



# Farm Business Survey

2006/2007

## Poultry Production in England



Richard Crane, Philip Jones  
and Rod Vaughan





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## **Farm Business Survey**

**2006/07**

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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](http://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 of the Consortium)

Spring 2007

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## Foreword to the Second Series

Launched in 2007, the farm types and enterprise reports based on the results of the Farm Business Survey (FBS) for England have quickly become established as the authoritative data source for a wide range of agricultural enterprises. The second series of reports builds upon the first by providing data for the most recent FBS accounting year (2006/07) and expanding the series coverage by including information on lowland grazing livestock production in addition to incorporating the well-established Horticultural Business Data report within this current series. Produced by Rural Business Research, a leading independent consortium comprising the Universities of Cambridge, Newcastle upon Tyne, Nottingham and Reading, and Askham Bryan, Duchy and Imperial Colleges, the reports draw directly upon the highly regarded annual Farm Business Survey financed by Defra.

These detailed reports, available via Rural Business Research's on-line service, [www.ruralbusinessresearch.co.uk](http://www.ruralbusinessresearch.co.uk) complement the comprehensive Farm Business Survey Reports for Government Office Regions published at [www.farmbusinesssurvey.co.uk](http://www.farmbusinesssurvey.co.uk). As with the first series, Rural Business Research aims, via these reports and its other data and results services, to provide timely and relevant information to farmers, consultants, advisers and other organisations and individuals interested in farming and land management. Our expertise in independent research, data and analysis ensures that we understand the needs of the different agricultural and horticultural sectors. The reports have been thus developed to capture the issues of direct relevance to the farm type or sector presented whilst ensuring consistency in the treatment and presentation of key data and results. Building upon developments in the FBS, a key performance result of direct relevance to all sectors is the new headline income measure of Farm Business Income (FBI) which provides a financial accounting return measure and represents the return to unpaid labour and capital invested in the farm business, including land and farm buildings. It incorporates the four revenue and cost centres of farm businesses, these being i) agricultural production and agricultural diversification, ii) agri-environmental activity, iii) single farm payment and iv) non-agricultural diversification. We believe the FBI measure further enhances the results provided by the reports in the series, enabling readers to view the results within a financial accounting context.

As we present these results in the Spring of 2008, the industry is undergoing a period of change, with enhanced prices in some sectors considerably improving profitability, whilst for others, increased costs are leading managers to further analyse the performance of their enterprises and overall business. One issue common across all sectors is that the need for independent data upon which to base decisions remains a key tool to successful business management; Rural Business Research's outputs, incorporating this series, continue to lead the way in providing this independent data.

Prof. Martin Seabrook

(Chief Executive, Rural Business Research)

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## Acknowledgements

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

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

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

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## Summary

The UK poultry industry grew significantly over the last two decades, with 173 million birds in production at any one time by 2006. This growth was largely due to a near doubling of the number of birds for meat (broilers) in the last 20 years, in response to an increase in the per capita consumption of poultry meat. The number of laying hens declined over the same period, but increases in hen productivity have largely maintained egg production volumes.

Broiler production was distributed over 3,100 holdings in 2005, but the majority of these were relatively small scale and the bulk of production (69%) originated on the largest 400 holdings, which had flock sizes in excess of 100,000 birds. Egg production is similarly dominated by a small number of holdings, with the largest 1% of some 37,400 units generating 78% of output by volume.

UK poultry producers, which had farm gate sales of £1.66 billion in 2006, supplied 90% of domestic demand for poultry meat and 89% of demand for eggs. This rate of self sufficiency is high, although it has declined in recent years.

The price of eggs had been rising faster than the costs of production between 2000 and 2004, but egg prices fell back sharply in 2005, leading to a drop in Gross Output on laying holdings. Egg prices began rising again in 2006 but Gross Output per farm fell 6% due to a 3% fall in the number of laying hens. This fall was only partially offset by lower Variable Costs (-4.1%) and with Fixed Costs held steady, the result was a fall in average Farm Business Income (FBI) of 29% to £15,810. Of the different production systems, Free Range producers saw FBI fall by £1,310 compared to a fall of £7,613 for Battery units. While free range egg prices were firm, leading to 12.4% increase in Gross Output, this was offset by sharply rising Variable Costs (+5.1%). Battery units, although experiencing a small fall in Gross Outputs, were able to make Variable Cost savings.

Poultry meat prices have risen only slowly since 2000 and have been outpaced by rises in the costs of production. In 2006 this trend continued, resulting in average farm Gross Output virtually unchanged on 2005. With Variable Cost savings of 4.7% offering more benefit to the bottom line than a 5.6% increase in Fixed Costs, FBI rose by 8.6% in the year. Over all poultry farms Total Assets rose by 8.8% from 2005 to 2006 (across the whole range of assets) to an average of £532,567 per farm. In spite of a 10.7% increase in Total External Liabilities (due to longer-term borrowings), Net Worth increased by 7.8% to £340,512 per farm.

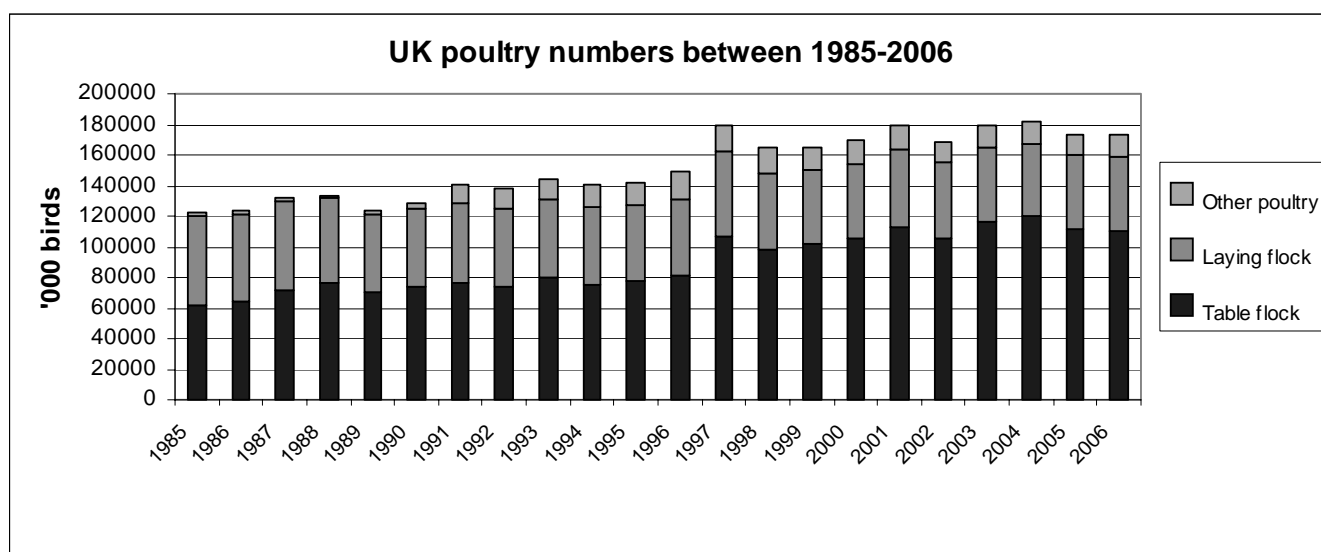


## SECTION 1: COMMENTARY ON THE UK POULTRY SECTOR

### 1.1 General introduction

In 2006 there were a little over 173 million birds in production in the UK at any one time (see Figure 1.1)<sup>1</sup>. Although the total number of birds in the UK flock has varied significantly from year to year, the general trend over the last two decades has been one of increasing bird numbers, due to a near doubling of the number of Table Birds since 1985. The number of Laying Birds has declined by some 50% over the same period, as the productivity of laying hens has increased. As Figure 1 shows, there have also been significant increases in the number of other types of poultry, such as turkeys, ducks and geese. Although the longer-term trend is for increasing numbers of birds, the number has declined slightly in both 2005 and 2006 from a peak in 2004. In 2006 around 64% of the national poultry flock were Table Chickens (produced for meat), 27% were laying hens, with the remaining 9% being other poultry.

Figure 1.1 UK poultry numbers between 1985-2006



Notes : (1) Improvements were made to the June Survey methodology in 1997 to account for poultry production on unregistered units. Figures from that date are thus not directly comparable with earlier years.

(2) Data prior to 1996 does not include figures for turkeys.

Sources: Defra (2007a & b)

### 1.2 The structure of the industry

#### 1.2.1 Poultry for meat

According to the June Survey of Agriculture, there were a reported 3,100 broiler holdings in the UK in 2005<sup>2</sup>. Table 1.1 shows how these units were distributed over size groups, where size is defined by the number of birds produced.

<sup>1</sup> The figure of 173 million birds and the data contained in Figure 1, represent the number of birds in production at the time of the Survey in June and not the total number of birds produced each year. In 2006 850.7 million broiler chicks were placed from registered UK hatcheries, plus 17.14 million turkey poult placings and 29.65 commercial layer chick placings.

<sup>2</sup> At the time of writing, 2005 was the latest date for which official data were available.

**Table 1.1 – Distribution of broiler holdings and production volumes, by size group (2005)**

Flock size	Number of holdings		Total number of birds	
		(%)	('000)	(%)
1 - 9,999 broilers	2,000	64.5	668.2	0.6
10,000 – 99,999	700	22.6	33,848.1	30.4
100,000 and over	400	12.9	76,970.5	69.0
<b>All</b>	<b>3,100</b>		<b>111,486.8</b>	

Percentages do not sum to 100 due to rounding errors.

Source: Defra (2007c)

In terms of production volumes, the broiler industry is dominated by a relatively small number of producers, with 69% of all production concentrated on the largest 400 holdings (13% of holdings). It is not possible to give detailed evidence on longer-term trends in the number and size of broiler flocks in the UK because of changes to the representation of broiler holdings in the June Survey from 1997. However, the data are sufficient to infer that average flock sizes have been increasing in the last decade. For example, in 1995 there were 200 holdings with broiler flocks in excess of 100,000 birds, but by 2005 this number had doubled.

A study by the University of Exeter in 2004 (Exeter, 2004) found that upwards of 70% of UK broiler production was processed by just 4 companies, who themselves produced half of the broilers they processed on their own holdings. According to the Exeter study, in 2001, around 88% of broiler holdings employed a 'conventional' production system, with just 6% free range and 3% organic (see below for a general description of these production systems).

### 1.2.2 Poultry for eggs

There were 37,400 laying fowl holdings in the UK in 2005. Table 1.2 shows how these units were distributed over size groups, where size is defined by the number of birds produced. The laying fowl sector is even more heavily dominated by the largest producers than is the case for broilers with, in 2005, 78% of production arising from the largest 400 units, this representing just 1% of all laying hen holdings.

**Table 1.2 – Distribution of laying fowl holdings and production volumes, by size group (2005)**

Flock size	Number of holdings		Total number of birds	
		(%)	('000)	(%)
1 - 999 layers	35,800	95.7	1,568.5	3.8
1,000 – 4,999	700	1.9	1,665.1	4.1
5000-19999	600	1.6	5,763.2	14.1
20,000 and over	400	1.1	31,970.0	78.0
<b>All</b>	<b>37,400</b>		<b>40,966.8</b>	

Percentages do not sum to 100 due to rounding errors.

Source: Defra (2007c)

Eggs are produced in three basic types of production system:

- *Laying cages* – this system consists of cages with sloping mesh floors allowing the eggs to roll forward out of reach of birds for collection. Droppings pass through the mesh floor to await removal. Cages may be stacked three high and are housed in environmentally controlled buildings many thousands at a time. This is the most common method of commercial egg production, accounting for 63% of eggs produced in 2006 (BEIS, 2007). Since 2003 it has only been permissible to install 'enriched cages', which are larger than conventional cages and contain a nest, perching space and scratching area.

- *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<sup>3</sup> per square metre. This system accounts for around 5% of eggs sold in the UK in 2006. 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 square metre. 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 2,500 birds per hectare. The Welfare of Laying Hens Directive imposes the same hen house conditions as for the Barn System. Around 32% of eggs produced in the UK came from this system in 2006. Free range production can also be organic, where, additionally, feeds are organic and the hens are ranged on organically managed land.

According to Defra (Defra, 2007d) 10,260 million eggs were produced in the UK in 2006, down from 10,608 millions in 2005. About 86% of eggs produced (8,856 millions) are for human consumption and the great majority of these go direct from producers to packing stations, of which there were, according to the British Egg Information Service (BEIS, 2007), 1409 in the UK in 2005, handling 8,847 million eggs. The packers sell eggs on to a number of outlets. BEIS data (BEIS, 2007), show that the relevant market shares of these outlets in 2006 were: Retail (48%), Manufacturers/processors (for egg products) (29%) and Wholesale/caterers (23%).

### 1.3 Contribution of the poultry sector to the economy

#### 1.3.1 The farm sector

In 2006, slaughterings of poultry for meat fell 2.5% to 1.5 million tonnes. The value of this production rose 1% to £1.3 billion, due to higher producer prices. In the same year, as already mentioned above, the quantity of eggs produced for human consumption fell by around 4%, although the value of this production rose by 2% to £357M. Total poultry output (meat and eggs) was valued at £1.6 billion at producer prices, with 21% of this, by value, accounted for by eggs (see Table 1.3). In 2006 the poultry sector contributed some 11.3% of total agricultural outputs (excluding subsidy), this figure being some half of one percent lower than in the previous four years. The poultry industry receives no direct producer support payments under the Common Agricultural Policy.

**Table 1.3 – Producer value of UK-produced poultry meat and eggs 2002-2006 (£M)**

	2002	2003	2004	2005	2006
Poultry meat	1261	1343	1332	1302	1315
Eggs	314	337	380	350	357
Total poultry	1575	1680	1712	1652	1672
Total agricultural output	13357	14166	14400	14130	14737

Source: Defra (2007e)

#### 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 an increase in the importance of poultry in the western diet. Recent statistics show that in the UK around 23kg of chicken are consumed per head per year, representing one third of total meat consumption. Retail sales of poultry meat in the UK are worth around £3.4 billion annually. Around 6% of sales are either free-range or organic (BPC, 2007). Table 1.4 shows the distribution of poultry meat sales over poultry types and product type.

<sup>3</sup> The maximum stocking density is stipulated by the UK Welfare of Laying Hens Directive 2007, this being more stringent than the current European Egg Marketing Regulations, which permit a maximum stocking density of 25 birds per m<sup>2</sup>

**Table 1.4 - Summary of retail sales for the 12 months to December 2006**

	Value (£'000)			Volume ('000kg)		
	Chicken	Duck	Turkey	Chicken	Duck	Turkey
Primary	1,263,729	31,189	154,365	397,012	8,353	50,380
Raw convenience	232,439	2,148	115,626	48,208	337	23,434
Further processed	488,504	n.a.	79,649	113,012	n.a.	18,411
Ready meals	651,409	n.a.	8,609	148,124	n.a.	1,717
Cooked	315,983	n.a.	6,647	67,739	n.a.	712
<b>Total</b>	<b>2,952,080</b>	<b>33,337</b>	<b>364,896</b>	<b>774,090</b>	<b>8,690</b>	<b>94,654</b>

Source: British Poultry Council (BPC), 2007.

### 1.3.2.2 Eggs

In 2006, 10,426 million eggs were consumed in the UK (29 million per day, compared to 28 million daily in 2005), with a retail market value of £582million (£514 million in 2005). Around half of all eggs produced are sold retail as shell eggs, with the remainder split fairly evenly between processing/manufacturing and wholesale/catering.

## 1.4 Trade

The UK is around 90% self-sufficient in poultry meat, although this percentage has declined from around 97% in the late 1980s. As UK consumers tend to favour the premium cuts, a significant proportion of the less favoured cuts are exported. In 2006 poultry meat imports were valued at £1 billion and exports nearly £200M (See Table 5). In 2006 the UK was 89% self-sufficient in eggs (Defra, 2007d), down from 94% in the mid 1990s (although an increase from the 86% in 2005).

**Table 1.5 - Trade summary statistics – UK imports and exports of poultry and eggs in the 12 months to October 2006**

	Imports (£M)	Exports (£M)
Total meat	992.0	220.4
<i>Chicken</i>	855.8	180.9
<i>Duck</i>	25.6	8.2
<i>Goose</i>	5.9	0.1
<i>Turkey</i>	104.7	31.1
Eggs <sup>#</sup>	77.1	27.5

<sup>#</sup> Eggs trade data are for 2005.

Note: Data are for period of the 12 months to October 2006.

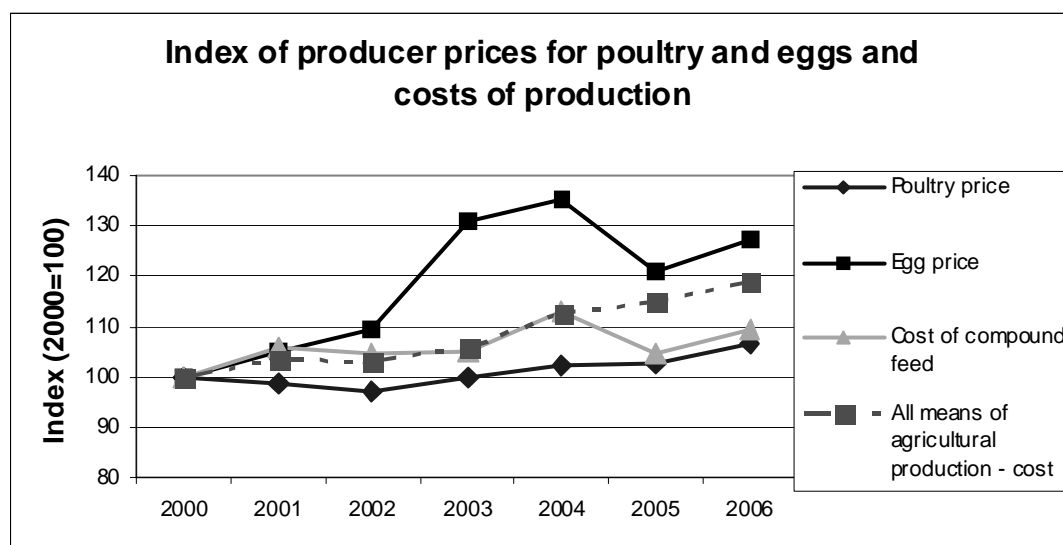
Source: Poultry meat: British Poultry Council (2007); Eggs: Defra (2007f)

## 1.5 Producer prices

### 1.5.1 Poultry meat prices

Poultry meat prices have been on a slight upward trend since 2002, but this trend has not kept pace with the costs of production (see Figure 2). Although the cost of compound feeds fell back in 2005, it rose sharply again in 2006. The total costs of production ended 2006 11 index points above poultry prices, implying that poultry margins have been increasingly squeezed since 2000.

**Figure 1.2 Index of producer prices for poultry and eggs and costs of production**



Source: Defra (2007g)

### 1.5.2 Egg prices

Egg prices have been more buoyant than poultry meat since 2000, rising to a peak in 2004, before falling back sharply in 2005. In 2006 prices picked up again to end the period ten index points above the cost of production, suggesting that egg producer margins remain relatively firm.

## 1.6 Animal welfare and regulation

The Poultry industry is heavily regulated in terms of public hygiene and animal welfare and successive welfare codes have been introduced which govern the way in which birds are housed, fed and transported. As a result, birds are raised across the industry in standardised and closely regulated environments (see Appendix 1 for a summary of existing and forthcoming legislation)<sup>4</sup>.

The industry is subject to routine testing and in 2006 a State Veterinary Inspections programme revealed that around 95% of all battery hen holdings were in full compliance with current animal welfare legislation. The picture is even better for broiler holdings, where close to 100% were fully compliant. The industry has its own Assured Chicken Production code and individual producers and may supermarkets operate even higher standards.

At the present time the egg producing sector is still adjusting to new regulations introduced in the UK in 2002 (see Appendix 1), which will continue to add compliance costs to the industry until 2012, when the phasing-in period ends. The broiler industry is likely to be faced with new regulation by 2010, resulting from recent agreement on an EC directive that will impact on producers of more than 500 birds (see Appendix).

<sup>4</sup> For a list of all the major legislation in the poultry sector, see <http://www.defra.gov.uk/foodrin/poultry/trade/legislation/index.htm>

## 1.7 Avian Flu

The global spread of Avian Flu continued in 2007, placing the UK at increasing risk of infection from both migrating birds and from trade movements, both legal and illegal. The first recorded outbreak of Avian Flu in the UK (excluding detection in birds in quarantine) was the highly pathogenic H5N1 strain, found in a dead wild swan in Fife, Scotland in April 2006. This resulted in the enforcement, according to EC rules, of restrictions on poultry movements in the area, together with an extensive surveillance programme. Restrictions were lifted on 1 May 2006 and it was concluded that the swan came from outside the UK. Since that time there have been seven outbreaks in both wild and farmed birds. Table 6 lists these outbreaks, together with their dates and locations.

On 20 February 2007 The Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2007 came into force. This Order adds a new Part 39 to Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995. Part 39 grants planning permission in respect of the erection of buildings necessary for the purposes of housing poultry and other captive birds to protect them from avian influenza. Where Part 39 applies, no specific application for planning permission is needed. Planning permission is granted by Part 39 subject to conditions requiring the developer to notify the local planning authority within 14 days of commencing development and to remove the development once the need for it has ended or by 19th February 2008 whichever is the sooner.

**Table 1.6 - Record of Avian Flu outbreaks in the UK 2006 - 2008**

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**April 2006 – highly pathogenic H5N1 strain found in a dead wild swan in Fife** This resulted in the enforcement, according to EC rules, of a 3 km Protection Zone (restrictions on poultry movements) and 10 km Surveillance Zone. Restrictions were lifted on 1 May 2006 and it was concluded that the swan came from outside the UK

**April 2006 – low pathogenic H7N3 at three commercial poultry holdings in Norfolk** A 3 km Protection Zone and 10 km Surveillance Zone were imposed. 35,000 birds slaughtered. Counter-measures prevented further spread and the restrictions were lifted about a month later.

**April 2006 - low pathogenic H7N3 confirmed on a poultry farm in Dereham, Norfolk** Restriction zones surrounding two premises were imposed and finally lifted on 26 May 2006.

**February 2007 - highly pathogenic H5N1 confirmed on a poultry farm in Holton, Suffolk** A 3 km Protection Zone and 10 km Surveillance Zone were imposed on 3 Feb 2007, along with a wider Restricted Zone. 160,000 turkeys were culled and rendered and the restrictions around the farm were lifted on 12 March 2007.

**May 2007 - H7N2 discovered in poultry sold at Chelford Market, Cheshire** The outbreak was traced to on a backyard flock of 48 mixed species poultry in Conwy, North Wales. A second infected premises was identified in St. Helens, Merseyside. Statutory disease control measures were enforced. These were lifted in June and July 2007 respectively.

**November 2007 – highly pathogenic H5N1 confirmed in poultry near Diss, Norfolk** A 3 km Protection Zone and 10 km Surveillance Zone were imposed, along with a wider Restricted Zone. 97,000 birds slaughtered. The Surveillance and Restricted Zones were lifted on 19 December 2007.

**January 2008 – highly pathogenic (H5N1) found in wild birds near Weymouth, Dorset.** Three interlocking 3km Wild Bird Control Areas were imposed, along with a 10km Wild Bird Monitoring Area around the place where disease was confirmed. The Wild Bird Control Area was revoked on 19 February, but following confirmation of H5N1 in a Canada goose, was reinstated on 29 February. On 5 March, this Control Area was lifted and the Monitoring Area was reduced in size.

Sources: Defra, 2008; BBC, 2008.

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## 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 in England and whose farms are classified as Specialist Poultry Farms.

Tables 2.11 to 2.15 are drawn from a sample of farms that participate in the Farm Business Survey who have a poultry enterprise. This sample of farms includes all farm type groups, including specialist poultry.

### 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 (a 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
  - sample includes all types of non laying enterprises (contract and non contract broilers, turkeys, ducks, geese, and rearing units)
- Table 2.5 - Laying flocks with battery hens
  - sample includes all battery laying enterprises (a sub-set of Table 2.3)
- Table 2.6 - Laying flocks with free range hens
  - sample includes all free range laying enterprises (a sub-set of Table 2.3)
- Table 2.7 - Non-laying flocks - non-contract broiler and table chickens
  - sample includes non contract broiler and table chicken 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.

- 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 battery hens
  - sample includes all battery laying enterprises (a sub-set of Table 2.11)
- Table 2.13 - Laying flocks with free range hens
  - sample includes all free range laying enterprises (a sub-set of Table 2.11)
- Table 2.14 - Non-contract broilers and table chickens
  - sample includes non contract broiler and table chicken enterprises
- Table 2.15 - Turkey production

## 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 the enterprises on a 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 and per head of livestock.

According to the 2006 June survey there are 1,054 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 threshold of 0.5 SLR. The FBS sample for the 2006/07 financial year included 67 specialist poultry farms, which represents 6.4% of the population.

The sample is drawn from a stratified population of seven Government Office Regions. Within each stratum a single weight is calculated as the ratio of numbers of farms in the population and 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 2005/06 and 2006/07 Farm Business Survey. Full 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 2005/06 and 2006/07

### 2.4.1 All Laying Flocks

Average Gross Output from laying flocks in the UK in 2006 was £341,083, down 6% on 2005 and down 14.8% on 2004. This fall in Gross Output occurred in spite of an increase in the price of eggs from 2005 to 2006 (see Figure 1.2) and was due to a fall in the number of eggs produced, as a consequence of a drop in the number of laying hens<sup>5</sup>. Compensating for this to some extent was a 4.1% fall in whole farm Variable Costs from 2005 to 2006, due in great measure to a 4.1% fall in feed costs. Feed costs constitute 90% of all Variable Costs. Variable Costs were 18.4% lower than in 2004. As a consequence of these changes average farm Gross Margin was down 8.1% (or £13,696) over the period 2005-2006. Fixed Costs fell by 4.4% from 2005 to 2006, after seeing a very slight rise the previous year. There were sharp increases in the cost of rent and occupier-type repairs (+27% and +35.5% respectively) and increases in electricity costs (+4.8%) and machinery repairs (+7.1%). However, these increases were more than offset by sharp falls in the cost of labour and depreciation charges. Regular hired labour costs fell by 11% and the imputed cost of unpaid labour by 7.7%. Average Farm Business Income (FBI) fell by 29% in 2006 to £15,810. Farm Business Income per bird fell by 20% to just £0.53 per bird. The percentage fall in FBI per bird is less than at the whole-farm level due to the fact that fewer birds were in production in 2006 than 2005.

**Table 2.1 – Comparison of financial performance measures for battery hen and free range holdings against All Laying holdings**

	<b>All Laying Flocks</b> (£ per holding)	<b>Battery hens</b> (£ per holding) (% difference from All Laying Flocks)	<b>Free Range hens</b> (£ per holding) (% difference from All Laying Flocks)
Total Gross Output	341,083	509,546 (+49.4)	189,135 (-44.5)
Total Variable Costs	186,639	284,570 (+52.5)	98,309 (-47.3)
Total Fixed Costs	150,712	212,071 (+40.7)	95,368 (-36.7)
Farm Business Income	15,810	32,592 (+106.2)	672 (-95.7)

Source: Defra (2007h)

<sup>5</sup> June Survey data (Defra, 2007b) reveal that the number of laying hens declined by 3.1% from 2005 to 2006; the number of eggs produced fell by 3.2% over the same period (Defra, 2007d)

The income measure 'Farm Business Income' (FBI) does not include imputed costs and therefore more accurately reflects the actual profit of the business. In the case of poultry businesses it is interesting to note how similar FBI is to 'Net Farm Income' (NFI). The reason being the level of interest charges and building depreciation incurred (included in FBI) equates closely to the imputed rental charges that are included as part of the NFI calculation.

#### **2.4.2 Battery and Free Range flocks**

In terms of financial performance, both Battery and Free Range holdings experienced a fall in Farm Business Income (FBI) over the period 2005/06 and 2006/07. Free Range holdings, which tend to be much smaller than Battery units (see Table 2.1), saw FBI fall by £1,310 compared to a fall of £7,613 for Battery units. While Free Range units saw a significant increase in Gross Output (+12.4%, where Battery holdings saw a 4.3% fall), due to firmer free range egg prices and an increase in production, they were not able to make the savings in Variable Costs that Battery holdings were able to achieve (+15.1% versus -1.9%). However, in spite of this the farm Gross Margin of Free Range units rose by an average of 9.7% compared to a fall of 7.3% on Battery units. Fixed Costs were virtually unchanged over the period in both cases, with Free Range units showing a 1% fall in costs.

Although Battery holdings saw a fall in both income measurements, Free Range units actually saw an increase in Net Farm Income, but a fall in Farm Business Income. For Free Range holdings interest charges and building depreciation exceeded the imputed rental charges included in Net Farm Income, whereas for Battery units the reverse was true.

#### **2.4.3 Non-laying flocks**

The year 2006 saw farm Gross Output down 5.4% on 2005, resulting from a significant loss of revenue from broilers (-18%) partially compensated by increases in Other poultry outputs as well as Non-poultry livestock. Broiler outputs were lower due to a combination of slightly firmer prices but significantly lower production volumes. However, farm Gross Margin increased by 10.1% due to savings in Variable Costs (-12.3%), led by savings in feed costs due to reduced bird numbers. The fact that Other livestock costs increased, coupled with the increase in Other livestock outputs, suggests some diversification on Broiler units. Fixed Costs rose by 10.9%, overall, driven by rises in labour and contractor costs and occupiers repairs. Electricity expenditures fell. As a consequence of large Variable Cost savings, FBI per holding increased by 11.4% from 2005 to 2006.

**Table 2.2 Financial results for all specialist poultry farms**

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2005/06	2006/07	% change	2005/06	2006/07	£ change
Number of farms	64	67		64	67	
Average number of birds per year	64,175	60,508		64,175	60,508	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
<b>Gross output</b>						
Eggs	198,938	177,845	-10.6	3.10	2.94	-0.16
Hen depreciation	-22,008	-16,366	-25.6	-0.34	-0.27	0.07
Broilers	219,709	192,439	-12.4	3.42	3.18	-0.24
Other poultry output	141,254	184,639	30.7	2.20	3.05	0.85
<b>Total poultry output</b>	<b>537,894</b>	<b>538,557</b>	<b>0.1</b>	<b>8.38</b>	<b>8.90</b>	<b>0.52</b>
Crops	2,444	3,922	60.5	0.04	0.06	0.03
Other livestock	1,884	2,253	19.6	0.03	0.04	0.01
Other output	18,409	16,532	-10.2	0.29	0.27	-0.01
<b>Total gross output</b>	<b>560,631</b>	<b>561,265</b>	<b>0.1</b>	<b>8.74</b>	<b>9.28</b>	<b>0.54</b>
<b>Variable costs</b>						
Feed	250,802	227,386	-9.3	3.91	3.76	-0.15
Seed, fertiliser, crop costs	8,112	7,175	-11.6	0.13	0.12	-0.01
Vet. & medicines	6,144	5,513	-10.3	0.10	0.09	0.00
Other livestock costs	51,728	61,730	19.3	0.81	1.02	0.21
<b>Total variable costs</b>	<b>316,786</b>	<b>301,804</b>	<b>-4.7</b>	<b>4.94</b>	<b>4.99</b>	<b>0.05</b>
<b>Total gross margin</b>	<b>243,845</b>	<b>259,461</b>	<b>6.4</b>	<b>3.80</b>	<b>4.29</b>	<b>0.49</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	50,113	52,941	5.6	0.78	0.87	0.09
Regular unpaid	17,192	16,606	-3.4	0.27	0.27	0.01
Casual labour	1,260	2,215	75.7	0.02	0.04	0.02
Power & machinery costs:						
Contract & hire	7,783	8,832	13.5	0.12	0.15	0.02
Fuel	5,096	4,913	-3.6	0.08	0.08	0.00
Electricity	9,183	7,815	-14.9	0.14	0.13	-0.01
Repairs	6,611	7,384	11.7	0.10	0.12	0.02
Depreciation	10,364	10,458	0.9	0.16	0.17	0.01
Rent (incl. imputed)	26,273	29,658	12.9	0.41	0.49	0.08
Other costs:						
Occupier's repairs	4,892	6,386	30.5	0.08	0.11	0.03
Sundries (incl. bad debt)	22,497	23,137	2.8	0.35	0.38	0.03
<b>Total fixed costs</b>	<b>161,264</b>	<b>170,344</b>	<b>5.6</b>	<b>2.51</b>	<b>2.82</b>	<b>0.30</b>
<b>Management &amp; investment income</b>	<b>82,581</b>	<b>89,116</b>	<b>7.9</b>	<b>1.29</b>	<b>1.47</b>	<b>0.19</b>
Minus: management salaries	584	760	30.3	0.01	0.01	0.00
Plus: farmer & spouse labour	15,528	14,277	-8.1	0.24	0.24	-0.01
<b>Net farm income</b>	<b>97,525</b>	<b>102,633</b>	<b>5.2</b>	<b>1.52</b>	<b>1.70</b>	<b>0.18</b>
<b>Farm business income</b>	<b>93,166</b>	<b>101,223</b>	<b>8.6</b>	<b>1.45</b>	<b>1.67</b>	<b>0.22</b>

**Per £100 of gross output**

	2005/06	2006/07	£ change
Number of farms	64	67	
Average number of birds per year	64,175	60,508	
<b>Average £ per £100 of gross output</b>			
<b>Gross output</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>			
Feed	44.74	40.51	-4.22
Seed, fertiliser, crop costs	1.45	1.28	-0.17
Vet. & medicines	1.10	0.98	-0.11
Other livestock costs	9.23	11.00	1.77
<b>Total variable costs</b>	<b>56.51</b>	<b>53.77</b>	<b>-2.73</b>
<b>Total gross margin</b>	<b>43.49</b>	<b>46.23</b>	<b>2.73</b>
<b>Fixed costs</b>			
Labour:			
Regular paid	8.94	9.43	0.49
Regular unpaid	3.07	2.96	-0.11
Casual labour	0.22	0.39	0.17
Power & machinery costs:			
Contract & hire	1.39	1.57	0.19
Fuel	0.91	0.88	-0.03
Electricity	1.64	1.39	-0.25
Repairs	1.18	1.32	0.14
Depreciation	1.85	1.86	0.01
Rent (incl. imputed)	4.69	5.28	0.60
Other costs:			
Occupier's repairs	0.87	1.14	0.27
Sundries (incl. bad debt)	4.01	4.12	0.11
<b>Total fixed costs</b>	<b>28.76</b>	<b>30.35</b>	<b>1.59</b>
<b>Management &amp; investment income</b>	<b>14.73</b>	<b>15.88</b>	<b>1.15</b>
Minus: management salaries	0.10	0.14	0.03
Plus: farmer & spouse labour	2.77	2.54	-0.23
<b>Net farm income</b>	<b>17.40</b>	<b>18.29</b>	<b>0.89</b>
<b>Farm business income</b>	<b>16.62</b>	<b>18.03</b>	<b>1.42</b>

**Farm Business Income (FBI) per farm**

(% distribution by number of farms)		
<i>FBI range per farm</i>	% 2005/06	% 2006/07
Over £100,000	12	12
£50,000 to < £100,000	19	13
£25,000 to < £50,000	15	16
£12,500 to < £25,000	19	22
0 to < £12,500	20	12
-£25,000 to 0	5	12
Below -£25,000	10	12
<b>Total</b>	<b>100</b>	<b>100</b>

**Other efficiency factors**

	Average 2005/06	Average 2006/07
Eggs per bird	260	247
Eggs (p/doz.)	54.73	58.12

**Table 2.3 Financial results for all laying flocks**

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2005/06	2006/07	% change	2005/06	2006/07	£ change
Number of farms	32	32		32	32	
Average number of birds per year	33,378	29,609		33,378	29,609	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
<b>Gross output</b>						
Eggs	402,510	386,184	-4.1	12.06	13.04	0.98
Hen depreciation	-67,645	-66,471	-1.7	-2.03	-2.24	-0.22
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	3,182	57	-98.2	0.10	0.00	-0.09
<b>Total poultry output</b>	<b>338,046</b>	<b>319,770</b>	<b>-5.4</b>	<b>10.13</b>	<b>10.80</b>	<b>0.67</b>
Crops	2,283	2,314	1.4	0.07	0.08	0.01
Other livestock	910	2,213	143.3	0.03	0.07	0.05
Other output	21,604	16,785	-22.3	0.65	0.57	-0.08
<b>Total gross output</b>	<b>362,843</b>	<b>341,083</b>	<b>-6.0</b>	<b>10.87</b>	<b>11.52</b>	<b>0.65</b>
<b>Variable costs</b>						
Feed	176,527	169,319	-4.1	5.29	5.72	0.43
Seed, fertiliser, crop costs	1,199	800	-33.3	0.04	0.03	-0.01
Vet. & medicines	1,520	2,102	38.3	0.05	0.07	0.03
Other livestock costs	15,456	14,419	-6.7	0.46	0.49	0.02
<b>Total variable costs</b>	<b>194,703</b>	<b>186,639</b>	<b>-4.1</b>	<b>5.83</b>	<b>6.30</b>	<b>0.47</b>
<b>Total gross margin</b>	<b>168,140</b>	<b>154,444</b>	<b>-8.1</b>	<b>5.04</b>	<b>5.22</b>	<b>0.18</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	53,213	47,350	-11.0	1.59	1.60	0.00
Regular unpaid	21,555	19,902	-7.7	0.65	0.67	0.03
Casual labour	796	787	-1.1	0.02	0.03	0.00
Power & machinery costs:						
Contract & hire	5,667	6,097	7.6	0.17	0.21	0.04
Fuel	4,658	3,523	-24.4	0.14	0.12	-0.02
Electricity	7,233	7,577	4.8	0.22	0.26	0.04
Repairs	7,809	8,360	7.1	0.23	0.28	0.05
Depreciation	11,950	9,985	-16.4	0.36	0.34	-0.02
Rent (incl. imputed)	19,919	25,424	27.6	0.60	0.86	0.26
Other costs:						
Occupier's repairs	3,474	4,707	35.5	0.10	0.16	0.05
Sundries (incl. bad debt)	21,361	16,999	-20.4	0.64	0.57	-0.07
<b>Total fixed costs</b>	<b>157,635</b>	<b>150,712</b>	<b>-4.4</b>	<b>4.72</b>	<b>5.09</b>	<b>0.37</b>
<b>Management &amp; investment income</b>	<b>10,506</b>	<b>3,732</b>	<b>-64.5</b>	<b>0.31</b>	<b>0.13</b>	<b>-0.19</b>
Minus: management salaries	468	578	23.3	0.01	0.02	0.01
Plus: farmer & spouse labour	19,172	17,603	-8.2	0.57	0.59	0.02
<b>Net farm income</b>	<b>29,210</b>	<b>20,757</b>	<b>-28.9</b>	<b>0.88</b>	<b>0.70</b>	<b>-0.17</b>
<b>Farm business income</b>	<b>22,397</b>	<b>15,810</b>	<b>-29.4</b>	<b>0.67</b>	<b>0.53</b>	<b>-0.14</b>

**Per £100 of gross output**

	2005/06	2006/07	£ change
Number of farms	32	32	
Average number of birds per year	33,378	29,609	
<b>Average £ per £100 of gross output</b>			
<b>Gross output</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>			
Feed	48.65	49.64	0.99
Seed, fertiliser, crop costs	0.33	0.23	-0.10
Vet. & medicines	0.42	0.62	0.20
Other livestock costs	4.26	4.23	-0.03
<b>Total variable costs</b>	<b>53.66</b>	<b>54.72</b>	<b>1.06</b>
<b>Total gross margin</b>	<b>46.34</b>	<b>45.28</b>	<b>-1.06</b>
<b>Fixed costs</b>			
Labour:			
Regular paid	14.67	13.88	-0.78
Regular unpaid	5.94	5.83	-0.11
Casual labour	0.22	0.23	0.01
Power & machinery costs:			
Contract & hire	1.56	1.79	0.23
Fuel	1.28	1.03	-0.25
Electricity	1.99	2.22	0.23
Repairs	2.15	2.45	0.30
Depreciation	3.29	2.93	-0.37
Rent (incl. imputed)	5.49	7.45	1.96
Other costs:			
Occupier's repairs	0.96	1.38	0.42
Sundries (incl. bad debt)	5.89	4.98	-0.90
<b>Total fixed costs</b>	<b>43.44</b>	<b>44.19</b>	<b>0.74</b>
<b>Management &amp; investment income</b>	<b>2.90</b>	<b>1.09</b>	<b>-1.80</b>
Minus: management salaries	0.13	0.17	0.04
Plus: farmer & spouse labour	5.28	5.16	-0.12
<b>Net farm income</b>	<b>8.05</b>	<b>6.09</b>	<b>-1.96</b>
<b>Farm business income</b>	<b>6.17</b>	<b>4.64</b>	<b>-1.54</b>

**Farm Business Income (FBI) per farm**

(% distribution by number of farms)

FBI range per farm	% 2005/06	% 2006/07
Over £100,000	6	6
£50,000 to < £100,000	9	9
£25,000 to < £50,000	19	9
£12,500 to < £25,000	28	31
0 to < £12,500	16	13
-£25,000 to 0	9	16
Below -£25,000	13	16
<b>Total</b>	<b>100</b>	<b>100</b>

**Other efficiency factors**

	Average 2005/06	Average 2006/07
Eggs per bird	278	279
Eggs (p/doz.)	54.49	57.53

**Table 2.4 Financial results for all non-laying flocks**

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2005/06	2006/07	% change	2005/06	2006/07	£ change
Number of farms	30	33		30	33	
Average number of birds per year	99,089	88,984		99,089	88,984	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
<b>Gross output</b>						
Eggs	0	0	0.00	0.00	0.00	0.00
Hen depreciation	0	0	0.00	0.00	0.00	0.00
Broilers	467,619	381,483	-18.4	4.72	4.29	-0.43
Other poultry output	72,838	125,453	72.2	0.74	1.41	0.67
<b>Total poultry output</b>	<b>540,457</b>	<b>506,936</b>	<b>-6.2</b>	<b>5.45</b>	<b>5.70</b>	<b>0.24</b>
Crops	2,795	5,525	97.7	0.03	0.06	0.03
Other livestock	3,079	2,489	-19.2	0.03	0.03	0.00
Other output	16,503	17,462	5.8	0.17	0.20	0.03
<b>Total gross output</b>	<b>562,834</b>	<b>532,413</b>	<b>-5.4</b>	<b>5.68</b>	<b>5.98</b>	<b>0.30</b>
<b>Variable costs</b>						
Feed	333,077	280,301	-15.8	3.36	3.15	-0.21
Seed, fertiliser, crop costs	14,797	12,660	-14.4	0.15	0.14	-0.01
Vet. & medicines	9,657	7,306	-24.3	0.10	0.08	-0.02
Other livestock costs	32,503	41,899	28.9	0.33	0.47	0.14
<b>Total variable costs</b>	<b>390,034</b>	<b>342,165</b>	<b>-12.3</b>	<b>3.94</b>	<b>3.85</b>	<b>-0.09</b>
<b>Total gross margin</b>	<b>172,800</b>	<b>190,248</b>	<b>10.1</b>	<b>1.74</b>	<b>2.14</b>	<b>0.39</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	26,812	34,314	28.0	0.27	0.39	0.12
Regular unpaid	13,005	13,678	5.2	0.13	0.15	0.02
Casual labour	1,864	3,693	98.2	0.02	0.04	0.02
Power & machinery costs:						
Contract & hire	10,689	12,061	12.8	0.11	0.14	0.03
Fuel	5,956	6,450	8.3	0.06	0.07	0.01
Electricity	10,721	7,726	-27.9	0.11	0.09	-0.02
Repairs	5,728	6,968	21.6	0.06	0.08	0.02
Depreciation	8,136	9,093	11.8	0.08	0.10	0.02
Rent (incl. imputed)	31,192	30,722	-1.5	0.31	0.35	0.03
Other costs:						
Occupier's repairs	6,504	8,102	24.6	0.07	0.09	0.03
Sundries (incl. bad debt)	19,359	22,394	15.7	0.20	0.25	0.06
<b>Total fixed costs</b>	<b>139,966</b>	<b>155,200</b>	<b>10.9</b>	<b>1.41</b>	<b>1.74</b>	<b>0.33</b>
<b>Management &amp; investment income</b>	<b>32,834</b>	<b>35,049</b>	<b>6.7</b>	<b>0.33</b>	<b>0.39</b>	<b>0.06</b>
Minus: management salaries	757	991	30.8	0.01	0.01	0.00
Plus: farmer & spouse labour	11,946	11,117	-6.9	0.12	0.12	0.00
<b>Net farm income</b>	<b>44,023</b>	<b>45,174</b>	<b>2.6</b>	<b>0.44</b>	<b>0.51</b>	<b>0.06</b>
<b>Farm business income</b>	<b>42,188</b>	<b>46,994</b>	<b>11.4</b>	<b>0.43</b>	<b>0.53</b>	<b>0.10</b>

**Per £100 of gross output**

	2005/06	2006/07	£ change
Number of farms	30	33	
Average number of birds per year	99,089	88,984	
<b>Average £ per £100 of gross output</b>			
<b>Gross output</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>			
Feed	59.18	52.65	-6.53
Seed, fertiliser, crop costs	2.63	2.38	-0.25
Vet. & medicines	1.72	1.37	-0.34
Other livestock costs	5.77	7.87	2.09
<b>Total variable costs</b>	<b>69.30</b>	<b>64.27</b>	<b>-5.03</b>
<b>Total gross margin</b>	<b>30.70</b>	<b>35.73</b>	<b>5.03</b>
<b>Fixed costs</b>			
Labour:			
Regular paid	4.76	6.44	1.68
Regular unpaid	2.31	2.57	0.26
Casual labour	0.33	0.69	0.36
Power & machinery costs:			
Contract & hire	1.90	2.27	0.37
Fuel	1.06	1.21	0.15
Electricity	1.90	1.45	-0.45
Repairs	1.02	1.31	0.29
Depreciation	1.45	1.71	0.26
Rent (incl. imputed)	5.54	5.77	0.23
Other costs:			
Occupier's repairs	1.16	1.52	0.37
Sundries (incl. bad debt)	3.44	4.21	0.77
<b>Total fixed costs</b>	<b>24.87</b>	<b>29.15</b>	<b>4.28</b>
<b>Management &amp; investment income</b>	<b>5.83</b>	<b>6.58</b>	<b>0.75</b>
Minus: management salaries	0.13	0.19	0.05
Plus: farmer & spouse labour	2.12	2.09	-0.03
<b>Net farm income</b>	<b>7.82</b>	<b>8.48</b>	<b>0.66</b>
<b>Farm business income</b>	<b>7.50</b>	<b>8.83</b>	<b>1.33</b>

**Farm Business Income (FBI) per farm**

(% distribution by number of farms)		
<i>FBI range per farm</i>	% 2005/06	% 2006/07
Over £100,000	13	12
£50,000 to < £100,000	27	18
£25,000 to < £50,000	13	24
£12,500 to < £25,000	10	12
0 to < £12,500	27	15
-£25,000 to 0	3	9
Below -£25,000	7	9
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 2.5 Financial results for laying flocks with battery hens**

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2005/06	2006/07	% change	2005/06	2006/07	£ change
Number of farms	16	15		16	15	
Average number of birds per year	50,780	48,140		50,780	48,140	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
<b>Gross output</b>						
Eggs	593,813	590,917	-0.5	11.69	12.27	0.58
Hen depreciation	-96,587	-104,063	7.7	-1.90	-2.16	-0.26
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	4,986	0	0.0	0.10	0.00	-0.10
<b>Total poultry output</b>	<b>502,212</b>	<b>486,854</b>	<b>-3.1</b>	<b>9.89</b>	<b>10.11</b>	<b>0.22</b>
Crops	2,794	3,375	20.8	0.06	0.07	0.02
Other livestock	219	2	-99.1	0.00	0.00	0.00
Other output	27,379	19,315	-29.5	0.54	0.40	-0.14
<b>Total gross output</b>	<b>532,604</b>	<b>509,546</b>	<b>-4.3</b>	<b>10.49</b>	<b>10.58</b>	<b>0.10</b>
<b>Variable costs</b>						
Feed	259,967	254,431	-2.1	5.12	5.29	0.17
Seed, fertiliser, crop costs	1,574	1,139	-27.7	0.03	0.02	-0.01
Vet. & medicines	2,126	2,560	20.4	0.04	0.05	0.01
Other livestock costs	26,372	26,440	0.3	0.52	0.55	0.03
<b>Total variable costs</b>	<b>290,040</b>	<b>284,570</b>	<b>-1.9</b>	<b>5.71</b>	<b>5.91</b>	<b>0.20</b>
<b>Total gross margin</b>	<b>242,564</b>	<b>224,975</b>	<b>-7.3</b>	<b>4.78</b>	<b>4.67</b>	<b>-0.10</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	86,013	82,597	-4.0	1.69	1.72	0.02
Regular unpaid	22,473	21,672	-3.6	0.44	0.45	0.01
Casual labour	172	491	185.6	0.00	0.01	0.01
Power & machinery costs:						
Contract & hire	6,541	7,761	18.6	0.13	0.16	0.03
Fuel	7,718	6,108	-20.9	0.15	0.13	-0.03
Electricity	10,627	12,054	13.4	0.21	0.25	0.04
Repairs	12,540	13,368	6.6	0.25	0.28	0.03
Depreciation	15,090	11,984	-20.6	0.30	0.25	-0.05
Rent (incl. imputed)	15,750	24,346	54.6	0.31	0.51	0.20
Other costs:						
Occupier's repairs	2,305	5,289	129.4	0.05	0.11	0.06
Sundries (incl. bad debt)	31,967	26,401	-17.4	0.63	0.55	-0.08
<b>Total fixed costs</b>	<b>211,197</b>	<b>212,071</b>	<b>0.4</b>	<b>4.16</b>	<b>4.41</b>	<b>0.25</b>
<b>Management &amp; investment income</b>						
	<b>31,367</b>	<b>12,905</b>	<b>-58.9</b>	<b>0.62</b>	<b>0.27</b>	<b>-0.35</b>
Minus: management salaries	825	676	-18.1	0.02	0.01	0.00
Plus: farmer & spouse labour	18,013	16,823	-6.6	0.35	0.35	-0.01
<b>Net farm income</b>	<b>48,556</b>	<b>29,052</b>	<b>-40.2</b>	<b>0.96</b>	<b>0.60</b>	<b>-0.35</b>
<b>Farm business income</b>	<b>40,205</b>	<b>32,592</b>	<b>-18.9</b>	<b>0.79</b>	<b>0.68</b>	<b>-0.11</b>

**Per £100 of gross output**

	2005/06	2006/07	£ change
Number of farms	16	15	
Average number of birds per year	50,780	48,140	
<b>Average £ per £100 of gross output</b>			
<b>Gross output</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>			
Feed	48.81	49.93	1.12
Seed, fertiliser, crop costs	0.30	0.22	-0.07
Vet. & medicines	0.40	0.50	0.10
Other livestock costs	4.95	5.19	0.24
<b>Total variable costs</b>	<b>54.46</b>	<b>55.85</b>	<b>1.39</b>
<b>Total gross margin</b>	<b>45.54</b>	<b>44.15</b>	<b>-1.39</b>
<b>Fixed costs</b>			
Labour:			
Regular paid	16.15	16.21	0.06
Regular unpaid	4.22	4.25	0.03
Casual labour	0.03	0.10	0.06
Power & machinery costs:			
Contract & hire	1.23	1.52	0.29
Fuel	1.45	1.20	-0.25
Electricity	2.00	2.37	0.37
Repairs	2.35	2.62	0.27
Depreciation	2.83	2.35	-0.48
Rent (incl. imputed)	2.96	4.78	1.82
Other costs:			
Occupier's repairs	0.43	1.04	0.61
Sundries (incl. bad debt)	6.00	5.18	-0.82
<b>Total fixed costs</b>	<b>39.65</b>	<b>41.62</b>	<b>1.97</b>
<b>Management &amp; investment income</b>	<b>5.89</b>	<b>2.53</b>	<b>-3.36</b>
Minus: management salaries	0.15	0.13	-0.02
Plus: farmer & spouse labour	3.38	3.30	-0.08
<b>Net farm income</b>	<b>9.12</b>	<b>5.70</b>	<b>-3.42</b>
<b>Farm business income</b>	<b>7.55</b>	<b>6.40</b>	<b>-1.15</b>

**Farm Business Income (FBI) per farm**

(% distribution by number of farms)

<i>FBI range per farm</i>	% 2005/06	% 2006/07
Over £100,000	13	7
£50,000 to < £100,000	19	13
£25,000 to < £50,000	13	13
£12,500 to < £25,000	19	33
0 to < £12,500	13	7
-£25,000 to 0	13	13
Below -£25,000	13	13
<b>Total</b>	<b>100</b>	<b>100</b>

**Other efficiency factors**

	Average 2005/06	Average 2006/07
Eggs per bird	285	282
Eggs (p/doz.)	51.12	53.23

**Table 2.6 Financial results for laying flocks with free range hens**

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2005/06	2006/07	% change	2005/06	2006/07	£ change
Number of farms	16	17		16	17	
Average number of birds per year	13,429	12,895		13,429	12,895	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
<b>Gross output</b>						
Eggs	183,202	201,521	10.0	13.64	15.63	1.99
Hen depreciation	-34,467	-33,292	-3.4	-2.57	-2.58	-0.02
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	1,113	837	-24.8	0.08	0.06	-0.02
<b>Total poultry output</b>	<b>149,848</b>	<b>169,065</b>	<b>12.8</b>	<b>11.16</b>	<b>13.11</b>	<b>1.95</b>
Crops	1,698	1,358	-20.0	0.13	0.11	-0.02
Other livestock	1,702	4,208	147.2	0.13	0.33	0.20
Other output	14,983	14,505	-3.2	1.12	1.12	0.01
<b>Total gross output</b>	<b>168,231</b>	<b>189,135</b>	<b>12.4</b>	<b>12.53</b>	<b>14.67</b>	<b>2.14</b>
<b>Variable costs</b>						
Feed	80,872	92,549	14.4	6.02	7.18	1.16
Seed, fertiliser, crop costs	770	494	-35.8	0.06	0.04	-0.02
Vet. & medicines	825	1,689	104.6	0.06	0.13	0.07
Other livestock costs	2,943	3,577	21.5	0.22	0.28	0.06
<b>Total variable costs</b>	<b>85,409</b>	<b>98,309</b>	<b>15.1</b>	<b>6.36</b>	<b>7.62</b>	<b>1.26</b>
<b>Total gross margin</b>	<b>82,822</b>	<b>90,826</b>	<b>9.7</b>	<b>6.17</b>	<b>7.04</b>	<b>0.88</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	15,611	15,559	-0.3	1.16	1.21	0.04
Regular unpaid	20,501	18,306	-10.7	1.53	1.42	-0.11
Casual labour	1,511	1,054	-30.3	0.11	0.08	-0.03
Power & machinery costs:						
Contract and hire	4,666	4,596	-1.5	0.35	0.36	0.01
Fuel	1,151	1,192	3.6	0.09	0.09	0.01
Electricity	3,342	3,539	5.9	0.25	0.27	0.03
Repairs	2,386	3,843	61.1	0.18	0.30	0.12
Depreciation	8,351	8,182	-2.0	0.62	0.63	0.01
Rent (incl. imputed)	24,698	26,396	6.9	1.84	2.05	0.21
Other costs:						
Occupier's repairs	4,813	4,183	-13.1	0.36	0.32	-0.03
Sundries (incl. bad debt)	9,203	8,519	-7.4	0.69	0.66	-0.02
<b>Total fixed costs</b>	<b>96,231</b>	<b>95,368</b>	<b>-0.9</b>	<b>7.17</b>	<b>7.40</b>	<b>0.23</b>
<b>Management &amp; investment income</b>	<b>-13,410</b>	<b>-4,542</b>	<b>66.1</b>	<b>-1.00</b>	<b>-0.35</b>	<b>0.65</b>
Minus: management salaries	60	489	718.5	0.00	0.04	0.03
Plus: farmer & spouse labour	20,501	18,306	-10.7	1.53	1.42	-0.11
<b>Net farm income</b>	<b>7,032</b>	<b>13,275</b>	<b>88.8</b>	<b>0.52</b>	<b>1.03</b>	<b>0.51</b>
<b>Farm business income</b>	<b>1,982</b>	<b>672</b>	<b>-66.1</b>	<b>0.15</b>	<b>0.05</b>	<b>-0.10</b>

**Per £100 of gross output**

	2005/06	2006/07	£ change
Number of farms	16	17	
Average number of birds per year	13,429	12,895	
<b>Average £ per £100 of gross output</b>			
<b>Gross output</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>			
Feed	48.07	48.93	0.86
Seed, fertiliser, crop costs	0.46	0.26	-0.20
Vet. & medicines	0.49	0.89	0.40
Other livestock costs	1.75	1.89	0.14
<b>Total variable costs</b>	<b>50.77</b>	<b>51.98</b>	<b>1.21</b>
<b>Total gross margin</b>	<b>49.23</b>	<b>48.02</b>	<b>-1.21</b>
<b>Fixed costs</b>			
Labour:			
Regular paid	9.28	8.23	-1.05
Regular unpaid	12.19	9.68	-2.51
Casual labour	0.90	0.56	-0.34
Power & machinery costs:			
Contract & hire	2.77	2.43	-0.34
Fuel	0.68	0.63	-0.05
Electricity	1.99	1.87	-0.12
Repairs	1.42	2.03	0.61
Depreciation	4.96	4.33	-0.64
Rent (incl. imputed)	14.68	13.96	-0.72
Other costs:			
Occupier's repairs	2.86	2.21	-0.65
Sundries (incl. bad debt)	5.47	4.50	-0.97
<b>Total fixed costs</b>	<b>57.20</b>	<b>50.42</b>	<b>-6.78</b>
<b>Management &amp; investment income</b>	<b>-7.97</b>	<b>-2.40</b>	<b>5.57</b>
Minus: management salaries	0.04	0.26	0.22
Plus: farmer & spouse labour	12.19	9.68	-2.51
<b>Net farm income</b>	<b>4.18</b>	<b>7.02</b>	<b>2.84</b>
<b>Farm business income</b>	<b>1.18</b>	<b>0.36</b>	<b>-0.82</b>

**Farm Business Income (FBI) per farm**

(% distribution by number of farms)

FBI range per farm	% 2005/06	% 2006/07
Over £100,000	0	6
£50,000 to < £100,000	0	6
£25,000 to < £50,000	25	6
£12,500 to < £25,000	38	29
0 to < £12,500	19	18
-£25,000 to 0	6	18
Below -£25,000	13	18
<b>Total</b>	<b>100</b>	<b>100</b>

**Other efficiency factors**

	Average 2005/06	Average 2006/07
Eggs per bird	246	267
Eggs (p/doz.)	72.19	73.18

**Table 2.7 Financial results for non-contract broilers and table chickens**

	<i>Per farm</i>			<i>Per bird (per crop)</i>		
	2005/06	2006/07	% change	2005/06	2006/07	£ change
Number of farms	18	15		18	15	
Average number of birds per year	114,608	118,519		114,608	118,519	
Throughput of birds per year	731,453	772,359		731,453	772,359	
Average number of crops per year**	6.4	6.5				
	<i>Average £ per farm</i>			<i>Average £ per bird (per crop)</i>		
<b>Gross output</b>						
Broilers	704,005	725,573	3.1	0.96	0.94	-0.02
Table chickens	3,793	26,647	n/a	0.01	0.03	0.03
<b>Total poultry output</b>	<b>707,798</b>	<b>752,220</b>	<b>6.3</b>	<b>0.97</b>	<b>0.97</b>	<b>0.01</b>
Crops	3,310	4,379	32.3	0.00	0.01	0.00
Other livestock	3,436	4,277	24.5	0.00	0.01	0.00
All other output	12,889	13,910	7.9	0.02	0.02	0.00
<b>Total gross output</b>	<b>727,432</b>	<b>774,785</b>	<b>6.5</b>	<b>0.99</b>	<b>1.00</b>	<b>0.01</b>
<b>Variable costs</b>						
Feed	493,140	524,272	6.3	0.67	0.68	0.00
Seed, fertiliser, crop costs	19,513	19,375	-0.7	0.03	0.03	0.00
Vet. & medicines	13,868	13,059	-5.8	0.02	0.02	0.00
Other livestock costs	23,133	25,577	10.6	0.03	0.03	0.00
<b>Total variable costs</b>	<b>549,654</b>	<b>582,283</b>	<b>5.9</b>	<b>0.75</b>	<b>0.75</b>	<b>0.00</b>
<b>Total gross margin</b>	<b>177,778</b>	<b>192,502</b>	<b>8.3</b>	<b>0.24</b>	<b>0.25</b>	<b>0.01</b>
<b>Fixed costs</b>						
Labour:						
Regular paid	20,545	25,716	25.2	0.03	0.03	0.01
Regular unpaid	12,315	13,334	8.3	0.02	0.02	0.00
Casual labour	1,158	3,967	242.6	0.00	0.01	0.00
Power & machinery costs:						
Contract & hire	14,280	14,226	-0.4	0.02	0.02	0.00
Fuel	6,138	7,335	19.5	0.01	0.01	0.00
Electricity	13,553	10,097	-25.5	0.02	0.01	-0.01
Repairs	5,984	6,511	8.8	0.01	0.01	0.00
Depreciation	7,267	9,007	23.9	0.01	0.01	0.00
Rent (incl. imputed)	39,067	36,293	-7.1	0.05	0.05	-0.1
Other costs:						
Occupier's repairs	6,347	8,492	33.8	0.01	0.01	0.00
Sundries (incl. bad debt)	15,562	18,455	18.6	0.02	0.02	0.00
<b>Total fixed costs</b>	<b>142,216</b>	<b>153,432</b>	<b>7.9</b>	<b>0.19</b>	<b>0.20</b>	<b>0.00</b>
<b>Management &amp; investment income</b>	<b>35,562</b>	<b>39,070</b>	<b>9.9</b>	<b>0.05</b>	<b>0.05</b>	<b>0.00</b>
Minus: management salaries	389	413	6.3	0.00	0.00	0.00
Plus: farmer & spouse labour	11,662	10,163	-12.9	0.02	0.01	0.00
<b>Net farm income</b>	<b>46,835</b>	<b>48,820</b>	<b>4.2</b>	<b>0.06</b>	<b>0.06</b>	<b>0.00</b>
<b>Farm business income</b>	<b>44,696</b>	<b>52,690</b>	<b>17.9</b>	<b>0.06</b>	<b>0.07</b>	<b>0.01</b>

**Per £100 of gross output**

	2005/06	2006/07	£ change
Number of farms	18	15	
Average number of birds per year	114,608	118,519	
Throughput of birds per year	731,453	772,359	
Average number of crops per year	6.4	6.5	
<b>Average £ per £100 of gross output</b>			
<b>Gross output</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>			
Feed	67.79	67.67	-0.13
Seed, fertiliser, crop costs	2.68	2.50	-0.18
Vet. & medicines	1.91	1.69	-0.22
Other livestock costs	3.18	3.30	0.12
<b>Total variable costs</b>	<b>75.56</b>	<b>75.15</b>	<b>-0.41</b>
<b>Total gross margin</b>	<b>24.44</b>	<b>24.85</b>	<b>0.41</b>
<b>Fixed costs</b>			
Labour:			
Regular paid	2.82	3.32	0.49
Regular unpaid	1.69	1.72	0.03
Casual labour	0.16	0.51	0.35
Power & machinery costs:			
Contract & hire	1.96	1.84	-0.13
Fuel	0.84	0.95	0.10
Electricity	1.86	1.30	-0.56
Repairs	0.82	0.84	0.02
Depreciation	1.00	1.16	0.16
Rent (incl. imputed)	5.37	4.68	-0.69
Other costs:			
Occupier's repairs	0.87	1.10	0.22
Sundries (incl. bad debt)	2.14	2.38	0.24
<b>Total fixed costs</b>	<b>19.55</b>	<b>19.80</b>	<b>0.25</b>
<b>Management &amp; investment income</b>	<b>4.89</b>	<b>5.04</b>	<b>0.15</b>
Minus: management salaries	0.05	0.05	0.00
Plus: farmer & spouse labour	1.60	1.31	-0.29
<b>Net farm income</b>	<b>6.44</b>	<b>6.30</b>	<b>-0.14</b>
<b>Farm business income</b>	<b>6.14</b>	<b>6.80</b>	<b>0.66</b>

**Farm Business Income (FBI) per farm**

(% distribution by number of farms)

FBI range per farm	% 2005/06	% 2006/07
Over £100,000	17	20
£50,000 to < £100,000	28	13
£25,000 to < £50,000	0	20
£12,500 to < £25,000	6	0
0 to < £12,500	33	20
-£25,000 to 0	6	13
Below -£25,000	11	13
<b>Total</b>	<b>100</b>	<b>100</b>

**Other efficiency factors**

	Average 2005/06	Average 2006/07
Broiler sale price (£/bird)	1.22	1.22
Broiler purchase price (£/bird)	0.25	0.25

**Table 2.8 Balance sheet data for 2006/07 - specialist poultry farms**

Group	Specialist poultry		Battery layers		Free range layers	
Number of farms	67		15		17	
Financial year	2006/07		2006/07		2006/07	
	Opening	Closing	Opening	Closing	Opening	Closing
<b>Assets</b>						
Fixed Assets						
Land, buildings & SPS	319,391	346,627	308,070	325,408	385,890	413,374
Breeding livestock	721	490	0	0	908	881
Machinery	55,869	57,967	75,969	68,303	42,432	46,476
Miscellaneous business assets	1,294	1,294	409	409	0	0
<b>Total fixed assets</b>	<b>377,275</b>	<b>406,378</b>	<b>384,449</b>	<b>394,120</b>	<b>429,230</b>	<b>460,731</b>
Current assets						
Crops and trading livestock	43,161	56,218	72,253	53,765	18,799	25,529
Feedstuffs & goods in store	4,024	3,928	8,403	7,336	2,241	3,252
Liquid assets	64,929	66,042	57,173	65,306	28,716	19,536
<b>Total current assets</b>	<b>112,114</b>	<b>126,189</b>	<b>137,829</b>	<b>126,407</b>	<b>49,756</b>	<b>48,316</b>
<b>Total assets</b>	<b>489,389</b>	<b>532,567</b>	<b>522,278</b>	<b>520,528</b>	<b>478,986</b>	<b>509,047</b>
<b>Liabilities</b>						
Bank term loans	46,348	64,348	37,385	87,698	93,723	108,760
Other loans	49,901	61,725	64,293	3,771	65,032	50,773
Bank overdraft	35,565	32,385	26,188	30,266	21,982	20,493
Other short term loans	41,646	33,597	32,078	29,086	22,325	11,059
<b>Total external liabilities</b>	<b>173,460</b>	<b>192,055</b>	<b>159,945</b>	<b>150,821</b>	<b>203,062</b>	<b>191,085</b>
<b>Net worth</b>	<b>315,930</b>	<b>340,512</b>	<b>362,333</b>	<b>369,707</b>	<b>275,924</b>	<b>317,962</b>
Percentage equity (%)	64.6%	63.9%	69.4%	71.0%	57.6%	62.5%

**Table 2.9 A comparison of net worth and percentage equity by farm type**

Financial year	Average Assets 2006/07	Average Liabilities 2006/07	Average Net Worth 2006/07	Average % Equity 2006/07
<b>Defra main farm type</b>				
Lowland cattle and sheep	527,752	52,770	474,982	90.0%
Cereals	1,189,047	115,551	1,073,496	90.3%
Mixed	814,811	100,568	714,243	87.7%
General cropping	1,096,865	148,628	948,237	86.4%
Dairy	716,028	131,116	584,913	81.7%
Horticulture	524,625	118,144	406,481	77.5%
Pigs	484,176	171,255	312,921	64.6%
Poultry	510,978	182,758	328,221	64.2%
<b>All businesses</b>	<b>788,258</b>	<b>105,407</b>	<b>682,851</b>	<b>86.6%</b>

Group	Broilers & table chickens	
Number of farms	15	
Financial year	2006/07	
	Opening	Closing
<b>Assets</b>		
Fixed Assets		
Land, buildings & SPS	212,341	238,252
Breeding livestock	389	396
Machinery	53,912	49,274
Miscellaneous business assets	624	624
<b>Total fixed assets</b>	<b>267,266</b>	<b>288,546</b>
Current assets		
Crops and trading livestock	62,227	72,995
Feedstuffs & goods in store	3,671	2,929
Liquid assets	53,792	39,243
<b>Total current assets</b>	<b>119,690</b>	<b>115,167</b>
<b>Total assets</b>	<b>386,955</b>	<b>403,713</b>
<b>Liabilities</b>		
Bank term loans	2,295	7,848
Other loans	27,058	50,531
Bank overdraft	17,774	21,978
Other short term loans	28,415	18,949
<b>Total external liabilities</b>	<b>75,541</b>	<b>99,306</b>
<b>Net worth</b>	<b>311,414</b>	<b>304,408</b>
Percentage equity (%)	80.5%	75.4%

**Table 2.10 Distribution of Tenant's Type Capital (%)**

	Specialist poultry	Battery layers	Free range layers	Broilers & table chickens
Crops & tillages	0.5	0.2	0.6	1.2
Stores	2.2	3.8	2.9	2.0
Machinery	32.2	35.2	47.5	30.6
Livestock	27.9	30.6	24.0	39.2
Other	37.2	30.1	25.0	27.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Tenant's Type Capital (£)</b>	<b>176,920</b>	<b>204,646</b>	<b>93,652</b>	<b>168,623</b>

**Table 2.11 Gross margin for all laying flocks**

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2005/06	2006/07	£ change	2005/06	2006/07	£ change
Number of farms	44	42				
Average number of birds per year	21,826	15,776				
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
<b>Gross output</b>						
Eggs	12.33	12.76	0.43			
Hen depreciation	-1.97	-2.13	-0.16			
Other poultry output	0.00	0.00	0.00			
<b>Total output</b>	<b>10.36</b>	<b>10.63</b>	<b>0.27</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>						
Feed	5.29	5.60	0.31	51.12	52.72	1.60
Vet. & medicines	0.05	0.07	0.02	0.48	0.68	0.20
Other livestock costs	0.44	0.45	0.01	4.23	4.23	0.00
Other variable costs	0.00	0.00	0.00	0.00	0.04	0.04
<b>Total variable costs</b>	<b>5.78</b>	<b>6.13</b>	<b>0.35</b>	<b>55.83</b>	<b>57.68</b>	<b>1.85</b>
<b>Total gross margin</b>	<b>4.57</b>	<b>4.50</b>	<b>-0.08</b>	<b>44.17</b>	<b>42.32</b>	<b>-1.85</b>

**Table 2.12 Gross margin for laying flocks with battery hens**

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2005/06	2006/07	£ change	2005/06	2006/07	£ change
Number of farms	19	20				
Average number of birds per year	35,068	21,755				
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
<b>Gross output</b>						
Eggs	11.83	12.22	0.39			
Hen depreciation	-1.85	-1.99	-0.15			
Other poultry output	-0.01	0.00	0.01			
<b>Total output</b>	<b>9.98</b>	<b>10.22</b>	<b>0.24</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>						
Feed	5.11	5.30	0.19	51.23	51.90	0.67
Vet. & medicines	0.05	0.05	0.00	0.47	0.48	0.01
Other livestock costs	0.50	0.49	-0.01	4.99	4.75	-0.24
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total variable costs</b>	<b>5.65</b>	<b>5.84</b>	<b>0.18</b>	<b>56.68</b>	<b>57.13</b>	<b>0.44</b>
<b>Total gross margin</b>	<b>4.32</b>	<b>4.38</b>	<b>0.06</b>	<b>43.32</b>	<b>42.87</b>	<b>-0.44</b>

**Table 2.13 Gross margin for laying flocks with free range hens**

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2005/06	2006/07	£ change	2005/06	2006/07	£ change
Number of farms	25	22				
Average number of birds per year	9,935	9,065				
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
<b>Gross output</b>						
Eggs	13.92	14.20	0.28			
Hen depreciation	-2.37	-2.48	-0.11			
Other poultry output	0.02	0.00	-0.02			
<b>Total output</b>	<b>11.56</b>	<b>11.72</b>	<b>0.16</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>						
Feed	5.88	6.41	0.53	50.82	54.66	3.84
Vet. & medicines	0.06	0.14	0.08	0.52	1.16	0.64
Other livestock costs	0.25	0.35	0.10	2.15	3.02	0.87
Other variable costs	0.00	0.02	0.02	0.01	0.14	0.13
<b>Total variable costs</b>	<b>6.19</b>	<b>6.91</b>	<b>0.73</b>	<b>53.50</b>	<b>58.98</b>	<b>5.48</b>
<b>Total gross margin</b>	<b>5.38</b>	<b>4.81</b>	<b>-0.57</b>	<b>46.50</b>	<b>41.02</b>	<b>-5.48</b>

**Table 2.14 Gross margin for non-contract broilers and table chickens**

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	<b>2005/06</b>	<b>2006/07</b>	<b>£ change</b>	<b>2005/06</b>	<b>2006/07</b>	<b>£ change</b>
Number of farms	23	18				
Average number of birds per year	81,959	75,569				
Throughput of birds per year	532,720	484,795				
Average number of crops per year	6.50	6.42				
Average sale price (broilers) - £/bird	1.22	1.21				
Average purchase price (broilers) - £/bird	0.24	0.25				
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
<b>Gross output</b>						
Broilers	0.98	0.97	-0.01			
<b>Total output</b>	<b>0.98</b>	<b>0.97</b>	<b>-0.01</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>						
Feed	0.68	0.66	-0.02	68.98	68.03	-0.95
Vet. & medicines	0.02	0.02	0.00	1.87	1.80	-0.08
Other livestock costs	0.03	0.03	0.00	3.23	3.37	0.14
Other variable costs	0.00	0.01	0.00	0.46	0.53	0.08
<b>Total variable costs</b>	<b>0.73</b>	<b>0.71</b>	<b>-0.02</b>	<b>74.54</b>	<b>73.73</b>	<b>-0.81</b>
<b>Total gross margin</b>	<b>0.25</b>	<b>0.25</b>	<b>0.00</b>	<b>25.46</b>	<b>26.27</b>	<b>0.81</b>

**Table 2.15 Gross margin for turkey production**

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	<b>2005/06</b>	<b>2006/07</b>	<b>£ change</b>	<b>2005/06</b>	<b>2006/07</b>	<b>£ change</b>
Number of farms	17	16				
Average number of birds per year	1,531	1,440				
Throughput of birds per year	4,541	3,530				
Average number of crops per year	2.97	2.45				
Average sale price - £/bird	11.57	15.20				
Average purchase price - £/bird	1.83	2.62				
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
<b>Gross output</b>						
Other poultry output	9.86	12.60	2.75			
<b>Total output</b>	<b>9.86</b>	<b>12.60</b>	<b>2.75</b>	<b>100.00</b>	<b>100.00</b>	
<b>Variable costs</b>						
Feed	4.44	6.02	1.57	45.07	47.74	2.68
Vet. & medicines	0.15	0.14	-0.01	1.52	1.10	-0.42
Other livestock costs	0.44	0.79	0.34	4.51	6.25	1.75
Other variable costs	0.00	0.01	0.00	0.01	0.04	0.03
<b>Total variable costs</b>	<b>5.04</b>	<b>6.95</b>	<b>1.91</b>	<b>51.10</b>	<b>55.14</b>	<b>4.03</b>
<b>Total gross margin</b>	<b>4.82</b>	<b>5.65</b>	<b>0.83</b>	<b>48.90</b>	<b>44.86</b>	<b>-4.03</b>

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- Quarterly supplies and total domestic usage of meat in the UK  
<http://statistics.defra.gov.uk/esg/natstats/release.asp>

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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 diversification, 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, 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 farmer and spouse 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 invested in the farm, whether borrowed or not.

### ***Net farm income (NFI)***

Represents the return to the farmer and spouse for their own manual labour, management and interest on tenant-type capital invested in the farm, whether 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***

Includes contract & 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, might 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 (sterling)
Defra	Department for Environment, Food and Rural Affairs
Ave	Average
depn.	depreciation
ha	hectare
no.	number
n/a	not applicable

## ***Rounding***

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

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## 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 the Welfare of Farm Animals (England) (Amendment) Regulations 2002 (SI 2002 No. 1646<sup>6</sup>), 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, nest 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 the 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 to production sites, until the leave for slaughter. The proposed new measures include, amongst other things:

- The introduction of limits on stocking density (ordinarily to a maximum of 33kg/m<sup>2</sup>)
- 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

The 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/m<sup>2</sup> have to comply with standards relating to drinkers, feeding, litter, ventilation/heating, light, inspection, cleaning, training, record keeping and mutilations. Producers stocking above 33kg/m<sup>2</sup> up to a maximum of 38kg/m<sup>2</sup> are subject to an additional set of standards, plus monitoring at the slaughterhouse. 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)).

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## **Appendix 2: Reports in this series**

Reports in this series:

**Crop Production in England 2006/07**

**Dairy Farming in England 2006/07**

**Hill Farming in England 2006/07**

**Horticulture Production in England 2006/07 (Horticultural Business Data)**

**Lowland Grazing Livestock Production 2006/07**

**Pig Production in England 2006/07**

**Poultry Production in England 2006/07**

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