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Rural Business Research

Farm Business Survey

2009/2010

Poultry Production in England

Richard Crane, Ross Davenport
and Rod Vaughan

RBR *independent research, data and analysis*

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2009/10

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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 Fifth Series

In the early spring of 2011 the economic fortunes of farmers and growers both excites and causes concern. For some, arable output price increases represent good fortunes; for others they simply represent increased input costs. 'Corn' versus 'horn' arguments abound at times when crop prices rise and livestock farmers face increased feed bills. The price variability that has been witnessed across many markets in recent months looks unlikely to abate in the near future, and with a potential change in support payments looming for 2013 or 2014, managing uncertainty and risk looks set to dominate farm business management decision making over the years ahead. However, optimism amongst many remains considerably higher than in the early years of the 21st Century, and new windows of business opportunity, particularly in the form of energy production, has brought its own optimism that farmers and growers have a role to play in both food and fuel markets.

The early spring of 2011 witnesses the launch of the fifth series of enterprise and farm type reports from *Rural Business Research (RBR)*. These outputs have quickly become recognised as important barometer reports on the major sectors of the industry. Our fifth series draws upon independent data from the Defra-funded Farm Business Survey (FBS) for England in 2009/10, with expert analysis and commentary. Our free to use on-line data services at www.farmbusinesssurvey.co.uk provide further data and analysis and readers are encouraged to explore the breadth and depth of data that exist on this site. During the early months of 2011 we have hosted a series of regional workshops around England, allowing us to showcase the wide ranging outputs that are freely available from the FBS via on-line delivery. If you have not been able to attend one of these events this year, please watch out for our plans for 2012 to find out for yourself what the FBS can do for you.

We hope that the fifth series of reports continues to interest readers and inform your work and businesses. *Rural Business Research* provides independent analysis on agricultural and horticultural business performance and these reports serve to add to this analysis. We always welcome comment on our outputs, so please let us know your thoughts by emailing paul.wilson@nottingham.ac.uk to let us know your views on our publications.

Dr Paul Wilson

Chief Executive Officer, Rural Business Research

Spring 2011

www.ruralbusinessresearch.co.uk

Acknowledgements

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

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

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

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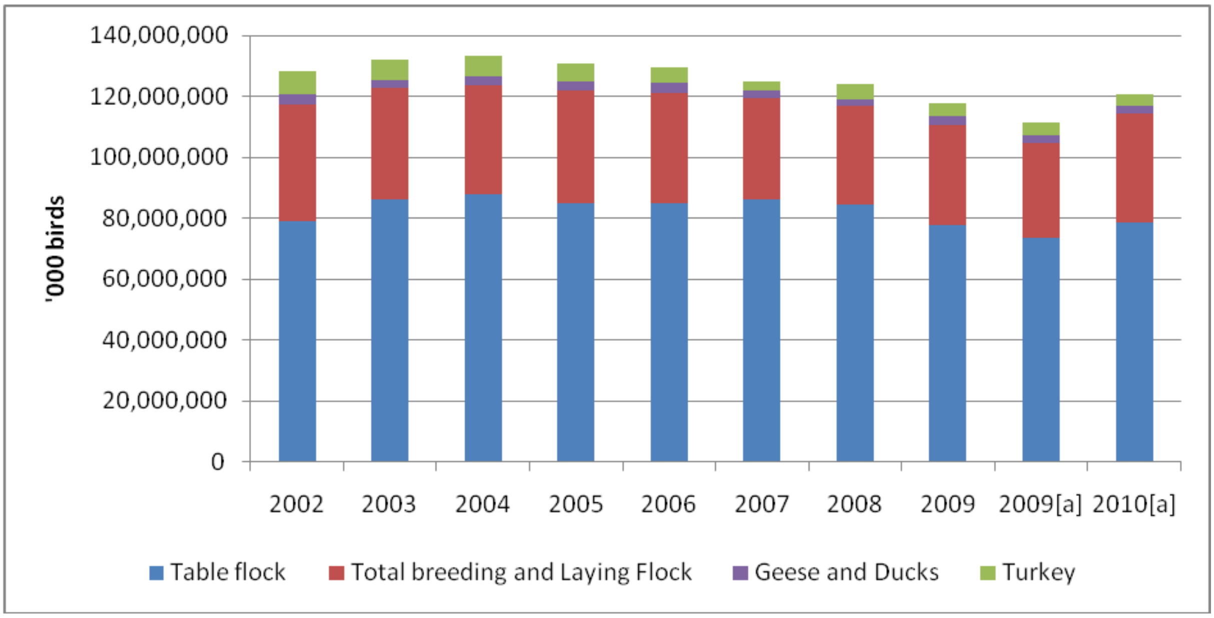
- Trend of UK poultry industry dominated by very large scale units continued in 2010 with number of holdings down from 4,533 in 2009 to 3,037 and average number of birds up from 2,665 to 3,373 in the same period
- Value of UK poultry production exceeded £2billion for the second successive year in 2010
- Egg prices on downturn in 2010, following modest increase in 2008 and 2009
- UK Self sufficiency in eggs and poultry meat declined to 79% and 91% respectively in 2009
- Farm Business Income for layers and non-layers improved in 2010 from £0.77 to £2.31 per bird and £0.62 to £0.99 per bird respectively
- Fixed costs of fuel and electricity per bird fell in 2010 by 21% and 14% respectively, for specialist poultry farms
- Net worth of specialist poultry farms as measured by percentage equity grew from 69.4% to 71.3% in 2010
- Gross margins for egg production on a per dozen basis rose sharply in 2010: up 26% for all layers; up 17% for free range layers and up 27% for combined battery, barn and deep litter production systems
- Gross margins for non contract broilers and table chicken rose again in 2010, up 6% on the previous year

SECTION 1: COMMENTARY ON THE UK POULTRY INDUSTRY

1.1 General introduction

At June 2010, the total number of birds in production in England was 125.7 million [1][1]. A change in methodology for 2009 onwards has been implemented, excluding holdings with very small amounts of activity; to remove non-commercial holdings. As a result population numbers before 2009 are not directly comparable. Total poultry numbers increased by 9.1% in 2010 when compared to the 2009 revised totals of 115.3 million, the first increase in numbers after a sustained decrease in the national flock from a high of 136.6 million in 2004 to the low recorded in 2009. This increase was most notable in the laying flock with a 14.7% increase in numbers on the previous year. The poultry flock in June 2010 comprised 29% breeding and laying fowl, 63% table chickens, and 8% other poultry (ducks, geese, turkeys & other poultry).

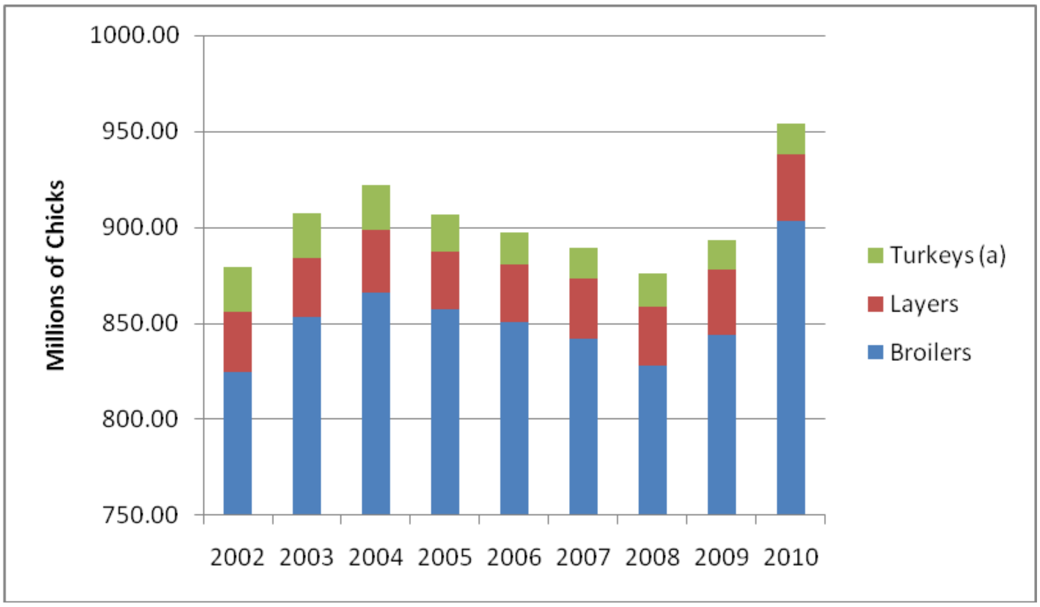
Figure 1.1 English poultry numbers at June 2002-2010 [1]



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 Census Statistical Release

[1] See all references at page 44

Figure 1.2 UK chick and poult placings 2002-2010 [2]



The data contained in Figure 1.1, represents the number of birds in production at the time of the annual Agricultural Survey in June 2010 and not the average number of bird produced each year. Figure 1.2 shows the number of UK chicks placed annually. The number of broiler chicks placed increased by 7% in 2010 to 904 million. Laying chick numbers also increased by 1.5 million birds to 34.5 million in the same period, an increase of 4% on the previous year.

Figure 1.3 Density of poultry production [3]

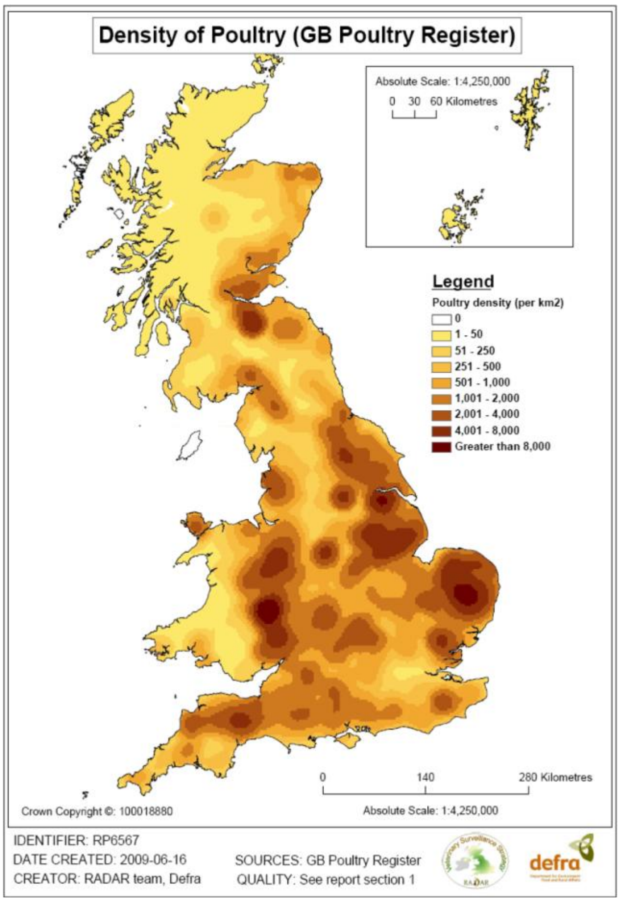


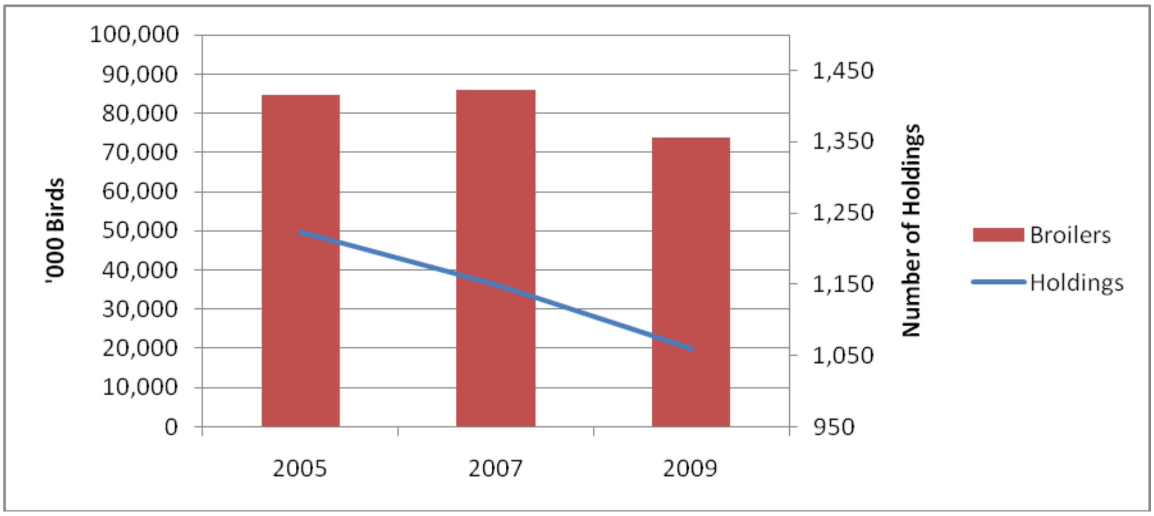
Figure 1.3 shows population density throughout Great Britain. High densities can be seen in the East midlands and Yorkshire as well as along the border between England and Wales.

1.2 The Structure of the industry

1.2.1 Poultry for meat

In 2009 there were 1,060 commercial broiler holdings operating in England, compared to 1,150 holdings in 2007 and 1,223 in 2005, a reduction of 13.2% over the five years.

Figure 1.4 – Number of broiler holdings and production volumes [4]



Notes: Biannual data has been used to negate large fluctuations in bird numbers between years caused by the rapid turnover of birds on holdings.

The average number of birds per holding in 2009 totalled approximately 69,500, this is a reduction compared to the 2005 average of 75,000 birds, however, due to the short growing cycle of broiler flocks (averaging 48 days in 2009 [5]) and an average of 11 days between flocks [5], population data for broiler holdings taken from the June census should be treated with caution.

Figure 1.5 – Annual UK production of poultry meat by type [6]

Note: (b) 2010 was a 53 week year

The broiler share of poultry meat production increased to a high of 1,323 thousand tonnes or 84% of total production in 2010. In 2000 meat derived from broilers amounted to only 77%, with the increase in output being at the expense of turkey production which fell from 17% in 2000 to 10% of output in 2010, with other fowl including duck meat accounting for 6% of production in 2010.

1.2.2 Poultry for eggs

Eggs are produced in three basic types of production system:

- *Laying cages* – As of 1st January 2012 poultry within Europe if raised in cage systems must be housed in enriched cages, categorised as having 750cm^2 of cage area per hen (compared to 550cm^2 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. It is estimated the cost of adapting existing housing will be on average £10-£14 per bird whilst investing in new housing is expected to cost £17-£30 per bird. [7]
- *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 9 birds per m^2. 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 7 birds per m^2. Both systems provide communal nest boxes and raised feeding troughs to prevent the scattering of feeds.
- *Free Range System* – this system requires birds to have continuous daytime access to outdoor 'runs', largely covered with vegetation, to a maximum stocking density of 9 laying hens per m^2 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. The pig and poultry farm practices survey in 2009 revealed that the outdoor range area averaged 14ha per holding, with 44% being grass only and 56% encompassed grass and trees [5].

The number of holdings continues to decline for all housing types. Table 1.1 shows that this decline has been most marked in holdings operating cage or barn housing systems, both showing their numbers have halved during the five year period 2005 to 2009. However, unit size has increased with the average number of birds held in caged housing up by 45% since 2005. Thus confirming larger poultry holdings are better placed to invest in expanding and upgrading existing units in preparation for the upcoming ban on un-enriched cages.

Table 1.1 – Number of holdings and populations of laying fowl, by housing type [4]

Laying Bird- Cages	**2005**	**2007**	**2009**
Number of Birds	14,695,301	12,081,778	10,242,461
Number of Holdings	6,306	4,533	3,037
Average number of birds per holding	2,330	2,665	3,373

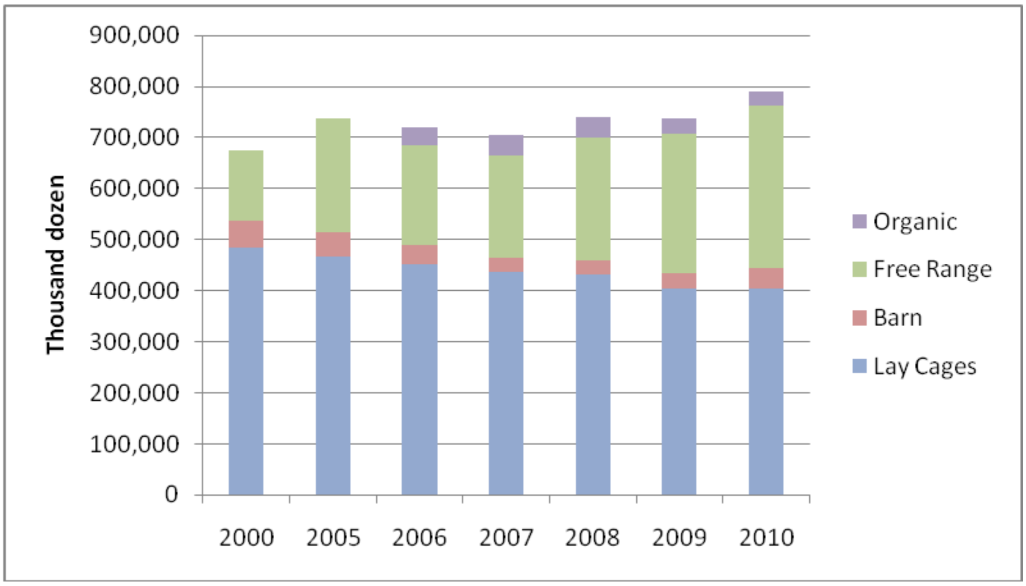
Laying Birds Free Range	**2005**	**2007**	**2009**
Number of Birds	6,886,426	7,813,091	7,685,534
Number of Holdings	14,801	15,537	14,523
Average Number of birds per holding	465	503	529

Laying Birds Barn	**2005**	**2007**	**2009**
Number of Birds	1,275,160	989,770	889,963
Number of Holdings	6,407	4,798	3,364
Average Number of birds per holding	199	206	265

Growing Pullets	**2005**	**2007**	**2009**
Number of Birds	8,719,150	6,277,002	5,942,435
Number of Holdings	2,873	2,379	2,056
Average Number of birds per holding	3,035	2,639	2,890

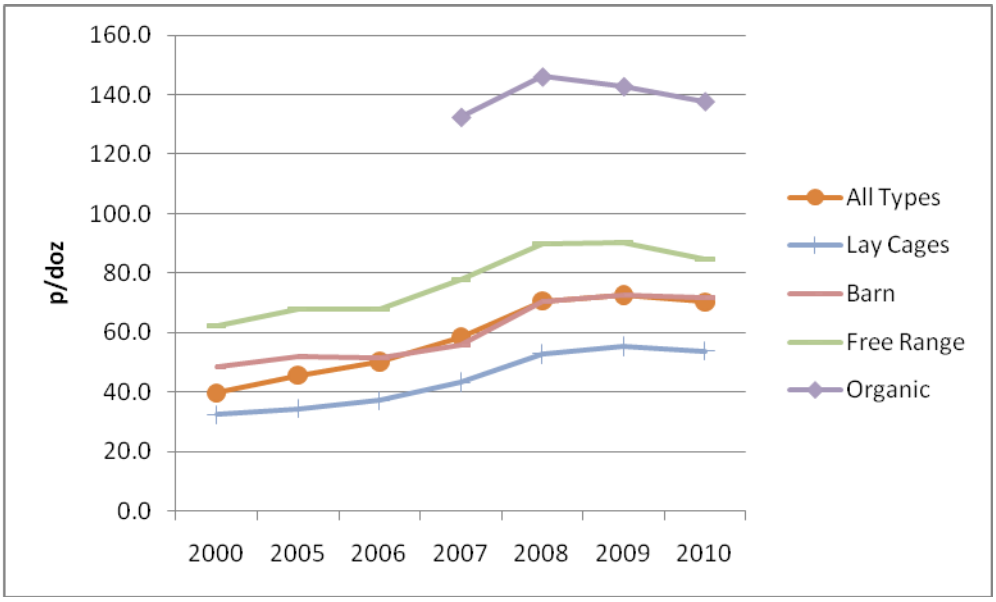
Total annual packing station throughput increased by more than 7% in 2010 to approximately 791,000 thousand dozen compared with 2009. The composition of production systems in 2010 was battery 51%, free range 40%, barn 5% and organic 4%. By way of comparison, in 2007 throughput of eggs was 62% battery, free range 28%, barn 4% and organic 6%.

Figure 1.6 Average annual UK egg production by production systems [8]



From 2006 to 2009 egg prices for all production systems showed large increases, with the exception of organic. Average prices peaked at 74.8p/doz in the first quarter of 2010. However, by the third quarter the price had fallen by 11% to 66.5p/doz with reductions observed for all systems, though the fall has been more pronounced for free range eggs, due to oversupply in this sector.

Figure 1.7 Average packers to producer prices by housing type [8]



1.3 Contribution of the poultry sector to the economy

1.3.1 The farm sector

Total poultry output for 2009 remained at over £2 billion for the second successive year. A modest increase in output from eggs and egg products was aided by a minor price improvement, though this was offset by a slight reduction in poultry meat output due to a very competitive market driven by imports. Poultry output as a proportion of total output from agriculture ranged from 11.6% [2005] to 10.5% [2007] with a rising trend maintained in 2009.

Table 1.2 – Producer value of UK-produced poultry meat and eggs 2005-2009 (£M) [9]

	2005	2006	2007	2008	2009
Poultry meat	1,300	1,233	1,249	1,578	1,563
Eggs and egg products	349	362	410	520	526
Total poultry	1,649	1,595	1,659	2,098	2,089
Total agricultural output	14,240	14,502	15,835	19,889	19,268
Poultry output as % of total agricultural output	11.6%	11.0%	10.5%	10.6%	10.8%

1.3.2 The retail sector

1.3.2.1 Poultry meat

The culinary versatility of poultry meat, particularly chicken, together with its perception as a 'healthy' meat option has, in recent times, driven the increase in the importance of poultry in the western diet. In the first three quarters of 2010, 45% of all meat produced in the UK was from poultry [10]. Table 1.3 shows the change in value and volume of sales through the retail market, up 3.6% and 2.5% respectively.

Table 1.3 - Summary of retail sales based on poultry type [11]

	Value (£'000)			Volume ('000kg)		
	52 weeks 2009	52 weeks 2010	% change	52 weeks 2009	52 weeks 2010	% change
Chicken	1,634,136	1,686,519	3.2	417,182	427,891	2.6
Duck	32,101	34,161	6.4	6,131	6,511	6.2
Other poultry	14,293	20,893	46.2	2,337	3,354	43.5
Turkey	217,854	226,878	4.1	44,419	44,343	-0.2
Total	1,902,357	1,970,578	3.6	470,768	482,467	2.5

1.3.2.2 Eggs

In 2009, 942 million dozen eggs were consumed in the UK (951 million in 2008) with a retail value of approximately £526 million [12]. In this period imports amounted to 214 million dozen eggs down from 220 million dozen in 2008 and exports at 18 million dozen also fell from 24 million in 2008.

1.4 Trade

The UK is approximately 91% self-sufficient in poultry meat [13]. The imports of fresh poultry meat [13] accounts for 45% from the Netherlands whilst imports of processed poultry meat such as cooked meat are predominantly sourced from Thailand, with 47% originating from there [14].

During the first six months of 2010 the UK imported 101,900 tonnes of fresh chilled chicken compared with 76,000 tonnes in the same period in 2009, the volume from the Netherlands showed little change, though ten times more fresh cuts originated from Ireland than previously. Imports of prepared chicken at 101,000 tonnes were up from the previous level of 76,000 tonnes, predominantly from Thailand [15].

Exports of fresh chicken in the first half of 2010 were lower, but shipments of frozen chicken were up 33% to 58,500 tonnes [15].

Table 1.4 - UK imports and exports of Eggs and Poultry meat [12,13]

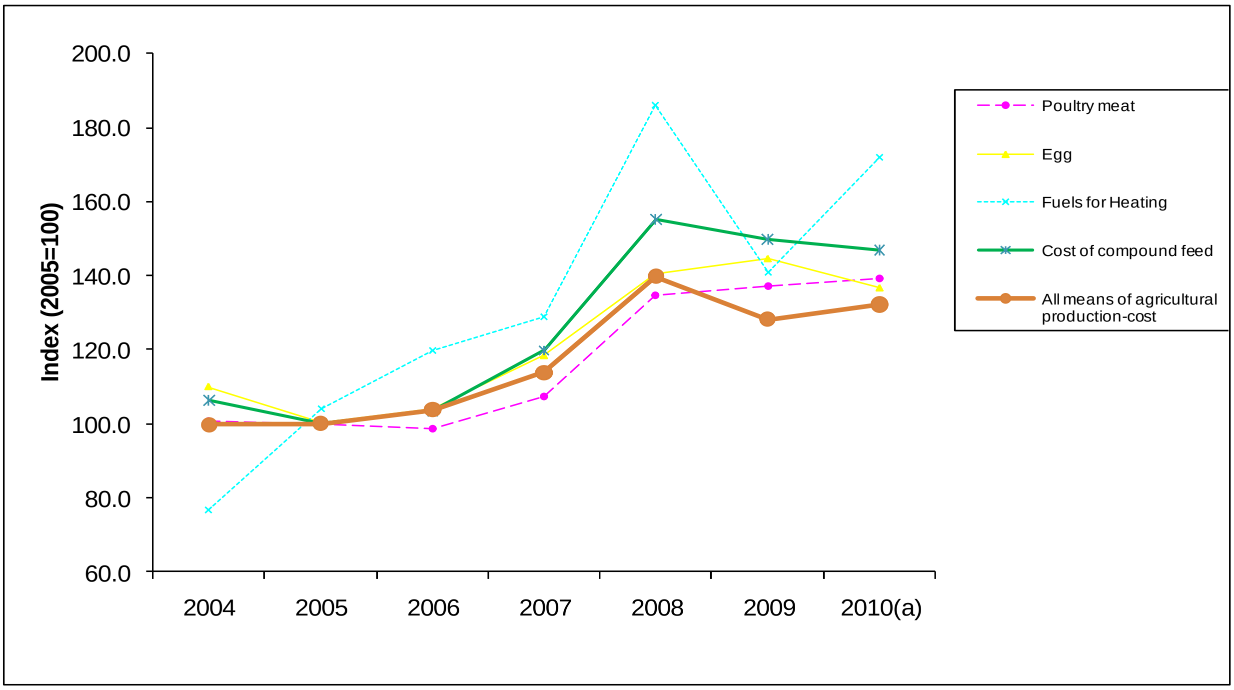
Eggs (Million Dozen)	2005	2006	2007	2008	2009
Imports	137	170	205	218	214
Exports	13	18	17	24	18
UK production	772	743	720	755	747
% self sufficient	86%	83%	79%	80%	79%

Poultry meat (carcass weight thousand tonnes)	2005	2006	2007	2008	2009
Imports	485	451	461	406	393
Exports	261	233	293	279	254
UK production	1,583	1,517	1,459	1,462.2	1,459
% self sufficient	88%	87%	90%	92%	91%

1.5 *Producer prices*

Record harvests in 2008 and 2009 contributed to a reduction in the purchase price of compound feed. The global recession also led to a fall in fuel price in 2009; the trend was reversed in 2010 as prices started to rise again. As already referred to oversupply in the egg market has seen the price of eggs drop, while poultry meat price has increased, but has not kept pace with average agricultural production costs.

Figure 1.8 Index of producer prices for poultry and eggs and cost of production [16]



Note: (a) 2010 data up to November 2010

1.6 *Animal welfare, regulation, and disease*

The Poultry industry is heavily regulated in terms of animal welfare codes and public hygiene that have been introduced which govern the way in which birds are housed, fed and transported. As a result, poultry production is undertaken increasingly in the UK and the European Union within standardised and closely regulated environments.

The EC directive setting a maximum stocking density for conventionally grown broilers units of 42kg/m^2 [14] is being implemented in England in early 2011 and set at 39kg/m^2. Other EU members states have opted for the maximum stocking density allowed of 42kg/m^2 [17].

With the UK caged laying flock on course to be fully converted to enriched cage systems by the 1st January 2012 deadline, it is estimated at the time of writing 29 percent of EU egg production [18] is from un-enriched caged birds. In recognition of the disparity that exists between the UK and the rest of the EU Farming Minister Jim Plaice has sought a ban on eggs produced using conventional cages being traded between member states after the January 2012 [19] deadline. An additional egg class has also been proposed to classify eggs produced under non compliant systems [18].

Free trade talks were re-launched in summer 2010 between the EU commission and Mercosur the South American trading bloc, consisting of Argentina, Brazil, Paraguay and Uruguay. The indications are for greater trade liberalisation between the trading blocs of the northern and southern hemisphere. Many in the British poultry industry are being influenced as to whether they should reinvest in their industry as the economics of production and demanding regulations make it difficult to compete [20].

The UK is the only European member state that currently has a derogation not to stamp eggs on-farm and following recent cases of fraud concerning the marketing of eggs Defra has recommended the removal of the derogation to reduce such practices. The British Egg Information Service (BEIS) has agreed that Lion accredited free range eggs should all be stamped on farm by June 2011. An NFU survey found the majority of producers felt that this change would not guarantee against future egg fraud and their production costs would rise as a consequence [21].

A ban on beak trimming of laying hens was due to have been implemented by the end of 2010. However, Defra have agreed an amendment to the bill allowing infra-red beak trimming at one day old. The Farm Animal Welfare Council (FAWC) also recommended a deferment of the ban until 2015 in the interests of laying hen welfare as birds with trimmed beaks show a reduction in feather pecking and cannibalism. Further development in management techniques and breeding of birds with low aggression traits will continue towards reducing feather pecking and cannibalism ultimately reducing the need for beak trimming [21].

In July 2010 the EC proposal to amend the Integrated Pollution Prevention and Control (IPPC) directive to reduce the size threshold of poultry units from 40,000 to 30,000 laying hens, to 24,000 for ducks and 11,500 for turkeys, was not pursued after lobbying from the NFU. The unchanged directive became law in November 2010 [21].

Campylobacteriosis, is an important source of food poisoning in England. The campylobacter survey monitors the level of infection in poultry meat at the abattoir level. Recent results published by the Food Standards Agency (FSA) showed that campylobacter is present in 65% of retailed poultry meat. A recent workshop involving Defra, Biotechnology, and Biological Sciences Research Council (BBSRC) and the Food Standard Agency (FSA), identified that most control strategies to lower risk from this bacterium should occur at the processing level [21].

1.7 *Important developments in the poultry industry in 2010*

Table 1.5 - Important developments in the poultry industry in 2010

February 2010- The NFU and Environment Agency launched a farm assurance scheme for pig and poultry producers which will reduce the number of inspections to one per year saving time and money for the producer [22].
July 2010 -The NFU Poultry housing survey revealed only 8% of housing had been built in the last 10 years with 60% of broiler housing over 20 years old. The average age of a broiler house was 24 years. Charles Bourns chair of the NFU poultry committee commented that low returns on sales over a prolonged period had meant there had been little confidence for investment in new housing [23].
September 2010 - Mr Stuart Agnew MEP and Norfolk egg farmer suggested that as much as 29% of EU egg production will still be from un-enriched caged bird when the ban comes into force. An extra egg class for non-compliant farms has been proposed [18].
September 2010- Defra launched an informal consultation on the EU TSE (transmissible spongiform encephalopathies) roadmap regarding the lifting of the ban on the use of processed animal proteins in feed, against a background of soya meal continuing to rise and restrictions on the import of GM soya, other protein sources should be discussed in particular reference to poultry and pigs [24].
October 2010- British egg week a point of sale campaign highlighting the versatility, value and ease of cooking with eggs launched between 4-12th www.timeforeggs.com [25].
October 2010- The merger of UK turkey producers Bernard Matthews and Lincs Turkeys is approved by the OFT. The OFT estimated that with the acquisition Bernard Matthews would account for a quarter of the market for fresh seasonal whole turkeys and crowns and approximately 60% of the frozen seasonal whole birds and crown market [26].
Nov-10 - Venky's group, which specialises in poultry farming and pharmaceuticals based in India took over the premiership football club Blackburn Rovers [27].
Nov-10 Vegan pressure group VIVA releases video and photographic evidence of male chicks being slaughtered at a few days old. Large parts of the media run the story [27].

SECTION 2: FINANCIAL RESULTS FOR POULTRY PRODUCTION IN ENGLAND

2.1 Introduction to the data

The following series of tables [Tables 2.2 to 2.10] are drawn from a sample of farmers who participate in the Farm Business Survey (FBS) in England and whose farms are classified as specialist poultry farms. Tables 2.11 to 2.16 are drawn from a sample of farms that participate in the FBS who have a poultry enterprise. This sample of farms includes all farm type groups, including specialist poultry farms.

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 gross margin.

Specialist Poultry

- Table 2.2 –All specialist poultry farms
  - Sample includes all types of laying and non-laying enterprises, as defined as specialist poultry
- Table 2.3-All laying flocks (sub-group of specialist poultry farms)
  - Sample includes all types of laying enterprises (battery, free range and deep litter*)*
- Table 2.4 –All non-laying flocks (sub-group of specialist poultry farms)
  - Sample includes all types of non-laying enterprises (contract and non-contract broilers, turkeys, ducks and poultry rearing units)
- Table 2.5 –Laying flocks with mixed production systems including battery, barn and deep litter hens
  - Sample includes all battery laying and mixed laying enterprises (a sub-set of Table 2.3)
- Table 2.6 –Laying flocks with free range hens
  - Sample includes solely free range laying enterprises (a sub-set of Table 2.3)
- Table 2.7 –Non-laying flocks –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 2.11 –All laying flocks
  - Sample includes all types of laying enterprises (battery, free range and deep litter)
- Table 2.12 –Laying flocks with mixed production systems including battery, barn and deep litter hens
  - Sample includes all battery laying and mixed laying enterprises (a sub-set of Table 2.11)
- Table 2.13 –Laying flocks with free range hens
  - Sample includes solely free range laying enterprises (a sub-set of Table 2.11)
- Table 2.14 –All laying flocks
  - Gross margin per dozen eggs
- Table 2.15 –Non-contract broilers and table chickens
  - Sample includes non-contract broiler and table chicken enterprises
- Table 2.16 –Turkey production
  - Sample includes mainly Christmas turkey producers

2.3 The sample

The Farm Business Survey (FBS) covers businesses with a Standard Labour Requirement (SLR) of 0.5 and above. The SLR represents the average labour requirement in Full Time Equivalents for all enterprises on the farm under typical conditions for enterprises of average size and performance. It is calculated from standard coefficients applied to each enterprise on the farm and represents the input of labour required per hectare of crops or per head of livestock.

According to the 2009 June survey there are 947 specialist poultry farms in England. This excludes farms that are regarded as too small for inclusion in the FBS, as they fall below the minimum size threshold of 0.5 SLR. The FBS sample for the 2009/10 financial year includes 67 specialist poultry farms, which represents 4.4% of the population.

The sample is drawn from a stratified population in seven Government Office Regions. Within each stratum a single weight is calculated as the ratio of numbers of farms in the population in the sample. This weight when applied to each farm represents the number of times that farm's data must be replicated in order to 'represent' farms not selected for the sample, so as to reflect the entire population. This weight is applied to all variables.

The data in this report have been compiled from the 2008/09 and 2009/10 FBS.
Results for this survey can be accessed at:
http://farmbusinesssurvey.co.uk and at: http://statistics.defra.gov.uk/esg/publications/fab/default.asp

2.4 Financial results for 2008/09 and 2009/10

2.4.1 Specialist poultry farms

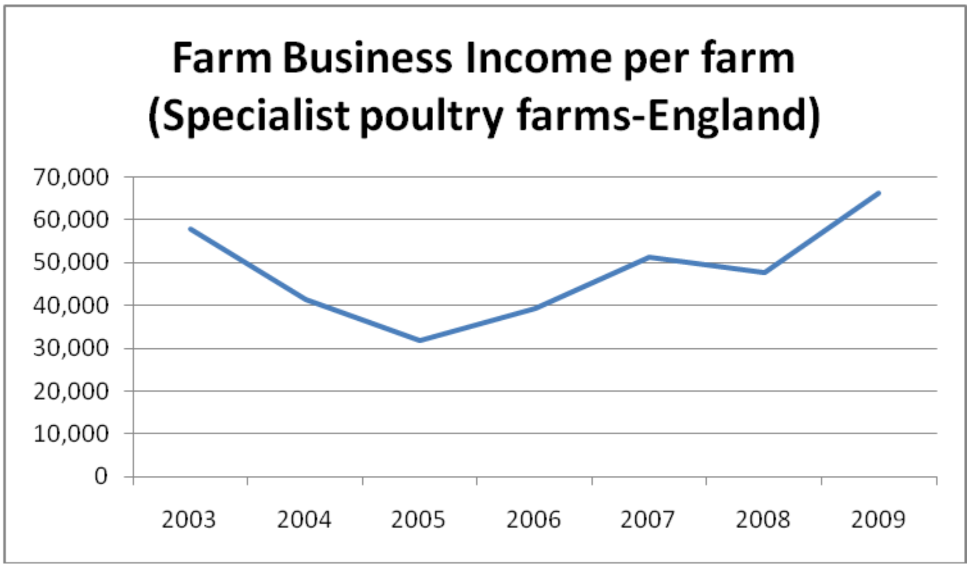
In 2009/10 a total of 67 farms participating in the FBS in England classified as specialist poultry farms, compared with 66 farms in 2008/09.

Specialist poultry farm businesses were more profitable [+39%] in the 2009/10 financial year than in the previous year. Although there were increases in both egg and poultry meat prices between the two years, total gross output fell by 11.8% to £606,356 per farm. This was due to a reduction in the average number of birds between the two years of 21.5%; 36.5% reduction in laying hen numbers and a 19% reduction in broiler and other poultry numbers. The sample is fairly evenly divided between egg [34] and meat [30] producers in terms of the number of businesses in 2009/10. However, in output terms 36% was derived from egg production and 64% from meat production.

As a result of the reduction in the number of birds, variable costs were down by 14.5% to £355,837 and fixed costs fell by 16.2% to £198,678 per farm in 2009/10. Although the decline in the number of birds led to lower feed costs the cost of feed as a proportion of poultry output at 55% was similar for the two years.

The net result of the year-on-year change to output and costs saw Farm Business Income (FBI) increase by 39%, to £66,326 per farm. In common with past income trends there was a wide range in the level of FBI per farm business, with 46% of farms producing an average annual FBI of over £50,000 in 2009/10 and 13% of farms incurring a negative FBI, compared with 34% and 20% respectively in the previous year.

Figure 2.1 Farm Business Income trend for specialist poultry farms in the FBS



Source: www.farmbusinesssurvey.co.uk
Figure 2.1 shows a time series of FBI for Specialist Poultry farms in England for the last seven years.

2.4.2 All Laying Flocks

In 2009/10 there were 34 specialist poultry farms that had laying flocks selling eggs for eating, compared with 31 farms in 2008/09. These included battery, barn, deep litter and free range production units. This section does not include breeding poultry (laying flocks producing hatching eggs, day-old chicks and pullets), although they are included in the total specialist poultry group.

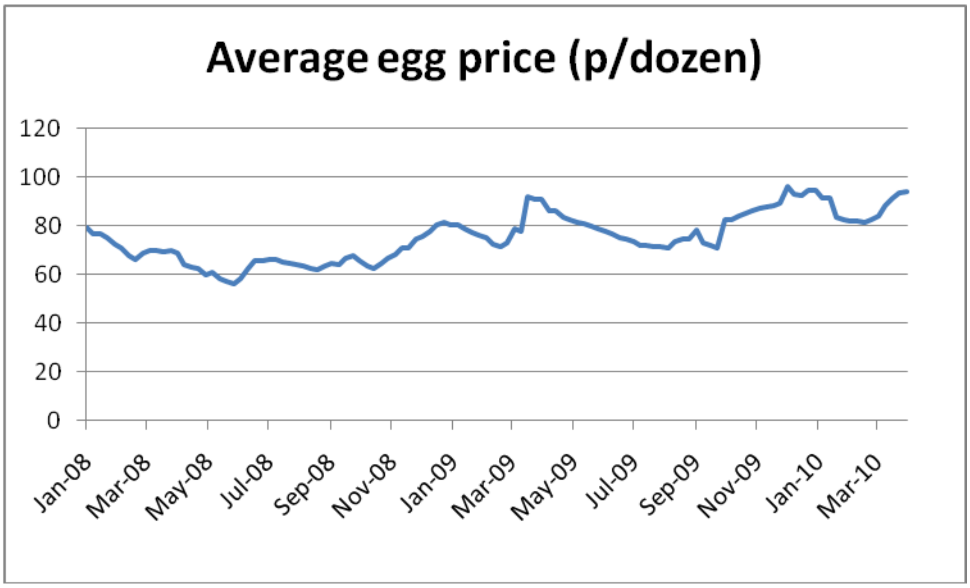
Average gross output for laying flocks in England in 2009/10 was £382,867, down 28% on 2008/09. The average flock size in the farm business survey latest sample saw a significant reduction of 39.5%, down from 36,000 in 2008/09 to approximately 22,000 in 2009/10. It is believed this reduction is being driven by the move from caged systems to free range production in the run-up to the ban on un-enriched cages from January 2012. The free range flocks are currently approximately a third of the size of flocks in caged systems.

Although gross output declined due to smaller flock size poultry output per bird actually increased by 15.6%. This was due to an improvement in the average price of eggs of 8.4%, from 73.8p/dozen in 2008/09, to 80p/dozen in 2009/10. As well as an increase in the egg price, the continuing trend towards free range production also helped to improve the average egg price until they started falling towards the end of the 2009/10 period. Additionally, production increased by 3.7% from 272 to 282 eggs per bird per year from 2008/09 to 2009/10. Hen depreciation also fell marginally, with cull hens generating a small financial return to offset the cost of replacement.

Total variable costs fell by 36.5% to £205,835 per farm amongst which feed comprising 93% of all these costs decreased by 35.8% to £190,875 per farm. As a consequence, average gross margin fell by 15.4% to £177,032 per farm. Total fixed costs also fell by 25.9% to £146,306 per farm, with expenditure on fuel and electricity showing the biggest reductions, down 44.2% and 49.9% respectively. These changes generated a marked increase of £22,674 in FBI, up from £27,605 for the 2008/09 financial year, to £50,279 per farm for the 2009/10 financial year.

The large decrease in average bird numbers and the increase in business profit had led to a three fold improvement in the margin per bird from 77p to £2.31 per bird. Gross output per bird increased by £2.75 to £17.57 per bird, with feed costs increasing by 51p per bird to £8.76, and a saving of 7p per bird recorded for fuel & electricity.

Figure 2.2 Average Monthly Wholesale to Retailer Egg price



Source: Defra (2010) Weekly average wholesale to retailer prices for home produced poultry and eggs
Figure 2.2 shows the average wholesale egg price has increased over the 2008/09 and 2009/10 financial years.

2.4.3 Mixed production systems and free range flocks

The laying flock group has been subdivided into two further groups, mixed production systems and free range flocks. Although the mixed production systems are predominantly battery units, they comprise some mixed systems, including barn and deep litter egg production.

In 2009/10 there were 13 mixed/battery units and 21 free range egg producers, compared with 15 mixed/battery units and 16 free range egg producers in 2008/09. With a small sample size of 13 farms in the mixed/battery group, care should be taken in interpreting the figures.

Table 2.1 Comparison of financial performance measures for mixed production systems and free range systems compared with All Laying flocks

	All Laying Flocks (£ per holding)	Mixed production systems including battery, barn & deep litter hens (£ per holding) (% difference from All Laying Flocks)		Free Range hens (£ per holding) (% difference from All Laying Flocks)	
Total Gross Output	382,867	530,751	(+38.6)	293,051	(-23.5)
Total Gross Margin	177,032	232,655	(+31.4)	143,250	(-19.1)
Farm Business Income	50,279	73,577	(+46.3)	36,129	(-28.1)

The more intensive mixed production systems benefited from an increase of 1.2% in the price of eggs, to an average of 71.1 p per dozen, while the price for free range eggs fell by 1.2% to 93.4 p per dozen. In both systems the number of eggs produced per bird was up on the year before, with battery/mixed units at 281 eggs and free range units at 283 eggs per bird.

The difference in average flock size between the two systems is less pronounced than previously at 35,273 and 13,600 average number of birds for battery and free range systems respectively.

On a per bird basis, the increase in poultry output increased more for free range units [+£2.15/bird] than for battery/mixed units [+£0.77/bird]. However, the average size of flock for battery/mixed units fell by 41.6% to 35,273 hens, while free range units recorded an increase of 24% to 13,600 hens. As a consequence total poultry output per business increased by 39.5% for free range units and fell by 38.3% on the battery/mixed units.

Total variable costs increased by £1.24 per bird for free range units whilst they fell by 41p per bird for battery/mixed units. Over 90% of the variable costs were attributable to the cost of feed. Fixed costs increased by £2.34 for free range systems, but remained unchanged for the battery/mixed units. On a per bird basis, the battery/mixed units saw FBI increase by £1.60 to £2.09 per bird, while free range units recorded an increase to FBI of 28p, to £2.66 per bird.

Overall, the largest increase in profitability on a 'business' basis was for the battery/mixed units. These units are two and half times larger than their free range counterparts in terms of flock numbers and generated twice the FBI [£73,577 and £36,129 respectively].

On a per bird basis battery/mixed units recorded an FBI of £2.09 per bird [+£1.60/bird], while for free range units an FBI of £2.66 per bird [+28p/bird] was achieved. In 2009/10 profitability of free range units was 1.3 times greater than for mixed/battery units.

2.4.4 Non-laying flocks

In 2009/10 there were 30 specialist poultry farms that had non-laying flocks, compared with 31 farms in 2008/09. These were flocks primarily kept for meat production and included 15 broiler producers amongst them, whose results are shown separately elsewhere in this section. In addition this group include contract broiler producers who do not own the birds and are provided with feed by the rearing company who pays a fee to the producer for rearing the birds. Although broiler production is the predominant system, a small number of producers of table chickens, turkeys, ducks and geese were also present. In addition, this group includes some poultry breeder-rearers', who buy in hatching eggs or day-old chicks and sell the pullets at point of lay at about 16-17 weeks of age.

Gross output went up by 15.5% to £845,257 per farm for non-laying flocks and total variable costs (mostly feed) increased by 9.1% and total fixed costs rose by 17.8%, while the average number of birds declined by 1.7% to 92,270. FBI increased by 56.5% to £91,260 per unit for 2009/10.

This group includes a mixture of contract and non-contract poultry meat producers.

It was not possible to show the results for individual enterprises, other than non-contract broiler production which can be found in Table 2.7, because of small sample sizes.

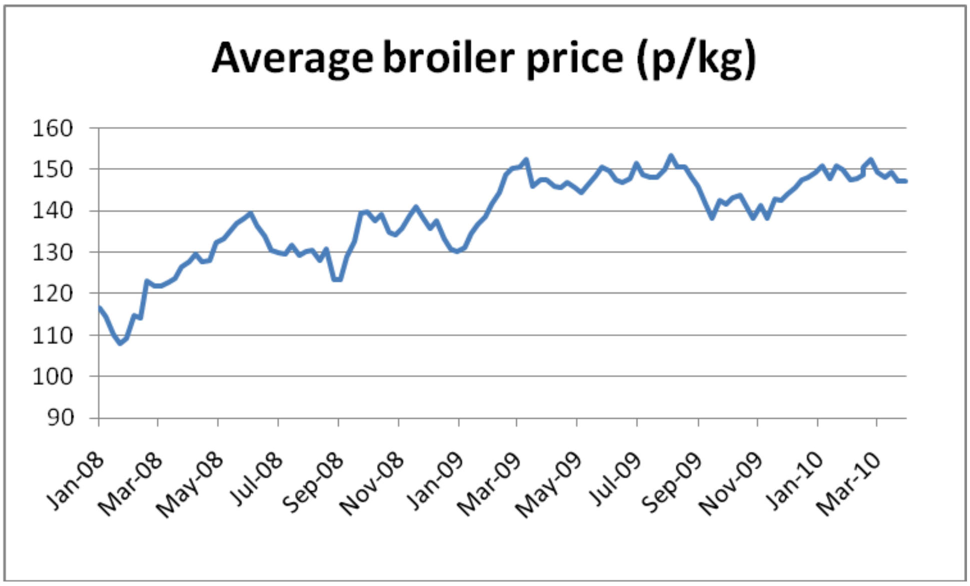
2.4.5 Non-contract broiler production

Producers in this group incur all costs associated with the production of broilers

Total poultry output increased by 18.4% to £1,274,193, as did total throughput which was up by 18.5% to 947,477 birds. The main cost by farm business for this system is feed which increased by 11.2% to £903,094 [70% of poultry output]. The only costs to show a reduction were fuel and electricity [-2.8% and -6.4%, respectively].

Consequently, FBI went up by £80,993 from £57,830 in 2008/09 to £138,823 per farm in 2009/10. As well as higher throughput, the average number of bird crops increased to 6.8 crops per year. Taken together these changes led to the increase in FBI. An average sale price of £1.68 per bird was achieved, which virtually remained unchanged from the previous year.

Figure 2.3 Average Monthly Wholesale to Retailer broiler price



Source: Defra (2010) Weekly average wholesale to retailer prices for home produced poultry and eggs

2.5 Balance sheet information

Table 2.8 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 marginally [+1.9%] during the year to 71.3%. The value of fixed assets increased by 11.9% to £632,713, while total external liabilities increased by less [+2.3%] to £218,986.

The laying flocks with battery/mixed production systems saw an increase [+3.7%] in their percentage equity during the most recent financial year, which at 83.2%, is greater than for free range production units with 65.4% equity in their business at the end of the year. Poultry meat producers recorded a rise [+2.8%] in their percentage equity, resulting from a decrease in liabilities of 7.7% and an 8% increase in total assets, with their equity amounting to 83.7%.

Table 2.9 compares the net worth and percentage equity for the other Robust Farm Type classification used in England at an average of £1,000,000 per farm representing 89.1% 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 a consequent smaller stake in the equity of their businesses. For example, lowland cattle & sheep farms and cereal farms having the highest percentage equity at 92.3% and 91.3%, while pig and poultry farms have the lowest percentage equity at 63.7% and 70.4% respectively.

2.6. Gross margins for all poultry enterprises

Tables 2.11 to 2.16 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 the 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 laying flocks

The average flock size for this group of farms at 11,450 hens in 2009/10 is half that of the specialist poultry layers group, however the trend of financial results is very similar. Average egg price was 81.5p per dozen, compared with 76.4p per dozen the year before. This rise in the price of eggs saw output increase to £16.18 [+£1.88] per bird. Feed costs, amounting to 54% of output, increased to £8.66 [+21p] per bird, resulting in a gross margin of £6.82 [+£1.67] per bird for 2009/10. The gross margin per dozen eggs was 30.5p for all layers, an increase of 6.4p per dozen.

As with the specialist poultry farms, both the free range egg producers and battery/mixed production systems in this enlarged sample experienced similar increases in output. The gross margin for free range egg production was £7.75 [+£1.71] per bird compared with £6.13 [+£1.40] for battery/mixed egg production for the 2009/10 financial year. Consequently, the difference in gross margin per bird between the two systems is less pronounced in this larger sample of farms than it is with the smaller sample of purely specialist poultry farms.

The average egg price was 25% higher for free range egg production at 92.1p per dozen, although egg production was 3% less for free range systems [272 eggs per year]. Feed costs were also 25% higher [£9.81 per bird] for free range egg producers. The gross margin per dozen eggs was 34.6p for free range egg production and 27.4p for battery/mixed egg production.

However, battery/mixed systems had the advantage of size, having twice the average number of birds than their free range counterparts in 2009/10.

2.6.2 Gross margin for boilers & table chicken production (non-contract)

The average price received for broilers in 2009/10 was £1.70 [-3p] per bird, while the average purchase price for chicks was 30p [+1p] per bird. Feed costs fell to 97p [-7p] per bird, producing a gross margin of 36p per bird compared with 35p per bird in the previous year. With 6.8 crops per year an average gross margin of £2.45 per bird was produced on a twelve month basis, an increase of 35p per bird on the previous year.

2.6.3 Turkey production

The majority of farms in this group are small scale Christmas turkey producers. The average price received for turkeys in 2009/10 was £31.96 [+£3.37] per bird, while the average purchase price was £3.78 [+64p] per bird. Overall, poultry output was £26.26 per bird [+£1.69], while the feed cost was £6.26 per bird [+£1.79]. This produced a gross margin of £17.41 [+£5.55] per bird for 2009/10.

Table 2.2 Financial results for all specialist poultry farms

	Per farm			*Per bird (annual basis)*		
	2008/09	**2009/10**	**% change**	**2008/09**	**2009/10**	**£ change**
Number of farms	66	67		66	67	
Average number of birds/year	69,099	54,226		69,099	54,226	
	Average £ per farm			*Average £ per bird*		
Gross output						
Eggs	300,445	209,340	-30.3	4.35	3.86	-0.49
Hen depreciation	-15,451	-4,109	-73.4	-0.22	-0.08	0.15
Broilers	283,762	291,248	2.6	4.11	5.37	1.26
Other poultry output	84,542	77,405	-8.4	1.22	1.43	0.20
Total poultry output	**653,298**	**573,884**	**-12.2**	**9.45**	**10.58**	**1.13**
Crops	5,368	3,780	-29.6	0.08	0.07	-0.01
Other livestock	2,312	3,105	34.3	0.03	0.06	0.02
Other output	26,370	25,587	-3.0	0.38	0.47	0.09
Total gross output	**687,348**	**606,356**	**-11.8**	**9.95**	**11.18**	**1.23**
Variable costs						
Feed	361,952	313,798	-13.3	5.24	5.79	0.55
Seed, fertiliser, crop costs	1,384	1,620	17.1	0.02	0.03	0.01
Vet. & medicines	9,036	8,026	-11.2	0.13	0.15	0.02
Other livestock costs	43,971	32,393	-26.3	0.64	0.60	-0.04
Total variable costs	**416,343**	**355,837**	**-14.5**	**6.03**	**6.56**	**0.54**
Total gross margin	**271,004**	**250,519**	**-7.6**	**3.92**	**4.62**	**0.70**
Fixed costs						
Labour:						
Regular paid	76,995	50,242	-34.7	1.11	0.93	-0.19
Regular unpaid	19,930	20,424	2.5	0.29	0.38	0.09
Casual labour	2,992	2,816	-5.9	0.04	0.05	0.01
Power & machinery costs:						
Contract & hire	6,438	6,374	-1.0	0.09	0.12	0.02
Fuel	9,461	5,841	-38.3	0.14	0.11	-0.03
Electricity	15,282	10,341	-32.3	0.22	0.19	-0.03
Heat	7,313	7,522	2.8	0.11	0.14	0.03
Repairs	10,476	9,913	-5.4	0.15	0.18	0.03
Depreciation	14,415	14,183	-1.6	0.21	0.26	0.05
Rent (incl. imputed)	30,810	35,242	14.4	0.45	0.65	0.20
Other costs:						
Occupiers repairs	9,147	7,544	-17.5	0.13	0.14	0.01
Sundries (incl. bad debts)	33,781	28,236	-16.4	0.49	0.52	0.03
Total fixed costs	**237,040**	**198,678**	**-16.2**	**3.43**	**3.66**	**0.23**
Management & investment income	**33,964**	**51,841**	**52.6**	**0.49**	**0.96**	**0.46**
Minus: management salaries	221	66	-70.0	0.00	0.00	0.00
Plus: farmer & spouse labour	16,018	17,125	6.9	0.23	0.32	0.08
Net farm income	**49,762**	**68,900**	**38.5**	**0.72**	**1.27**	**0.55**
Farm business income	**47,701**	**66,326**	**39.0**	**0.69**	**1.22**	**0.53**

Per £100 of gross output

	2008/09	2009/10	£ change
Number of farms	66	67	
Average number (birds/year)	69,099	54,226	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	43.71	34.52	
Hen depreciation (%)	-2.25	-0.68	
Broilers (%)	41.28	48.03	
Other poultry output (%)	12.30	12.77	
Total poultry output (%)	**95.05**	**94.64**	
Crops (%)	0.78	0.62	
Other livestock (%)	0.34	0.51	
Other output (%)	3.84	4.22	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	52.66	51.75	-0.91
Seed, fertiliser, crop costs	0.20	0.27	0.07
Vet. & medicines	1.31	1.32	0.01
Other livestock costs	6.40	5.34	-1.05
Total variable costs	**60.57**	**58.68**	**-1.89**
Total gross margin	**39.43**	**41.32**	**1.89**
Fixed costs			
Labour:			
Regular paid	11.20	8.29	-2.92
Regular unpaid	2.90	3.37	0.47
Casual labour	0.44	0.46	0.03
Power & machinery costs:			
Contract & hire	0.94	1.05	0.11
Fuel	1.38	0.96	-0.41
Electricity	2.22	1.71	-0.52
Heat	1.06	1.24	0.18
Repairs	1.52	1.63	0.11
Depreciation	2.10	2.34	0.24
Rent (incl. imputed)	4.48	5.81	1.33
Other costs:			
Occupiers repairs	1.33	1.24	-0.09
Sundries (incl. bad debts)	4.91	4.66	-0.26
Total fixed costs	**34.49**	**32.77**	**-1.72**
Management & investment income	**4.94**	**8.55**	**3.61**
Minus: management salaries	0.03	0.01	-0.02
Plus: farmer & spouse labour	2.33	2.82	0.49
Net farm income	**7.24**	**11.36**	**4.12**
Farm business income	**6.94**	**10.94**	**4.00**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2008/09	% 2009/10
Over £100,000	17	19
£50,000 to <£100,000	17	27
£25,000 to <£50,000	18	12
£12,500 to <£25,000	20	13
0 to <£12,000	9	15
-£25,000 to 0	12	9
Below -£25,000	8	4
Total	**100**	**100**

Average Poultry Numbers

	Average 2008/09	Average 2009/10
Hens in lay	19,902	12,638
Pullets	3,636	4,706
Broilers & other poultry	45,560	36,882
Total Average	**69,099**	**54,226**

Other efficiency factors

	Average 2008/09	Average 2009/10
Eggs per bird	238	248
Eggs (p/doz.)	76.06	80.05

Table 2.3 Financial results for all laying flocks

	Per farm			*Per bird (annual basis)*		
	2008/09	**2009/10**	**% change**	**2008/09**	**2009/10**	**£ change**
Number of farms	31	34		31	34	
Average number of birds/year	36,001	21,789		36,001	21,789	
	Average £ per farm			*Average £ per bird*		
Gross output						
Eggs	579,378	396,753	-31.5	16.09	18.21	2.12
Hen depreciation	-74,486	-41,950	-43.7	-2.07	-1.93	0.14
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	172	-1,449	-942.1	0.00	-0.07	-0.07
Total poultry output	**505,064**	**353,353**	**-30.0**	**14.03**	**16.22**	**2.19**
Crops	742	736	-0.8	0.02	0.03	0.01
Other livestock	572	2,751	380.6	0.02	0.13	0.11
Other output	27,047	26,027	-3.8	0.75	1.19	0.44
Total gross output	**533,426**	**382,867**	**-28.2**	**14.82**	**17.57**	**2.75**
Variable costs						
Feed	297,087	190,875	-35.8	8.25	8.76	0.51
Seed, fertiliser, crop costs	161	400	149.2	0.00	0.02	0.01
Vet. & medicines	3,758	2,851	-24.1	0.10	0.13	0.03
Other livestock costs	23,104	11,708	-49.3	0.64	0.54	-0.10
Total variable costs	**324,109**	**205,835**	**-36.5**	**9.00**	**9.45**	**0.44**
Total gross margin	**209,317**	**177,032**	**-15.4**	**5.81**	**8.12**	**2.31**
Fixed costs						
Labour:						
Regular paid	65,155	36,499	-44.0	1.81	1.68	-0.13
Regular unpaid	20,418	22,337	9.4	0.57	1.03	0.46
Casual labour	2,846	2,617	-8.0	0.08	0.12	0.04
Power & machinery costs:						
Contract & hire	3,613	2,965	-17.9	0.10	0.14	0.04
Fuel	6,955	3,883	-44.2	0.19	0.18	-0.01
Electricity	12,296	6,161	-49.9	0.34	0.28	-0.06
Heat	361	179	-50.4	0.01	0.01	0.00
Repairs	11,983	9,154	-23.6	0.33	0.42	0.09
Depreciation	11,424	13,212	15.6	0.32	0.61	0.29
Rent (incl. imputed)	27,198	24,671	-9.3	0.76	1.13	0.38
Other costs:						
Occupiers repairs	5,008	4,179	-16.5	0.14	0.19	0.05
Sundries (incl. bad debts)	30,140	20,449	-32.2	0.84	0.94	0.10
Total fixed costs	**197,397**	**146,306**	**-25.9**	**5.48**	**6.71**	**1.23**
Management & investment income	**11,920**	**30,726**	**157.8**	**0.33**	**1.41**	**1.08**
Minus: management salaries	478	82	-82.8	0.01	0.00	-0.01
Plus: farmer & spouse labour	18,314	19,409	6.0	0.51	0.89	0.38
Net farm income	**29,756**	**50,053**	**68.2**	**0.83**	**2.30**	**1.47**
Farm business income	**27,605**	**50,279**	**82.1**	**0.77**	**2.31**	**1.54**

Per £100 of gross output

	2008/09	2009/10	£change
Number of farms	31	34	
Average number (birds/year)	36,001	21,789	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	108.61	103.63	
Hen depreciation (%)	-13.96	-10.96	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.03	-0.38	
Total poultry output (%)	**94.68**	**92.29**	
Crops (%)	0.14	0.19	
Other livestock (%)	0.11	0.72	
Other output (%)	5.07	6.80	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	55.69	49.85	-5.84
Seed, fertiliser, crop costs	0.03	0.10	0.07
Vet. & medicines	0.70	0.74	0.04
Other livestock costs	4.33	3.06	-1.27
Total variable costs	**60.76**	**53.76**	**-7.00**
Total gross margin	**39.24**	**46.24**	**7.00**
Fixed costs			
Labour:			
Regular paid	12.21	9.53	-2.68
Regular unpaid	3.83	5.83	2.01
Casual labour	0.53	0.68	0.15
Power & machinery costs:			
Contract & hire	0.68	0.77	0.10
Fuel	1.30	1.01	-0.29
Electricity	2.31	1.61	-0.70
Heat	0.07	0.05	-0.02
Repairs	2.25	2.39	0.14
Depreciation	2.14	3.45	1.31
Rent (incl. imputed)	5.10	6.44	1.35
Other costs:			
Occupiers repairs	0.94	1.09	0.15
Sundries (incl. bad debts)	5.65	5.34	-0.31
Total fixed costs	**37.01**	**38.21**	**1.21**
Management & investment income	**2.23**	**8.03**	**5.79**
Minus: management salaries	0.09	0.02	-0.07
Plus: farmer & spouse labour	3.43	5.07	1.64
Net farm income	**5.58**	**13.07**	**7.49**
Farm business income	**5.18**	**13.13**	**7.96**

Pence per dozen eggs

	2008/09	2009/10
Gross output		
Eggs	73.79	79.96
Other poultry output	-9.46	-8.75
Other output	3.61	5.95
Total gross output	**67.94**	**77.16**
Variable costs		
Feed	37.84	38.47
Other variable costs	3.44	3.01
Total variable costs	**41.28**	**41.48**
Total gross margin	**26.66**	**35.68**
Total fixed costs	**25.14**	**29.48**
Management & investment income	**1.52**	**6.19**
Net farm income	**3.79**	**10.09**
Farm business income	**3.52**	**10.13**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2008/09	% 2009/10
Over £100,000	6	15
£50,000 to <£100,000	13	21
£25,000 to <£50,000	23	12
£12,500 to <£25,000	23	21
0 to <£12,000	16	18
-£25,000 to 0	16	15
Below -£25,000	3	0
Total	**100**	**100**

Average Poultry Numbers

	Average 2008/09	Average 2009/10
Hens in lay	34,645	21,109
Pullets	1,357	680
Broilers & other poultry	0	0
Total Average	**36,001**	**21,789**

Other efficiency factors

	Average 2008/09	Average 2009/10
Eggs per bird	272	282
Eggs (p/doz.)	73.79	79.96

Table 2.4 Financial results for all non-laying flocks

	Per farm			*Per bird (annual basis)*		
	2008/09	**2009/10**	**% change**	**2008/09**	**2009/10**	**£ change**
Number of farms	31	30		31	30	
Average number of birds/year	93,897	92,270		93,897	92,270	
	Average £ per farm			*Average £ per bird*		
Gross output						
Eggs	0	0	0.0	0.00	0.00	0.00
Hen depreciation	0	0	0.0	0.00	0.00	0.00
Broilers	578,387	652,143	12.8	6.16	7.07	0.91
Other poultry output	123,253	155,560	26.2	1.31	1.69	0.37
Total poultry output	**701,639**	**807,703**	**15.1**	**7.47**	**8.75**	**1.28**
Crops	9,972	7,592	-23.9	0.11	0.08	-0.02
Other livestock	4,404	3,757	-14.7	0.05	0.04	-0.01
Other output	15,679	26,204	67.1	0.17	0.28	0.12
Total gross output	**731,694**	**845,257**	**15.5**	**7.79**	**9.16**	**1.37**
Variable costs						
Feed	421,230	468,381	11.2	4.49	5.08	0.59
Seed, fertiliser, crop costs	2,545	3,120	22.6	0.03	0.03	0.01
Vet. & medicines	7,407	10,400	40.4	0.08	0.11	0.03
Other livestock costs	59,415	53,482	-10.0	0.63	0.58	-0.05
Total variable costs	**490,597**	**535,383**	**9.1**	**5.22**	**5.80**	**0.58**
Total gross margin	**241,097**	**309,874**	**28.5**	**2.57**	**3.36**	**0.79**
Fixed costs						
Labour:						
Regular paid	42,863	45,827	6.9	0.46	0.50	0.04
Regular unpaid	17,502	19,000	8.6	0.19	0.21	0.02
Casual labour	2,953	2,830	-4.2	0.03	0.03	0.00
Power & machinery costs:						
Contract & hire	9,305	10,645	14.4	0.10	0.12	0.02
Fuel	7,202	7,224	0.3	0.08	0.08	0.00
Electricity	14,204	12,634	-11.0	0.15	0.14	-0.01
Heat	14,389	16,236	12.8	0.15	0.18	0.02
Repairs	6,230	10,825	73.8	0.07	0.12	0.05
Depreciation	12,155	13,758	13.2	0.13	0.15	0.02
Rent (incl. imputed)	30,194	47,007	55.7	0.32	0.51	0.19
Other costs:						
Occupiers repairs	12,878	11,567	-10.2	0.14	0.13	-0.01
Sundries (incl. bad debts)	25,835	32,997	27.7	0.28	0.36	0.08
Total fixed costs	**195,709**	**230,551**	**17.8**	**2.08**	**2.50**	**0.41**
Management & investment income	**45,388**	**79,323**	**74.8**	**0.48**	**0.86**	**0.38**
Minus: management salaries	26	52	102.9	0.00	0.00	0.00
Plus: farmer & spouse labour	15,355	15,013	-2.2	0.16	0.16	0.00
Net farm income	**60,717**	**94,284**	**55.3**	**0.65**	**1.02**	**0.38**
Farm business income	**58,329**	**91,260**	**56.5**	**0.62**	**0.99**	**0.37**

Per £100 of gross output

	2008/09	2009/10	£ change
Number of farms	31	30	
Average number (birds/year)	93,897	92,270	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	0.00	0.00	
Hen depreciation (%)	0.00	0.00	
Broilers (%)	79.05	77.15	
Other poultry output (%)	16.84	18.40	
Total poultry output (%)	**95.89**	**95.56**	
Crops (%)	1.36	0.90	
Other livestock (%)	0.60	0.44	
Other output (%)	2.14	3.10	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	57.57	55.41	-2.16
Seed, fertiliser, crop costs	0.35	0.37	0.02
Vet. & medicines	1.01	1.23	0.22
Other livestock costs	8.12	6.33	-1.79
Total variable costs	**67.05**	**63.34**	**-3.71**
Total gross margin	**32.95**	**36.66**	**3.71**
Fixed costs			
Labour:			
Regular paid	5.86	5.42	-0.44
Regular unpaid	2.39	2.25	-0.14
Casual labour	0.40	0.33	-0.07
Power & machinery costs:			
Contract & hire	1.27	1.26	-0.01
Fuel	0.98	0.85	-0.13
Electricity	1.94	1.49	-0.45
Heat	1.97	1.92	-0.05
Repairs	0.85	1.28	0.43
Depreciation	1.66	1.63	-0.03
Rent (incl. imputed)	4.13	5.56	1.43
Other costs:			
Occupiers repairs	1.76	1.37	-0.39
Sundries (incl. bad debts)	3.53	3.90	0.37
Total fixed costs	**26.75**	**27.28**	**0.53**
Management & investment income	**6.20**	**9.38**	**3.18**
Minus: management salaries	0.00	0.01	0.00
Plus: farmer & spouse labour	2.10	1.78	-0.32
Net farm income	**8.30**	**11.15**	**2.86**
Farm business income	**7.97**	**10.80**	**2.82**

Farm Business Income (FBI) per farm
(% distribution by number of farms)

	% 2008/09	% 2009/10
Over £100,000	23	23
£50,000 to <£100,000	16	37
£25,000 to <£50,000	19	13
£12,500 to <£25,000	19	7
0 to <£12,000	6	13
-£25,000 to 0	10	3
Below -£25,000	6	3
Total	**100**	**100**

Average Poultry Numbers

	Average 2008/09	Average 2009/10
Hens in lay	0	0
Pullets	4,986	9,687
Broilers & other poultry	88,911	82,583
Total Average	**93,897**	**92,270**

Table 2.5 Financial results for laying flocks with mixed production systems including battery, barn and deep litter hens

	Per farm			Per bird (annual basis)		
	2008/09	**2009/10**	**% change**	**2008/09**	**2009/10**	**£ change**
Number of farms	15	13		15	13	
Average number of birds/year	60,425	35,273		60,425	35,273	
	Average £ per farm			***Average £ per bird***		
Gross output (%)						
Eggs	932,606	562,400	-39.7	15.43	15.94	0.51
Hen depreciation	-118,509	-59,874	-49.5	-1.96	-1.70	0.26
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	0	0	0.0	0.00	0.00	0.00
Total poultry output	**814,098**	**502,526**	**-38.3**	**13.47**	**14.25**	**0.77**
Crops	983	812	-17.4	0.02	0.02	0.01
Other livestock	0	2,622	0.0	0.00	0.07	0.07
Other output	50,210	24,790	-50.6	0.83	0.70	-0.13
Total gross output	**865,291**	**530,751**	**-38.7**	**14.32**	**15.05**	**0.73**
Variable costs						
Feed	487,209	272,101	-44.2	8.06	7.71	-0.35
Seed, fertiliser, crop costs	144	103	-28.1	0.00	0.00	0.00
Vet. & medicines	6,127	3,698	-39.6	0.10	0.10	0.00
Other livestock costs	42,223	22,195	-47.4	0.70	0.63	-0.07
Total variable costs	**535,703**	**298,096**	**-44.4**	**8.87**	**8.45**	**-0.41**
Total gross margin	**329,588**	**232,655**	**-29.4**	**5.45**	**6.60**	**1.14**
Fixed costs						
Labour:						
Regular paid	118,511	57,814	-51.2	1.96	1.64	-0.32
Regular unpaid	22,125	25,469	15.1	0.37	0.72	0.36
Casual labour	4,558	3,203	-29.7	0.08	0.09	0.02
Power & machinery costs:						
Contract & hire	4,777	2,876	-39.8	0.08	0.08	0.00
Fuel	12,256	6,834	-44.2	0.20	0.19	-0.01
Electricity	21,987	11,603	-47.2	0.36	0.33	-0.03
Heat	538	239	-55.6	0.01	0.01	0.00
Repairs	20,529	11,026	-46.3	0.34	0.31	-0.03
Depreciation	14,367	10,679	-25.7	0.24	0.30	0.06
Rent (incl. imputed)	38,275	16,446	-57.0	0.63	0.47	-0.17
Other costs:						
Occupiers repairs	8,068	4,945	-38.7	0.13	0.14	0.01
Sundries (incl. bad debts)	53,137	35,307	-33.6	0.88	1.00	0.12
Total fixed costs	**319,129**	**186,441**	**-41.6**	**5.28**	**5.29**	**0.00**
Management & investment income	**10,459**	**46,214**	**341.8**	**0.17**	**1.31**	**1.14**
Minus: management salaries	744	133	-82.2	0.01	0.00	-0.01
Plus: farmer & spouse labour	18,025	20,531	13.9	0.30	0.58	0.28
Net farm income	**27,740**	**66,612**	**140.1**	**0.46**	**1.89**	**1.43**
Farm business income	**29,142**	**73,577**	**152.5**	**0.48**	**2.09**	**1.60**

Per £100 of gross output

	2008/09	2009/10	£ change
Number of farms	15	13	
Average number (birds/year)	60,425	35,273	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	107.78	105.96	
Hen depreciation (%)	-13.70	-11.28	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.00	0.00	
Total poultry output (%)	**94.08**	**94.68**	
Crops (%)	0.11	0.15	
Other livestock (%)	0.00	0.49	
Other output (%)	5.80	4.67	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	56.31	51.27	-5.04
Seed, fertiliser, crop costs	0.02	0.02	0.00
Vet. & medicines	0.71	0.70	-0.01
Other livestock costs	4.88	4.18	-0.70
Total variable costs	**61.91**	**56.16**	**-5.75**
Total gross margin	**38.09**	**43.84**	**5.75**
Fixed costs			
Labour:			
Regular paid	13.70	10.89	-2.80
Regular unpaid	2.56	4.80	2.24
Casual labour	0.53	0.60	0.08
Power & machinery costs:			
Contract & hire	0.55	0.54	-0.01
Fuel	1.42	1.29	-0.13
Electricity	2.54	2.19	-0.35
Heat	0.06	0.05	-0.02
Repairs	2.37	2.08	-0.29
Depreciation	1.66	2.01	0.35
Rent (incl. imputed)	4.42	3.10	-1.32
Other costs:			
Occupiers repairs	0.93	0.93	0.00
Sundries (incl. bad debts)	6.14	6.65	0.51
Total fixed costs	**36.88**	**35.13**	**-1.75**
Management & investment income	**1.21**	**8.71**	**7.50**
Minus: management salaries	0.09	0.03	-0.06
Plus: farmer & spouse labour	2.08	3.87	1.79
Net farm income	**3.21**	**12.55**	**9.34**
Farm business income	**3.37**	**13.86**	**10.49**

Pence per dozen eggs

	2008/09	2009/10
Gross output		
Eggs	70.29	71.10
Other poultry output	-8.93	-7.57
Other output	3.86	3.57
Total gross output	**65.21**	**67.10**
Variable costs		
Feed	36.72	34.40
Other variable costs	3.65	3.29
Total variable costs	**40.37**	**37.68**
Total gross margin	**24.84**	**29.41**
Total fixed costs	**24.05**	**23.57**
Management & investment income	**0.79**	**5.84**
Net farm income	**2.09**	**8.42**
Farm business income	**2.20**	**9.30**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2008/09	% 2009/10
Over £100,000	13	23
£50,000 to <£100,000	7	23
£25,000 to <£50,000	20	8
£12,500 to <£25,000	20	15
0 to <£12,000	20	23
-£25,000 to 0	13	8
Below -£25,000	7	0
Total	**100**	**100**

Average Poultry Numbers

	Average 2008/09	Average 2009/10
Hens in lay	58,152	33,726
Pullets	2,273	1,547
Broilers & other poultry	0	0
Total Average	**60,425**	**35,273**

Other efficiency factors

	Average 2008/09	Average 2009/10
Eggs per bird	274	281
Eggs (p/doz.)	70.29	71.10

Table 2.6 Financial results for laying flocks with free range hens

	Per farm			*Per bird (annual basis)*		
	2008/09	**2009/10**	**% change**	**2008/09**	**2009/10**	**£ change**
Number of farms	16	21		16	21	
Average number of birds/year	10,969	13,600		10,969	13,600	
	Average £ per farm			*Average £ per bird*		
Gross output (%)						
Eggs	217,354	296,148	36.3	19.81	21.78	1.96
Hen depreciation	-29,368	-31,065	5.8	-2.68	-2.28	0.39
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	348	-2,329	-768.4	0.03	-0.17	-0.20
Total poultry output	**188,335**	**262,754**	**39.5**	**17.17**	**19.32**	**2.15**
Crops	495	689	39.3	0.05	0.05	0.01
Other livestock	1,159	2,830	144.1	0.11	0.21	0.10
Other output	3,308	26,779	709.5	0.30	1.97	1.67
Total gross output	**193,297**	**293,051**	**51.6**	**17.62**	**21.55**	**3.93**
Variable costs						
Feed	102,230	141,543	38.5	9.32	10.41	1.09
Seed, fertiliser, crop costs	178	581	226.1	0.02	0.04	0.03
Vet. & medicines	1,329	2,337	75.8	0.12	0.17	0.05
Other livestock costs	3,508	5,340	52.2	0.32	0.39	0.07
Total variable costs	**107,246**	**149,801**	**39.7**	**9.78**	**11.01**	**1.24**
Total gross margin	**86,051**	**143,250**	**66.5**	**7.84**	**10.53**	**2.69**
Fixed costs						
Labour:						
Regular paid	10,470	23,553	125.0	0.95	1.73	0.78
Regular unpaid	18,668	20,435	9.5	1.70	1.50	-0.20
Casual labour	1,091	2,261	107.2	0.10	0.17	0.07
Power & machinery costs:						
Contract & hire	2,420	3,019	24.8	0.22	0.22	0.00
Fuel	1,522	2,091	37.3	0.14	0.15	0.01
Electricity	2,363	2,856	20.9	0.22	0.21	-0.01
Heat	179	142	-20.5	0.02	0.01	-0.01
Repairs	3,224	8,017	148.7	0.29	0.59	0.30
Depreciation	8,409	14,750	75.4	0.77	1.08	0.32
Rent (incl. imputed)	15,845	29,666	87.2	1.44	2.18	0.74
Other costs:						
Occupiers repairs	1,871	3,714	98.5	0.17	0.27	0.10
Sundries (incl. bad debts)	6,572	11,425	73.9	0.60	0.84	0.24
Total fixed costs	**72,634**	**121,930**	**67.9**	**6.62**	**8.97**	**2.34**
Management & investment income	**13,416**	**21,320**	**58.9**	**1.22**	**1.57**	**0.34**
Minus: management salaries	204	51	-74.8	0.02	0.00	-0.01
Plus: farmer & spouse labour	18,610	18,728	0.6	1.70	1.38	-0.32
Net farm income	**31,822**	**39,996**	**25.7**	**2.90**	**2.94**	**0.04**
Farm business income	**26,030**	**36,129**	**38.8**	**2.37**	**2.66**	**0.28**

Per £100 of gross output

	2008/09	2009/10	£ change
Number of farms	16	21	
Average number (birds/year)	10,969	13,600	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	112.45	101.06	
Hen depreciation (%)	-15.19	-10.60	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.18	-0.79	
Total poultry output (%)	**97.43**	**89.66**	
Crops (%)	0.26	0.24	
Other livestock (%)	0.60	0.97	
Other output (%)	1.71	9.14	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	52.89	48.30	-4.59
Seed, fertiliser, crop costs	0.09	0.20	0.11
Vet. & medicines	0.69	0.80	0.11
Other livestock costs	1.81	1.82	0.01
Total variable costs	**55.48**	**51.12**	**-4.36**
Total gross margin	**44.52**	**48.88**	**4.36**
Fixed costs			
Labour:			
Regular paid	5.42	8.04	2.62
Regular unpaid	9.66	6.97	-2.68
Casual labour	0.56	0.77	0.21
Power & machinery costs:			
Contract & hire	1.25	1.03	-0.22
Fuel	0.79	0.71	-0.07
Electricity	1.22	0.97	-0.25
Heat	0.09	0.05	-0.04
Repairs	1.67	2.74	1.07
Depreciation	4.35	5.03	0.68
Rent (incl. imputed)	8.20	10.12	1.93
Other costs:			
Occupiers repairs	0.97	1.27	0.30
Sundries (incl. bad debts)	3.40	3.90	0.50
Total fixed costs	**37.58**	**41.61**	**4.03**
Management & investment income	**6.94**	**7.28**	**0.33**
Minus: management salaries	0.11	0.02	-0.09
Plus: farmer & spouse labour	9.63	6.39	-3.24
Net farm income	**16.46**	**13.65**	**-2.81**
Farm business income	**13.47**	**12.33**	**-1.14**

Pence per dozen eggs

	2008/09	2009/10
Gross output		
Eggs	94.53	93.38
Other poultry output	-12.62	-10.53
Other output	2.16	9.55
Total gross output	**84.06**	**92.40**
Variable costs		
Feed	44.46	44.63
Other variable costs	2.18	2.60
Total variable costs	**46.64**	**47.23**
Total gross margin	**37.42**	**45.17**
Total fixed costs	**31.59**	**38.45**
Management & investment income	**5.83**	**6.72**
Net farm income	**13.84**	**12.61**
Farm business income	**11.32**	**11.39**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2008/09	% 2009/10
Over £100,000	0	10
£50,000 to <£100,000	19	19
£25,000 to <£50,000	25	14
£12,500 to <£25,000	25	24
0 to <£12,000	13	14
-£25,000 to 0	19	19
Below -£25,000	0	0
Total	**100**	**100**

Average Poultry Numbers

	Average 2008/09	Average 2009/10
Hens in lay	10,552	13,447
Pullets	418	153
Broilers & other poultry	0	0
Total Average	**10,969**	**13,600**

Other efficiency factors

	Average 2008/09	Average 2009/10
Eggs per bird	262	283
Eggs (p/doz.)	94.53	93.38

Table 2.7 Financial results for non-contract broilers

	Per farm			*Per bird (annual basis)*		
	2008/09	**2009/10**	**% change**	**2008/09**	**2009/10**	**£ change**
Number of farms	15	15		15	15	
Average number of birds/year	129,232	138,413		129,232	138,413	
Throughput of birds/year	799,809	947,477		799,809	947,477	
	Average £ per farm			*Average £ per bird*		
Gross output (%)						
Eggs	0	0	0.0	0.00	0.00	0.00
Hen depreciation	0	0	0.0	0.00	0.00	0.00
Broilers	1,076,264	1,273,759	18.4	1.35	1.34	0.00
Other poultry output	213	434	104.0	0.00	0.00	0.00
Total poultry output	**1,076,477**	**1,274,193**	**18.4**	**1.35**	**1.34**	**0.00**
Crops	10,795	5,826	-46.0	0.01	0.01	-0.01
Other livestock	7,108	6,521	-8.3	0.01	0.01	0.00
Other output	6,903	13,180	90.9	0.01	0.01	0.01
Total gross output	**1,101,282**	**1,299,721**	**18.0**	**1.38**	**1.37**	**-0.01**
Variable costs						
Feed	812,447	903,094	11.2	1.02	0.95	-0.06
Seed, fertiliser, crop costs	2,358	2,888	22.4	0.00	0.00	0.00
Vet. & medicines	13,522	16,854	24.6	0.02	0.02	0.00
Other livestock costs	26,564	34,525	30.0	0.03	0.04	0.00
Total variable costs	**854,892**	**957,361**	**12.0**	**1.07**	**1.01**	**-0.06**
Total gross margin	**246,390**	**342,360**	**39.0**	**0.31**	**0.36**	**0.05**
Fixed costs						
Labour:						
Regular paid	30,396	23,873	-21.5	0.04	0.03	-0.01
Regular unpaid	17,235	19,827	15.0	0.02	0.02	0.00
Casual labour	2,718	2,961	9.0	0.00	0.00	0.00
Power & machinery costs:						
Contract & hire	14,046	15,744	12.1	0.02	0.02	0.00
Fuel	10,307	10,021	-2.8	0.01	0.01	0.00
Electricity	18,106	16,950	-6.4	0.02	0.02	0.00
Heat	20,859	25,476	22.1	0.03	0.03	0.00
Repairs	6,297	12,009	90.7	0.01	0.01	0.00
Depreciation	9,325	10,129	8.6	0.01	0.01	0.00
Rent (incl. imputed)	41,173	47,294	14.9	0.05	0.05	0.00
Other costs:						
Occupiers repairs	7,114	8,807	23.8	0.01	0.01	0.00
Sundries (incl. bad debts)	18,712	24,479	30.8	0.02	0.03	0.00
Total fixed costs	**196,289**	**217,568**	**10.8**	**0.25**	**0.23**	**-0.02**
Management & investment income	**50,101**	**124,792**	**149.1**	**0.06**	**0.13**	**0.07**
Minus: management salaries	0	0	0.0	0.00	0.00	0.00
Plus: farmer & spouse labour	15,622	16,062	2.8	0.02	0.02	0.00
Net farm income	**65,724**	**140,854**	**114.3**	**0.08**	**0.15**	**0.07**
Farm business income	**57,830**	**138,823**	**140.1**	**0.07**	**0.15**	**0.07**

Per £100 of gross output

	2008/09	2009/10	£ change
Number of farms	15	15	
Average number (birds/year)	129,232	138,413	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	0.00	0.00	
Hen depreciation (%)	0.00	0.00	
Broilers (%)	97.73	98.00	
Other poultry output (%)	0.02	0.03	
Total poultry output (%)	**97.75**	**98.04**	
Crops (%)	0.98	0.45	
Other livestock (%)	0.65	0.50	
Other output (%)	0.63	1.01	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	73.77	69.48	-4.29
Seed, fertiliser, crop costs	0.21	0.22	0.01
Vet. & medicines	1.23	1.30	0.07
Other livestock costs	2.41	2.66	0.24
Total variable costs	**77.63**	**73.66**	**-3.97**
Total gross margin	**22.37**	**26.34**	**3.97**
Fixed costs			
Labour:			
Regular paid	2.76	1.84	-0.92
Regular unpaid	1.57	1.53	-0.04
Casual labour	0.25	0.23	-0.02
Power & machinery costs:			
Contract & hire	1.28	1.21	-0.06
Fuel	0.94	0.77	-0.16
Electricity	1.64	1.30	-0.34
Heat	1.89	1.96	0.07
Repairs	0.57	0.92	0.35
Depreciation	0.85	0.78	-0.07
Rent (incl. imputed)	3.74	3.64	-0.10
Other costs:			
Occupiers repairs	0.65	0.68	0.03
Sundries (incl. bad debts)	1.70	1.88	0.18
Total fixed costs	**17.82**	**16.74**	**-1.08**
Management & investment income	**4.55**	**9.60**	**5.05**
Minus: management salaries	0.00	0.00	0.00
Plus: farmer & spouse labour	1.42	1.24	-0.18
Net farm income	**5.97**	**10.84**	**4.87**
Farm business income	**5.25**	**10.68**	**5.43**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2008/09	% 2009/10
Over £100,000	27	33
£50,000 to <£100,000	13	47
£25,000 to <£50,000	27	0
£12,500 to <£25,000	13	13
0 to <£12,000	7	7
-£25,000 to 0	0	0
Below -£25,000	13	0
Total	**100**	**100**

Other efficiency factors

	Average 2008/09	Average 2009/10
Broiler sale price (£/bird)	1.70	1.68
Broiler purchase price (£/bird)	0.29	0.30
Average number of crops/year	6.2	6.8

Table 2.8 Balance sheet data for 2009/10 - specialist poultry farms

Group	All specialist poultry farms		Laying flocks, battery barn & deep litter		Free range layers	
Number of farms	67		13		21	
Financial year	**2009/10**		**2009/10**		**2009/10**	
	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed assets						
Land, buildings & SPS	490,742	549,149	357,038	363,577	366,472	399,012
Breeding livestock	1,951	1,934	3,086	2,478	2,796	3,256
Machinery	70,758	79,405	48,300	65,561	76,089	83,543
Miscellaneous business assets	2,214	2,226	687	687	0	0
Total fixed assets	**565,665**	**632,713**	**409,111**	**432,303**	**445,356**	**485,811**
Current assets						
Crops & trading livestock	39,041	43,635	61,352	66,716	18,795	20,358
Feedstuffs & goods in store	6,219	5,819	4,962	3,806	2,645	2,363
Liquid assets	87,846	79,919	73,928	81,003	34,786	31,746
Total current assets	**133,106**	**129,372**	**140,243**	**151,525**	**56,226**	**54,467**
Total assets	**698,771**	**762,085**	**549,354**	**583,828**	**501,583**	**540,278**
Liabilities						
Bank term loans	68,372	104,826	48,137	43,458	72,919	89,767
Other loans	47,808	44,803	258	10,267	35,446	33,858
Bank overdraft	41,484	24,608	19,074	14,497	30,426	35,665
Other short term loans	56,474	44,749	45,062	29,666	35,241	27,713
Total external liabilities	**214,138**	**218,986**	**112,532**	**97,888**	**174,033**	**187,003**
Net worth	**484,633**	**543,100**	**436,822**	**485,940**	**327,550**	**353,275**
Percentage equity (%)	**69.4%**	**71.3%**	**79.5%**	**83.2%**	**65.3%**	**65.4%**

Table 2.9 Comparison of net worth and percentage equity by farm type for 2009/10

	Average Assets	Average Liabilities	Average Net Worth	Average % Equity
Defra main farm type				
Lowland cattle & sheep	737,496	57,022	680,474	92.3%
Cereals	1,729,603	141,304	1,588,299	91.8%
Mixed	1,179,334	118,375	1,060,959	90.0%
General cropping	1,686,863	184,431	1,502,432	89.1%
Dairy	1,183,191	193,547	989,644	83.6%
Horticulture	634,457	115,912	518,545	81.7%
Pigs	747,046	271,202	475,844	63.7%
Poultry	730,428	216,562	513,866	70.4%
All businesses	**1,173,612**	**127,578**	**1,046,034**	**89.1%**

Group	*Broilers, non contract*	
Number of farms	15	
Financial year	**2009/10**	
	Opening	Closing
Assets		
Fixed assets		
Land, buildings & SPS	597,071	621,375
Breeding livestock	0	0
Machinery	48,196	55,562
Miscellaneous business assets	1,564	1,619
Total fixed assets	**646,832**	**678,556**
Current assets		
Crops & trading livestock	41,638	54,564
Feedstuffs & goods in store	17,549	17,046
Liquid assets	110,370	131,863
Total current assets	**169,557**	**203,473**
Total assets	**816,389**	**882,029**
Liabilities		
Bank term loans	24,157	30,568
Other loans	51,150	46,655
Bank overdraft	9,182	5,547
Other short term loans	71,607	61,287
Total external liabilities	**156,096**	**144,057**
Net worth	**660,293**	**737,972**
Percentage equity (%)	**80.9%**	**83.7%**

Table 2.10 Distribution of tenant's type capital (%)

	Specialist poultry	**Laying flocks, battery, barn & deep litter**	**Free range layers**	**Broilers, non contract**
Crops & tillages	0.6	0.5	0.3	1.1
Stores	2.9	2.1	1.8	7.3
Machinery	35.8	27.6	57.8	21.8
Livestock	20.0	31.9	16.1	19.1
Other	40.8	37.9	24.0	50.8
Total	**100.0**	**100.0**	**100.0**	**100.0**
Tenant's type capital (£)	**209,929**	**206,277**	**138,079**	**238,201**

Table 2.11 Gross margin for all laying flocks

	Per bird (annual basis)			*Per £100 of gross output*		
	2008/09	**2009/10**	**£ change**	**2008/09**	**2009/10**	**£ change**
Number of farms	53	53				
Average number of birds/year	18,021	11,450				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Eggs	16.35	18.26	1.91			
Hen depreciation	-2.06	-2.18	-0.12			
Other poultry output	0.01	0.10	0.09			
Total output	**14.30**	**16.18**	**1.88**	**100.00**	**100.00**	
Variable costs						
Feed	8.45	8.66	0.21	59.06	53.50	-5.56
Vet. & medicines	0.13	0.13	0.00	0.91	0.78	-0.13
Other livestock costs	0.57	0.54	-0.03	3.95	3.33	-0.62
Other variable costs	0.00	0.03	0.03	0.00	0.21	0.21
Total variable costs	**9.14**	**9.36**	**0.21**	**63.93**	**57.83**	**-6.11**
Total gross margin	**5.16**	**6.82**	**1.67**	**36.07**	**42.17**	**6.11**

Table 2.12 Gross margin for laying flocks with mixed production systems including battery, barn and deep litter hens

	Per bird (annual basis)			*Per £100 of gross output*		
	2008/09	**2009/10**	**£ change**	**2008/09**	**2009/10**	**£ change**
Number of farms	20	19				
Average number of birds/year	27,005	16,940				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Eggs	15.63	16.47	0.85			
Hen depreciation	-1.99	-1.76	0.23			
Other poultry output	0.00	0.00	0.00			
Total output	**13.64**	**14.71**	**1.07**	**100.00**	**100.00**	
Variable costs						
Feed	8.11	7.80	-0.31	59.46	53.03	-6.42
Vet. & medicines	0.10	0.09	-0.01	0.73	0.58	-0.14
Other livestock costs	0.70	0.69	-0.01	5.12	4.69	-0.43
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00
Total variable costs	**8.91**	**8.58**	**-0.33**	**65.30**	**58.31**	**-6.99**
Total gross margin	**4.73**	**6.13**	**1.40**	**34.70**	**41.69**	**6.99**

Table 2.13 Gross margin for laying flocks with free range hens

	Per bird (annual basis)			*Per £100 of gross output*		
	2008/09	**2009/10**	**£ change**	**2008/09**	**2009/10**	**£ change**
Number of farms	33	34				
Average number of birds/year	10,671	7,973				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Eggs	17.85	20.67	2.81			
Hen depreciation	-2.20	-2.74	-0.54			
Other poultry output	0.02	0.23	0.21			
Total output	**15.67**	**18.16**	**2.49**	**100.00**	**100.00**	
Variable costs						
Feed	9.14	9.81	0.67	58.34	54.02	-4.33
Vet. & medicines	0.20	0.18	-0.02	1.25	1.00	-0.26
Other livestock costs	0.29	0.33	0.04	1.86	1.84	-0.01
Other variable costs	0.00	0.08	0.08	0.01	0.44	0.43
Total variable costs	**9.63**	**10.40**	**0.77**	**61.46**	**57.30**	**-4.16**
Total gross margin	**6.04**	**7.75**	**1.71**	**38.54**	**42.70**	**4.16**

Table 2.14 Gross margin per dozen eggs for all laying flocks (annual basis)

	Layers		**Laying flocks, battery barn & deep litter**		**Free range Layers**	
	2008/09	**2009/10**	**2008/09**	**2009/10**	**2008/09**	**2009/10**
Number of farms	53	53	20	19	33	34
No of dozen eggs	385,487	256,426	590,873	378,774	217,446	178,948
Average egg yield/bird	268	277	273	281	258	272
Average egg price p/doz	76.44	81.53	71.42	73.67	87.61	92.07
	Average pence per dozen (annual basis)					
Gross output						
Eggs	76.44	81.53	71.42	73.67	87.61	92.07
Hen depreciation	-9.62	-9.72	-9.09	-7.88	-10.79	-12.19
Other poultry output	0.03	0.43	0.00	0.00	0.09	1.02
Total output	**66.85**	**72.25**	**62.32**	**65.79**	**76.91**	**80.90**
Variable costs						
Feed	39.48	38.66	37.06	34.89	44.87	43.70
Vet. & medicines	0.61	0.56	0.45	0.38	0.96	0.81
Other livestock costs	2.64	2.41	3.19	3.09	1.43	1.49
Other variable costs	0.00	0.15	0.00	0.00	0.01	0.36
Total variable costs	**42.74**	**41.78**	**40.70**	**38.36**	**47.27**	**46.35**
Total gross margin	**24.11**	**30.47**	**21.62**	**27.43**	**29.64**	**34.55**

Table 2.15 Gross margin for non-contract broilers and table chicken

	Per bird (annual basis)			*Per £100 of gross output*		
	2008/09	**2009/10**	**£ change**	**2008/09**	**2009/10**	**£ change**
Number of farms	19	21				
Average number of birds/year	78,045	83,615				
Throughput of birds/year	473,307	566,893				
Average number of crops/year	6.06	6.78				
Average sale price (broilers) - £/bird	1.73	1.70				
Average purchase price (broilers) - £/bird	0.29	0.30				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Broilers	1.45	1.39	-0.05			
Total output	**1.45**	**1.39**	**-0.05**	**100.00**	**100.00**	
Variable costs						
Feed	1.04	0.97	-0.07	71.84	69.34	-2.50
Vet. & medicines	0.02	0.02	0.00	1.25	1.27	0.02
Other livestock costs	0.04	0.04	0.00	2.98	2.86	-0.12
Other variable costs	0.00	0.01	0.01	0.05	0.66	0.61
Total variable costs	**1.10**	**1.03**	**-0.07**	**76.12**	**74.14**	**-1.99**
Total gross margin	**0.35**	**0.36**	**0.02**	**23.88**	**25.86**	**1.99**

Table 2.16 Gross margin for turkey production

	Per bird (annual basis)			*Per £100 of gross output*		
	2008/09	**2009/10**	**£ change**	**2008/09**	**2009/10**	**£ change**
Number of farms	20	18				
Average number of birds/year	1,511	627				
Throughput of birds/year	3,277	1,343				
Average sale price (turkeys) - £/bird	28.59	31.96				
Average purchase price (turkeys) - £/bird	3.14	3.78				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Other poultry output	24.57	26.26	1.69			
Total output	**24.57**	**26.26**	**1.69**	**100.00**	**100.00**	
Variable costs						
Feed	4.47	6.26	1.79	18.20	23.84	5.63
Vet. & medicines	0.08	0.12	0.04	0.31	0.44	0.14
Other livestock costs	8.10	2.37	-5.73	32.97	9.01	-23.95
Other variable costs	0.07	0.11	0.04	0.27	0.42	0.15
Total variable costs	**12.71**	**8.85**	**-3.86**	**51.75**	**33.71**	**-18.04**
Total gross margin	**11.86**	**17.41**	**5.55**	**48.25**	**66.29**	**18.04**

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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) plus profit/loss on sale of assets 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 grower 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)
Defra	Department for Environment, Food and Rural Affairs
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
- Non-agricultural output historically not accounted for in Net Farm Income

Less:

- Net interest payments
- Ownership charges [buildings & works depreciation; insurance of farm buildings; landlord-type repairs and upkeep]
- Non-agricultural input costs historically not accounted for in Net Farm Income
- Director's remuneration

Equals:

- Farm Business Income

Appendix 1: Regulation of and codes of conduct for poultry production

Laying hens

In 1999 the Welfare of Laying Hens Directive (1999/74/EC)(EC, 1999) was adopted and this was implemented in the UK by domestic legislation such as Welfare of Farm animals (England)(Amendment) Regulations 2002 (SI 2002 No.1646), later amended by the Welfare of Farmed Animals (England) Regulations 2007 (SI 2007 No.2078), which came into force on 1st October 2007 and by similar legislation from the Devolved Administrations. The legislation set out the following:

- Minimum standards for non-cage systems (barn, free-range). **These came into effect on 1 January 2007.**
- A ban on the barren battery cage from 2012. From 1 January 2003, it has been illegal to install new barren battery cage systems, 'enriched' cages must be used instead.
- Minimum standards for 'enriched' cages, including an increased space allowance, a claw shortening device, perch, next boxes and litter for scratching and pecking.

A Defra research exercise into the cost of compliance with these new regulations (see House of Commons, 2002) estimated one off costs for a medium sized flock of 100,000 birds at £1.39 millions and the cost for a flock of 400,000 birds of £5.57 millions. The total cost to the industry is estimated by Defra study to be around £400 millions.

Broilers

Defra announced on 8 May 2007 (Defra,2007i) that agreement had been reached on the contents of an EC directive (EC,2007) to regulate the conditions in which chickens reared for meat are kept from the time chicks are brought on to production sites, until they leave for slaughter. The proposed new measures include, amongst other things:

- The introduction of limits on stocking density (ordinarily to a maximum of 33kg/m2)
- Cross-EU training for the industry
- A possible new welfare labelling regime
- EU-wide data collection and scientific monitoring of impacts on welfare
- Action against anyone breaking the rules

A directive will come into force by 2010 and will apply to all flocks of more than 500 birds. Two sets of standards are applied using stocking density as a criterion for production intensity. Producers who stock up to a maximum of 33kg/m2 have to comply with standards relating to drinkers, feeding, litter, ventilation/heating, light, inspection, cleaning, training, record keeping and mutilations. Producers stocking above 33kg/m2 up to a maximum of 38kg/m2 are subject to an additional set of standards, plus monitoring at the slaughter house. At present there is no dedicated legislation governing the production of poultry for meat, although a code of recommendations was published by Defra in 2002, based on elements of existing legislation governing the protection of farm animals (eg, The Welfare of Farmed Animals (England) Regulations 2000 and later amendment (2007).

Appendix 2: 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**
- **Pig Production in England**
- **Poultry Production in England**

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