



Farm Business Survey

2016/2017

Poultry Production in England



Richard Crane 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 Twelfth Series

This series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)* represents the twelfth series of outputs that focus on providing independent data and analysis to the individual sectors of agriculture and horticulture. As farmers and growers look towards the future for their businesses, the policy landscape is beginning to emerge. The direction of policy travel for UK agriculture and horticulture will be more focused upon the market and the provision of specific environmental goods, and land-area based payments are likely to be reduced or removed in the future. The direction of policy travel has been accompanied with a guarantee that the Basic Payment will remain until at least 2022. These signals provide both an indication of policy outcomes and a time-frame within which businesses can begin to adapt to a new future. The UK's decision to leave the EU will of course have major implications for agriculture and horticulture; these impacts are likely to bring both challenges and opportunities. While many factors remain uncertain, at the level of the individual business what is required is to position the business to meet the challenges that lie ahead while maximising the outcome of the opportunities that will present themselves. For individual businesses this begins with a need to understand current performance, and to place this within the context of the wider market environment and understand the relative strengths of the business against others within the sector. Within this series of reports, RBR seeks to help businesses to identify their relative strengths and challenges through independent data presented to highlight the key findings and data as appropriate to individual sectors of agriculture and horticulture. It is not possible to manage a process or activity successfully without knowing the underlying data or performance of the process or activity. This series of reports sets out to provide this information at this crucial planning stage for agriculture and horticulture.

The headline data from the Farm Business Survey (FBS) for the 2016/17 financial year, shows that average Farm Business Income (FBI) increased by 20% to £38,000 per farm, taking farm incomes upwards again after a period of six years of falling income levels. At £38,000 per farm FBI is still the second lowest average income from the previous six years. Examining results by farm type, on average, with the exception of Poultry farms, all farm types benefited from an increase in FBI in 2016/17. One of the main drivers for the increased FBI results was a generally lower cost base, with increases in the price of beef, sheep and combinable crops also playing an important part in the increased FBI results. The contribution of increased output from agri-environment, diversification activities and the Basic Payment were also features of the increased FBI result. The exchange rate movement that weakened the value of Sterling in the aftermath of the EU referendum result in 2016, that led to increased output prices during 2016/17, has recently moderated. Should Sterling gain momentum moving forward this will place downward pressure on output prices, but offer some input price advantage, in particular for imported inputs.

As we produce this twelfth series of independent reports, agricultural and horticultural businesses need to prepare for the future if they are to prosper as the market and policy landscapes change. Businesses that understand their costs of production and their relative strengths within a sector will be best placed to compete irrespective of what the future may bring. With this series of reports we aim to help inform agricultural and horticultural businesses about the economics of the sector in which they operate, in order to aid management decision making. It is of crucial importance to recognise that this valuable series of reports would not be possible without the direct support of our farmer and grower co-operators and the wider support of agricultural and horticultural businesses and sector stakeholders. Our thanks therefore go to the farmers and growers who assist us in this valuable work through their participation in the FBS.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
February 2018

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

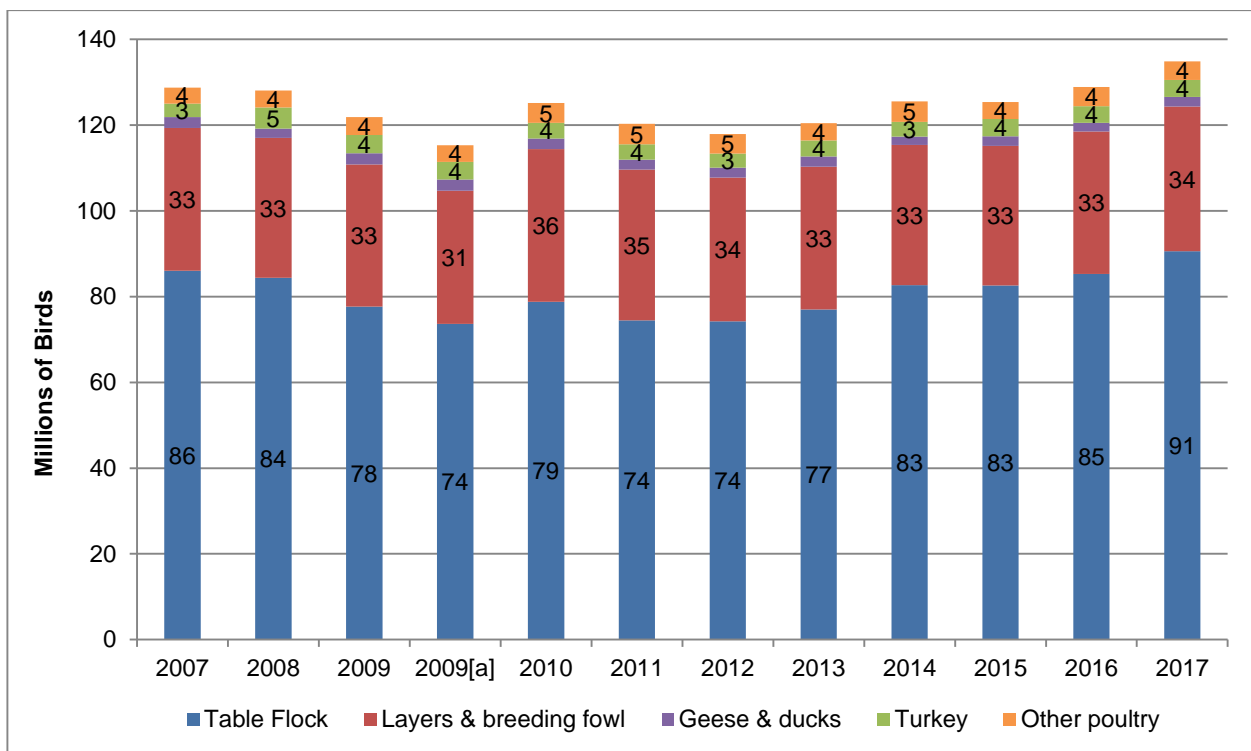
- Total number of birds in production in England in June 2017 was just under 135 million birds, up 5% on the previous year
- Poultry output in 2016 was over £3.1 billion, 13% of the total output from agriculture, the same proportion as the previous year
- The value of UK poultry meat production reached £2.25 billion in 2016, representing an increase of just over 1% on the previous twelve month period
- Output from egg and egg products at £603 million in 2016 showed an 11% year-on-year decrease and was £115 million less than in 2013
- In 2016/17 a total of 95 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 87 in 2015/16
- The profitability of specialist poultry farm businesses reduced by 49% in the 2016/17 financial year, with average profit as measured by Farm Business Income (FBI) falling on a per business basis from £106,670 in 2015/16, to £54,151 in 2016/17
- Within this sector, there was a marked difference in profits during 2016/17 and the change in profit compared to the previous year; Average FBI on a per business basis for the layers increased from £14,118 in 2015/16, to £32,459 in 2016/17 and for the poultry meat producers FBI fell by 59%, falling from £170,738 in 2015/16, to £69,216 in 2016/17
- Of the 48 farms classified as Specialist Layers in 2016/17, 35 had laying flocks producing eggs for human consumption, while the remaining 13 were breeding flocks and hatcheries
- Laying flocks producing eggs for human consumption had a decrease in FBI from £45,063 in 2015/16, to £28,359 in 2016/17
- Free range layers recorded a fall in profitability with FBI down 13%, to £29,651 per business
- The price of the eggs from free range systems fell 4% to an average of 94p/doz, while egg production for the group increased from 272 to 285 eggs per year
- For the poultry meat producers FBI fell by around 59%, from £170,738 in 2015/16, to £69,216 in 2016/17; while throughput increased, the group experienced a fall in the price of poultry meat
- After an increase in 2015/16, the average number of laying hens decreased by 9% in 2016/17 to 46,330 birds; by contrast, the average number of birds for meat production increased by 3%, to 104,239
- Among the total average variable costs for all specialist poultry farms, there was a 22% decrease in average feed costs; cost of feed as a percentage of £100 of output per business remained at approximately 45% in 2016/17
- Total fixed costs on a per business basis fell by almost 11%, to an average of £290,552 in 2016/17
- In common with past income trends, there was a wide range in the level of FBI observed for different businesses in 2016/17, with around 38% recording an annual FBI of over £50,000 (42%, 2015/16), there was a big increase in the number of businesses incurring a negative FBI, 31% in 2016/17 compared to only 8% in 2015/16

SECTION 1: COMMENTARY ON THE UK POULTRY INDUSTRY

1.1 General introduction

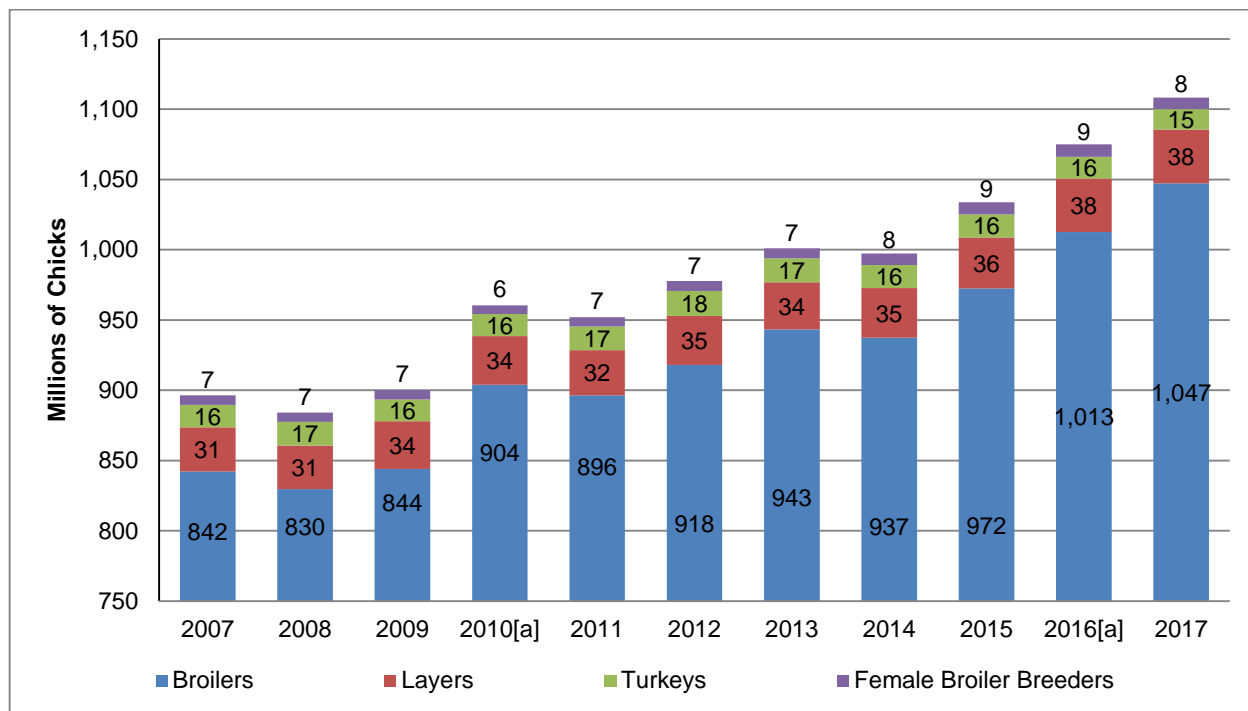
- The English poultry flock rose to just under 135 million birds in 2017, up 5% from 2016
- The table flock rose to around 91 million birds in 2017, an increase of 6% on the previous year
- The turkey flock increased by 3% between 2016 and 2017, following a 3% decrease the previous year
- Layer and breeding fowl numbers rose by 2% to around 34 million in 2017
- The poultry flock in England in 2017 consists of approximately 67% table birds, 25% layers and breeding fowl, 3% other poultry, 3% turkey and 2% geese and ducks [1]

Figure 1.1 English poultry numbers at June 2007-2017 [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 poult placings 2007-2017 [2]



Note: [a] denotes a 53 week year

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

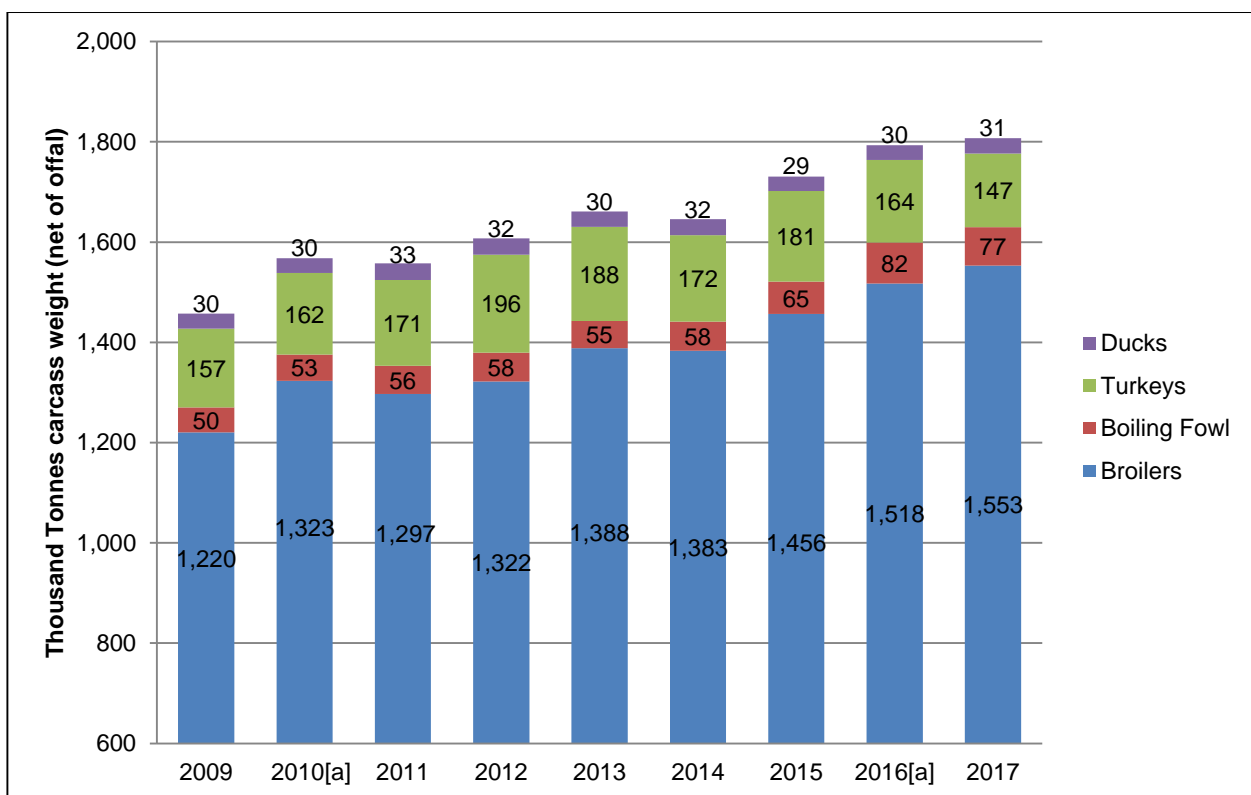
- Chicks and poult placings have shown an almost continuous rise in numbers from a low of 830 million in 2008, to over one billion in 2017, an increase of 26%
- Since numbers fell slightly in 2014 they have risen to the highest levels in the recorded period (2007-2017), in 2017 numbers increased by 3% on a year-to-year basis
- Placements of turkeys have decreased by around 18% since their peak in 2012
- There was a decrease (down almost 9%) in placements of broiler breeder hens between 2016 and 2017, following an increase of 28% between 2013 and 2016 [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]
- Broiler production in 2017 showed a year on year increase of 2%, having increased by over a quarter since 2009
- Turkey production, at just under 10% of poultry meat production, was up on a year to year basis in 2017 by just over 9%, having over the period 2009 to 2017 grown by over 14% [4]

Figure 1.3 Annual UK production of poultry meat by type [4]



Note: [a] denotes a 53 week year

1.2.2 Poultry for eggs

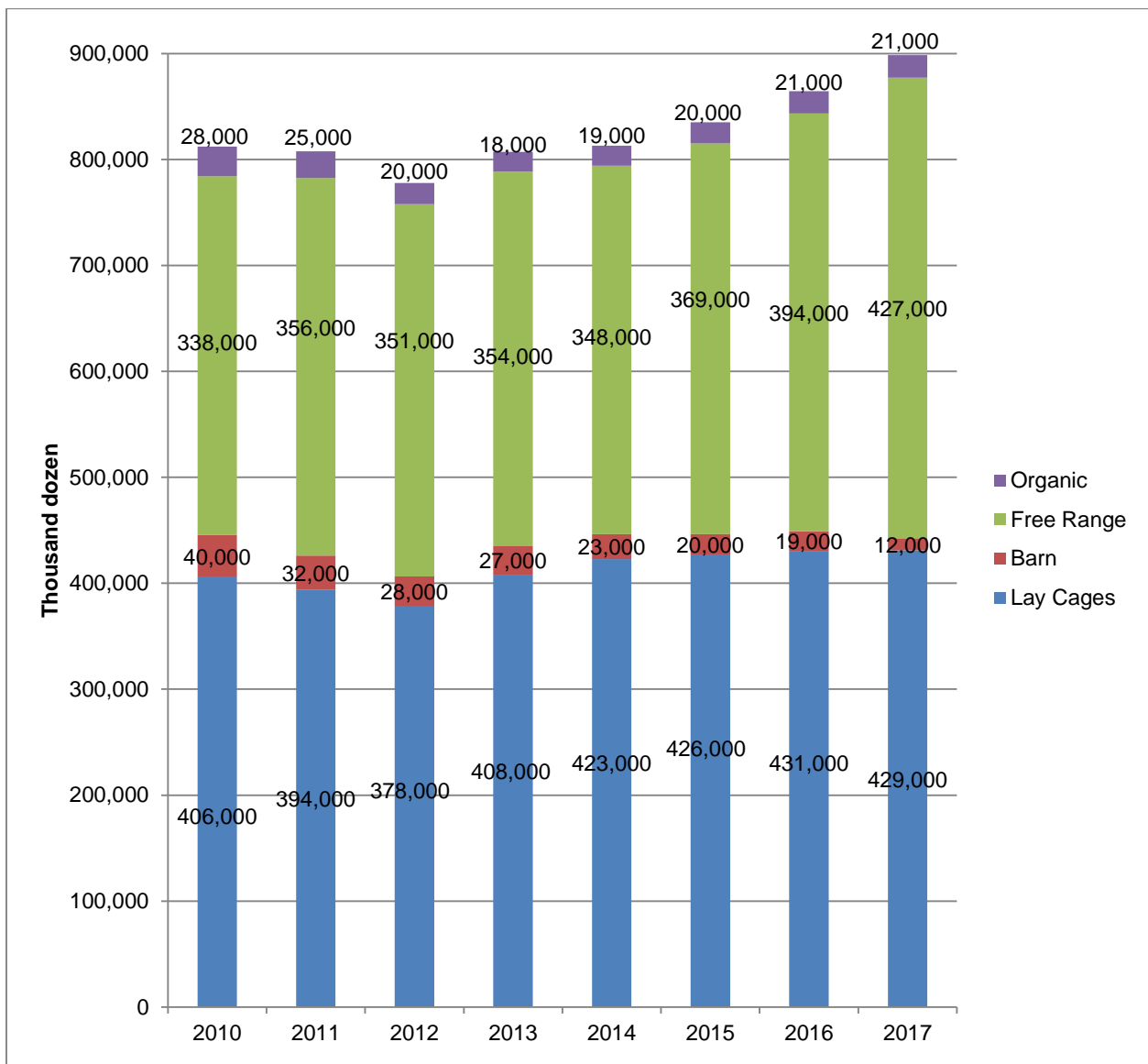
Eggs are produced in different types of production system:

- *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

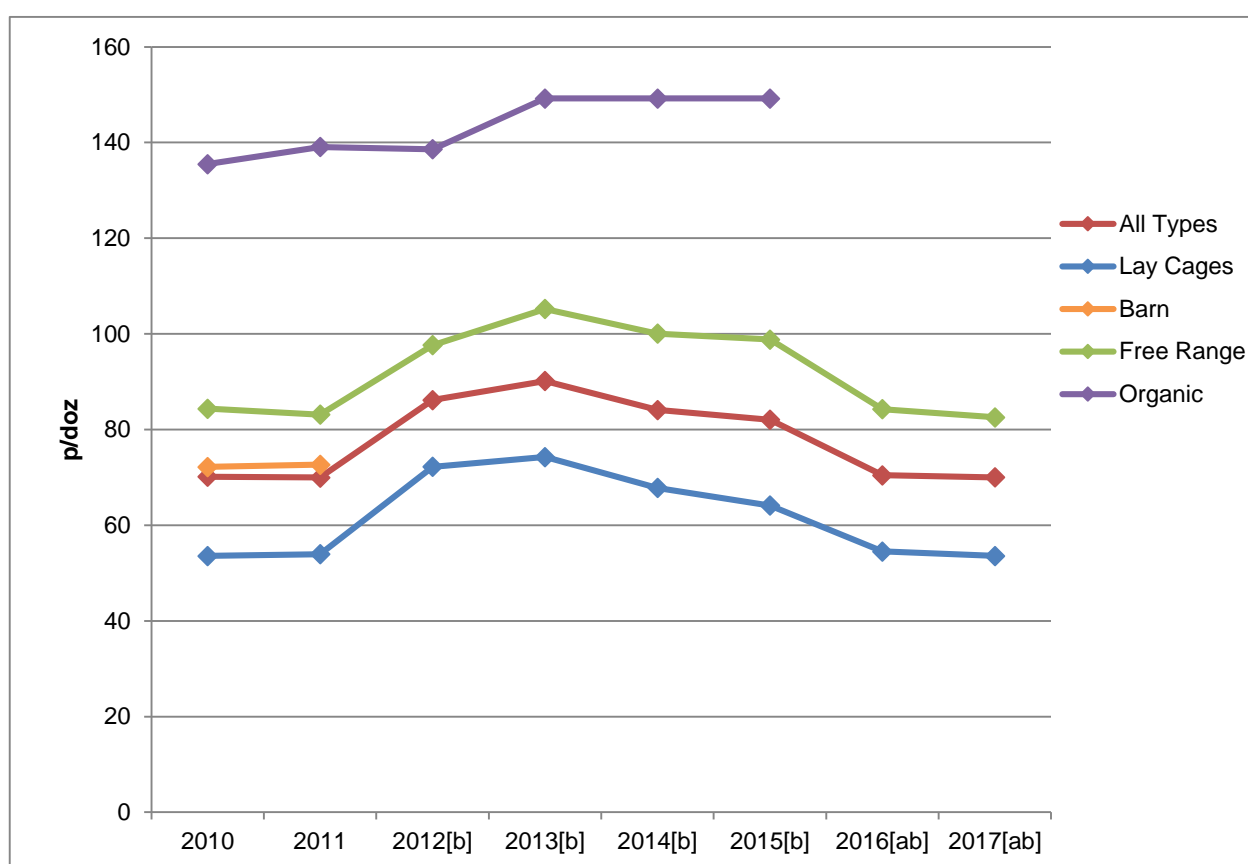
- *Free Range System* – This system requires birds to have continuous daytime access to outdoor ‘runs’, largely covered with vegetation, to a maximum stocking density of nine laying hens per m² of usable area. The Welfare of Laying Hens Directive imposes the same hen house conditions as for the Barn 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 [8]

Figure 1.4 Annual UK egg production by production systems [5]



- Total packing station throughput increased by 3% between 2016 and 2017
- In 2017 just over 48% of eggs were produced in enriched cages, 48% in free range systems, just over 1% in barns, and just over 2% from organic systems
- Compared to 2016 enriched cage production has decreased by under 1% in 2017 after increasing 1% in the previous year
- There has been an increase in free range production between 2016 and 2017 of around 8%, up to the highest level recorded to date
- Organic production in 2017 was up just over 1% compared to 2016
- The most significant change compared to 2016 was in barn production which fell 33% [5]

Figure 1.5 Average packers to producer prices by housing type [5]



Note: [a] 2016 and 2017 data for organic eggs suppressed as sample too small
 [b] 2012 to 2017 data for barn eggs suppressed as sample too small

- The average packer to producer price for all types decreased by less than 1p/doz (-0.3%) in 2017, to 70.3p/doz, following a decrease of almost 12p/doz (-14%) in the previous year
- The average price of free range eggs fell to 83.1p/doz in 2017, a 1p/doz reduction on the previous year; this comes after several years of price decreases after the price peaked in 2013 at 105.2p/doz
- The average lay cage egg price in 2016 dropped back slightly by almost 1p/doz, to 53.7p/doz [5]

1.3 Contribution of the poultry sector to the economy

1.3.1 The farm sector

- In 2016 total poultry output decreased by 2%, to just over £3.1 billion, whilst total agricultural output also decreased, by just over 3%
- Poultry meat output rose by just over 1%, to £2.24 billion in 2016, an increase of £26 million on 2015
- Egg and egg products fell by over 11% for the same period to £603 million, this is a decrease of £115 million from the peak seen in 2013
- Poultry output, as a proportion of gross output from agriculture remained at 13% in 2016

Figure 1.6 Producer value of UK-produced poultry meat and eggs 2009-2016 (£M) [6]

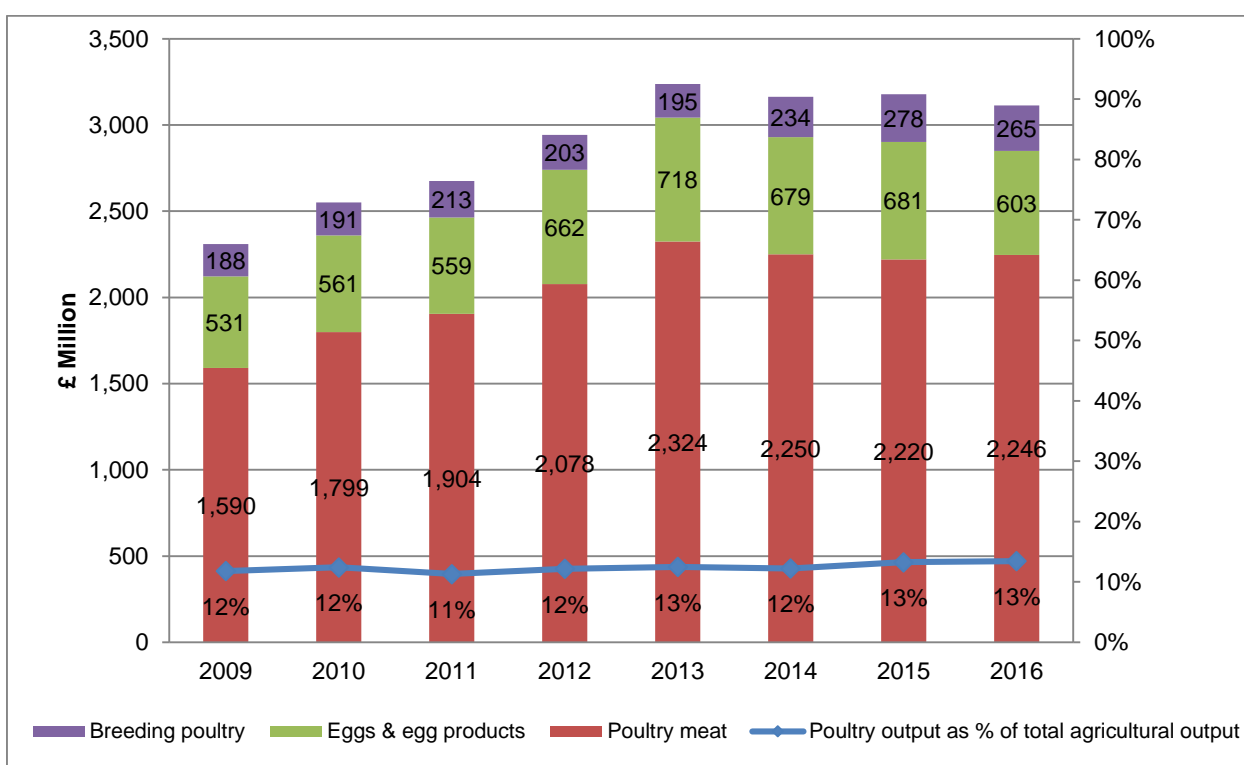
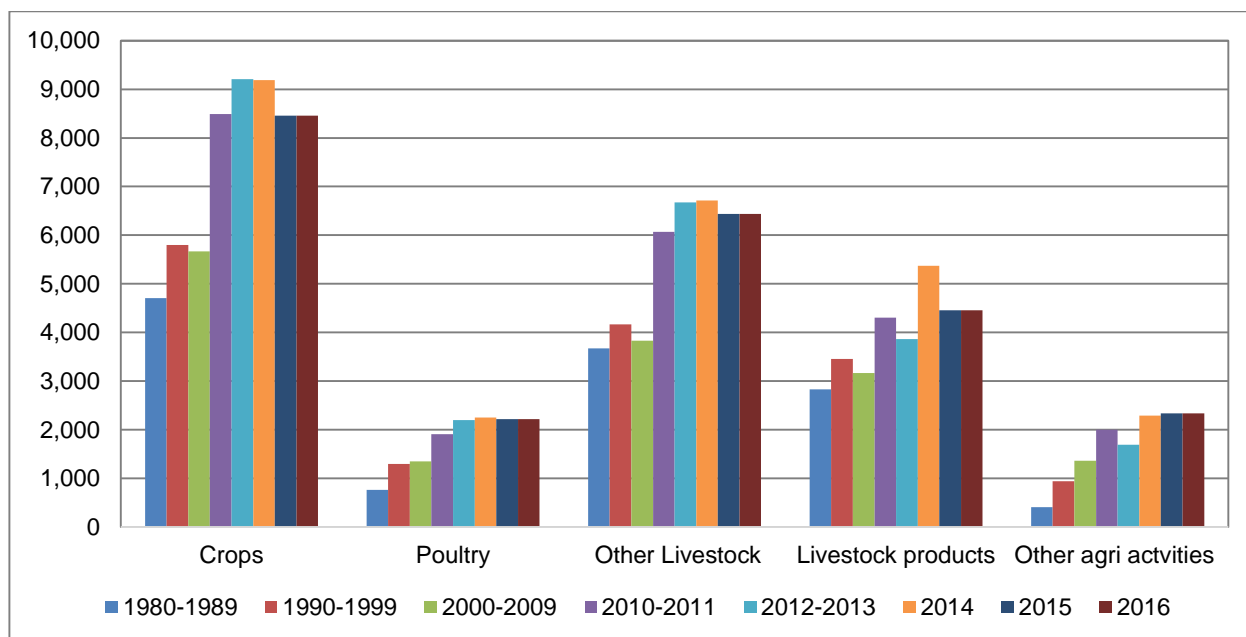


Figure 1.7 Poultry output compared with other agricultural outputs through time at current prices (£M) [6]



1.3.2 The retail sector

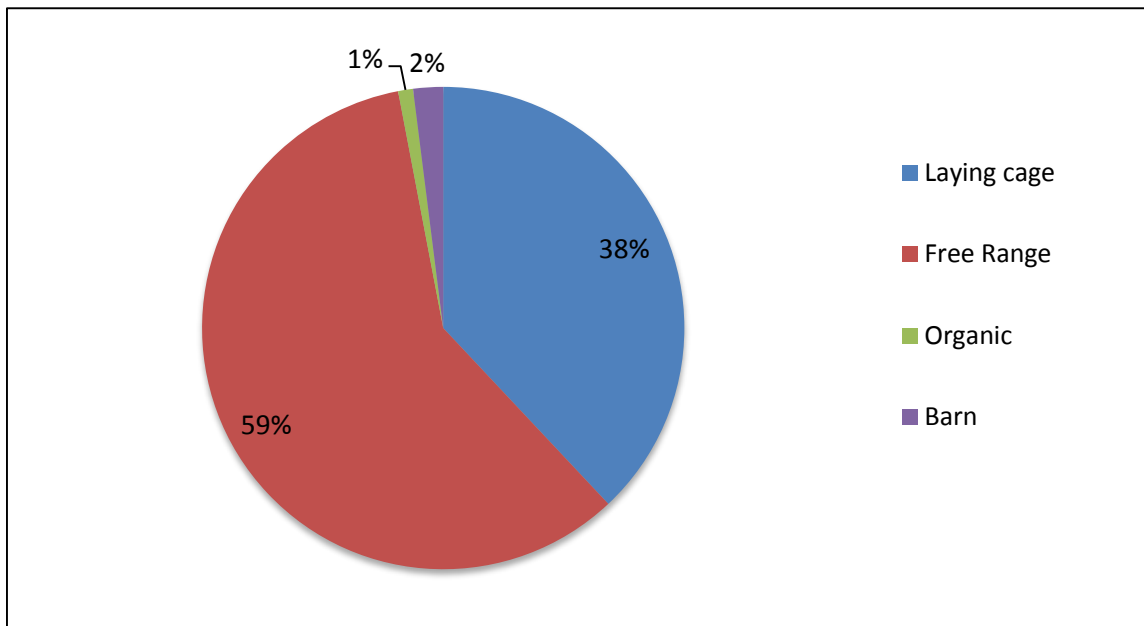
1.3.2.1 Poultry meat

- Poultry meat has continued to be the most popular meat with consumers in the UK, amounting to 43% of total meat consumption in 2016 [7]
- Year-on-year average consumption was up from 36.1kg per person per year in 2015, to 37.3kg per person per year in 2016, representing an increase of just over 3% [7]
- Total UK poultry meat production was 14 thousand tonnes higher in 2017, up almost 1% from the previous year [4]

1.3.2.2 Eggs

- In 2017 UK egg consumption rose by around 3%, to 1,076 million doz, with a retail value of approximately £984 million [8]
- Between 2016 and 2017, retail sales rose by around 8% [8]
- According to figures from Kantar Worldpanel (consumer/market research organisation), the egg retail sector for the year up to December 2017 consisted of 38% laying cage production, 60% free range production (including estimated 1% organic) and 2% barn production [8]

Figure 1.8 Retail Egg Market for year to December 2017 [8]



1.4 Trade

Table 1.1 UK imports and exports of Eggs and Poultry meat [9]

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

Poultry meat [a] (carcass weight thousand tonnes)	2010	2011	2012	2013	2014	2015	2016
Imports	474	516	480	482	509	541	580
Exports	268	291	283	314	339	292	299
UK production	1,570	1,560	1,609	1,663	1,648	1,733	1,792
% self sufficient	88%	87%	89%	91%	91%	87%	86%

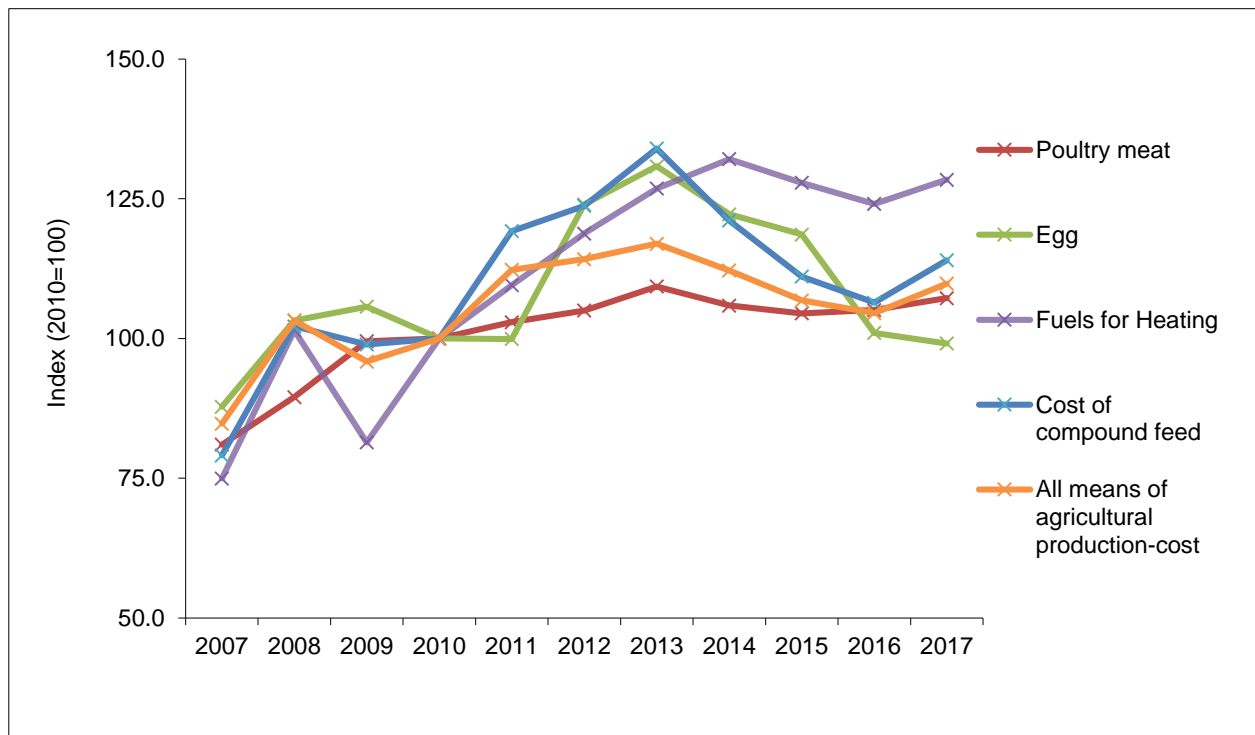
[a] excludes offal

- Between 2015 and 2016, production of eggs increased by 4% and production of poultry meat increased by 3%
- Imports of eggs decreased by 2%, and exports increased by 22%, resulting in a very similar self-sufficiency to previous years of 85%
- Poultry meat imports increased by 7%, whilst exports increased by 2%, resulting in a fall of 1% in the rate of self-sufficiency to 86% [9]

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 5% in 2017 (up from 104.5 points in 2016, to 109.8), following a reduction in the previous three years
- Average compound feed prices for 2017 have risen by around 7% or eight points compared to the previous year but are still around 20 points lower than the peak in 2013
- Fuel for heating increased by over 3% - approximately 4 points, in 2017
- Egg output fell slightly by 1.9 points in 2017, following a large reduction in 2016 of over 17 points compared to the previous year
- Poultry meat showed a slight increase in 2017 of 2.0 points, following an increase of 0.6 points in 2016 and a decrease of 1.4 points in 2015 [10]

Figure 1.9 Index of producer prices for poultry and eggs and cost of production [10]



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 2016/17:

- 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 2016/17:
 - 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 2016 June survey there were 1,545 specialist poultry farm businesses in England that were above the FBS size threshold.

The results for the 2016/17 financial year are based on 95 specialist poultry farms, which represent 6.1% 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 2015/16 and 2016/17 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 2015/16 and 2016/17

2.4.1 Specialist poultry farms [Table 2.1]

- In 2016/17 a total of 95 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 87 farms in 2015/16
- The total of 95 farms included 48 specialist layers, 46 specialist poultry meat producers and one farm categorised as both a layer and meat producer
- The profitability of specialist poultry farm businesses reduced by 49% in the 2016/17 financial year, with average profit as measured by Farm Business Income (FBI) falling on a per business basis from £106,670 in 2015/16, to £54,151 in 2016/17 [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 fallen by 33% between 2015/16 and 2016/17, from £56,140 to £37,598
- Within this sector, there was a marked difference in profits during 2016/17 and the change in profit compared to the previous year
 - Average FBI on a per business basis for the layers increased from £14,118 in 2015/16, to £32,459 in 2016/17 [Table 2.2]
 - For the poultry meat producers FBI fell by 59%, falling from £170,738 in 2015/16, to £69,216 in 2016/17 [Table 2.3]
- After increasing by 12% in 2015/16 to 51,079 birds, the average number of laying hens per business decreased by 9% in 2016/17, to 46,330 birds, with the average overall number of birds for meat production increasing by 3%, to 104,239
- Although the sample of poultry businesses is divided fairly evenly between layers and poultry meat producers (51% & 48%), the balance was very different in terms of poultry output attained:
 - Some 19% was derived from egg production
 - Around 55% from broiler production and
 - Almost 26% 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 22% decrease in average feed costs on a per holding basis, after a 19% decrease the previous year; however cost of feed as a percentage of £100 of output per business remained at approximately 45% in 2016/17
- Total fixed costs on a per business basis fell by almost 11%, to an average of £290,552 in 2016/17
- In common with past income trends, there was a wide range in the level of Farm Business Income (FBI) observed for different businesses with 38% recording an annual FBI of over £50,000, and 31% incurring a negative FBI compared to only 8% in 2015/16

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

- In 2016/17, the 48 specialist poultry farms that were classified as layers (Defra farm typology code 521) included 35 businesses with laying flocks producing eggs for human consumption and 13 businesses comprising breeding and rearing units (including growing pullets, layer breeders and broiler breeders)
- On a business basis, gross output of all laying flocks decreased by 13%, dropping from an average of £635,793 in 2015/16, to an average of £556,051 in 2016/17
- The net result of the year-on-year changes for these businesses was an increase in the average FBI from £14,118 per business in 2015/16, to £32,459 per business in 2016/17
- However, care should be taken in interpreting these results, as the main driver for the increase in profit was a large saving in directors remunerations which are part of the Farm Business Income calculation

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 3%, to an average of £348,407 per business; despite this, higher costs meant the average gross margin per business decreased by 2%, to £153,825 in 2016/17
- In contrast to the results for 'layers producing eggs for human consumption and breeder/rearers', where a large increase was seen, the FBI for 'layers producing eggs for human consumption' only, decreased by 37% from £45,063 in 2015/16, to £28,359 in 2016/17
- The decrease in profitability appeared to have come from the more intensive units, including enriched cages, whilst the less intensive free range layers experienced a much smaller fall in profitability
- The price attained for eggs produced by both the more intensive group and from free range systems decreased from 94.2p/doz to 90.6p/doz in 2016/17 while average number of birds was higher in 2016/17
- This is in agreement to the trends seen nationally that show a fall in egg prices and an increase in production over the same period of time
- The differences in the scale of the changes are due to the composition of the sample and when only those farms that were in the sample in both years were considered this indicated a smaller decrease in the average egg price closer 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 six farms with mixed production systems and 29 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 decrease in average FBI per business, compared with a much smaller decrease in the free range systems

- The price of free range eggs came back to an average of 94p/doz, a 4% fall compared to the previous year
- The average number of eggs per bird per year increased by 5% for free range producers, to 285 eggs per year
- On a per business basis free range egg farms experienced a 13% fall in profit, with the average FBI decreasing from £34,034 in 2015/16, to £29,651 in 2016/17

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 2016/17 there were 46 of these farms, compared with 38 in 2015/16; 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 fell to an average of £512,272 per business, 23% less than the previous year with the main cost, feed, decreasing by 25% to an average of £433,572, compared to £579,368 in 2015/16
- On a per bird basis, the feed costs decreased to an average of £4.16, from £5.75
- The average number of birds per business was up by approximately 3%, to 104,239 birds
- A fall in gross margin of almost 26%, meant that the FBI per business reduced by 59% to an average of £69,216 despite a fall in fixed costs of over 8%
- FBI as measured on a per bird basis was also down on the previous year, by 61%, reducing from an average of £1.69 to an average of just £0.66 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 enable 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 decreased by over 17% to an average of £1,248,285 per business
- However on a per bird basis, the cost of feed actually increased from an average of £0.86, to £0.88
- Throughput decreased and the group experienced a fall in price for poultry meat leading to the lower output
- Productivity was down in 2016/17, decreasing from 7.5 crops of birds reared per year in 2015/16, to 7.0 crops

- The average price received for broilers in the year was £1.67 per bird, a decrease of 9p on the previous year, while the price of chicks increased from an average of 34p per bird, to an average of 36p
- FBI decreased from an average of £347,659 per business in 2015/16, to an average of £148,377 in 2016/17

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 3.5% in 2016/17, to an average of just under 70%
- The laying flock systems saw their percentage of equity decline by 4% to an average of 56%, while the poultry meat producers saw percentage equity decline by 3% remaining much higher than the laying flocks, at an average of just under 74%
- 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 £1,797,617 recorded per business, representing an overall average of a little under 90% equity in the business
- Those farms that are predominantly land based have the highest net worth (e.g. Lowland cattle & sheep at 93%), while those businesses with intensive livestock systems (e.g. Poultry at 71%) and with a very low dependency on land have lower net worth and, consequently, a smaller stake in the equity of their businesses

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 93p/doz in 2016/17, compared with 96p/doz for the previous year
- The average number of birds per holding increased by over 38% compared to 2015/16, from 9,574, to 13,253 in 2016/17
- On a per bird basis, poultry output was similar to the previous year at an average of £18 per bird, with a marginal fall in the egg price but a rise in egg production per bird
- Feed costs for all farms with poultry layers increased by 24p per bird, to £9.97
- Total variable costs increased by 3% on a per bird basis, resulting in a mean gross margin of £7.48, down £0.79 on 2015/16
- The gross margin per doz eggs was 32p for all layers, a decrease of 4p on the 2015/16 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 decreased by just under 8%, to an average of £18.27 per bird [-£1.55], while the free range egg producers decreased by under 0.5%, to an average of £18.35 [-£0.03] per bird
- The average egg price was 5% higher for free range egg production than for intensive units, at 94.7p/doz compared to 90.2p/doz, and egg production for free range systems at an average of 283 eggs per year was around 5% less, compared with an average production of 299 eggs for the intensive units
- The average gross margin per doz eggs was 30.06p for intensive/mixed egg production systems and 32.83p for free range egg production
- Feed cost for the free range systems is about 5% higher per bird than for the intensive systems
- Despite this the gross margin for free range egg production was higher than for the intensive systems; year-on-year gross margin recorded a decrease of £0.35 per bird for free range systems and a much larger decrease of £1.87 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 £1.68 [-9p] per bird, with the purchase price of chicks averaging 36p [+2p]
- With 7 crops per year (a decrease of over 7% from 7.5 crops) an average gross margin of £2.36 per bird place was recorded on an annual basis, a reduction of £1.03 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 2015/16 was £42.80 [+£5.47] per bird, while the average purchase price was £4.52 per bird [+£0.09]
- Overall, poultry output averaged £36.22 per bird [+£4.60] in 2016/17 and feed costs £7.09 per bird [-£0.41], resulting in an improved gross margin of £24.41 [+£3.55] per bird

Table 2.1 Financial results for all specialist poultry farms

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2015/16	2016/17	% change	2015/16	2016/17	£ change
Number of farms	87	95		87	95	
Average number of birds/year	80,479	79,121		80,479	79,121	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	126,471	138,409	9	1.57	1.75	0.18
Hen depreciation	-14,899	-21,287	43	-0.19	-0.27	-0.08
Broilers	513,986	347,714	-32	6.39	4.39	-1.99
Other poultry output	208,891	165,315	-21	2.60	2.09	-0.51
Total poultry output	834,451	630,151	-24	10.37	7.96	-2.40
Crops	30,958	46,158	49	0.38	0.58	0.20
Other livestock	24,205	17,624	-27	0.30	0.22	-0.08
Other output	78,807	58,321	-26	0.98	0.74	-0.24
Total gross output	968,421	752,254	-22	12.03	9.51	-2.53
Variable costs						
Feed	437,569	340,639	-22	5.44	4.31	-1.13
Seed, fertiliser, crop costs	14,675	16,933	15	0.18	0.21	0.03
Vet. & medicines	23,401	15,934	-32	0.29	0.20	-0.09
Other livestock costs	53,978	42,822	-21	0.67	0.54	-0.13
Total variable costs	529,623	416,328	-21	6.58	5.26	-1.32
Total gross margin	438,798	335,926	-23	5.45	4.25	-1.21
Fixed costs						
Labour:						
Regular paid	59,904	51,000	-15	0.74	0.64	-0.10
Regular unpaid	25,063	25,436	1	0.31	0.32	0.01
Casual labour	5,725	9,579	67	0.07	0.12	0.05
Power & machinery costs:						
Contract & hire	14,747	10,305	-30	0.18	0.13	-0.05
Fuel	5,875	5,900	0	0.07	0.07	0.00
Electricity	17,543	15,054	-14	0.22	0.19	-0.03
Heat	22,320	15,746	-29	0.28	0.20	-0.08
Repairs	26,799	15,561	-42	0.33	0.20	-0.14
Depreciation	38,270	32,433	-15	0.48	0.41	-0.07
Rent (incl. imputed)	62,604	66,161	6	0.78	0.84	0.06
Other costs:						
Occupiers repairs	12,327	15,939	29	0.15	0.20	0.05
Sundries (incl. bad debts)	33,610	27,439	-18	0.42	0.35	-0.07
Total fixed costs	324,787	290,552	-11	4.04	3.67	-0.36
Management & investment income	114,011	45,374	<u>Δ£/farm</u> -68,637	1.42	0.57	-0.84
Minus: management salaries	59	38	-21	0.00	0.00	0.00
Plus: farmer & spouse labour	20,402	21,521	1,120	0.25	0.27	0.02
Net farm income	134,353	66,858	-67,496	1.67	0.85	-0.82
Farm business income	106,670	54,151	-52,519	1.33	0.68	-0.64

Per £100 of gross output

	2015/16	2016/17	£ change	Farm Business Income (FBI) per farm (% distribution by number of weighted farms)	
				%	%
				2015/16	2016/17
Number of farms	87	95			
Average number (birds/year)	80,479	79,121			
Average £ per £100 of gross output					
Gross output (%)					
Eggs (%)	13.06	18.40		Over £100,000	28
Hen depreciation (%)	-1.54	-2.83		£50,000 to <£100,000	13
Broilers (%)	53.07	46.22		£25,000 to <£50,000	26
Other poultry output (%)	21.57	21.98		0 to <£25,000	25
				Less than 0	8
Total poultry output (%)	86.17	83.77		Total	100
Crops (%)	3.20	6.14			100
Other livestock (%)	2.50	2.34			
Other output (%)	8.14	7.75			
Total gross output (%)	100.00	100.00			
Variable costs					
Feed	45.18	45.28	0.10		
Seed, fertiliser, crop costs	1.52	2.25	0.74		
Vet. & medicines	2.42	2.12	-0.30		
Other livestock costs	5.57	5.69	0.12		
Total variable costs	54.69	55.34	0.65		
Total gross margin	45.31	44.66	-0.65		
Fixed costs					
				Average Poultry Numbers	
Labour:				Average	Average
				2015/16	2016/17
Regular paid	6.19	6.78	0.59	Hens in lay	7,396
Regular unpaid	2.59	3.38	0.79	Pullets	13,499
Casual labour	0.59	1.27	0.68	Broilers & other poultry	59,584
Power & machinery costs:				Total Average	80,479
Contract & hire	1.52	1.37	-0.15		79,121
Fuel	0.61	0.78	0.18		
Electricity	1.81	2.00	0.19		
Heat	2.30	2.09	-0.21		
Repairs	2.77	2.07	-0.70		
Depreciation	3.95	4.31	0.36		
Rent (incl. imputed)	6.46	8.80	2.33		
Other costs:					
Occupiers repairs	1.27	2.12	0.85		
Sundries (incl. bad debts)	3.47	3.65	0.18		
Total fixed costs	33.54	38.62	5.09		
Management & investment income	11.77	6.03	-5.74		
Other efficiency factors					
Minus: management salaries				Average	Average
Plus: farmer & spouse labour				2015/16	2016/17
	0.01	0.01	0.00	Eggs per bird	233
	2.11	2.86	0.75	Eggs (p/doz.)	87.85
Net farm income	13.87	8.89	-4.99		246
Farm business income	11.01	7.20	-3.82		88.29

Table 2.2 Financial results for all laying flocks

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2015/16	2016/17	% change	2015/16	2016/17	£ change
Number of farms	49	48		49	48	
Average number of birds/year	51,079	46,330		51,079	46,330	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	309,171	345,440	12	6.05	7.46	1.40
Hen depreciation	-36,421	-52,996	46	-0.71	-1.14	-0.43
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	322,040	229,751	-29	6.30	4.96	-1.35
Total poultry output	594,790	522,195	-12	11.64	11.27	-0.37
Crops	6,941	8,927	29	0.14	0.19	0.06
Other livestock	2,061	2,861	39	0.04	0.06	0.02
Other output	32,001	22,069	-31	0.63	0.48	-0.15
Total gross output	635,793	556,051	-13	12.45	12.00	-0.45
Variable costs						
Feed	232,728	220,461	-5	4.56	4.76	0.20
Seed, fertiliser, crop costs	3,898	3,567	-9	0.08	0.08	0.00
Vet. & medicines	31,781	24,702	-22	0.62	0.53	-0.09
Other livestock costs	62,815	45,764	-27	1.23	0.99	-0.24
Total variable costs	331,221	294,495	-11	6.48	6.36	-0.13
Total gross margin	304,571	261,557	-14	5.96	5.65	-0.32
Fixed costs						
Labour:						
Regular paid	76,834	64,696	-16	1.50	1.40	-0.11
Regular unpaid	25,569	25,319	-1	0.50	0.55	0.05
Casual labour	7,342	11,887	62	0.14	0.26	0.11
Power & machinery costs:						
Contract & hire	6,315	5,935	-6	0.12	0.13	0.00
Fuel	4,515	4,652	3	0.09	0.10	0.01
Electricity	11,391	11,084	-3	0.22	0.24	0.02
Heat	9,003	6,245	-31	0.18	0.13	-0.04
Repairs	14,923	7,157	-52	0.29	0.15	-0.14
Depreciation	21,304	18,855	-11	0.42	0.41	-0.01
Rent (incl. imputed)	57,438	44,196	-23	1.12	0.95	-0.17
Other costs:						
Occupiers repairs	7,654	14,101	84	0.15	0.30	0.15
Sundries (incl. bad debts)	25,753	25,279	-2	0.50	0.55	0.04
Total fixed costs	268,039	239,408	-11	5.25	5.17	-0.08
Management & investment income	36,532	22,149	<u>Δ£/farm</u> -14,383	0.72	0.48	-0.24
Minus: management salaries	20	19	-1	0.00	0.00	0.00
Plus: farmer & spouse labour	21,261	21,371	110	0.42	0.46	0.05
Net farm income	57,773	43,501	-14,273	1.13	0.94	-0.19
Farm business income	14,118	32,459	18,341	0.28	0.70	0.42

Per £100 of gross output

	2015/16	2016/17	£ change	Farm Business Income (FBI) per farm (% distribution by number of weighted farms)		
				%	%	
				2015/16	2016/17	
Number of farms	49	48				
Average number (birds/year)	51,079	46,330				
Average £ per £100 of gross output						
Gross output (%)						
Eggs (%)	48.63	62.12		17	10	Over £100,000
Hen depreciation (%)	-5.73	-9.53		9	13	£50,000 to <£100,000
Broilers (%)	0.00	0.00		27	10	£25,000 to <£50,000
Other poultry output (%)	50.65	41.32		27	22	0 to <£25,000
				20	45	Less than 0
Total poultry output (%)	93.55	93.91		100	100	Total
Crops (%)	1.09	1.61				
Other livestock (%)	0.32	0.51				
Other output (%)	5.03	3.97				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	36.60	39.65	3.04			
Seed, fertiliser, crop costs	0.61	0.64	0.03			
Vet. & medicines	5.00	4.44	-0.56			
Other livestock costs	9.88	8.23	-1.65			
Total variable costs	52.10	52.96	0.87			
Total gross margin	47.90	47.04	-0.87			
Fixed costs				Average Poultry Numbers		
Labour:				Average	Average	
Regular paid	12.08	11.63	-0.45	2015/16	2016/17	
Regular unpaid	4.02	4.55	0.53			
Casual labour	1.15	2.14	0.98			
Power & machinery costs:						
Contract & hire	0.99	1.07	0.07			Hens in lay
Fuel	0.71	0.84	0.13			18,080
Electricity	1.79	1.99	0.20			32,999
Heat	1.42	1.12	-0.29			0
Repairs	2.35	1.29	-1.06			0
Depreciation	3.35	3.39	0.04			Total Average
Rent (incl. imputed)	9.03	7.95	-1.09			51,079
Other costs:						46,330
Occupiers repairs	1.20	2.54	1.33			
Sundries (incl. bad debts)	4.05	4.55	0.50			
Total fixed costs	42.16	43.06	0.90			
Management & investment income	5.75	3.98	-1.76			
Minus: management salaries	0.00	0.00	0.00	Other efficiency factors		
Plus: farmer & spouse labour	3.34	3.84	0.50	Average	Average	
				2015/16	2016/17	
Net farm income	9.09	7.82	-1.26			
Farm business income	2.22	5.84	3.62			
						Eggs per bird
						233
						245
						Eggs (p/doz.)
						87.85
						87.59

Table 2.3 Financial results for all poultry meat producers

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2015/16	2016/17	% change	2015/16	2016/17	£ change
Number of farms	38	46		38	46	
Average number of birds/year	100,831	104,239		100,831	104,239	
	<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	869,787	596,191	-31	8.63	5.72	-2.91
Other poultry output	130,565	127,517	-2	1.29	1.22	-0.07
Total poultry output	1,000,353	723,708	-28	9.92	6.94	-2.98
Crops	47,584	72,392	52	0.47	0.69	0.22
Other livestock	39,535	28,287	-28	0.39	0.27	-0.12
Other output	111,208	83,413	-25	1.10	0.80	-0.30
Total gross output	1,198,679	907,800	-24	11.89	8.71	-3.18
Variable costs						
Feed	579,368	433,572	-25	5.75	4.16	-1.59
Seed, fertiliser, crop costs	22,135	26,272	19	0.22	0.25	0.03
Vet. & medicines	17,600	10,606	-40	0.17	0.10	-0.07
Other livestock costs	47,861	41,821	-13	0.47	0.40	-0.07
Total variable costs	666,964	512,272	-23	6.61	4.91	-1.70
Total gross margin	531,716	395,528	-26	5.27	3.79	-1.48
Fixed costs						
Labour:						
Regular paid	48,185	43,772	-9	0.48	0.42	-0.06
Regular unpaid	24,714	25,708	4	0.25	0.25	0.00
Casual labour	4,605	7,816	70	0.05	0.07	0.03
Power & machinery costs:						
Contract & hire	20,583	13,444	-35	0.20	0.13	-0.08
Fuel	6,817	6,921	2	0.07	0.07	0.00
Electricity	21,801	18,297	-16	0.22	0.18	-0.04
Heat	31,539	22,758	-28	0.31	0.22	-0.09
Repairs	35,020	21,638	-38	0.35	0.21	-0.14
Depreciation	50,015	42,624	-15	0.50	0.41	-0.09
Rent (incl. imputed)	66,181	83,011	25	0.66	0.80	0.14
Other costs:						
Occupiers repairs	15,563	17,612	13	0.15	0.17	0.01
Sundries (incl. bad debts)	39,048	29,488	-24	0.39	0.28	-0.10
Total fixed costs	364,070	333,089	-9	3.61	3.20	-0.42
Management & investment income	167,645	62,439	<u>Δ£/farm</u> -105,206	1.66	0.60	-1.06
Minus: management salaries	87	52	-35	0.00	0.00	0.00
Plus: farmer & spouse labour	19,807	21,661	1,854	0.20	0.21	0.01
Net farm income	187,365	84,048	-103,318	1.86	0.81	-1.05
Farm business income	170,738	69,216	-101,521	1.69	0.66	-1.03

Per £100 of gross output

	2015/16	2016/17	£ change	Farm Business Income (FBI) per farm (% distribution by number of weighted farms)	
				%	%
				2015/16	2016/17
Number of farms	38	46			
Average number (birds/year)	100,831	104,239			
Average £ per £100 of gross output					
Gross output (%)					
Eggs (%)	0.00	0.00		Over £100,000	36
Hen depreciation (%)	0.00	0.00		£50,000 to <£100,000	16
Broilers (%)	72.56	65.67		£25,000 to <£50,000	25
Other poultry output (%)	10.89	14.05		0 to <£25,000	23
				Less than 0	0
Total poultry output (%)	83.45	79.72		Total	100
Crops (%)	3.97	7.97			28
Other livestock (%)	3.30	3.12			22
Other output (%)	9.28	9.19			9
Total gross output (%)	100.00	100.00			19
					22
Variable costs					
Feed	48.33	47.76	-0.57		
Seed, fertiliser, crop costs	1.85	2.89	1.05		
Vet. & medicines	1.47	1.17	-0.30		
Other livestock costs	3.99	4.61	0.61		
Total variable costs	55.64	56.43	0.79		
Total gross margin	44.36	43.57	-0.79		
Fixed costs				Average Poultry Numbers	
Labour:				Average	Average
Regular paid	4.02	4.82	0.80	2015/16	2016/17
Regular unpaid	2.06	2.83	0.77		
Casual labour	0.38	0.86	0.48	Hens in lay	0
Power & machinery costs:				Pullets	0
Contract & hire	1.72	1.48	-0.24	Broilers & other poultry	100,831
Fuel	0.57	0.76	0.19		104,239
Electricity	1.82	2.02	0.20	Total Average	100,831
Heat	2.63	2.51	-0.12		104,239
Repairs	2.92	2.38	-0.54		
Depreciation	4.17	4.70	0.52		
Rent (incl. imputed)	5.52	9.14	3.62		
Other costs:					
Occupiers repairs	1.30	1.94	0.64		
Sundries (incl. bad debts)	3.26	3.25	-0.01		
Total fixed costs	30.37	36.69	6.32		
Management & investment income	13.99	6.88	-7.11		
Minus: management salaries	0.01	0.01	0.00		
Plus: farmer & spouse labour	1.65	2.39	0.73		
Net farm income	15.63	9.26	-6.37		
Farm business income	14.24	7.62	-6.62		

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

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2015/16	2016/17	% change	2015/16	2016/17	£ change
Number of farms	38	35		38	35	
Average number of birds/year	16,670	17,549		16,670	17,549	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	358,500	375,699	5	21.51	21.41	-0.10
Hen depreciation	-55,432	-61,544	11	-3.33	-3.51	-0.18
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	4,429	2,012	-55	0.27	0.11	-0.15
Total poultry output	307,497	316,167	3	18.45	18.02	-0.43
Crops	7,832	10,949	40	0.47	0.62	0.15
Other livestock	2,556	3,868	51	0.15	0.22	0.07
Other output	19,121	17,423	-9	1.15	0.99	-0.15
Total gross output	337,006	348,407	3	20.22	19.85	-0.36
Variable costs						
Feed	159,685	173,648	9	9.58	9.90	0.32
Seed, fertiliser, crop costs	4,568	4,727	3	0.27	0.27	0.00
Vet. & medicines	3,714	3,401	-8	0.22	0.19	-0.03
Other livestock costs	11,979	12,807	7	0.72	0.73	0.01
Total variable costs	179,946	194,583	8	10.79	11.09	0.29
Total gross margin	157,060	153,825	-2	9.42	8.77	-0.66
Fixed costs						
Labour:						
Regular paid	21,873	23,097	6	1.31	1.32	0.00
Regular unpaid	27,083	27,576	2	1.62	1.57	-0.05
Casual labour	2,379	5,014	111	0.14	0.29	0.14
Power & machinery costs:						
Contract & hire	3,849	4,795	25	0.23	0.27	0.04
Fuel	2,485	2,976	20	0.15	0.17	0.02
Electricity	5,717	6,062	6	0.34	0.35	0.00
Heat	445	377	-15	0.03	0.02	-0.01
Repairs	4,831	5,603	16	0.29	0.32	0.03
Depreciation	13,478	13,674	1	0.81	0.78	-0.03
Rent (incl. imputed)	29,774	31,377	5	1.79	1.79	0.00
Other costs:						
Occupiers repairs	4,872	6,462	33	0.29	0.37	0.08
Sundries (incl. bad debts)	14,146	16,545	17	0.85	0.94	0.09
Total fixed costs	130,934	143,559	10	7.85	8.18	0.33
Management & investment income	26,126	10,265	<u>Δ£/farm</u> -15,861	1.57	0.58	-0.98
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	22,358	22,872	514	1.34	1.30	-0.04
Net farm income	48,484	33,137	-15,347	2.91	1.89	-1.02
Farm business income	45,063	28,359	-16,704	2.70	1.62	-1.09

Per £100 of gross output

	2015/16	2016/17	£ change
Number of farms	38	35	
Average number (birds/year)	16,670	17,549	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	103.91	109.07	
Hen depreciation (%)	-12.51	-18.23	
Broilers (%)	0.00	0.00	
Other poultry output (%)	1.80	1.78	
Total poultry output (%)	93.20	92.62	
Crops (%)	2.10	2.88	
Other livestock (%)	0.32	1.15	
Other output (%)	4.38	3.36	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	47.38	49.84	2.46
Seed, fertiliser, crop costs	1.36	1.36	0.00
Vet. & medicines	1.10	0.98	-0.13
Other livestock costs	3.55	3.68	0.12
Total variable costs	53.40	55.85	2.45
Total gross margin	46.60	44.15	-2.45
Fixed costs			
Labour:			
Regular paid	6.49	6.63	0.14
Regular unpaid	8.04	7.91	-0.12
Casual labour	0.71	1.44	0.73
Power & machinery costs:			
Contract & hire	1.14	1.38	0.23
Fuel	0.74	0.85	0.12
Electricity	1.70	1.74	0.04
Heat	0.13	0.11	-0.02
Repairs	1.43	1.61	0.17
Depreciation	4.00	3.92	-0.07
Rent (incl. imputed)	8.83	9.01	0.17
Other costs:			
Occupiers repairs	1.45	1.85	0.41
Sundries (incl. bad debts)	4.20	4.75	0.55
Total fixed costs	38.85	41.20	2.35
Management & investment income	7.75	2.95	-4.81
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	6.63	6.56	-0.07
Net farm income	14.39	9.51	-4.88
Farm business income	13.37	8.14	-5.23

Pence per dozen eggs

	2015/16	2016/17
Gross output		
Eggs	94.29	90.60
Other poultry output	-13.41	-14.36
Other output	7.76	7.77
Total gross output	88.64	84.01
Variable costs		
Feed	42.00	41.87
Other variable costs	5.33	5.05
Total variable costs	47.33	46.92
Total gross margin	41.31	37.09
Total fixed costs	34.44	34.62
Management & investment income	6.87	2.48
Net farm income	12.75	7.99
Farm business income	11.85	6.84

Average Poultry Numbers

	Average 2015/16	Average 2016/17
Hens in lay	16,131	17,224
Pullets	539	325
Broilers & other poultry	0	0
Total Average	16,670	17,549

Other efficiency factors

	Average 2015/16	Average 2016/17
Eggs per bird	283	289
Eggs (p/doz.)	94.18	90.63

Table 2.5 Financial results for laying flocks with free range hens

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2015/16	2016/17	% change	2015/16	2016/17	£ change
Number of farms	31	29		31	29	
Average number of birds/year	14,023	14,756		14,023	14,756	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	301,404	325,571	8	21.49	22.06	0.57
Hen depreciation	-50,047	-53,006	6	-3.57	-3.59	-0.02
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	3,221	682	-79	0.23	0.05	-0.18
Total poultry output	254,578	273,247	7	18.15	18.52	0.36
Crops	6,748	9,754	45	0.48	0.66	0.18
Other livestock	2,561	3,331	30	0.18	0.23	0.04
Other output	17,202	16,610	-3	1.23	1.13	-0.10
Total gross output	281,089	302,943	8	20.05	20.53	0.48
Variable costs						
Feed	136,752	150,309	10	9.75	10.19	0.43
Seed, fertiliser, crop costs	3,800	4,183	10	0.27	0.28	0.01
Vet. & medicines	3,769	3,398	-10	0.27	0.23	-0.04
Other livestock costs	6,435	7,179	12	0.46	0.49	0.03
Total variable costs	150,756	165,069	9	10.75	11.19	0.44
Total gross margin	130,333	137,874	6	9.29	9.34	0.05
Fixed costs						
Labour:						
Regular paid	16,695	18,694	12	1.19	1.27	0.08
Regular unpaid	25,903	26,308	2	1.85	1.78	-0.06
Casual labour	1,917	2,979	55	0.14	0.20	0.07
Power & machinery costs:						
Contract & hire	3,888	5,052	30	0.28	0.34	0.07
Fuel	1,761	2,150	22	0.13	0.15	0.02
Electricity	5,125	5,119	0	0.37	0.35	-0.02
Heat	323	272	-16	0.02	0.02	0.00
Repairs	3,412	4,097	20	0.24	0.28	0.03
Depreciation	10,517	10,669	1	0.75	0.72	-0.03
Rent (incl. imputed)	27,457	28,375	3	1.96	1.92	-0.04
Other costs:						
Occupiers repairs	4,463	6,508	46	0.32	0.44	0.12
Sundries (incl. bad debts)	12,660	14,904	18	0.90	1.01	0.11
Total fixed costs	114,121	125,127	10	8.14	8.48	0.34
Management & investment income	16,212	12,747	<u>Δ£/farm</u> -3,466	1.16	0.86	-0.29
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	22,128	22,798	670	1.58	1.54	-0.03
Net farm income	38,340	35,545	-2,796	2.73	2.41	-0.33
Farm business income	34,034	29,651	-4,383	2.43	2.01	-0.42

Per £100 of gross output

	2015/16	2016/17	£ change
Number of farms	31	29	
Average number (birds/year)	14,023	14,756	

Average £ per £100 of gross output

Gross output (%)			
Eggs (%)	107.23	107.47	
Hen depreciation (%)	-17.80	-17.50	
Broilers (%)	0.00	0.00	
Other poultry output (%)	1.15	0.23	
Total poultry output (%)	90.57	90.20	
Crops (%)	2.40	3.22	
Other livestock (%)	0.91	1.10	
Other output (%)	6.12	5.48	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	48.65	49.62	0.97
Seed, fertiliser, crop costs	1.35	1.38	0.03
Vet. & medicines	1.34	1.12	-0.22
Other livestock costs	2.29	2.37	0.08
Total variable costs	53.63	54.49	0.86
Total gross margin	46.37	45.51	-0.86
Fixed costs			
Labour:			
Regular paid	5.94	6.17	0.23
Regular unpaid	9.22	8.68	-0.53
Casual labour	0.68	0.98	0.30
Power & machinery costs:			
Contract & hire	1.38	1.67	0.28
Fuel	0.63	0.71	0.08
Electricity	1.82	1.69	-0.13
Heat	0.11	0.09	-0.02
Repairs	1.21	1.35	0.14
Depreciation	3.74	3.52	-0.22
Rent (incl. imputed)	9.77	9.37	-0.40
Other costs:			
Occupiers repairs	1.59	2.15	0.56
Sundries (incl. bad debts)	4.50	4.92	0.42
Total fixed costs	40.60	41.30	0.70
Management & investment income	5.77	4.21	-1.56
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	7.87	7.53	-0.35
Net farm income	13.64	11.73	-1.91
Farm business income	12.11	9.79	-2.32

Pence per dozen eggs

	2015/16	2016/17
Gross output		
Eggs	97.93	94.01
Other poultry output	-15.21	-15.11
Other output	8.61	8.58
Total gross output	91.33	87.48
Variable costs		
Feed	44.43	43.40
Other variable costs	4.55	4.26
Total variable costs	48.98	47.67
Total gross margin	42.35	39.81
Total fixed costs	37.08	36.13
Management & investment income	5.27	3.68
Net farm income	12.46	10.26
Farm business income	11.06	8.56

Average Poultry Numbers

	Average 2015/16	Average 2016/17
Hens in lay	13,564	14,557
Pullets	459	199
Broilers & other poultry	0	0
Total Average	14,023	14,756

Other efficiency factors

	Average 2015/16	Average 2016/17
Eggs per bird	272	285
Eggs (p/doz.)	97.82	94.05

Table 2.6 Financial results for non-contract broilers

	<i>Per farm</i>			<i>Per bird (per crop)</i>		
	2015/16	2016/17	% change	2015/16	2016/17	£ change
Number of farms	11	15		11	15	
Average number of birds/year	232,173	204,226		232,173	204,226	
Throughput of birds/year	1,748,086	1,425,971		1,748,086	1,425,971	
	<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	2,403,682	1,810,854	-25	1.38	1.27	-0.11
Other poultry output	14,025	8,342	-41	0.01	0.01	0.00
Total poultry output	2,417,707	1,819,196	-25	1.38	1.28	-0.11
Crops	60,847	42,103	-31	0.03	0.03	-0.01
Other livestock	15,276	9,435	-38	0.01	0.01	0.00
Other output	132,279	93,306	-29	0.08	0.07	-0.01
Total gross output	2,626,109	1,964,040	-25	1.50	1.38	-0.12
Variable costs						
Feed	1,506,748	1,248,285	-17	0.86	0.88	0.01
Seed, fertiliser, crop costs	23,355	20,593	-12	0.01	0.01	0.00
Vet. & medicines	42,819	23,674	-45	0.02	0.02	-0.01
Other livestock costs	92,155	75,525	-18	0.05	0.05	0.00
Total variable costs	1,665,076	1,368,077	-18	0.95	0.96	0.01
Total gross margin	961,033	595,963	-38	0.55	0.42	-0.13
Fixed costs						
Labour:						
Regular paid	72,513	54,537	-25	0.04	0.04	0.00
Regular unpaid	21,930	27,768	27	0.01	0.02	0.01
Casual labour	3,167	7,512	137	0.00	0.01	0.00
Power & machinery costs:						
Contract & hire	37,805	12,626	-67	0.02	0.01	-0.01
Fuel	7,256	7,203	-1	0.00	0.01	0.00
Electricity	53,895	39,982	-26	0.03	0.03	0.00
Heat	76,566	49,356	-36	0.04	0.03	-0.01
Repairs	72,635	38,302	-47	0.04	0.03	-0.01
Depreciation	62,223	43,063	-31	0.04	0.03	-0.01
Rent (incl. imputed)	108,456	113,388	5	0.06	0.08	0.02
Other costs:						
Occupiers repairs	13,536	16,881	25	0.01	0.01	0.00
Sundries (incl. bad debts)	68,348	45,351	-34	0.04	0.03	-0.01
Total fixed costs	598,330	455,970	-24	0.34	0.32	-0.02
Management & investment income	362,703	139,993	<u>Δ£/farm</u> -222,709	0.21	0.10	-0.11
Minus: management salaries	39	0	-39	0.00	0.00	0.00
Plus: farmer & spouse labour	15,935	20,703	4,769	0.01	0.01	0.01
Net farm income	378,599	160,697	-217,902	0.22	0.11	-0.10
Farm business income	347,659	148,377	-199,283	0.20	0.10	-0.09

Per £100 of gross output

	2015/16	2016/17	£ change	Other efficiency factors	
Number of farms	11	15			
Average number (birds/year)	232,173	204,226		Average	Average
				2015/16	2016/17
	Average £ per £100 of gross output				
Gross output (%)				Broiler sale price (£/bird)	1.76 1.67
Eggs (%)	0.00	0.00		Broiler purchase price (£/bird)	0.34 0.36
Hen depreciation (%)	0.00	0.00		Average number of crops/year	7.5 7.0
Broilers (%)	91.53	92.20			
Other poultry output (%)	0.53	0.42			
Total poultry output (%)	92.06	92.63			
Crops (%)	2.32	2.14			
Other livestock (%)	0.58	0.48			
Other output (%)	5.04	4.75			
Total gross output (%)	100.00	100.00			
Variable costs					
Feed	57.38	63.56	6.18		
Seed, fertiliser, crop costs	0.89	1.05	0.16		
Vet. & medicines	1.63	1.21	-0.43		
Other livestock costs	3.51	3.85	0.34		
Total variable costs	63.40	69.66	6.25		
Total gross margin	36.60	30.34	-6.25		
Fixed costs					
Labour:					
Regular paid	2.76	2.78	0.02		
Regular unpaid	0.84	1.41	0.58		
Casual labour	0.12	0.38	0.26		
Power & machinery costs:					
Contract & hire	1.44	0.64	-0.80		
Fuel	0.28	0.37	0.09		
Electricity	2.05	2.04	-0.02		
Heat	2.92	2.51	-0.40		
Repairs	2.77	1.95	-0.82		
Depreciation	2.37	2.19	-0.18		
Rent (incl. imputed)	4.13	5.77	1.64		
Other costs:					
Occupiers repairs	0.52	0.86	0.34		
Sundries (incl. bad debts)	2.60	2.31	-0.29		
Total fixed costs	22.78	23.22	0.43		
Management & investment income	13.81	7.13	-6.68		
Minus: management salaries	0.00	0.00	0.00		
Plus: farmer & spouse labour	0.61	1.05	0.45		
Net farm income	14.42	8.18	-6.23		
Farm business income	13.24	7.55	-5.68		

Table 2.7 Balance sheet data for 2016/17 - specialist poultry farms

Group	All specialist poultry farms		All laying flocks		All poultry meat producers	
	2016/17		2016/17		2016/17	
Number of farms	95		48		46	
Financial year	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed assets						
Land, buildings & BPS	1,096,850	1,164,808	697,036	757,394	1,353,788	1,430,901
Breeding livestock	7,563	9,331	1,380	1,445	12,036	15,024
Machinery	186,497	189,335	109,116	119,501	244,345	242,423
Miscellaneous business assets	877	874	1,188	1,182	701	701
Total fixed assets	1,291,786	1,364,348	808,720	879,523	1,610,870	1,689,049
Current assets						
Crops & trading livestock	73,771	78,137	83,052	92,028	69,788	71,210
Feedstuffs & goods in store	14,564	11,600	7,239	7,338	20,021	14,937
Liquid assets	163,867	180,875	53,623	81,737	243,020	252,797
Total current assets	252,201	270,612	143,914	181,103	332,829	338,944
Total assets	1,543,987	1,634,960	952,634	1,060,626	1,943,699	2,027,993
Liabilities						
Bank term loans	233,758	286,060	170,784	209,595	285,211	348,955
Other loans	66,774	84,458	81,178	120,413	56,994	61,091
Bank overdraft	39,204	40,263	59,494	62,151	27,064	26,452
Other short term loans	74,375	85,051	66,548	75,053	81,715	95,037
Total external liabilities	414,111	495,832	378,004	467,212	450,984	531,535
Net worth	1,129,876	1,139,128	574,630	593,414	1,492,715	1,496,458
Percentage equity (%)	73.2%	69.7%	60.3%	55.9%	76.8%	73.8%

Table 2.8 Comparison of net worth and percentage equity by farm type for 2016/17

Defra main farm type	Average Assets	Average Liabilities	Average Net Worth	Average % Equity
Lowland cattle & sheep	1,312,630	87,984	1,224,646	93.3%
Cereals	2,787,673	222,998	2,564,676	92.0%
General cropping	3,278,144	301,699	2,976,445	90.8%
Mixed	2,149,027	200,270	1,948,757	90.7%
Horticulture	904,054	139,122	764,932	84.6%
Dairy	1,934,022	326,311	1,607,712	83.1%
Pigs	1,384,842	299,681	1,085,161	78.4%
Poultry	1,589,474	454,972	1,134,502	71.4%
All businesses	2,000,995	203,378	1,797,617	89.8%

Table 2.7 continued

Group	<i>Broilers, non contract</i>	
	Opening	Closing
Number of farms	15	
Financial year	2016/17	
	Opening	Closing
Assets		
Fixed assets		
Land, buildings & BPS	1,738,371	1,743,354
Breeding livestock	4,320	3,833
Machinery	281,431	262,754
Miscellaneous business assets	289	289
Total fixed assets	2,024,412	2,010,230
Current assets		
Crops & trading livestock	111,327	98,829
Feedstuffs & goods in store	18,648	16,443
Liquid assets	610,765	666,179
Total current assets	740,740	781,452
Total assets	2,765,152	2,791,682
Liabilities		
Bank term loans	276,890	278,832
Other loans	146,162	156,591
Bank overdraft	14,589	18,623
Other short term loans	148,893	150,629
Total external liabilities	586,535	604,675
Net worth	2,178,617	2,187,007
Percentage equity (%)	78.8%	78.3%

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	18.4	31.8	14.2	10.5
Stores	2.9	2.6	2.9	1.7
Machinery	41.0	40.9	41.0	26.2
Other	37.8	24.6	41.9	61.6
Total	100.0	100.0	100.0	100.0
Tenant's type capital (£)	458,645	279,415	593,501	1,037,554

Table 2.10 Gross margin for all laying flocks

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2015/16	2016/17	£ change	2015/16	2016/17	£ change
Number of farms	49	49				
Average number of birds/year	9,574	13,253				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	21.97	21.83	-0.14			
Hen depreciation	-3.20	-3.50	-0.30			
Other poultry output	0.03	0.00	-0.03			
Total output	18.80	18.33	-0.47	100.00	100.00	
Variable costs						
Feed	9.74	9.97	0.24	51.79	54.42	2.63
Vet. & medicines	0.18	0.20	0.01	0.97	1.07	0.10
Other livestock costs	0.60	0.67	0.07	3.18	3.65	0.47
Other variable costs	0.01	0.00	0.00	0.04	0.02	-0.01
Total variable costs	10.53	10.84	0.32	55.98	59.17	3.19
Total gross margin	8.28	7.48	-0.79	44.02	40.83	-3.19

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>		
	2015/16	2016/17	£ change	2015/16	2016/17	£ change
Number of farms	11	11				
Average number of birds/year	16,383	17,101				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	22.21	21.72	-0.49			
Hen depreciation	-2.40	-3.36	-0.96			
Other poultry output	0.02	-0.08	-0.10			
Total output	19.83	18.27	-1.55	100.00	100.00	
Variable costs						
Feed	9.40	9.62	0.22	47.40	52.66	5.26
Vet. & medicines	0.08	0.07	-0.01	0.40	0.40	0.00
Other livestock costs	1.24	1.33	0.09	6.23	7.28	1.05
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00
Total variable costs	10.71	11.03	0.31	54.03	60.34	6.31
Total gross margin	9.11	7.25	-1.87	45.97	39.66	-6.31

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>		
	2015/16	2016/17	£ change	2015/16	2016/17	£ change
Number of farms	38	38				
Average number of birds/year	8,185	12,139				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	21.87	21.88	0.01			
Hen depreciation	-3.52	-3.56	-0.03			
Other poultry output	0.04	0.03	-0.01			
Total output	18.38	18.35	-0.03	100.00	100.00	
Variable costs						
Feed	9.88	10.12	0.24	53.72	55.14	1.42
Vet. & medicines	0.23	0.25	0.02	1.23	1.34	0.12
Other livestock costs	0.34	0.40	0.06	1.84	2.17	0.33
Other variable costs	0.01	0.01	0.00	0.05	0.03	-0.02
Total variable costs	10.45	10.77	0.32	56.84	58.69	1.85
Total gross margin	7.94	7.58	-0.35	43.16	41.31	-1.85

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

	Layers		Laying flocks, cage barn & deep litter		Free range layers	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
Number of farms	49	49	11	11	38	38
No of dozen eggs	219,404	309,915	405,144	412,228	181,532	280,308
Average egg yield/bird	283	288	306	299	273	283
Average egg price p/doz	95.74	93.34	89.68	90.20	98.50	94.67
	<i>Average pence per dozen (annual basis)</i>					
Gross output						
Eggs	95.85	93.35	89.79	90.10	98.61	94.74
Hen depreciation	-13.95	-14.97	-9.71	-13.96	-15.88	-15.40
Other poultry output	0.14	-0.01	0.09	-0.34	0.17	0.13
Total output	82.04	78.38	80.17	75.80	82.89	79.47
Variable costs						
Feed	42.49	42.66	38.00	39.92	44.53	43.82
Vet. & medicines	0.80	0.84	0.32	0.30	1.02	1.07
Other livestock costs	2.61	2.86	5.00	5.52	1.52	1.72
Other variable costs	0.03	0.02	0.00	0.00	0.04	0.03
Total variable costs	45.93	46.37	43.31	45.74	47.11	46.64
Total gross margin	36.12	32.00	36.85	30.06	35.78	32.83

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

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2015/16	2016/17	£ change	2015/16	2016/17	£ change
Number of farms	22	22				
Average number of birds/year	130,574	112,040				
Throughput of birds/year	984,199	783,356				
Average number of crops/year	7.54	6.99				
Average sale price (broilers) - £/bird	1.77	1.68				
Average purchase price (broilers) - £/bird	0.34	0.36				
	<i>Average £ per bird (per flock)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Broilers	1.40	1.29	-0.11			
Total output	1.40	1.29	-0.11	100.00	100.00	
Variable costs						
Feed	0.87	0.88	0.01	62.05	68.33	6.28
Vet. & medicines	0.02	0.02	-0.01	1.72	1.26	-0.46
Other livestock costs	0.05	0.05	0.00	3.72	4.13	0.42
Other variable costs	0.01	0.00	0.00	0.41	0.09	-0.32
Total variable costs	0.95	0.95	0.00	67.90	73.82	5.92
Total gross margin	0.45	0.34	-0.11	32.10	26.18	-5.92

Table 2.15 Gross margin for turkey production

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2015/16	2016/17	£ change	2015/16	2016/17	£ change
Number of farms	24	23				
Average number of birds/year	671	755				
Throughput of birds/year	1,365	1,793				
Average sale price (turkeys) - £/bird	37.33	42.80				
Average purchase price (turkeys) - £/bird	4.43	4.52				
	<i>Average £ per bird</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	31.62	36.22	4.60			
Total output	31.62	36.22	4.60	100.00	100.00	
Variable costs						
Feed	7.50	7.09	-0.41	23.71	19.58	-4.14
Vet. & medicines	0.10	0.08	-0.02	0.30	0.22	-0.08
Other livestock costs	3.14	4.63	1.49	9.94	12.78	2.84
Other variable costs	0.02	0.01	-0.02	0.08	0.02	-0.05
Total variable costs	10.76	11.81	1.05	34.03	32.60	-1.42
Total gross margin	20.86	24.41	3.55	65.97	67.40	1.42

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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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