



Farm Business Survey

2017/2018

Poultry Production in England



Richard Crane, Amelia Clarke
and Elspeth Organ



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Foreword to the First Series

This report is one of a series being produced based on the results of the Farm Business Survey (FBS) for England. The annual Farm Business Survey is the most comprehensive and independent survey of farm incomes and provides a definitive data source on the economic and physical performance of farm businesses in England. It is conducted by a Consortium comprising the Universities of Cambridge, Newcastle upon Tyne, Nottingham and Reading, and Askham Bryan, Duchy and Imperial Colleges. The Consortium is lead by the University of Nottingham and its members work in partnership, using uniform and standard practices in reporting on their findings to ensure consistent data quality, accuracy and validity. The Survey is financed by Defra and the Consortium values greatly the input of their staff.

These detailed reports for various farm types and enterprises are in addition to the comprehensive Farm Business Survey Reports for Government Office Regions published at www.farmbusinesssurvey.co.uk.

The Consortium is seeking by these additional reports to ensure that timely and relevant information is available to farmers, consultants, advisers and other organisations and individuals interested in farming and land management. The analysis and publication of these reports uses data from farm businesses across England, with an individual member of the Consortium undertaking the research analysis. In line with the ethos of the Consortium, these reports present results in such a way as to ensure a significant element of continuity and consistency from one report to the other, whilst also ensuring that each report captures the contemporary issues of relevance to the sector of agriculture in England to which it relates.

We believe these new reports will make a valuable and useful contribution to the farming industry and we commend them to you.

Prof. Martin Seabrook

(Chief Executive Officer of the Consortium)

Spring 2007

Foreword to the Thirteenth Series

This series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)* represents the thirteenth series of outputs that focus on providing independent data and analysis to the individual sectors of agriculture and horticulture. As the UK edges closer to an outcome following the EU referendum in June 2016, much uncertainty remains in the sector, the UK and across the EU. At the time of writing the political landscape remains uncertain with the three main outcomes still being possible: i) UK departure from the EU with a deal; ii) UK departure from the EU with no deal; iii) a delay in the UK's departure or a 'no Brexit' outcome. On the assumption that the UK will leave the EU, and that a new UK Agriculture Bill will be passed, then the direction of policy travel for UK agriculture and horticulture has become clearer. The seven year transition deal in subsidy payments based on the Basic Payment demonstrates the plan to transition support to farmers away from this broad land-area based payment structure to one which rewards farmers and land managers more for providing environmental public goods. Reflecting on the likely drivers of success for farm and horticultural business in the future, irrespective of the Brexit outcomes and the future trade deals that may follow, the fundamental business drivers of success remain unchanged. Successful businesses focus on margins by understanding their cost, revenue and market base and they undertake comparative analysis of their business performance against other businesses. These successful businesses look for new business opportunities, and are frequently more diversified in their business base than less successful businesses. Within our reports, RBR aims to provide businesses with the independent data, analysis and interpretation to help them identify their strengths and challenges.

For the 2017/18 year, average Farm Business Income (FBI), derived from our work on the Farm Business Survey (FBS), was £56,500, an increase of 49% on the previous year. While a number of factors led to this increase, the devaluation of the pound, leading to UK commodity prices increasing, played a key role in this income boost. Most farm types witnessed an increase in FBI, with the exception of pig farms who faced an increased cost base at the same time as a decreased closing valuations at the year end from a drop in pig prices at that point in time. Dairy farms witnessed the greatest percentage price increase from 2016/17, as they benefited from both increased milk output and improved milk prices. The influence of currency fluctuation on the performance of agriculture is well recognised. The output of the Brexit scenario on the strength or weakness of sterling alone will have a large influence on business profitability moving forward.

With this thirteenth series of reports on the performance of the different sectors of agriculture and horticulture, our core aim of helping inform agricultural and horticultural businesses about the economics in their sector remains unchanged, and is arguably of even greater importance at this historic point in time. This series of reports, and our work on the FBS more generally, would not be possible without the cooperation of the farmers and growers who participate in the FBS to ensure that the data we provide for policy making, and in our reports and free to use online data services at www.farmbusinesssurvey.co.uk, is truly representative of the sectors. Our sincere thanks therefore go to the farmers and growers for their most valuable contribution.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
February 2019

www.ruralbusinessresearch.co.uk

Acknowledgements

Rural Business Research thanks sincerely all those farmers who have voluntarily provided records and information on which the annual Farm Business Survey, and this report, is based.

The basic information on which this report is based was collected on behalf of, and largely financed by, the Department for Environment, Food and Rural Affairs and is Crown Copyright.

The views expressed in this publication are those of the authors and are not necessarily shared by other members of the University or by the University as a whole.

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Summary

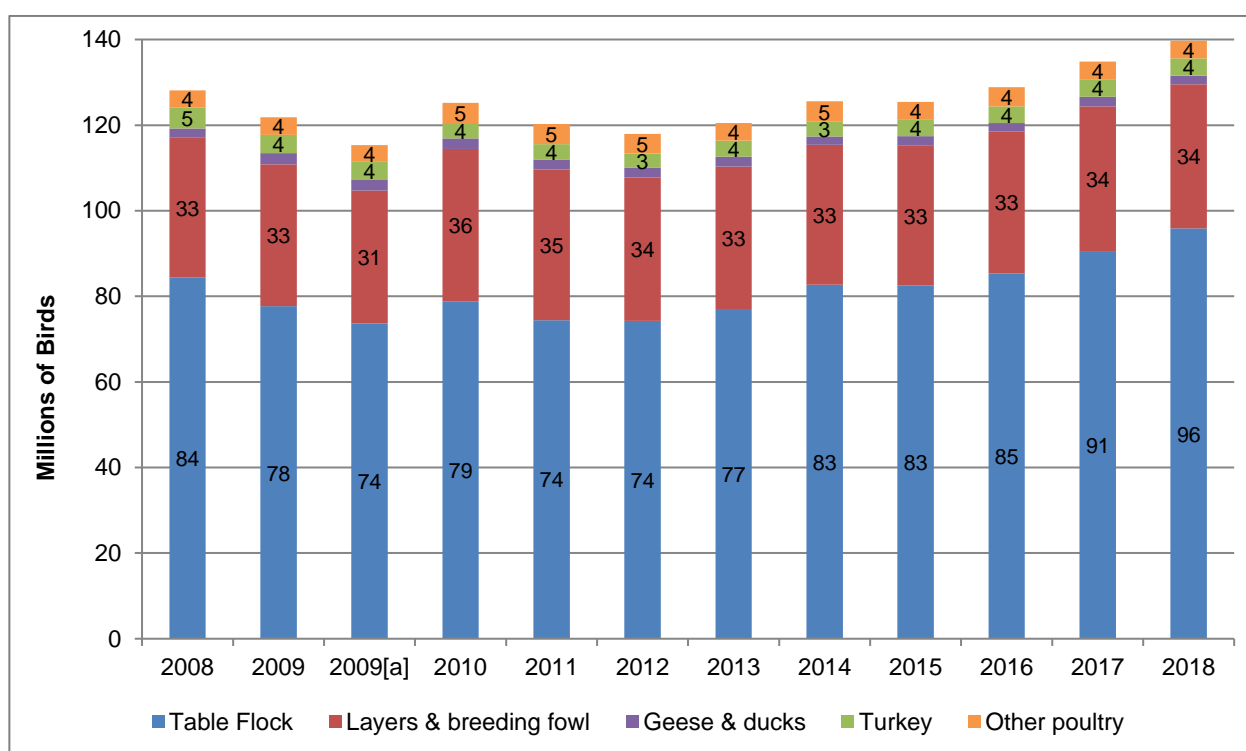
- Total number of birds in production in England in June 2018 was just under 140 million birds, up 3.6% on the previous year
- Poultry output in 2017 was over £3.3 billion, 13% of the total output from agriculture, the same proportion as the previous year
- The value of UK poultry meat production reached £2.4 billion in 2017, representing an increase of almost 7% on the previous twelve month period
- Output from egg and egg products at £624 million in 2017 showed an 13% year-on year decrease and was £94 million less than in 2013
- In 2017/18 a total of 101 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 95 in 2016/17
- The profitability of specialist poultry farm businesses increased by 77% in the 2017/18 financial year, with average profit as measured by Farm Business Income (FBI) rising on a per business basis from £54,151 in 2016/17, to £96,044 in 2017/18
- Within this sector, there was a marked difference in profits during 2017/18 but the changes in profit were all positive compared to the previous year; Average FBI on a per business basis for the layers increased from £32,459 in 2016/17, to £53,202 in 2017/18 and for the poultry meat producers FBI rose by 73%, increasing from £69,216 in 2016/17, to £119,896 in 2017/18
- Of the 56 farms classified as Specialist Layers in 2017/18, 41 had laying flocks producing eggs for human consumption, while the remaining 15 were breeding flocks and hatcheries
- Laying flocks producing eggs for human consumption had an increase in FBI from £28,359 in 2016/17, to £42,944 in 2017/18
- Free range layers recorded a rise in profitability with FBI up 25%, to £37,047 per business
- The price of the eggs from free range systems rose 4% to an average of 97.5p/doz, while egg production for the group increased from 285 to 295 eggs per year
- For the poultry meat producers FBI increased by around 73%, from £69,216 in 2016/17, to £119,896 in 2017/18; throughput increased and the group experienced a rise in the price of poultry meat
- After a decrease in 2016/17, the average number of laying hens increased by 23% in 2017/18 to 56,762 birds; the average number of birds for meat production also increased, by 12%, to 116,548
- Among the total average variable costs for all specialist poultry farms, there was a 53% increase in average feed costs; cost of feed as a percentage of £100 of output per business rose to approximately 50% in 2017/18
- Total fixed costs on a per business basis rose by over 20%, to an average of £349,814 in 2017/18
- In common with past income trends, there was a wide range in the level of FBI observed for different businesses in 2017/18, with around 21% recording an annual FBI of over £100,000 (20% in 2016/17) and 19% incurring a negative FBI compared to 31% in 2016/17

SECTION 1: COMMENTARY ON THE UK POULTRY INDUSTRY

1.1 General introduction

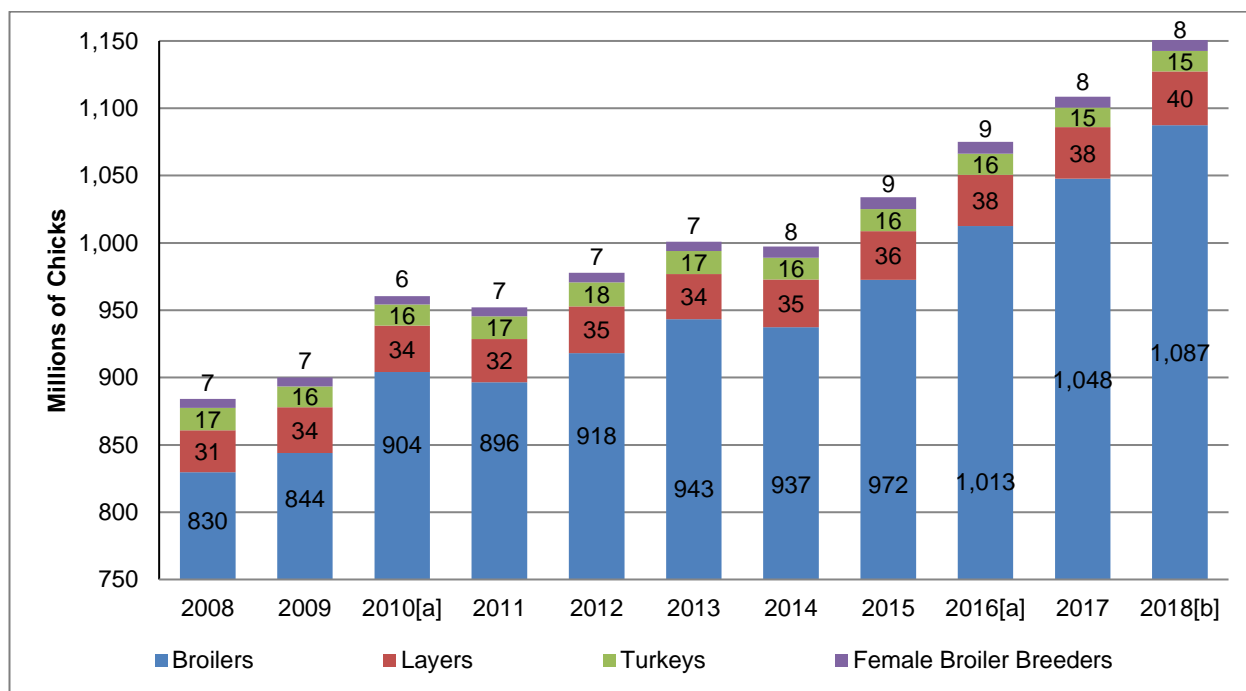
- The English poultry flock continued to rise in 2018 to just under 140 million birds, up 3.6% from 2017
- The table flock rose to around 96 million birds in 2017, an increase of 6% on the previous year
- Table chickens still make up the majority proportion of total poultry, at 69% for 2018
- Contrary to the previous year, the turkey flock and layers and breeding fowl numbers stayed relatively stable for 2018, around 4 million and 34 million respectively
- Geese and duck numbers fell to just over 2 million birds in 2018, an 8% fall from numbers in 2017
- The poultry flock in England in 2017 consists of approximately 69% table birds, 24% layers and breeding fowl, 3% other poultry, 3% turkey and 1% geese and ducks [1]

Figure 1.1 English poultry numbers at June 2008-2018 [1]



Notes: [a] June 2009 figures were revised on 16 September 2010 for two reasons. Firstly, the new methodology for 2010 employed thresholds to exclude holdings with very low activity, so revised 2009 figures were required to permit like-for-like comparison between 2009 and 2010. Secondly, the census exercise included a register cleaning exercise to enable the removal of inactive holdings from the register. Further details on the revisions referred to are available from the June Survey Statistical Release.

Figure 1.2 UK chick and poutl placings 2008-2018 [2]



Note: [a] denotes a 53 week year

[b] 2018 data based on the monthly data recorded up to the end of October 2018, with November and December based on figures for the same months for the previous year (2017)

Only data for UK chick and poutl placings is available and it is therefore not possible to focus solely on the situation for England:

- Broiler chick and poutl placings have shown an almost continuous rise in numbers from a low of 830 million in 2008, to over one billion in 2018, an increase of 31% in 10 years
- Despite showing a 6% increase in turkey chick and poutl placings in 2018, numbers are still 14% lower than they were in 2012
- Broiler breeder hen placements remained very similar to the year before, just 16,000 birds down from 2017, compared to the 9% decrease in placements between 2016 and 2017
- In total, chick and poutl placings increased by just under 4% in 2018, following on from similar increases year to year since 2014 [2]

1.2 The Structure of the industry

1.2.1 Poultry for meat

- Poultry premises stocked with more than 50 birds must register with the British Poultry Register (BPR) giving details of poultry type, housing type, maximum number of poultry present on holdings through the year, together with a note of owner and associate organisations [3]
- According to IBIS World (Industry Market Research Company), the UK broiler market in 2018 comprised of Boparan Holdings (proprietor of 2 Sisters) (24%), Moy Park (17%), Faccenda (8%), Cargill (4%), Banham (3%) and others (44%), as shown below [4]
- Amount of total poultry production increased by just over 4% in 2018. In total, this means that in 2018 almost 30% more poultry products were produced than in 2008
- Broiler production in 2018 showed a year on year increase of 5%, representing 86% of total poultry meat production. A slight rise compared to 2017
- Turkey production, at just over 8% of poultry meat production, was up on a year to year basis in 2018 by just over 3% [5]

Figure 1.3 UK Broiler Market - Estimate [4]

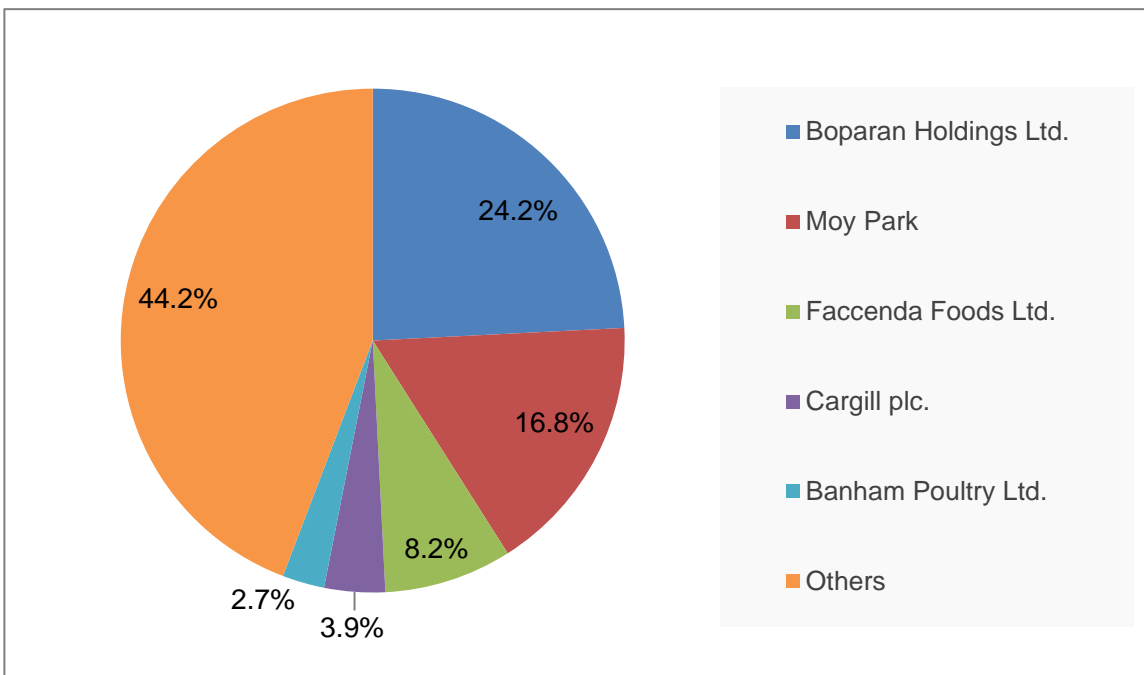
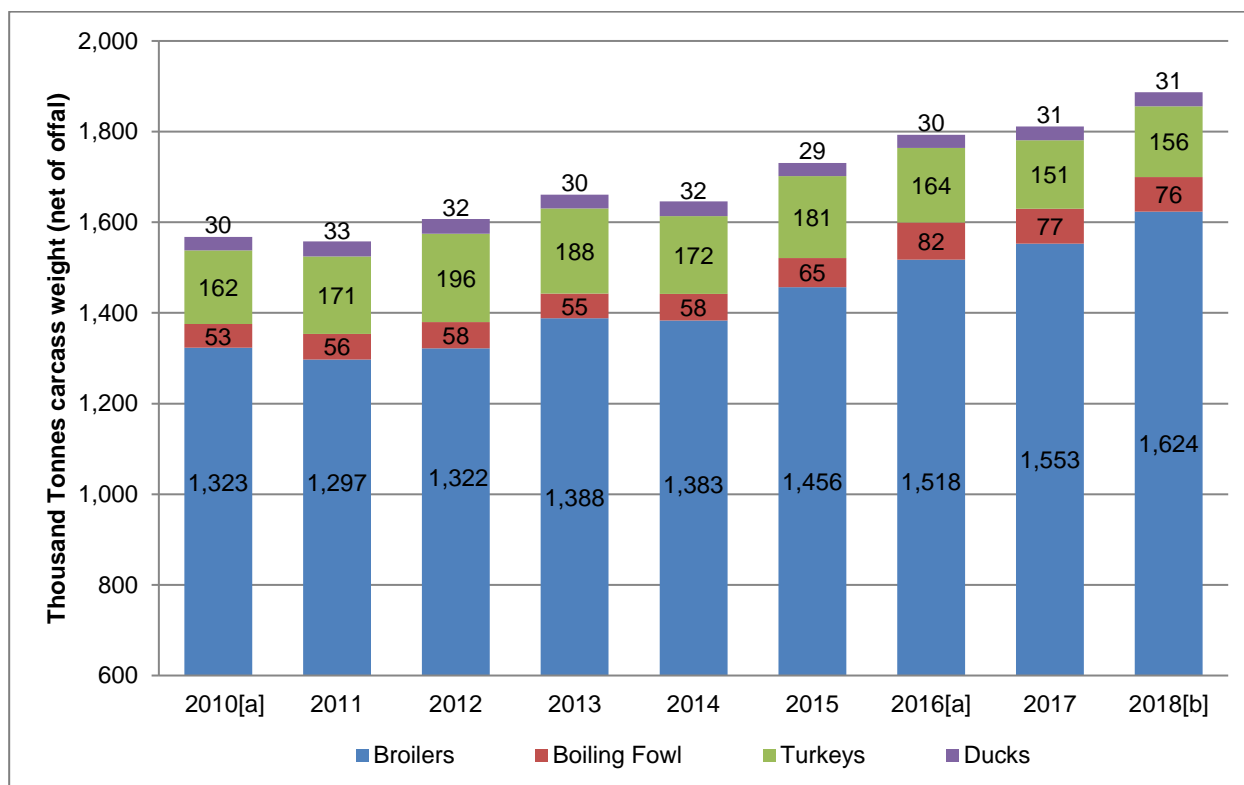


Figure 1.4 Annual UK production of poultry meat by type [5]



Note: [a] denotes a 53 week year

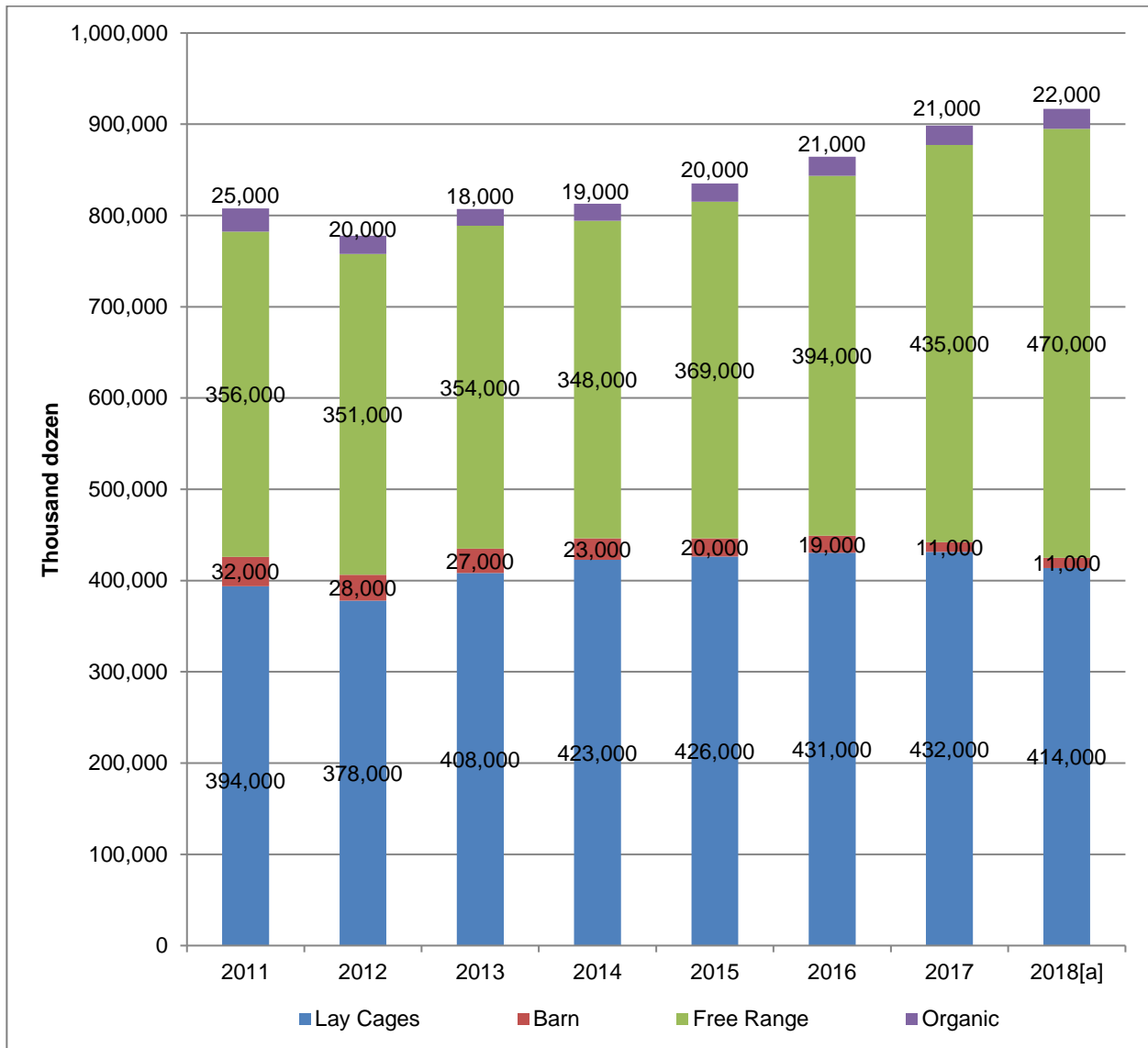
[b] 2018 data based on the monthly data recorded up to the end of October 2018, with November and December based on figures for the same months for the previous year (2017)

1.2.2 Poultry for eggs

Eggs are produced in different types of production system:

- *Enriched cages* – As of 1st January 2012 poultry for egg production within Europe if raised in cage systems must be housed in enriched cages, categorised as having 750cm² of cage area per hen (compared with 550cm² in conventional housing), housing must include a nesting area, litter to allow dust bathing, perches of at least 15cm per bird, and claw shortening devices
- *Barn system* – This system employs open-space hen houses with a series of perches at different levels. Birds are allowed to roam the litter covered floor space, at a maximum density (since 2002) of nine birds per m². There is a Deep Litter variant of this system where hen houses have solid floors covered with straw, sand, shavings or turf and a lower stocking density of seven birds per m². Both systems provide communal nest boxes and raised feeding troughs to prevent the scattering of feeds
- *Free Range System* – This system requires birds to have continuous daytime access to outdoor 'runs', largely covered with vegetation, to a maximum stocking density of nine laying hens per m² of usable area. The Welfare of Laying Hens Directive imposes the same hen house conditions as for the Barn System. Free range production can also be organic where, additionally, feeds are organic and the hens are ranged on organically managed land
- *Organic system* - Hens producing organic eggs are always free range. In addition, hens must be fed an organically produced diet and ranged on land that is registered as organic. The hen house conditions for organic hens are set by the EU Organic Regulations and stipulate a maximum stocking density of 6 hens per m² of useable area and a maximum flock size of 3,000 birds. Hens must be provided with nest boxes and adequate perches, providing 18 centimetres of perch per hen, together with litter, accounting for one-third of the ground for scratching and dust bathing [9]

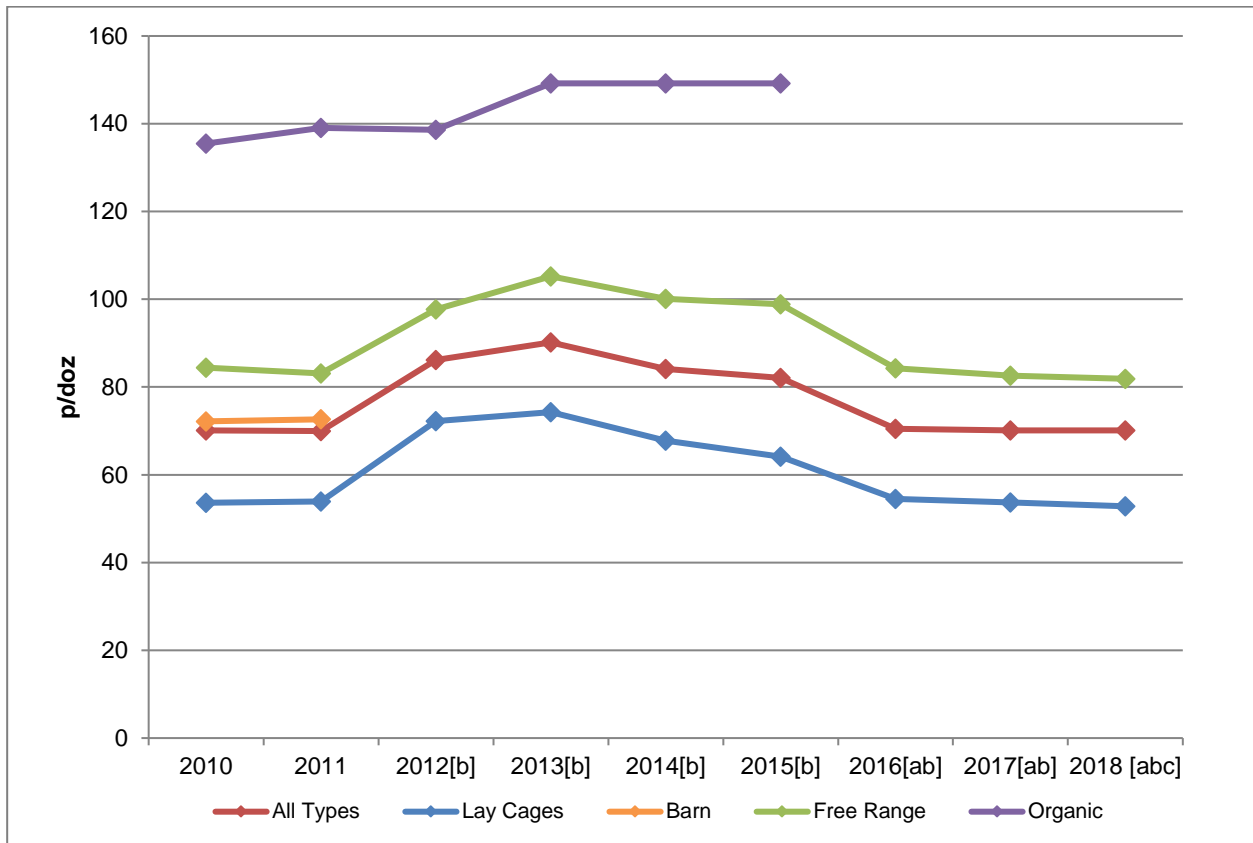
Figure 1.5 Annual UK egg production by production systems [6]



Note: [a] 2018 data for quarter four not available at date of publish. Estimates from quarter four 2017 used.

- Total packing station throughput increased by 2% between 2017 and 2018
- In 2018 45% of eggs were produced in enriched cages, compared with 48% in 2017, a decrease of just under 3%
- 51% of eggs were produced in free range systems in 2018, compared with 48% in 2017, an increase of just under 3%
- Eggs produced from both barn and organic systems stayed roughly the same as in 2017, just over 1% in barns, and just over 2% from organic systems [6]

Figure 1.6 Average packers to producer prices by housing type [6]



Note: [a] Data for organic eggs suppressed as sample too small
 [b] Data for barn eggs suppressed as sample too small
 [c] 2018 data for quarter four not available at date of publish. Estimates from quarter four 2017 used.

- The average packer to producer price for all types remained consistent this year at 70.1p/doz, following a decrease of 12p/doz (-14%) in 2016
- The average price of free range eggs continues to fall following several years of price decreases after the price peaked in 2013 at 105.2p/doz. The price for 2018 was a 0.7p/doz reduction on 2017's prices to 81.9p/doz
- The average lay cage egg price in 2018 also dropped slightly by almost 1p/doz, to 52.8p/doz [6]

1.3 Contribution of the poultry sector to the economy

1.3.1 The farm sector

- In 2017 total poultry output increased by 5%, to just over £3.3 billion, this is the first significant increase since 2013 when output increased by 10% on the previous year
- Total agricultural output also increased by 12% in 2017
- Poultry meat output rose by almost 7%, to £2.4 billion in 2017, an increase of £149 million on 2016
- After falling by over 11% in 2016 to £603 million, egg and egg products rose in 2017 by just over 3% to £624 million. This is still down 13% compared to the peak output seen in 2013 of £718 million
- Poultry output, as a proportion of gross output from agriculture fell slightly to 13% in 2017 [7]

Figure 1.7 Producer value of UK-produced poultry meat and eggs 2010-2017 (£M) [7]

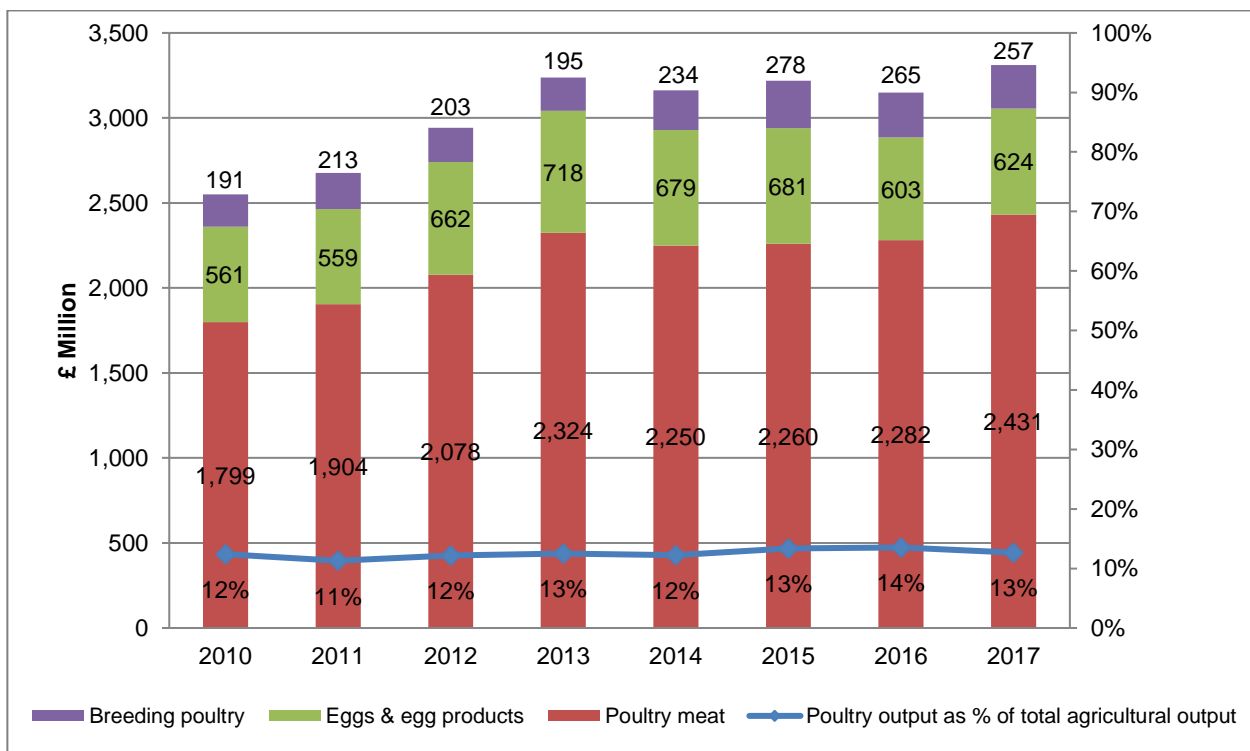
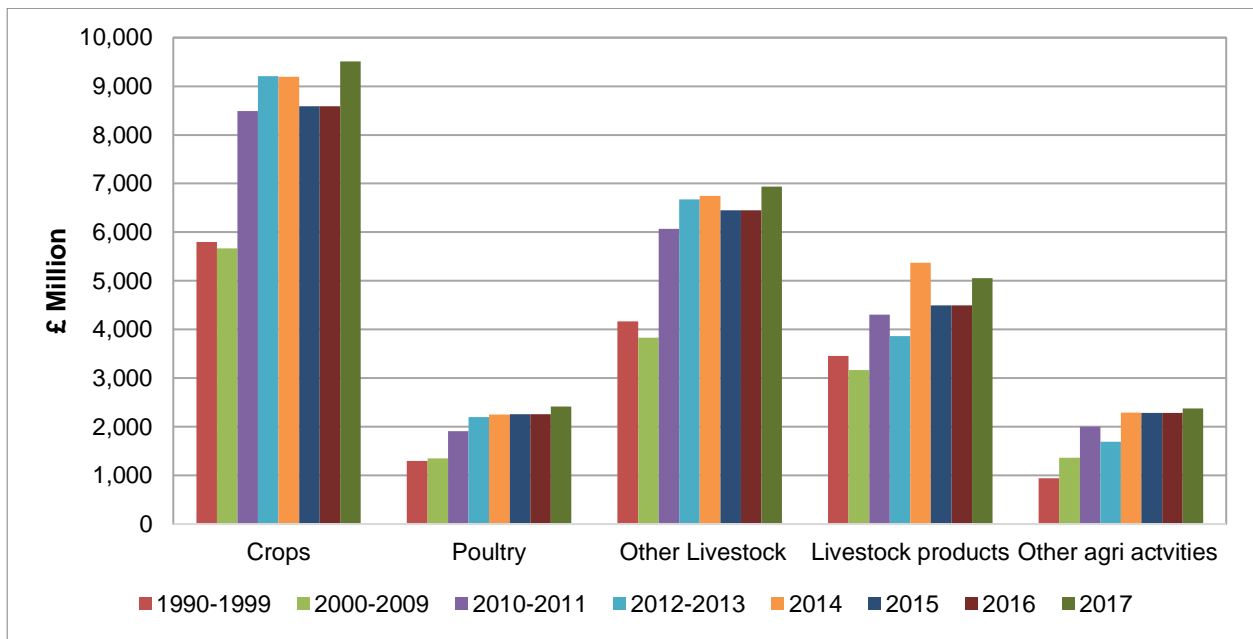


Figure 1.8 Poultry output compared with other agricultural outputs through time at current prices (£M) [10]



1.3.2 The retail sector

1.3.2.1 Poultry meat

- Although the total kg of meat per person per year in the UK has decreased by just under 2kg this year, poultry meat continues to be the most popular meat with consumers making up 43% of total meat consumption in 2017
- After an increase of average consumption of poultry meat over the past 9 years, the amount consumed per person per year for 2017 fell back to 36.3kg, similar to the amount reported in 2015
- Compared with 10 years ago, year-on-year average consumption of poultry meat has increased by 21% [8]

1.4 Trade

Table 1.1 UK imports and exports of Eggs and Poultry meat [10]

Eggs (Million Dozen)	2010	2011	2012	2013	2014	2015	2016	2017
Imports	136	127	163	153	158	175	171	166
Exports	8	10	19	23	11	9	11	12
UK production	826	821	797	829	839	866	899	931
% self sufficient	87%	88%	85%	86%	85%	84%	85%	86%

Poultry meat [a] (carcass weight thousand tonnes)	2010	2011	2012	2013	2014	2015	2016	2017
Imports	474	516	480	482	509	541	580	562
Exports	268	291	283	314	339	292	299	353
UK production	1,570	1,560	1,609	1,663	1,648	1,733	1,796	1,813
% self sufficient	88%	87%	89%	91%	91%	87%	86%	90%

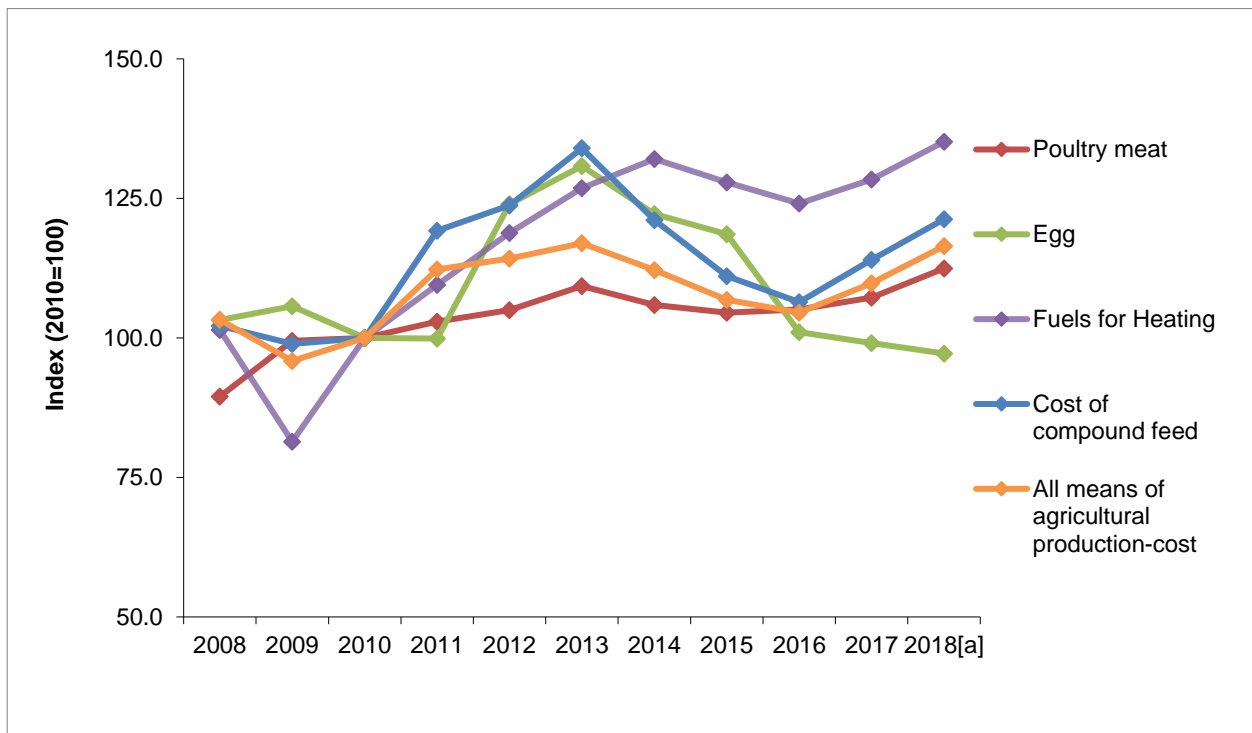
Note: [a] excludes offal

- Between 2016 and 2017, production of eggs increased by 4% and production of poultry meat increased by 1%
- Imports of eggs decreased by 3%, and exports increased by 12%, resulting in self-sufficiency continuing to increase to 86% in 2017
- Poultry meat imports decreased by 3%, a fall for the first time since 2012, whilst exports increased by 18%, resulting in a jump in self-sufficiency to 90% [10]

1.5 Producer prices

- Feed and fuel continue to be the major costs for poultry producers
- The 'All means of production cost' (based on figures available at the time of preparation of report), saw an increase of 6% in 2018 (up from 109.8 points in 2017, to 116.5), an increase of over 11% since 2016
- Average compound feed prices for 2018 have risen by around 6% or 7 points compared to the previous year, but are still around 13 points lower than the peak in 2013
- Fuel for heating increased by over 5% - approximately 7 points, in 2018
- Egg output fell slightly by 1.9 points in 2018, following a large reduction in 2016 of over 17 points compared to the previous year
- Poultry meat increased again in 2018 by 5.3 points (5%), following an increase of 2.1 points (2%) in 2017 [11]

Figure 1.9 Index of producer prices for poultry and eggs and cost of production [11]



SECTION 2: FINANCIAL RESULTS FOR POULTRY PRODUCTION IN ENGLAND

2.1 Introduction to the data

The following series of tables [Tables 2.1 to 2.9] are based on farm businesses that participate in the Farm Business Survey (FBS) in England and are classified as specialist poultry farms. Tables 2.10 to 2.15 are based on farm businesses that participate in the FBS with a poultry enterprise; includes all farm type groups, including specialist poultry farms. The FBS is a sample survey, so results here have been weighted to be representative of the poultry industry in England. Businesses all have year ends between December and April, representing an average February year end.

2.2 Definition of poultry type groups:

Specialist Poultry farms are farms on which poultry account for more than two thirds of their total Standard Output.

Specialist Poultry Farms:

- Table 2.1 - All specialist poultry farms:
 - Sample includes all types of laying and non-laying enterprises, defined as specialist poultry farms

Specialist Poultry Farms – split between laying flocks and poultry meat producers:

- Table 2.2 - All laying flocks:
 - Sample includes all types of laying enterprises producing eggs for human consumption including enriched cage, free range and deep litter and breeder/rearer enterprises (growing pullets, layer breeders and broiler breeders)
- Table 2.3 - Poultry meat producers:
 - Sample includes all types of poultry meat enterprises including contract and non-contract broilers, turkeys, and ducks

Layers – further sub-groups of table 2.2:

- Table 2.4 - Laying flocks producing eggs for human consumption:
 - Sample includes all types of laying enterprises including enriched cage, free range and deep litter systems
- Table 2.5 - Laying flocks with free range hens:
 - Sample includes solely free range laying enterprises [a sub-set of Table 2.4]

Poultry meat producers – further sub-group of table 2.3:

- Table 2.6 - Non-contract broilers:
 - Sample includes non-contract broiler enterprises [a sub-set of Table 2.3]

Balance sheet information for 2017/18:

- Table 2.7 - Balance sheet data for all specialist poultry farms:
 - Analysis for laying flocks, poultry meat producers and non-contract broilers
- Table 2.8 - Comparison of net worth and percentage equity by farm type for 2017/18:
 - Farms with poultry as their main farm type are compared to other farm types in terms of assets, liabilities, net worth and average % equity

- Table 2.9 – Distribution of tenant's type capital (%):
 - Shown for all specialist poultry farms with subsets for all laying flocks, all poultry meat producers and non-contract broilers

Gross margin analysis for all poultry enterprises:

This sample of farms includes all farm type groups, including specialist poultry farms.

- Table 2.10 - All laying flocks:
 - Sample includes all types of laying enterprises (enriched cage, free range and deep litter)
- Table 2.11 - Laying flocks with mixed production systems including enriched cage, barn and deep litter:
 - Sample includes all enriched cage laying and mixed laying enterprises [a sub-set of Table 2.10]
- Table 2.12 - Laying flocks with free range hens:
 - Sample includes solely free range laying enterprises [a sub-set of Table 2.10]
- Table 2.13 - Laying flocks on an annual basis (enriched cage and free range systems):
 - Gross margin per doz eggs
- Table 2.14 - Non-contract broilers and table chickens:
 - Sample includes non-contract broiler and table chicken enterprises
- Table 2.15 - Turkey production:
 - Sample includes mainly Christmas turkey producers

2.3 The sample

The Farm Business Survey (FBS) covers businesses with a Standard Output (SO) of 25,000 Euros and above. Standard Outputs are representative of the level of output that could be expected on the average farm under "normal" conditions (i.e. no disease outbreaks or adverse weather). They measure the total value of output of any one enterprise; per head for livestock and per hectare for crops. It is calculated from standard coefficients applied to each enterprise on the farm and represents the output per hectare of crops or per head of livestock.

The sample is drawn from a stratified population of seven regions in England. The weighting of the FBS results is a two stage process with, firstly, an initial weight being produced and, secondly, this initial weight is then adjusted via a calibration procedure. The weights are based on population data from the June business register and are calculated for each design stratum. The initial weights for the FBS are based on the inverse sampling fraction. Suppose, for example, there were 250 Cereal farms in the population and of these 50 were sampled, then these 50 sampled farms would be given an initial sample weight of 5 (250/50). These weights are then adjusted (Calibration Weighting), so that they produce correct population totals for a series of calibration variables for which accurate population values are known from other sources. This ensures that the weights produce precise estimates of other variables, with little bias, despite the inevitable imperfections of the sampling strategy. This weight when applied to each business represents the number of times that business' data must be replicated in order to 'represent' businesses not selected for the sample, so as to reflect the entire population, and applies to all variables.

The design of the weights used in the FBS was altered from 2011/12 to improve the accuracy of estimates relating to both specialist poultry farms and poultry enterprises. This was done by calibrating the weighted up number of poultry to those estimated by Defra's June Survey of Agriculture and Horticulture 2012. This method was already used for the other main livestock groups. The new weighting methodology also matches the number of specialist layer businesses and meat production businesses to the June Survey, however, it does not split production to the lower levels sometimes used in this report.

According to the 2017 June survey there were 1,488 specialist poultry farm businesses in England that were above the FBS size threshold.

The results for the 2017/18 financial year are based on 101 specialist poultry farms, which represent 6.8% of the population of specialist poultry farms. No premium results are shown for the top quartile of businesses, due to the small sample size.

The data in this report have been compiled from the 2016/17 and 2017/18 FBS. When making inter-year comparisons the results should be treated with caution as poultry farms are subject to a considerable degree of uncertainty reflecting both the structure of this sector and the relatively small sample of these farms in the FBS.

Results for this survey can be accessed at:

<http://farmbusinesssurvey.co.uk> and

<https://www.gov.uk/government/collections/farm-business-survey#farm-accounts-in-england>

2.4 Financial results for 2016/17 and 2017/18

2.4.1 Specialist poultry farms [Table 2.1]

- In 2017/18 a total of 101 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 95 farms in 2016/17
- The total of 101 farms included 56 specialist layers, 44 specialist poultry meat producers and one farm categorised as both a layer and meat producer
- The profitability of specialist poultry farm businesses increased by 77% in the 2017/18 financial year, with average profit as measured by Farm Business Income (FBI) rising on a per business basis from £54,151 in 2016/17, to £96,044 in 2017/18 [Table 2.1]
- Note that these changes should be treated with caution because of the small sample; removing a particularly influential farm from the results suggests that the average income would have risen by 80% between 2016/17 and 2017/18, from £37,598 to £67,566
- Within this sector, there was a marked difference in profits during 2017/18 but the changes in profit were all positive compared to the previous year
 - Average FBI on a per business basis for the layers increased from £32,459 in 2016/17, to £53,202 in 2017/18 [Table 2.2]
 - For the poultry meat producers FBI rose by 73%, increasing from £69,216 in 2016/17, to £119,896 in 2017/18 [Table 2.3]
- After decreasing by 9% in 2016/17 to 46,330 birds, the average number of laying hens per business increased by 23% in 2017/18, to 56,762 birds, with the average overall number of birds for meat production increasing by 12%, to 116,548
- Previously the sample of poultry businesses has been divided fairly evenly between layers and poultry meat producers (51% & 48%) but this year there has been an increase in the percentage of layers to 55% and a decrease in the percentage of meat producers to 44%. The balance was very different in terms of poultry output attained:
 - 16% was derived from egg production
 - 66% from broiler production and
 - 18% from a mix of breeding, rearing and other forms of poultry meat production
- Among the total average variable costs for all specialist poultry farms, there was a 53% increase in average feed costs on a per holding basis, after a 22% decrease the previous year; cost of feed as a percentage of £100 of output per business rose to approximately 50% in 2017/18
- Total fixed costs on a per business basis rose by over 20%, to an average of £349,184 in 2017/18
- In common with past income trends, there was a wide range in the level of Farm Business Income (FBI) observed for different businesses with 21% recording an annual FBI of over £100,000, compared to 20% in 2016/17 and 19% incurring a negative FBI compared to 31% in 2016/17

2.4.2 Layers producing eggs for human consumption and breeder/rearers [Table 2.2]

- In 2017/18, the 56 specialist poultry farms that were classified as layers (Defra farm typology code 521) included 41 businesses with laying flocks producing eggs for human consumption and 15 businesses comprising breeding and rearing units (including growing pullets, layer breeders and broiler breeders)
- On a business basis, gross output of all laying flocks rose by 32%, increasing from an average of £556,051 in 2016/17, to an average of £732,198 in 2017/18
- The net result of the year-on-year changes for these businesses was an increase in the average FBI from £32,459 per business in 2016/17, to £53,202 per business in 2017/18

2.4.3 Layers producing eggs for human consumption [Table 2.4]

- This sub-set of farms consists of flocks producing eggs for human consumption, which include:
 - Enriched cage, barn, deep litter and free range egg production units; breeding poultry (laying flocks producing hatching eggs, day-old chicks and pullets) are not included
 - Thus making this group suited to assessing egg producer figures in terms of analysing the changes in bird numbers, output, costs and FBI, particularly on a per bird basis
- The total gross output for this group increased by 20%, to an average of £417,320 per business; this meant that despite higher costs, the average gross margin per business increased by 22%, to £187,747 in 2017/18
- In line with the results for 'layers producing eggs for human consumption and breeder/rearers', the FBI for 'layers producing eggs for human consumption' only, increased by 51% from £28,359 in 2016/17, to £42,944 in 2017/18
- The increase in profitability appears to have come from the more intensive units, including enriched cages, whilst the less intensive free range layers experienced a smaller rise in profitability
- The price attained for eggs produced by both the more intensive group and from free range systems increased from 90.6p/doz to 94.6p/doz in 2017/18, average number of birds was also higher in 2017/18
- This is in contrast to the trends seen nationally that show a slight fall in egg prices. This is due to a trend seen in the FBS sample towards more direct selling
- The differences in the scale of the changes are partially due to the composition of the sample; when only those farms that were in the sample in both years were considered this indicated a small decrease in the average egg price close to the trend seen nationally

2.4.4 Mixed production systems and free range flocks [Table 2.5]

- The laying flock group producing eggs for human consumption is normally subdivided into two further groups of mixed production systems and free range flocks:
 - There are seven farms with mixed production systems and 34 farms with free range systems
 - The mixed production systems are predominantly enriched cage units, however, the sample is too small to publish results
- Although the sample of non-free range egg producers is too small to publish, the evidence suggests that the more intensive producers, including enriched cages, barn and deep litter systems, showed a significant increase in average FBI per business, compared with a smaller increase in the free range systems

- The price of free range eggs rose to an average of 97.5p/doz, a 4% increase compared to the previous year
- The average number of eggs per bird per year increased by 3% for free range producers, to 295 eggs per year
- On a per business basis free range egg farms experienced a 25% rise in profit, with the average FBI increasing from £29,651 in 2016/17, to £37,047 in 2017/18

2.4.5 Poultry meat producers [Table 2.3]

- This group of farms is classified as poultry meat producers (Defra farm typology code 522):
 - In 2017/18 there were 44 of these farms, compared with 46 in 2016/17; among them were 15 broiler producers whose results are reported separately (Table 2.6)
 - This group also includes contract broiler producers where birds and feed are provided by the rearing company, who in turn pay a fee to the producer, but due to their very small sample size results are not reported separately here
- Although broiler production is the predominant system, a small number of producers of table chickens, turkeys, ducks and geese are also present in the sample, but their results have not been reported separately here due to very small sample size
- Total variable costs increased significantly to an average of £758,758 per business, 48% more than the previous year with the main cost, feed, increasing by 57% to an average of £681,674, compared to £433,572 in 2016/17
- On a per bird basis, the feed costs increased to an average of £5.85, from £4.16
- The average number of birds per business was up by just under 12%, to 116,548 birds
- A large increase in gross output meant that, despite higher costs, the gross margin rose by over 25%, and the FBI per business increased by 73% to an average of £119,896 despite a rise in fixed costs of over 15%
- FBI as measured on a per bird basis also showed a large increase compared to the previous year, up 55%, rising from an average of just £0.66 to an average of £1.03 per bird

2.4.6 Non-contract broiler production [Table 2.6]

- Producers in this group own the birds and incur all the costs associated with their production
- A production cycle of normally around 42 days enables seven crops a year to be reared, allowing a reasonable period between each new batch of birds to undertake maintenance and biosecurity measures
- The results recorded here on a per bird basis are on an individual 'bird-crop' basis
- The main cost to the farm business for this system is feed, which increased by 67% to an average of £2,083,634 per business
- On a per bird basis, the increase in the cost of feed was just 13%, increasing from an average of £0.88, to £1.00
- Throughput increased and the group experienced a rise in price for poultry meat leading to the much higher output
- Productivity was down slightly in 2017/18, decreasing from 7.0 crops of birds reared per year in 2016/17, to 6.9 crops

- The average price received for broilers in the year was £1.81 per bird, an increase of 14p on the previous year, while the price of chicks decreased from an average of 36p per bird, to an average of 34p
- FBI increased from an average of £148,377 per business in 2016/17, to an average of £236,540 in 2017/18

2.5 Balance sheet information [Table 2.7 to 2.9]

- Table 2.7 shows the assets, liabilities and net worth for the same group of farms included in the preceding commentary on financial results
- For specialist poultry farms as a whole, the percentage equity in the business decreased by 11% in 2017/18, to an average of just under 63%
- The laying flock systems saw their percentage of equity increase by 1% to an average of 65%, while the poultry meat producers saw percentage equity decline by 15% to an average of just under 61%.
- Table 2.8 compares the net worth and percentage equity with other Robust Farm Type classification used in England with an overall average net worth of £1,906,105 recorded per business, representing an overall average of a little over 89% equity in the business
- Those farms that are predominantly land based have the highest percentage equity due to lower liabilities (e.g. Lowland cattle & sheep at 93%), while those businesses with intensive livestock systems, requiring large capital investments and with a very low dependency on land have higher liabilities and, consequently, a smaller stake in the equity of their businesses (e.g. Poultry at 66%)

2.6. Gross margins for all poultry enterprises

- Tables 2.10 to 2.15 show the gross margin results from all farms in the survey with poultry enterprises, some of which will be in addition to the specialist poultry farms commented upon earlier in this report
- Hence the sample of farms on which gross margins have been calculated is larger, although the average flock size is smaller, as the poultry enterprises on these additional farms tend to be supplementary to the main farm enterprises

2.6.1 Gross margin for all laying flocks [Table 2.10 to 2.13]

- Average egg price was 97.6p/doz in 2017/18, compared with 93.3p/doz for the previous year
- The average number of birds per holding increased very slightly by just under 1% compared to 2016/17, from 13,253, to 13,376 in 2017/18
- On a per bird basis, poultry output was higher than the previous year at an average of £20 per bird, with a rise in both the egg price and egg production per bird
- Feed costs for all farms with poultry layers increased by 74p per bird, to £10.71
- Total variable costs increased by 9% on a per bird basis, resulting in an average gross margin of £8.14, up £0.65 on 2016/17
- The gross margin per doz eggs was 34p for all layers, an increase of 2p on the 2016/17 returns [Table 2.13]

- There was a difference in the changes to output in the last two years between different production systems; the enriched caged/mixed production systems increased by just under 2%, to an average of £18.62 per bird [+£0.35], while the free range egg producers increased by under 13%, to an average of £20.71 [+£2.36] per bird
- The average egg price was 9% higher for free range egg production than for intensive units, at 99.8p/doz compared to 91.4p/doz, and egg production for free range systems at an average of 300 eggs per year was around 4% more, compared with an average production of 287 eggs for the intensive units
- The average gross margin per doz eggs was 31.52p for intensive/mixed egg production systems and 35.29p for free range egg production
- Feed cost for the free range systems is about 11% higher per bird than for the intensive systems
- Despite this the gross margin per bird for free range egg production was higher than for the intensive systems; year-on-year, gross margin recorded an increase of £1.03 per bird for free range systems and a much smaller increase of £0.10 for enriched cage/mixed egg production systems
- The sample size of specialist poultry farms with enriched cage and mixed production systems in this year's report is small, and any inference of a general trend relating to enriched cage systems should therefore be treated with caution

2.6.2 Gross margin for broilers & table chicken production (non-contract) [Table 2.14]

- The average price received for broilers was £1.82 [+14p] per bird, with the purchase price of chicks averaging 34p [-2p]
- With 6.9 crops per year (a decrease of over 1% from 7.0 crops) an average gross margin of £2.57 per bird place was recorded on an annual basis, a reduction of £0.22 on the previous year

2.6.3 Turkey production [Table 2.15]

- Farms in this group are predominantly small scale Christmas turkey producers and are not representative of large scale turkey production, which accounts for the vast majority of English turkey production
- The average price received for turkeys in 2017/18 was £42.06 [-£0.74] per bird, while the average purchase price was £4.73 per bird [+£0.21]
- Overall, poultry output averaged £35.56 per bird [-£0.66] in 2017/18 and feed costs £7.99 per bird [+£0.90], resulting in a slightly poorer gross margin of £24.24 [-£0.17] per bird

Table 2.1 Financial results for all specialist poultry farms

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2016/17	2017/18	% change	2016/17	2017/18	£ change
Number of farms	95	101		95	101	
Average number of birds/year	79,121	91,763		79,121	91,763	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	138,409	147,426	7	1.75	1.61	-0.14
Hen depreciation	-21,287	-19,406	-9	-0.27	-0.21	0.06
Broilers	347,714	601,172	73	4.39	6.55	2.16
Other poultry output	165,315	186,465	13	2.09	2.03	-0.06
Total poultry output	630,151	915,658	45	7.96	9.98	2.01
Crops	46,158	30,172	-35	0.58	0.33	-0.25
Other livestock	17,624	18,335	4	0.22	0.20	-0.02
Other output	58,321	72,595	24	0.74	0.79	0.05
Total gross output	752,254	1,036,760	38	9.51	11.30	1.79
Variable costs						
Feed	340,639	520,367	53	4.31	5.67	1.37
Seed, fertiliser, crop costs	16,933	8,990	-47	0.21	0.10	-0.12
Vet. & medicines	15,934	20,022	26	0.20	0.22	0.02
Other livestock costs	42,822	53,113	24	0.54	0.58	0.04
Total variable costs	416,328	602,491	45	5.26	6.57	1.30
Total gross margin	335,926	434,269	29	4.25	4.73	0.49
Fixed costs						
Labour:						
Regular paid	51,000	63,647	25	0.64	0.69	0.05
Regular unpaid	25,436	27,383	8	0.32	0.30	-0.02
Casual labour	9,579	9,102	-5	0.12	0.10	-0.02
Power & machinery costs:						
Contract & hire	10,305	14,113	37	0.13	0.15	0.02
Fuel	5,900	9,308	58	0.07	0.10	0.03
Electricity	15,054	21,238	41	0.19	0.23	0.04
Heat	15,746	19,343	23	0.20	0.21	0.01
Repairs	15,561	20,972	35	0.20	0.23	0.03
Depreciation	32,433	32,320	0	0.41	0.35	-0.06
Rent (incl. imputed)	66,161	66,950	1	0.84	0.73	-0.11
Other costs:						
Occupiers repairs	15,939	22,160	39	0.20	0.24	0.04
Sundries (incl. bad debts)	27,439	42,647	55	0.35	0.46	0.12
Total fixed costs	290,552	349,184	20	3.67	3.81	0.13
Management & investment income	45,374	85,085	Δ£/farm 39,711	0.57	0.93	0.35
Minus: management salaries	38	72	34	0.00	0.00	0.00
Plus: farmer & spouse labour	21,521	23,182	1,661	0.27	0.25	-0.02
Net farm income	66,858	108,196	41,338	0.85	1.18	0.33
Farm business income	54,151	96,044	41,893	0.68	1.05	0.36

Per £100 of gross output

	2016/17	2017/18	£ change	Farm Business Income (FBI) per farm	
				(% distribution by number of weighted farms)	
				%	%
				2016/17	2017/18
Number of farms	95	101			
Average number (birds/year)	79,121	91,763			
Average £ per £100 of gross output					
Gross output (%)				Over £100,000	20
Eggs (%)	18.40	14.22		0 to <£100,000	49
Hen depreciation (%)	-2.83	-1.87		Less than 0	31
Broilers (%)	46.22	57.99		Total	100
Other poultry output (%)	21.98	17.99			100
Total poultry output (%)	83.77	88.32			
Crops (%)	6.14	2.91			
Other livestock (%)	2.34	1.77			
Other output (%)	7.75	7.00			
Total gross output (%)	100.00	100.00			
Variable costs					
Feed	45.28	50.19	4.91		
Seed, fertiliser, crop costs	2.25	0.87	-1.38		
Vet. & medicines	2.12	1.93	-0.19		
Other livestock costs	5.69	5.12	-0.57		
Total variable costs	55.34	58.11	2.77		
Total gross margin	44.66	41.89	-2.77		
Fixed costs				Average Poultry Numbers	
Labour:				Average	Average
Regular paid	6.78	6.14	-0.64	2016/17	2017/18
Regular unpaid	3.38	2.64	-0.74		
Casual labour	1.27	0.88	-0.40	Hens in lay	7,665
Power & machinery costs:				Pullets	10,647
Contract & hire	1.37	1.36	-0.01	Broilers & other poultry	60,809
Fuel	0.78	0.90	0.11	Total Average	79,121
Electricity	2.00	2.05	0.05		91,763
Heat	2.09	1.87	-0.23		
Repairs	2.07	2.02	-0.05		
Depreciation	4.31	3.12	-1.19		
Rent (incl. imputed)	8.80	6.46	-2.34		
Other costs:					
Occupiers repairs	2.12	2.14	0.02		
Sundries (incl. bad debts)	3.65	4.11	0.47		
Total fixed costs	38.62	33.68	-4.94		
Management & investment income	6.03	8.21	2.18		
Minus: management salaries	0.01	0.01	0.00	Other efficiency factors	
Plus: farmer & spouse labour	2.86	2.24	-0.62	Average	Average
Net farm income	8.89	10.44	1.55	2016/17	2017/18
Farm business income	7.20	9.26	2.07	Eggs per bird	246
				Eggs (p/doz.)	88.29
					258
					94.35

Table 2.2 Financial results for all laying flocks

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2016/17	2017/18	% change	2016/17	2017/18	£ change
Number of farms	48	56		48	56	
Average number of birds/year	46,330	56,762		46,330	56,762	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	345,440	413,757	20	7.46	7.29	-0.17
Hen depreciation	-52,996	-54,680	3	-1.14	-0.96	0.18
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	229,751	321,499	40	4.96	5.66	0.70
Total poultry output	522,195	680,577	30	11.27	11.99	0.72
Crops	8,927	10,857	22	0.19	0.19	0.00
Other livestock	2,861	3,951	38	0.06	0.07	0.01
Other output	22,069	36,813	67	0.48	0.65	0.17
Total gross output	556,051	732,198	32	12.00	12.90	0.90
Variable costs						
Feed	220,461	281,368	28	4.76	4.96	0.20
Seed, fertiliser, crop costs	3,567	4,597	29	0.08	0.08	0.00
Vet. & medicines	24,702	31,438	27	0.53	0.55	0.02
Other livestock costs	45,764	61,488	34	0.99	1.08	0.10
Total variable costs	294,495	378,891	29	6.36	6.68	0.32
Total gross margin	261,557	353,307	35	5.65	6.22	0.58
Fixed costs						
Labour:						
Regular paid	64,696	87,215	35	1.40	1.54	0.14
Regular unpaid	25,319	32,063	27	0.55	0.56	0.02
Casual labour	11,887	13,826	16	0.26	0.24	-0.01
Power & machinery costs:						
Contract & hire	5,935	7,587	28	0.13	0.13	0.01
Fuel	4,652	5,798	25	0.10	0.10	0.00
Electricity	11,084	19,256	74	0.24	0.34	0.10
Heat	6,245	6,122	-2	0.13	0.11	-0.03
Repairs	7,157	8,175	14	0.15	0.14	-0.01
Depreciation	18,855	19,181	2	0.41	0.34	-0.07
Rent (incl. imputed)	44,196	52,214	18	0.95	0.92	-0.03
Other costs:						
Occupiers repairs	14,101	28,667	103	0.30	0.51	0.20
Sundries (incl. bad debts)	25,279	33,420	32	0.55	0.59	0.04
Total fixed costs	239,408	313,523	31	5.17	5.52	0.36
Management & investment income	22,149	39,783	<u>Δ£/farm</u> 17,635	0.48	0.70	0.22
Minus: management salaries	19	19	-1	0.00	0.00	0.00
Plus: farmer & spouse labour	21,371	27,873	6,501	0.46	0.49	0.03
Net farm income	43,501	67,638	24,137	0.94	1.19	0.25
Farm business income	32,459	53,202	20,743	0.70	0.94	0.24

Per £100 of gross output

	2016/17	2017/18	£ change
Number of farms	48	56	
Average number (birds/year)	46,330	56,762	

Average £ per £100 of gross output

Gross output (%)

Eggs (%)	62.12	56.51	
Hen depreciation (%)	-9.53	-7.47	
Broilers (%)	0.00	0.00	
Other poultry output (%)	41.32	43.91	

Total poultry output (%) 93.91 92.95

Crops (%)	1.61	1.48	
Other livestock (%)	0.51	0.54	
Other output (%)	3.97	5.03	

Total gross output (%) 100.00 100.00

Variable costs

Feed	39.65	38.43	-1.22
Seed, fertiliser, crop costs	0.64	0.63	-0.01
Vet. & medicines	4.44	4.29	-0.15
Other livestock costs	8.23	8.40	0.17

Total variable costs 52.96 51.75 -1.21

Total gross margin 47.04 48.25 1.21

Fixed costs

Labour:			
Regular paid	11.63	11.91	0.28
Regular unpaid	4.55	4.38	-0.17
Casual labour	2.14	1.89	-0.25
Power & machinery costs:			
Contract & hire	1.07	1.04	-0.03
Fuel	0.84	0.79	-0.04
Electricity	1.99	2.63	0.64
Heat	1.12	0.84	-0.29
Repairs	1.29	1.12	-0.17
Depreciation	3.39	2.62	-0.77
Rent (incl. imputed)	7.95	7.13	-0.82
Other costs:			
Occupiers repairs	2.54	3.92	1.38
Sundries (incl. bad debts)	4.55	4.56	0.02

Total fixed costs 43.06 42.82 -0.24

Management & investment income 3.98 5.43 1.45

Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	3.84	3.81	-0.04

Net farm income 7.82 9.24 1.41

Farm business income 5.84 7.27 1.43

Average Poultry Numbers

	Average 2016/17	Average 2017/18
Hens in lay	19,289	20,778
Pullets	27,042	35,984
Broilers & other poultry	0	0
Total Average	46,330	56,762

Other efficiency factors

	Average 2016/17	Average 2017/18
Eggs per bird	245	257
Eggs (p/doz.)	87.59	92.48

Table 2.3 Financial results for all poultry meat producers

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2016/17	2017/18	% change	2016/17	2017/18	£ change
Number of farms	46	44		46	44	
Average number of birds/year	104,239	116,548		104,239	116,548	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	0	0	0	0.00	0.00	0.00
Hen depreciation	0	0	0	0.00	0.00	0.00
Broilers	596,191	970,670	63	5.72	8.33	2.61
Other poultry output	127,517	121,377	-5	1.22	1.04	-0.18
Total poultry output	723,708	1,092,046	51	6.94	9.37	2.43
Crops	72,392	41,869	-42	0.69	0.36	-0.34
Other livestock	28,287	27,422	-3	0.27	0.24	-0.04
Other output	83,413	93,373	12	0.80	0.80	0.00
Total gross output	907,800	1,254,711	38	8.71	10.77	2.06
Variable costs						
Feed	433,572	681,674	57	4.16	5.85	1.69
Seed, fertiliser, crop costs	26,272	11,849	-55	0.25	0.10	-0.15
Vet. & medicines	10,606	14,923	41	0.10	0.13	0.03
Other livestock costs	41,821	50,313	20	0.40	0.43	0.03
Total variable costs	512,272	758,758	48	4.91	6.51	1.60
Total gross margin	395,528	495,952	25	3.79	4.26	0.46
Fixed costs						
Labour:						
Regular paid	43,772	54,264	24	0.42	0.47	0.05
Regular unpaid	25,708	25,194	-2	0.25	0.22	-0.03
Casual labour	7,816	6,765	-13	0.07	0.06	-0.02
Power & machinery costs:						
Contract & hire	13,444	18,339	36	0.13	0.16	0.03
Fuel	6,921	11,432	65	0.07	0.10	0.03
Electricity	18,297	23,596	29	0.18	0.20	0.03
Heat	22,758	27,794	22	0.22	0.24	0.02
Repairs	21,638	29,055	34	0.21	0.25	0.04
Depreciation	42,624	41,087	-4	0.41	0.35	-0.06
Rent (incl. imputed)	83,011	78,085	-6	0.80	0.67	-0.13
Other costs:						
Occupiers repairs	17,612	19,090	8	0.17	0.16	-0.01
Sundries (incl. bad debts)	29,488	49,565	68	0.28	0.43	0.14
Total fixed costs	333,089	384,266	15	3.20	3.30	0.10
Management & investment income	62,439	111,686	<u>Δ£/farm</u> 49,247	0.60	0.96	0.36
Minus: management salaries	52	106	54	0.00	0.00	0.00
Plus: farmer & spouse labour	21,661	20,727	-934	0.21	0.18	-0.03
Net farm income	84,048	132,307	48,259	0.81	1.14	0.33
Farm business income	69,216	119,896	50,679	0.66	1.03	0.36

Per £100 of gross output

	2016/17	2017/18	£ change
Number of farms	46	44	
Average number (birds/year)	104,239	116,548	

Average £ per £100 of gross output

Gross output (%)			
Eggs (%)	0.00	0.00	
Hen depreciation (%)	0.00	0.00	
Broilers (%)	65.67	77.36	
Other poultry output (%)	14.05	9.67	
Total poultry output (%)	79.72	87.04	
Crops (%)	7.97	3.34	
Other livestock (%)	3.12	2.19	
Other output (%)	9.19	7.44	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	47.76	54.33	6.57
Seed, fertiliser, crop costs	2.89	0.94	-1.95
Vet. & medicines	1.17	1.19	0.02
Other livestock costs	4.61	4.01	-0.60
Total variable costs	56.43	60.47	4.04
Total gross margin	43.57	39.53	-4.04
Fixed costs			
Labour:			
Regular paid	4.82	4.32	-0.50
Regular unpaid	2.83	2.01	-0.82
Casual labour	0.86	0.54	-0.32
Power & machinery costs:			
Contract & hire	1.48	1.46	-0.02
Fuel	0.76	0.91	0.15
Electricity	2.02	1.88	-0.13
Heat	2.51	2.22	-0.29
Repairs	2.38	2.32	-0.07
Depreciation	4.70	3.27	-1.42
Rent (incl. imputed)	9.14	6.22	-2.92
Other costs:			
Occupiers repairs	1.94	1.52	-0.42
Sundries (incl. bad debts)	3.25	3.95	0.70
Total fixed costs	36.69	30.63	-6.07
Management & investment income	6.88	8.90	2.02
Minus: management salaries	0.01	0.01	0.00
Plus: farmer & spouse labour	2.39	1.65	-0.73
Net farm income	9.26	10.54	1.29
Farm business income	7.62	9.56	1.93

Average Poultry Numbers

	Average 2016/17	Average 2017/18
Hens in lay	0	0
Pullets	0	0
Broilers & other poultry	104,239	116,548
Total Average	104,239	116,548

Table 2.4 Financial results for laying flocks producing eggs for human consumption

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2016/17	2017/18	% change	2016/17	2017/18	£ change
Number of farms	35	41		35	41	
Average number of birds/year	17,549	19,032		17,549	19,032	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	375,699	440,417	17	21.41	23.14	1.73
Hen depreciation	-61,544	-67,283	9	-3.51	-3.54	-0.03
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	2,012	2,597	29	0.11	0.14	0.02
Total poultry output	316,167	375,731	19	18.02	19.74	1.73
Crops	10,949	14,069	28	0.62	0.74	0.12
Other livestock	3,868	5,118	32	0.22	0.27	0.05
Other output	17,423	22,401	29	0.99	1.18	0.18
Total gross output	348,407	417,320	20	19.85	21.93	2.07
Variable costs						
Feed	173,648	204,321	18	9.90	10.74	0.84
Seed, fertiliser, crop costs	4,727	6,222	32	0.27	0.33	0.06
Vet. & medicines	3,401	3,890	14	0.19	0.20	0.01
Other livestock costs	12,807	15,139	18	0.73	0.80	0.07
Total variable costs	194,583	229,573	18	11.09	12.06	0.97
Total gross margin	153,825	187,747	22	8.77	9.86	1.10
Fixed costs						
Labour:						
Regular paid	23,097	27,504	19	1.32	1.45	0.13
Regular unpaid	27,576	27,832	1	1.57	1.46	-0.11
Casual labour	5,014	3,236	-35	0.29	0.17	-0.12
Power & machinery costs:						
Contract & hire	4,795	5,974	25	0.27	0.31	0.04
Fuel	2,976	3,465	16	0.17	0.18	0.01
Electricity	6,062	7,863	30	0.35	0.41	0.07
Heat	377	505	34	0.02	0.03	0.01
Repairs	5,603	5,702	2	0.32	0.30	-0.02
Depreciation	13,674	14,223	4	0.78	0.75	-0.03
Rent (incl. imputed)	31,377	39,839	27	1.79	2.09	0.31
Other costs:						
Occupiers repairs	6,462	7,078	10	0.37	0.37	0.00
Sundries (incl. bad debts)	16,545	17,743	7	0.94	0.93	-0.01
Total fixed costs	143,559	160,966	12	8.18	8.46	0.28
Management & investment income	10,265	26,781	<u>Δ£/farm</u> 16,516	0.58	1.41	0.82
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	22,872	23,039	168	1.30	1.21	-0.09
Net farm income	33,137	49,821	16,683	1.89	2.62	0.73
Farm business income	28,359	42,944	14,586	1.62	2.26	0.64

Per £100 of gross output

	2016/17	2017/18	£ change
Number of farms	35	41	
Average number (birds/year)	17,549	19,032	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	109.07	103.96	
Hen depreciation (%)	-18.23	-13.97	
Broilers (%)	0.00	0.00	
Other poultry output (%)	1.78	1.74	
Total poultry output (%)	92.62	91.73	
Crops (%)	2.88	2.62	
Other livestock (%)	1.15	0.81	
Other output (%)	3.36	4.83	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	49.84	48.96	-0.88
Seed, fertiliser, crop costs	1.36	1.49	0.13
Vet. & medicines	0.98	0.93	-0.04
Other livestock costs	3.68	3.63	-0.05
Total variable costs	55.85	55.01	-0.84
Total gross margin	44.15	44.99	0.84
Fixed costs			
Labour:			
Regular paid	6.63	6.59	-0.04
Regular unpaid	7.91	6.67	-1.25
Casual labour	1.44	0.78	-0.66
Power & machinery costs:			
Contract & hire	1.38	1.43	0.06
Fuel	0.85	0.83	-0.02
Electricity	1.74	1.88	0.14
Heat	0.11	0.12	0.01
Repairs	1.61	1.37	-0.24
Depreciation	3.92	3.41	-0.52
Rent (incl. imputed)	9.01	9.55	0.54
Other costs:			
Occupiers repairs	1.85	1.70	-0.16
Sundries (incl. bad debts)	4.75	4.25	-0.50
Total fixed costs	41.20	38.57	-2.63
Management & investment income	2.95	6.42	3.47
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	6.56	5.52	-1.04
Net farm income	9.51	11.94	2.43
Farm business income	8.14	10.29	2.15

Pence per dozen eggs

	2016/17	2017/18
Gross output		
Eggs	90.60	94.57
Other poultry output	-14.36	-13.89
Other output	7.77	8.93
Total gross output	84.01	89.61
Variable costs		
Feed	41.87	43.87
Other variable costs	5.05	5.42
Total variable costs	46.92	49.29
Total gross margin	37.09	40.31
Total fixed costs	34.62	34.56
Management & investment income	2.48	5.75
Net farm income	7.99	10.70
Farm business income	6.84	9.22

Average Poultry Numbers

	Average 2016/17	Average 2017/18
Hens in lay	17,224	18,762
Pullets	325	270
Broilers & other poultry	0	0
Total Average	17,549	19,032

Other efficiency factors

	Average 0	Average 0
Eggs per bird	289	298
Eggs (p/doz.)	90.63	94.56

Table 2.5 Financial results for laying flocks with free range hens

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2016/17	2017/18	% change	2016/17	2017/18	£ change
Number of farms	29	34		29	34	
Average number of birds/year	14,756	16,399		14,756	16,399	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	325,571	389,806	20	22.06	23.77	1.71
Hen depreciation	-53,006	-61,505	16	-3.59	-3.75	-0.16
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	682	1,142	67	0.05	0.07	0.02
Total poultry output	273,247	329,443	21	18.52	20.09	1.57
Crops	9,754	13,165	35	0.66	0.80	0.14
Other livestock	3,331	4,938	48	0.23	0.30	0.08
Other output	16,610	20,291	22	1.13	1.24	0.11
Total gross output	302,943	367,837	21	20.53	22.43	1.90
Variable costs						
Feed	150,309	182,000	21	10.19	11.10	0.91
Seed, fertiliser, crop costs	4,183	5,578	33	0.28	0.34	0.06
Vet. & medicines	3,398	3,872	14	0.23	0.24	0.01
Other livestock costs	7,179	8,910	24	0.49	0.54	0.06
Total variable costs	165,069	200,359	21	11.19	12.22	1.03
Total gross margin	137,874	167,478	21	9.34	10.21	0.87
Fixed costs						
Labour:						
Regular paid	18,694	20,891	12	1.27	1.27	0.01
Regular unpaid	26,308	26,517	1	1.78	1.62	-0.17
Casual labour	2,979	3,182	7	0.20	0.19	-0.01
Power & machinery costs:						
Contract & hire	5,052	6,372	26	0.34	0.39	0.05
Fuel	2,150	2,489	16	0.15	0.15	0.01
Electricity	5,119	7,306	43	0.35	0.45	0.10
Heat	272	350	28	0.02	0.02	0.00
Repairs	4,097	4,407	8	0.28	0.27	-0.01
Depreciation	10,669	11,831	11	0.72	0.72	0.00
Rent (incl. imputed)	28,375	38,517	36	1.92	2.35	0.43
Other costs:						
Occupiers repairs	6,508	6,633	2	0.44	0.40	-0.04
Sundries (incl. bad debts)	14,904	16,159	8	1.01	0.99	-0.02
Total fixed costs	125,127	144,654	16	8.48	8.82	0.34
Management & investment income	12,747	22,824	<u>Δ£/farm</u> 10,077	0.86	1.39	0.53
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	22,798	22,948	151	1.54	1.40	-0.15
Net farm income	35,545	45,772	10,228	2.41	2.79	0.38
Farm business income	29,651	37,047	7,396	2.01	2.26	0.25

Per £100 of gross output

	2016/17	2017/18	£ change
Number of farms	29	34	
Average number (birds/year)	14,756	16,399	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	107.47	105.97	
Hen depreciation (%)	-17.50	-16.72	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.23	0.31	
Total poultry output (%)	90.20	89.56	
Crops (%)	3.22	3.58	
Other livestock (%)	1.10	1.34	
Other output (%)	5.48	5.52	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	49.62	49.48	-0.14
Seed, fertiliser, crop costs	1.38	1.52	0.14
Vet. & medicines	1.12	1.05	-0.07
Other livestock costs	2.37	2.42	0.05
Total variable costs	54.49	54.47	-0.02
Total gross margin	45.51	45.53	0.02
Fixed costs			
Labour:			
Regular paid	6.17	5.68	-0.49
Regular unpaid	8.68	7.21	-1.48
Casual labour	0.98	0.87	-0.12
Power & machinery costs:			
Contract & hire	1.67	1.73	0.06
Fuel	0.71	0.68	-0.03
Electricity	1.69	1.99	0.30
Heat	0.09	0.10	0.01
Repairs	1.35	1.20	-0.15
Depreciation	3.52	3.22	-0.31
Rent (incl. imputed)	9.37	10.47	1.10
Other costs:			
Occupiers repairs	2.15	1.80	-0.35
Sundries (incl. bad debts)	4.92	4.39	-0.53
Total fixed costs	41.30	39.33	-1.98
Management & investment income	4.21	6.20	2.00
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	7.53	6.24	-1.29
Net farm income	11.73	12.44	0.71
Farm business income	9.79	10.07	0.28

Pence per dozen eggs

	2016/17	2017/18
Gross output		
Eggs	94.01	97.52
Other poultry output	-15.11	-15.10
Other output	8.58	9.61
Total gross output	87.48	92.03
Variable costs		
Feed	43.40	45.53
Other variable costs	4.26	4.59
Total variable costs	47.67	50.13
Total gross margin	39.81	41.90
Total fixed costs	36.13	36.19
Management & investment income	3.68	5.71
Net farm income	10.26	11.45
Farm business income	8.56	9.27

Average Poultry Numbers

	Average 2016/17	Average 2017/18
Hens in lay	14,557	16,274
Pullets	199	125
Broilers & other poultry	0	0
Total Average	14,756	16,399

Other efficiency factors

	Average 0	Average 0
Eggs per bird	285	295
Eggs (p/doz.)	94.05	97.53

Table 2.6 Financial results for non-contract broilers

	<i>Per farm</i>			<i>Per bird (per crop)</i>		
	2016/17	2017/18	% change	2016/17	2017/18	£ change
Number of farms	15	15		15	15	
Average number of birds/year	204,226	301,109		204,226	301,109	
Throughput of birds/year	1,425,971	2,082,110		1,425,971	2,082,110	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	0	0	0	0.00	0.00	0.00
Hen depreciation	0	0	0	0.00	0.00	0.00
Broilers	1,810,854	2,949,179	63	1.27	1.42	0.15
Other poultry output	8,342	18,403	121	0.01	0.01	0.00
Total poultry output	1,819,196	2,967,582	63	1.28	1.43	0.15
Crops	42,103	50,855	21	0.03	0.02	-0.01
Other livestock	9,435	17,752	88	0.01	0.01	0.00
Other output	93,306	159,884	71	0.07	0.08	0.01
Total gross output	1,964,040	3,196,073	63	1.38	1.54	0.16
Variable costs						
Feed	1,248,285	2,083,634	67	0.88	1.00	0.13
Seed, fertiliser, crop costs	20,593	12,576	-39	0.01	0.01	-0.01
Vet. & medicines	23,674	39,522	67	0.02	0.02	0.00
Other livestock costs	75,525	104,706	39	0.05	0.05	0.00
Total variable costs	1,368,077	2,240,438	64	0.96	1.08	0.12
Total gross margin	595,963	955,635	60	0.42	0.46	0.04
Fixed costs						
Labour:						
Regular paid	54,537	91,074	67	0.04	0.04	0.01
Regular unpaid	27,768	26,037	-6	0.02	0.01	-0.01
Casual labour	7,512	8,183	9	0.01	0.00	0.00
Power & machinery costs:						
Contract & hire	12,626	41,959	232	0.01	0.02	0.01
Fuel	7,203	22,453	212	0.01	0.01	0.01
Electricity	39,982	59,704	49	0.03	0.03	0.00
Heat	49,356	69,205	40	0.03	0.03	0.00
Repairs	38,302	61,235	60	0.03	0.03	0.00
Depreciation	43,063	53,806	25	0.03	0.03	0.00
Rent (incl. imputed)	113,388	140,545	24	0.08	0.07	-0.01
Other costs:						
Occupiers repairs	16,881	30,825	83	0.01	0.01	0.00
Sundries (incl. bad debts)	45,351	97,521	115	0.03	0.05	0.02
Total fixed costs	455,970	702,547	54	0.32	0.34	0.02
Management & investment income	139,993	253,088	Δ£/farm 113,095	0.10	0.12	0.02
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	20,703	21,067	364	0.01	0.01	0.00
Net farm income	160,697	274,155	113,458	0.11	0.13	0.02
Farm business income	148,377	236,540	88,163	0.10	0.11	0.01

Per £100 of gross output

	2016/17	2017/18	£ change	Other efficiency factors	
Number of farms	15	15			
Average number (birds/year)	204,226	301,109		Average	Average
				0	0
	Average £ per £100 of gross output				
Gross output (%)				Broiler sale price (£/bird)	1.67 1.81
Eggs (%)	0.00	0.00			
Hen depreciation (%)	0.00	0.00		Broiler purchase price (£/bird)	0.36 0.34
Broilers (%)	92.20	92.28			
Other poultry output (%)	0.42	0.58		Average number of crops/year	7.0 6.9
Total poultry output (%)	92.63	92.85			
Crops (%)	2.14	1.59			
Other livestock (%)	0.48	0.56			
Other output (%)	4.75	5.00			
Total gross output (%)	100.00	100.00			
Variable costs					
Feed	63.56	65.19	1.64		
Seed, fertiliser, crop costs	1.05	0.39	-0.66		
Vet. & medicines	1.21	1.24	0.03		
Other livestock costs	3.85	3.28	-0.57		
Total variable costs	69.66	70.10	0.44		
Total gross margin	30.34	29.90	-0.44		
Fixed costs					
Labour:					
Regular paid	2.78	2.85	0.07		
Regular unpaid	1.41	0.81	-0.60		
Casual labour	0.38	0.26	-0.13		
Power & machinery costs:					
Contract & hire	0.64	1.31	0.67		
Fuel	0.37	0.70	0.34		
Electricity	2.04	1.87	-0.17		
Heat	2.51	2.17	-0.35		
Repairs	1.95	1.92	-0.03		
Depreciation	2.19	1.68	-0.51		
Rent (incl. imputed)	5.77	4.40	-1.38		
Other costs:					
Occupiers repairs	0.86	0.96	0.10		
Sundries (incl. bad debts)	2.31	3.05	0.74		
Total fixed costs	23.22	21.98	-1.23		
Management & investment income	7.13	7.92	0.79		
Minus: management salaries	0.00	0.00	0.00		
Plus: farmer & spouse labour	1.05	0.66	-0.39		
Net farm income	8.18	8.58	0.40		
Farm business income	7.55	7.40	-0.15		

Table 2.7 Balance sheet data for 2017/18 - specialist poultry farms

Group	All specialist poultry farms		All laying flocks		All poultry meat producers	
	101		56		44	
Financial year	2017/18		2017/18		2017/18	
	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed assets						
Land, buildings & BPS	1,217,799	1,465,717	992,659	1,051,645	1,331,557	1,700,363
Breeding livestock	9,052	9,479	2,969	3,358	12,976	13,450
Machinery	210,453	192,334	127,350	114,537	267,007	244,380
Miscellaneous business assets	802	802	1,234	1,234	613	613
Total fixed assets	1,438,106	1,668,332	1,124,211	1,170,773	1,612,152	1,958,806
Current assets						
Crops & trading livestock	78,536	80,750	97,460	105,301	71,941	71,549
Feedstuffs & goods in store	16,032	22,751	9,167	10,391	20,822	30,993
Liquid assets	203,195	161,364	94,876	83,447	272,276	208,709
Total current assets	297,763	264,865	201,503	199,139	365,038	311,251
Total assets	1,735,869	1,933,197	1,325,714	1,369,912	1,977,191	2,270,057
Liabilities						
Bank term loans	217,217	430,630	226,440	254,379	225,523	554,669
Other loans	93,269	96,478	118,070	128,202	81,523	81,606
Bank overdraft	50,818	45,120	57,895	72,399	49,071	31,670
Other short term loans	150,914	147,271	80,744	31,470	198,847	220,277
Total external liabilities	512,218	719,498	483,150	486,450	554,965	888,222
Net worth	1,223,652	1,213,699	842,564	883,462	1,422,226	1,381,835
Percentage equity (%)	70.5%	62.8%	63.6%	64.5%	71.9%	60.9%

Table 2.8 Comparison of net worth and percentage equity by farm type for 2017/18

Defra main farm type	Average Assets	Average Liabilities	Average Net Worth	Average % Equity
Lowland cattle & sheep	1,309,760	92,247	1,217,513	93.0%
Cereals	3,007,058	238,362	2,768,696	92.1%
General cropping	3,709,030	386,895	3,322,135	89.6%
Mixed	2,334,839	247,221	2,087,618	89.4%
Horticulture	895,781	142,877	752,905	84.1%
Dairy	2,262,838	422,731	1,840,108	81.3%
Pigs	1,233,756	284,274	949,482	77.0%
Poultry	1,834,533	615,858	1,218,675	66.4%
All businesses	2,138,694	232,589	1,906,105	89.1%

Table 2.7 continued

Group	<i>Broilers, non contract</i>	
	2017/18	
Number of farms	15	
Financial year	Opening	Closing
Assets		
Fixed assets		
Land, buildings & BPS	1,740,230	2,866,882
Breeding livestock	1,274	1,175
Machinery	360,510	318,512
Miscellaneous business assets	231	231
Total fixed assets	2,102,245	3,186,800
Current assets		
Crops & trading livestock	149,538	154,131
Feedstuffs & goods in store	50,318	76,885
Liquid assets	700,441	451,801
Total current assets	900,297	682,817
Total assets	3,002,542	3,869,616
Liabilities		
Bank term loans	252,109	1,270,551
Other loans	210,060	213,269
Bank overdraft	97,586	55,386
Other short term loans	522,428	583,556
Total external liabilities	1,082,183	2,122,762
Net worth	1,920,359	1,746,854
Percentage equity (%)	64.0%	45.1%

Table 2.9 Distribution of tenant's type capital (%)

	Specialist poultry	Laying flocks, cage, barn & deep litter	All Poultry meat producers	Broilers, non contract
Crops & livestock	18.0	32.1	14.0	13.5
Stores	3.9	3.0	4.3	5.6
Machinery	40.9	37.1	42.1	30.0
Other	37.2	27.8	39.7	50.9
Total	100.0	100.0	100.0	100.0
Tenant's type capital (£)	492,775	325,662	607,664	1,132,523

Table 2.10 Gross margin for all laying flocks

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2016/17	2017/18	£ change	2016/17	2017/18	£ change
Number of farms	49	53				
Average number of birds/year	13,253	13,376				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	21.83	23.35	1.52			
Hen depreciation	-3.50	-3.21	0.30			
Other poultry output	0.00	-0.16	-0.16			
Total output	18.33	19.98	1.65	100.00	100.00	
Variable costs						
Feed	9.97	10.71	0.74	54.42	53.62	-0.80
Vet. & medicines	0.20	0.19	0.00	1.07	0.96	-0.11
Other livestock costs	0.67	0.91	0.24	3.65	4.57	0.92
Other variable costs	0.00	0.02	0.02	0.02	0.11	0.09
Total variable costs	10.84	11.84	0.09	59.17	59.27	0.10
Total gross margin	7.48	8.14	0.65	40.83	40.73	-0.10

Table 2.11 Gross margin for laying flocks with mixed production systems including enriched cage, barn and deep litter hens

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2016/17*	2017/18*	£ change	2016/17*	2017/18*	£ change
Number of farms	11	10				
Average number of birds/year	17,101	16,962				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	21.72	21.34	-0.38			
Hen depreciation	-3.36	-2.67	0.69			
Other poultry output	-0.08	-0.05	0.03			
Total output	18.27	18.62	0.35	100.00	100.00	
Variable costs						
Feed	9.62	9.59	-0.04	52.66	51.48	-1.18
Vet. & medicines	0.07	0.10	0.02	0.40	0.52	0.12
Other livestock costs	1.33	1.59	0.26	7.28	8.54	1.26
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00
Total variable costs	11.03	11.27	0.25	60.34	60.53	0.19
Total gross margin	7.25	7.35	0.10	39.66	39.47	-0.19

* Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Table 2.12 Gross margin for laying flocks with free range hens

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2016/17	2017/18	£ change	2016/17	2017/18	£ change
Number of farms	38	42				
Average number of birds/year	12,139	11,622				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	21.88	24.35	2.47			
Hen depreciation	-3.56	-3.69	-0.13			
Other poultry output	0.03	0.05	0.02			
Total output	18.35	20.71	2.36	100.00	100.00	
Variable costs						
Feed	10.12	11.18	1.06	55.14	53.97	-1.17
Vet. & medicines	0.25	0.21	-0.04	1.34	1.02	-0.33
Other livestock costs	0.40	0.68	0.28	2.17	3.27	1.10
Other variable costs	0.01	0.03	0.03	0.03	0.15	0.12
Total variable costs	10.77	12.09	1.32	58.69	58.41	-0.28
Total gross margin	7.58	8.61	1.03	41.31	41.59	0.28

Table 2.13 Gross margin per dozen eggs for all laying flocks (annual basis)

	Layers		Laying flocks, cage barn & deep litter		Free range layers	
	2016/17	2017/18	2016/17*	2017/18*	2016/17	2017/18
Number of farms	49	53	11	10	38	42
No of dozen eggs	309,915	320,108	412,228	395,538	280,308	283,606
Average egg yield/bird	288	294	299	287	283	300
Average egg price p/doz	93.34	97.55	90.20	91.38	94.67	99.77
	<i>Average pence per dozen (annual basis)</i>					
Gross output						
Eggs	93.35	97.56	90.10	91.50	94.74	99.77
Hen depreciation	-14.97	-13.40	-13.96	-11.45	-15.40	-15.13
Other poultry output	-0.01	-0.68	-0.34	-0.20	0.13	0.21
Total output	78.38	83.48	75.80	79.85	79.47	84.85
Variable costs						
Feed	42.66	44.77	39.92	41.11	43.82	45.80
Vet. & medicines	0.84	0.80	0.30	0.41	1.07	0.86
Other livestock costs	2.86	3.81	5.52	6.82	1.72	2.78
Other variable costs	0.02	0.09	0.00	0.00	0.03	0.13
Total variable costs	46.37	49.48	45.74	48.34	46.64	49.56
Total gross margin	32.00	34.01	30.06	31.52	32.83	35.29

* Data is derived from a modest sample size and thus there is a lower degree of confidence in the figures

Table 2.14 Gross margin for non-contract broilers and table chicken

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2016/17	2017/18	£ change	2016/17	2017/18	£ change
Number of farms	22	25				
Average number of birds/year	112,040	158,515				
Throughput of birds/year	781,971	1,090,885				
Average number of crops/year	6.98	6.88				
Average sale price (broilers) - £/bird	1.68	1.82				
Average purchase price (broilers) - £/bird	0.36	0.34				
	<i>Average £ per bird (per flock)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Broilers	1.29	1.45	0.16			
Total output	1.29	1.45	0.16	100.00	100.00	
Variable costs						
Feed	0.88	1.01	0.13	68.33	69.37	1.04
Vet. & medicines	0.02	0.02	0.00	1.26	1.28	0.02
Other livestock costs	0.05	0.05	0.00	4.13	3.59	-0.55
Other variable costs	0.00	0.00	0.00	0.09	0.00	-0.09
Total variable costs	0.95	1.08	0.13	73.82	74.24	0.42
Total gross margin	0.34	0.37	0.04	26.18	25.76	-0.42

Table 2.15 Gross margin for turkey production

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2016/17	2017/18	£ change	2016/17	2017/18	£ change
Number of farms	23	20				
Average number of birds/year	755	842				
Throughput of birds/year	1,793	1,970				
Average sale price (turkeys) - £/bird	42.80	42.06				
Average purchase price (turkeys) - £/bird	4.52	4.73				
	<i>Average £ per bird</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	36.22	35.56	-0.66			
Total output	36.22	35.56	-0.66	100.00	100.00	
Variable costs						
Feed	7.09	7.99	0.90	19.58	22.48	2.90
Vet. & medicines	0.08	0.05	-0.03	0.22	0.13	-0.09
Other livestock costs	4.63	3.23	-1.40	12.78	9.10	-3.69
Other variable costs	0.01	0.04	0.04	0.02	0.12	0.10
Total variable costs	11.81	11.32	-0.49	32.60	31.83	-0.77
Total gross margin	24.41	24.24	-0.17	67.40	68.17	0.77

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Glossary

Farm Business Income (FBI)

Represents the return to all unpaid labour (farmers, spouses and others with an entrepreneurial interest in the farm business) and to all their capital invested in the farm business including land and farm buildings. It is defined as Total Farm Output (TFO) minus cost (C): where TFO is defined as the sum of output from: crop enterprises, adjustment for disposal of previous crops, livestock enterprises, separable non-agricultural diversifications, basic payment scheme, agri-environmental payments, other grants and subsidies, miscellaneous receipts; C is defined as variable costs plus fixed costs.

Fixed costs

These include rent (or imputed rent), regular wages, unpaid manual labour, casual labour, power and machinery costs, glasshouse depreciation, glasshouse fuel, building and general repairs, insurance, water, office expenses and miscellaneous expenditure.

Gross output

Total revenue adjusted for changes in valuation of livestock and stores, less purchases of livestock, or produce for resale.

Labour

Covers not only the costs of hired labour, but also an appropriate allowance for the unpaid manual labour of the producer and members of the family.

Management and investment income (MII)

Total gross output less all costs (including the value of unpaid manual labour) other than salaried management. It represents the reward to management, both paid and unpaid and the return on tenant-type capital whether that capital is borrowed or not.

Net farm income

Represents the return to the farmer and spouse for their manual labour, management and interest on tenant-type capital invested in the farm, whether that capital is borrowed or not.

Per £100 gross output

Shows the relative importance of the main resources used in each unit product, and in total provide a useful measure of profitability.

Power and machinery

Include contract and hire, fuel, electricity, repairs and an allowance for depreciation. A deduction is made for the private use of vehicles. Machinery depreciation is calculated on a 'replacement cost' basis.

Rent

In the case of an owner occupier, an imputed rent is charged in accordance with what a tenant in similar circumstances, including length of occupation, would be paying.

Tenant-type capital

Assets normally provided by tenants and includes growing crops, stores, machinery, livestock, cash and other assets needed to run the business. Permanent crops (including orchards) and glasshouses are also generally considered to be tenant-type capital.

Total gross margin

This is the difference between total gross output and total variable costs and measures the contribution of the business towards covering its fixed costs and providing for a profit.

Variable costs

These vary in direct proportion to the size of each holding enterprise and include all purchased feed, seed, fertilisers, crop protection, veterinary and livestock costs.

Abbreviations used in this Publication

/	per
£	pounds (stirling)
cfu/g	colony forming units per gram
Defra	Department for Environment, Food and Rural Affairs
doz	dozen
ha	hectare
kg	kilogram
no.	number
n/a	not applicable
p	pence

Rounding

Totals are calculated from unrounded components and may not therefore be the total of the rounded components shown.

Derivation of Farm Business Income

Net Farm Income

Plus:

Value of unpaid labour [excluding farmer & spouse; already taken into account in deriving Net Farm Income]
Imputed rent and rental value

Less:

Net interest payments
Ownership charges [buildings & works depreciation; insurance of farm buildings; landlord-type repairs and upkeep]
Director's remuneration

Equals:

Farm Business Income

Appendix 1: Reports in this series

- **Crop Production in England**
- **Dairy Farming in England**
- **Hill Farming in England**
- **Horticulture Production in England**
- **Lowland Grazing Livestock in England**
- **Organic Farming in England**
- **Pig Production in England**
- **Poultry Production in England**

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