

Farm Business Survey

2014/2015

Poultry Production in England



Peter Hoyle, Blake Knox and
Richard Crane

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Peter Hoyle, Blake Knox and Richard Crane

RBR at Reading
Agriculture and Food Investigation Team (AFIT)
School of Agriculture, Policy and Development
University of Reading
4 Earley Gate
Whiteknights
PO Box 237
Reading RG6 6AR

Telephone : 0118 378 7426
E-mail : r.t.crane@reading.ac.uk

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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 Tenth Series

This series of reports on the economics of agriculture and horticulture in England celebrates ten years of *Rural Business Research (RBR)* providing independent data and analysis to the individual sectors of the agricultural and horticultural industry. Drawing upon Farm Business Survey data from the 2014/15 financial year our reports are set against a modest decrease in overall Farm Business Income (FBI) of around 8% to an average £39,700 per farm. Of this overall measure of farm business profitability, the income derived from the Single Payment Scheme accounted for around 55%, highlighting the importance of support payments to the average farm business in England. The 2014/15 data relates to the 2014 harvest / production year – since this time there have been some marked downturns in a number of output prices for farm businesses – it is therefore clear that the importance of policy support to businesses at the start of 2016 is even greater than the above data indicates.

Over the ten years that RBR has been presenting this series of reports, farm businesses have witnessed widely fluctuating fortunes due to the vagaries of world market input and output prices and fluctuations in weather patterns. Throughout this period our reports have sought to demonstrate the variation in performance across farm businesses, within the specific sectors covered in each report, and also to provide businesses with the independent data required to benchmark their own performance and explore possibilities for production within the sectors. Ten years on, our aim to provide comprehensive and independent analysis remains at the very core of our work on the Farm Business Survey research programme for England.

The wider agricultural and horticultural market place in the mid-2010s clearly demonstrates the need for farm businesses to focus on the market opportunities for their produce and to understand the wider economic environment in which they operate. There are a number of technical and weather-related issues facing farm businesses at the start of 2016. But arguably the largest political issue over recent decades – the EU referendum which the current government will hold on the 23 June 2016 – represents the greatest uncertainty. There will be numerous debates and discussions about this major political issue over the coming months and, potentially, years. Given the importance of the EU Common Agricultural Policy support to the average FBI figures for 2014/15, the outcome of the EU referendum will be closely watched by those managing UK farm businesses. At the same time, the wider global economy continues to exhibit rather sluggish performance, with UK inflation remaining around the 0% mark, oil prices substantially lower than a year ago and signs of any interest rate increase in the UK being continually pushed further out into the future. With recent price volatility, and generally lower output prices, it remains important for businesses to plan ahead and focus on financial margins in contrast to physical output performance.

Against this wider economic context we hope that this tenth series of reports helps farm businesses in England to examine and benchmark their own performance. 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
January 2016

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.

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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

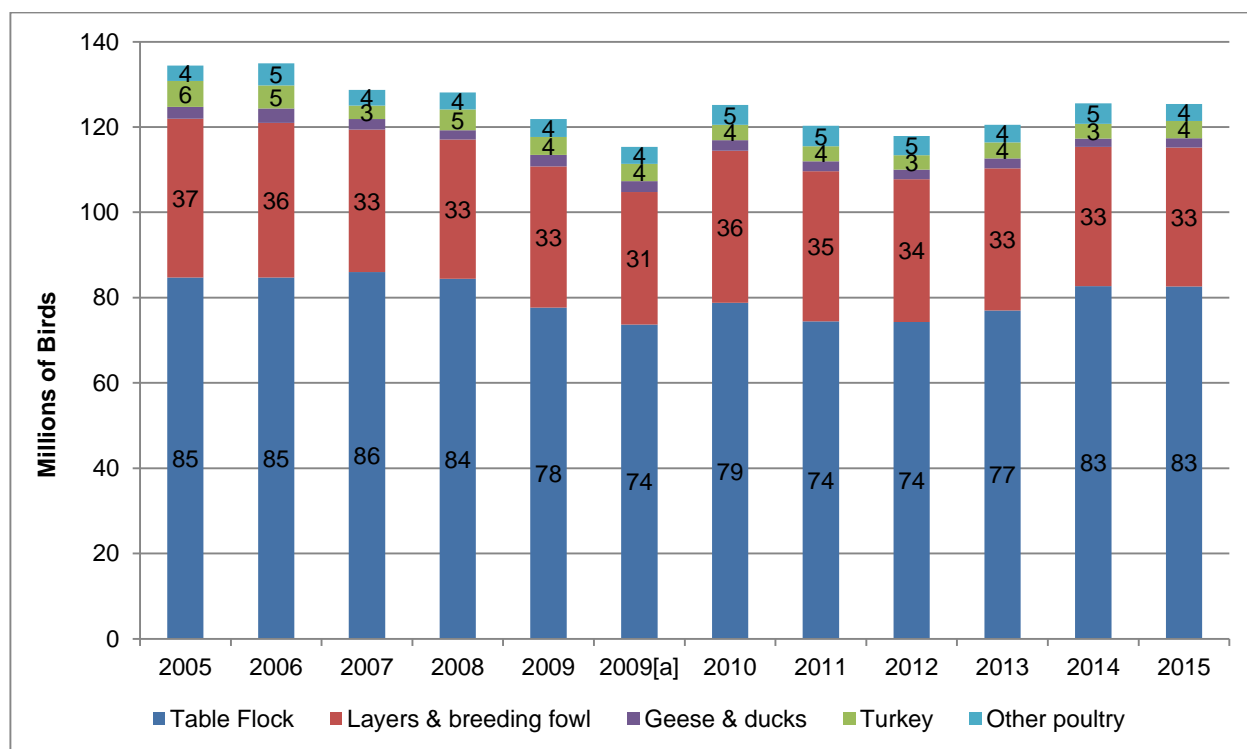
- Total number of birds in production in June 2015 remained at over 125 million
- Poultry output was 12.3% of UK total output from agriculture in 2014
- The value of UK poultry meat production totalled £2.26 billion in 2014, a decrease of £65 million on 2013
- Egg production was valued at £679 million, down 5% on 2013
- Packing Station egg prices in 2015 fell on average by 2% from 2014 price to 82.3p/doz
- UK self-sufficiency in 2014 was 85% for eggs and 91% for poultry meat
- The profitability of specialist poultry farm businesses fell by just under 20% compared to 2013/14, with average profit as measured by Farm Business Income (FBI) falling from £157,203 in 2013/14 to £126,839 in 2014/15
- Businesses specialising in poultry meat production saw a 10% reduction in farm incomes to an average FBI of £187,000 in 2014/15
- Businesses specialising in the production of eggs for human consumption recorded an average FBI per farm business of £29,931 in 2014/15 compared to £65,482 in 2013/14
- The average number of birds per farm for specialist poultry farms surveyed increased by just over 5% to 84,045 in 2014/15
- The price of eggs for specialist poultry farms increased by over 4%, to 86p/doz in 2014/15
- The average price of eggs from intensive/mixed egg production systems increased by over 2% to 82p/doz in 2014/15, whilst the average price of eggs from free range systems fell by 2% to 100p/doz
- Following a reduction in poultry output feed costs per £100 of gross output increased from £47.60 in 2013/14 to £48.51 in 2014/15 for all specialist poultry farms
- Poultry farms have the lowest percentage equity at 71.3% in their business of all farm types

SECTION 1: COMMENTARY ON THE UK POULTRY INDUSTRY

1.1 General introduction

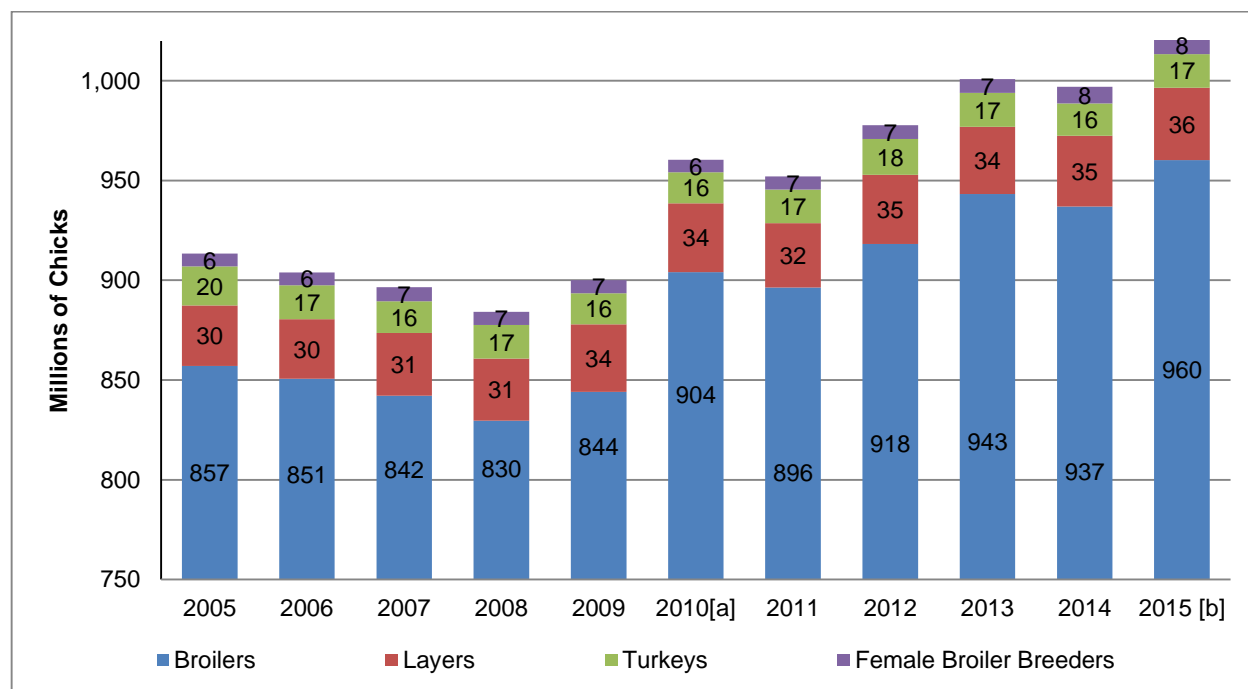
The English poultry flock remained at over 125 million birds in 2015 after two consecutive years of growth in 2013 and 2014. The table flock also remained at just below 83 million birds in 2015, after an increase of 7% between June 2013 and 2014. The turkey flock increased by 16% between 2014 and 2015 bringing it to almost the same level as 2009, following an 8% reduction between 2013 and 2014. Layer and breeding fowl numbers remained at just below 33 million in 2015. The poultry flock in England in 2015 consists of approximately 66% table birds, 26% layers and breeding fowl, 4% other poultry, 3% turkey and 2% duck and geese [1].

Figure 1.1 English poultry numbers at June 2005-2015 [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 2005-2015 [2]



Note: [a] denotes a 53 week year

[b] 2015 12 month average includes last three months of 2014 as 2015 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 884 million in 2008, to approximately 1 billion in 2015, a rise of 16%. Following three consecutive years of increasing overall chick and poultry placings between 2011 and 2013, numbers plateaued in 2014. However, in 2015 numbers have increased by 2.5% on a year-to-year basis based on data available up to the end of September 2015. Placements of turkeys decreased in 2013 and 2014, but in 2015 numbers increased by 3.3% to approximately 17 million, bringing it to almost the same level as in 2013. There was a 1.2% increase in placements of broiler breeder hens between 2014 and 2015, following an increase of 20% between 2013 and 2014 [2].

Figure 1.3 Density of traditional poultry at 1st January 2013 [3]

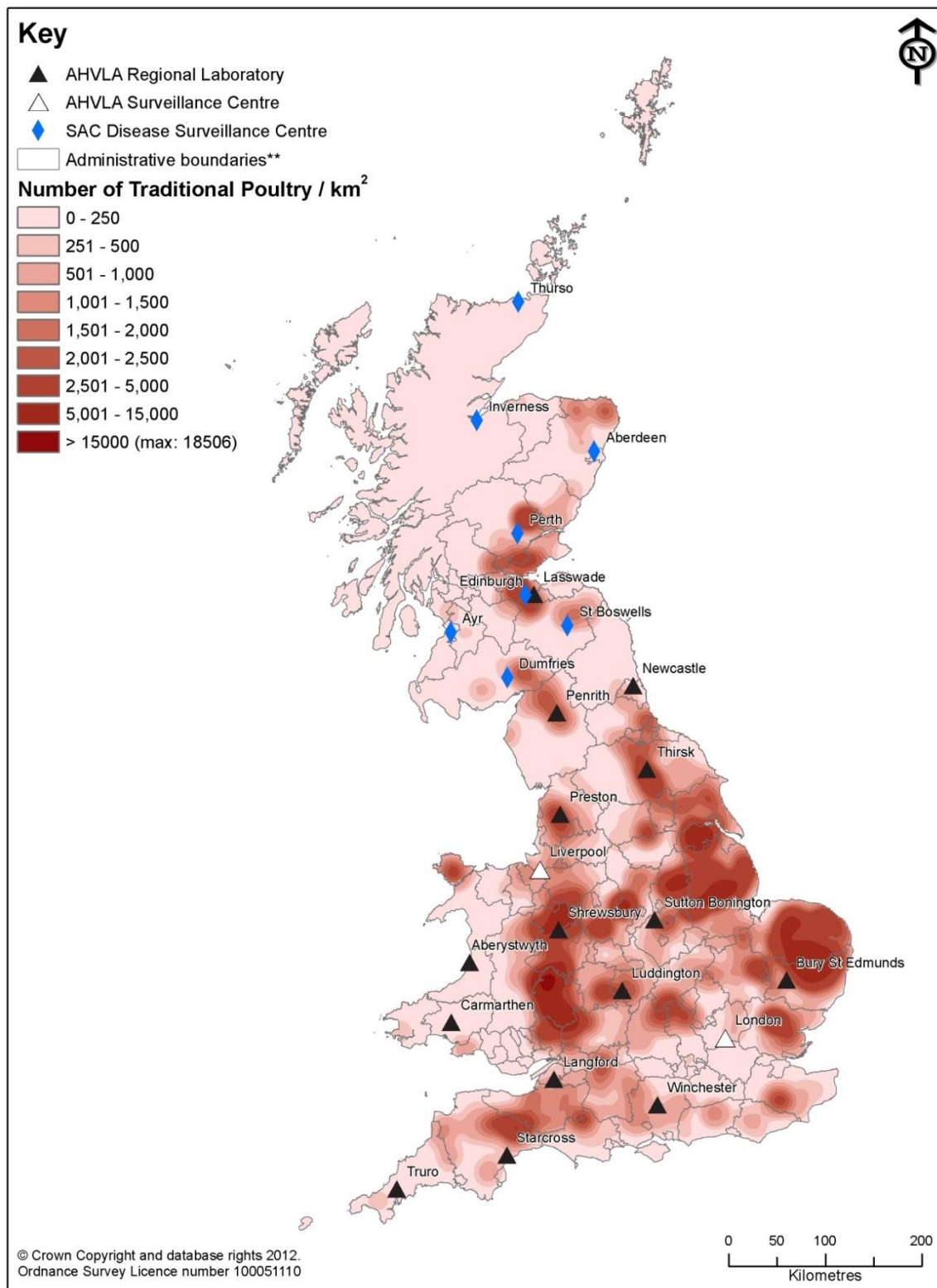


Figure 1.3 shows poultry population density throughout England. The highest densities of the English flock in 2013 were in East Anglia, Lincolnshire, Yorkshire and along the English/Welsh border, with much lower populations in the south east of England. A more up to date map was not available at the time of writing.

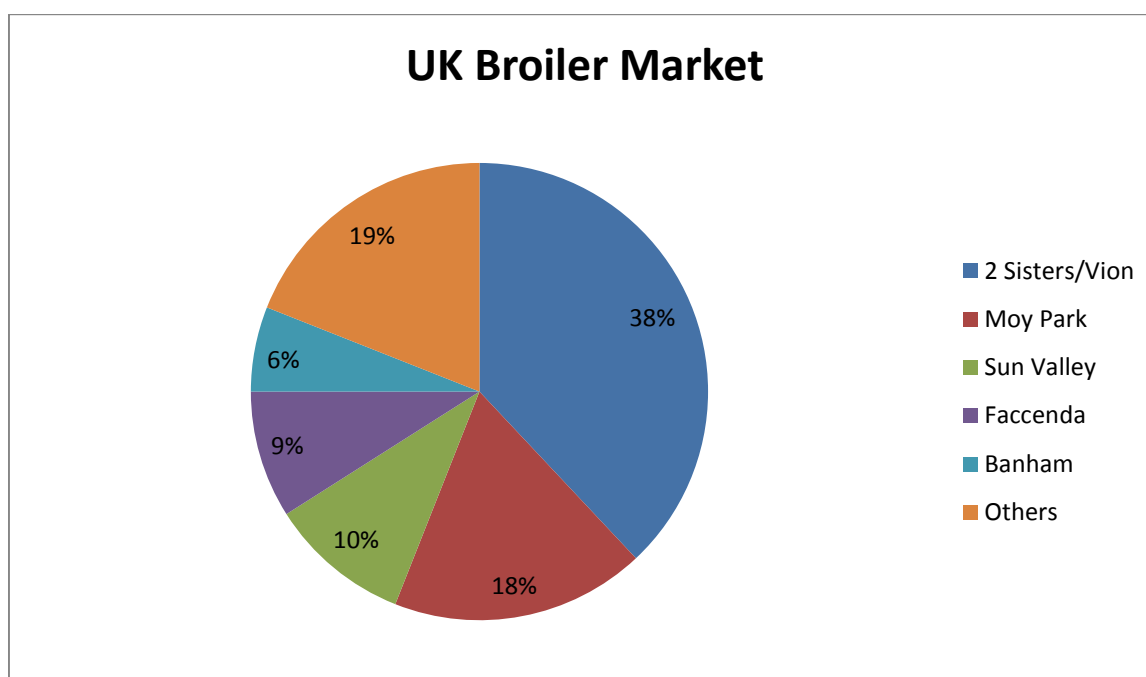
1.2 The Structure of the industry

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 organisations and associate organisations [4]. In England, 1,031 holdings (with 1,000 or more birds) were registered in 2014, housing approximately 83 million birds, with an average of approximately 80,000 broilers per holding. This is compared to 1,061 holdings registered in 2013, housing approximately 77 million birds, with an average of approximately 73,000 broilers per holding. in 2014. Premises with less than 1,000 broilers have been excluded as these are defined as small, non-commercial holdings [5].

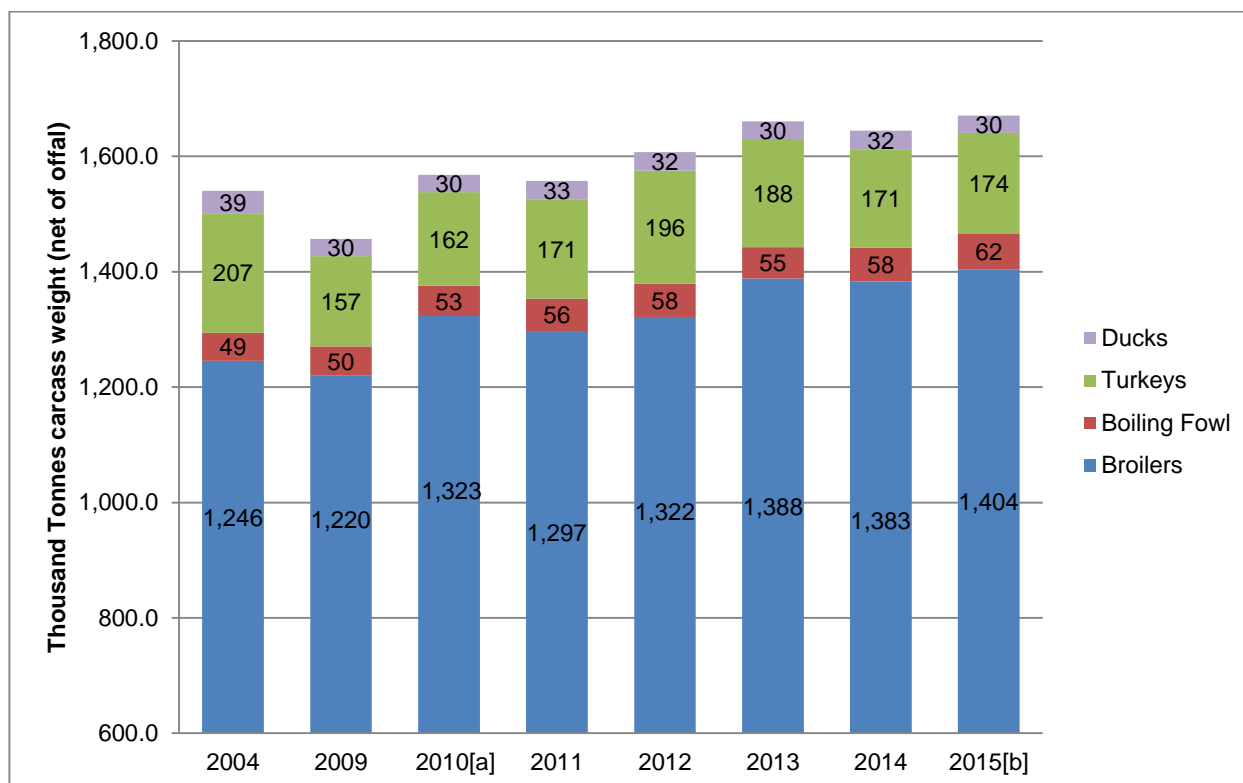
According to Andersons, the UK broiler market in 2014 comprised of 2 Sisters/Vion (38%), Moy Park (18%), Sun Valley (10%), Faccenda (9%), Banham (6%) and others (19%), as shown below [6].

Figure 1.4 UK Broiler Market - Estimate [6]



According to the NFU, in 2014 the broiler market was made up of 82% of birds being reared on a standard (for example, the red tractor assurance scheme) or standard plus systems (chickens that are often provided with natural light, environmental enrichment and more space compared to 'standard' broiler systems) with a typical growth rate of 60 grams per day (2.4kg live weight gain over 40 days); 14% of birds reared on a higher welfare system with an enriched environment for example, RSPCA freedom foods, with a lower growth rate of under 45 grams per day; 3% of birds reared on a free range system with 2.4kg live weight gain over 65 days and 1% of birds reared as organic, with 2.4kg live weight gain over 80 days [7].

Figure 1.5 Annual UK production of poultry meat by type [8]



Note: [a] 2010 was a 53 week year

[b] 2015 data is based on the monthly data recorded up to end of September 2015 with October, November and December based on figures for the same months for the previous year (2014)

Total annual production of poultry meat in 2015 totalled some 1.67 million tonnes, 4% more than the previous five year average and 8% more than for 2004. Approximation by type: 84% were broilers, 10% turkey, 4% boiling fowl and 2% duck.

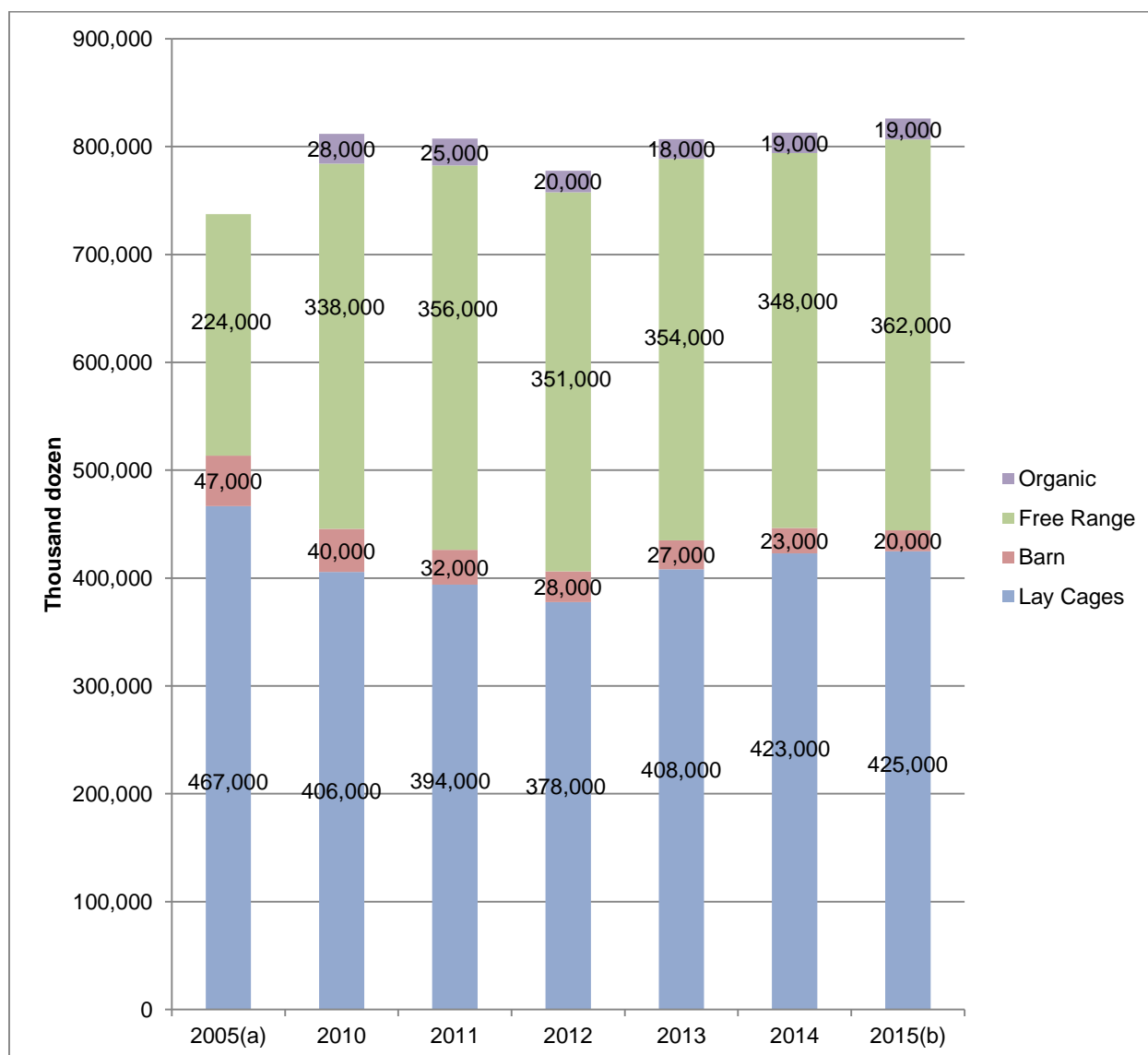
1.2.2 Poultry for eggs

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].

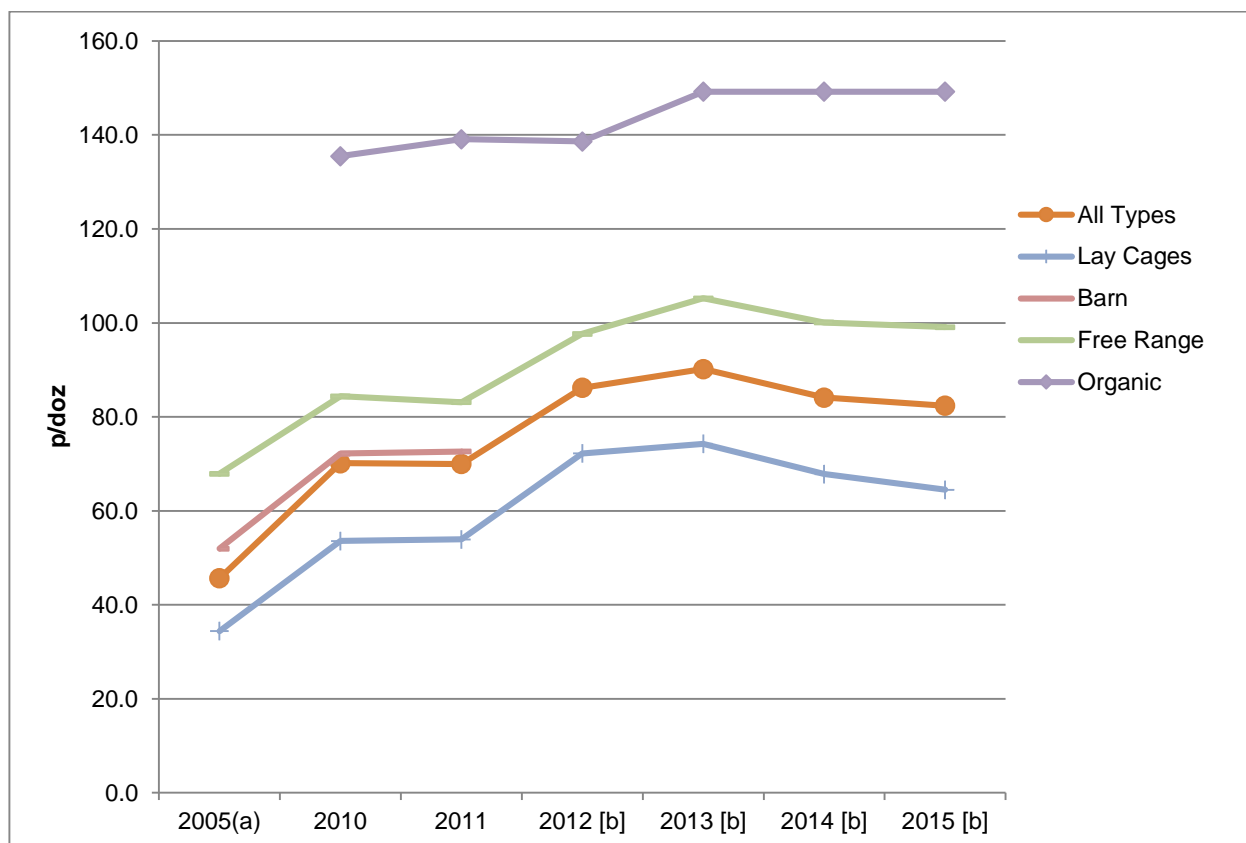
Figure 1.6 Annual UK egg production by production systems [12]



Note: (a) 2005; no organic data available
 (b) Note that Q4 results for 2015 were not available so they have been based on Q4 of 2014

Total packing station throughput increased by 2% between 2014 and 2015 and is also 2% above the peak of 2010. In 2015 approximately 52% of eggs were produced in enriched cages, 44% in free range systems, 2% in barns, and 2% from organic systems. Between 2013 and 2014 enriched cage production increased by 4%, whereas the increase for 2015 was minimal (<1%). There has been an increase in free range production between 2014 and 2015 of around 4%, bringing it to the highest level recorded to date. Organic production in 2015 was almost identical to 2014.

Figure 1.7 Average packers to producer prices by housing type [11] [12]



Note: [a] 2005; no organic data available
 [b] 2012 to 2015 data for barn eggs suppressed as sample too small

The average packer to producer price decreased by around 2p/doz (-2%) in 2015 to 82.3p/doz, following a decrease of around 6p/doz (-7%) in the previous year.

The average price of free range eggs fell to 99.1p/doz in 2015, a 1p/doz reduction from the previous year. This followed several years of price increases when the price peaked in 2013 at 105.2p/doz.

The average lay cage egg price in 2015 also dropped back by around 3p/dozen to 64.5p/dozen, while the average price for organically produced eggs remained unchanged at 149p/doz since 2013, continuing the highest average recorded price since 2007, but with no year-on-year increases in the past three years [11, 12].

1.3 Contribution of the poultry sector to the economy

1.3.1 The farm sector

In 2014 total poultry output decreased by 2.4% to just under £3.2 billion, following an increase of just over 10% in 2013 from 2012, whilst total agricultural output decreased by 0.6% in 2014. Poultry meat output fell by 2.8% to £2.26 billion in 2014, a decrease of £65 million on 2013. Egg and egg products also decreased over the same period by 5.4% or £39 million to £679 million, compared with an increase of 8.5% or £56 million to £718 million between 2012 and 2013. Poultry output, as a proportion of gross output from agriculture remained at 12%.

Figure 1.8 Producer value of UK-produced poultry meat and eggs 2008-2014 (£M) [13]

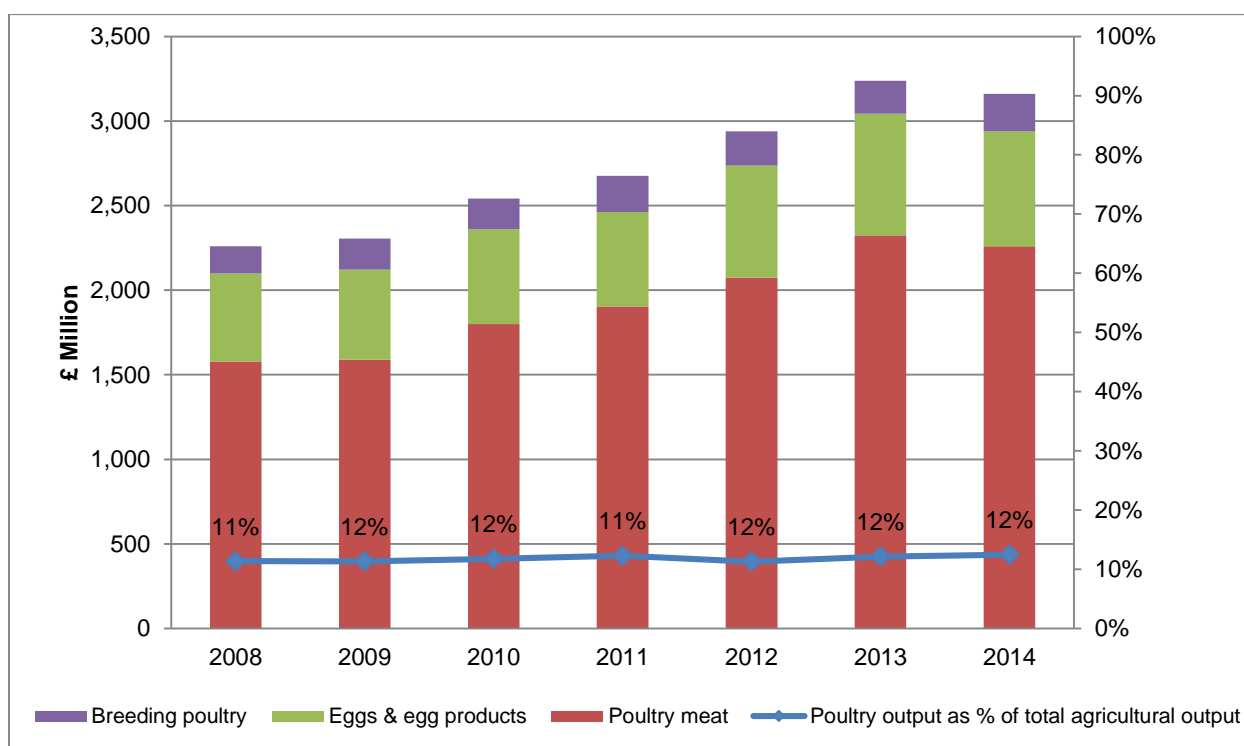
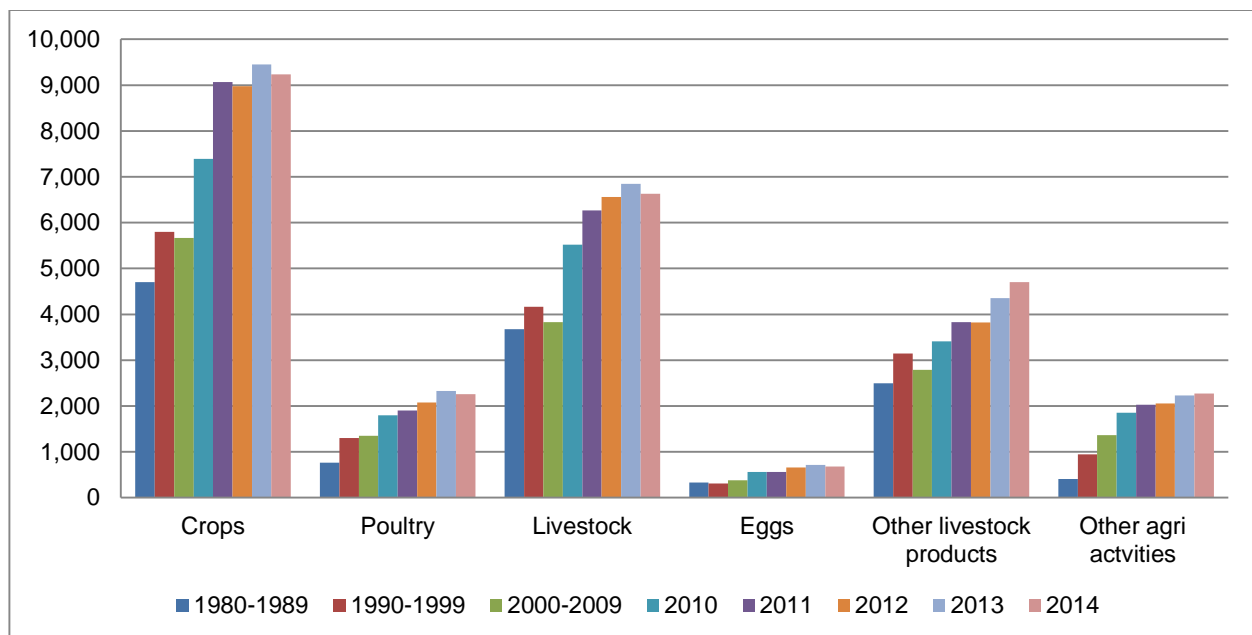


Figure 1.9 Poultry and egg output compared with other agricultural outputs through time at current prices (£M) [14]



1.3.2 The retail sector

1.3.2.1 Poultry meat

Poultry meat has maintained its popularity with consumers by being regarded as low in fat, healthy and, in the current economic climate, cheaper than red meat [14].

Sales of poultry meat in 2014 grew by 1.6%, reaching £5.23 billion [19]. It is estimated that average consumer consumption in the UK of 33.1kg in 2014, represented an increase of 3.1% and 0.9% from 2010 and 2013, respectively. Expenditure accounted for 27.2% of total expenditure on meat in 2014, which was 0.1% less than in 2013, but 0.5% more than in 2010. Between 2015 and 2019, overall value growth for poultry meat is forecast to grow by 8.5% in the UK. Confidence in the robust nature of the market is supported by the high extent that chicken is ingrained in UK diets and also the availability of a variety of free-range, organic and ethically certified poultry products. The result of which is an expectation for the market to show further growth, though not on the same scale as for recent years [15].

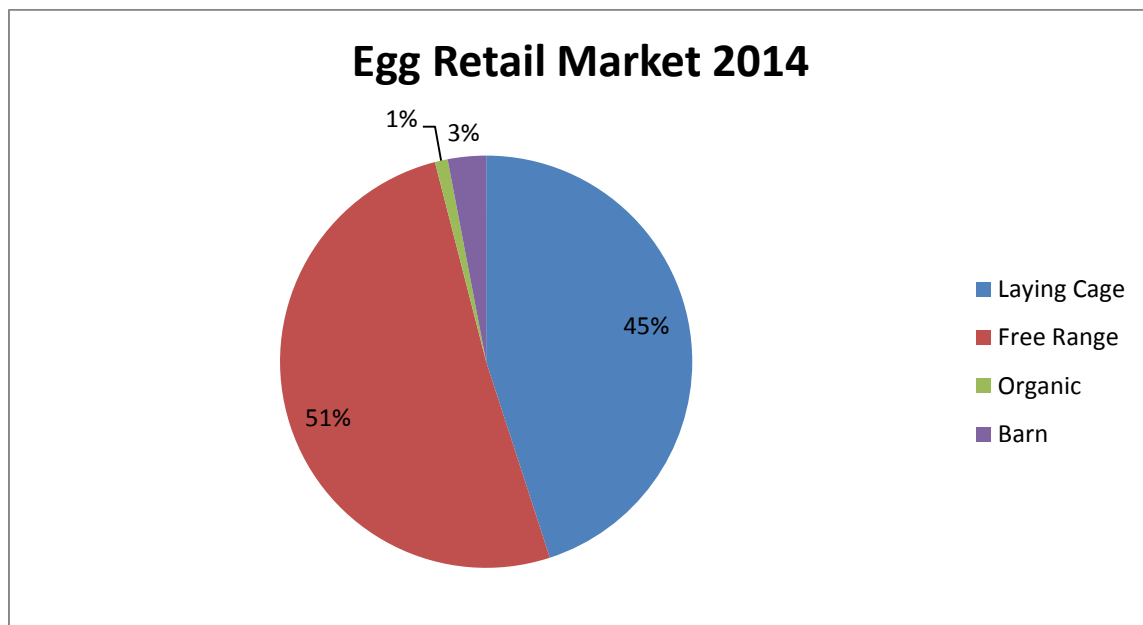
1.3.2.2 Eggs

In 2014 UK egg consumption rose by around 2%, to 983 million dozen, with a retail value of approximately £955 million [16]. Between 2013 and 2014, retail sales fell by around 3% [16]. Production of eggs for processing for human consumption was up by around 7% in 2014, following a drop in 2013 of 6%. UK human consumption of shell eggs did not change from 2013 to 2014, following an increase of around 6% in 2013 [17].

Egg sales have accelerated significantly in 2015, building on several years of growth according to new data from the British Egg Industry Council (BEIC). Retail egg sales (volume) have increased by 6% in the first three quarters of 2015, compared to the same period last year. If sales continue at the current rate, a record breaking year of figures since the 1950s is set to be recorded in 2015. This follows long term growth in the egg market, with sales up 22% since 2008. Data from the BEIC shows growth is being driven by the younger generation, with those under 34 years of age purchasing 31% more eggs than they did in 2008 [18].

According to figures from Kantar Worldpanel, the egg retail sector in 2014 consisted of 45% laying cage production, 52% free range production (including estimated 1% organic) and 3% barn production [16].

Figure 1.10 Retail Egg Market 2014 [16]



1.4 Trade

Table 1.1 UK imports and exports of Eggs and Poultry meat [17]

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

Poultry meat [a] (carcass weight thousand tonnes)	2010	2011	2012	2013	2014
Imports	475	515	468	470	495
Exports	268	291	276	306	331
UK production	1,570	1,660	1,609	1,662	1,648
% self sufficient	88%	87%	89%	91%	91%

[a] excludes offal

Between 2013 and 2014, production of eggs increased by 1%, whilst production of poultry meat decreased by 1%. Imports of eggs increased by 3%, whilst exports decreased by 52%, resulting in a 1% fall in self-sufficiency, to 85%. Poultry meat imports increased by 5%, whilst exports increased by 8%, but self-sufficiency remained at 91% [17].

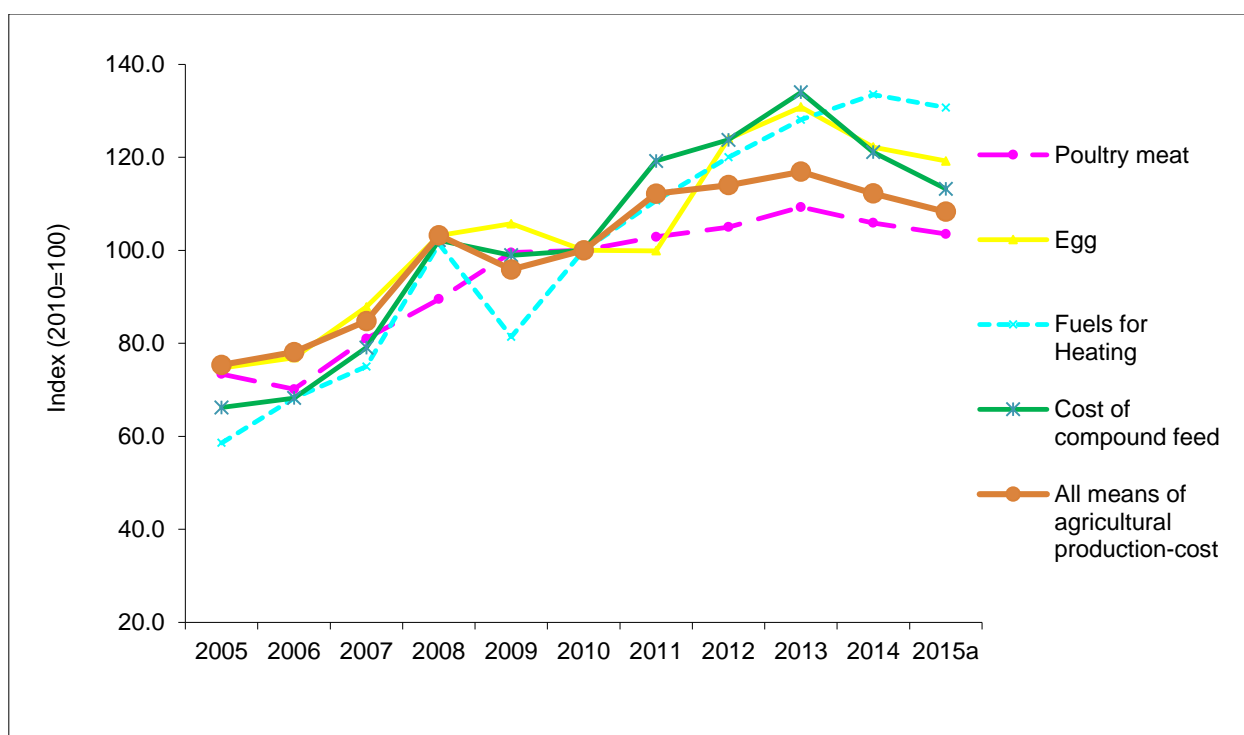
1.5 Producer prices

Feed and fuel continue to be the major costs for poultry producers. The means of production costs (based on figures available at the time of preparation of report), saw a further reduction in 2015, following a reduction in 2014, after continuous year- on-year rises since 2009.

Average compound feed prices for 2015 have dropped by around 7% following a reduction of just under 10% between 2013 and 2014. Fuel for heating decreased by around 3% in 2015 (based on figures available up to the end of September 2015) after increases in 2013 and 2014 of around 7% and 4% respectively [19].

Egg output fell by 3% in 2015 following a reduction in 2014 of under 7% after a peak in 2013. Similarly, poultry meat production fell by 2% in 2015 following a reduction in 2014 of 3% after a peak in 2013 [19].

Figure 1.11 Index of producer prices for poultry and eggs and cost of production [19]



(a) 2015 figures based on average prices between January and August 2015.

1.6 Animal welfare, regulation, and disease

New UK poultry slaughter regulations: Welfare of Animals at the Time of Killing (WATOK)

The new regulations came into force on 5th November 2015 and contain provisions to improve the welfare of animals at time of slaughter. Large slaughterhouses must have in place an Animal Welfare Officer and Certificates of Competence for key personnel such as 'experienced' operatives involved with handling livestock and for those responsible for slaughtering. Although the British Veterinary Association (BVA) is broadly supportive of the new WATOK regulations it has raised an urgent question with the Department for Environment, Food and Rural Affairs (DEFRA) about the omission of parameters in the legislation for poultry killed in accordance with religious rites. European legislation on welfare at slaughter includes rules on stunning following work to evaluate parameters for electrical water-bath stunning for poultry killed according to religious rites, which if not adhered to correctly could leave a proportion of birds immobilised rather than stunned, causing avoidable suffering. The BVA has previously called for all European legislation to be implemented in full through WATOK and is therefore concerned about the exclusion of parameters in electrical water-bath stunning and the absence of a legal guarantee for effective stunning before slaughter [20].

Campylobacter

Campylobacter is a food bug mainly found on raw poultry and is the biggest cause of food poisoning in the UK. The Food Standards Agency (FSA) has been heading up a campaign for all those involved in the food supply chain to address the issue. In May 2015 the FSA published the final set of results from its year-long survey of campylobacter on fresh chickens. The study tested 4,000 samples of whole chicken purchased from the major UK retail outlets, as well as from smaller independent stores and butchers. Cumulative results for 4,000 samples taken between February 2014 and February 2015 have been published as official statistics, including results presented by major retailers. The results for the full year show:

- 19% of chickens tested positive for campylobacter above the highest level of contamination*
- 73% of chickens tested positive for the presence of campylobacter
- 7% of packaging tested positive for the presence of campylobacter with only one sample at the highest level of contamination (>1,000 cfu/g)

** Above 1,000 colony forming units per gram (>1,000 cfu/g). These units indicate the degree of contamination on each sample [21].*

The data shows variations between the different retailers, but none met the target for reducing campylobacter on chicken [22].

Further details of the ongoing testing of chickens for campylobacter were also confirmed by the FSA with a new survey having started in summer 2015. It will once again sample fresh whole chickens from all types of retail outlets. Continued testing will enable the FSA to measure the impact of the interventions now being introduced by the industry to tackle campylobacter [21].

Outbreaks of avian influenza (bird flu) in 2015

Hampshire February 2015

The low severity case of avian flu was confirmed in chickens at a farm in Hampshire on 2 February 2015 and robust action was taken to prevent any spread of the disease, which posed very low risk to human health. A one kilometre restriction zone was placed around the premises. Tests confirmed the outbreak in Hampshire as a low severity H7N7 strain of the disease, a different and much less severe form than the H5N8 strain found at a Yorkshire duck farm in November 2014. All poultry on the premises were culled and the affected farm buildings were cleansed and disinfected to prevent the disease spreading. Investigations suggest the most likely source of infection was indirect contact with infected wild birds [23].

Lancashire July 2015

A case of H7N7 avian influenza was confirmed near Preston, Lancashire on 13 July 2015. Restrictions were lifted in August 2015. Robust action was taken to prevent any spread of the disease, which posed a very low risk to human health. Restriction zones of three (protection zone) and ten (surveillance zone) kilometres were placed around the premises. The restrictions were lifted 30 days after the completion of an initial cleaning and disinfection of the premises, which is the earliest point allowed under EU rules to end the controls [24]. DEFRA have published the epidemiological report into the outbreak of High Pathological Avian Influenza (HPAI) H7N7. It is likely to have resulted from an incursion of Low Pathological Avian Influenza (LPAI) virus that then mutated to a HPAI virus on the infected premises. The outbreak was not related to the LPAI outbreak in broiler breeders in Hampshire. There is still uncertainty what caused the outbreak, however, there is evidence that it may have been the result of indirect contact between wildfowl into one group of free range birds on the site [25].

Cost implications of bird flu outbreaks

Costs linked to the two individual outbreaks of avian influenza (AI) affecting the UK in the past 12 months are now estimated at more than £50m. Delegates at the inaugural UK Poultry Health and Welfare Group (PHWG) were told that the figure took into account lost exports and displaced products for the poultry meat industry [26]. Clean-up costs are estimated to be as much as £10 per bird for egg producers whose layer units are affected by AI. Whilst the Government takes responsibility for the preliminary cleansing and disinfection of an affected site, the cost of secondary cleansing and disinfection is borne by the producer. The work also involves the secure removal of the waste water from cleaning the sheds and of the chicken litter [27].

Bird flu insurance offered again for poultry farmers

Insurance underwriters are offering cover again for avian influenza (AI), having temporarily withdrawn from the market in the immediate aftermath of the Lancashire outbreak in July 2015. Initially, insurers withdrew their cover, due to uncertainty relating to the cost of cleaning up and disinfecting premises following an outbreak. But, having had time to assess the situation, underwriters have once again entered the market offering cover again [28].

Ban on beak trimming

A ban on beak trimming of laying hens was due to have been implemented by the end of 2010. However, DEFRA agreed an amendment to the bill allowing infra-red beak trimming at one day old. On advice from the Farm Animal Welfare Council (FAWC) the British Parliament decided in 2010 to postpone a total ban of this practice until at least 2016 [29]. The government made the decision that a total ban would not be enforced until sufficient evidence could be gathered that laying hens under commercial conditions without beak trimming being carried out would result in a greater risk to welfare than if trimming was undertaken routinely [29]. It has also been suggested that further development in management techniques and breeding of birds with low aggression traits will also help reduce feather pecking and cannibalism, ultimately reducing the need for beak trimming [30].

Provisional results from a report published in March 2015 by Bristol University found that generally most of the flocks with intact beaks had responded well to the various management interventions, but two of the larger flocks had seen outbreaks of injurious pecking, one of which had to be emergency hot bladed [31].

In the UK, the Beak Trimming Action Group was considering the report by Bristol University into trials on non-beak trimmed flocks conducted last year. It is understood the report concluded that it is too soon to implement a ban in 2016. A final decision was made in November 2015 not to introduce the ban, but called for improved management techniques by poultry keepers to create a calm and tranquil environment for poultry flocks [32].

1.7 Important developments in the poultry industry

Egg and Poultry Industry Conference (EPIC) November 2015 – Key points raised

Compulsory levy to fund bird flu costs gains momentum

An industry group has been calling on the government to establish a levy to raise funds to help with the clean-up of a bird flu outbreak, or setting up an insurance model. The most likely outcome, the president of the Egg and Poultry Industry Conference (EPIC) Andrew Joret suggested, would be a combination of the two – “a fund at one level, and a certain amount of reinsurance at a second level”. Mr Joret suggested government involvement is “in their-own interest”. The three outbreaks in the UK in the past 12 months “had cost the poultry sector £50m in lost profits”, said Mr Joret. “With corporation tax at 20%, that amounted to £10m in lost revenue to the Treasury”.

Transatlantic trade deal concerns

DEFRA Farming Minister, George Eustice recognised UK industry concerns about the prospect of poultry products reared at lower welfare and food standards entering the country from the US as a result of the EU/US Transatlantic Trade and Investment Partnership deal. Mr Eustice pledged that the EU would “not compromise on food safety standards”.

Export markets after bird flu

DEFRA Farming Minister, George Eustice would examine whether he could reopen export markets earlier, following an avian influenza outbreak, in the light of industry concerns about having to wait for full secondary cleansing and disinfection to be completed. Mr Eustice revealed that other sectors did not have the same stringent requirements before export markets could be re-opened.

Chinese export opportunities

There was potential for the poultry sector to export more dark chicken meat and fifth-quarter (by-products such as offal and feet) products. DEFRA Secretary of State, Liz Truss led a food and farming trade mission to China at the beginning of November 2015, and DEFRA Farming Minister, George Eustice said the Chinese love of chicken feet presented a “real market opportunity that should be taken”.

Futures market

DEFRA farming Minister George Eustice is keen to investigate the possibility of developing a futures market for the poultry and dairy sectors in the UK, stating it could be very useful in both business forward planning and risk management.

Survey shows egg consumers less concerned over cholesterol

New independent research has shown that concerns over cholesterol and eggs are fast disappearing, the British Egg Information Service (BEIS) has reported. Research undertaken among more than 1,500 people, has shown a complete reversal of opinion over the past seven years, with 42% of people now believing it is reasonable to eat six or more eggs per week, up from 19% in 2008. In addition, the number of people saying it is only reasonable to eat between one and three eggs fell from 45% to 26% [33].

Cage-free eggs gather pace in US market

Major US egg producer Rembrandt Foods has announced it is to move towards cage-free production, which will further accelerate the growth of the free-range sector. The decision by Rembrandt, which is the third largest US egg producer, comes a month after McDonald's made a similar commitment to use cage-free eggs only in the US and Canada, having already sourced 100% cage free eggs in the UK and rest of Europe for over fifteen years. Burger King, Kellogg's and large institutional food suppliers Sodexo and Aramark have all recently announced their decision to phase-in cage-free eggs over the next five to ten years [34].

More than 90% of all eggs outside the European Union (EU) are still produced in cages

According to research conducted by the International Egg Commission (IEC) more than 90% of all eggs outside the EU are still produced in cages - mainly conventional cages. Whilst free range hens account for half of egg production in the United Kingdom, some 93% of layers in countries outside the EU remain in cages. Professor Windhorst said in his report that in some countries this was unlikely to change within the next 10 to 20 years. He stated that the ethics on animal welfare developed in Europe could not simply be transferred to other parts of the world. Overall, nearly 60% of the EU's 380 million laying hens were in enriched cages in 2013, according to Professor Windhorst's analysis. Some 26% of the EU's hens were in barn units, with just 16% in free range production [35].

1.8 Key business developments during 2015 and outlook for 2016

State of the Poultry Industry AHDB Outlook Conference – 11 February 2015

Challenges/threats identified

- The Association of Poultry Processors and Poultry Trade in the EU (AVEC) 2011 estimated that costs of EU regulations are 5% of production cost
- There is perceived anti-intensive livestock rhetoric from the English media and a difficulty with planning application for buildings for intensive livestock production due to 'the countryside will be ruined' concerns linked to factory farming
- There is intense competition amongst retailers with promotions that create false demand and devalue poultry products
- There is continued volatility with poultry feed prices

Opportunities identified

- The opportunity for biomass poultry litter combustion for larger units resulting in less reliance on volatile fossil fuels and added income from the Renewable Heat Incentive (RHI)
- EU meat consumption estimated to increase by 3% over next six years and 20-22% in Asia and Africa.
- A 'YouGov' poll carried out for the NFU in 2014 found that 86% of shoppers wanted to buy more traceable food produced on British Farms [36]

The British Poultry Council's 'manifesto for the British Poultry Industry

The British Poultry Council (BPC) launched its manifesto for the British Poultry Industry on 3 December 2014, calling on the Government to help ensure long-term success for the British poultry meat industry and help deliver its 2020 vision. The manifesto was launched at the annual poultry awards in the House of Commons, hosted by Environment, Food and Rural Affairs Committee Chair, Anne McIntosh and with Food and Farming

Minister George Eustice MP as guest speaker. It set out the high ambitions of the industry for 2020, focusing on its ability to produce consistently safe, nutritious, affordable and sustainable food for British families and the export market. The BPC have called on the government for help to:

- Create the conditions needed to produce growth and export potential
- Ensure rearing poultry remains affordable to British farmers by securing long-term feed supplies
- Promote the dietary benefits and affordability of British poultry meats

The BPC have high ambitions for the sector going forward, and the document sets out their vision for 2020, including:

- Growing the value of UK poultry meat year-on-year, including exports
- Growing employment in the sector, contributing to rebalancing UK jobs and growth
- UK wide recognition poultry is a lean and nutritious meat that should be part of a healthy UK diet
- British poultry remains affordable for British families and is Britain's most popular meat, accounting for over half of all meat eaten in the UK
- A continued decline in levels of campylobacter [37]

Positive outlook for the poultry sector despite threat of avian influenza (AI)

According to the latest Rabobank poultry report, the industry is benefiting from ongoing bullish market fundamentals, with supply balanced in most regions and feed costs low. AI remains a major concern for the global industry, with new outbreaks in most regions of the world, except to date in Australia and South America. However, the number of outbreaks has been lower in recent months, and this offers the industry in these previously affected regions some time to recover from recent outbreaks. The outlook for late 2015 and 2016 is predicted in the report to be good, as feed prices are expected to remain low, and the global breeding stock supply will be very low in regions with AI-related import restrictions, such as China and other countries in south-east Asia. The expectation that China will face a shortage in poultry and pork supply next year could especially become a major driver of improved economic prospects for the global poultry industry. However, the anticipated further spread of AI to key US chicken production areas does pose uncertainty for the industry outlook in the second half of 2015 [38].

Positive outlook for poultry meat in 2016

Poultry meat production across the EU rose by 3.6% in the first half of 2015 and is set to continue to increase due to affordable feed prices, according to the latest European Commission Short Term Outlook report. Latest figures show the largest rise to be in the EU-N13 nations (typically, east European countries that joined in 2004, 2007 and 2013), which saw a 10.3% jump in production, while in contrast, there was a small drop in production in Germany (-0.4%) [39].

SECTION 2: FINANCIAL RESULTS FOR POULTRY PRODUCTION IN ENGLAND

2.1 Introduction to the data

The following series of tables [Tables 2.2 to 2.11] are based on farm businesses that participate in the Farm Business Survey (FBS) in England and are classified as specialist poultry farms. Tables 2.12 to 2.17 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 2.2 - 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 2.3 - 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 2.4 - 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 2.3:

- Table 2.5 - Laying flocks producing eggs for human consumption
 - Sample includes all types of laying enterprises including enriched cage, free range and deep litter systems
- Table 2.6 - Laying flocks with mixed production systems including enriched cage, barn and deep litter systems
 - Sample includes all enriched cage laying and mixed laying enterprises [a sub-set of Table 2.5]
- Table 2.7 - Laying flocks with free range hens
 - Sample includes solely free range laying enterprises [a sub-set of Table 2.5]

Poultry meat producers – further sub-group of table 2.4:

- Table 2.8 - Non-contract broilers
 - Sample includes non-contract broiler enterprises [a sub-set of Table 2.4]

Gross margin analysis for all poultry enterprises:

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

- Table 2.12 - All laying flocks
 - Sample includes all types of laying enterprises (enriched cage, free range and deep litter)

- Table 2.13 - 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 2.12]
- Table 2.14 - Laying flocks with free range hens
 - Sample includes solely free range laying enterprises [a sub-set of Table 2.12]
- Table 2.15 - Laying flocks (enriched cage and free range systems)
 - Gross margin per dozen eggs
- Table 2.16 - Non-contract broilers and table chickens
 - Sample includes non-contract broiler and table chicken enterprises
- Table 2.17 - 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 (see section on Sampling and Recruitment) 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 2014 June survey there were 1,409 specialist poultry farm businesses in England that were above the FBS threshold.

The results for the 2014/15 financial year are based on 83 specialist poultry farms, which represent 5.9% 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 2013/14 and 2014/15 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/statistics/farm-accounts-in-england-201415>

2.4 Financial results for 2013/14 and 2014/15

2.4.1 Specialist poultry farms [Table 2.2]

In 2014/15 a total of 83 farms participating in the Farm Business Survey (FBS) in England were classified as specialist poultry farms, compared to 84 farms in 2013/14. The total of 83 farms included 46 specialist layers and 37 specialist poultry meat producers. This relatively small sample size can mean individual farms have a large influence on the results, particularly when there has been significant change to the composition of businesses within the sample.

The profitability of specialist poultry farm businesses reduced by just under 20% in the 2014/15 financial year, with average profit as measured by Farm Business Income (FBI) falling on a per business basis from £157,203 in 2013/14 to £126,839 in 2014/15 [Table 2.2]. However, this decrease should be treated with some caution due to the structural change to the sample. The presence of a particularly influential poultry meat business has exacerbated the trend of falling income in the past year.

Within this sector, both the layers and the poultry meat producers experienced a fall in profits during 2014/15. 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 £95,653 in 2013/14 to £53,998 in 2014/15, representing a drop of 44% [Table 2.3]. For the poultry meat producers FBI fell by around 10%, falling from £208,010 in 2013/14 to £187,700 in 2014/15 [Table 2.4].

The average number of birds recorded for specialist poultry farm businesses increased by just over 5%, rising from 79,901 birds in 2013/14 to 84,045 in 2014/15. This increase follows a decrease of around 2% observed in 2013/14, the result of changes in the average number of birds for both layers and poultry meat producer businesses. After two consecutive periods of growth (2012/13 and 2013/14), the average number of laying hens decreased by 4% in 2014/15 to 45,642 birds. By contrast, the average number of birds for meat production increased by about 9% to 116,133.

Despite an overall increase of around 5% in the average number of birds on a per business basis in the specialist poultry sample, average gross output of these farms fell by just under 1%. This small reduction in output was largely due to a smaller contribution from the breeding and rearing of chicks and pullets, than in the previous year.

The average price of eggs recorded in the 2014/15 FBS increased by over 4% from the previous year, to around 86p (p/doz). However, there is evidence of producers receiving very variable egg price rises (+/-10%), with some being paid less than in 2013/14. Returns on egg sales have been influenced by the nature of formal arrangements with pack-houses, including renegotiation of the guaranteed price at the end of a contract period. Other arrangements cited by producers are based on prices being capped in line with production costs. There has also been anecdotal feedback from producers achieving best returns for their eggs by supplying direct to the consumer.

Although the sample of poultry businesses is divided fairly evenly between layers and poultry meat producers, the balance was very different in terms of output attained. Some 19% was derived from egg production, 56% from broiler production and 25% from a mix of breeding, rearing and other forms of poultry meat production.

On a per business basis, the average number of birds increased by just over 5% in the year, whilst little change was recorded for total variable costs. Among the total variable costs (£643,000), there was once again little change in average feed costs. The cost of feed as a percentage of £100 of output per business remained at approximately 48% for both years. On a per bird basis, the cost of feed dropped 4%, from an average cost of £6.67 per bird in 2013/14, to an average cost of £6.40 in 2014/15. Total fixed costs on a per business basis increased from an average of £324,684 in 2013/14, to an average of £347,802 in 2014/15, which represents an increase of just over 7%.

The net result of year-on-year changes on a business basis to output and costs contributed to a drop in average FBI of some 20% for specialist poultry farms. However, in common with past income trends, there was a wide range in the level of FBI observed for different businesses with around 58% recording an annual FBI of over £50,000 and nearly 20% incurring a negative FBI.

2.4.2 Layers producing eggs for human consumption and breeder/rearers [Table 2.3]

In 2014/15, the 46 specialist poultry farms that were classified as layers (Defra farm typology code 521) included 37 businesses with laying flocks producing eggs for human consumption and nine businesses comprising breeding and rearing units. This latter category includes growing pullets, layer breeders and broiler breeders.

Gross output of all laying flocks on a business basis decreased by over 10%, dropping from an average of £835,378 in 2013/14 to an average of £745,768 in 2014/15. The average number of birds reduced by 4% to 45,642 birds, while the total number of eggs produced per bird increased by over 16%, from 218 to a mean of 253 eggs per bird per year. Feed costs increased by an average of 2% per business, rising to £324,133. On a per bird basis, the cost of feed was up by £0.42 to a mean of £7.10.

Total variable costs reduced by around 3%, which along with the reduction in gross output resulted in a reduction of around 19% in the total gross margin. Total gross margin per business decreased from an average of £397,957 in 2013/14 to an average of £322,273 in 2014/15. Total fixed costs were down by just over 9%, dropping from an average of £306,179 to an average of £277,718 per business in 2014/15. The net result of the year-on-year change to output and costs was the reduced average FBI of some £53,998 per business.

2.4.3 Layers producing eggs for human consumption [Table 2.5]

This sub-set of farms consists of flocks producing eggs for human consumption, which includes enriched cage, barn, deep litter and free range 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 average flock size on a per business basis increased by about 15%, increasing from an average of 23,438 birds in 2013/14, to an average of 26,974 birds in 2014/15. This increase continued the upward trend that was observed in the previous twelve month period, when the increase was around 16%.

Egg production per bird has remained fairly constant, rising from an average of 287 eggs in 2013/14 to an average of 288 eggs in 2014/15. The price received for eggs decreased by nearly 2% in the year, dropping from an average of just over 90p/doz in 2013/14 to an average of just over 89p/doz in 2014/15. At nearly 2% less in 2014/15, this fall was not as high as the 8% year-on-year reduction in average price recorded in the previous year.

The total gross output for the all laying flocks group increased by more than 10%, rising to an average of £506,865 per business. As a consequence of this higher output, the average gross margin per business increased by over 3.5% to £192,985.

Output 'per bird' decreased from an average of £19.64 in 2013/14 to an average of £18.79 in 2014/15, representing a drop of over 4%. This was due in part to the impact of higher hen depreciation from the cost of purchasing point-of-lay hens to stock new enriched cages.

Total variable costs increased by almost 15% to an average of £313,880, per business, amongst which feed, comprising 89% of these costs, increased by approximately 12% to an average of £280,237. On a per bird basis feed costs decreased by almost 3% to an average of £10.39. As a percentage of £100 of output per business feed costs were slightly higher than they were in the previous year at over 55% in 2014/15, up from over 54% in 2013/14.

Total fixed costs increased by nearly 30% to an average of £175,747 per business, with rent (which includes imputed rent and building depreciation) increasing by over 50% due to higher building depreciation charges on some larger units. On a per bird basis, fixed costs increased from an average of £5.78 in 2013/14 to £6.52 in 2014/15.

The year-on-year change on a per bird basis to output and costs meant that the average profit as measured by FBI decreased by £1.68, dropping from a return of £2.79 in 2013/14 to a return of £1.11 in 2014/15. When based on a 'per dozen' basis, the average profit decreased from over 12p to under 5p in 2014/15.

2.4.4 Mixed production systems and free range flocks [Table 2.6 and Table 2.7]

The laying flock group producing eggs for human consumption has been subdivided into two further groups of mixed production systems and free range flocks. There are ten farms with mixed production systems and 27 farms with free range systems. Although the mixed production systems are predominantly enriched cage units, they comprise some mixed systems, including barn and deep litter egg production.

Due to the very small sample size these figures are subject to a high level of variation and will, in the case of units with a high number of chick placings, result in averages that may diverge from data recorded in Section 1.

The 2014/15 financial year was less profitable overall for laying hen producers (producing eggs for human consumption) compared with the previous period. However, there were quite sharp contrasts in profitability for the different production systems of enriched cages and barn and deep litter (intensive) compared with free range systems. The mixed systems showed a much larger decrease in average FBI per business compared with the free range systems. The average number of birds per business increased on units using the intensive systems and decreased for those farms with free range units.

Table 2.1 Comparison of financial performance measures for mixed production systems and free range systems compared with all laying flocks in 2014/15

	All Laying Flocks [Table 2.5] £ per farm	Mixed production systems including enriched cages, barn & deep litter hens [Table 2.6] £ per farm (% difference from all laying flocks)	Free Range hens [Table 2.7] £ per farm (% difference from all laying flocks)
Number of businesses	37	10	27
Average number of birds	26,974	88,780 (+229%)	13,102 (-51%)
Total Gross Output	506,865	1,504,223 (+197%)	283,018 (-44%)
Total Gross Margin	192,985	491,817 (+155%)	125,915 (-35%)
Farm Business Income	29,931	-6,368	38,078

The mixed system farms producing eggs for human consumption recorded, on average, an increase in their gross margin when reported on a per business basis, but when reported on a per bird basis gross margin was down. Between 2013/14 and 2014/15, the gross margin per business increased by over 85% and when expressed on per bird basis it decreased by around 3%.

For the enriched cage/mixed units, the number of birds per business increased by over 90% to an average of 88,780 birds. As a result, the feed costs on per business basis went up by over 103% to an average of £879,762. On a per bird basis, the cost of feed increased by nearly 6%, to an average of £9.91.

The price attained for eggs by the mixed/enriched cage unit group increased by over 2%, rising on average from 80p in 2013/14, to just under 82p per dozen in 2014/15. Average egg production for the group fell slightly from an average of 298 eggs to an average of 290 eggs per bird per year.

These farms experienced a sharp fall in profit on a per business basis with the average FBI down from £61,871 in 2013/14 to -£6,368 in 2014/15. The fall on a per bird basis amounted to £1.34, falling to an average of -£0.07 from £1.34 in 2013/14.

The 27 farms with free range systems saw a drop of over 20% in their total gross margin, which was down from an average of £158,428 per business in 2013/14 to an average of £125,915 in 2014/15. There was a reduction in the average number of birds per business, which was down by over 15% to 13,102 birds. The price of the eggs came back to an average of 100.05p/doz, although the average number of eggs per bird increased by eight eggs per bird per year from 278 to 286 eggs.

Variable costs reduced by over 20% to an average £157,103 per business, largely due to a 22% reduction in the cost of feed. On a per bird basis, the cost of feed decreased by £1 to an average of £11.12. As a percentage of £100 of gross output per farm, feed accounted for a little over 50% compared to just over 52% in the previous year.

Total gross output was down from an average of £356,419 per business to an average of £283,018, largely due to a substantial year-on-year reduction in other poultry output.

The changes in the year-on-year output and costs led to the reductions in the FBI, which on a per bird basis dropped from an average of £4.33 in 2013/14 to an average of £2.91 in 2014/15. On a per dozen basis, the FBI dropped from an average of 19.14p to an average of 12.48p.

2.4.5 Poultry meat producers [Table 2.4]

This group of farms is classified as poultry meat producers (Defra farm typology code 522). In 2014/15 there were 37 of these farms, compared with 38 in 2013/14. Among them were 12 broiler producers whose results are reported separately (Table 2.8). 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 their 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 no results have been reported separately here due to their very small sample size.

The total gross output for these poultry meat producers increased by over 4% in 2014/15 to an average of £1,413,086 per business. Total variable costs went up to an average of £826,690 per farm, with feed costs increasing by less than 1% to an average of £716,915. On a per bird basis, the feed costs went down to an average of £6.17 from £6.67 in 2013/14. The improvement in gross output exceeded the rise in variable costs, meaning that the total gross margin increased by over 9% to an average of £586,396 per business.

Total fixed costs increased by 19.5% to an average of £406,359 per business, with year-on-year increases in all of the costs except for casual labour which showed a reduction of around 25% on the previous year. The average number of birds per business was up by approximately 9% to 116,133 birds.

Despite an improved gross margin of more than 9%, the rise in the fixed costs meant that the FBI per business reduced by nearly 10% to an average of £187,700. FBI as measured by the basis of per bird was also down on the previous year, reducing from an average of £1.95 to an average of £1.62.

2.4.6 Non-contract broiler production [Table 2.8]

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 for disinfection of the building. The results recorded here on a per bird basis are on an individual 'bird-crop' basis.

Total poultry output increased by just over 2% to an average of £2,682,522 per farm, within which the total throughput of birds was up by around 9% to an annual average of 1,709,223 birds. The main cost to the farm business for this system is feed, which increased by 3% to an average of £1,807,671 per farm. On a per bird basis, the cost of feed decreased from an average of £1.12 to £1.06. In 2013/14 the feed costs were about 65% of poultry output but dropped to a little over 60% in 2014/15. The total gross margin increased to an average of £1,017,100 per farm. Productivity was down in 2014/15, reducing from 7.4 crops of birds reared per year in 2013/14 to 7.2 crops.

The average price received for broilers in the year was £1.99 per bird, a decrease of 13p on the previous year, while the price of chicks increased from an average of 36p per bird to an average of 37p. FBI reduced from an average of £401,237 per farm in 2013/14 to an average of £358,995 in 2014/15, representing a drop of 10.5%.

2.5 Balance sheet information [Table 2.9 to 2.11]

Table 2.9 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 increased by less than 1% in 2014/15 to an average of just under 72%. The value of fixed assets increased by around 9% to an average of £1,370,190 per business, whilst total external liabilities increased by just over 8% to an average of £480,680 per business.

The laying flock systems saw their percentage of equity improve by a little over 2% in 2014/15 to an average of 59.5%, while the poultry meat producers saw percentage equity remain similar to the previous year at an average of just over 76%.

Table 2.10 compares the net worth and percentage equity with other Robust Farm Type classification used in England with an overall average of £1,615,414 recorded per farm, representing an overall average of 89% equity in the business. Those farms that are predominantly land based have the highest net worth, while those businesses with intensive livestock systems and with a very low dependency on land have lower net worth and, consequently, a smaller stake in the equity of their businesses. For example, lowland cattle & sheep farms and cereal farms have the highest percentage equity at around 93%, while pig and poultry farms have the lowest percentage equity at around 78% and 71% respectively.

2.6. Gross margins for all poultry enterprises

Tables 2.12 to 2.17 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 2.12 to 2.15]

The average flock size for all farms with poultry layers was reported at 13,584 hens, which is some 50% of the mean size of the flock for specialist poultry layers group [Table 2.5]. Average egg price was just over 96p per dozen, compared with 94p in the previous year. The rise in the egg price, along with a small increase of just less than 1% (+2 eggs per bird per year) in the average egg yield, saw poultry output increase by around 1% to an average of £257,546 per business. On a per bird basis, poultry output was similar to the previous year at around an average of £19 per bird.

Feed costs for all farms with poultry layers, amounting to almost 56% of output, decreased by nearly 3% to an average of £144,003 per business. On a per bird basis cost of feed dropped by nearly 4% to an average of £10.90 per bird. Total variable costs reduced by over 3% on a per bird basis, resulting in a mean gross margin of £7.56 [+£0.41] per bird. The gross margin per dozen eggs was just under 33p for all layers, an increase of just over £0.01 on the 2013/14 returns [Table 2.15].

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 10% to an average of £17.82 per bird [+£1.70], while the free range egg producers decreased by 7% to an average of £19.47 [-£1.40] per bird.

The average egg price was nearly 9% higher for free range egg production than for intensive units, at 98.82p/doz compared to 90.85. However, egg production for free range systems at an average of 284 eggs per year was around 2% less (-5 eggs per bird per year), compared with an average production of 289 eggs for the intensive units.

The average gross margin per dozen eggs was 27.94p for intensive/mixed egg production systems and 34.99p for free range egg production.

Feed cost for the free range systems is about 8% higher per bird than for the intensive systems, but despite this the gross margin for free range egg production was also higher. The year-on-year gross margin recorded

decreased by £0.20 per bird for free range systems and increased by £0.94 for enriched cage/mixed egg production systems.

Despite intensive/mixed laying hen systems having the advantage of size, with over two thirds more birds on average than for free range units, the latter achieved higher gross margins on the basis of both per bird and per £100 of gross output.

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. Therefore, any inference of a general trend relating to enriched cage systems should be treated with caution.

2.6.2 Gross margin for broilers & table chicken production (non-contract) [Table 2.16]

The average price received for broilers was £2.01 [-11p] per bird, with the purchase price of chicks averaging 37p. Feed costs decreased to £1.05 [-7p] per bird, producing a mean gross margin of 45p per bird compared with a mean of 47p per bird in the previous year. With 6.5 crops per year (a decrease of over 11%-down from 7.3 crops) an average gross margin of £2.92 per bird place was recorded on an annual basis, a reduction of 56p on the previous year.

2.6.3 Turkey production [Table 2.17]

Farms in this group are predominantly small scale Christmas turkey producers and are not representative of large scale turkey production, which will be responsible for the vast majority of English turkey production. The average price received for turkeys was £38.31 [-£1.10] per bird, while the average purchase price was £4.42 per bird [-£0.36]. Overall, poultry output averaged £31.17 per bird [-£0.37] and feed costs £7.71 per bird [-£1.04]. This resulted in a gross margin of £20.27 [+£1.00] per bird.

Table 2.2 Financial results for all specialist poultry farms

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	84	83		84	83	
Average number of birds/year	79,901	84,045		79,901	84,045	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	175,765	218,886	25	2.20	2.60	0.40
Hen depreciation	-19,278	-32,080	66	-0.24	-0.38	-0.14
Broilers	563,354	543,710	-3	7.05	6.47	-0.58
Other poultry output	293,904	237,963	-19	3.68	2.83	-0.85
Total poultry output	1,013,745	968,479	-4	12.69	11.52	-1.16
Crops	27,238	33,668	24	0.34	0.40	0.06
Other livestock	26,233	32,088	22	0.33	0.38	0.05
Other output	52,446	75,089	43	0.66	0.89	0.24
Total gross output	1,119,663	1,109,324	-1	14.01	13.20	-0.81
Variable costs						
Feed	533,002	538,122	1	6.67	6.40	-0.27
Seed, fertiliser, crop costs	10,045	13,353	33	0.13	0.16	0.03
Vet. & medicines	22,941	25,103	9	0.29	0.30	0.01
Other livestock costs	79,479	66,579	-16	0.99	0.79	-0.20
Total variable costs	645,467	643,157	0	8.08	7.65	-0.43
Total gross margin	474,196	466,168	-2	5.93	5.55	-0.39
Fixed costs						
Labour:						
Regular paid	78,278	71,328	-9	0.98	0.85	-0.13
Regular unpaid	24,256	25,132	4	0.30	0.30	0.00
Casual labour	7,093	9,316	31	0.09	0.11	0.02
Power & machinery costs:						
Contract & hire	12,840	13,699	7	0.16	0.16	0.00
Fuel	8,530	9,429	11	0.11	0.11	0.01
Electricity	15,947	15,488	-3	0.20	0.18	-0.02
Heat	18,171	21,099	16	0.23	0.25	0.02
Repairs	19,179	23,999	25	0.24	0.29	0.05
Depreciation	31,339	38,863	24	0.39	0.46	0.07
Rent (incl. imputed)	48,937	64,031	31	0.61	0.76	0.15
Other costs:						
Occupiers repairs	20,790	18,149	-13	0.26	0.22	-0.04
Sundries (incl. bad debts)	39,323	37,269	-5	0.49	0.44	-0.05
Total fixed costs	324,684	347,802	7	4.06	4.14	0.07
Management & investment income	149,513	118,366	<u>Δ£/farm</u> -31,147	1.87	1.41	-0.46
Minus: management salaries	0	198	198	0.00	0.00	0.00
Plus: farmer & spouse labour	19,264	20,380	1,116	0.24	0.24	0.00
Net farm income	168,777	138,548	-30,229	2.11	1.65	-0.46
Farm business income	157,203	126,839	-30,364	1.97	1.51	-0.46

Per £100 of gross output

	2013/14	2014/15	£ change	Farm Business Income (FBI) per farm		
Number of farms	84	83		(% distribution by no. of weighted farms)		
Average number (birds/year)	79,901	84,045			%	%
					2013/14	2014/15
Average £ per £100 of gross output						
Gross output (%)				Over £100,000	29	28
Eggs (%)	15.70	19.73		£50,000 to <£100,000	16	16
Hen depreciation (%)	-1.72	-2.89		£25,000 to <£50,000	21	16
Broilers (%)	50.31	49.01		£12,500 to <£25,000	7	6
Other poultry output (%)	26.25	21.45		0 to <£12,500	17	13
				Below 0	11	21
Total poultry output (%)	90.54	87.30		Total	100	100
Crops (%)	2.43	3.04				
Other livestock (%)	2.34	2.89				
Other output (%)	4.68	6.77				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	47.60	48.51	0.91			
Seed, fertiliser, crop costs	0.90	1.20	0.31			
Vet. & medicines	2.05	2.26	0.21			
Other livestock costs	7.10	6.00	-1.10			
Total variable costs	57.65	57.98	0.33			
Total gross margin	42.35	42.02	-0.33			
Fixed costs				Average Poultry Numbers		
Labour:					Average	Average
Regular paid	6.99	6.43	-0.56		2013/14	2014/15
Regular unpaid	2.17	2.27	0.10			
Casual labour	0.63	0.84	0.21	Hens in lay	11,801	12,095
Power & machinery costs:				Pullets	9,701	8,681
Contract & hire	1.15	1.23	0.09	Broilers & other poultry	58,399	63,269
Fuel	0.76	0.85	0.09			
Electricity	1.42	1.40	-0.03	Total Average	79,901	84,045
Heat	1.62	1.90	0.28			
Repairs	1.71	2.16	0.45			
Depreciation	2.80	3.50	0.70			
Rent (incl. imputed)	4.37	5.77	1.40			
Other costs:						
Occupiers repairs	1.86	1.64	-0.22			
Sundries (incl. bad debts)	3.51	3.36	-0.15			
Total fixed costs	29.00	31.35	2.35			
Management & investment income	13.35	10.67	-2.68			
Minus: management salaries	0.00	0.02	0.02	Other efficiency factors		
Plus: farmer & spouse labour	1.72	1.84	0.12		Average	Average
					2013/14	2014/15
Net farm income	15.07	12.49	-2.58	Eggs per bird	218	253
Farm business income	14.04	11.43	-2.61	Eggs (p/doz.)	82.03	85.81

Table 2.3 Financial results for all laying flocks

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	46	46		46	46	
Average number of birds/year	47,551	45,642		47,551	45,642	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	388,697	480,859	24	8.17	10.54	2.36
Hen depreciation	-42,633	-70,475	65	-0.90	-1.54	-0.65
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	449,127	301,718	-33	9.45	6.61	-2.83
Total poultry output	795,191	712,102	-10	16.72	15.60	-1.12
Crops	6,694	7,215	8	0.14	0.16	0.02
Other livestock	1,798	1,936	8	0.04	0.04	0.00
Other output	31,695	24,515	-23	0.67	0.54	-0.13
Total gross output	835,378	745,768	-11	17.57	16.34	-1.23
Variable costs						
Feed	317,849	324,133	2	6.68	7.10	0.42
Seed, fertiliser, crop costs	2,460	3,241	32	0.05	0.07	0.02
Vet. & medicines	30,847	31,417	2	0.65	0.69	0.04
Other livestock costs	86,265	64,705	-25	1.81	1.42	-0.40
Total variable costs	437,421	423,495	-3	9.20	9.28	0.08
Total gross margin	397,957	322,273	-19	8.37	7.06	-1.31
Fixed costs						
Labour:						
Regular paid	109,911	80,511	-27	2.31	1.76	-0.55
Regular unpaid	25,524	25,502	0	0.54	0.56	0.02
Casual labour	4,327	12,064	179	0.09	0.26	0.17
Power & machinery costs:						
Contract & hire	8,772	2,963	-66	0.18	0.06	-0.12
Fuel	6,981	6,911	-1	0.15	0.15	0.00
Electricity	14,744	12,065	-18	0.31	0.26	-0.05
Heat	9,191	7,612	-17	0.19	0.17	-0.03
Repairs	11,740	9,364	-20	0.25	0.21	-0.04
Depreciation	23,040	19,833	-14	0.48	0.43	-0.05
Rent (incl. imputed)	40,553	56,202	39	0.85	1.23	0.38
Other costs:						
Occupiers repairs	11,947	15,737	32	0.25	0.34	0.09
Sundries (incl. bad debts)	39,449	28,954	-27	0.83	0.63	-0.20
Total fixed costs	306,179	277,718	-9	6.44	6.08	-0.35
Management & investment income	91,778	44,555	<u>Δ£/farm</u> -47,223	1.93	0.98	-0.95
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	20,382	21,178	796	0.43	0.46	0.04
Net farm income	112,159	65,732	-46,427	2.36	1.44	-0.92
Farm business income	95,653	53,998	-41,655	2.01	1.18	-0.83

Per £100 of gross output

	2013/14	2014/15	£ change	Farm Business Income (FBI) per farm (% distribution by no. of weighted farms)		
Number of farms	46	46			%	%
Average number (birds/year)	47,551	45,642			2013/14	2014/15
Average £ per £100 of gross output						
Gross output (%)						
Eggs (%)	46.53	64.48		Over £100,000	20	16
Hen depreciation (%)	-5.10	-9.45		£50,000 to <£100,000	19	10
Broilers (%)	0.00	0.00		£25,000 to <£50,000	12	20
Other poultry output (%)	53.76	40.46		0 to <£25,000	28	23
				Below 0	21	30
Total poultry output (%)	95.19	95.49		Total	100	100
Crops (%)	0.80	0.97				
Other livestock (%)	0.22	0.26				
Other output (%)	3.79	3.29				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	38.05	43.46	5.41			
Seed, fertiliser, crop costs	0.29	0.43	0.14			
Vet. & medicines	3.69	4.21	0.52			
Other livestock costs	10.33	8.68	-1.65			
Total variable costs	52.36	56.79	4.42			
Total gross margin	47.64	43.21	-4.42			
Fixed costs				Average Poultry Numbers		
Labour:					Average	Average
Regular paid	13.16	10.80	-2.36		2013/14	2014/15
Regular unpaid	3.06	3.42	0.36			
Casual labour	0.52	1.62	1.10	Hens in lay	26,098	26,570
Power & machinery costs:				Pullets	21,453	19,072
Contract & hire	1.05	0.40	-0.65	Broilers & other poultry	0	0
Fuel	0.84	0.93	0.09	Total Average	47,551	45,642
Electricity	1.76	1.62	-0.15			
Heat	1.10	1.02	-0.08			
Repairs	1.41	1.26	-0.15			
Depreciation	2.76	2.66	-0.10			
Rent (incl. imputed)	4.85	7.54	2.68			
Other costs:						
Occupiers repairs	1.43	2.11	0.68			
Sundries (incl. bad debts)	4.72	3.88	-0.84			
Total fixed costs	36.65	37.24	0.59			
Management & investment income	10.99	5.97	-5.01			
Minus: management salaries	0.00	0.00	0.00	Other efficiency factors		
Plus: farmer & spouse labour	2.44	2.84	0.40		Average	Average
					2013/14	2014/15
Net farm income	13.43	8.81	-4.61	Eggs per bird	218	253
Farm business income	11.45	7.24	-4.21	Eggs (p/doz.)	82.03	85.81

Table 2.4 Financial results for all poultry meat producers

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	38	37		38	37	
Average number of birds/year	106,604	116,133		106,604	116,133	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output						
Eggs	0	0	0	0.00	0.00	0.00
Hen depreciation	0	0	0	0.00	0.00	0.00
Broilers	1,028,379	997,995	-3	9.65	8.59	-1.05
Other poultry output	165,774	184,694	11	1.56	1.59	0.04
Total poultry output	1,194,153	1,182,689	-1	11.20	10.18	-1.02
Crops	44,197	55,771	26	0.41	0.48	0.07
Other livestock	46,403	57,282	23	0.44	0.49	0.06
Other output	69,576	117,344	69	0.65	1.01	0.36
Total gross output	1,354,329	1,413,086	4	12.70	12.17	-0.54
Variable costs						
Feed	710,601	716,915	1	6.67	6.17	-0.49
Seed, fertiliser, crop costs	16,306	21,801	34	0.15	0.19	0.03
Vet. & medicines	16,415	19,828	21	0.15	0.17	0.02
Other livestock costs	73,878	68,146	-8	0.69	0.59	-0.11
Total variable costs	817,200	826,690	1	7.67	7.12	-0.55
Total gross margin	537,129	586,396	9	5.04	5.05	0.01
Fixed costs						
Labour:						
Regular paid	52,167	63,655	22	0.49	0.55	0.06
Regular unpaid	23,210	24,823	7	0.22	0.21	0.00
Casual labour	9,377	7,020	-25	0.09	0.06	-0.03
Power & machinery costs:						
Contract & hire	16,198	22,669	40	0.15	0.20	0.04
Fuel	9,809	11,534	18	0.09	0.10	0.01
Electricity	16,940	18,347	8	0.16	0.16	0.00
Heat	25,584	32,368	27	0.24	0.28	0.04
Repairs	25,320	36,228	43	0.24	0.31	0.07
Depreciation	38,189	54,763	43	0.36	0.47	0.11
Rent (incl. imputed)	55,859	70,572	26	0.52	0.61	0.08
Other costs:						
Occupiers repairs	28,089	20,164	-28	0.26	0.17	-0.09
Sundries (incl. bad debts)	39,219	44,217	13	0.37	0.38	0.01
Total fixed costs	339,958	406,359	20	3.19	3.50	0.31
Management & investment income	197,171	180,037	<u>Δ£/farm</u> -17,133	1.85	1.55	-0.30
Minus: management salaries	0	363	363	0.00	0.00	0.00
Plus: farmer & spouse labour	18,342	19,713	1,371	0.17	0.17	0.00
Net farm income	215,513	199,388	-16,125	2.02	1.72	-0.30
Farm business income	208,010	187,700	-20,310	1.95	1.62	-0.33

Per £100 of gross output

	2013/14	2014/15	£ change	Farm Business Income (FBI) per farm		
Number of farms	38	37		(% distribution by no. of weighted farms)		
Average number (birds/year)	106,604	116,133			%	%
					2013/14	2014/15
Average £ per £100 of gross output						
Gross output (%)				Over £100,000	35	39
Eggs (%)	0.00	0.00		£50,000 to <£100,000	14	22
Hen depreciation (%)	0.00	0.00		£12,500 to <£50,000	32	21
Broilers (%)	75.93	70.63		Below 0 to <£12,500	20	18
Other poultry output (%)	12.24	13.07				
				Total	100	100
Total poultry output (%)	88.17	83.70				
Crops (%)	3.26	3.95				
Other livestock (%)	3.43	4.05				
Other output (%)	5.14	8.30				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	52.47	50.73	-1.73			
Seed, fertiliser, crop costs	1.20	1.54	0.34			
Vet. & medicines	1.21	1.40	0.19			
Other livestock costs	5.45	4.82	-0.63			
Total variable costs	60.34	58.50	-1.84			
Total gross margin	39.66	41.50	1.84			
Fixed costs				Average Poultry Numbers		
Labour:					Average	Average
Regular paid	3.85	4.50	0.65		2013/14	2014/15
Regular unpaid	1.71	1.76	0.04			
Casual labour	0.69	0.50	-0.20	Hens in lay	0	0
Power & machinery costs:				Pullets	0	0
Contract & hire	1.20	1.60	0.41	Broilers & other poultry	106,604	116,133
Fuel	0.72	0.82	0.09			
Electricity	1.25	1.30	0.05	Total Average	106,604	116,133
Heat	1.89	2.29	0.40			
Repairs	1.87	2.56	0.69			
Depreciation	2.82	3.88	1.06			
Rent (incl. imputed)	4.12	4.99	0.87			
Other costs:						
Occupiers repairs	2.07	1.43	-0.65			
Sundries (incl. bad debts)	2.90	3.13	0.23			
Total fixed costs	25.10	28.76	3.66			
Management & investment income	14.56	12.74	-1.82			
Minus: management salaries	0.00	0.03	0.03			
Plus: farmer & spouse labour	1.35	1.40	0.04			
Net farm income	15.91	14.11	-1.80			
Farm business income	15.36	13.28	-2.08			

Table 2.5 Financial results for laying flocks producing eggs for human consumption

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	36	37		36	37	
Average number of birds/year	23,438	26,974		23,438	26,974	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	484,951	563,911	16	20.69	20.91	0.22
Hen depreciation	-71,335	-89,969	26	-3.04	-3.34	-0.29
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	23,256	8,452	-64	0.99	0.31	-0.68
Total poultry output	436,872	482,394	10	18.64	17.88	-0.76
Crops	4,948	6,641	34	0.21	0.25	0.04
Other livestock	1,953	2,403	23	0.08	0.09	0.01
Other output	16,543	15,426	-7	0.71	0.57	-0.13
Total gross output	460,317	506,865	10	19.64	18.79	-0.85
Variable costs						
Feed	250,810	280,237	12	10.70	10.39	-0.31
Seed, fertiliser, crop costs	1,900	3,262	72	0.08	0.12	0.04
Vet. & medicines	3,068	4,406	44	0.13	0.16	0.03
Other livestock costs	18,478	25,975	41	0.79	0.96	0.17
Total variable costs	274,256	313,880	14	11.70	11.64	-0.06
Total gross margin	186,060	192,985	4	7.94	7.15	-0.78
Fixed costs						
Labour:						
Regular paid	23,419	35,187	50	1.00	1.30	0.31
Regular unpaid	26,482	25,959	-2	1.13	0.96	-0.17
Casual labour	5,892	13,396	127	0.25	0.50	0.25
Power & machinery costs:						
Contract & hire	2,191	3,202	46	0.09	0.12	0.03
Fuel	3,900	5,791	48	0.17	0.21	0.05
Electricity	6,433	6,910	7	0.27	0.26	-0.02
Heat	258	544	111	0.01	0.02	0.01
Repairs	7,002	6,646	-5	0.30	0.25	-0.05
Depreciation	17,611	15,224	-14	0.75	0.56	-0.19
Rent (incl. imputed)	25,337	38,618	52	1.08	1.43	0.35
Other costs:						
Occupiers repairs	3,165	6,215	96	0.14	0.23	0.10
Sundries (incl. bad debts)	13,709	18,055	32	0.58	0.67	0.08
Total fixed costs	135,400	175,747	30	5.78	6.52	0.74
Management & investment income	50,660	17,238	Δ£/farm -33,422	2.16	0.64	-1.52
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	21,200	21,611	411	0.90	0.80	-0.10
Net farm income	71,860	38,849	-33,011	3.07	1.44	-1.63
Farm business income	65,482	29,931	-35,551	2.79	1.11	-1.68

Per £100 of gross output

	2013/14	2014/15	£ change
Number of farms	36	37	
Average number (birds/year)	23,438	26,974	

Average £ per £100 of gross output

Gross output (%)			
Eggs (%)	112.73	114.04	
Hen depreciation (%)	-17.37	-18.28	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.50	1.40	
Total poultry output (%)	95.86	97.16	
Crops (%)	0.49	0.75	
Other livestock (%)	0.11	0.24	
Other output (%)	3.54	1.84	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	54.49	55.29	0.80
Seed, fertiliser, crop costs	0.41	0.64	0.23
Vet. & medicines	0.67	0.87	0.20
Other livestock costs	4.01	5.12	1.11
Total variable costs	59.58	61.93	2.35
Total gross margin	40.42	38.07	-2.35
Fixed costs			
Labour:			
Regular paid	5.09	6.94	1.85
Regular unpaid	5.75	5.12	-0.63
Casual labour	1.28	2.64	1.36
Power & machinery costs:			
Contract & hire	0.48	0.63	0.16
Fuel	0.85	1.14	0.30
Electricity	1.40	1.36	-0.03
Heat	0.06	0.11	0.05
Repairs	1.52	1.31	-0.21
Depreciation	3.83	3.00	-0.82
Rent (incl. imputed)	5.50	7.62	2.11
Other costs:			
Occupiers repairs	0.69	1.23	0.54
Sundries (incl. bad debts)	2.98	3.56	0.58
Total fixed costs	29.41	34.67	5.26
Management & investment income	11.01	3.40	-7.60
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	4.61	4.26	-0.34
Net farm income	15.61	7.66	-7.95
Farm business income	14.23	5.91	-8.32

Pence per dozen eggs

	2013/14	2014/15
Gross output		
Eggs	90.58	89.03
Other poultry output	-8.98	-12.87
Other output	4.38	3.86
Total gross output	85.98	80.03
Variable costs		
Feed	46.85	44.24
Other variable costs	4.38	5.31
Total variable costs	51.23	49.56
Total gross margin	34.75	30.47
Total fixed costs	25.29	27.75
Management & investment income	9.46	2.72
Net farm income	13.42	6.13
Farm business income	12.23	4.73

Farm Business Income (FBI) per farm

(% distribution by no. of weighted farms)		
	%	%
	2013/14	2014/15
Over £50,000	36	21
0 to <£50,000	40	43
Below 0	24	36
Total	100	100

Average Poultry Numbers

	Average 2013/14	Average 2014/15
Hens in lay	22,350	26,350
Pullets	1,088	624
Broilers & other poultry	0	0
Total Average	23,438	26,974

Other efficiency factors

	Average 2013/14	Average 2014/15
Eggs per bird	287	288
Eggs (p/doz.)	90.61	89.03

Table 2.6 Financial results for enriched cage, barn and deep litter hens
(due to small sample size, these figures are statistically less robust)

	Per farm			Per bird (annual basis)		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	9	10		9	10	
Average number of birds/year	46,181	88,780		46,181	88,780	
	Average £ per farm			Average £ per bird		
Gross output (%)						
Eggs	851,601	1,715,466	101	18.44	19.32	0.88
Hen depreciation	-131,241	-274,968	110	-2.84	-3.10	-0.26
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	3,757	21,072	461	0.08	0.24	0.16
Total poultry output	724,117	1,461,570	102	15.68	16.46	0.78
Crops	3,710	11,351	206	0.08	0.13	0.05
Other livestock	831	3,671	342	0.02	0.04	0.02
Other output	26,759	27,631	3	0.58	0.31	-0.27
Total gross output	755,417	1,504,223	99	16.36	16.94	0.59
Variable costs						
Feed	432,073	879,762	104	9.36	9.91	0.55
Seed, fertiliser, crop costs	1,276	6,979	447	0.03	0.08	0.05
Vet. & medicines	2,339	7,075	203	0.05	0.08	0.03
Other livestock costs	55,185	118,589	115	1.19	1.34	0.14
Total variable costs	490,873	1,012,406	106	10.63	11.40	0.77
Total gross margin	264,544	491,817	86	5.73	5.54	-0.19
Fixed costs						
Labour:						
Regular paid	47,626	134,996	183	1.03	1.52	0.49
Regular unpaid	33,886	31,538	-7	0.73	0.36	-0.38
Casual labour	16,179	65,319	304	0.35	0.74	0.39
Power & machinery costs:						
Contract & hire	625	4,074	551	0.01	0.05	0.03
Fuel	7,769	22,883	195	0.17	0.26	0.09
Electricity	11,113	15,760	42	0.24	0.18	-0.06
Heat	364	1,132	211	0.01	0.01	0.00
Repairs	17,068	22,201	30	0.37	0.25	-0.12
Depreciation	33,815	35,780	6	0.73	0.40	-0.33
Rent (incl. imputed)	30,017	110,338	268	0.65	1.24	0.59
Other costs:						
Occupiers repairs	4,698	9,477	102	0.10	0.11	0.01
Sundries (incl. bad debts)	19,355	45,885	137	0.42	0.52	0.10
Total fixed costs	222,515	499,383	124	4.82	5.62	0.81
Management & investment income	42,029	-7,565	<u>Δ£/farm</u> -49,595	0.91	-0.09	-1.00
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	21,850	24,103	2,253	0.47	0.27	-0.20
Net farm income	63,880	16,538	-47,342	1.38	0.19	-1.20
Farm business income	61,871	-6,368	-68,239	1.34	-0.07	-1.41

Per £100 of gross output

	2013/14	2014/15	£ change
Number of farms	9	10	
Average number (birds/year)	46,181	88,780	

Average £ per £100 of gross output

Gross output (%)			
Eggs (%)	112.73	114.04	
Hen depreciation (%)	-17.37	-18.28	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.50	1.40	
Total poultry output (%)	95.86	97.16	
Crops (%)	0.49	0.75	
Other livestock (%)	0.11	0.24	
Other output (%)	3.54	1.84	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	57.20	58.49	1.29
Seed, fertiliser, crop costs	0.17	0.46	0.30
Vet. & medicines	0.31	0.47	0.16
Other livestock costs	7.31	7.88	0.58
Total variable costs	64.98	67.30	2.32
Total gross margin	35.02	32.70	-2.32
Fixed costs			
Labour:			
Regular paid	6.30	8.97	2.67
Regular unpaid	4.49	2.10	-2.39
Casual labour	2.14	4.34	2.20
Power & machinery costs:			
Contract & hire	0.08	0.27	0.19
Fuel	1.03	1.52	0.49
Electricity	1.47	1.05	-0.42
Heat	0.05	0.08	0.03
Repairs	2.26	1.48	-0.78
Depreciation	4.48	2.38	-2.10
Rent (incl. imputed)	3.97	7.34	3.36
Other costs:			
Occupiers repairs	0.62	0.63	0.01
Sundries (incl. bad debts)	2.56	3.05	0.49
Total fixed costs	29.46	33.20	3.74
Management & investment income	5.56	-0.50	-6.07
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	2.89	1.60	-1.29
Net farm income	8.46	1.10	-7.36
Farm business income	8.19	-0.42	-8.61

Pence per dozen eggs

	2013/14	2014/15
Gross output		
Eggs	79.92	81.86
Other poultry output	-11.96	-12.12
Other output	2.94	2.04
Total gross output	70.90	71.78
Variable costs		
Feed	40.55	41.98
Other variable costs	5.52	6.33
Total variable costs	46.07	48.31
Total gross margin	24.83	23.47
Total fixed costs	20.88	23.83
Management & investment income	3.94	-0.36
Net farm income	6.00	0.79
Farm business income	5.81	-0.30

Farm Business Income (FBI) per farm

(% distribution by no. of weighted farms)	%	%
	2013/14	2014/15

Sample too small

Average Poultry Numbers

	Average 2013/14	Average 2014/15
Hens in lay	42,954	86,707
Pullets	3,227	2,073
Broilers & other poultry	0	0
Total Average	46,181	88,780

Other efficiency factors

	Average 2013/14	Average 2014/15
Eggs per bird	298	290
Eggs (p/doz.)	80.01	81.89

Table 2.7 Financial results for laying flocks with free range hens

	<i>Per farm</i>			<i>Per bird (annual basis)</i>		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	27	27		27	27	
Average number of birds/year	15,431	13,102		15,431	13,102	
	<i>Average £ per farm</i>			<i>Average £ per bird</i>		
Gross output (%)						
Eggs	355,863	305,457	-14	23.06	23.31	0.25
Hen depreciation	-50,243	-48,448	-4	-3.26	-3.70	-0.44
Broilers	0	0	0	0.00	0.00	0.00
Other poultry output	30,121	5,619	-81	1.95	0.43	-1.52
Total poultry output	335,741	262,628	-22	21.76	20.04	-1.71
Crops	5,385	5,585	4	0.35	0.43	0.08
Other livestock	2,347	2,119	-10	0.15	0.16	0.01
Other output	12,946	12,687	-2	0.84	0.97	0.13
Total gross output	356,419	283,018	-21	23.10	21.60	-1.50
Variable costs						
Feed	186,992	145,679	-22	12.12	11.12	-1.00
Seed, fertiliser, crop costs	2,120	2,428	15	0.14	0.19	0.05
Vet. & medicines	3,325	3,807	14	0.22	0.29	0.08
Other livestock costs	5,555	5,189	-7	0.36	0.40	0.04
Total variable costs	197,991	157,103	-21	12.83	11.99	-0.84
Total gross margin	158,428	125,915	-21	10.27	9.61	-0.66
Fixed costs						
Labour:						
Regular paid	14,896	12,786	-14	0.97	0.98	0.01
Regular unpaid	23,876	24,707	3	1.55	1.89	0.34
Casual labour	2,270	1,742	-23	0.15	0.13	-0.01
Power & machinery costs:						
Contract & hire	2,743	3,006	10	0.18	0.23	0.05
Fuel	2,538	1,955	-23	0.16	0.15	-0.02
Electricity	4,785	4,923	3	0.31	0.38	0.07
Heat	220	412	87	0.01	0.03	0.02
Repairs	3,458	3,154	-9	0.22	0.24	0.02
Depreciation	11,906	10,611	-11	0.77	0.81	0.04
Rent (incl. imputed)	23,690	22,522	-5	1.54	1.72	0.18
Other costs:						
Occupiers repairs	2,626	5,483	109	0.17	0.42	0.25
Sundries (incl. bad debts)	11,721	11,808	1	0.76	0.90	0.14
Total fixed costs	104,729	103,110	-2	6.79	7.87	1.08
Management & investment income	53,699	22,805	<u>Δ£/farm</u> -30,894	3.48	1.74	-1.74
Minus: management salaries	0	0	0	0.00	0.00	0.00
Plus: farmer & spouse labour	20,971	21,052	80	1.36	1.61	0.25
Net farm income	74,670	43,857	-30,813	4.84	3.35	-1.49
Farm business income	66,754	38,078	-28,675	4.33	2.91	-1.42

Per £100 of gross output

	2013/14	2014/15	£ change
Number of farms	27	27	
Average number (birds/year)	15,431	13,102	

Average £ per £100 of gross output

Gross output (%)			
Eggs (%)	99.84	107.93	
Hen depreciation (%)	-14.10	-17.12	
Broilers (%)	0.00	0.00	
Other poultry output (%)	8.45	1.99	
Total poultry output (%)	94.20	92.80	
Crops (%)	1.51	1.97	
Other livestock (%)	0.66	0.75	
Other output (%)	3.63	4.48	
Total gross output (%)	100.00	100.00	
Variable costs			
Feed	52.46	51.47	-0.99
Seed, fertiliser, crop costs	0.59	0.86	0.26
Vet. & medicines	0.93	1.35	0.41
Other livestock costs	1.56	1.83	0.27
Total variable costs	55.55	55.51	-0.04
Total gross margin	44.45	44.49	0.04
Fixed costs			
Labour:			
Regular paid	4.18	4.52	0.34
Regular unpaid	6.70	8.73	2.03
Casual labour	0.64	0.62	-0.02
Power & machinery costs:			
Contract & hire	0.77	1.06	0.29
Fuel	0.71	0.69	-0.02
Electricity	1.34	1.74	0.40
Heat	0.06	0.15	0.08
Repairs	0.97	1.11	0.14
Depreciation	3.34	3.75	0.41
Rent (incl. imputed)	6.65	7.96	1.31
Other costs:			
Occupiers repairs	0.74	1.94	1.20
Sundries (incl. bad debts)	3.29	4.17	0.88
Total fixed costs	29.38	36.43	7.05
Management & investment income	15.07	8.06	-7.01
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	5.88	7.44	1.55
Net farm income	20.95	15.50	-5.45
Farm business income	18.73	13.45	-5.27

Pence per dozen eggs

	2013/14	2014/15
Gross output		
Eggs	102.06	100.09
Other poultry output	-5.77	-14.03
Other output	5.93	6.68
Total gross output	102.22	92.73
Variable costs		
Feed	53.63	47.73
Other variable costs	3.15	3.74
Total variable costs	56.78	51.48
Total gross margin	45.43	41.26
Total fixed costs	30.03	33.79
Management & investment income	15.40	7.47
Net farm income	21.41	14.37
Farm business income	19.14	12.48

Farm Business Income (FBI) per farm

(% distribution by no. of weighted farms)		
	%	%
	2013/14	2014/15
Over £50,000	32	22
£12,500 to <£50,000	32	20
Below 0 to <£12,500	36	58
Total	100	100

Average Poultry Numbers

	Average 2013/14	Average 2014/15
Hens in lay	15,096	12,803
Pullets	335	299
Broilers & other poultry	0	0
Total Average	15,431	13,102

Other efficiency factors

	Average 2013/14	Average 2014/15
Eggs per bird	277	286
Eggs (p/doz.)	102.02	100.05

Table 2.8 Financial results for non-contract broilers

	<i>Per farm</i>			<i>Per bird (per crop)</i>		
	2013/14	2014/15	% change	2013/14	2014/15	£ change
Number of farms	14	12		14	12	
Average number of birds/year	210,183	238,875		210,183	238,875	
Throughput of birds/year	1,564,999	1,709,223		1,564,999	1,709,223	
	<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	2,607,763	2,670,686	2	1.67	1.56	-0.10
Other poultry output	15,565	11,836	-24	0.01	0.01	0.00
Total poultry output	2,623,327	2,682,522	2	1.68	1.57	-0.11
Crops	25,064	55,023	120	0.02	0.03	0.02
Other livestock	15,084	64,747	329	0.01	0.04	0.03
Other output	48,692	169,877	249	0.03	0.10	0.07
Total gross output	2,712,167	2,972,170	10	1.73	1.74	0.01
Variable costs						
Feed	1,754,810	1,807,671	3	1.12	1.06	-0.06
Seed, fertiliser, crop costs	11,749	20,317	73	0.01	0.01	0.00
Vet. & medicines	37,890	47,129	24	0.02	0.03	0.00
Other livestock costs	70,852	79,952	13	0.05	0.05	0.00
Total variable costs	1,875,302	1,955,069	4	1.20	1.14	-0.05
Total gross margin	836,866	1,017,100	22	0.53	0.60	0.06
Fixed costs						
Labour:						
Regular paid	53,575	88,085	64	0.03	0.05	0.02
Regular unpaid	20,741	21,238	2	0.01	0.01	0.00
Casual labour	2,083	9,486	355	0.00	0.01	0.00
Power & machinery costs:						
Contract & hire	22,836	30,805	35	0.01	0.02	0.00
Fuel	9,465	15,676	66	0.01	0.01	0.00
Electricity	34,485	42,658	24	0.02	0.02	0.00
Heat	53,956	75,432	40	0.03	0.04	0.01
Repairs	41,419	62,491	51	0.03	0.04	0.01
Depreciation	44,570	87,231	96	0.03	0.05	0.02
Rent (incl. imputed)	83,735	114,647	37	0.05	0.07	0.01
Other costs:						
Occupiers repairs	19,465	14,631	-25	0.01	0.01	0.00
Sundries (incl. bad debts)	45,440	64,890	43	0.03	0.04	0.01
Total fixed costs	431,771	627,272	45	0.28	0.37	0.09
Management & investment income	405,095	389,829	<u>Δ£/farm</u> -15,266	0.26	0.23	-0.03
Minus: management salaries	0	1,026	1,026	0.00	0.00	0.00
Plus: farmer & spouse labour	16,155	15,171	-984	0.01	0.01	0.00
Net farm income	421,250	403,974	-17,276	0.27	0.24	-0.03
Farm business income	401,237	358,995	-42,242	0.26	0.21	-0.05

Per £100 of gross output

	2013/14	2014/15	£ change	Farm Business Income (FBI) per farm		
Number of farms	14	12		(% distribution by number of farms)		
Average number (birds/year)	210,183	238,875			%	%
					2013/14	2014/15
Average £ per £100 of gross output						
Gross output (%)				Over £100,000	46	42
Eggs (%)	0.00	0.00		Below 0 to <£100,000	54	58
Hen depreciation (%)	0.00	0.00				
Broilers (%)	96.15	89.86		Total	100	100
Other poultry output (%)	0.57	0.40				
Total poultry output (%)	96.72	90.25				
Crops (%)	0.92	1.85				
Other livestock (%)	0.56	2.18				
Other output (%)	1.80	5.72				
Total gross output (%)	100.00	100.00				
Variable costs						
Feed	64.70	60.82	-3.88			
Seed, fertiliser, crop costs	0.43	0.68	0.25			
Vet. & medicines	1.40	1.59	0.19			
Other livestock costs	2.61	2.69	0.08			
Total variable costs	69.14	65.78	-3.36			
Total gross margin	30.86	34.22	3.36			
Fixed costs				Other efficiency factors		
Labour:					Average	Average
Regular paid	1.98	2.96	0.99		2013/14	2014/15
Regular unpaid	0.76	0.71	-0.05			
Casual labour	0.08	0.32	0.24			
Power & machinery costs:				Broiler sale price	2.12	1.99
Contract & hire	0.84	1.04	0.19	(£/bird)		
Fuel	0.35	0.53	0.18			
Electricity	1.27	1.44	0.16	Broiler purchase price	0.36	0.37
Heat	1.99	2.54	0.55	(£/bird)		
Repairs	1.53	2.10	0.58			
Depreciation	1.64	2.93	1.29	Average number of	7.4	7.2
Rent (incl. imputed)	3.09	3.86	0.77	crops/year		
Other costs:						
Occupiers repairs	0.72	0.49	-0.23			
Sundries (incl. bad debts)	1.68	2.18	0.51			
Total fixed costs	15.92	21.10	5.19			
Management & investment income	14.94	13.12	-1.82			
Minus: management salaries	0.00	0.03	0.03			
Plus: farmer & spouse labour	0.60	0.51	-0.09			
Net farm income	15.53	13.59	-1.94			
Farm business income	14.79	12.08	-2.72			

Table 2.9 Balance sheet data for 2014/15 - specialist poultry farms

Group	All specialist poultry farms		All laying flocks		All poultry meat producers	
Number of farms	83		46		37	
Financial year	2014/15		2014/15		2014/15	
	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed assets						
Land, buildings & SPS	1,024,603	1,108,278	674,462	720,938	1,317,155	1,431,911
Breeding livestock	16,887	14,793	1,784	1,660	29,507	25,767
Machinery	208,620	243,411	106,439	124,609	293,995	342,673
Miscellaneous business assets	3,579	3,707	1,919	1,919	4,966	5,200
Total fixed assets	1,253,690	1,370,190	784,604	849,127	1,645,623	1,805,552
Current assets						
Crops & trading livestock	76,062	93,387	81,521	92,423	71,501	94,192
Feedstuffs & goods in store	13,392	13,919	6,745	7,524	18,946	19,262
Liquid assets	187,848	213,297	42,060	55,078	309,658	345,493
Total current assets	277,302	320,603	130,326	155,025	400,105	458,947
Total assets	1,530,992	1,690,792	914,930	1,004,151	2,045,728	2,264,499
Liabilities						
Bank term loans	176,559	194,124	159,786	165,166	190,573	218,319
Other loans	120,450	113,708	128,451	123,600	113,764	105,443
Bank overdraft	64,390	90,929	64,331	68,139	64,439	109,969
Other short term loans	83,179	81,920	40,378	50,147	118,940	108,467
Total external liabilities	444,577	480,680	392,946	407,052	487,717	542,198
Net worth	1,086,414	1,210,112	521,983	597,099	1,558,011	1,722,301
Percentage equity (%)	71.0%	71.6%	57.1%	59.5%	76.2%	76.1%

Table 2.10 Comparison of net worth and percentage equity by farm type for 2014/15

	Average Assets	Average Liabilities	Average Net Worth	Average % Equity
Defra main farm type				
Lowland cattle & sheep	1,263,308	89,433	1,173,875	92.9%
Cereals	2,563,303	191,578	2,371,725	92.5%
Mixed	1,721,481	160,788	1,560,694	90.7%
General cropping	2,892,026	281,116	2,610,910	90.3%
Horticulture	901,545	148,819	752,726	83.5%
Dairy	1,975,181	366,547	1,608,635	81.4%
Pigs	1,078,288	236,264	842,025	78.1%
Poultry	1,610,892	462,629	1,148,264	71.3%
All businesses	1,800,759	185,345	1,615,414	89.7%

Table 2.9 continued

Group	<i>Broilers, non contract</i>	
Number of farms	12	
Financial year	2014/15	
	Opening	Closing
Assets		
Fixed assets		
Land, buildings & SPS	1,641,762	1,697,422
Breeding livestock	31,623	26,837
Machinery	495,230	518,308
Miscellaneous business assets	10,688	11,350
Total fixed assets	2,179,303	2,253,917
Current assets		
Crops & trading livestock	144,254	209,341
Feedstuffs & goods in store	23,230	17,926
Liquid assets	585,440	694,957
Total current assets	752,924	922,224
Total assets	2,932,226	3,176,141
Liabilities		
Bank term loans	280,535	278,212
Other loans	281,411	261,805
Bank overdraft	151,146	186,003
Other short term loans	196,285	186,255
Total external liabilities	909,378	912,275
Net worth	2,022,849	2,263,866
Percentage equity (%)	69.0%	71.3%

Table 2.11 Distribution of tenant's type capital (%)

	Specialist poultry	Laying flocks, cage, barn & deep litter	All Poultry meat producers	Broilers, non contract
Crops & livestock	18.5	33.9	14.2	14.9
Stores	2.5	2.7	2.4	1.5
Machinery	41.5	44.1	40.8	36.6
Other	37.5	19.3	42.6	47.0
Total	100.0	100.0	100.0	100.0
Tenant's type capital (£)	544,452	261,840	780,581	1,384,592

Table 2.12 Gross margin for all laying flocks

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2013/14	2014/15	£ change	2013/14	2014/15	£ change
Number of farms	52	47				
Average number of birds/year	13,423	13,584				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	21.30	22.21	0.91			
Hen depreciation	-3.08	-3.40	-0.32			
Other poultry output	0.71	0.14	-0.57			
Total output	18.94	18.96	0.02	100.00	100.00	
Variable costs						
Feed	11.03	10.60	-0.43	58.26	55.91	-2.34
Vet. & medicines	0.14	0.22	0.08	0.74	1.14	0.41
Other livestock costs	0.62	0.57	-0.05	3.27	3.01	-0.25
Other variable costs	0.00	0.01	0.00	0.02	0.03	0.01
Total variable costs	11.80	11.40	-0.40	62.28	60.10	-2.17
Total gross margin	7.15	7.56	0.42	37.72	39.90	2.17

Table 2.13 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>		
	2013/14	2014/15	£ change	2013/14	2014/15	£ change
Number of farms	11	12				
Average number of birds/year	27,829	19,909				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	19.00	20.97	1.97			
Hen depreciation	-2.89	-3.19	-0.30			
Other poultry output	0.01	0.04	0.03			
Total output	16.12	17.82	1.70	100.00	100.00	
Variable costs						
Feed	9.45	10.03	0.58	58.63	56.26	-2.37
Vet. & medicines	0.05	0.13	0.08	0.30	0.74	0.44
Other livestock costs	1.10	1.19	0.09	6.83	6.69	-0.15
Other variable costs	0.00	0.01	0.01	0.00	0.07	0.07
Total variable costs	10.60	11.36	0.76	65.77	63.76	-2.01
Total gross margin	5.52	6.46	0.94	34.23	36.24	2.01

Table 2.14 Gross margin for laying flocks with free range hens

	<i>Per bird (annual basis)</i>			<i>Per £100 of gross output</i>		
	2013/14	2014/15	£ change	2013/14	2014/15	£ change
Number of farms	41	35				
Average number of birds/year	9,917	11,900				
	<i>Average £ per bird (annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	22.88	22.77	-0.11			
Hen depreciation	-3.20	-3.49	-0.28			
Other poultry output	1.20	0.19	-1.01			
Total output	20.87	19.47	-1.40	100.00	100.00	
Variable costs						
Feed	12.12	10.86	-1.26	58.06	55.77	-2.29
Vet. & medicines	0.20	0.25	0.05	0.97	1.31	0.34
Other livestock costs	0.29	0.30	0.01	1.38	1.52	0.13
Other variable costs	0.01	0.00	0.00	0.03	0.02	-0.01
Total variable costs	12.61	11.41	-1.20	60.44	58.61	-1.82
Total gross margin	8.26	8.06	-0.20	39.56	41.39	1.82

Table 2.15 Gross margin per dozen eggs for all laying flocks (annual basis)

	Layers		Laying flocks, cage barn & deep litter		Free range layers	
	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15
Number of farms	52	47	11	12	41	35
No of dozen eggs	304,269	313,146	631,401	460,126	224,643	274,026
Average egg yield/bird	284	286	296	289	276	284
Average egg price p/doz	94.02	96.36	83.90	90.85	100.94	98.82
	<i>Average pence per dozen (annual basis)</i>					
Gross output						
Eggs	93.99	96.35	83.74	90.73	100.99	98.86
Hen depreciation	-13.57	-14.73	-12.75	-13.81	-14.14	-15.14
Other poultry output	3.15	0.62	0.05	0.17	5.28	0.82
Total output	83.56	82.24	71.04	77.10	92.13	84.54
Variable costs						
Feed	48.68	45.99	41.65	43.38	53.49	47.15
Vet. & medicines	0.62	0.94	0.21	0.57	0.89	1.11
Other livestock costs	2.73	2.48	4.85	5.16	1.27	1.28
Other variable costs	0.02	0.03	0.00	0.05	0.02	0.01
Total variable costs	52.04	49.43	46.72	49.16	55.68	49.55
Total gross margin	31.52	32.81	24.32	27.94	36.45	34.99

Table 2.16 Gross margin for non-contract broilers and table chicken

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2013/14	2014/15	£ change	2013/14	2014/15	£ change
Number of farms	23	20				
Average number of birds/year	142,126	159,418				
Throughput of birds/year	1,043,751	1,037,402				
Average number of crops/year	7.34	6.51				
Average sale price (broilers) - £/bird	2.12	2.01				
Average purchase price (broilers) - £/bird	0.36	0.37				
	<i>Average £ per bird (per flock)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Broilers	1.67	1.59	-0.08			
Total output	1.67	1.59	-0.08	100.00	100.00	
Variable costs						
Feed	1.12	1.05	-0.07	67.19	66.20	-0.98
Vet. & medicines	0.02	0.03	0.00	1.45	1.67	0.22
Other livestock costs	0.04	0.04	0.00	2.49	2.70	0.21
Other variable costs	0.01	0.02	0.01	0.45	1.19	0.74
Total variable costs	1.19	1.14	-0.05	71.58	71.76	0.18
Total gross margin	0.47	0.45	-0.03	28.42	28.24	-0.18

Table 2.17 Gross margin for turkey production

	<i>Per bird</i>			<i>Per £100 of gross output</i>		
	2013/14	2014/15	£ change	2013/14	2014/15	£ change
Number of farms	28	27				
Average number of birds/year	593	645				
Throughput of birds/year	1,281	1,344				
Average sale price (turkeys) - £/bird	39.41	38.31				
Average purchase price (turkeys) - £/bird	4.78	4.42				
	<i>Average £ per bird</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	31.54	31.17	-0.37			
Total output	31.54	31.17	-0.37	100.00	100.00	
Variable costs						
Feed	8.75	7.71	-1.04	27.73	24.74	-3.00
Vet. & medicines	0.14	0.09	-0.04	0.43	0.30	-0.13
Other livestock costs	3.35	3.08	-0.27	10.62	9.87	-0.75
Other variable costs	0.04	0.02	-0.02	0.12	0.05	-0.07
Total variable costs	12.27	10.90	-1.37	38.91	34.97	-3.94
Total gross margin	19.27	20.27	1.00	61.09	65.03	3.94

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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, single farm payment, 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
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**

Details available at www.ruralbusinessresearch.co.uk

RBR at Reading
Agriculture and Food Investigation Team
School of Agriculture, Policy and Development
University of Reading
4 Earley Gate
Whiteknights
PO Box 237
Reading RG6 6AR

Phone 0118 378 7426

www.ruralbusinessresearch.co.uk