



Farm Business Survey

2015/2016

Poultry Production in England



Richard Crane and Elspeth Organ



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2015/16

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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 Eleventh Series

With this eleventh series of reports on the economics of agriculture and horticulture in England from *Rural Business Research (RBR)*, our focus of providing independent data and analysis to the individual sectors has arguably never been of such importance. The collective decision of the UK voting public on the 23 June 2016 to leave the EU will have large impacts on agricultural and horticultural sectors. Issues of policy, trade, exchange rates and labour availability are now very much front and centre in the minds of many businesses. Ensuring that the enterprises that constitute the farm business are profitable is of even greater importance given the uncertainty which now exists in the industry. Brexit will also bring opportunities, and those seeking to make the most of the opportunities that will arise will need independent data to support effective decision making. In this eleventh series, RBR seeks to provide these independent data in a revised and succinct format which places the data results at the heart of each report; we have focused our succinct comments on key results within the tables to draw to the attention of readers the central highlights. Our increasing focus on the presentation of data and results flows from internal and external feedback.

Setting the context to this series, data from the Farm Business Survey (FBS) for the 2015/16 financial year, shows that average Farm Business Income (FBI) decreased by 21% to £31,400 per farm. Examining results by farm type, on average, only General Cropping, Less Favoured Areas (LFA) Grazing Livestock and Horticulture recorded increases in FBI; by contrast Dairy and Specialist Pig farms recorded FBI decreases of around 50% on 2014/15 levels. Average FBI was at its lowest point for a number of years in 2015/16. The immediate impact of Brexit on exchange rates has however led to recent increases in commodity prices, and the overall outlook for 2016/17 is consequently more positive, though farm type variation remains and not all sectors are likely to witness improvements for 2016/17. Moving forward however, businesses will need to understand the impact of the exchange rate movement on the costs incurred, and a greater focus on budgeting and cost management will be the order of the day in order to capitalise on the exchange rate benefit. Cost comparison from the independent data produced within these reports provides valuable information in relation to costs and returns across each sector to aid managers in this respect.

With respect to the policy environment for agriculture and horticulture moving forward, the rigorous and independent FBS data presented in these reports will be of crucial importance for evidenced-based policy making. Our research work within the FBS programme could 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 are given to them all.

Professor Paul Wilson

Chief Executive Officer, Rural Business Research
March 2017

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.

TABLE OF CONTENTS

	Page
Foreword to the First Series	2
Foreword to the Eleventh Series	3
Acknowledgements	3
Table of Contents	4
List of Tables	5
List of Figures	5
Summary	7
Section 1	9
Commentary on the UK Poultry Industry	
1.1	9
1.2	11
1.3	15
1.4	18
1.5	18
1.6	19
Section 2	21
Financial Results for Poultry Production in England	
2.1	21
2.2	21
2.3	22
2.4	23
2.5	26
2.6	26
References	45
Glossary	46
Appendix 1	48
Reports in this series	

LIST OF TABLES

		Page
Table 1.1	UK imports and exports of Eggs and Poultry meat	18
Table 2.1	Financial results for all specialist poultry farms	28
Table 2.2	Financial results for all laying flocks	30
Table 2.3	Financial results for all poultry meat producers	32
Table 2.4	Financial results for laying flocks producing eggs for human consumption	34
Table 2.5	Financial results for laying flocks with free range hens	36
Table 2.6	Financial results for non-contract broilers	38
Table 2.7	Balance sheet data for 2015/16 – specialist poultry farms	40
Table 2.8	Comparison of net worth and percentage equity by farm type for 2015/16	40
Table 2.9	Distribution of tenant's type capital (%)	41
Table 2.10	Gross margin for all laying flocks	42
Table 2.11	Gross margin for laying flocks with mixed production systems including enriched cage, barn and deep litter hens	42
Table 2.12	Gross margin for laying flocks with free range hens	43
Table 2.13	Gross margin per dozen eggs for all laying flocks (annual basis)	43
Table 2.14	Gross margin for non-contract broilers and table chicken	44
Table 2.15	Gross margin for turkey production	44

LIST OF FIGURES

		Page
Figure 1.1	English poultry numbers at June 2006-2016	9
Figure 1.2	UK chick and poult placings 2006-2016	10
Figure 1.3	UK broiler market - estimate	11
Figure 1.4	Annual UK production of poultry meat by type	12
Figure 1.5	Annual UK egg production by production systems	13
Figure 1.6	Average packers to producer prices by housing type	14
Figure 1.7	Producer value of UK-produced poultry meat and eggs 2009-2015 (£M)	15
Figure 1.8	Poultry and egg output compared to other agricultural outputs through time at current prices (£M)	16
Figure 1.9	Retail egg market for year to November 2016	17
Figure 1.10	Index of producer prices for poultry and eggs and cost of production	19

Summary

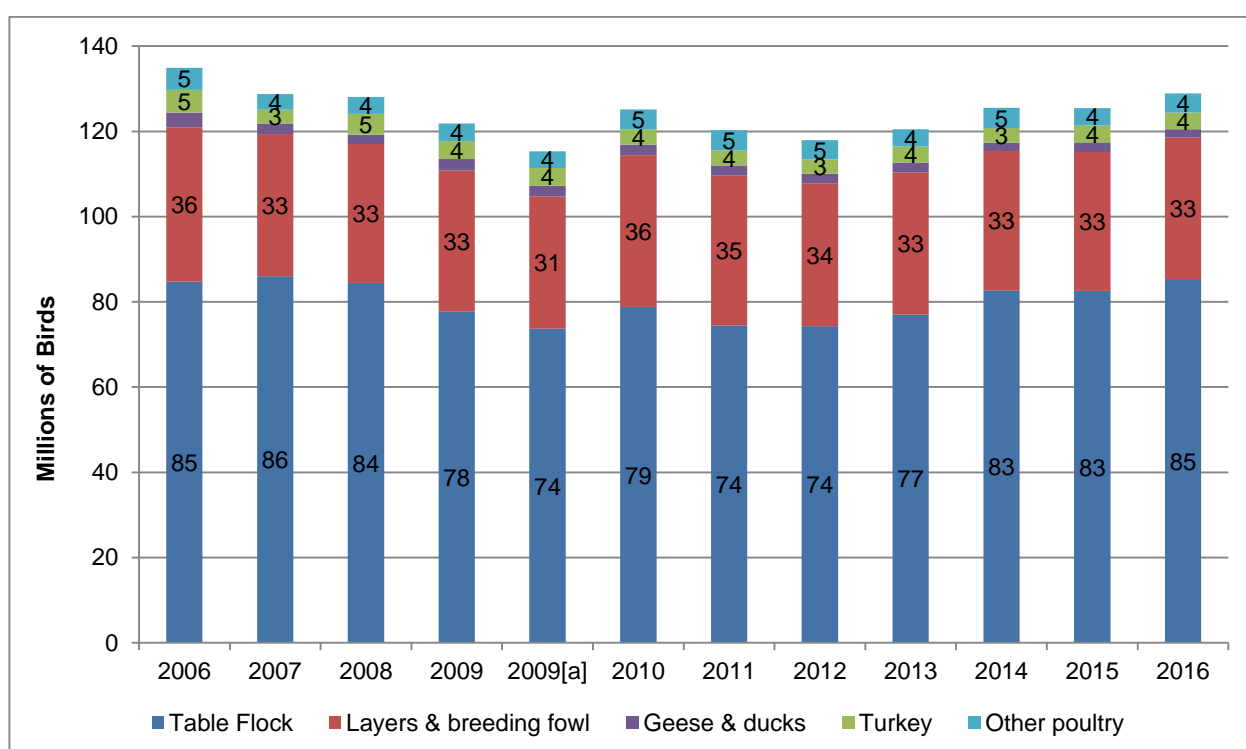
- Total number of birds in production in England in June 2016 was just under 129 million birds, up 3% on the previous year
- Poultry output in 2015 was nearly £3.2 billion, 13% of total output from agriculture, up from 12% in 2014
- The value of UK poultry meat production reached £2.27 billion in 2015, representing an increase of less than 1% on the previous twelve month period
- Output from egg and egg products at £681 million in 2015 showed negligible year-on-year change, following an increase of approximately 6% between 2012 and 2013
- In 2015/16 a total of 87 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 83 in 2014/15
- The profitability of specialist poultry farm businesses reduced by 16% in the 2015/16 financial year, with average profit as measured by Farm Business Income (FBI) falling on a per business basis from £126,839 in 2014/15, to £106,670 in 2015/16
- Within this sector, both the layers and poultry meat producers experienced a fall in profits during 2015/16; FBI down from £53,998 per business in 2014/15 to £14,118 per business for layers and down from £187,700 in 2014/15 to £170,738 per business for poultry meat producers
- Of the 49 farms classified as Specialist Layers in 2015/16, 38 had laying flocks producing eggs for human consumption, while the remaining 11 were breeding flocks and hatcheries
- Laying flocks producing eggs for human consumption had an increase in FBI from £29,931 in 2014/15, to £45,063 in 2015/16
- Free range layers recorded a fall in profitability with FBI down 10%, to £34,034 per business
- The price of the eggs from free range systems fell 2% to an average of 98p/doz, while egg production for the group decreased from 286 to 272 eggs per year; it should be noted there is evidence of producers receiving very variable egg prices (+/-10%), with some being paid much less than in 2014/15
- For the poultry meat producers FBI fell by around 9%, from £187,700 in 2014/15, to £170,738 in 2015/16; while throughput increased, the group experienced a fall in the price of poultry meat
- After a decrease in 2014/15, the average number of laying hens increased by around 12% in 2015/16 to 51,000 birds; by contrast, the average number of birds for meat production decreased by 13%, to 100,831
- Among the total average variable costs for all specialist poultry farms, there was nearly a 19% decrease in average feed costs; cost of feed as a percentage of £100 of output per business fell to approximately 45% in 2015/16, compared with 48% in 2014/15
- Total fixed costs on a per business basis fell by almost 7%, to an average of £324,787 in 2015/16
- In common with past income trends, there was a wide range in the level of FBI observed for different businesses in 2015/16, with around 42% recording an annual FBI of over £50,000 (44%, 2014/15), with only 8% incurring a negative FBI (21%, 2014/15)

SECTION 1: COMMENTARY ON THE UK POULTRY INDUSTRY

1.1 General introduction

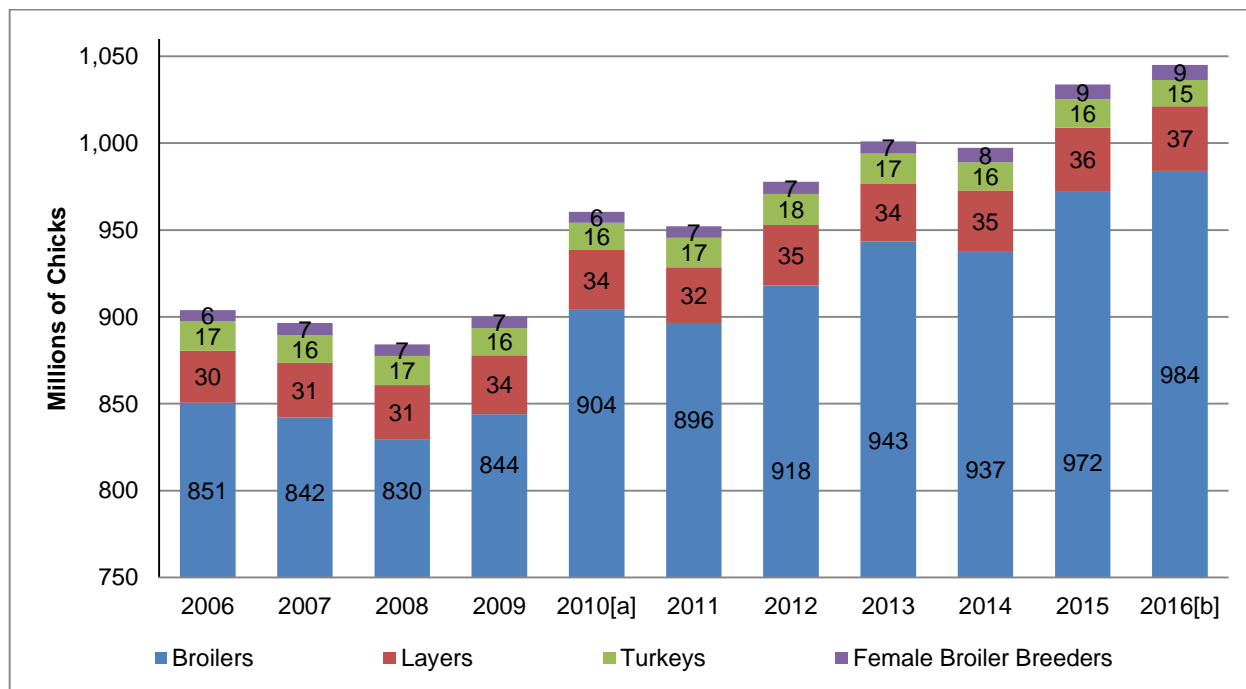
- The English poultry flock rose to just under 129 million birds in 2016 (up 3%) after a slight contraction in 2015
- The table flock rose to over 85 million birds in 2016, an increase of 3% on the previous year
- The turkey flock decreased by 3% between 2015 and 2016, following a 16% increase the previous year
- Layer and breeding fowl numbers remained stable at around 33 million in 2015 and 2016
- The poultry flock in England in 2016 consists of approximately 66% table birds, 26% layers and breeding fowl, 3.5% other poultry, 3% turkey and 1.5% duck and geese [1]

Figure 1.1 English poultry numbers at June 2006-2016 [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 2006-2016 [2]



Note: [a] denotes a 53 week year
 [b] 2016 12 month average includes last 2 months of 2015 as 2016 data not available at time of preparing report

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 a continuous rise in numbers from a low of 830 million in 2008, to approximately 1 billion in 2016, an increase of 19%
- Since numbers plateaued in 2014 they have risen to the highest levels in the recorded period (2006-2016), in 2016 numbers increased by 2% on a year-to-year basis, based on data available up to the end of October 2016
- Placements of turkeys have decreased by around 17% since 2012
- There was a very small decrease (-1%) in placements of broiler breeder hens between 2015 and 2016, following an increase of 23% between 2013 and 2015 [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 2016 comprised of Boparan Holdings (proprietor of 2 Sisters) (31%), Moy Park (17%), Faccenda (10%), Cargill (3%), Banham (3%) and others (36%), as shown below [4]
- Broiler production in 2016 showed a year to year increase of just over 1%, having increased by just over a fifth since 2009
- Turkey production at about 4% of poultry meat production was down on a year to year basis in 2016 by just under 4%, having over the period 2009 to 2016 grown by almost 11%

Figure 1.3 UK Broiler Market - Estimate [4]

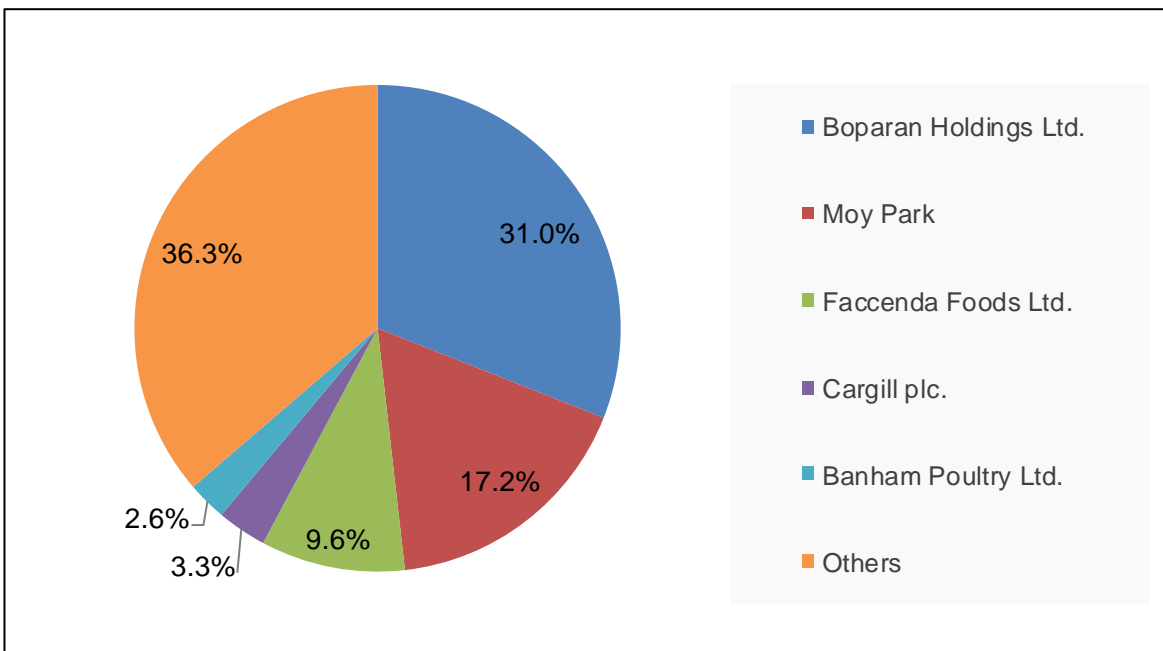
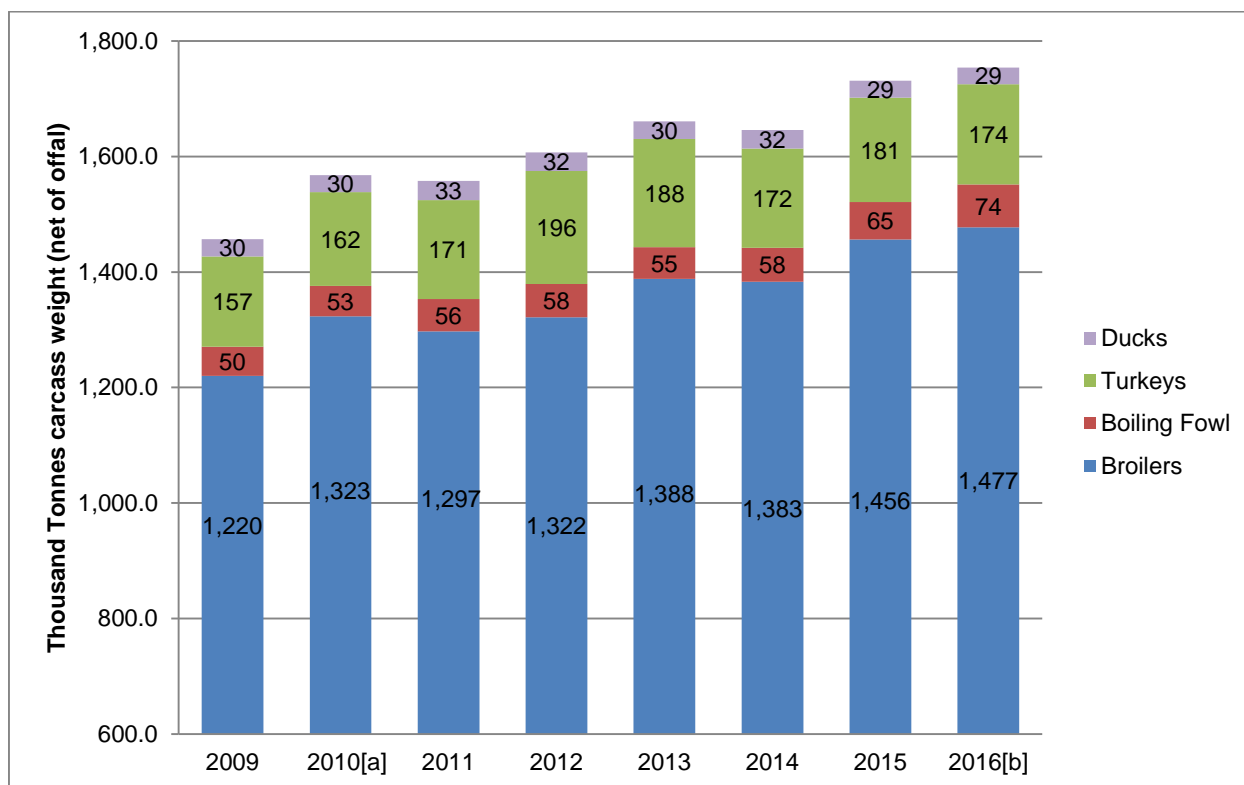


Figure 1.4 Annual UK production of poultry meat by type [5]



Note: [a] 2010 was a 53 week year

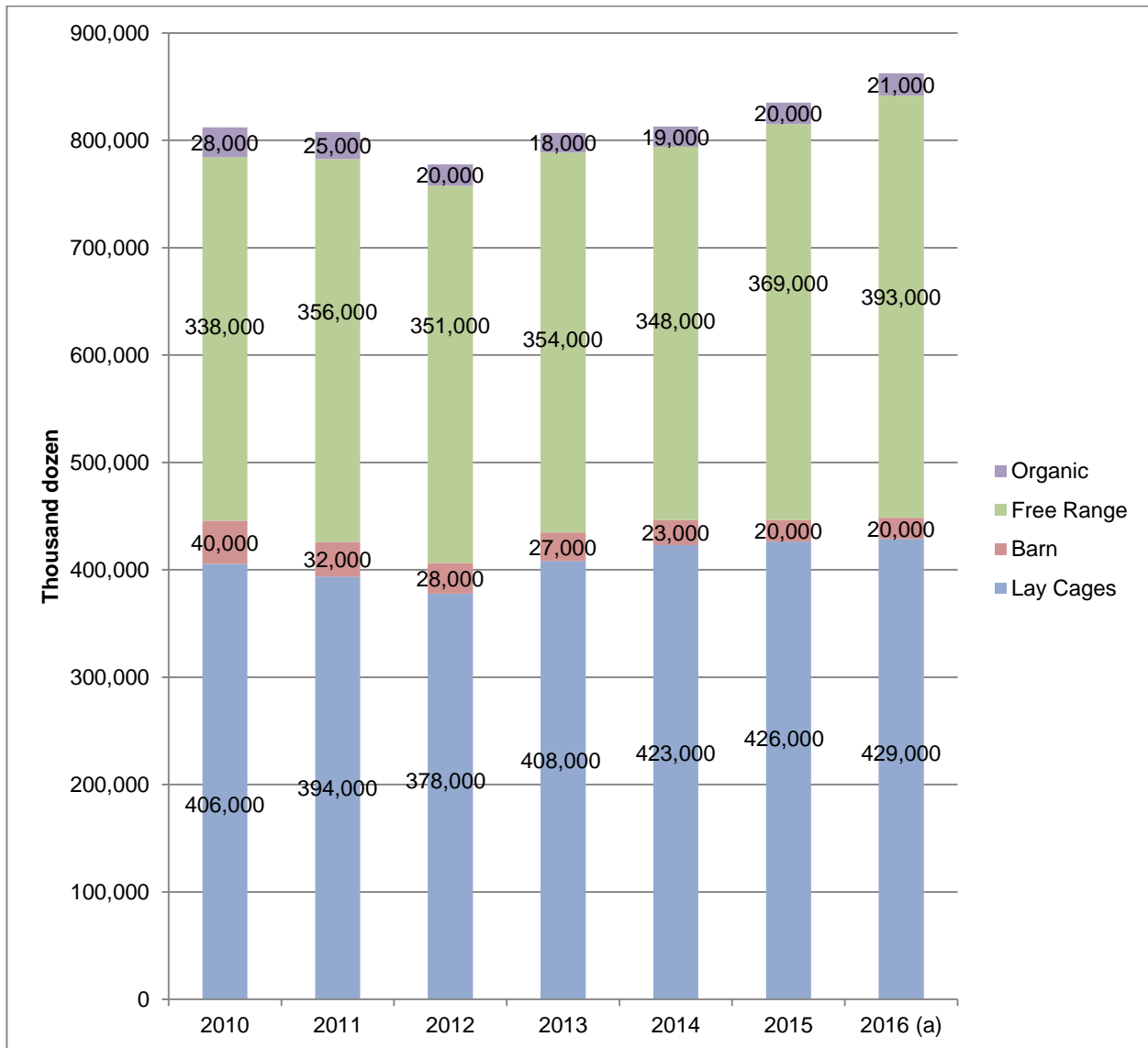
[b] 2016 data is based on the monthly data recorded up to end of October 2016 with November and December based on figures for the same months for the previous year (2015)

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 [9]
- *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 [9]
- *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 [10]

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



Note: (a) Note that Q4 results for 2016 were not available so they have been based on Q4 of 2015

- Total packing station throughput increased by 3% between 2015 and 2016 and is 6% above the previous peak in 2010
- In 2016 approximately 50% of eggs were produced in enriched cages, 46% in free range systems, 2% in barns, and 2% from organic systems
- Compared to 2015 enriched cage production has increased by just under 1% in 2016
- There has been an increase in free range production between 2015 and 2016 of around 7%, bringing it to the highest level recorded to date
- Organic production in 2016 was up just over 5% compared to 2015 [6]

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



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

- The average packer to producer price decreased by around 9p/doz (-11%) in 2016, to 73.3p/doz, following a decrease of only 2p/doz (-2%) in the previous year
- The average price of free range eggs fell to 88.0p/doz in 2016, an 11p/doz reduction from the previous year; this after several years of price increases when the price peaked in 2013 at 105.2p/doz
- The average lay cage egg price in 2016 dropped back by around 7p/doz, to 56.7p/doz [6]

1.3 Contribution of the poultry sector to the economy

1.3.1 The farm sector

- In 2015 total poultry output increased by just under 1%, to nearly £3.2 billion, after an increase of just over 8% in 2013 from 2012, whilst total agricultural output decreased by 7% in 2015
- Poultry meat output rose by less than 1%, to £2.27 billion in 2015, an increase of £16 million on 2014
- Egg and egg products remained stable over the same period at £681 million, compared with an increase of approximately 6%, or £44 million, to £733 million between 2012 and 2013
- Poultry output, as a proportion of gross output from agriculture rose slightly to 13% in 2016, up from 12% in the previous year [7]

Figure 1.7 Producer value of UK-produced poultry meat and eggs 2009-2015 (£M) [7]

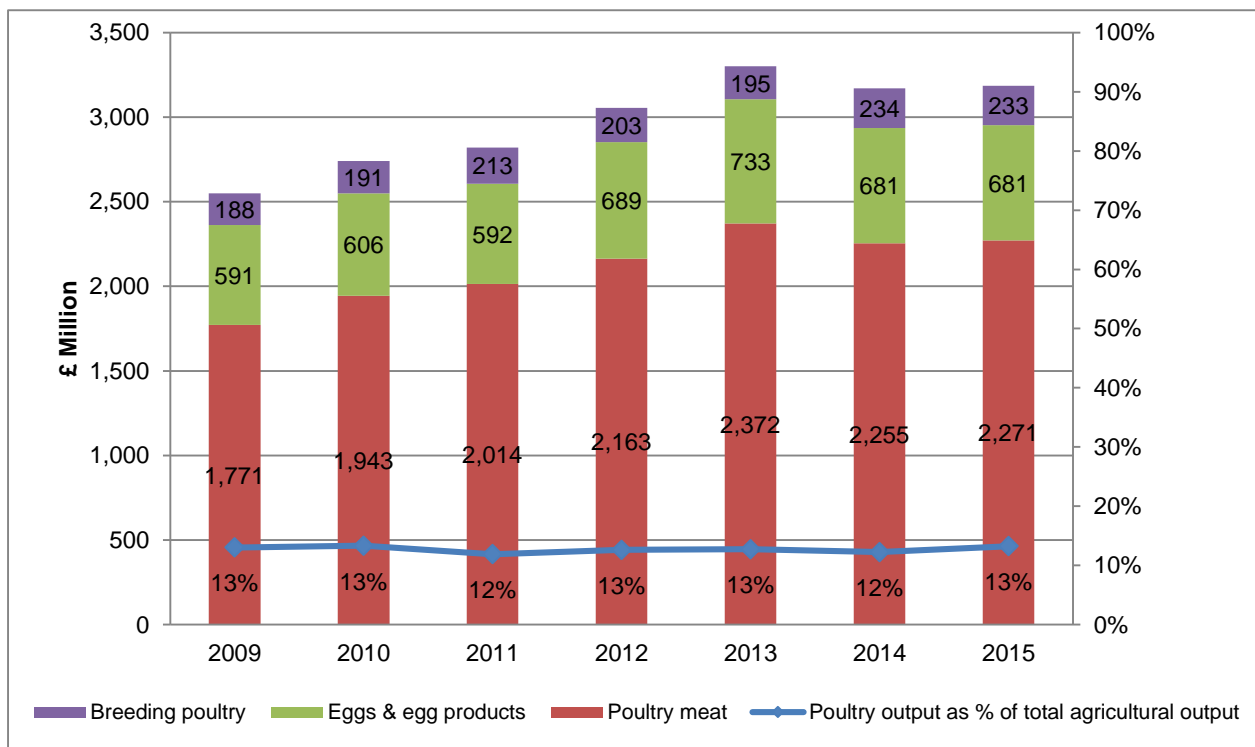
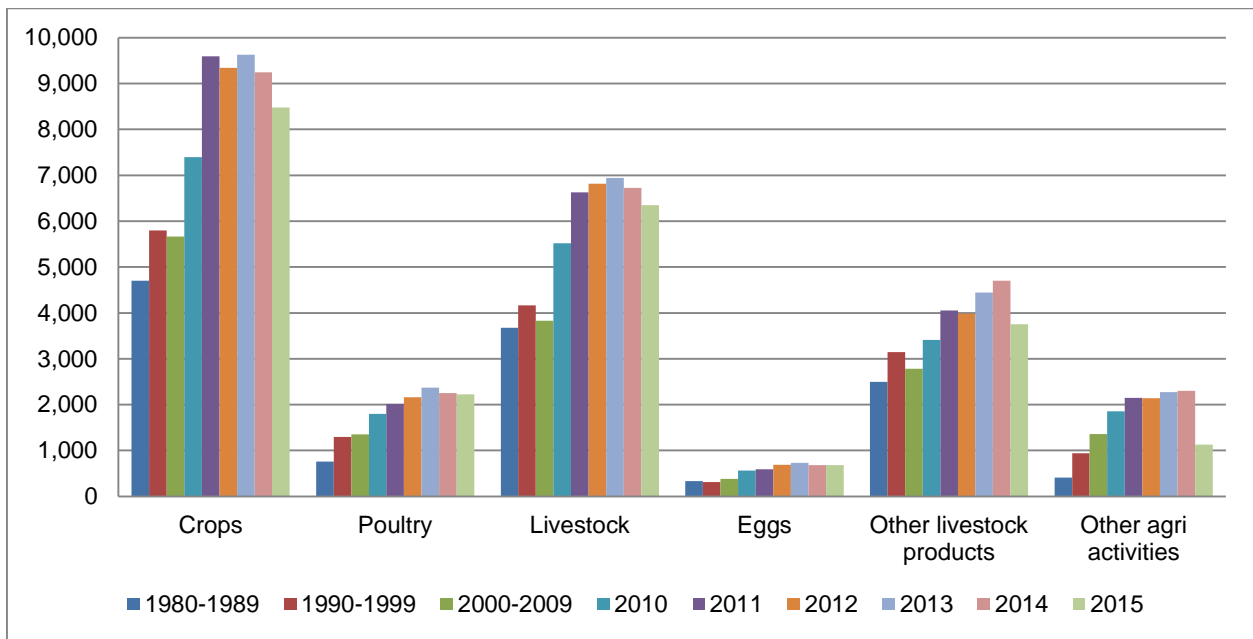


Figure 1.8 Poultry and egg output compared with other agricultural outputs through time at current prices (£M) [7]



1.3.2 The retail sector

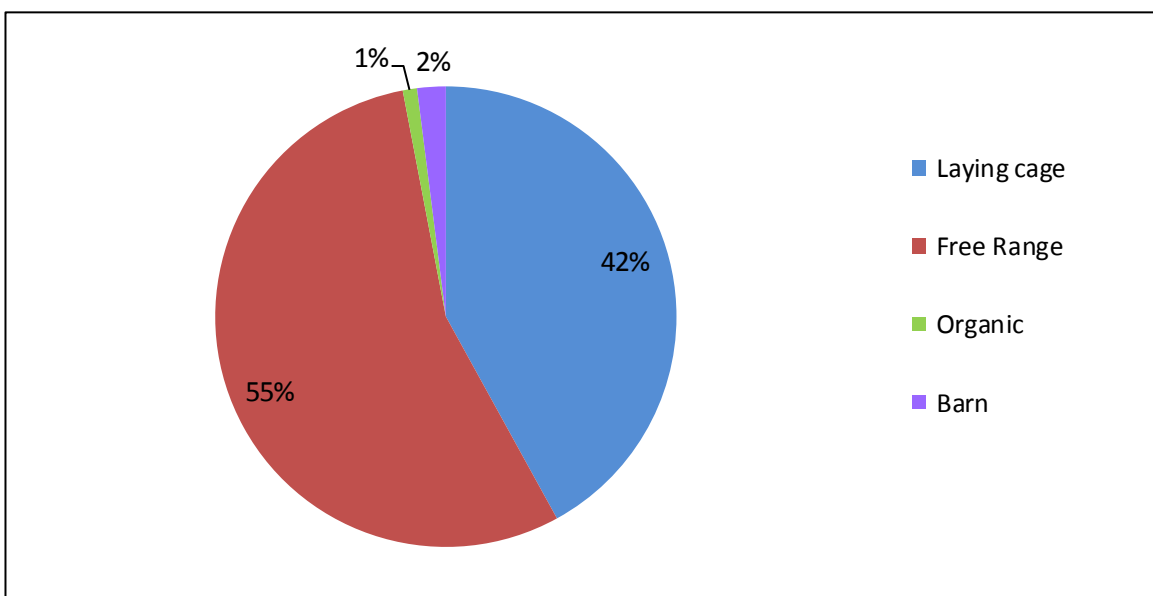
1.3.2.1 Poultry meat

- Poultry meat has continued to be the most popular meat with consumers in the UK, amounting to 42% of total meat consumption in 2015 [8]
- Year-on-year average consumption was up from 33.0kg per person per year in 2014, to 35.4kg per person per year in 2015, representing an increase of just over 7% [8]
- Total UK poultry meat production was 23 thousand tonnes higher in 2016, up a little over 1% from the previous year [9]

1.3.2.2 Eggs

- In 2016 UK egg consumption rose by around 2%, to 1,042 million doz, with a retail value of approximately £910 million [10]
- Between 2015 and 2016, retail sales rose by around 1% [10]
- Egg sales have continued to rise in 2016, building on several years of growth according to data from the British Egg Industry Council (BEIC) [11]
- Retail egg sales by volume have increased by 4.2% compared to the same period last year [11]
- Egg sales are expanding and data to the end of November 2016 showed the strongest period of growth since the 1950's [11]
- Data from the BEIC shows growth is being driven by the younger generation, with consumption by women aged 16-24, up 27% in the past two years [12]
- According to figures from Kantar Worldpanel (consumer/market research organisation), the egg retail sector for the year up to November 2016 consisted of 42% laying cage production, 55% free range production (including estimated 1% organic) and 2% barn production [10]

Figure 1.9 Retail Egg Market for year to November 2016 [10]



1.4 Trade

Table 1.1 UK imports and exports of Eggs and Poultry meat [13]

Eggs (Million Dozen)	2010	2011	2012	2013	2014	2015
Imports	136	126	163	153	158	167
Exports	8	11	19	23	11	9
UK production	826	821	797	829	839	866
% self sufficient	87%	88%	85%	86%	85%	85%

Poultry meat [a] (carcass weight thousand tonnes)	2010	2011	2012	2013	2014	2015
Imports	475	515	480	482	509	540
Exports	268	291	283	314	339	292
UK production	1,570	1,660	1,609	1,663	1,648	1,694
% self sufficient	88%	87%	89%	91%	91%	87%

[a] excludes offal

- Between 2014 and 2015, production of both eggs and poultry meat increased by 3%
- Imports of eggs increased by 6%, whilst exports decreased by 18%, resulting in self-sufficiency remaining unchanged at 85%
- Poultry meat imports increased by 6%, whilst exports decreased by 14%, resulting in a fall of 4% in the rate of self-sufficiency to 87% [13]

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 a further reduction in 2016 (down from 107.1 points in 2015, to 103.6), following a reduction the previous two years (down from 116.9 points in 2013, to 112.2 in 2014), after continuous year-on-year rises since between 2009 and 2013
- Average compound feed prices for 2016 have dropped by around eight points compared to the previous year and are 29 points lower than the peak in 2013
- Fuel for heating decreased by approximately six points in 2016 (based on figures available up to the end of September 2016)
- Egg output fell by over 15 points in 2016, following a reduction in 2015 of just over 3 points after a peak in 2013
- However, poultry meat remained unchanged in 2016, following reductions of a little over one point in 2015 and around three points in 2014, after a peak in 2013 [14]

Figure 1.10 Index of producer prices for poultry and eggs and cost of production [14]



(a) 2016 figures based on average prices between January and September 2016

1.6 Recent outbreaks of avian influenza (bird flu)

- 16th December 2016 Lincolnshire

Confirmed case of H5N8 in turkeys, all birds died or were humanely culled and a 3km Protection zone and 10km Surveillance zone set up around the premises

- 3rd January 2017 Carmarthenshire

Confirmed case of H5N8 in a backyard flock of chickens and ducks; the birds were all culled and a 3km Protection zone and 10km Surveillance zone set up around the premises

- An Avian Influenza Prevention zone has been in place in England, Scotland and Wales since the 6th of December 2016 and after the confirmed case on the 4th January the prevention zone has been extended to 28th of February 2017 when it will be reviewed
- The prevention zone requires anyone that keeps poultry to keep their birds indoors or take practical steps to minimize their exposure to wild birds
- Poultry gatherings and shows are currently banned to prevent the spread of the disease [15]

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 2015/16:

- Table 2.7 - Balance sheet data for all specialist poultry farms:
 - The data is broken down further to all laying flocks, all poultry meat producers and non-contract broilers
- Table 2.8 - Comparison of net worth and percentage equity by farm type for 2015/16:
 - 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 (%):
 - The data is again shown for all specialist poultry farms then broken down further to 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 (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 2015 June survey there were 1,362 specialist poultry farm businesses in England that were above the FBS size threshold.

The results for the 2015/16 financial year are based on 87 specialist poultry farms, which represent 6.4% 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 2014/15 and 2015/16 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 2014/15 and 2015/16

2.4.1 Specialist poultry farms [Table 2.1]

- In 2015/16 a total of 87 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 83 farms in 2014/15
- The total of 87 farms included 49 specialist layers and 38 specialist poultry meat producers
- The profitability of specialist poultry farm businesses reduced by 16% in the 2015/16 financial year, with average profit as measured by Farm Business Income (FBI) falling on a per business basis from £126,839 in 2014/15, to £106,670 in 2015/16 [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 2014/15 and 2015/16, from £83,600 to £56,140
- Within this sector, both the layers and the poultry meat producers experienced a fall in profits during 2015/16
- There was, however, a marked difference to the scale of these reductions:
 - Average FBI on a per business basis for the layers dropped back from £53,998 in 2014/15, to £14,118 in 2015/16, representing a drop of 74% [Table 2.2]
 - For the poultry meat producers FBI fell by around 9%, falling from £187,700 in 2014/15, to £170,738 in 2015/16 [Table 2.3]
- After falling by 4% in 2014/15 to 45,642 birds, the average number of laying hens increased by almost 12% in 2015/16, to 51,079 birds, with the average overall number of birds for meat production decreasing by 13%, to 100,831
- Although the sample of poultry businesses is divided fairly evenly between layers and poultry meat producers (56% & 44%), the balance was very different in terms of poultry output attained:
 - Some 15% was derived from egg production
 - Around 62% from broiler production and
 - Almost 23% 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 an almost 19% decrease in average feed costs on a per holding basis; cost of feed as a percentage of £100 of output per business fell to approximately 45% in 2015/16, compared with 48% in 2014/15
- Total fixed costs on a per business basis fell by almost 7%, to an average of £324,787 in 2015/16

- In common with past income trends, there was a wide range in the level of Farm Business Income (FBI) observed for different businesses with around 42% recording an annual FBI of over £50,000, but only 8% incurring a negative FBI compared to 21% in 2014/15

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

- In 2015/16, the 49 specialist poultry farms that were classified as layers (Defra farm typology code 521) included 38 businesses with laying flocks producing eggs for human consumption and 11 businesses comprising breeding and rearing units (including growing pullets, layer breeders and broiler breeders)
- Gross output of all laying flocks on a business basis decreased by nearly 15%, dropping from an average of £745,768 in 2014/15, to an average of £635,793 in 2015/16
- The net result of the year-on-year change to output and costs for these businesses was a reduction in the average FBI from £53,998 per business in 2014/15, to £14,118 per business in 2015/16

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 decreased by more than 33%, falling to an average of £337,006 per business; despite lower costs, the average gross margin per business decreased by almost 19%, to £157,060 in 2015/16
- In contrast to the results for layers producing eggs for human consumption and breeder/rearers, the FBI for layers only producing eggs for human consumption increased 51% from £29,931 in 2014/15, to £45,063 in 2015/16
- The increase in profitability came from the more intensive units, including enriched cages, whilst the free range layers experienced a fall in profitability
- The price attained for eggs produced by the more intensive group increased while the price of eggs from free range systems decreased
- Although for farms in this sample the average price for eggs increased and throughput was lower, this is in contrast to the trends seen nationally that show a fall in egg prices but an increase in production over the same period of time
- Some of these 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 small decrease in the average egg price

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 31 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 an increase in average FBI per business, compared with a decrease in the free range systems

- The price of free range eggs came back to an average of 98p/doz, a 2% fall compared to the previous year
- The average number of eggs per bird per year decreased by 5% for free range producers, to 272 eggs per year
- On a per business basis free range egg farms experienced an 11% fall in profit, with the average FBI decreasing from £38,078 in 2014/15, to £34,034 in 2015/16

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 2015/16 there were 38 of these farms, compared with 37 in 2014/15; among them were 10 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 went down to an average of £666,964 per business, over 19% less than the previous year with the main cost of feed decreasing by more than 19% to an average of £579,368, compared to £716,915 in 2014/15
- On a per bird basis, the feed costs went down to an average of £5.75, from £6.17
- The average number of birds per business was down by approximately 13%, to 109,200 birds
- A fall in gross margin of more than 9%, meant that the FBI per business reduced by 9% to an average of £170,738 despite a fall in fixed costs of over 10%
- For poultry meat producers FBI fell by around 9%, from £187,700 in 2014/15, to £170,738 in 2015/16
- FBI as measured on a per bird basis was also down on the previous year, but by only 0.08%, reducing from an average of £1.62 to an average of £1.69

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 almost 17% to an average of £1,506,748 per business
- On a per bird basis, the cost of feed decreased from an average of £1.06, to £0.88
- Although throughput increased, the group experienced a fall in price for poultry meat
- Productivity was up in 2015/16, increasing from 7.2 crops of birds reared per year in 2014/15, to 7.4 crops

- The average price received for broilers in the year was £1.76 per bird, a decrease of 23p on the previous year, while the price of chicks decreased from an average of 37p per bird, to an average of 34p
- FBI decreased from an average of £358,995 per business in 2014/15, to an average of £347,659 in 2015/16

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 just over 1% in 2015/16, to an average of just under 76%
- The laying flock systems saw their percentage of equity decline by 3% to an average of 57.3%, while the poultry meat producers saw percentage equity remain similar to the previous year, at an average of just over 81%
- Table 2.8 compares the net worth and percentage equity with other Robust Farm Type classification used in England with an overall average of £187,620 recorded per business, representing an overall average of a little over 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 76.2%) 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 very similar to the previous year at 96p/doz
- The average number of birds per holding decreased by almost 29% compared to 2014/15, from 13,382, to 9,574 in 2015/16
- On a per bird basis, poultry output was similar to the previous year at an average of £19 per bird, with a very marginal fall in both the egg price and egg production per bird
- Feed costs for all farms with poultry layers decreased by 92p per bird, to £9.74
- Total variable costs reduced by 8% on a per bird basis, resulting in a mean gross margin of £8.28, up £0.73 on 2014/15
- The gross margin per doz eggs was just over 36p for all layers, an increase of just under £0.04 on the 2014/15 returns [Table 2.13]

- There was a marked difference in the changes to output in the last two years between different production systems; the enriched caged/mixed production systems increased by just over 13%, to an average of £19.83 per bird [+£2.01], while the free range egg producers decreased by 6%, to an average of £18.38 [-£1.13] per bird
- The average egg price was nearly 10% higher for free range egg production than for intensive units, at 98.5p/doz compared to 89.7, while egg production for free range systems at an average of 273 eggs per year was around 11% less (-33 eggs per bird, per year), compared with an average production of 306 eggs for the intensive units
- The average gross margin per doz eggs was 36.85p for intensive/mixed egg production systems and 35.78p for free range egg production
- Feed cost for the free range systems is about 17% higher per bird than for the intensive systems, one of the reasons the gross margin for free range egg production was lower; year-on-year gross margin recorded an increase of £0.11 per bird for free range systems and an increase of £2.66 for enriched cage/mixed egg production systems
- The small sample size of specialist poultry farms with enriched cage and mixed production systems in this year's report, may account for the disparity in gross margins reported for the last two periods; 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 £1.77 [-23p] per bird, with the purchase price of chicks averaging 34p
- With 7.5 crops per year (an increase of nearly 6% from 7.1 crops) an average gross margin of £3.39 per bird place was recorded on an annual basis, a reduction of 22p 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 £37.33 [-£0.98] per bird, while the average purchase price was £4.43 per bird [+£0.01]
- Overall, poultry output averaged £31.62 per bird [+£0.44] in 2015/16 and feed costs £7.50 per bird [-£0.21], resulting in a gross margin of £20.86 [+£0.59] per bird

Table 2.1 Financial results for all specialist poultry farms

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2014/15	2015/16	% change	2014/15	2015/16	£ change
Number of farms	83	87		83	87	
Average number of birds/year	84,045	80,479		84,045	80,479	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	218,886	126,471	-42	2.60	1.57	-1.03
Hen depreciation	-32,080	-14,899	-54	-0.38	-0.19	0.20
Broilers	543,710	513,986	-5	6.47	6.39	-0.08
Other poultry output	237,963	208,891	-12	2.83	2.60	-0.24
Total poultry output	968,479	834,451	-14	11.52	10.37	-1.15
Crops	33,668	30,958	-8	0.40	0.38	-0.02
Other livestock	32,088	24,205	-25	0.38	0.30	-0.08
Other output	75,089	78,807	5	0.89	0.98	0.09
Total gross output	1,109,324	968,421	-13	13.20	12.03	-1.17
Variable costs						
Feed	538,122	437,569	-19	6.40	5.44	-0.97
Seed, fertiliser, crop costs	13,353	14,675	10	0.16	0.18	0.02
Vet. & medicines	25,103	23,401	-7	0.30	0.29	-0.01
Other livestock costs	66,579	53,978	-19	0.79	0.67	-0.12
Total variable costs	643,157	529,623	-18	7.65	6.58	-1.07
Total gross margin	466,168	438,798	-6	5.55	5.45	-0.09
Fixed costs						
Labour:						
Regular paid	71,328	59,904	-16	0.85	0.74	-0.10
Regular unpaid	25,132	25,063	0	0.30	0.31	0.01
Casual labour	9,316	5,725	-39	0.11	0.07	-0.04
Power & machinery costs:						
Contract & hire	13,699	14,747	8	0.16	0.18	0.02
Fuel	9,429	5,875	-38	0.11	0.07	-0.04
Electricity	15,488	17,543	13	0.18	0.22	0.03
Heat	21,099	22,320	6	0.25	0.28	0.03
Repairs	23,999	26,799	12	0.29	0.33	0.05
Depreciation	38,863	38,270	-2	0.46	0.48	0.01
Rent (incl. imputed)	64,031	62,604	-2	0.76	0.78	0.02
Other costs:						
Occupiers repairs	18,149	12,327	-32	0.22	0.15	-0.06
Sundries (incl. bad debts)	37,269	33,610	-10	0.44	0.42	-0.03
Total fixed costs	347,802	324,787	-7	4.14	4.04	-0.10
Management & investment income	118,366	114,011	<u>Δ£/farm</u> -4,355	1.41	1.42	0.01
Minus: management salaries	198	59	-138	0.00	0.00	0.00
Plus: farmer & spouse labour	20,380	20,402	22	0.24	0.25	0.01
Net farm income	138,548	134,353	-4,195	1.65	1.67	0.02
Farm business income	126,839	106,670	-20,170	1.51	1.33	-0.18

Per £100 of gross output

	2014/15	2015/16	£ change	Farm Business Income (FBI) per farm		
				(% distribution by number of weighted farms)		
				%	% 2014/15 2015/16	
Number of farms	83	87				
Average number (birds/year)	84,045	80,479				
Average £ per £100 of gross output						
Gross output (%)				Over £100,000	28	29
Eggs (%)	19.73	13.06		£50,000 to <£100,000	16	13
Hen depreciation (%)	-2.89	-1.54		£25,000 to <£50,000	16	27
Broilers (%)	49.01	53.07		£12,500 to <£25,000	6	9
Other poultry output (%)	21.45	21.57		0 to <£12,500	13	13
				-£25,000 to 0	21	8
Total poultry output (%)	87.30	86.17		Below -£25,000	0	0
Crops (%)	3.04	3.20		Total	100	100
Other livestock (%)	2.89	2.50				
Other output (%)	6.77	8.14				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	48.51	45.18	-3.33			
Seed, fertiliser, crop costs	1.20	1.52	0.31			
Vet. & medicines	2.26	2.42	0.15			
Other livestock costs	6.00	5.57	-0.43			
Total variable costs	57.98	54.69	-3.29			
Total gross margin	42.02	45.31	3.29			
Fixed costs						
				Average Poultry Numbers		
Labour:				Average	Average	
Regular paid	6.43	6.19	-0.24	2014/15	2015/16	
Regular unpaid	2.27	2.59	0.32			
Casual labour	0.84	0.59	-0.25	Hens in lay	12,095	7,396
Power & machinery costs:				Pullets	8,681	13,499
Contract & hire	1.23	1.52	0.29	Broilers & other poultry	63,269	59,584
Fuel	0.85	0.61	-0.24	Total Average	84,045	80,479
Electricity	1.40	1.81	0.42			
Heat	1.90	2.30	0.40			
Repairs	2.16	2.77	0.60			
Depreciation	3.50	3.95	0.45			
Rent (incl. imputed)	5.77	6.46	0.69			
Other costs:						
Occupiers repairs	1.64	1.27	-0.36			
Sundries (incl. bad debts)	3.36	3.47	0.11			
Total fixed costs	31.35	33.54	2.19			
Management & investment income	10.67	11.77	1.10			
Minus: management salaries	0.02	0.01	-0.01	Other efficiency factors		
Plus: farmer & spouse labour	1.84	2.11	0.27	Average	Average	
				2014/15	2015/16	
Net farm income	12.49	13.87	1.38	Eggs per bird	253	233
Farm business income	11.43	11.01	-0.42	Eggs (p/doz.)	85.81	87.85

Table 2.2 Financial results for all laying flocks

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2014/15	2015/16	% change	2014/15	2015/16	£ change
Number of farms	46	49		46	49	
Average number of birds/year	45,642	51,079		45,642	51,079	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	480,859	309,171	-36	10.54	6.05	-4.48
Hen depreciation	-70,475	-36,421	-48	-1.54	-0.71	0.83
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	301,718	322,040	7	6.61	6.30	-0.31
Total poultry output	712,102	594,790	-16	15.60	11.64	-3.96
Crops	7,215	6,941	-4	0.16	0.14	-0.02
Other livestock	1,936	2,061	6	0.04	0.04	0.00
Other output	24,515	32,001	31	0.54	0.63	0.09
Total gross output	745,768	635,793	-15	16.34	12.45	-3.89
Variable costs						
Feed	324,133	232,728	-28	7.10	4.56	-2.55
Seed, fertiliser, crop costs	3,241	3,898	20	0.07	0.08	0.01
Vet. & medicines	31,417	31,781	1	0.69	0.62	-0.07
Other livestock costs	64,705	62,815	-3	1.42	1.23	-0.19
Total variable costs	423,495	331,221	-22	9.28	6.48	-2.79
Total gross margin	322,273	304,571	-5	7.06	5.96	-1.10
Fixed costs						
Labour:						
Regular paid	80,511	76,834	-5	1.76	1.50	-0.26
Regular unpaid	25,502	25,569	0	0.56	0.50	-0.06
Casual labour	12,064	7,342	-39	0.26	0.14	-0.12
Power & machinery costs:						
Contract & hire	2,963	6,315	113	0.06	0.12	0.06
Fuel	6,911	4,515	-35	0.15	0.09	-0.06
Electricity	12,065	11,391	-6	0.26	0.22	-0.04
Heat	7,612	9,003	18	0.17	0.18	0.01
Repairs	9,364	14,923	59	0.21	0.29	0.09
Depreciation	19,833	21,304	7	0.43	0.42	-0.02
Rent (incl. imputed)	56,202	57,438	2	1.23	1.12	-0.11
Other costs:						
Occupiers repairs	15,737	7,654	-51	0.34	0.15	-0.19
Sundries (incl. bad debts)	28,954	25,753	-11	0.63	0.50	-0.13
Total fixed costs	277,718	268,039	-3	6.08	5.25	-0.84
Management & investment income	44,555	36,532	<u>Δ£/farm</u> -8,023	0.98	0.72	-0.26
Minus: management salaries	0	20	20	0.00	0.00	0.00
Plus: farmer & spouse labour	21,178	21,261	84	0.46	0.42	-0.05
Net farm income	65,732	57,773	-7,959	1.44	1.13	-0.31
Farm business income	53,998	14,118	-39,880	1.18	0.28	-0.91

Per £100 of gross output

	2014/15	2015/16	£ change	Farm Business Income (FBI) per farm (% distribution by number of weighted farms)	
				%	%
				2014/15	2015/16
Number of farms	46	49			
Average number (birds/year)	45,642	51,079			
Average £ per £100 of gross output					
Gross output (%)					
Eggs (%)	64.48	48.63		Over £100,000	16
Hen depreciation (%)	-9.45	-5.73		£50,000 to <£100,000	9
Broilers (%)	0.00	0.00		£25,000 to <£50,000	21
Other poultry output (%)	40.46	50.65		£12,500 to <£25,000	2
				0 to <£12,500	21
				-£25,000 to 0	30
				Below -£25,000	0
Total poultry output (%)	95.49	93.55		Total	100
Crops (%)	0.97	1.09			100
Other livestock (%)	0.26	0.32			
Other output (%)	3.29	5.03			
Total gross output (%)	100.00	100.00			
Variable costs					
Feed	43.46	36.60	-6.86		
Seed, fertiliser, crop costs	0.43	0.61	0.18		
Vet. & medicines	4.21	5.00	0.79		
Other livestock costs	8.68	9.88	1.20		
Total variable costs	56.79	52.10	-4.69		
Total gross margin	43.21	47.90	4.69		
Fixed costs				Average Poultry Numbers	
Labour:				Average	Average
Regular paid	10.80	12.08	1.29	2014/15	2015/16
Regular unpaid	3.42	4.02	0.60		
Casual labour	1.62	1.15	-0.46	Hens in lay	26,570
Power & machinery costs:				Pullets	19,072
Contract & hire	0.40	0.99	0.60	Broilers & other poultry	0
Fuel	0.93	0.71	-0.22	Total Average	45,642
Electricity	1.62	1.79	0.17		51,079
Heat	1.02	1.42	0.40		
Repairs	1.26	2.35	1.09		
Depreciation	2.66	3.35	0.69		
Rent (incl. imputed)	7.54	9.03	1.50		
Other costs:					
Occupiers repairs	2.11	1.20	-0.91		
Sundries (incl. bad debts)	3.88	4.05	0.17		
Total fixed costs	37.24	42.16	4.92		
Management & investment income	5.97	5.75	-0.23		
Minus: management salaries	0.00	0.00	0.00	Other efficiency factors	
Plus: farmer & spouse labour	2.84	3.34	0.50	Average	Average
				2014/15	2015/16
Net farm income	8.81	9.09	0.27	Eggs per bird	253
				Eggs (p/doz.)	85.81
Farm business income	7.24	2.22	-5.02		233
					87.85

Table 2.3 Financial results for all poultry meat producers

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2014/15	2015/16	% change	2014/15	2015/16	£ change
Number of farms	37	38		37	38	
Average number of birds/year	116,133	100,831		116,133	100,831	
	<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	997,995	869,787	-13	8.59	8.63	0.03
Other poultry output	184,694	130,565	-29	1.59	1.29	-0.30
Total poultry output	1,182,689	1,000,353	-15	10.18	9.92	-0.26
Crops	55,771	47,584	-15	0.48	0.47	-0.01
Other livestock	57,282	39,535	-31	0.49	0.39	-0.10
Other output	117,344	111,208	-5	1.01	1.10	0.09
Total gross output	1,413,086	1,198,679	-15	12.17	11.89	-0.28
Variable costs						
Feed	716,915	579,368	-19	6.17	5.75	-0.43
Seed, fertiliser, crop costs	21,801	22,135	2	0.19	0.22	0.03
Vet. & medicines	19,828	17,600	-11	0.17	0.17	0.00
Other livestock costs	68,146	47,861	-30	0.59	0.47	-0.11
Total variable costs	826,690	666,964	-19	7.12	6.61	-0.50
Total gross margin	586,396	531,716	-9	5.05	5.27	0.22
Fixed costs						
Labour:						
Regular paid	63,655	48,185	-24	0.55	0.48	-0.07
Regular unpaid	24,823	24,714	0	0.21	0.25	0.03
Casual labour	7,020	4,605	-34	0.06	0.05	-0.01
Power & machinery costs:						
Contract & hire	22,669	20,583	-9	0.20	0.20	0.01
Fuel	11,534	6,817	-41	0.10	0.07	-0.03
Electricity	18,347	21,801	19	0.16	0.22	0.06
Heat	32,368	31,539	-3	0.28	0.31	0.03
Repairs	36,228	35,020	-3	0.31	0.35	0.04
Depreciation	54,763	50,015	-9	0.47	0.50	0.02
Rent (incl. imputed)	70,572	66,181	-6	0.61	0.66	0.05
Other costs:						
Occupiers repairs	20,164	15,563	-23	0.17	0.15	-0.02
Sundries (incl. bad debts)	44,217	39,048	-12	0.38	0.39	0.01
Total fixed costs	406,359	364,070	-10	3.50	3.61	0.11
Management & investment income	180,037	167,645	<u>Δ£/farm</u> -12,392	1.55	1.66	0.11
Minus: management salaries	363	87	-276	0.00	0.00	0.00
Plus: farmer & spouse labour	19,713	19,807	93	0.17	0.20	0.03
Net farm income	199,388	187,365	-12,022	1.72	1.86	0.14
Farm business income	187,700	170,738	-16,963	1.62	1.69	0.08

Per £100 of gross output

	2014/15	2015/16	£ change	Farm Business Income (FBI) per farm	
Number of farms	37	38		(% distribution by number of weighted farms)	
Average number (birds/year)	116,133	100,831		%	%
				2014/15	2015/16
Average £ per £100 of gross output					
Gross output (%)					
Eggs (%)	0.00	0.00		Over £100,000	39
Hen depreciation (%)	0.00	0.00		£50,000 to <£100,000	22
Broilers (%)	70.63	72.56		£25,000 to <£50,000	12
Other poultry output (%)	13.07	10.89		£12,500 to <£25,000	9
				0 to <£12,500	6
				-£25,000 to 0	13
				Below -£25,000	0
Total poultry output (%)	83.70	83.45		Total	100
Crops (%)	3.95	3.97			100
Other livestock (%)	4.05	3.30			
Other output (%)	8.30	9.28			
Total gross output (%)	100.00	100.00			
Variable costs					
Feed	50.73	48.33	-2.40		
Seed, fertiliser, crop costs	1.54	1.85	0.30		
Vet. & medicines	1.40	1.47	0.07		
Other livestock costs	4.82	3.99	-0.83		
Total variable costs	58.50	55.64	-2.86		
Total gross margin	41.50	44.36	2.86		
Fixed costs					
Labour:				Average Poultry Numbers	
Regular paid	4.50	4.02	-0.48	Average	Average
Regular unpaid	1.76	2.06	0.31	2014/15	2015/16
Casual labour	0.50	0.38	-0.11	Hens in lay	0
Power & machinery costs:				Pullets	0
Contract & hire	1.60	1.72	0.11	Broilers & other poultry	116,133
Fuel	0.82	0.57	-0.25	Total Average	116,133
Electricity	1.30	1.82	0.52		100,831
Heat	2.29	2.63	0.34		
Repairs	2.56	2.92	0.36		
Depreciation	3.88	4.17	0.30		
Rent (incl. imputed)	4.99	5.52	0.53		
Other costs:					
Occupiers repairs	1.43	1.30	-0.13		
Sundries (incl. bad debts)	3.13	3.26	0.13		
Total fixed costs	28.76	30.37	1.62		
Management & investment income	12.74	13.99	1.25		
Minus: management salaries	0.03	0.01	-0.02		
Plus: farmer & spouse labour	1.40	1.65	0.26		
Net farm income	14.11	15.63	1.52		
Farm business income	13.28	14.24	0.96		

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

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2014/15	2015/16	% change	2014/15	2015/16	£ change
Number of farms	37	38		37	38	
Average number of birds/year	26,974	16,670		26,974	16,670	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	563,911	358,500	-36	20.91	21.51	0.60
Hen depreciation	-89,969	-55,432	-38	-3.34	-3.33	0.01
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	8,452	4,429	-48	0.31	0.27	-0.05
Total poultry output	482,394	307,497	-36	17.88	18.45	0.56
Crops	6,641	7,832	18	0.25	0.47	0.22
Other livestock	2,403	2,556	6	0.09	0.15	0.06
Other output	15,426	19,121	24	0.57	1.15	0.58
Total gross output	506,865	337,006	-34	18.79	20.22	1.43
Variable costs						
Feed	280,237	159,685	-43	10.39	9.58	-0.81
Seed, fertiliser, crop costs	3,262	4,568	40	0.12	0.27	0.15
Vet. & medicines	4,406	3,714	-16	0.16	0.22	0.06
Other livestock costs	25,975	11,979	-54	0.96	0.72	-0.24
Total variable costs	313,880	179,946	-43	11.64	10.79	-0.84
Total gross margin	192,985	157,060	-19	7.15	9.42	2.27
Fixed costs						
Labour:						
Regular paid	35,187	21,873	-38	1.30	1.31	0.01
Regular unpaid	25,959	27,083	4	0.96	1.62	0.66
Casual labour	13,396	2,379	-82	0.50	0.14	-0.35
Power & machinery costs:						
Contract & hire	3,202	3,849	20	0.12	0.23	0.11
Fuel	5,791	2,485	-57	0.21	0.15	-0.07
Electricity	6,910	5,717	-17	0.26	0.34	0.09
Heat	544	445	-18	0.02	0.03	0.01
Repairs	6,646	4,831	-27	0.25	0.29	0.04
Depreciation	15,224	13,478	-11	0.56	0.81	0.24
Rent (incl. imputed)	38,618	29,774	-23	1.43	1.79	0.35
Other costs:						
Occupiers repairs	6,215	4,872	-22	0.23	0.29	0.06
Sundries (incl. bad debts)	18,055	14,146	-22	0.67	0.85	0.18
Total fixed costs	175,747	130,934	-25	6.52	7.85	1.34
Management & investment income	17,238	26,126	Δ£/farm 8,888	0.64	1.57	0.93
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	21,611	22,358	747	0.80	1.34	0.54
Net farm income	38,849	48,484	9,635	1.44	2.91	1.47
Farm business income	29,931	45,063	15,132	1.11	2.70	1.59

Per £100 of gross output

	2014/15	2015/16	£ change
Number of farms	37	38	
Average number (birds/year)	26,974	16,670	

Average £ per £100 of gross output

Gross output (%)			
Eggs (%)	114.04	103.91	
Hen depreciation (%)	-18.28	-12.51	
Broilers (%)	0.00	0.00	
Other poultry output (%)	1.40	1.80	
Total poultry output (%)	97.16	93.20	
Crops (%)	0.75	2.10	
Other livestock (%)	0.24	0.32	
Other output (%)	1.84	4.38	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	55.29	47.38	-7.90
Seed, fertiliser, crop costs	0.64	1.36	0.71
Vet. & medicines	0.87	1.10	0.23
Other livestock costs	5.12	3.55	-1.57
Total variable costs	61.93	53.40	-8.53
Total gross margin	38.07	46.60	8.53
Fixed costs			
Labour:			
Regular paid	6.94	6.49	-0.45
Regular unpaid	5.12	8.04	2.91
Casual labour	2.64	0.71	-1.94
Power & machinery costs:			
Contract & hire	0.63	1.14	0.51
Fuel	1.14	0.74	-0.41
Electricity	1.36	1.70	0.33
Heat	0.11	0.13	0.02
Repairs	1.31	1.43	0.12
Depreciation	3.00	4.00	1.00
Rent (incl. imputed)	7.62	8.83	1.22
Other costs:			
Occupiers repairs	1.23	1.45	0.22
Sundries (incl. bad debts)	3.56	4.20	0.64
Total fixed costs	34.67	38.85	4.18
Management & investment income	3.40	7.75	4.35
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	4.26	6.63	2.37
Net farm income	7.66	14.39	6.72
Farm business income	5.91	13.37	7.47

Pence per dozen eggs

	2014/15	2015/16
Gross output		
Eggs	89.03	94.29
Other poultry output	-12.87	-13.41
Other output	3.86	7.76
Total gross output	80.03	88.64
Variable costs		
Feed	44.24	42.00
Other variable costs	5.31	5.33
Total variable costs	49.56	47.33
Total gross margin	30.47	41.31
Total fixed costs	27.75	34.44
Management & investment income	2.72	6.87
Net farm income	6.13	12.75
Farm business income	4.73	11.85
Farm Business Income (FBI) per farm		
(% distribution by number of weighted farms)		
	%	%
	2014/15	2015/16
Over £100,000	11	18
£50,000 to <£100,000	9	8
£25,000 to <£50,000	26	34
£12,500 to <£25,000	1	6
0 to <£12,500	17	13
-£25,000 to 0	37	21
Below -£25,000	0	0
Total	100	100
Average Poultry Numbers		
	Average	Average
	2014/15	2015/16
Hens in lay	26,350	16,131
Pullets	624	539
Broilers & other poultry	0	0
Total Average	26,974	16,670
Other efficiency factors		
	Average	Average
	2014/15	2015/16
Eggs per bird	288	283
Eggs (p/doz.)	89.03	94.18

Table 2.5 Financial results for laying flocks with free range hens

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2014/15	2015/16	% change	2014/15	2015/16	£ change
Number of farms	27	31		27	31	
Average number of birds/year	13,102	14,023		13,102	14,023	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	305,457	301,404	-1	23.31	21.49	-1.82
Hen depreciation	-48,448	-50,047	3	-3.70	-3.57	0.13
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	5,619	3,221	-43	0.43	0.23	-0.20
Total poultry output	262,628	254,578	-3	20.04	18.15	-1.89
Crops	5,585	6,748	21	0.43	0.48	0.06
Other livestock	2,119	2,561	21	0.16	0.18	0.02
Other output	12,687	17,202	36	0.97	1.23	0.26
Total gross output	283,018	281,089	-1	21.60	20.05	-1.56
Variable costs						
Feed	145,679	136,752	-6	11.12	9.75	-1.37
Seed, fertiliser, crop costs	2,428	3,800	57	0.19	0.27	0.09
Vet. & medicines	3,807	3,769	-1	0.29	0.27	-0.02
Other livestock costs	5,189	6,435	24	0.40	0.46	0.06
Total variable costs	157,103	150,756	-4	11.99	10.75	-1.24
Total gross margin	125,915	130,333	4	9.61	9.29	-0.32
Fixed costs						
Labour:						
Regular paid	12,786	16,695	31	0.98	1.19	0.21
Regular unpaid	24,707	25,903	5	1.89	1.85	-0.04
Casual labour	1,742	1,917	10	0.13	0.14	0.00
Power & machinery costs:						
Contract & hire	3,006	3,888	29	0.23	0.28	0.05
Fuel	1,955	1,761	-10	0.15	0.13	-0.02
Electricity	4,923	5,125	4	0.38	0.37	-0.01
Heat	412	323	-22	0.03	0.02	-0.01
Repairs	3,154	3,412	8	0.24	0.24	0.00
Depreciation	10,611	10,517	-1	0.81	0.75	-0.06
Rent (incl. imputed)	22,522	27,457	22	1.72	1.96	0.24
Other costs:						
Occupiers repairs	5,483	4,463	-19	0.42	0.32	-0.10
Sundries (incl. bad debts)	11,808	12,660	7	0.90	0.90	0.00
Total fixed costs	103,110	114,121	11	7.87	8.14	0.27
Management & investment income	22,805	16,212	$\frac{\Delta\text{£/farm}}{-6,593}$	1.74	1.16	-0.58
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	21,052	22,128	1,076	1.61	1.58	-0.03
Net farm income	43,857	38,340	-5,516	3.35	2.73	-0.61
Farm business income	38,078	34,034	-4,044	2.91	2.43	-0.48

Per £100 of gross output

	2014/15	2015/16	£ change
Number of farms	27	31	
Average number (birds/year)	13,102	14,023	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	107.93	107.23	
Hen depreciation (%)	-17.12	-17.80	
Broilers (%)	0.00	0.00	
Other poultry output (%)	1.99	1.15	
Total poultry output (%)	92.80	90.57	
Crops (%)	1.97	2.40	
Other livestock (%)	0.75	0.91	
Other output (%)	4.48	6.12	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	51.47	48.65	-2.82
Seed, fertiliser, crop costs	0.86	1.35	0.49
Vet. & medicines	1.35	1.34	0.00
Other livestock costs	1.83	2.29	0.46
Total variable costs	55.51	53.63	-1.88
Total gross margin	44.49	46.37	1.88
Fixed costs			
Labour:			
Regular paid	4.52	5.94	1.42
Regular unpaid	8.73	9.22	0.49
Casual labour	0.62	0.68	0.07
Power & machinery costs:			
Contract & hire	1.06	1.38	0.32
Fuel	0.69	0.63	-0.06
Electricity	1.74	1.82	0.08
Heat	0.15	0.11	-0.03
Repairs	1.11	1.21	0.10
Depreciation	3.75	3.74	-0.01
Rent (incl. imputed)	7.96	9.77	1.81
Other costs:			
Occupiers repairs	1.94	1.59	-0.35
Sundries (incl. bad debts)	4.17	4.50	0.33
Total fixed costs	36.43	40.60	4.17
Management & investment income	8.06	5.77	-2.29
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	7.44	7.87	0.43
Net farm income	15.50	13.64	-1.86
Farm business income	13.45	12.11	-1.35

Pence per dozen eggs

	2014/15	2015/16
Gross output		
Eggs	100.09	97.93
Other poultry output	-14.03	-15.21
Other output	6.68	8.61
Total gross output	92.73	91.33
Variable costs		
Feed	47.73	44.43
Other variable costs	3.74	4.55
Total variable costs	51.48	48.98
Total gross margin	41.26	42.35
Total fixed costs	33.79	37.08
Management & investment income	7.47	5.27
Net farm income	14.37	12.46
Farm business income	12.48	11.06
Farm Business Income (FBI) per farm		
(% distribution by number of weighted farms)		
	%	%
	2014/15	2015/16
Over £100,000	11	16
£50,000 to <£100,000	11	6
£25,000 to <£50,000	20	35
£12,500 to <£25,000	0	7
0 to <£12,500	20	15
-£25,000 to 0	38	22
Below -£25,000	0	0
Total	100	100
Average Poultry Numbers		
	Average	Average
	2014/15	2015/16
Hens in lay	12,803	13,564
Pullets	299	459
Broilers & other poultry	0	0
Total Average	13,102	14,023
Other efficiency factors		
	Average	Average
	2014/15	2015/16
Eggs per bird	286	272
Eggs (p/doz.)	100.05	97.82

Table 2.6 Financial results for non-contract broilers

	<i>Per farm</i>			<i>Per bird (per crop)</i>		
	2014/15	2015/16	% change	2014/15	2015/16	£ change
Number of farms	12	11		12	11	
Average number of birds/year	238,875	232,173		238,875	232,173	
Throughput of birds/year	1,709,223	1,718,381		1,709,223	1,718,381	
	<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	2,670,686	2,403,682	-10	1.56	1.40	-0.16
Other poultry output	11,836	14,025	18	0.01	0.01	0.00
Total poultry output	2,682,522	2,417,707	-10	1.57	1.41	-0.16
Crops	55,023	60,847	11	0.03	0.04	0.00
Other livestock	64,747	15,276	-76	0.04	0.01	-0.03
Other output	169,877	132,279	-22	0.10	0.08	-0.02
Total gross output	2,972,170	2,626,109	-12	1.74	1.53	-0.21
Variable costs						
Feed	1,807,671	1,506,748	-17	1.06	0.88	-0.18
Seed, fertiliser, crop costs	20,317	23,355	15	0.01	0.01	0.00
Vet. & medicines	47,129	42,819	-9	0.03	0.02	0.00
Other livestock costs	79,952	92,155	15	0.05	0.05	0.01
Total variable costs	1,955,069	1,665,076	-15	1.14	0.97	-0.17
Total gross margin	1,017,100	961,033	-6	0.60	0.56	-0.04
Fixed costs						
Labour:						
Regular paid	88,085	72,513	-18	0.05	0.04	-0.01
Regular unpaid	21,238	21,930	3	0.01	0.01	0.00
Casual labour	9,486	3,167	-67	0.01	0.00	0.00
Power & machinery costs:						
Contract & hire	30,805	37,805	23	0.02	0.02	0.00
Fuel	15,676	7,256	-54	0.01	0.00	0.00
Electricity	42,658	53,895	26	0.02	0.03	0.01
Heat	75,432	76,566	2	0.04	0.04	0.00
Repairs	62,491	72,635	16	0.04	0.04	0.01
Depreciation	87,231	62,223	-29	0.05	0.04	-0.01
Rent (incl. imputed)	114,647	108,456	-5	0.07	0.06	0.00
Other costs:						
Occupiers repairs	14,631	13,536	-7	0.01	0.01	0.00
Sundries (incl. bad debts)	64,890	68,348	5	0.04	0.04	0.00
Total fixed costs	627,272	598,330	-5	0.37	0.35	-0.02
Management & investment income	389,829	362,703	<u>Δ£/farm</u> -27,126	0.23	0.21	-0.02
Minus: management salaries	1,026	39	-987	0.00	0.00	0.00
Plus: farmer & spouse labour	15,171	15,935	764	0.01	0.01	0.00
Net farm income	403,974	378,599	-25,375	0.24	0.22	-0.02
Farm business income	358,995	347,659	-11,336	0.21	0.20	-0.01

Per £100 of gross output

	2014/15	2015/16	£ change	Farm Business Income (FBI) per farm		
				(% distribution by number of weighted farms)		
				%	% 2014/15 2015/16	
Number of farms	12	11				
Average number (birds/year)	238,875	232,173				
Average £ per £100 of gross output						
Gross output (%)						
Eggs (%)	0.00	0.00		Over £100,000	42	54
Hen depreciation (%)	0.00	0.00		£50,000 to <£100,000	27	4
Broilers (%)	89.86	91.53		£25,000 to <£50,000	7	42
Other poultry output (%)	0.40	0.53		£12,500 to <£25,000	0	0
				0 to <£12,500	0	0
				-£25,000 to 0	24	0
Total poultry output (%)	90.25	92.06		Below -£25,000	0	0
Crops (%)	1.85	2.32		Total	100	100
Other livestock (%)	2.18	0.58				
Other output (%)	5.72	5.04				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	60.82	57.38	-3.44			
Seed, fertiliser, crop costs	0.68	0.89	0.21			
Vet. & medicines	1.59	1.63	0.04			
Other livestock costs	2.69	3.51	0.82			
Total variable costs	65.78	63.40	-2.37			
Total gross margin	34.22	36.60	2.37			
Fixed costs				Other efficiency factors		
Labour:					Average	Average
Regular paid	2.96	2.76	-0.20		2014/15	2015/16
Regular unpaid	0.71	0.84	0.12			
Casual labour	0.32	0.12	-0.20			
Power & machinery costs:				Broiler sale price	1.99	1.76
Contract & hire	1.04	1.44	0.40	(£/bird)		
Fuel	0.53	0.28	-0.25	Broiler purchase price	0.37	0.34
Electricity	1.44	2.05	0.62	(£/bird)		
Heat	2.54	2.92	0.38	Average number of	7.2	7.4
Repairs	2.10	2.77	0.66	crops/year		
Depreciation	2.93	2.37	-0.57			
Rent (incl. imputed)	3.86	4.13	0.27			
Other costs:						
Occupiers repairs	0.49	0.52	0.02			
Sundries (incl. bad debts)	2.18	2.60	0.42			
Total fixed costs	21.10	22.78	1.68			
Management & investment income	13.12	13.81	0.70			
Minus: management salaries	0.03	0.00	-0.03			
Plus: farmer & spouse labour	0.51	0.61	0.10			
Net farm income	13.59	14.42	0.82			
Farm business income	12.08	13.24	1.16			

Table 2.7 Balance sheet data for 2015/16 - specialist poultry farms

Group	All specialist poultry farms		All laying flocks		All poultry meat producers	
	87		49		38	
Financial year	2015/16		2015/16		2015/16	
	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed assets						
Land, buildings & BPS	1,083,533	1,130,991	636,765	695,089	1,392,804	1,432,739
Breeding livestock	11,273	8,610	1,381	1,374	18,122	13,619
Machinery	215,002	247,628	111,998	130,513	286,306	328,699
Miscellaneous business assets	1,554	1,552	1,925	1,919	1,297	1,297
Total fixed assets	1,311,363	1,388,781	752,069	828,896	1,698,528	1,776,354
Current assets						
Crops & trading livestock	78,725	96,376	90,189	106,104	70,789	89,641
Feedstuffs & goods in store	13,681	12,495	7,156	6,048	18,198	16,959
Liquid assets	201,729	199,663	43,164	49,895	311,494	303,339
Total current assets	294,135	308,534	140,509	162,047	400,481	409,938
Total assets	1,605,498	1,697,315	892,578	990,943	2,099,009	2,186,293
Liabilities						
Bank term loans	165,175	196,715	188,567	191,432	148,982	200,371
Other loans	76,217	72,634	51,712	72,606	93,180	72,653
Bank overdraft	57,499	43,747	79,159	68,198	42,504	26,822
Other short term loans	73,750	100,579	34,424	90,744	100,974	107,388
Total external liabilities	372,640	413,675	353,861	422,981	385,640	407,234
Net worth	1,232,857	1,283,640	538,717	567,962	1,713,369	1,779,059
Percentage equity (%)	76.8%	75.6%	60.4%	57.3%	81.6%	81.4%

Table 2.8 Comparison of net worth and percentage equity by farm type for 2015/16

Defra main farm type	Average Assets	Average Liabilities	Average Net Worth	Average % Equity
Lowland cattle & sheep	1,315,647	91,885	1,223,763	93.0%
Cereals	2,827,546	201,635	2,625,911	92.9%
Mixed	1,906,509	176,309	1,730,200	90.8%
General cropping	3,220,262	319,687	2,900,576	90.1%
Horticulture	903,685	141,211	762,474	84.4%
Dairy	1,984,575	326,311	1,658,265	83.6%
Pigs	1,503,206	299,681	1,203,525	80.1%
Poultry	1,651,407	393,158	1,258,249	76.2%
All businesses	1,943,213	187,620	1,755,593	90.3%

Table 2.7 continued

Group	<i>Broilers, non contract</i>	
	2015/16	
Number of farms	11	
Financial year	Opening	Closing
Assets		
Fixed assets		
Land, buildings & BPS	1,823,955	1,839,505
Breeding livestock	1,640	1,509
Machinery	406,220	409,722
Miscellaneous business assets	470	470
Total fixed assets	2,232,285	2,251,206
Current assets		
Crops & trading livestock	142,973	181,086
Feedstuffs & goods in store	22,434	24,382
Liquid assets	684,001	665,669
Total current assets	849,409	871,138
Total assets	3,081,694	3,122,344
Liabilities		
Bank term loans	90,114	71,588
Other loans	254,763	194,529
Bank overdraft	27,031	48,361
Other short term loans	166,061	158,387
Total external liabilities	537,968	472,865
Net worth	2,543,726	2,649,478
Percentage equity (%)	82.5%	84.9%

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	17.9	36.1	13.2	12.9
Stores	2.4	2.4	2.4	1.8
Machinery	42.5	44.0	42.1	32.1
Other	37.2	17.6	42.3	53.2
Total	100.0	100.0	100.0	100.0
Tenant's type capital (£)	544,144	275,833	729,880	1,270,289

Table 2.10 Gross margin for all laying flocks

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2014/15	2015/16	£ change	2014/15	2015/16	£ change
Number of farms	46	49				
Average number of birds/year	13,382	9,574				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	22.30	21.97	-0.33			
Hen depreciation	-3.47	-3.20	0.27			
Other poultry output	0.15	0.03	-0.11			
Total output	18.98	18.80	-0.18	100.00	100.00	
Variable costs						
Feed	10.66	9.74	-0.92	56.15	51.79	-4.36
Vet. & medicines	0.21	0.18	-0.03	1.11	0.97	-0.13
Other livestock costs	0.56	0.60	0.03	2.97	3.18	0.21
Other variable costs	0.01	0.01	0.00	0.03	0.04	0.00
Total variable costs	11.44	10.53	-0.91	60.26	55.98	-4.28
Total gross margin	7.54	8.28	0.73	39.74	44.02	4.28

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>		
	2014/15	2015/16	£ change	2014/15	2015/16	£ change
Number of farms	12	11				
Average number of birds/year	19,909	16,383				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	20.97	22.21	1.24			
Hen depreciation	-3.19	-2.40	0.79			
Other poultry output	0.04	0.02	-0.02			
Total output	17.82	19.83	2.01	100.00	100.00	
Variable costs						
Feed	10.03	9.40	-0.63	56.26	47.40	-8.86
Vet. & medicines	0.13	0.08	-0.05	0.74	0.40	-0.34
Other livestock costs	1.19	1.24	0.04	6.69	6.23	-0.46
Other variable costs	0.01	0.00	-0.01	0.07	0.00	-0.07
Total variable costs	11.36	10.71	-0.65	63.76	54.03	-9.73
Total gross margin	6.46	9.11	2.66	36.24	45.97	9.73

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>		
	2014/15	2015/16	£ change	2014/15	2015/16	£ change
Number of farms	34	38				
Average number of birds/year	11,622	8,185				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	22.91	21.87	-1.05			
Hen depreciation	-3.60	-3.52	0.07			
Other poultry output	0.20	0.04	-0.16			
Total output	19.51	18.38	-1.13	100.00	100.00	
Variable costs						
Feed	10.95	9.88	-1.07	56.10	53.72	-2.38
Vet. & medicines	0.25	0.23	-0.02	1.26	1.23	-0.04
Other livestock costs	0.27	0.34	0.06	1.40	1.84	0.44
Other variable costs	0.00	0.01	0.01	0.02	0.05	0.03
Total variable costs	11.47	10.45	-1.02	58.78	56.84	-1.94
Total gross margin	8.04	7.94	-0.11	41.22	43.16	1.94

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

	Layers		Laying flocks, cage barn & deep litter		Free range layers	
	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
Number of farms	46	49	12	11	34	38
No of dozen eggs	310,797	219,404	460,126	405,144	270,528	181,532
Average egg yield/bird	286	283	289	306	285	273
Average egg price p/doz	96.02	95.74	90.85	89.68	98.39	98.50
	<i>Average pence per dozen (annual basis)</i>					
Gross output						
Eggs	96.02	95.85	90.73	89.79	98.44	98.61
Hen depreciation	-14.94	-13.95	-13.81	-9.71	-15.45	-15.88
Other poultry output	0.63	0.14	0.17	0.09	0.84	0.17
Total output	81.71	82.04	77.10	80.17	83.83	82.89
Variable costs						
Feed	45.88	42.49	43.38	38.00	47.03	44.53
Vet. & medicines	0.90	0.80	0.57	0.32	1.06	1.02
Other livestock costs	2.43	2.61	5.16	5.00	1.17	1.52
Other variable costs	0.03	0.03	0.05	0.00	0.01	0.04
Total variable costs	49.24	45.93	49.16	43.31	49.27	47.11
Total gross margin	32.48	36.12	27.94	36.85	34.56	35.78

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

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2014/15	2015/16	£ change	2014/15	2015/16	£ change
Number of farms	19	22				
Average number of birds/year	153,266	130,574				
Throughput of birds/year	1,093,239	984,220				
Average number of crops/year	7.13	7.54				
Average sale price (broilers) - £/bird	2.00	1.77				
Average purchase price (broilers) - £/bird	0.37	0.34				
	<i>Average £ per bird (per flock)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Broilers	1.58	1.40	-0.19			
Total output	1.58	1.40	-0.19	100.00	100.00	
Variable costs						
Feed	1.05	0.87	-0.18	66.16	62.05	-4.11
Vet. & medicines	0.03	0.02	0.00	1.67	1.72	0.05
Other livestock costs	0.04	0.05	0.01	2.71	3.72	1.01
Other variable costs	0.02	0.01	-0.01	1.21	0.41	-0.80
Total variable costs	1.14	0.95	-0.19	71.75	67.90	-3.85
Total gross margin	0.45	0.45	0.00	28.25	32.10	3.85

Table 2.15 Gross margin for turkey production

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2014/15	2015/16	£ change	2014/15	2015/16	£ change
Number of farms	27	24				
Average number of birds/year	645	671				
Throughput of birds/year	1,344	1,365				
Average sale price (turkeys) - £/bird	38.31	37.33				
Average purchase price (turkeys) - £/bird	4.42	4.43				
	<i>Average £ per bird</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	31.17	31.62	0.44			
Total output	31.17	31.62	0.44	100.00	100.00	
Variable costs						
Feed	7.71	7.50	-0.21	24.74	23.71	-1.02
Vet. & medicines	0.09	0.10	0.00	0.30	0.30	0.00
Other livestock costs	3.08	3.14	0.06	9.87	9.94	0.07
Other variable costs	0.02	0.02	0.01	0.05	0.08	0.02
Total variable costs	10.90	10.76	-0.14	34.97	34.03	-0.94
Total gross margin	20.27	20.86	0.59	65.03	65.97	0.94

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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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