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Rural Business Research

Farm Business Survey

2007/2008

Poultry Production in England

Richard Crane and Rod Vaughan

RBR

independent research, data and analysis

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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 of the Consortium)

Spring 2007

Foreword to the Third Series

Agricultural history in the UK records many regulations, policies and plans designed to enable agriculture and horticulture to meet the contemporary challenges of the day. The Marketing Acts of the 1930s, the UK's entry to the Common Agricultural Policy, Milk Quotas, Set-Aside, Cross-Compliance; the list is extensive. Common across all these examples, and inherent in their inception, is the variability and uncertainty faced by the industry. The last 18 months have witnessed renewed unpredictability in the incomes of UK farmers and growers. In the 21st Century the emphasis on freeing up markets leads farmers and growers to be increasingly reliant upon business planning and decision making in the face of uncertainty. With such uncertainty, the need for independent data to aid farmers, growers and their advisors is paramount and one which *Rural Business Research* continues to provide based upon comprehensive analysis of independent data from the Farm Business Survey for England. The third series of these influential reports highlights the changing economic landscape faced by farmers and growers during the 2007/08 financial year and place in context the profitability and vulnerability of different sectors of the industry. Complementing these reports are *Rural Business Research's* free-to-use on-line services, providing comprehensive Farm Business Survey Reports for Government Office Regions and farm business benchmarking at www.farmbusinesssurvey.co.uk.

Rural Business Research's aim, in providing these reports and data services, is to facilitate individuals and organisations working in agriculture, horticulture, land management and rural development, through the provision of independent data, research and analysis. As part of our wider engagement we are keen to hear the views of readers and users of our reports and data-services; supporting our dedicated outreach web-site www.ruralbusinessresearch.co.uk is our email alert network which promptly highlights our new publications and outputs to interested parties. If you would like your details to be added to our email alert network or wish to comment on our reports, please email paul.wilson@nottingham.ac.uk.

As we provide the third series of these influential reports, *Rural Business Research* looks forward to continuing its role at *the* independent organisation responsible for providing analysis and insight to the industry over the coming decade. *Rural Business Research* has recently successfully tendered for the Contract to undertake the Farm Business Survey in England for 2009/10 and beyond; a central aspect of our continued work and analysis of the Farm Business Survey is to further enhance the outreach and knowledge transfer activities we undertake, making even greater use of the data, and engaging with a wider range of practitioners and policy makers working in food production and land use in the UK.

Dr Paul Wilson

Chief Executive Elect, Rural Business Research

Spring 2009

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.

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Summary

- The UK poultry industry has grown significantly over the last two decades [+25%] with 167.7 million birds in production at any one time in 2007. This growth was largely due to an increase of over 50% in the number of birds kept for poultry meat production. However, the number of laying hens declined [-28%] over the same period, though improvement in productivity has maintained egg production volumes.

- The UK poultry industry is dominated by very large scale units. Broiler production was distributed over 3,100 units in 2005, 400 of which accounted for 69% of the number of birds in production. The domination of large units was even more marked for laying fowl units with 400 units responsible for 78% of production.

- The value of UK poultry production amounted to £1.617 billion in 2007 with self sufficiency of approximately 90%.

- The declaration in November 2008 that the UK had been declared free of bird flu was welcome news for the industry allowing export trade negotiations to countries outside the EU to resume.

- The price of eggs rose faster than the cost of feed in 2007.

- The profitability per bird for Laying Flocks was greater than for non-Laying Flocks in 2007.

- The fixed costs of electricity, fuel and machinery repairs rose sharply in 2007, up 54.1%, 49.3% and 43% respectively, for all Specialist Poultry Farms.

- The net worth of Specialist Poultry farms declined marginally [-2.4%] in 2007 with percentage equity of 58.9% recorded compared with 61.3% in 2006.

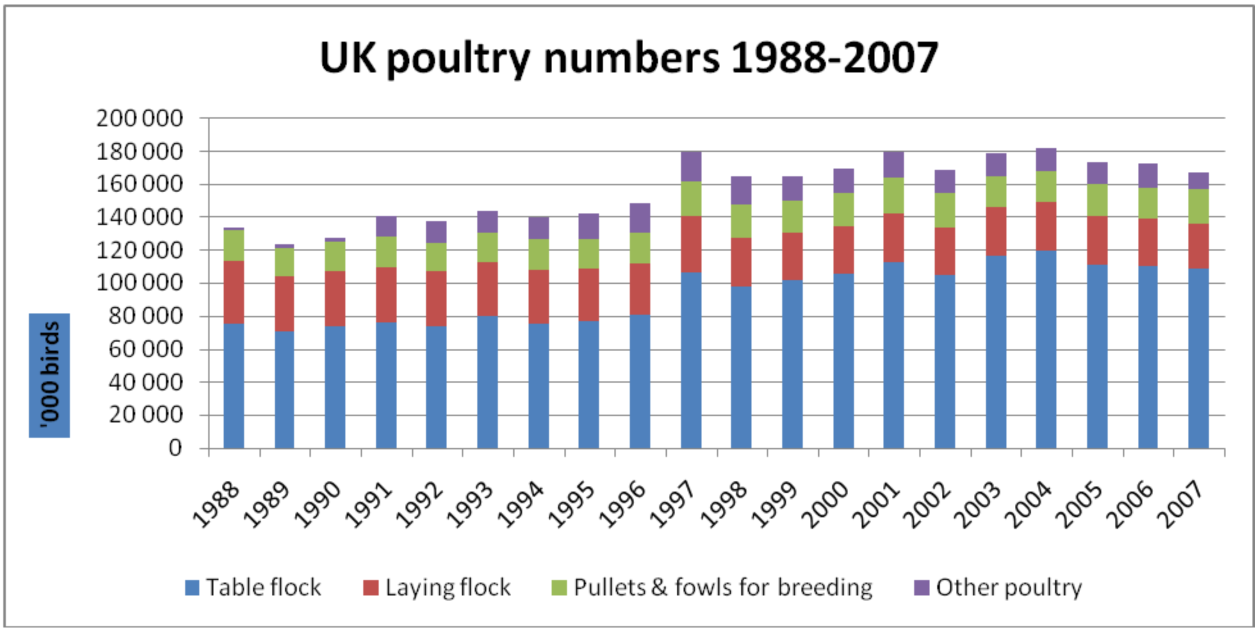
- The improvement in gross margins was most marked among the laying flocks with free range hens in 2007 that saw an increase of £1.28 per bird, compared with per bird gains for laying flocks with battery hens and non-contract table chicken of £0.42 and £0.26 respectively.

SECTION 1: COMMENTARY ON THE UK POULTRY INDUSTRY

1.1 General introduction

In 2007 there were 167.7 million birds in production in the UK at any one time (see Figure 1.1)[1]. 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, up 20% since 1988. In this period the number of Table Birds increased by 30% whilst the number of Laying Birds declined by some 39%. There have also been significant increases in the number of Other Poultry, such as turkeys, ducks and geese, with numbers having grown from 1.85 in 1988 to 10.1 million in 2007. Although the longer-term trend is for increasing numbers of birds, numbers have declined slightly between 2005 and 2008 from a peak in 2004. In 2007 the national poultry flock comprised of 65% Table Chickens (produced for meat), 16% Laying Hens, 13% Pullets and Breeding Fowls with the remaining 6% being Other Poultry (ducks, geese, turkeys & other poultry).

Figure 1.1 UK poultry numbers between 1988 and 2007



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 (2008 a & b)

[1] The figure of 167.7 million birds and the data contained in Figure 1.1, represent the number of birds in production at the time of the Agricultural Survey in June 2007 and not the total number of birds produced each year. In 2007, 842.2 million broiler chicks were placed from registered UK hatcheries, plus 14.6 million turkey pullet placements and 31.4 commercial layer chick placements.

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[2]. Table 1.1 shows how these units were distributed over size groups, where size is defined by the number of birds produced.

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
All	**3,100**		**111,486.8**	

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 (12.9% 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.

1.2.2 Poultry for eggs

There were 37,400 laying fowl holdings in the UK in 2005[2]. 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	95.4	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
All	**37,400**		**40,966.8**	

Source: Defra (2007c)

[2] At time of writing, 2005 was the latest date for which official data were available. (No new Data available)

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 though 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 58% of eggs produced in 2007 (BEIS, 2009). 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[3] per square metre. This system accounts for around 4% of eggs sold in the UK in 2007. 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 38% of eggs produced in the UK came from this system in 2007. Free range production can also be organic, where, additionally, feeds are organic and the hens are ranged on organically managed land.

1.3 Contribution of the poultry sector to the economy

1.3.1 The farm sector

In 2007, slaughtering of poultry for meat fell 3.8% to 1.46 million tonnes (Defra). The value of poultry production fell by 0.25%, to £1.207 billion, due to impact of promotions by the multiples on unit returns. The volume of eggs produced for human consumption fell by around 3% in the same period, although the value of egg production rose by 13% to £410M. Total poultry output (meat and eggs) was valued at £1.61 billion at producer prices, with 25% of this, by value, accounted for by eggs (see Table 1.3). In 2007 the poultry sector contributed some 10.3% of total agricultural outputs (excluding subsidy), this figure being 1.2% lower than the previous four years average. 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 2003-2007 (£M)

	2003	2004	2005	2006	2007
Poultry meat	1,337	1,329	1,321	1,218	1,207
Eggs	338	381	349	361	410
Total poultry	1,675	1,710	1,670	1,579	1,617
Total agricultural output	14,166	14,400	14,130	14,737	15,700

Source: Defra (2008)

[3] This 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^2.

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 (BPC 2009[7]). Retail sales of poultry meat in the UK are worth around £3.7 billion annually. Around 4% of sales are either free-range or organic (Great British Chicken). Table 1.4 shows the distribution of poultry meat sales over poultry types and product type.

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
Total	2,952,080	33,337	364,896	774,090	8,690	94,654

Source: British Poultry Council (BPC), 2007.

1.3.2.2 Eggs

In 2007, 10,462 million eggs were consumed in the UK (29 million per day, compared with 28 million daily in 2005), with a retail market value of approximately £650million (£582 million in 2006). Demand was met from UK production of 8,473 million eggs with net imports of 1,989 million eggs. Around half [48%] of all eggs produced are sold retail as shell eggs, with the remainder split between processing/manufacturing [29%] and wholesale/catering [23%]. Retail egg sales through multiples amounted to 85% of the total with the remaining 15% sold through Co-ops [4%], market stalls and independents [4%] and others [7%] such as butchers and with door step delivery of milk.

1.4 Trade

The UK is around 90% self-sufficient in poultry meat (Defra 2009), 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 2007 poultry meat imports were valued at £1 billion and exports nearly £400M (BPC 2009). Self-sufficiency in eggs was 81% in 2007 (Defra, 2009), down from 94% in the mid 1990s, and showing a 2% decline from 2006.

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
Chicken	855.8	180.9
Duck	25.6	8.2
Goose	5.9	0.1
Turkey	104.7	31.1
Eggs[#]	77.1	27.5

[#] Eggs trade data are for 2005.
Note: Data are for period of the 12 months to October 2006; no new data available
Source: Poultry meat: British Poultry Council (2007); Eggs: Defra (2007)

Table 1.6 - UK imports and exports of poultry and eggs and egg products 2002-2006

(£M)		2002	2003	2004	2005	2006
Poultry Meat	Imports	634.9	723.7	784.4	785.3	705.3
	Exports	160.9	186.9	205.9	215.2	160.5
Eggs and egg products	Imports	73.7	91.9	90.8	79.6	91.3
	Exports	35.5	31.8	34.8	28.3	24.4

Note: Data for calendar years

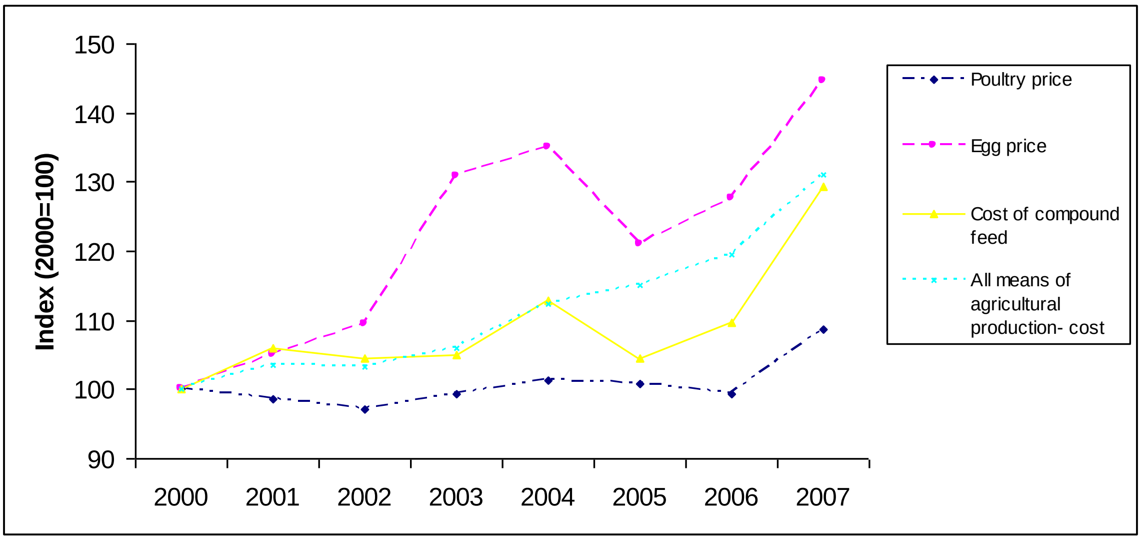
Source: Defra (2009)

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 feed (see Figure 1.2). Although the cost of compound feeds fell back in 2005, it rose very sharply again in 2007 after the increase in 2006. Feed costs ended 2007 20 index points above poultry prices and 15 index points below the egg price indicating that poultry laying flocks were more profitable than non-laying flocks, as are borne out by the results in Section 2 of this report.

Figure 1.2 Index of producer prices for poultry and eggs and cost of production



Source Defra (2009)

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. This was followed into 2007 to end the period sixteen points above the increasing 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)[4].

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 many of the multiples 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 1).

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 several outbreaks in both wild and farmed birds. Table 1.7 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.

In November 2008 the UK was declared free of avian flu.

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

Table 1.7 - Record of Avian Flu outbreaks in the UK 2006 – 2008

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.
July 2008- Avian Flu control zone lifted
The control zone around the outbreak in Oxfordshire has been lifted after a Defra report concluded there was no evidence of the disease spreading.
November 2008- UK declared free of avian flu
After the outbreak on a chicken farm near Banbury, Oxfordshire the UK has been declared free of bird flu allowing export trade negotiations to countries outside the EU to resume.

Sources: Defra, 2009

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 2.16 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 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
    - 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 battery hens
    - Sample includes 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 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 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 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 2007 June survey there are 838 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 2007/08 financial year includes 69 Specialist Poultry farms, which represents 8.2% 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 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 2006/07and 2007/08 Farm Business Survey. Results for this survey can be accessed at:
http://farmbusinesssurvey.co.uk and at: http://statistics.defra.gov.uk/esg/publications/fab/default.asp

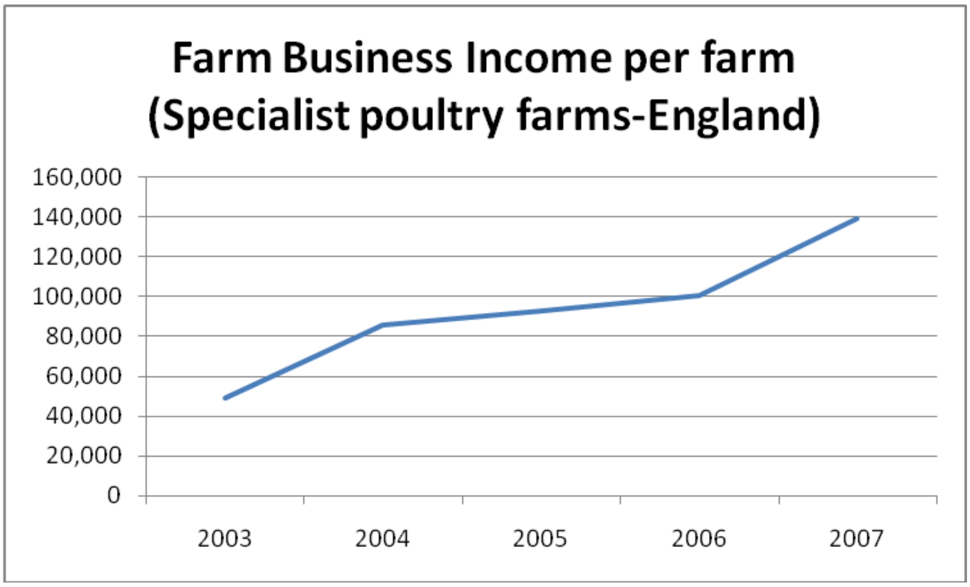
2.4 Financial results for 2006/07 and 2007/08

2.4.1 Specialist Poultry Farms

In 2007/08 a total of 69 farms participating in the Farm Business Survey in England were classified as Specialist Poultry farms, two more than in the previous year. On average these farm businesses were more profitable in the 2007/08 financial year, with average Gross Output showing a growth of 26.3%, reaching £709,135 per farm. Higher egg prices and a modest increase in the returns of table chickens were the main factors responsible for improved growth. Higher commodity prices led to a big rise in feed costs with expenditure on feed, the single largest cost on these poultry units increasing by 27.5%, to £290,028 per farm. There were also significant increases to Fixed Cost inputs, up by 27% to £216,409 per farm. The result of these changes in output and costs saw Farm Business Income (FBI) increase by 38.4% to £139,225 per farm. In common with past income trends there was a wide range in the level of FBI per farm business, with 30% of farms producing an average annual FBI of over £50,000 in 2007/08 and 12% of farms suffering from a negative FBI, compared with 26% and 24% respectively for the previous year.

Figure 2.1 shows a time series of Farm Business Income for Specialist Poultry farms in England for the last five years.

Figure 2.1 Farm Business Income trend for Specialist Poultry Farms in the FBS



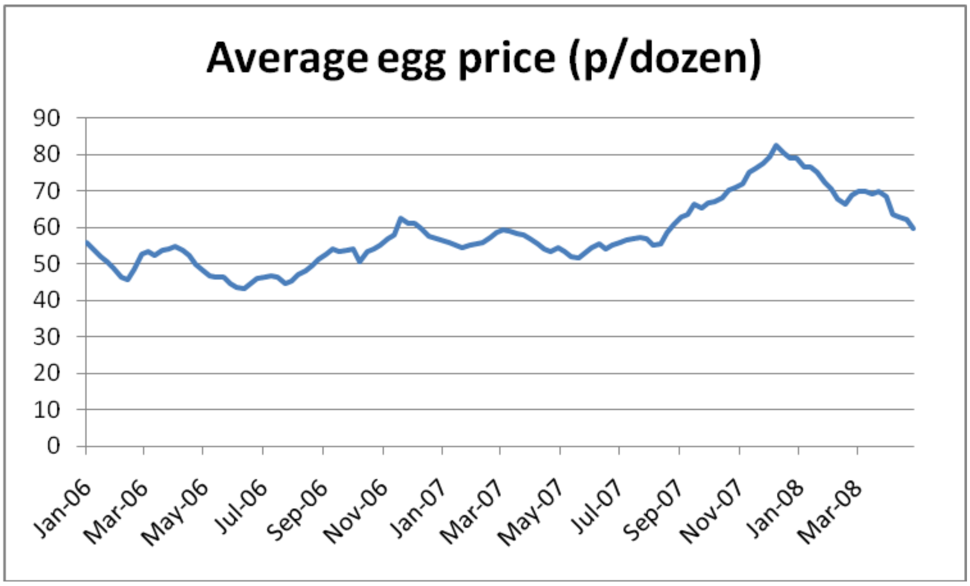
Source: www.farmbusinesssurvey.co.uk

2.4.2 All Laying Flocks

Average Gross Output for Laying Flocks in England in 2007 was £518,507, an increase of 52% on 2006 and, up 29% on 2005. Three quarters of the improvement was due to larger laying flocks with the remaining twenty five percent attributable to the higher price paid for eggs. Egg yields were similar between the two years at 278 and 279 eggs per bird per year. Whole farm Variable Costs went up by 56.4% to £291,832 per farm amongst which feed comprising 90.2% of all these costs increased by 55.6% to £263,524 per farm. As a consequence, the average Gross Margin increased by 46.8% to £226,675 per farm. Total Fixed Costs increased by 31.6%, to £198,348 per farm with the rises in expenditure on fuel [+64.6%] and electricity [+47.9] being most prominent. The result of which was a marked increase of £25,446 to £40,502 per farm for the 2007/08 financial year.

Although the increase in average bird numbers contributed to higher profit, the margin per bird also showed an improvement on the previous year. The average egg price in 2007/08 increased by 13.7% to 65.4 pence per dozen for the farms that were sampled. Consequently, Gross Output per bird increased by £1.52 to £13.04 per bird. In the same period feed costs increased by 15.9% to £6.63 per bird. Despite this increase and the increases in the cost of fuel and electricity, FBI rose by 51p to £1.02 per bird. Figure 2.2 shows the average wholesale egg price has increased over the 2006/07 and 2007/08 financial years.

Figure 2.2 Average Monthly Wholesale to Retailer Egg price



Source: Defra (2008) Weekly average wholesale to retailer prices for home produced poultry and eggs

2.4.3 Battery and Free Range flocks

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

	All Laying Flocks (£ per holding)	Battery hens (£ per holding) (% difference from All Laying Flocks)	Free Range hens (£ per holding) (% difference from All Laying Flocks)
Total Gross Output	518,507	783,352 (+51.1)	236,531 (-54.1)
Total Variable Costs	291,832	457,009 (+56.6)	115,970 (-60.3)
Total Fixed Costs	198,348	294,184 (+48.3)	96,313 (-51.4)
Farm Business Income	40,502	51,892 (+128.1)	28,375 (-29.9)

In terms of financial performance, both Battery and Free Range units experienced an increase in FBI over the period 2006/07 and 2007/08. Battery units benefited from a 16.9% increase in the price of eggs to an average of 62.2 p per dozen, while the returns from free range eggs increased more slowly [10.6 %] to 80.9 p per dozen. While the number of eggs produced per bird remained static for the battery units at 282 eggs per bird per year, free range units saw a slight decline in production from 267 to 261 eggs per bird per year. Consequently, on a per bird basis, output increased by the same rate for both production systems, but on the much larger battery operations the increase in output was more pronounced than for the relatively smaller free range operations.

Costs per bird increased at a higher rate on the battery units, in particular for feed. Consequently, although both systems experienced better margins, the increase in the margin per bird was higher for the free range units, with a Gross Margin of £8.42 per bird and FBI of £1.98 per bird.

When the results are shown on a “£ per dozen eggs” basis a similar pattern emerges. Both production systems show comparable increases in output, but with the battery units experiencing a larger increase in costs. The margin (FBI) per dozen eggs for free range systems is two and a half times greater than for battery systems. However, as battery units were four times larger than free range units in 2007/08, the overall profitability for Battery Units was higher at £51,892, compared with £28,735 for Free Range units.

2.4.4 Non-laying flocks

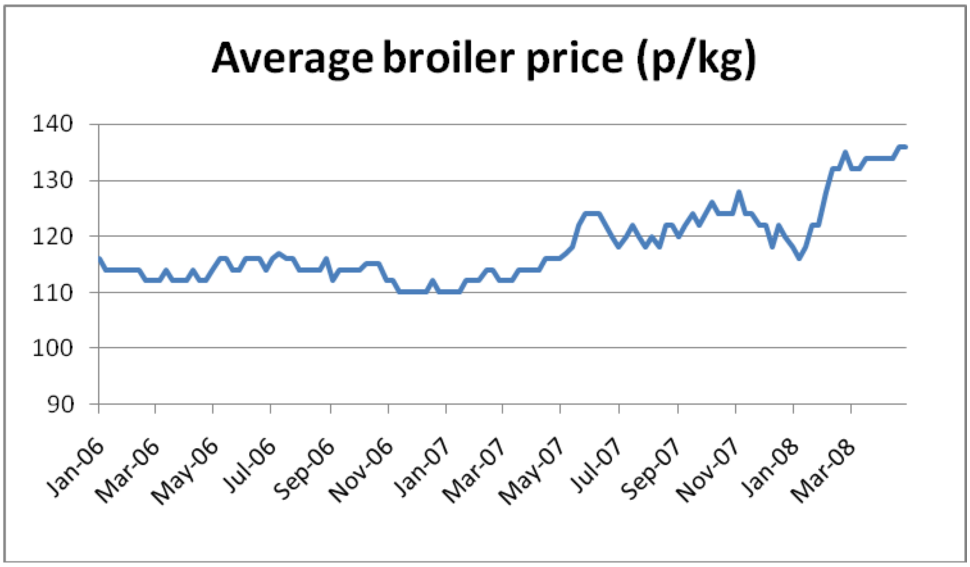
The 2007/08 financial year saw Gross Output go up by 14% to £607,044 per farm for Non-Laying flocks. At the same time total Variable Costs (which is mostly feed) increased by 16.5% and total Fixed Costs increased by 9.2%, although total bird numbers fell by 15.8%. Overall, FBI increased by 22.6% to £56,893 per unit for 2007/08. This group includes a mixture of contract and non-contract poultry meat producers. Although the majority of them are broiler producers, there are a small number of producers of table chickens, turkeys, ducks and geese. Sample sizes are insufficient to show the results for individual enterprises, although the combined results for non-contract broilers, table chickens and turkey production can be found in Table 2.7.

2.4.5 Broilers, Table Chickens & Turkeys

Total poultry output in this group increased by 24.3% to £1,016,317. However, costs also increased by a similar amount (feed +28.3%, labour +11.9%, fuel & electric +13.7%). As a result, the increase in FBI was small [+3.6%] to £66,353 per farm. The average number of birds was virtually unchanged between the two years, although throughput increased marginally by 0.6 to 6.9 crops per year. The results on a per bird basis (based on throughput) show that although poultry output increased by 15p per bird, feed costs increased by 12p per bird and other livestock costs by 2p per bird. Consequently, Gross Margin per bird remained relatively static at 34p per bird, with FBI at 8p per bird. In this group the average sale price for broilers was £1.35 per bird, up 13.4% on the previous year. Figure 2.3 shows how the average broiler price has changed over the 2006/07 and 2007/08 financial years.

Although the sample of solely non-contract broilers was not sufficiently large to publish results, evidence from a limited number of observations show Gross Output increased by approximately 15p per bird, while feed costs increased by 13p per bird, producing a Gross Margin of 25p per bird (+2p per bird on 2006/07).

Figure 2.3 Average Monthly Wholesale to Retailer broiler price (p/kg)



Source: Defra (2008) 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 fell slightly [-2.4%] during the year to 58.9%. Although the value of Fixed Assets increased by 13% to £469,442, total External Liabilities (particularly short term borrowings) increased [+20.5%] to £264,141.

The Laying Flocks with Free Range production systems saw their percentage equity improve slightly [+2.6%] during the financial year, however, at only 54.7%, this is less than for Battery Production units with 69.7% equity in their business at the end of the year. Poultry Meat producers also experienced a decline [-5.5%] in their percentage equity during the year, brought about by a significant increase in short term borrowings. At the end of the financial year, their equity amounted to 68.7%.

Table 2.9 compares the Net Worth and percentage equity for the other Robust Farm Type classification used in England. The average Net Worth for all farms is approximately £800,000 per farm representing 87.5% equity in the business. Those farms that are predominantly land based have the highest Net Worth, while those businesses with intensive livestock systems and less land have a lower Net Worth and smaller percentage equity. Consequently, lowland cattle & sheep farms and cereal farms have the highest percentage equity at 91%, while pig and poultry farms have the lowest percentage equity at 60%.

2.6 Gross Margins

2.6.1 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.

2.6.2 Gross margin for laying flocks

The average flock size for this group of farms at 17,000 hens in 2007/08 was half that of the Specialist Poultry group, however the trend of financial results is very similar. Average egg price was 66.9 per dozen, compared with 57p per dozen the year before. This rise in the price of eggs saw output increase to £12.44 [+£1.81] per bird. Feed costs, amounting to over 90% of variable costs, increased to £6.71 [+£1.11] per bird, resulting in a Gross Margin of £5.11 [+62p] per bird for 2007/08. The Gross Margin per dozen eggs was 29p for free range layers and 22p for battery layers.

Similarly with the Specialist Poultry farms, the Free Range systems experienced a larger increase to the Gross Margin per bird. The Gross Margin for Free Range layers was £6.09 [+£1.28] per bird compared with £4.80 [+42p] for Battery Layers for the 2007/08 financial year.

The average egg price was 26% higher for Free Range layers [79.6p per dozen], although egg production was 10% less for free range systems [252 eggs per year]. Feed costs were also 15% higher [£7.48 per bird] for free range producers.

However, battery systems had the advantage of size, being five times greater than their free range counterparts in 2007/08.

2.6.3 Gross margin for Broilers & table chicken production (non-contract)

The average price received for broilers in 2007/08 was £1.41 [+20p] per bird, while the average purchase price for chicks was 26p [+1p] per bird. Feed costs also increased to 77p [+12p] per bird, producing a Gross Margin of 33p per bird compared with 25p the year before. With 6.9 crops per year this produced an average Gross Margin of £2.26 per bird place on a twelve month basis.

2.6.4 Gross margin for Turkey production

Overall, poultry output was £24.05 per bird [+£11.45], while feed cost was £6.36 per bird [+34p]. This produced a Gross Margin of £13.89 [+£8.23] per bird for 2007/08. The majority of farms in this group are small scale Christmas turkey producers.

Table 2.2 Financial results for all specialist poultry farms

	Per farm			*Per bird (annual basis)*		
	2006/07	**2007/08**	**% change**	**2006/07**	**2007/08**	**£ change**
Number of farms	67	69		67	69	
Average number of birds/year	60,508	57,200		60,508	57,200	
	Average £ per farm			*Average £ per bird*		
Gross output						
Eggs	177,845	287,973	61.9	2.94	5.03	2.10
Hen depreciation	-16,366	-25,208	54.0	-0.27	-0.44	-0.17
Broilers	192,439	207,076	7.6	3.18	3.62	0.44
Other poultry output	184,639	214,448	16.1	3.05	3.75	0.70
Total poultry output	**538,557**	**684,288**	**27.1**	**8.90**	**11.96**	**3.06**
Crops	3,922	2,789	-28.9	0.06	0.05	-0.02
Other livestock	2,253	3,215	42.7	0.04	0.06	0.02
Other output	16,532	18,843	14.0	0.27	0.33	0.06
Total gross output	**561,265**	**709,135**	**26.3**	**9.28**	**12.40**	**3.12**
Variable costs						
Feed	227,386	290,028	27.5	3.76	5.07	1.31
Seed, fertiliser, crop costs	7,175	7,534	5.0	0.12	0.13	0.01
Vet. & medicines	5,513	7,937	44.0	0.09	0.14	0.05
Other livestock costs	61,730	60,381	-2.2	1.02	1.06	0.04
Total variable costs	**301,804**	**365,880**	**21.2**	**4.99**	**6.40**	**1.41**
Total gross margin	**259,461**	**343,255**	**32.3**	**4.29**	**6.00**	**1.71**
Fixed costs						
Labour:						
Regular paid	52,941	73,334	38.5	0.87	1.28	0.41
Regular unpaid	16,606	17,882	7.7	0.27	0.31	0.04
Casual labour	2,215	3,423	54.6	0.04	0.06	0.02
Power & machinery costs:						
Contract & hire	8,832	5,839	-33.9	0.15	0.10	-0.04
Fuel	4,913	7,334	49.3	0.08	0.13	0.05
Electricity	7,815	12,043	54.1	0.13	0.21	0.08
Repairs	7,384	10,560	43.0	0.12	0.18	0.06
Depreciation	10,458	12,166	16.3	0.17	0.21	0.04
Rent (incl. imputed)	29,658	28,813	-2.8	0.49	0.50	0.01
Other costs:						
Occupiers repairs	6,386	11,954	87.2	0.11	0.21	0.10
Sundries (incl. bad debts)	23,137	33,061	42.9	0.38	0.58	0.20
Total fixed costs	**170,344**	**216,409**	**27.0**	**2.82**	**3.78**	**0.97**
Management & investment income	**89,116**	**126,846**	**42.3**	**1.47**	**2.22**	**0.74**
Minus: management salaries	760	573	-24.6	0.01	0.01	0.00
Plus: farmer & spouse labour	14,277	15,104	5.8	0.24	0.26	0.03
Net farm income	**102,633**	**141,371**	**37.7**	**1.70**	**2.47**	**0.78**
Farm business income	**100,591**	**139,225**	**38.4**	**1.66**	**2.43**	**0.77**

Per £100 of gross output

	2006/07	2007/08	£ change
Number of farms	67	69	
Average number (birds/year)	60,508	57,200	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	31.69	40.61	
Hen depreciation (%)	-2.92	-3.55	
Broilers (%)	34.29	29.20	
Other poultry output (%)	32.90	30.24	
Total poultry output (%)	**95.95**	**96.50**	
Crops (%)	0.70	0.39	
Other livestock (%)	0.40	0.45	
Other output (%)	2.95	2.66	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	40.51	40.90	0.39
Seed, fertiliser, crop costs	1.28	1.06	-0.22
Vet. & medicines	0.98	1.12	0.14
Other livestock costs	11.00	8.51	-2.48
Total variable costs	**53.77**	**51.60**	**-2.18**
Total gross margin	**46.23**	**48.40**	**2.18**
Fixed costs			
Labour:			
Regular paid	9.43	10.34	0.91
Regular unpaid	2.96	2.52	-0.44
Casual labour	0.39	0.48	0.09
Power & machinery costs:			
Contract & hire	1.57	0.82	-0.75
Fuel	0.88	1.03	0.16
Electricity	1.39	1.70	0.31
Repairs	1.32	1.49	0.17
Depreciation	1.86	1.72	-0.15
Rent (incl. imputed)	5.28	4.06	-1.22
Other costs:			
Occupiers repairs	1.14	1.69	0.55
Sundries (incl. bad debts)	4.12	4.66	0.54
Total fixed costs	**30.35**	**30.52**	**0.17**
Management & investment income	**15.88**	**17.89**	**2.01**
Minus: management salaries	0.14	0.08	-0.05
Plus: farmer & spouse labour	2.54	2.13	-0.41
Net farm income	**18.29**	**19.94**	**1.65**
Farm business income	**17.92**	**19.63**	**1.71**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2006/07	% 2007/08
Over £100,000	13	17
£50,000 to <£100,000	13	13
£25,000 to <£50,000	16	26
£12,500 to <£25,000	21	22
0 to <£12,000	11	10
-£25,000 to 0	11	6
Below -£25,000	13	6
Total	**100**	**100**

Other efficiency factors

	Average 2006/07	Average 2007/08
Eggs per bird	247	250
Eggs (p/doz.)	58.12	63.44

Table 2.3 Financial results for all laying flocks

	Per farm			*Per bird (annual basis)*		
	2006/07	**2007/08**	**% change**	**2006/07**	**2007/08**	**£ change**
Number of farms	32	35		32	35	
Average number of birds/year	29,609	39,762		29,609	39,762	
	Average £ per farm			*Average £ per bird*		
Gross output						
Eggs	386,184	573,956	48.6	13.04	14.43	1.39
Hen depreciation	-66,471	-80,825	21.6	-2.24	-2.03	0.21
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	57	-589	-1,129.3	0.00	-0.01	-0.02
Total poultry output	**319,770**	**492,543**	**54.0**	**10.80**	**12.39**	**1.59**
Crops	2,314	1,445	-37.6	0.08	0.04	-0.04
Other livestock	2,213	3,486	57.5	0.07	0.09	0.01
Other output	16,786	21,033	25.3	0.57	0.53	-0.04
Total gross output	**341,083**	**518,507**	**52.0**	**11.52**	**13.04**	**1.52**
Variable costs						
Feed	169,319	263,524	55.6	5.72	6.63	0.91
Seed, fertiliser, crop costs	800	810	1.2	0.03	0.02	-0.01
Vet. & medicines	2,102	3,221	53.3	0.07	0.08	0.01
Other livestock costs	14,419	24,277	68.4	0.49	0.61	0.12
Total variable costs	**186,639**	**291,832**	**56.4**	**6.30**	**7.34**	**1.04**
Total gross margin	**154,444**	**226,675**	**46.8**	**5.22**	**5.70**	**0.48**
Fixed costs						
Labour:						
Regular paid	47,350	69,795	47.4	1.60	1.76	0.16
Regular unpaid	19,902	20,344	2.2	0.67	0.51	-0.16
Casual labour	787	4,544	477.4	0.03	0.11	0.09
Power & machinery costs:						
Contract & hire	6,097	4,021	-34.0	0.21	0.10	-0.10
Fuel	3,523	5,800	64.6	0.12	0.15	0.03
Electricity	7,577	11,208	47.9	0.26	0.28	0.03
Repairs	8,360	10,363	24.0	0.28	0.26	-0.02
Depreciation	9,985	12,506	25.3	0.34	0.31	-0.02
Rent (incl. imputed)	25,424	22,055	-13.3	0.86	0.55	-0.30
Other costs:						
Occupiers repairs	4,707	8,232	74.9	0.16	0.21	0.05
Sundries (incl. bad debts)	16,999	29,481	73.4	0.57	0.74	0.17
Total fixed costs	**150,712**	**198,348**	**31.6**	**5.09**	**4.99**	**-0.10**
Management & investment income	**3,732**	**28,327**	**659.0**	**0.13**	**0.71**	**0.59**
Minus: management salaries	578	543	-6.1	0.02	0.01	-0.01
Plus: farmer & spouse labour	17,603	17,713	0.6	0.59	0.45	-0.15
Net farm income	**20,757**	**45,497**	**119.2**	**0.70**	**1.14**	**0.44**
Farm business income	**15,056**	**40,502**	**169.0**	**0.51**	**1.02**	**0.51**

Per £100 of gross output

	2006/07	2007/08	£ change
Number of farms	32	35	
Average number (birds/year)	29,609	39,762	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	113.22	110.69	
Hen depreciation (%)	-19.49	-15.59	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.02	-0.11	
Total poultry output (%)	**93.75**	**94.99**	
Crops (%)	0.68	0.28	
Other livestock (%)	0.65	0.67	
Other output (%)	4.92	4.06	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	49.64	50.82	1.18
Seed, fertiliser, crop costs	0.23	0.16	-0.08
Vet. & medicines	0.62	0.62	0.01
Other livestock costs	4.23	4.68	0.45
Total variable costs	**54.72**	**56.28**	**1.56**
Total gross margin	**45.28**	**43.72**	**-1.56**
Fixed costs			
Labour:			
Regular paid	13.88	13.46	-0.42
Regular unpaid	5.83	3.92	-1.91
Casual labour	0.23	0.88	0.65
Power & machinery costs:			
Contract & hire	1.79	0.78	-1.01
Fuel	1.03	1.12	0.09
Electricity	2.22	2.16	-0.06
Repairs	2.45	2.00	-0.45
Depreciation	2.93	2.41	-0.52
Rent (incl. imputed)	7.45	4.25	-3.20
Other costs:			
Occupiers repairs	1.38	1.59	0.21
Sundries (incl. bad debts)	4.98	5.69	0.70
Total fixed costs	**44.19**	**38.25**	**-5.93**
Management & investment income	**1.09**	**5.46**	**4.37**
Minus: management salaries	0.17	0.10	-0.06
Plus: farmer & spouse labour	5.16	3.42	-1.74
Net farm income	**6.09**	**8.77**	**2.69**
Farm business income	**4.41**	**7.81**	**3.40**

Pence per dozen eggs

	2006/07	2007/08
Gross output		
Eggs	57.53	65.40
Other poultry output	-9.89	-9.28
Other output	3.18	2.96
Total gross output	**50.82**	**59.08**
Variable costs		
Feed	25.23	30.03
Other variable costs	2.58	3.23
Total variable costs	**27.81**	**33.25**
Total gross margin	**23.01**	**25.83**
Total fixed costs	**22.45**	**22.60**
Management & investment income	**0.56**	**3.23**
Net farm income	**3.09**	**5.18**
Farm business income	**2.24**	**4.61**

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

	% 2006/07	% 2007/08
Over £100,000	6	14
£50,000 to <£100,000	9	3
£25,000 to <£50,000	9	31
£12,500 to <£25,000	31	26
0 to <£12,000	13	11
-£25,000 to 0	16	6
Below -£25,000	16	9
Total	**100**	**100**

Other efficiency factors

	Average 2006/07	Average 2007/08
Eggs per bird	279	278
Eggs (p/doz.)	57.53	65.40

Table 2.4 Financial results for all non-laying flocks

	Per farm			*Per bird (annual basis)*		
	2006/07	**2007/08**	**% change**	**2006/07**	**2007/08**	**£ change**
Number of farms	33	30		33	30	
Average number of birds/year	88,984	74,920		88,984	74,920	
	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	381,483	453,824	19.0	4.29	6.06	1.77
Other poultry output	125,453	126,916	1.2	1.41	1.69	0.28
Total poultry output	**506,936**	**580,739**	**14.6**	**5.70**	**7.75**	**2.05**
Crops	5,525	4,463	-19.2	0.06	0.06	0.00
Other livestock	2,489	3,517	41.3	0.03	0.05	0.02
Other output	17,462	18,325	4.9	0.20	0.24	0.05
Total gross output	**532,413**	**607,044**	**14.0**	**5.98**	**8.10**	**2.12**
Variable costs						
Feed	280,301	322,834	15.2	3.15	4.31	1.16
Seed, fertiliser, crop costs	12,660	14,651	15.7	0.14	0.20	0.05
Vet. & medicines	7,306	7,365	0.8	0.08	0.10	0.02
Other livestock costs	41,899	53,632	28.0	0.47	0.72	0.25
Total variable costs	**342,165**	**398,481**	**16.5**	**3.85**	**5.32**	**1.47**
Total gross margin	**190,248**	**208,563**	**9.6**	**2.14**	**2.78**	**0.65**
Fixed costs						
Labour:						
Regular paid	34,314	37,950	10.6	0.39	0.51	0.12
Regular unpaid	13,678	16,711	22.2	0.15	0.22	0.07
Casual labour	3,693	2,436	-34.0	0.04	0.03	-0.01
Power & machinery costs:						
Contract & hire	12,061	7,576	-37.2	0.14	0.10	-0.03
Fuel	6,450	7,712	19.6	0.07	0.10	0.03
Electricity	7,726	8,108	4.9	0.09	0.11	0.02
Repairs	6,968	6,503	-6.7	0.08	0.09	0.01
Depreciation	9,093	10,154	11.7	0.10	0.14	0.03
Rent (incl. imputed)	30,722	32,106	4.5	0.35	0.43	0.08
Other costs:						
Occupiers repairs	8,102	15,399	90.1	0.09	0.21	0.11
Sundries (incl. bad debts)	22,394	24,793	10.7	0.25	0.33	0.08
Total fixed costs	**155,200**	**169,449**	**9.2**	**1.74**	**2.26**	**0.52**
Management & investment income	**35,049**	**39,113**	**11.6**	**0.39**	**0.52**	**0.13**
Minus: management salaries	991	711	-28.3	0.01	0.01	0.00
Plus: farmer & spouse labour	11,117	13,269	19.4	0.12	0.18	0.05
Net farm income	**45,174**	**51,671**	**14.4**	**0.51**	**0.69**	**0.18**
Farm business income	**46,414**	**56,893**	**22.6**	**0.52**	**0.76**	**0.24**

Per £100 of gross output

	2006/07	2007/08	£ change
Number of farms	33	30	
Average number (birds/year)	88,984	74,920	
Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	0.00	0.00	
Hen depreciation (%)	0.00	0.00	
Broilers (%)	71.65	74.76	
Other poultry output (%)	23.56	20.91	
Total poultry output (%)	**95.21**	**95.67**	
Crops (%)	1.04	0.74	
Other livestock (%)	0.47	0.58	
Other output (%)	3.28	3.02	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	52.65	53.18	0.53
Seed, fertiliser, crop costs	2.38	2.41	0.04
Vet. & medicines	1.37	1.21	-0.16
Other livestock costs	7.87	8.84	0.97
Total variable costs	**64.27**	**65.64**	**1.38**
Total gross margin	**35.73**	**34.36**	**-1.38**
Fixed costs			
Labour:			
Regular paid	6.44	6.25	-0.19
Regular unpaid	2.57	2.75	0.18
Casual labour	0.69	0.40	-0.29
Power & machinery costs:			
Contract & hire	2.27	1.25	-1.02
Fuel	1.21	1.27	0.06
Electricity	1.45	1.34	-0.12
Repairs	1.31	1.07	-0.24
Depreciation	1.71	1.67	-0.04
Rent (incl. imputed)	5.77	5.29	-0.48
Other costs:			
Occupiers repairs	1.52	2.54	1.02
Sundries (incl. bad debts)	4.21	4.08	-0.12
Total fixed costs	**29.15**	**27.91**	**-1.24**
Management & investment income	**6.58**	**6.44**	**-0.14**
Minus: management salaries	0.19	0.12	-0.07
Plus: farmer & spouse labour	2.09	2.19	0.10
Net farm income	**8.48**	**8.51**	**0.03**
Farm business income	**8.72**	**9.37**	**0.65**

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

	% 2006/07	% 2007/08
Over £100,000	12	17
£50,000 to <£100,000	15	27
£25,000 to <£50,000	27	20
£12,500 to <£25,000	12	17
0 to <£12,000	15	13
-£25,000 to 0	9	3
Below -£25,000	9	3
Total	**100**	**100**

Table 2.5 Financial results for laying flocks with battery hens

	Per farm			*Per bird (annual basis)*		
	2006/07	**2007/08**	**% change**	**2006/07**	**2007/08**	**£ change**
Number of farms	15	16		15	16	
Average number of birds/year	48,140	63,663		48,140	63,663	
	Average £ per farm			*Average £ per bird*		
Gross output (%)						
Eggs	590,917	879,162	48.8	12.27	13.81	1.53
Hen depreciation	-103,256	-123,040	19.2	-2.14	-1.93	0.21
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	-807	-382	0.0	-0.02	-0.01	0.01
Total poultry output	**486,854**	**755,740**	**55.2**	**10.11**	**11.87**	**1.76**
Crops	3,375	957	-71.6	0.07	0.02	-0.06
Other livestock	2	0	-100.0	0.00	0.00	0.00
Other output	19,315	26,654	38.0	0.40	0.42	0.02
Total gross output	**509,546**	**783,352**	**53.7**	**10.58**	**12.30**	**1.72**
Variable costs						
Feed	254,431	408,975	60.7	5.29	6.42	1.14
Seed, fertiliser, crop costs	1,139	569	-50.1	0.02	0.01	-0.01
Vet. & medicines	2,560	4,003	56.4	0.05	0.06	0.01
Other livestock costs	26,440	43,462	64.4	0.55	0.68	0.13
Total variable costs	**284,570**	**457,009**	**60.6**	**5.91**	**7.18**	**1.27**
Total gross margin	**224,975**	**326,342**	**45.1**	**4.67**	**5.13**	**0.45**
Fixed costs						
Labour:						
Regular paid	82,597	118,357	43.3	1.72	1.86	0.14
Regular unpaid	21,672	22,279	2.8	0.45	0.35	-0.10
Casual labour	491	7,929	1,513.9	0.01	0.12	0.11
Power & machinery costs:						
Contract & hire	7,761	4,920	-36.6	0.16	0.08	-0.08
Fuel	6,108	9,650	58.0	0.13	0.15	0.02
Electricity	12,054	18,222	51.2	0.25	0.29	0.04
Repairs	13,368	16,016	19.8	0.28	0.25	-0.03
Depreciation	11,984	14,033	17.1	0.25	0.22	-0.03
Rent (incl. imputed)	24,346	24,162	-0.8	0.51	0.38	-0.13
Other costs:						
Occupiers repairs	5,289	11,188	111.5	0.11	0.18	0.07
Sundries (incl. bad debts)	26,401	47,428	79.6	0.55	0.74	0.20
Total fixed costs	**212,071**	**294,184**	**38.7**	**4.41**	**4.62**	**0.22**
Management & investment income	**12,905**	**32,158**	**149.2**	**0.27**	**0.51**	**0.24**
Minus: management salaries	676	765	13.3	0.01	0.01	0.00
Plus: farmer & spouse labour	16,823	17,222	2.4	0.35	0.27	-0.08
Net farm income	**29,052**	**48,614**	**67.3**	**0.60**	**0.76**	**0.16**
Farm business income	**31,003**	**51,892**	**67.4**	**0.64**	**0.82**	**0.17**

Per £100 of gross output

	2006/07	2007/08	£ change
Number of farms	15	16	
Average number (birds/year)	48,140	63,663	
	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	115.97	112.23	
Hen depreciation (%)	-20.26	-15.71	
Broilers (%)	0.00	0.00	
Other poultry output (%)	-0.16	-0.05	
Total poultry output (%)	**95.55**	**96.48**	
Crops (%)	0.66	0.12	
Other livestock (%)	0.00	0.00	
Other output (%)	3.79	3.40	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	49.93	52.21	2.28
Seed, fertiliser, crop costs	0.22	0.07	-0.15
Vet. & medicines	0.50	0.51	0.01
Other livestock costs	5.19	5.55	0.36
Total variable costs	**55.85**	**58.34**	**2.49**
Total gross margin	**44.15**	**41.66**	**-2.49**
Fixed costs			
Labour:			
Regular paid	16.21	15.11	-1.10
Regular unpaid	4.25	2.84	-1.41
Casual labour	0.10	1.01	0.92
Power & machinery costs:			
Contract & hire	1.52	0.63	-0.89
Fuel	1.20	1.23	0.03
Electricity	2.37	2.33	-0.04
Repairs	2.62	2.04	-0.58
Depreciation	2.35	1.79	-0.56
Rent (incl. imputed)	4.78	3.08	-1.69
Other costs:			
Occupiers repairs	1.04	1.43	0.39
Sundries (incl. bad debts)	5.18	6.05	0.87
Total fixed costs	**41.62**	**37.55**	**-4.06**
Management & investment income	**2.53**	**4.11**	**1.57**
Minus: management salaries	0.13	0.10	-0.03
Plus: farmer & spouse labour	3.30	2.20	-1.10
Net farm income	**5.70**	**6.21**	**0.50**
Farm business income	**6.08**	**6.62**	**0.54**

Pence per dozen eggs

	2006/07	2007/08
Gross output		
Eggs	53.23	62.22
Other poultry output	-9.37	-8.73
Other output	2.04	1.95
Total gross output	**45.90**	**55.44**
Variable costs		
Feed	22.92	28.94
Other variable costs	2.72	3.40
Total variable costs	**25.64**	**32.34**
Total gross margin	**20.27**	**23.10**
Total fixed costs	**19.10**	**20.82**
Management & investment income	**1.16**	**2.28**
Net farm income	**2.62**	**3.44**
Farm business income	**2.79**	**3.67**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2006/07	% 2007/08
Over £100,000	7	19
£50,000 to <£100,000	13	6
£25,000 to <£50,000	13	31
£12,500 to <£25,000	33	19
0 to <£12,000	7	6
-£25,000 to 0	13	6
Below -£25,000	13	13
Total	**100**	**100**

Other efficiency factors

	Average 2006/07	Average 2007/08
Eggs per bird	282	282
Eggs (p/doz.)	53.23	62.22

Table 2.6 Financial results for laying flocks with free range hens

	Per farm			*Per bird (annual basis)*		
	2006/07	**2007/08**	**% change**	**2006/07**	**2007/08**	**£ change**
Number of farms	17	19		17	19	
Average number of birds/year	12,895	14,315		12,895	14,315	
	Average £ per farm			*Average £ per bird*		
Gross output (%)						
Eggs	201,521	249,009	23.6	15.63	17.40	1.77
Hen depreciation	-33,292	-36,739	10.4	-2.58	-2.57	0.02
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	837	50	-94.0	0.06	0.00	-0.06
Total poultry output	**169,065**	**212,321**	**25.6**	**13.11**	**14.83**	**1.72**
Crops	1,358	1,964	44.7	0.11	0.14	0.03
Other livestock	4,208	7,197	71.0	0.33	0.50	0.18
Other output	14,505	15,048	3.7	1.12	1.05	-0.07
Total gross output	**189,135**	**236,531**	**25.1**	**14.67**	**16.52**	**1.86**
Variable costs						
Feed	92,549	108,664	17.4	7.18	7.59	0.41
Seed, fertiliser, crop costs	494	1,066	115.7	0.04	0.07	0.04
Vet. & medicines	1,689	2,389	41.5	0.13	0.17	0.04
Other livestock costs	3,577	3,851	7.7	0.28	0.27	-0.01
Total variable costs	**98,309**	**115,970**	**18.0**	**7.62**	**8.10**	**0.48**
Total gross margin	**90,826**	**120,561**	**32.7**	**7.04**	**8.42**	**1.38**
Fixed costs						
Labour:						
Regular paid	15,559	18,092	16.3	1.21	1.26	0.06
Regular unpaid	18,306	18,284	-0.1	1.42	1.28	-0.14
Casual labour	1,054	939	-10.9	0.08	0.07	-0.02
Power & machinery costs:						
Contract & hire	4,596	3,064	-33.3	0.36	0.21	-0.14
Fuel	1,192	1,700	42.6	0.09	0.12	0.03
Electricity	3,539	3,740	5.7	0.27	0.26	-0.01
Repairs	3,843	4,345	13.0	0.30	0.30	0.01
Depreciation	8,182	10,880	33.0	0.63	0.76	0.13
Rent (incl. imputed)	26,396	19,812	-24.9	2.05	1.38	-0.66
Other costs:						
Occupiers repairs	4,183	5,084	21.5	0.32	0.36	0.03
Sundries (incl. bad debts)	8,519	10,373	21.8	0.66	0.72	0.06
Total fixed costs	**95,368**	**96,313**	**1.0**	**7.40**	**6.73**	**-0.67**
Management & investment income	**-4,542**	**24,248**	**n/a**	**-0.35**	**1.69**	**2.05**
Minus: management salaries	489	306	-37.5	0.04	0.02	-0.02
Plus: farmer & spouse labour	18,306	18,237	-0.4	1.42	1.27	-0.15
Net farm income	**13,275**	**42,179**	**n/a**	**1.03**	**2.95**	**1.92**
Farm business income	**672**	**28,375**	**n/a**	**0.05**	**1.98**	**1.93**

Per £100 of gross output

	2006/07	2007/08	£ change
Number of farms	17	19	
Average number (birds/year)	12,895	14,315	

	Average £ per £100 of gross output		
Gross output (%)			
Eggs (%)	106.55	105.28	
Hen depreciation (%)	-17.60	-15.53	
Broilers (%)	0.00	0.00	
Other poultry output (%)	0.44	0.02	
Total poultry output (%)	**89.39**	**89.76**	
Crops (%)	0.72	0.83	
Other livestock (%)	2.22	3.04	
Other output (%)	7.67	6.36	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	48.93	45.94	-2.99
Seed, fertiliser, crop costs	0.26	0.45	0.19
Vet. & medicines	0.89	1.01	0.12
Other livestock costs	1.89	1.63	-0.26
Total variable costs	**51.98**	**49.03**	**-2.95**
Total gross margin	**48.02**	**50.97**	**2.95**
Fixed costs			
Labour:			
Regular paid	8.23	7.65	-0.58
Regular unpaid	9.68	7.73	-1.95
Casual labour	0.56	0.40	-0.16
Power & machinery costs:			
Contract & hire	2.43	1.30	-1.13
Fuel	0.63	0.72	0.09
Electricity	1.87	1.58	-0.29
Repairs	2.03	1.84	-0.20
Depreciation	4.33	4.60	0.27
Rent (incl. imputed)	13.96	8.38	-5.58
Other costs:			
Occupiers repairs	2.21	2.15	-0.06
Sundries (incl. bad debts)	4.50	4.39	-0.12
Total fixed costs	**50.42**	**40.72**	**-9.70**
Management & investment income	**-2.40**	**10.25**	**12.65**
Minus: management salaries	0.26	0.13	-0.13
Plus: farmer & spouse labour	9.68	7.71	-1.97
Net farm income	**7.02**	**17.83**	**10.81**
Farm business income	**0.36**	**12.00**	**11.64**

Pence per dozen eggs

	2006/07	2007/08
Gross output		
Eggs	73.18	80.92
Other poultry output	-11.79	-11.92
Other output	7.29	7.87
Total gross output	**68.68**	**76.86**
Variable costs		
Feed	33.61	35.31
Other variable costs	2.09	2.37
Total variable costs	**35.70**	**37.69**
Total gross margin	**32.98**	**39.18**
Total fixed costs	**34.63**	**31.30**
Management & investment income	**-1.65**	**7.88**
Net farm income	**4.82**	**13.71**
Farm business income	**0.24**	**9.22**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2006/07	% 2007/08
Over £100,000	6	11
£50,000 to <£100,000	6	0
£25,000 to <£50,000	6	32
£12,500 to <£25,000	29	32
0 to <£12,000	18	16
-£25,000 to 0	18	5
Below -£25,000	18	5
Total	**100**	**100**

Other efficiency factors

	Average 2006/07	Average 2007/08
Eggs per bird	267	261
Eggs (p/doz.)	73.18	80.92

Table 2.7 Financial results for non-contract broilers, table chicken and turkeys

	Per farm			*Per bird (annual basis)*		
	2006/07	**2007/08**	**% change**	**2006/07**	**2007/08**	**£ change**
Number of farms	17	15		17	15	
Average number of birds/year	113,897	113,846		113,897	113,846	
Throughput of birds/year	722,294	790,108		722,294	790,108	
Average number of crops/year	6.3	6.9				
	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	677,704	855,082	26.2	0.94	1.08	0.14
Other poultry output	140,153	161,235	15.0	0.19	0.20	0.01
Total poultry output	**817,857**	**1,016,317**	**24.3**	**1.13**	**1.29**	**0.15**
Crops	4,088	6,851	67.6	0.01	0.01	0.00
Other livestock	3,993	5,581	39.8	0.01	0.01	0.00
Other output	13,001	12,474	-4.1	0.02	0.02	0.00
Total gross output	**838,939**	**1,041,223**	**24.1**	**1.16**	**1.32**	**0.16**
Variable costs						
Feed	497,301	638,039	28.3	0.69	0.81	0.12
Seed, fertiliser, crop costs	18,734	20,301	8.4	0.03	0.03	0.00
Vet. & medicines	12,628	13,657	8.2	0.02	0.02	0.00
Other livestock costs	70,660	96,900	37.1	0.10	0.12	0.02
Total variable costs	**599,322**	**768,896**	**28.3**	**0.83**	**0.97**	**0.14**
Total gross margin	**239,617**	**272,327**	**13.7**	**0.33**	**0.34**	**0.01**
Fixed costs						
Labour:						
Regular paid	50,374	56,465	12.1	0.07	0.07	0.00
Regular unpaid	12,484	14,859	19.0	0.02	0.02	0.00
Casual labour	3,914	3,405	-13.0	0.01	0.00	0.00
Power & machinery costs:						
Contract & hire	13,538	12,033	-11.1	0.02	0.02	0.00
Fuel	7,324	9,048	23.5	0.01	0.01	0.00
Electricity	9,724	10,331	6.2	0.01	0.01	0.00
Repairs	7,052	7,583	7.5	0.01	0.01	0.00
Depreciation	9,345	9,249	-1.0	0.01	0.01	0.00
Rent (incl. imputed)	34,713	40,394	16.4	0.05	0.05	0.00
Other costs:						
Occupiers repairs	10,078	25,500	153.0	0.01	0.03	0.02
Sundries (incl. bad debts)	28,423	32,139	13.1	0.04	0.04	0.00
Total fixed costs	**186,969**	**221,006**	**18.2**	**0.26**	**0.28**	**0.02**
Management & investment income	**52,648**	**51,321**	**-2.5**	**0.07**	**0.06**	**-0.01**
Minus: management salaries	1,568	1,390	-11.4	0.00	0.00	0.00
Plus: farmer & spouse labour	9,525	11,151	17.1	0.01	0.01	0.00
Net farm income	**60,605**	**61,082**	**0.8**	**0.08**	**0.08**	**-0.01**
Farm business income	**64,047**	**66,353**	**3.6**	**0.09**	**0.08**	**0.00**

Per £100 of gross output

	2006/07	2007/08	£ change
Number of farms	17	15	
Average number (birds/year)	113,897	113,846	

Average £ per £100 of gross output			
Gross output (%)			
Eggs (%)	0.00	0.00	
Hen depreciation (%)	0.00	0.00	
Broilers (%)	80.78	82.12	
Other poultry output (%)	16.71	15.49	
Total poultry output (%)	**97.49**	**97.61**	
Crops (%)	0.49	0.66	
Other livestock (%)	0.48	0.54	
Other output (%)	1.55	1.20	
Total gross output (%)	**100.00**	**100.00**	
Variable costs			
Feed	59.28	61.28	2.00
Seed, fertiliser, crop costs	2.23	1.95	-0.28
Vet. & medicines	1.51	1.31	-0.19
Other livestock costs	8.42	9.31	0.88
Total variable costs	**71.44**	**73.85**	**2.41**
Total gross margin	**28.56**	**26.15**	**-2.41**
Fixed costs			
Labour:			
Regular paid	6.00	5.42	-0.58
Regular unpaid	1.49	1.43	-0.06
Casual labour	0.47	0.33	-0.14
Power & machinery costs:			
Contract & hire	1.61	1.16	-0.46
Fuel	0.87	0.87	0.00
Electricity	1.16	0.99	-0.17
Repairs	0.84	0.73	-0.11
Depreciation	1.11	0.89	-0.23
Rent (incl. imputed)	4.14	3.88	-0.26
Other costs:			
Occupiers repairs	1.20	2.45	1.25
Sundries (incl. bad debts)	3.39	3.09	-0.30
Total fixed costs	**22.29**	**21.23**	**-1.06**
Management & investment income	**6.28**	**4.93**	**-1.35**
Minus: management salaries	0.19	0.13	-0.05
Plus: farmer & spouse labour	1.14	1.07	-0.06
Net farm income	**7.22**	**5.87**	**-1.36**
Farm business income	**7.63**	**6.37**	**-1.26**

Farm Business Income (FBI) per farm

(% distribution by number of farms)

	% 2006/07	% 2007/08
Over £100,000	25	19
£50,000 to <£100,000	13	19
£25,000 to <£50,000	19	31
£12,500 to <£25,000	0	13
0 to <£12,000	19	6
-£25,000 to 0	13	6
Below -£25,000	13	6
Total	**100**	**100**

Other efficiency factors

	Average 2006/07	Average 2007/08
Broiler sale price (£/bird)	1.19	1.35
Broiler purchase price (£/bird)	0.24	0.25

Table 2.8 Balance sheet data for 2007/08 - specialist poultry farms

Group	*Specialist poultry*		*Battery layers*		*Free range layers*	
Number of farms	69		16		19	
Financial year	**2007/08**		**2007/08**		**2007/08**	
	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed assets						
Land, buildings & SPS	350,147	399,022	336,167	373,613	377,907	401,215
Breeding livestock	744	908	0	0	581	919
Machinery	62,681	66,596	73,949	76,581	60,215	60,976
Miscellaneous business assets	1,315	2,915	501	1,051	0	0
Total fixed assets	**414,888**	**469,442**	**410,617**	**451,245**	**438,702**	**463,110**
Current assets						
Crops & trading livestock	60,366	64,677	77,607	85,590	32,321	28,170
Feedstuffs & goods in store	5,264	7,181	13,297	15,215	3,029	2,609
Liquid assets	86,388	101,886	120,319	117,429	19,224	33,804
Total current assets	**152,018**	**173,744**	**211,223**	**218,234**	**54,574**	**64,584**
Total assets	**566,906**	**643,186**	**621,840**	**669,479**	**493,276**	**527,694**
Liabilities						
Bank term loans	76,050	78,140	83,192	82,323	124,677	112,728
Other loans	65,731	69,896	9,566	12,131	63,810	66,059
Bank overdraft	30,785	40,909	29,367	26,298	28,794	25,053
Other short term loans	46,652	75,196	60,260	82,327	18,951	35,019
Total external liabilities	**219,217**	**264,141**	**182,385**	**203,078**	**236,232**	**238,859**
Net worth	**347,689**	**379,045**	**439,454**	**466,401**	**257,044**	**288,835**
Percentage equity (%)	**61.3%**	**58.9%**	**70.7%**	**69.7%**	**52.1%**	**54.7%**

Table 2.9 A comparison of net worth and percentage equity by farm type for 2007/08

	Average Assets	**Average Liabilities**	**Average Net Worth**	**Average % Equity**
Defra main farm type				
Lowland cattle & sheep	629,471	52,492	576,979	91.7%
Cereals	1,292,558	114,298	1,178,260	91.2%
Mixed	912,066	119,802	792,264	86.9%
General cropping	1,281,701	158,130	1,123,571	87.7%
Dairy	902,820	164,634	738,186	81.8%
Horticulture	629,095	142,958	486,137	77.3%
Pigs	527,287	207,182	320,105	60.7%
Poultry	605,021	241,669	363,352	60.1%
All businesses	**911,849**	**114,262**	**797,588**	**87.5%**

Group	*Broilers, table chickens & turkeys*	
Number of farms	15	
Financial year	**2007/08**	
	Opening	Closing
Assets		
Fixed assets		
Land, buildings & SPS	284,942	376,407
Breeding livestock	455	519
Machinery	49,475	53,307
Miscellaneous business assets	788	788
Total fixed assets	**335,660**	**431,021**
Current assets		
Crops & trading livestock	67,966	69,545
Feedstuffs & goods in store	1,933	9,490
Liquid assets	113,890	165,388
Total current assets	**183,789**	**244,422**
Total assets	**519,449**	**675,444**
Liabilities		
Bank term loans	10,302	9,088
Other loans	66,503	61,605
Bank overdraft	45,277	98,833
Other short term loans	11,801	42,137
Total external liabilities	**133,883**	**211,663**
Net worth	**385,565**	**463,781**
Percentage equity (%)	**74.2%**	**68.7%**

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

	Specialist poultry	Battery layers	Free range layers	Broilers & table chickens
Crops & tillages	0.5	0.1	1.3	1.1
Stores	2.7	4.9	2.4	2.1
Machinery	28.2	25.9	51.1	19.3
Livestock	27.1	28.0	24.8	25.0
Other	41.5	41.1	20.4	52.5
Total	**100.0**	**100.0**	**100.0**	**100.0**
Tenant's type capital (£)	**229,568**	**290,719**	**118,571**	**266,221**

Table 2.11 Gross margin for all laying flocks

	Per bird (annual basis)			*Per £100 of gross output*		
	2006/07	**2007/08**	**£ change**	**2006/07**	**2007/08**	**£ change**
Number of farms	42	51				
Average number of birds/year	15,776	17,098				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Eggs	12.76	14.54	1.79			
Hen depreciation	-2.15	-2.11	0.04			
Other poultry output	0.02	0.00	-0.02			
Total output	**10.63**	**12.44**	**1.81**	**100.00**	**100.00**	
Variable costs						
Feed	5.60	6.71	1.11	52.72	53.93	1.20
Vet. & medicines	0.07	0.07	0.00	0.68	0.58	-0.10
Other livestock costs	0.45	0.53	0.08	4.23	4.29	0.06
Other variable costs	0.00	0.01	0.01	0.04	0.09	0.05
Total variable costs	**6.13**	**7.32**	**1.20**	**57.68**	**58.89**	**1.21**
Total gross margin	**4.50**	**5.11**	**0.62**	**42.32**	**41.11**	**-1.21**

Table 2.12 Gross margin per dozen eggs for all laying flocks (annual basis)

	Layers		**Battery Layers**		**Free range Layers**	
	2006/07	**2007/08**	**2006/07**	**2007/08**	**2006/07**	**2007/08**
Number of farms	42	51	20	20	22	31
No of dozen eggs	353,242	371,721	500,376	738,101	188,113	139,888
Average egg yield/bird	275	273	282	280	257	252
Average egg price p/doz	56.97	66.90	53.12	63.06	68.44	79.57
	Average pence per dozen (annual basis)					
Gross output						
Eggs	56.97	66.90	53.12	63.06	68.44	79.57
Hen depreciation	-9.60	-9.69	-8.69	-8.85	-12.31	-12.44
Other poultry output	0.09	0.00	0.00	0.00	0.35	0.01
Total output	**47.46**	**57.22**	**44.43**	**54.21**	**56.48**	**67.14**
Variable costs						
Feed	25.02	30.85	23.06	29.29	30.87	36.02
Vet. & medicines	0.33	0.33	0.21	0.28	0.65	0.49
Other livestock costs	2.01	2.46	2.11	2.87	1.70	1.09
Other variable costs	0.02	0.05	0.00	0.00	0.08	0.20
Total variable costs	**27.37**	**33.69**	**25.38**	**32.45**	**33.31**	**37.81**
Total gross margin	**20.08**	**23.52**	**19.05**	**21.75**	**23.17**	**29.33**

Table 2.13 Gross margin for laying flocks with battery hens

	Per bird (annual basis)			Per £100 of gross output		
	2006/07	**2007/08**	**£ change**	**2006/07**	**2007/08**	**£ change**
Number of farms	20	20				
Average number of birds/year	21,755	33,459				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Eggs	12.22	13.91	1.69			
Hen depreciation	-2.00	-1.95	0.05			
Other poultry output	0.00	0.00	0.00			
Total output	**10.22**	**11.96**	**1.74**	**100.00**	**100.00**	
Variable costs						
Feed	5.30	6.46	1.16	51.90	54.04	2.14
Vet. & medicines	0.05	0.06	0.01	0.48	0.53	0.04
Other livestock costs	0.49	0.63	0.15	4.75	5.30	0.55
Other variable costs	0.00	0.00	0.00	0.00	0.01	0.01
Total variable costs	**5.84**	**7.16**	**1.32**	**57.13**	**59.87**	**2.74**
Total gross margin	**4.38**	**4.80**	**0.42**	**42.87**	**40.13**	**-2.74**

Table 2.14 Gross margin for laying flocks with free range hens

	Per bird (annual basis)			Per £100 of gross output		
	2006/07	**2007/08**	**£ change**	**2006/07**	**2007/08**	**£ change**
Number of farms	22	31				
Average number of birds/year	9,065	6,739				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Eggs	14.20	16.52	2.31			
Hen depreciation	-2.55	-2.58	-0.03			
Other poultry output	0.07	0.00	-0.07			
Total output	**11.72**	**13.94**	**2.22**	**100.00**	**100.00**	
Variable costs						
Feed	6.41	7.48	1.07	54.66	53.66	-1.00
Vet. & medicines	0.14	0.10	-0.03	1.16	0.73	-0.42
Other livestock costs	0.35	0.23	-0.13	3.02	1.62	-1.40
Other variable costs	0.02	0.04	0.03	0.14	0.30	0.16
Total variable costs	**6.91**	**7.85**	**0.94**	**58.98**	**56.31**	**-2.66**
Total gross margin	**4.81**	**6.09**	**1.28**	**41.02**	**43.69**	**2.66**

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

	Per bird (annual basis)			*Per £100 of gross output*		
	2006/07	**2007/08**	**£ change**	**2006/07**	**2007/08**	**£ change**
Number of farms	18	17				
Average number of birds/year	75,613	50,468				
Throughput of birds/year	484,795	347,448				
Average number of crops/year	6.41	6.88				
Average sale price (broilers) - £/bird	1.21	1.41				
Average purchase price (broilers) - £/bird	0.25	0.26				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Broilers	0.97	1.20	0.23			
Total output	**0.97**	**1.20**	**0.23**	**100.00**	**100.00**	
Variable costs						
Feed	0.66	0.77	0.12	68.03	64.48	-3.55
Vet. & medicines	0.02	0.02	0.00	1.80	1.69	-0.11
Other livestock costs	0.03	0.08	0.04	3.37	6.32	2.95
Other variable costs	0.01	0.00	0.00	0.53	0.14	-0.39
Total variable costs	**0.71**	**0.87**	**0.16**	**73.73**	**72.64**	**-1.10**
Total gross margin	**0.25**	**0.33**	**0.07**	**26.27**	**27.36**	**1.10**

Table 2.16 Gross margin for turkey production

	Per bird (annual basis)			Per £100 of gross output		
	2006/07	**2007/08**	**£ change**	**2006/07**	**2007/08**	**£ change**
Number of farms	16	17				
Average number of birds/year	1,440	651				
Throughput of birds/year	3,530	1,365				
Average number of crops/year	2.45	2.10				
Average sale price (turkeys) - £/bird	15.20	29.50				
Average purchase price (turkeys) - £/bird	2.62	3.25				
	Average £ per bird (annual basis)			*Average £ per £100 gross output*		
Gross output						
Other poultry output	12.60	24.05	11.45			
Total output	**12.60**	**24.05**	**11.45**	**100.00**	**100.00**	
Variable costs						
Feed	6.02	6.36	0.34	47.74	26.44	-21.30
Vet. & medicines	0.14	0.22	0.08	1.10	0.90	-0.20
Other livestock costs	0.79	3.54	2.75	6.25	14.71	8.46
Other variable costs	0.01	0.05	0.05	0.04	0.21	0.17
Total variable costs	**6.95**	**10.17**	**3.22**	**55.14**	**42.26**	**-12.87**
Total gross margin	**5.65**	**13.89**	**8.23**	**44.86**	**57.74**	**12.87**

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
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.

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
- Imputed rent on farmhouse and cottages
- 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

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[6]), 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 bought 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 upto 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. Producersstocking 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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