

University of Reading

Farm Business Survey

2005/06

Poultry Production in England



Farm Business Survey

2005/06

Poultry Production in England

Photography courtesy of "Legbars of Broadway"

Department of Agricultural & Food Economics
School of Agriculture, Policy and Development
University of Reading
4 Earley Gate
Whiteknights
PO Box 237
Reading RG6 6AR

Tel: 0118 378 7426

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

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

TABLE OF CONTENTS

	Page
Table of Contents	3
List of Tables	4
List of Figures	4
Foreword	5
Summary	6
Section 1	7
Commentary on the UK poultry industry	7
1.1	7
General Introduction	7
1.2	7
The structure of the industry	7
1.3	9
Contribution of the sector to the economy	9
1.4	9
Trade	9
1.5	10
Producer prices	10
1.6	10
Animal welfare and regulation	10
1.7	11
Avian flu	11
References	12
Section 2	13
Financial Results for Poultry Production in England	13
2.1	13
Introduction to the data	13
2.2	13
Definition of poultry type groups	13
2.3	14
The sample	14
2.4	15
Financial results for 2004/05 and 2005/06	15
Appendix 1	34
Definitions, explanations and abbreviations	34
Appendix 2	35
Reports in this series	35

LIST OF TABLES

	Page	
Table 1.1	Distribution of broiler holdings and production volumes, by size group (2005)	7
Table 1.2	Distribution of laying fowl holdings and production volumes, by size group (2005)	8
Table 1.3	Value of UK produced poultry meat and eggs 2002-2006 (£M)	9
Table 1.4	Trade summary statistics - UK imports and exports of poultry and eggs in the 12 months to October 2006	9
Table 2.1	Comparison of financial performance measures for battery hen and free range farms against all laying farms	15
Table 2.2	Financial results for all specialist poultry farms	16
Table 2.3	Financial results for all laying flocks	18
Table 2.4	Financial results for all non-laying flocks	20
Table 2.5	Financial results for laying flocks with battery hens	22
Table 2.6	Financial results for laying flocks with free range hens	24
Table 2.7	Financial results for non-laying flocks - non-contract broiler production	26
Table 2.8	Balance sheet data for 2005/06 - specialist poultry farms	28
Table 2.9	A comparison of net worth and percentage equity by farm type	28
Table 2.10	Distribution of Tenant's Type Capital (%)	29
Table 2.11	Gross margin for all laying flocks	30
Table 2.12	Gross margin for laying flocks with battery hens	31
Table 2.13	Gross margin for laying flocks with free range hens	31
Table 2.14	Gross margin for non-laying flocks - non-contract broiler production	32
Table 2.15	Gross margin for non-laying flocks - turkey production	32
Table 2.16	Gross margin for non-laying flocks - contract rearing poultry production	33
Table 2.17	Gross margin for non-laying flocks - other poultry production	33

LIST OF FIGURES

Figure 1.1	UK poultry numbers between 1985 - 2005	7
Figure 1.2	Index of producer prices for poultry and eggs and costs of production	10

Foreword

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)

Summary

The UK poultry industry grew significantly over the last two decades, producing 174 million birds by 2005, with this growth largely due to a near doubling of the number of birds for meat production (broilers) 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 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 from 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 £1.6 billion in 2005, supplied 90% of domestic demand for poultry meat and 86% of demand for eggs. This rate of self sufficiency is high, although it has declined in recent years.

The poultry industry does not receive direct support under the CAP, but is one of the most regulated industries in UK agriculture and is subject to public hygiene and animal welfare codes which govern the way birds are housed, fed and transported. In 2005 the industry was still adjusting to new regulations introduced in 2002 (the Welfare of Laying Hens Directive), compliance with which, it is estimated, will cost the industry in excess of £400 millions by 2012. The broiler industry is likely to be faced with new regulation by 2010, as a result of agreement on an EC directive that will impact on producers of more than 500 birds.

The price of eggs has risen faster than the costs of production since 2000, but egg prices fell back in 2004, leading to a drop in gross output on laying holdings. This fall in revenues was offset, though only partially, by a fall in variable costs, resulting in a fall in average Net Farm Income (NFI) of 14.6% from 2004 to 2005. However, not all types of producers fared this badly and battery hen units, which tend to be larger than their free-range counterparts, experienced a 32% rise in NFI. Total liabilities for laying units increased by 19% in 2005, but this was offset by an increase in total assets, primarily due to increases in the value of land and buildings, resulting in a 4% increase in net worth, which in 2005 stood at an industry average of £322,532.

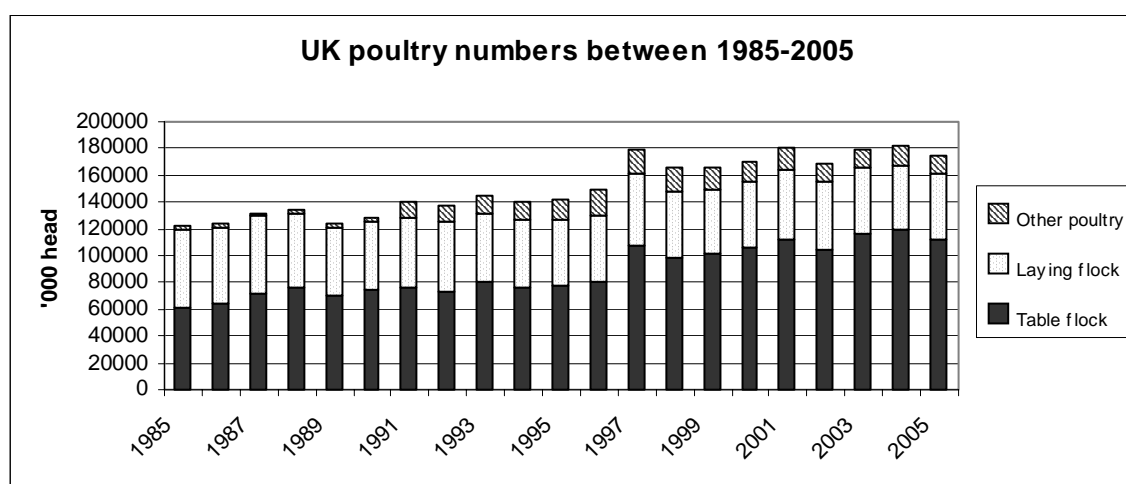
Poultry meat prices have risen only slowly since 2000 and have been outpaced by rises in the costs of production. In 2005 this trend continued, resulting in average gross output rising just 3% and variable costs rising 9%. In consequence, NFI for these holdings fell 25% on average. Total assets fell by 7.8% in 2005, but this was more than offset by a 29.7% fall in total external liabilities, particularly bank loans, resulting in a 5% increase in net worth.

SECTION 1: COMMENTARY ON THE UK POULTRY SECTOR

1.1 General introduction

In 2005 the UK poultry industry produced in excess of 174 million birds (see Figure 1.1), around 64% of which were table chickens (produced for meat), while 28% were laying hens, with the remaining 8% being other poultry such as turkeys, ducks and geese. Although the total number of birds in the UK flock can vary 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. The number of laying birds has declined by some 50% over the same period, as the productivity of laying hens has increased. As Figure 1.1 shows, there have also been significant increases in the number of other poultry.

Figure 1.1 UK poultry numbers between 1985-2005



Source: Defra (2007a)

1.2 The structure of the industry

1.2.1 Poultry for meat

According to the June Agricultural Census, there were a reported 3,100 broiler holdings in the UK in 2005. 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	

Percentages do not sum to 100 due to rounding errors.

Source: Defra (2007b)

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 Census 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 all broilers 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. 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 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
5,000 - 19,999	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	

Percentages do not sum to 100 due to rounding errors.

Source: Defra (2007c)

Eggs are produced in three types of production system:

- Laying cages – the system consists of cages with sloping mesh floors allowing the eggs to roll forward out of reach of birds for collection. 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 66% of eggs produced in 2004.
- Barn system – the system employs hen houses with a series of perches at different levels. Birds are allowed to roam the litter covered floor space, at a maximum density (since 2002) of 9 birds per square metre. This system accounts for around 7% of eggs.
- Free Range System – the system requires birds to have continuous daytime access to outdoor 'runs', covered with vegetation, to a maximum stocking density of 2,500 birds per hectare. Around 27% of eggs produced in the UK employ this system. Free range production can also be organic.

Producers sell eggs almost exclusively to packing stations, of which there were 1,509 in the UK, who handled 8,847 million eggs in 2005. The packers then sell on to a number of outlets. British Egg Information Service data for 2005 (BEIS, 2007) show that the relevant market shares of these outlets were: Retail (49%), Manufacturers/processors (for egg products) (28%) and Wholesale/caterers (23%).

1.3 Contribution of the sector to the economy

In 2006, total poultry output (meat and eggs) was valued at £1.6 billion at farm gate prices, with 21% of this, by value, accounted for by eggs (see Table 1.3). In the same year 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 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 (2007d)

1.3.1 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.

1.3.2 Eggs

In 2005, 10,116 million eggs were consumed in the UK (28 million per day), with a retail market value of £514 million, of which 86% were home produced. 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 was 90% self-sufficient in poultry meat in 2005, although this represents a decline from around 97% in the late 1980s. As UK consumers tend to favour the premium cuts, a significant volume of the less favoured cuts, valued at £220M, are exported, as Table 1.4 shows. The UK was 86% self-sufficient in eggs in 2005, a decline from 94% in the mid 1990s.

Table 1.4 Trade summary statistics – UK imports and exports of poultry and eggs in the 12 months to October 2006

	Poultry for meat	
	Imports (£M)	Exports (£M)
Chicken	855.8	180.9
Duck	25.6	8.2
Goose	5.9	0.1
Turkey	104.7	31.1
Total meat	992.0	220.4
Eggs [#]	77.1	27.5

[#] Eggs trade data are for 2005.

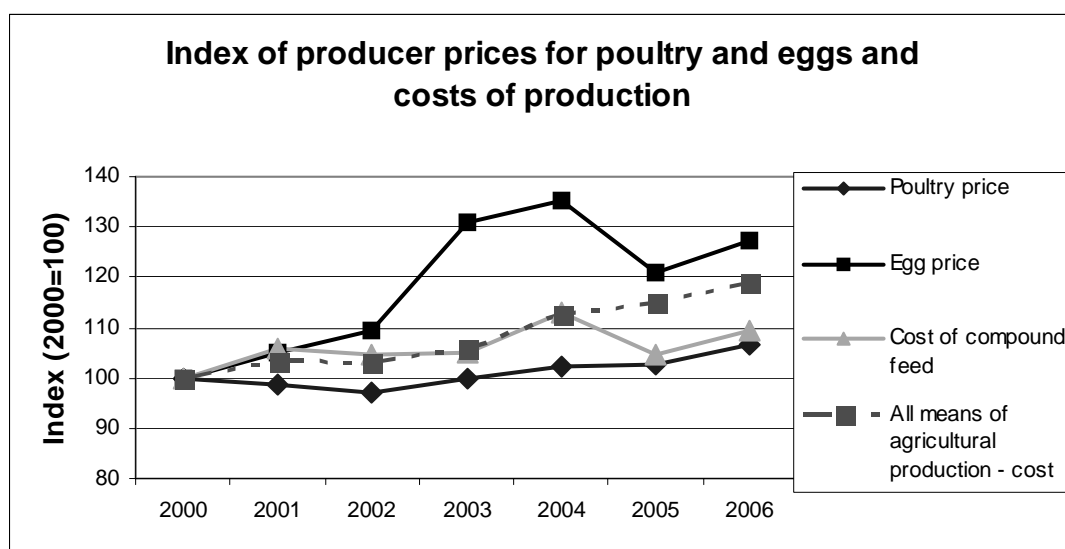
Source: Poultry meat: British Poultry Council (2007); Eggs: Defra (2007e)

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 1.2). 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 (2007f)

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 Section 1.6.1 for a summary of existing and forthcoming legislation).

The industry is subject to routine testing and a State Veterinary Inspections programme in 2006 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 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 Section 1.6.1), 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.

1.6.1 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. 1646¹) 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, no new barren battery cage systems may be brought into use, 'enriched' cages must be used instead.
- Minimum standards for "enriched" cages, including 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, 2007h) that agreement had been reached on the contents of a EC directive to regulate the conditions in which chickens reared for meat are kept. The new measures include, amongst other things:

- The introduction of limits on stocking density
- A possible new welfare labelling regime
- 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. 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).

1.7 Avian Flu

The global spread of Avian Flu continued in 2006, placing the UK at increasing risk of infection from both migrating birds and from trade movements, both legal and illegal. In April 2006 there were two recorded outbreaks of Avian Flu in the UK. The first was the highly pathogenic H5N1 strain, found in a dead wild swan in Fife. 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. The second outbreak was of the low pathogenic strain H7N3 at three commercial poultry holdings in Norfolk. Counter-measures prevented further spread and the restrictions were lifted about a month later.

¹ http://www.opsi.gov.uk/si/si2002/uksi_20021646_en.pdf

References

- British Egg Information Service (2007) (<http://www.britegg.co.uk/ukeggs05/ukeggs4.html>)
- British Poultry Council (2007) (http://www.poultry.uk.com/con_economic01.htm)
- Defra (2007a) June Agricultural Census. (http://www.defra.gov.uk/esg/work.htm/publications/cs/farmstats_web/2_SURVEY_DATA_SEARCH/survey_data_search_overview.htm)
- Defra (2007b) Agriculture in the United Kingdom 2006. (<http://statistics.defra.gov.uk/esg/publications/auk/2006/05%20Chapter%203%20The%20Structure%20of%20the%20Industry.pdf>)
- Defra (2007c) Agriculture in the United Kingdom 2006. (<http://statistics.defra.gov.uk/esg/publications/auk/2006/05%20Chapter%203%20The%20Structure%20of%20the%20Industry.pdf>)
- Defra (2007d) Agriculture in the United Kingdom 2006. (<http://statistics.defra.gov.uk/esg/publications/auk/2006/11%20Chapter%209%20Accounts.pdf>)
- Defra (2007e) Agriculture in the United Kingdom 2006. (<http://statistics.defra.gov.uk/esg/publications/auk/2006/10%20Chapter%208%20Overseas%20Trade.pdf>)
- Defra (2007f) Agricultural Price Indices, United Kingdom (2000=100). Stats 12/07, April 2007.
- Defra (2007g) Farm Business Survey, 2005.
- Defra (2007h) Defra Press release. (<http://www.defra.defra.gov.uk/news/latest/2007/animals-0508.htm>)
- EC (1999) Council Directive 1999/74/EC, Official Journal of the European Communities, No. L 203, 3.8.99. (http://europa.eu.int/eur-lex/pri/en/oj/dat/1999/l_203/l_20319990803en00530057.pdf)
- Exeter (2004) *The Structure and Economics of Broiler Production in England. Special Studies in Agricultural Economics, No. 59*. The University of Exeter, Centre for Rural Research, June 2004. The survey of broiler holdings was carried out in 2001
- House of Commons (2002) House of Commons Standing Committee on Delegated Legislation. (<http://www.publications.parliament.uk/pa/cm200102/cmstand/deleg5/st020612/20612s02.htm>)

Other sources

- Egg statistics
<http://statistics.defra.gov.uk/esg/statnot/eggnotce.pdf>
- Poultry and poultrymeat statistics
<http://statistics.defra.gov.uk/esg/statnot/ppntc.pdf>
- Expenditure and Food Survey (formerly National Food Survey)
http://statistics.defra.gov.uk/esg/index/list.asp?i_id=087
- Quarterly supplies and total domestic usage of meat in the UK
<http://statistics.defra.gov.uk/esg/statnot/qlymtpn.pdf>

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 2.17 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 producers
 - sample includes non contract broiler enterprises (a sub-set of Table 2.4)

Gross margin analysis for all poultry enterprises

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

- 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 broiler production
 - sample includes non contract broiler enterprises
- Table 2.15 - Turkey production
- Table 2.16 - Contract rearing poultry production
- Table 2.17 - Other poultry production
 - sample includes any other poultry enterprise not included in the above

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 2005 June survey there are 1,438 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 2005/06 financial year included 64 specialist poultry farms, which represents 4.45% 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 2004/05 and 2005/06 Farm Business Survey. Full results for this survey can be accessed at <http://www.farmbusinesssurvey.co.uk>.

2.4 Financial results for 2004/05 and 2005/06

2.4.1 All Laying Flocks

Average gross output from laying flocks [Table 2.3] in the UK in 2005/06 was £362,843, down 9.4% on 2004/05. This fall in gross output was primarily caused by a significant fall in the price of eggs from 2004 to 2005 (see Figure 1.2). Compensating for this to a great extent was a fall in whole farm variable costs, resulting, in large measure, from a 15.5% fall in feed costs and a similar fall in the cost of crop variable costs (seed and sprays). The net effect of these changes was that average farm gross margin was down only 2% (or £3,672) over the period. Fixed costs showed only a 0.4% increase from 2004/05 to 2005/06, with increases in power costs, rents and elevated levels of bad debt, compensated for by labour cost savings (including farmer and spouse manual labour). Savings in repair costs (-14.5%) were cancelled out by an increased depreciation charge (+11.1%). A fall in Net Farm Income (NFI) of 14.6% between 2004/05 and 2005/06 seems large considering the above, however, NFI represents only a small fraction of gross output (just 8.1% in 2005/06) and so even small absolute changes in income can have a significant effect on the NFI measure.

Table 2.1 – Comparison of financial performance measures for battery hen and free range farms against all laying farms for 2005/06

	All laying flocks (£ per farm)	Battery hens (£ per farm) (% difference from All laying flocks)	Free range hens (£ per farm) (% difference from All laying flocks)
Total gross output	362,843	502,879 (+38.6)	228,541 (-37.0)
Total variable costs	168,140	276,459 (+64.4)	116,294 (-30.8)
Total fixed costs	157,635	202,055 (+28.2)	115,032 (-27.0)
Net farm income	29,210	41,777 (+43.0)	17,157 (-41.3)

Source: Defra (2007g)

2.4.2 Laying flocks – battery hens and free range units

In terms of financial performance, battery and free range holdings experienced different trends over the period 2004/05 and 2005/06. Battery holdings, which tend to be much larger than free range units (see Table 1.5), saw a 32% increase in NFI over the period [Table 2.5]. Data for free range flocks is only shown for the 2005/06 financial year in Table 2.6 due to a small sample size in the 2004/05 financial year of 11 farms. The data suggest, however, that free range holdings, on average, experienced a 55% fall in NFI over the same period although this is a tentative observation given the small size of the sample. While free range units saw a slight increase in gross output (+3.2%, where battery farms saw a 2.9% fall), due to firmer free range egg prices, they were not able to make the savings in variable costs that battery farms were able to achieve (+12.7% versus -11.1%) and as a consequence gross margins fell by 5.0%, compared to an increase of 9.4% for battery farms. In addition, there was also a difference in the sector response to fixed costs, where battery units experienced a 4.9% increase while for free range units the increase was 12%.

2.4.3 Non-laying flocks

The year 2005/06 saw a 2.9% increase total gross output compared to 2004/05 [Table 2.4], resulting from marginal increases in both poultry meat prices and the volumes produced. However, this increase in revenues was more than offset by an increase in variable costs, which rose by 9%, largely as a result of a rise in feed costs, although there were less significant, but nevertheless marked rises in all other variable costs, including veterinary and medicine and other livestock costs. Fixed costs rose more modestly over the same period, rising just 1.6%, largely on the back of increases in fuel and electricity costs. As a consequence of these significant cost increases, and in spite of increased revenues, NFI per farm fell in 2005/06 by 25.5% on the previous year.

Table 2.2 Financial results for all specialist poultry farms

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2004/05	2005/06	% change	2004/05	2005/06	£ change
Number of farms	56	64		56	64	
Average number of birds per year	85 133	64 175		85 133	64 175	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
Gross output						
Eggs	260 965	198 938	-23.8	3.07	3.10	+0.03
Hen depreciation	-12 120	-22 008	+81.6	-0.14	-0.34	-0.20
Broilers	232 314	219 709	-5.4	2.73	3.42	+0.69
Other poultry output	49 438	141 254	+185.7	0.58	2.20	+1.62
Total poultry output	530 597	537 894	+1.4	6.23	8.38	+2.15
Crops	5 622	2 444	-56.5	0.07	0.04	-0.03
Other livestock	5 006	1 884	-62.4	0.06	0.03	-0.03
Other output	12 685	18 409	+45.1	0.15	0.29	+0.14
Total gross output	553 911	560 631	+1.2	6.51	8.74	+2.23
Variable costs						
Feed	249 699	250 802	+0.4	2.93	3.91	+0.98
Seed, fertiliser, crop costs	6 079	8 112	+33.4	0.07	0.13	+0.05
Vet. & medicines	7 014	6 144	-12.4	0.08	0.10	+0.01
Other livestock costs	61 338	51 728	-15.7	0.72	0.81	+0.09
Total variable costs	324 130	316 786	-2.3	3.81	4.94	+1.13
Total gross margin	229 781	243 845	+6.1	2.70	3.80	+1.10
Fixed costs						
Labour:						
Regular paid	47 064	50 113	+6.5	0.55	0.78	+0.23
Regular unpaid	15 649	17 192	+9.9	0.18	0.27	+0.08
Casual labour	2 021	1 260	-37.6	0.02	0.02	+0.00
Power & machinery costs:						
Contract & hire	8 233	7 783	-5.5	0.10	0.12	+0.02
Fuel	3 497	5 096	+45.7	0.04	0.08	+0.04
Electricity	7 384	9 183	+24.4	0.09	0.14	+0.06
Repairs	7 610	6 611	-13.1	0.09	0.10	+0.01
Depreciation	9 105	10 364	+13.8	0.11	0.16	+0.05
Rent (incl. imputed)	22 837	26 273	+15.0	0.27	0.41	+0.14
Other costs:						
Occupier's repairs	5 849	4 892	-16.4	0.07	0.08	+0.01
Sundries (incl. bad debt)	22 263	22 497	+1.1	0.26	0.35	+0.09
Total fixed costs	151 513	161 264	+6.4	1.78	2.51	+0.73
Management & investment income						
	78 268	82 581	+5.5	0.92	1.29	+0.37
Minus: management salaries	775	584	-24.7	0.01	0.01	0.00
Plus: farmer & spouse labour	13 786	15 528	+12.6	0.16	0.24	+0.08
Net farm income	91 279	97 525	+6.8	1.07	1.52	+0.45

Per £100 of gross output

	2004/05	2005/06	£ change
Number of farms	56	64	
Average number of birds per year	85 133	64 175	
Average £ per £100 of gross output			
Gross output	100.00	100.00	
Variable costs			
Feed	45.08	44.74	-0.34
Seed, fertiliser, crop costs	1.10	1.45	+0.35
Vet. & medicines	1.27	1.10	-0.17
Other livestock costs	11.07	9.23	-1.85
Total variable costs	58.52	56.51	-2.01
Total gross margin	41.48	43.49	+2.01
Fixed costs			
Labour:			
Regular paid	8.50	8.94	+0.44
Regular unpaid	2.83	3.07	+0.24
Casual labour	0.36	0.22	-0.14
Power & machinery costs:			
Contract & hire	1.49	1.39	-0.10
Fuel	0.63	0.91	+0.28
Electricity	1.33	1.64	+0.31
Repairs	1.37	1.18	-0.19
Depreciation	1.64	1.85	+0.20
Rent (incl. imputed)	4.12	4.69	+0.56
Other costs:			
Occupier's repairs	1.06	0.87	-0.18
Sundries (incl. bad debt)	4.02	4.01	-0.01
Total fixed costs	27.35	28.76	+1.41
Management & investment income	14.13	14.73	+0.60
Minus: management salaries	0.14	0.10	-0.04
Plus: farmer & spouse labour	2.49	2.77	+0.28
Net farm income	16.48	17.40	0.92

Net Farm Income (NFI) per farm

(% distribution by number of farms)		
NFI range per farm	2004/05 %	2005/06 %
Over £100,000	18	16
£50,000 to < £100,000	18	19
£25,000 to < £50,000	29	17
£12,500 to < £25,000	16	19
0 to < £12,500	13	16
-£25,000 to 0	4	6
Below -£25,000	4	8
Total	100	100

Other efficiency factors

	Average 2004/05	Average 2005/06
Eggs per bird	265	260
Eggs (p/doz.)	52.39	54.73

Table 2.3 Financial results for all laying flocks

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2004/05	2005/06	% change	2004/05	2005/06	£ change
Number of farms	26	32		26	32	
Average number of birds per year	39 015	33 378		39 015	33 378	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
Gross output						
Eggs	451 743	402 510	-10.9	11.58	12.06	+0.48
Hen depreciation	-76 945	-67 645	-12.1	-1.97	-2.03	-0.05
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	3 543	3 182	-10.2	0.09	0.10	0.00
Total poultry output	378 342	338 046	-10.7	9.70	10.13	+0.43
Crops	4 349	2 283	-47.5	0.11	0.07	-0.04
Other livestock	2 457	910	-63.0	0.06	0.03	-0.04
Other output	15 397	21 604	+40.3	0.39	0.65	+0.25
Total gross output	400 545	362 843	-9.4	10.27	10.87	+0.60
Variable costs						
Feed	208 837	176 527	-15.5	5.35	5.29	-0.06
Seed, fertiliser, crop costs	1 431	1 199	-16.2	0.04	0.04	0.00
Vet. & medicines	1 514	1 520	+0.4	0.04	0.05	+0.01
Other livestock costs	16 950	15 456	-8.8	0.43	0.46	+0.03
Total variable costs	228 733	194 703	-14.9	5.86	5.83	-0.03
Total gross margin	171 812	168 140	-2.1	4.40	5.04	+0.63
Fixed costs						
Labour:						
Regular paid	56 578	53 213	-5.9	1.45	1.59	+0.14
Regular unpaid	24 597	21 555	-12.4	0.63	0.65	+0.02
Casual labour	2 129	796	-62.6	0.05	0.02	-0.03
Power & machinery costs:						
Contract & hire	5 348	5 667	+6.0	0.14	0.17	+0.03
Fuel	4 718	4 658	-1.3	0.12	0.14	+0.02
Electricity	6 075	7 233	+19.1	0.16	0.22	+0.06
Repairs	9 136	7 809	-14.5	0.23	0.23	0.00
Depreciation	10 756	11 950	+11.1	0.28	0.36	+0.08
Rent (incl. imputed)	16 492	19 919	+20.8	0.42	0.60	+0.17
Other costs:						
Occupier's repairs	3 411	3 474	+1.8	0.09	0.10	+0.02
Sundries (incl. bad debt)	17 798	21 361	+20.0	0.46	0.64	+0.18
Total fixed costs	157 037	157 635	+0.4	4.03	4.72	+0.70
Management & investment income						
Management & investment income	14 775	10 506	-28.9	0.38	0.31	-0.06
Minus: management salaries	584	468	-19.7	0.01	0.01	0.00
Plus: farmer & spouse labour	20 027	19 172	-4.3	0.51	0.57	+0.06
Net farm income	34 218	29 210	-14.6	0.88	0.88	0.00

Per £100 of gross output

	2004/05	2005/06	£ change
Number of farms	26	32	
Average number of birds per year	39 015	33 378	
Average £ per £100 of gross output			
Gross output	100.00	100.00	
Variable costs			
Feed	52.14	48.65	-3.49
Seed, fertiliser, crop costs	0.36	0.33	-0.03
Vet. & medicines	0.38	0.42	+0.04
Other livestock costs	4.23	4.26	+0.03
Total variable costs	57.11	53.66	-3.45
Total gross margin	42.89	46.34	+3.45
Fixed costs			
Labour:			
Regular paid	14.13	14.67	+0.54
Regular unpaid	6.14	5.94	-0.20
Casual labour	0.53	0.22	-0.31
Power & machinery costs:			
Contract & hire	1.34	1.56	+0.23
Fuel	1.18	1.28	+0.11
Electricity	1.52	1.99	+0.48
Repairs	2.28	2.15	-0.13
Depreciation	2.69	3.29	+0.61
Rent (incl. imputed)	4.12	5.49	+1.37
Other costs:			
Occupier's repairs	0.85	0.96	+0.11
Sundries (incl. bad debt)	4.44	5.89	+1.44
Total fixed costs	39.21	43.44	+4.24
Management & investment income	3.69	2.90	-0.79
Minus: management salaries	0.15	0.13	-0.02
Plus: farmer & spouse labour	5.0	5.28	+0.28
Net farm income	8.54	8.05	-0.49

Net Farm Income (NFI) per farm

(% distribution by number of farms)

NFI range per farm	%	
	2004/05	2005/06
Over £100,000	12	9
£50,000 to < £100,000	12	13
£25,000 to < £50,000	31	13
£12,500 to < £25,000	15	31
0 to < £12,500	19	19
-£25,000 to 0	4	6
Below -£25,000	8	9
Total	100	100

Other efficiency factors

	Average 2004/05	Average 2005/06
Eggs per bird	285	278
Eggs (p/doz.)	50.35	54.49

Table 2.4 Financial results for all non-laying flocks

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2004/05	2005/06	% change	2004/05	2005/06	£ change
Number of farms	27	30		27	30	
Average number of birds per year	131 075	99 089		131 075	99 089	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
Gross output						
Eggs	0	0	0.00	0.00	0.00	0.00
Hen depreciation	0	0	0.00	0.00	0.00	0.00
Broilers	451 113	467 619	+3.7	3.44	4.72	+1.28
Other poultry output	67 829	72 838	+7.4	0.52	0.74	+0.22
Total poultry output	518 942	540 457	+4.1	3.96	5.45	+1.50
Crops	7 515	2 795	-62.8	0.06	0.03	-0.03
Other livestock	7 863	3 079	-60.8	0.06	0.03	-0.03
Other output	12 394	16 503	+33.2	0.09	0.17	+0.07
Total gross output	546 713	562 834	+2.9	4.17	5.68	+1.51
Variable costs						
Feed	311 996	333 077	+6.8	2.38	3.36	+0.98
Seed, fertiliser, crop costs	10 381	14 797	+42.5	0.08	0.15	+0.07
Vet. & medicines	8 665	9 657	+11.4	0.07	0.10	+0.03
Other livestock costs	26 626	32 503	+22.1	0.20	0.33	+0.12
Total variable costs	357 669	390 034	+9.0	2.73	3.94	+1.21
Total gross margin	189 045	172 800	-8.6	1.44	1.74	+0.30
Fixed costs						
Labour:						
Regular paid	33 852	26 812	-20.8	0.26	0.27	+0.01
Regular unpaid	8 982	13 005	+44.8	0.07	0.13	+0.06
Casual labour	2 290	1 864	-18.6	0.02	0.02	0.00
Power & machinery costs:						
Contract & hire	11 901	10 689	-10.2	0.09	0.11	+0.02
Fuel	2 989	5 956	+99.3	0.02	0.06	+0.04
Electricity	8 976	10 721	+19.4	0.07	0.11	+0.04
Repairs	7 360	5 728	-22.2	0.06	0.06	0.00
Depreciation	8 143	8 136	-0.1	0.06	0.08	+0.02
Rent (incl. imputed)	26 051	31 192	+19.7	0.20	0.31	+0.12
Other costs:						
Occupier's repairs	8 426	6 504	-22.8	0.06	0.07	0.00
Sundries (incl. bad debt)	18 799	19 359	+3.0	0.14	0.20	+0.05
Total fixed costs	137 770	139 966	+1.6	1.05	1.41	+0.36
Management & investment income	51 275	32 834	-36.0	0.39	0.33	-0.06
Minus: management salaries	1 059	757	-28.5	0.01	0.01	0.00
Plus: farmer & spouse labour	8 906	11 946	+34.1	0.07	0.12	+0.05
Net farm income	59 122	44 023	-25.5	0.45	0.44	-0.01

Per £100 of gross output

	2004/05	2005/06	£ change
Number of farms	27	30	
Average number of birds per year	131 075	99 089	
Average £ per £100 of gross output			
Gross output	100.00	100.00	
Variable costs			
Feed	57.07	59.18	+2.11
Seed, fertiliser, crop costs	1.90	2.63	+0.73
Vet. & medicines	1.58	1.72	+0.13
Other livestock costs	4.87	5.77	+0.90
Total variable costs	65.42	69.30	+3.88
Total gross margin	34.58	30.70	-3.88
Fixed costs			
Labour:			
Regular paid	6.19	4.76	-1.43
Regular unpaid	1.64	2.31	+0.67
Casual labour	0.42	0.33	-0.09
Power & machinery costs:			
Contract & hire	2.18	1.90	-0.28
Fuel	0.55	1.06	+0.51
Electricity	1.64	1.90	+0.26
Repairs	1.35	1.02	-0.33
Depreciation	1.49	1.45	-0.04
Rent (incl. imputed)	4.77	5.54	+0.78
Other costs:			
Occupier's repairs	1.54	1.16	-0.39
Sundries (incl. bad debt)	3.44	3.44	0.00
Total fixed costs	25.20	24.87	-0.33
Management & investment income	9.38	5.83	-3.55
Minus: management salaries	0.19	0.13	-0.06
Plus: farmer & spouse labour	1.63	2.12	+0.49
Net farm income	10.81	7.82	-2.99

Net Farm Income (NFI) per farm

(% distribution by number of farms)		
NFI range per farm	2004/05 %	2005/06 %
Over £100,000	22	20
£50,000 to < £100,000	22	20
£25,000 to < £50,000	26	23
£12,500 to < £25,000	19	7
0 to < £12,500	7	17
-£25,000 to 0	4	7
Below -£25,000	0	7
Total	100	100

Table 2.5 Financial results for laying flocks with battery hens

	<i>Per farm</i>			<i>Per bird (Annual basis)</i>		
	2004/05	2005/06	% change	2004/05	2005/06	£ change
Number of farms	15	15		15	15	
Average number of birds per year	54 157	49 468		54 157	49 468	
	<i>Average £ per farm</i>			<i>Average £ per bird (Annual basis)</i>		
Gross output						
Eggs	603 587	572 608	-5.1	11.15	11.58	+0.43
Hen depreciation	-106 555	-97 875	-8.1	-1.97	-1.98	-0.01
Broilers	0	0	0.0	0.00	0.00	0.00
Other poultry output	5 609	5 737	0.0	0.10	0.12	+0.01
Total poultry output	502 640	480 470	-4.4	9.28	9.71	+0.43
Crops	853	462	-45.8	0.02	0.01	-0.01
Other livestock	1 631	2	-99.9	0.03	0.00	-0.03
Other output	12 801	21 945	+71.4	0.24	0.44	+0.21
Total gross output	517 925	502 879	-2.9	9.56	10.17	+0.60
Variable costs						
Feed	286 127	250 758	-12.4	5.28	5.07	-0.21
Seed, fertiliser, crop costs	351	693	+97.7	0.01	0.01	+0.01
Vet. & medicines	1 002	1 675	+67.2	0.02	0.03	+0.02
Other livestock costs	23 486	23 332	-0.7	0.43	0.47	+0.04
Total variable costs	310 965	276 459	-11.1	5.74	5.59	-0.15
Total gross margin	206 961	226 420	+9.4	3.82	4.58	+0.76
Fixed costs						
Labour:						
Regular paid	80 970	82 769	+2.2	1.50	1.67	+0.18
Regular unpaid	25 673	23 178	-9.7	0.47	0.47	-0.01
Casual labour	1 824	159	-91.3	0.03	0.00	-0.03
Power & machinery costs:						
Contract & hire	4 585	6 008	+31.1	0.08	0.12	+0.04
Fuel	6 515	6 746	+3.5	0.12	0.14	+0.02
Electricity	8 324	9 729	+16.9	0.15	0.20	+0.04
Repairs	11 428	10 419	-8.8	0.21	0.21	0.00
Depreciation	13 050	14 034	+7.5	0.24	0.28	+0.04
Rent (incl. imputed)	14 811	14 876	+0.4	0.27	0.30	+0.03
Other costs:						
Occupier's repairs	2 580	2 009	-22.1	0.05	0.04	-0.01
Sundries (incl. bad debt)	22 901	32 129	+40.3	0.42	0.65	+0.23
Total fixed costs	192 660	202 055	+4.9	3.56	4.08	+0.53
Management & investment income						
	14 301	24 365	+70.4	0.26	0.49	+0.23
Minus: management salaries	927	900	-2.9	0.02	0.02	0.00
Plus: farmer & spouse labour	18 283	18 312	+0.2	0.34	0.37	+0.03
Net farm income	31 656	41 777	+32.0	0.58	0.84	+0.26

Per £100 of gross output

	2004/05	2005/06	£ change
Number of farms	15	15	
Average number of birds per year	54 157	49 468	
Average £ per £100 of gross output			
Gross output	100.00	100.00	
Variable costs			
Feed	55.24	49.86	-5.38
Seed, fertiliser, crop costs	0.07	0.14	+0.07
Vet. & medicines	0.19	0.33	+0.14
Other livestock costs	4.53	4.64	+0.11
Total variable costs	60.04	54.98	-5.07
Total gross margin	39.96	45.02	+5.07
Fixed costs			
Labour:			
Regular paid	15.63	16.46	+0.83
Regular unpaid	4.96	4.61	-0.35
Casual labour	0.35	0.03	-0.32
Power & machinery costs:			
Contract & hire	0.89	1.19	+0.31
Fuel	1.26	1.34	+0.08
Electricity	1.61	1.93	+0.33
Repairs	2.21	2.07	-0.13
Depreciation	2.52	2.79	+0.27
Rent (incl. imputed)	2.86	2.96	+0.10
Other costs:			
Occupier's repairs	0.50	0.40	-0.10
Sundries (incl. bad debt)	4.42	6.39	+1.97
Total fixed costs	37.20	40.18	+2.98
Management & investment income	2.76	4.85	+2.08
Minus: management salaries	0.18	0.18	0.00
Plus: farmer & spouse labour	3.53	3.64	+0.11
Net farm income	6.11	8.31	+2.20

Net Farm Income (NFI) per farm

(% distribution by number of farms)

NFI range per farm	2004/05 %	2005/06 %
Over £100,000	13	13
£50,000 to < £100,000	20	27
£25,000 to < £50,000	13	7
£12,500 to < £25,000	7	20
0 to < £12,500	27	20
-£25,000 to 0	7	7
Below -£25,000	13	7
Total	100	100

Other efficiency factors

	Average 2004/05	Average 2005/06
Eggs per bird	290	290
Eggs (p/doz.)	47.32	49.28

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

	<i>Per farm</i>	<i>Per bird (Annual basis)</i>
	2005/06	2005/06
Number of farms	17	17
Average number of birds per year	17 948	17 948
	<i>Average £ per farm</i>	<i>Average £ per bird (Annual basis)</i>
Gross output		
Eggs	239 376	13.34
Hen depreciation	-38 653	-2.15
Broilers	0	0.00
Other poultry output	731	0.04
Total poultry output	201 454	11.22
Crops	4 030	0.22
Other livestock	1 781	0.10
Other output	21 276	1.19
Total gross output	228 541	12.73
Variable costs		
Feed	105 335	5.87
Seed, fertiliser, crop costs	1 685	0.09
Vet. & medicines	1 371	0.08
Other livestock costs	7 903	0.44
Total variable costs	116 294	6.48
Total gross margin	112 246	6.25
Fixed costs		
Labour:		
Regular paid	24 867	1.39
Regular unpaid	19 997	1.11
Casual labour	1 406	0.08
Power & machinery costs:		
Contract & hire	5 340	0.30
Fuel	2 656	0.15
Electricity	4 839	0.27
Repairs	5 307	0.30
Depreciation	9 952	0.55
Rent (incl. imputed)	24 755	
Occupier's repairs	4 878	0.27
Sundries (incl. bad debt)	11 034	0.61
Total fixed costs	115 032	6.41
Management & investment income	-2 786	-0.16
Minus: management salaries	55	0.00
Plus: farmer & spouse labour	19 997	1.11
Net farm income	17 157	0.96

Per £100 of gross output

	2005/06
Number of farms	17
Average number of birds per year	17 948
Average £ per £100 of gross output	
Gross output	100.00
Variable costs	
Feed	46.09
Seed, fertiliser, crop costs	0.74
Vet. & medicines	0.60
Other livestock costs	3.46
Total variable costs	50.89
Total gross margin	49.11
Fixed costs	
Labour:	
Regular paid	10.88
Regular unpaid	8.75
Casual labour	0.62
Power & machinery costs:	
Contract & hire	2.34
Fuel	1.16
Electricity	2.12
Repairs	2.32
Depreciation	4.35
Rent (incl. imputed)	10.83
Other costs:	
Occupier's repairs	2.13
Sundries (incl. bad debt)	4.83
Total fixed costs	50.33
Management & investment income	-1.22
Minus: management salaries	0.02
Plus: farmer & spouse labour	8.75
Net farm income	7.51

Net Farm Income (NFI) per farm

(% distribution by number of farms)	
<i>NFI range per farm</i>	% 2005/06
Over £100,000	6
£50,000 to < £100,000	0
£25,000 to < £50,000	18
£12,500 to < £25,000	41
0 to < £12,500	18
-£25,000 to 0	6
Below -£25,000	12
Total	100

Other efficiency factors

	Average 2005/06
Eggs per bird	244
Eggs (p/doz.)	71.93

* No 2004/05 financial figures shown, sample too small

Table 2.7 Financial results for non-laying flocks - non-contract broiler production*

	<i>Per farm</i>	<i>Per bird (Annual basis)</i>
	2005/06	2005/06
Number of farms	16	16
Average number of birds per year	122 761	122 761
Average number of crops per year**	6.3	6.3
	<i>Average £ per farm</i>	<i>Average £ per bird (Annual basis)</i>
Gross output		
Eggs	0	0.00
Hen depreciation	0	0.00
Broilers	738 172	6.01
Other poultry output	1 058	0.01
Total poultry output	739 230	6.02
Crops	3 994	0.03
Other livestock	3 186	0.03
All other output	12 891	0.11
Total gross output	759 300	6.19
Variable costs		
Feed	517 263	4.21
Seed, fertiliser, crop costs	21 901	0.18
Vet. & medicines	13 154	0.11
Other livestock costs	23 559	0.19
Total variable costs	575 877	4.69
Total gross margin	183 423	1.49
Fixed costs		
Labour:		
Regular paid	20 118	0.16
Regular unpaid	12 476	0.10
Casual labour	1 250	0.01
Power & machinery costs:		
Contract & hire	15 810	0.13
Fuel	5 256	0.04
Electricity	14 158	0.12
Repairs	6 042	0.05
Depreciation	7 674	0.06
Rent (incl. imputed)	42 640	0.35
Other costs:		
Occupier's repairs	6 859	0.06
Sundries (incl. bad debt)	16 879	0.14
Total fixed costs	149 162	1.22
Management & investment income	34 260	0.28
Minus: management salaries	437	0.00
Plus: farmer & spouse labour	12 403	0.10
Net farm income	46 227	0.38

Per £100 of gross output

	2005/06
Number of farms	16
Average number of birds per year	122 761
Average number of crops per year	6.3
Average £ per £100 of gross output	
Gross output	100.00
Variable costs	
Feed	68.12
Seed, fertiliser, crop costs	2.88
Vet. & medicines	1.73
Other livestock costs	3.10
Total variable costs	75.84
Total gross margin	24.16
Fixed costs	
Labour:	
Regular paid	2.65
Regular unpaid	1.64
Casual labour	0.16
Power & machinery costs:	
Contract & hire	2.08
Fuel	0.69
Electricity	1.86
Repairs	0.80
Depreciation	1.01
Rent (incl. imputed)	5.62
Other costs:	
Occupier's repairs	0.90
Sundries (incl. bad debt)	2.22
Total fixed costs	19.64
Management & investment income	4.51
Minus: management salaries	0.06
Plus: farmer & spouse labour	1.63
Net farm income	6.09

Net Farm Income (NFI) per farm

(% distribution by number of farms)	
<i>NFI range per farm</i>	%
	2005/06
Over £100,000	19
£50,000 to < £100,000	25
£25,000 to < £50,000	13
£12,500 to < £25,000	6
0 to < £12,500	19
-£25,000 to 0	6
Below -£25,000	13
Total	100

* No 2004/05 financial figures shown, sample too small

** The financial results are based on a trading period of 12 months duration and therefore to obtain the financial performance per bird sold, the results shown Per bird (Annual basis) should be divided by the Average number of crops per year

Table 2.8 Balance sheet data for 2005/06 - specialist poultry farms

Group	Specialist Poultry		Battery layers		Free range layers	
Number of farms	64		15		17	
Financial year	2005/06		2005/06		2005/06	
	Opening	Closing	Opening	Closing	Opening	Closing
Assets						
Fixed Assets						
Land, buildings & SPS	301 254	322 000	219 773	239 358	416 995	498 384
Breeding livestock	593	259	0	0	1 900	540
Machinery	52 382	58 653	79 936	77 113	39 177	61 532
Miscellaneous business assets	189	327	1	575	0	0
Total fixed assets	354 418	381 240	299 710	317 046	458 072	560 455
Current assets						
Crops and trading livestock	46 116	47 000	61 867	70 104	26 448	31 465
Feedstuffs & goods in store	4 509	5 110	7 857	8 217	4 869	4 470
Liquid assets	49 107	62 412	71 386	59 815	15 516	41 837
Total current assets	99 731	114 523	141 110	138 137	46 833	77 773
Total assets	454 150	495 763	440 820	455 183	504 905	638 228
Liabilities						
Bank term loans	51 238	43 768	42 925	48 973	58 645	78 123
Other loans	32 902	53 294	3 329	2 414	78 217	147 207
Bank overdraft	23 640	32 266	24 797	21 066	18 005	24 726
Other short term loans	37 512	43 901	26 574	23 205	14 616	37 764
Total external liabilities	145 292	173 230	97 625	95 657	169 483	287 820
Net worth	308 857	322 532	343 196	359 526	335 423	350 408
Percentage equity (%)	68.0%	65.1%	77.9%	79.0%	66.4%	54.9%

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

Financial year	Average Assets 2005/06	Average Liabilities 2005/06	Average Net Worth 2005/06	Average % Equity 2005/06
Defra main farm type				
Lowland cattle and sheep	476 071	46 762	429 310	90.2%
Cereals	1 205 541	119 926	1 085 616	90.1%
Mixed	774 127	91 279	682 848	88.2%
General cropping	988 173	143 613	844 560	85.5%
Dairy	634 171	116 551	517 620	81.6%
Horticulture	468 467	108 775	359 692	76.8%
Pigs	489 406	158 848	330 558	67.5%
Poultry	474 957	159 261	315 696	66.5%
All businesses	746 915	100 255	646 660	86.6%

Group	Non-contract broilers	
Number of farms	16	
Financial year	2005/06	
	Opening	Closing
Assets		
Fixed Assets		
Land, buildings & SPS	260 431	227 107
Breeding livestock	0	0
Machinery	50 279	42 593
Miscellaneous business assets	617	617
Total fixed assets	311 326	270 317
Current assets		
Crops and trading livestock	52 433	48 707
Goods in store	4 344	4 647
Liquid assets	56 503	67 528
Total current assets	113 280	120 882
Total assets	424 606	391 200
Liabilities		
Bank term loans	62 085	14 564
Other loans	23 599	30 955
Bank overdraft	35 112	31 509
Other short term loans	37 120	33 960
Total external liabilities	157 917	110 989
Net worth	266 689	280 211
Percentage equity (%)	62.8%	71.6%

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

	Specialist Poultry	Battery layers	Free range layers	Non-contract broilers
Crops & tillages	0.7	0.0	1.8	1.0
Stores	2.9	3.7	4.1	2.7
Machinery	34.0	35.9	44.2	28.3
Livestock	28.1	30.2	24.7	29.9
Other	34.3	30.2	25.2	38.2
Total	100	100	100	100

Table 2.11 Gross margin for all laying flocks

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	46	47		46	47	
Average number of birds per year	20 171	19 277		20 171	19 277	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	12.30	12.33	+0.03			
Hen depreciation	-2.15	-1.97	+0.18			
Other poultry output	0.00	0.00	0.00			
Total output	10.14	10.35	+0.21	100.00	100.00	
Variable costs						
Feed	5.46	5.29	-0.17	53.87	51.12	-2.75
Vet. & medicines	0.03	0.05	+0.02	0.34	0.48	+0.15
Other livestock costs	0.43	0.44	+0.01	4.24	4.23	-0.02
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00
Total variable costs	5.93	5.78	-0.15	58.45	55.83	-2.62
Total gross margin	4.21	4.57	+0.36	41.55	44.17	+2.62

Table 2.12 Gross margin for laying flocks with battery hens

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	18	17		18	17	
Average number of birds per year	41 287	35 101		41 287	35 101	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	11.37	11.73	+0.36			
Hen depreciation	-1.98	-1.92	+0.06			
Other poultry output	0.00	0.00	0.00			
Total output	9.40	9.81	+0.41	100.00	100.00	
Variable costs						
Feed	5.29	5.06	-0.23	56.29	51.60	-4.69
Vet. & medicines	0.02	0.04	+0.03	0.16	0.41	+0.25
Other livestock costs	0.43	0.45	+0.02	4.61	4.61	0.00
Other variable costs	0.00	0.00	0.00	0.00	0.00	0.00
Total variable costs	5.74	5.55	-0.18	61.07	56.62	-4.45
Total gross margin	3.66	4.26	+0.60	38.93	43.38	+4.45

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>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	25	29		25	29	
Average number of birds per year	8 089	10 211		8 089	10 211	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Eggs	14.55	13.60	-0.95			
Hen depreciation	-2.09	-2.09	0.00			
Other poultry output	0.00	0.00	0.00			
Total output	12.46	11.50	-0.95	100.00	100.00	
Variable costs						
Feed	5.81	5.78	-0.03	46.65	50.24	+3.59
Vet. & medicines	0.11	0.07	-0.04	0.87	0.61	-0.26
Other livestock costs	0.41	0.41	0.00	3.27	3.54	+0.27
Other variable costs	0.00	0.00	0.00	0.00	0.01	+0.01
Total variable costs	6.33	6.26	-0.07	50.80	54.41	+3.61
Total gross margin	6.13	5.24	-0.88	49.20	45.59	-3.61

Table 2.14 Gross margin for non-laying flocks - non-contract broiler production

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	16	21		16	21	
Average number of birds per year	100 477	87 229		100 477	87 229	
Average number of crops per year*	6.6	6.4		6.6	6.4	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Broilers	6.53	6.23	-0.30			
Total output	6.53	6.23	-0.30	100.00	100.00	
Variable costs						
Feed	4.62	4.31	-0.31	70.79	69.18	-1.60
Vet. & medicines	0.12	0.11	-0.01	1.77	1.71	-0.05
Other livestock costs	0.18	0.20	+0.02	2.71	3.17	+0.46
Other variable costs	0.05	0.03	-0.02	0.76	0.49	-0.27
Total variable costs	4.96	4.64	-0.32	76.02	74.56	-1.46
Total gross margin	1.57	1.58	+0.02	23.98	25.44	+1.46

Table 2.15 Gross margin for non-laying flocks - turkey production

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	22	16		22	16	
Average number of birds per year	559	815		559	815	
Average number of crops per year*	1.7	1.8		1.7	1.8	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	27.35	26.63	-0.72			
Total output	27.35	26.63	-0.72	100.00	100.00	
Variable costs						
Feed	6.67	6.62	-0.05	24.39	24.86	+0.48
Vet. & medicines	0.23	0.20	-0.03	0.84	0.77	-0.07
Other livestock costs	1.66	1.98	+0.32	6.07	7.44	+1.37
Other variable costs	0.00	0.01	+0.01	0.00	0.02	+0.02
Total variable costs	8.56	8.81	+0.25	31.30	33.09	+1.79
Total gross margin	18.79	17.82	-0.97	68.70	66.91	-1.79

* The financial results are based on a trading period of 12 months duration and therefore to obtain the financial performance per bird sold, the results shown Per bird (Annual basis) should be divided by the Average number of crops per year

Table 2.16 Gross margin for non-laying flocks - contract rearing poultry production

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	16	15		16	15	
Average number of birds per year	71 284	58 224		71 284	58 224	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	1.52	1.39	-0.14			
Total output	1.52	1.39	-0.14	100.00	100.00	
Variable costs						
Feed	0.00	0.00	0.00	0.00	0.00	0.00
Vet. & medicines	0.00	0.00	0.00	0.00	0.06	+0.06
Other livestock costs	0.11	0.12	+0.01	7.21	8.39	+1.18
Other variable costs	0.02	0.01	-0.01	1.59	0.94	-0.65
Total variable costs	0.13	0.13	0.00	8.80	9.39	+0.59
Total gross margin	1.39	1.26	-0.13	91.20	90.61	-0.59

Table 2.17 Gross margin for non-laying flocks - other poultry production

	<i>Per bird (Annual basis)</i>			<i>Per £100 of gross output</i>		
	2004/05	2005/06	£ change	2004/05	2005/06	£ change
Number of farms	15	16		15	16	
Average number of birds per year	6 538	8 626		6 538	8 626	
	<i>Average £ per bird (Annual basis)</i>			<i>Average £ per £100 gross output</i>		
Gross output						
Other poultry output	35.25	49.09	+13.84			
Total output	35.25	49.09	+13.84	100.00	100.00	
Variable costs						
Feed	3.87	4.65	+0.78	10.99	9.47	-1.52
Vet. & medicines	1.12	0.41	-0.71	3.19	0.84	-2.35
Other livestock costs	0.59	11.53	+10.94	1.68	23.49	+21.81
Other variable costs	0.20	0.29	+0.09	0.56	0.58	+0.02
Total variable costs	5.79	16.88	+11.09	16.42	34.38	+17.96
Total gross margin	29.46	32.21	+2.75	83.58	65.62	-17.96

Appendix 1: Definitions, explanations and abbreviations

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

Include 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. Orchards, permanent crops 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.

Appendix 2: Reports in this series

Crop Production in England 2005/06

<http://www.landecon.cam.ac.uk/research/eeprg/rbu/rbupubs.htm>

Dairy Farming in England 2005/06

<http://www.nottingham.ac.uk/rbru/publications.html>

Hill Farming in England 2005/06

http://www.cornwall.ac.uk/rbs/index.php?page=_Home

Pig Production in England 2005/06

http://www.askham-bryan.ac.uk/for_business/rural_business_research_unit

Poultry Production in England 2005/06

<http://www.apd.rdg.ac.uk/AgEcon/research/afit/index.htm>