81	75
	Large	176	4,193	6.8	7.0	198	175
	All Sizes	238	5,839	5.9	5.6	172	143
Lowland Grazing Livestock [c]	Part-Time	51	5,883	0.7	0.6	51	43
	Small	90	3,799	1.5	1.4	80	69
	Medium	68	1,474	2.5	2.4	105	109
	Large	87	1,635	5.3	5.6	239	260
	All Sizes	296	12,791	1.8	1.7	92	86
LFA Grazing Livestock [c]	Part-Time	22	2,886	0.7	0.6	61	60
	Small	54	1,865	1.5	1.4	106	126
	Medium	50	951	2.5	2.4	175	230
	Large	86	1,226	5.9	5.1	423	553
	All Sizes	212	6,928	2.3	1.9	168	188
Specialist Pigs	Part-Time	6	366	0.8	0.5	6	10
	Small	8	217	1.6	1.5	35	23
	Medium	13	177	2.6	2.4	43	33
	Large	49	578	15.3	14.5	155	130
	All Sizes	76	1,338	6.3	7.0	67	67
Specialist Poultry	Part-Time	8	443	0.6	0.5	16	14
	Small	10	253	1.6	1.5	19	24
	Medium	24	152	2.4	2.5	19	35
	Large	57	725	12.8	13.8	101	103
	All Sizes	99	1,573	6.2	7.0	54	59
Mixed	Part-Time	13	2,087	0.7	0.6	62	47
	Small	41	1,353	1.5	1.4	104	95
	Medium	34	872	2.4	2.4	126	146
	Large	83	1,691	6.3	6.6	314	347
	All Sizes	171	6,003	2.9	2.8	162	157
Horticulture	Part-Time	15	733	0.8	0.6	8	14
	Small	23	563	1.4	1.5	10	14
	Medium	14	313	2.3	2.5	4	21
	Large	120	1,143	15.2	17.5	41	86
	All Sizes	172	2,752	6.8	8.0	21	45
All Types	Part-Time	230	21,525	0.7	0.6	64	57
	Small	378	13,187	1.5	1.4	101	105
	Medium	320	7,193	2.5	2.5	148	159
	Large	840	15,219	7.8	8.2	291	314
	All Sizes	1,768	57,124	3.0	3.0	143	149

(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 FBI. It is used when assessing the impact of new policies or regulations on the individual farm business. Although FBI is equivalent to financial Net Profit, in practice they are likely to differ because Net Profit is derived from financial accounting principles whereas FBI 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 FBI. 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 farming[15] 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.

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[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.

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 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.
Purchased and home-grown seeds	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.
Fertilisers	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.
Machinery running costs	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 FBI 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 FBI.
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 FBI 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.