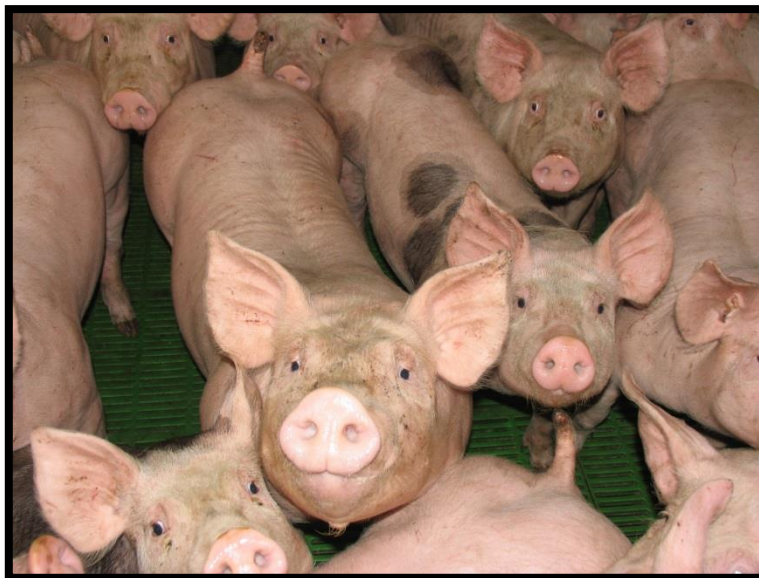




Farm Business Survey

2012/2013

Pig Production in England



Mervyn Lewis



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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

Acknowledgements

The Rural Business Research (RBR) Consortium thanks sincerely all those farmers and growers 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 (Defra) and is Crown Copyright. The views expressed in this report are those of the authors and are not necessarily shared by other members of RBR or by Defra.

Cover photograph kindly supplied by Pig World.

Foreword to the Eighth Series

Drawing upon data from the financial year 2012 to 2013, this eighth series of reports arguably represents a turning point in the average financial fortunes of agricultural and horticultural businesses in England. Across the sectors, average Farm Business Income (FBI) fell by 30% from the previous year's results, albeit with specialist pig and poultry farms bucking this trend. Looking across the most recent five years' FBI performance, we may yet look back to the harvest of 2011, and the 2011-12 financial year more generally, and conclude this represented a high point for the industry, in aggregate, at the start of the 2000s. Therefore, as we provide the 2012-13 results for particular farm types and enterprises, it is opportune to consider the driving forces of economic performance as we look to the future.

Having written about Common Agricultural Policy (CAP) reform numerous times within the forewords to these series, one would be forgiven for thinking that we must have by now arrived at a point of certainty and clear policy direction. However, at the start of 2014, while the direction of the CAP is certainly clearer, there remains considerable uncertainty over how the broad CAP reform package that has been agreed will be implemented. The modulation rules over the movement of monies from Pillar I to Pillar II of the CAP will almost certainly lead to a more uncommon implementation of the CAP within the EU, and even within the UK. One of the largest unknowns of the new CAP is how the greening rules will be implemented by member states – discussions of crop rotation and permanent pasture will take on a whole new meaning and focus around the kitchen tables of farm households, while understanding what is meant by an Ecological Focus Area is already bringing forward yet more terminology and rules for farmers and producers to get to grips with.

No preface to the 2012-13 agricultural and horticultural financial year data analysis would be complete without reference to the prevailing climatic conditions over the April 2012 to March 2013 period. After the early spring 2012 drought conditions gave way to one of the wettest summers on record, the main grass and crop growing and harvest season of 2012 will not quickly fade from the memories of those at the sharp end of primary food production. The exceptionally cold late winter of 2012/13 and spring 2013 then placed increased pressures on many businesses, placing immediate financial pressures on livestock farmers. The results presented in this eighth series must therefore be set against the prevailing conditions of this, hopefully atypical, 12 month period. However, the impacts of yields and costs are only part of the story; output prices, exchange rate fluctuations, policy support and diversification opportunities all contribute to the changing fortunes of the various sectors that we report on in our series. As businesses look to the future, all of these aspects, and many more, will be at the forefront of their thinking. To help businesses assess their own strengths, weaknesses, opportunities and threats, we hope that the data and independent analyses contained within *Rural Business Research's (RBR)* series of reports provide useful and essential information to facilitate the task.

Once again, I particularly thank all the farmers and producers who take part in the FBS research programme; without the voluntary contribution of these individual businesses it would not be possible to provide such a breadth and depth of data and information to the wider industry.

Dr Paul Wilson

Chief Executive Officer, Rural Business Research
January 2014

www.ruralbusinessresearch.co.uk

Summary

This report presents the results collated from those farms with pig enterprises in the 2012/13 Farm Business Survey. They relate to farm businesses with financial year ends between 31st December 2012 and 31st March 2013. Most of the data is drawn from those farms defined as Specialist Pig Farms, that is, more than two-thirds of their total standard output is derived from pigs.

Pig numbers have declined by 36% in the last two decades between 1990 and 2013. In 2013 there was a slight fall in the number of breeding pigs (-0.6%), however, fattening pig numbers rose quite substantially (12.6%), which has resulted in an increase in overall pig numbers (11%), compared to the previous year.

The Yorkshire and the Humber and Eastern regions taken together account for 62% of the pigs in England. In consequence, the other six regions only account for the remaining 38%.

Slaughter statistics indicate that 7831 thousand head of pigs were killed in 2012, an increase of 3% on the previous year. In consequence of these increasing numbers the percentage contribution made by home produced meat to total supply increased to 59%. This is the highest level recorded for some years.

Since 2011 pig prices have improved. In 2011 and 2012 prices averaged 145 pence per kg and 150 pence per kg respectively for the year. In 2013 prices improved again and the annual average price was 165 pence per kg.

The full sample of 70 Specialist pig farms recorded an average gross margin of £204,333 after deduction of variable costs amounting to £311,362. Feed costs accounted for 82% of total variable costs and just over half of all costs. Compared to the previous year, feed costs rose by 2%. Fixed costs amounted to £183,963 resulting in an average Management and Investment Income (MII) of £20,371 (previous year £13,870). Average Net Farm Income (NFI) was £40,820 (£34,833). Average Farm Business Income (FBI) was £40,889 (£37,980). This is the third year in succession that pig producers have experienced low returns.

There is always a great variation in profit performance between farms and it was noticeable that, as in the previous year, one-half of all farms showed a negative MII figure (35 out of 70). Furthermore, nearly one-quarter (16 farms) showed negative FBI figures. The top 25% show an average MII of £128,022 whilst the bottom 25% show an average negative MII of £33,127. The high MII farms are significantly larger than the others with a pig output five times larger than the middle 50% band. The gap between the top and bottom performers remains very wide.

In 2013, pig prices have strengthened and feed prices have fallen and consequently there has been considerable improvement in the compound feed price to pig price ratio. Most pig producers are enjoying positive margins and the 2013/14 results should show a considerable upturn in profitability. It would be a great boost to the pig sector in the UK if there could be a sustained period where there is stability in pig margins.

Enterprise Net Margins for pigs derived from the FBS sample are also presented in this report. On a sample of 65 Specialist Pig Farms there was an average Net Margin of £17,124 which compares with a negative Net Margin of £296 for the previous year. Within this figure there are 34 farms (52%) making a negative Net Margin. This is very similar to the previous year indicating that many farms are experiencing a sustained period of loss making.

Breeding farms selling finished pigs made a Net Margin of £19,009. The contract rearing only farms and the 'other' farm type showed positive Net Margins of £15,670 and £15,042 respectively.

Chapter 1

Economic Background

The purpose of this chapter is to collate relevant pig data for England. Data has been presented for different time series in order to show the key changes. The following figures clearly portray the dramatic structural change that has taken place in the industry during this period.

Pig Population – June Survey

Table 1.1 shows the pig population in England according to the June survey data. Data for the five years 2009-2013 is presented together with historic data for 1990 and 2000 as a comparison. The 2009 data has been revised so there is a break in the data series.

Pig numbers have declined by 36% in the last two decades between 1990 and 2013. In 2013 there was a slight fall in the number of breeding pigs (-0.6%), however, fattening pig numbers rose quite substantially (12.6%), which has resulted in an increase in overall pig numbers (11%), compared to the previous year.

Regional Specialist Pig Holdings and number of pigs

Table 1.2 shows the number of holdings in 2012 classified as specialist pig holdings according to region in England. Pre 2010 farm type was classified by the predominant farming activity taking place on the holdings, based on economic measure and profitability (Standard Gross Margin, SGM). The farm type is defined as the activity which contributes more than two thirds of the total SGM for the holding. For 2010 onwards the methodology for classifying farms has changed to one based on Standard Outputs (SO). The table shows that the switch to SO in 2009 increased the number of farms classified as pig holdings by 15%. In 2012, the number of holdings classified as pigs, using SO typology, fell by 2%. The greatest percentage decrease was seen in the North East, with a fall of 7%. In terms of absolute numbers, however, the largest decrease was seen in the Eastern region.

Table 1.3 shows the distribution of pigs by region in 2012. This highlights the fact that the Yorkshire and the Humber account for 35% of the total pigs in England with the Eastern region accounting for a further 27%. There was an overall decrease of 23% of the total number of pigs in 2012, compared with 2011. The South East saw the biggest decrease of 30%.

Collectively data from Table 1.2 and 1.3 suggests that in 2012, the number of pig holdings in England and the average number of pigs on each holding decreased.

Pig slaughter data for England

Table 1.4 shows the number of clean pigs and sows and boars slaughtered in England for the period 2001-2013. In 2010 and 2011 Defra were unable to release data on the number of sows and boars slaughtered. This is for confidentiality reasons.

In 2009 the number of pigs slaughtered in England reached its lowest recorded level at 6886 thousand. However, over the last couple of years we have seen a steady increase to 8164 thousand pigs slaughtered in 2013, an increase of 19% compared to 2009. Not shown in the table is the average carcass weight. In 2000 the average carcass weight was 70kg, however over the last decade this has increased by over 10%, with average carcass figures reported in 2013 at 79.5kg.

UK Supply and use of Pork and Bacon

Table 1.5 shows the impact of the changing numbers of pigs on the percentage contribution made by home produced meat to total supply. In the period 2005-2009 home production of pig meat has fluctuated around 50% of total supply. In recent years there has been a modest improvement and in 2012 home production increased to 59% of total supply. There was a fall in exports of 9% to EU countries; however, exports to the rest of the world rose by 10% when compared with the previous year's figures.

UK Pig prices

Table 1.6 shows pig prices for the period 2001-2013. In the late 1990s pig prices collapsed and the sector contracted considerably as a consequence of these low prices. In the period 2004-2007 the monthly pig price was relatively stable. In the period 2007-2009 prices improved and peaked at 155 pence per kg in July of 2009. In 2010, prices fell back 3% on the previous year. In 2011 and 2012 prices improved and averaged 145 pence per kg and 150 pence per kg respectively for the year. In 2013 prices improved again and the annual average price was 165 pence per kg.

Table 1.1 Pigs on Agricultural Holdings in England 1st June ('000)

	1990	2000	2009	Revised 2009	2010	2011	2012	2013	% change 2013/2012
Total pigs	6308	5442	3872	3689	3606	3600	3662	4066	11%
Breeding pigs	757	595	444	421	423	433	437	434	-0.6%
Sows in pig	417	340	264	250	228	227	244	234	-3.9%
Gilts in pig	92	60	43	41	54	58	57	53	-6.7%
Other sows	137	103	65	61	64	68	51	59	16.1%
Boars	37	25	16	15	14	14	14	13	-6.4%
Gilts not yet in pig	73	68	57	54	63	65	72	75	4.8%
Fattening pigs (liveweight)	5552	4847	3428	3268	3183	3167	3225	3632	12.6%
110kg and over	52	47	39	38	38	38	39	40	3.7%
80-110kg	513	643	532	511	503	500	510	559	9.8%
50-80kg	1473	1280	821	770	796	792	806	868	7.6%
20-50kg	1785	1468	1029	982	921	917	934	1041	11.5%
Under 20kg	1728	1409	1006	967	925	920	937	1123	19.9%

Source:

<https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june>

Table 1.2 Specialist Pig Holdings by Region 2012

	2009 sgm	2009 so	2010 so	2011 so	2012 so
North East	42	50	39	46	43
North West and Merseyside	106	117	110	125	127
Yorkshire and The Humber	301	421	410	464	464
East Midlands	128	156	159	174	178
West Midlands	137	138	133	161	153
Eastern	330	398	369	398	382
South East	149	154	137	159	159
South West	269	253	244	283	274
England	1462	1687	1601	1810	1780

Source: DEFRA Farming Statistics

Table 1.3 Number of Pigs by Region 2012

	2010	2011	2012
North East	89,056	89,832	68557
North West and Merseyside	138,284	141,882	115782
Yorkshire and The Humber	1,222,505	1,257,909	971222
East Midlands	344,131	332,655	276616
West Midlands	188,840	193,304	145102
Eastern	1,032,016	989,187	749944
South East (incl. London)	204,756	201,053	140746
South West	386,529	393,737	295118
England	3,606,117	3,599,559	2,763,086

Source: DEFRA Farming Statistics

Table 1.4 Pigs Slaughtered in England 2001-2013 (thousand head)

Year	Clean pigs	Sows and boars
2001	8646	163
2002	8231	289
2003	7074	226
2004	7126	227
2005	6984	198
2006	7020	196
2007	7231	206
2008	7223	231
2009	6886	196
2010	7282	c
2011	7592	c
2012	7831	263
2013	8164	249

Footnotes:

C data are confidential

Source:

<https://www.gov.uk/government/publications/cattle-sheep-and-pig-slaughter>

Table 1.5 Supply and Use of Pigmeat 2005-2012 (thousand tonnes)

	2005	2006	2007	2008	2009	2010	2011	2012
Home-fed production	669	667	707	706	681	712	759	781
Imports from:								
the EU (a)	836	837	864	801	804	801	770	719
the rest of the world	6	7	5	12	12	12	11	10
Exports to:								
the EU	101	110	113	130	109	146	154	140
the rest of the world	12	10	12	25	26	25	39	43
Total new supply	1398	1391	1451	1364	1362	1353	1347	1327
Home-fed production as % of total new supply for use in the UK	48%	48%	49%	52%	50%	53%	56%	59%

Footnotes:

The figures for 2012 are provisional and have been adjusted from a 53-week to a 52-week basis where appropriate.

(a) Includes meat from imports of live finished animals.

Source: Agriculture in the United Kingdom 2012

Table 1.6 Pig Prices 2001-2013**Clean Pigs (AESAs) UK (a)**

pence per kg dwt

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2001	98.14	96.50	97.40	95.96	96.44	103.01	104.20	95.74	92.81	94.11	99.50	102.60
2002	93.38	88.29	95.03	98.06	101.07	103.39	95.55	88.76	88.07	88.66	90.31	91.50
2003	94.78	98.93	108.36	105.88	110.02	112.39	102.32	96.52	97.48	103.75	106.90	101.97
2004	98.71	99.35										

Deadweight Pig Prices (DAPP GB (EU)) (a)

pence per kg dwt

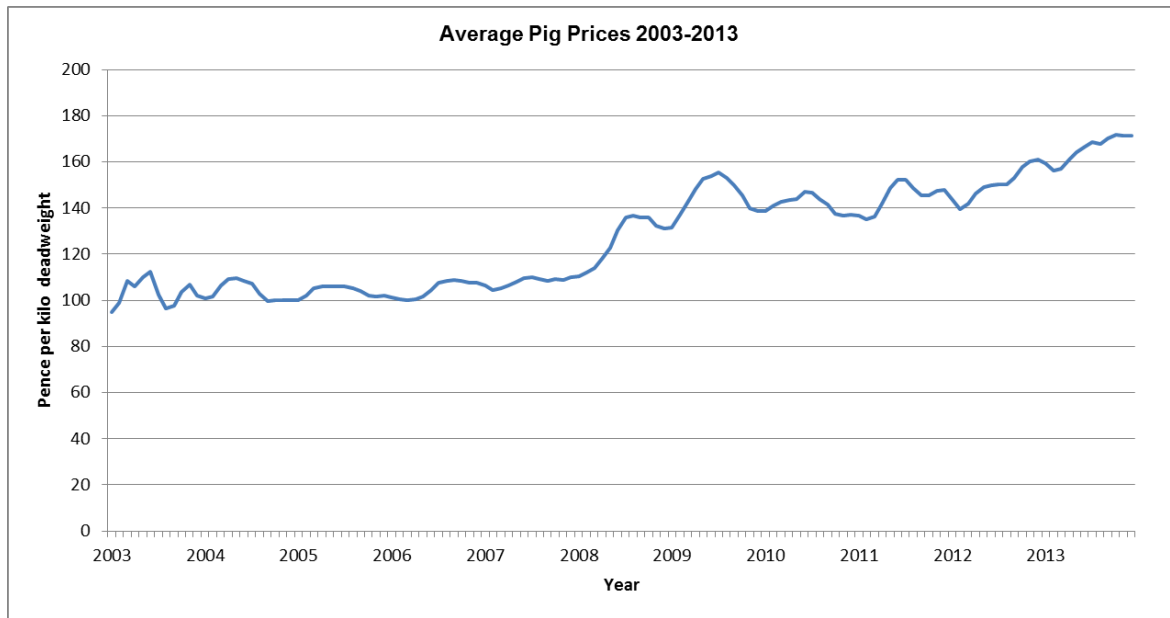
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2003					109.24	111.53	104.00	98.26	98.49	103.75	107.27	103.28
2004	100.80	101.56	106.26	109.27	109.64	108.54	107.52	102.96	99.57	100.08	99.95	100.18
2005	99.99	102.09	105.39	106.03	106.01	106.19	106.06	105.12	103.95	102.07	101.74	101.95
2006	101.23	100.61	99.96	100.54	101.68	104.37	107.59	108.42	108.87	108.42	107.47	107.82
2007	106.45	104.54	105.28	106.40	108.13	109.55	109.96	109.37	108.52	109.04	108.99	110.17
2008	110.34	111.85	113.86	118.00	122.87	130.21	136.03	136.70	136.06	135.86	132.48	131.14
2009	131.46	137.14	142.32	148.30	152.81	154.04	155.27	153.06	150.05	145.62	140.01	138.79
2010	138.89	140.92	142.51	143.60	143.86	147.04	146.54	143.74	141.43	137.57	136.69	137.23
2011	136.69	134.93	136.21	141.84	148.76	152.24	152.46	148.62	145.34	145.52	147.41	147.74
2012	143.46	139.66	141.85	146.17	148.97	149.79	150.45	150.40	152.91	157.74	160.25	160.95
2013	159.32	156.21	156.96	160.94	164.06	166.79	168.55	167.90	170.07	171.87	171.56	171.31

Footnotes:

- (a) In 2003 the Meat and Livestock Commission, with the support of the British Pig Executive, launched a new deadweight pig price reporting survey – the Deadweight Average Pig Price (DAPP). The DAPP replaced the Adjusted Euro Spec Average (AESAs), the price formally reported. In March 2004 the AESAs ceased to be calculated and the DAPP became the official pig price indicator.

Source: ADHB/Defra

Figure 1 Deadweight Average Pig Prices (DAPP) 2003-2013



Chapter 2

Financial Performance of Specialist Pig Farms

The data in this report has been extracted from the 2012/13 Farm Business Survey (FBS). Full results for this survey, together with previous years, can be accessed at <http://www.farmbusinesssurvey.co.uk>. This presents data for all farm types on both a national and Government Office region (GOR) basis. The basis for the classification of farms in the FBS is described in Appendix A.

In the 2012/13 FBS there were 70 farm businesses that were classified as Specialist Pig farms. This is similar to the previous year when there were 74 recorded pig farms. Farms are classified according to Standard Outputs (SO). Please see the explanatory document at <https://www.gov.uk/government/collections/farm-business-survey> for further details on Standard Outputs.

To be classified as a Specialist Pig farm at least two-thirds of the total SO from the enterprises on the farm must have been generated by pigs.

All the results presented in this report are based on weighted data.

Classification of farms

The 70 Specialist Pig farms subdivided into three EU Particular Farm Types as follows :

EU PFT	No of farms	Description
5110	7	Specialist pig rearing
5130	41	Pigs rearing and fattening combined
5120	22	Specialist pig fattening

Due to the small sample numbers for type 5110, types 5110 and 5130 have been combined. Thus this group refers to farms with predominantly sows selling either weaners or fat pigs and type 5120 are predominantly farms without sows but selling fat pigs, many on a contract basis.

Financial Results

For the full sample of 70 farms total farm output amounted to £515,696 (Table 2.1) which was 2% higher than the previous year. Pig output accounted for 86% of total output with miscellaneous income accounting for 6%. Receipts from the Single Payment Scheme (SPS) are included in the account under miscellaneous income. SPS income is not significant on these farms because they have very little land area on which to claim the regional payment.

These farms recorded an average gross margin of £204,000 after deduction of variable costs amounting to £311,000. This margin is slightly higher than the one recorded last year, mainly due to an increase in total output. Feed costs accounted for 82% of total variable costs which is the same as the previous year. Fixed costs amounted to £184,000 resulting in a Management and Investment Income (MII) of just over £20,000. Net Farm Income (NFI) averaged £40,820. Farm Business Income (FBI) was slightly higher at £40,889. In summary, incomes have increased by 8%. Average prices in 2012/13 were 8 pence per kg higher than in the previous year and were higher in every corresponding month for the period April 2012 to March 2013 apart from June and July 2012.

There is always a great variation in profit performance between farms and it was noticeable that one-half of all farms showed a negative MII figure (35 out of 70). The number of farms showing negative FBI figures was 16 representing 23% of the sample. In other words, despite an improvement in average levels of profit across the sample the number of farms showing either negative MII or negative FBI figures has not changed from the previous year. Table 2.2 shows the range in performance in terms of MII for Specialist Pig farms. The top 25% recorded an average MII of £128,022 whilst the middle and bottom 25% recorded negative MII of £5,619 and £33,127 respectively. The high MII farms are significantly larger than the other farms with a pig output five times as large as the middle 50% band.

An analysis of the results split between businesses classed as 'predominantly sows' and those classed as 'predominantly growing and fattening pigs' is presented in Table 2.4. On this sample of farms, the 'predominantly sows' farm type is considerably larger than for that of the other farm types. Whilst the associated variable and fixed costs are also higher the overall profit measures are still higher. For instance the average FBI recorded for the 'predominantly sows' group is £54,420 compared to £24,191 for the other farms.

In order to examine the influence of size on financial performance the results have been analysed in terms of SO. Table 2.5 shows the results and indicates the range of SO for each size category. There is a good distribution of farms across the three size categories.

The results show a clear difference between the largest size group and those of the other two groups. The largest size group records an average MII of £109,044; whilst the other two size groups record MII's of £966 and £-3,353. When these results are compared with those from previous years it appears that the gap in profitability between the different size groups is growing.

A note on 2013/14

We have seen how the 2012/13 results represented a modest increase in profitability compared to those of the previous year. Indeed, the pig sector was one of the few sectors of the agricultural economy which saw such an increase. Looking ahead, the situation for pig farmers for the 2013/14 year looks encouraging. In contrast to 2012 when feed prices rose, feed prices have now fallen again. In February 2014 feed wheat is valued at £145 per tonne compared to £220 per tonne in December 2012. Forward feed wheat prices for November 2014 are £145 indicating that feed prices will remain stable. Based on the net margin calculation presented in Table 3.1 feed represents 61% of total costs and therefore this change will have a large impact on profitability.

The other key factor is that pig prices have been consistently higher in 2013 compared to 2012. Indeed, prices reached a record high in October with an average recorded price of 172 p per kg. The better returns have also been reflected in an increase in weaner prices. EU output from pigs has fallen and is expected to continue to do so at least in the short term. This has been brought about partly by the impact of the stall and tether ban.

The combination of higher prices and lower feed costs has seen a considerable improvement in the compound feed price to pig price ratio. This, in turn, has meant that according to ADHB figures, producers have been experiencing positive pig margins since the summer of 2013 compared to a very long run of negative margins over the previous three years. Defra predicts that income on pig farms will jump 90% from £41,000 to £78,000 in 2013/14. Even if this optimistic prediction falls somewhat short there is the real possibility that the pig sector will see a reasonably sustained period of both profitability and stability. This in turn is likely to result in an increase in the breeding herd offsetting at least some of the declines of recent years.

Table 2.1 Specialist Pig Farms – Financial Results

	2011/12	2012/13
Number of farms	74	70
Output	£	£
Pigs	419787	444218
Other livestock	9054	7607
Crops	33497	33419
Miscellaneous	40849	30451
Total output	503187	515696
Variable costs		
Feed	251438	256223
Vet and medicines	12246	10860
Other livestock costs	27959	32699
Crop costs	12588	11581
Total variable costs	304231	311362
Farm gross margin	198956	204333
Fixed costs		
Labour		
- Paid	53666	54238
- Unpaid	21021	20706
Machinery		
- Contract	9549	9745
- Depreciation	16807	21002
- Repairs	11459	12603
- Fuel and oil	10651	13047
Occupiers repairs	11791	7874
Rent and rates	27679	23869
Other farm costs	22463	20879
Total fixed costs	185086	183963
Management and investment income	13870	20371
Less management charges	58	257
Plus farmer and spouse labour	21021	20706
Net farm income	34833	40820
Less net interest payments	6388	6821
Less building depreciation and insurance	11465	10559
Less directors remuneration	1188	596
Plus rental value and imputed rent	18881	14626
Plus imputed labour	3308	3419
Farm business income	37980	40889

Table 2.2 Specialist Pig Farms 2012/13 – Grouped by MII per Farm

	Top 25%	Middle 50%	Bottom 25%
Output	£	£	£
Pigs	1179169	230862	145706
Other livestock	6770	7340	8897
Crops	78790	25182	5827
Miscellaneous	60417	28113	6466
Total output	1325147	291497	166895
Variable costs			
Feed	640360	145644	98462
Vet and medicines	27140	6452	3658
Other livestock costs	82154	19924	9674
Crop costs	19523	11387	4434
Total variable costs	769176	183406	116227
Farm gross margin	555971	108091	50668
Fixed costs			
Labour			
- Paid	150969	24390	18230
- Unpaid	19305	21224	21068
Machinery			
- Contract	25160	5075	3846
- Depreciation	53789	12522	5757
- Repairs	31149	7168	5165
- Fuel and oil	35957	6430	3682
Occupiers repairs	15692	4512	6728
Rent and rates	55445	16273	8127
Other farm costs	40484	16116	11193
Total fixed costs	427949	113710	83795
Management and investment income	128022	-5619	-33127
Less management charges	694	173	0
Plus farmer and spouse labour	19305	21224	21068
Net farm income	146632	15432	-12058
Less net interest payments	16713	3676	3313
Less building depreciation and insurance	23347	6810	5432
Less directors remuneration	2122	141	0
Plus rental value and imputed rent	30015	11032	6755
Plus imputed labour	3986	3467	2796
Farm business income	138452	19304	-11253

Table 2.3 Specialist Pig Farms 2012/13 – Grouped by FBI per Farm

	Top 25%	Middle 50%	Bottom 25%
Output	£	£	£
Pigs	1042785	212331	308668
Other livestock	6633	7253	9279
Crops	86564	18928	9299
Miscellaneous	65163	25925	4909
Total output	1201145	264437	332155
Variable costs			
Feed	567558	123482	209759
Vet and medicines	21673	6487	8777
Other livestock costs	75259	16552	22385
Crop costs	22172	10157	3873
Total variable costs	686662	156677	244793
Farm gross margin	514483	107760	87362
Fixed costs			
Labour			
- Paid	137963	21649	35580
- Unpaid	21776	21488	18091
Machinery			
- Contract	22815	5820	4527
- Depreciation	51783	11601	9029
- Repairs	27205	8368	6479
- Fuel and oil	32315	6312	7241
Occupiers repairs	13093	4814	8750
Rent and rates	51240	15275	13688
Other farm costs	36255	15627	16001
Total fixed costs	394445	110954	119386
Management and investment income	120039	-3194	-32024
Less management charges	690	1.8	332
Plus farmer and spouse labour	21776	21488	18091
Net farm income	141125	18292	-14264
Less net interest payments	14872	3410	5578
Less building depreciation and insurance	18653	8321	6945
Less directors remuneration	2109	0	274
Plus rental value and imputed rent	27890	11370	7893
Plus imputed labour	6426	3095	1073
Farm business income	139806	21026	-18096

Table 2.4 Specialist Pig Farms 2012/13 – Grouped by Type

	Predominantly sows	Predominantly growing/fattening pigs
Number of farms	48	22
Output	£	£
Pigs	700458	128026
Other livestock	10033	4615
Crops	45688	18280
Miscellaneous	45605	11752
Total output	801783	162673
Variable costs		
Feed	443477	25157
Vet and medicines	18979	841
Other livestock costs	47698	14190
Crop costs	17159	4698
Total variable costs	527313	44886
Farm gross margin	274470	117787
Fixed costs		
Labour		
- Paid	74651	29048
- Unpaid	23727	16978
Machinery		
- Contract	14853	3441
- Depreciation	26524	14188
- Repairs	15970	8448
- Fuel and oil	17787	7199
Occupiers repairs	11426	3491
Rent and rates	29959	16354
Other farm costs	28734	11187
Total fixed costs	243631	110334
Management and investment income	30839	7453
Less management charges	176	357
Plus farmer and spouse labour	23727	16978
Net farm income	54390	24074
Less net interest payments	9149	3950
Less building depreciation and insurance	14232	6026
Less directors remuneration	1080	0
Plus rental value and imputed rent	19637	8443
Plus imputed labour	4853	1650
Farm business income	54420	24191

Table 2.5 Specialist Pig Farms 2012/13 – Grouped by Standard Output per Farm

000 SO	0-200	200-500	500+
Number of farms	17	27	26
Output	£	£	£
Pigs	144251	225999	1515445
Other livestock	3328	7196	17913
Crops	8907	34978	85237
Miscellaneous	1174	31829	93233
Total output	157661	300002	1711827
Variable costs			
Feed	60264	132838	920709
Vet and medicines	1885	6550	38823
Other livestock costs	15671	19111	95719
Crop costs	569	12681	34123
Total variable costs	78389	171180	1089374
Farm gross margin	79272	128822	622453
Fixed costs			
Labour			
- Paid	21542	30965	170054
- Unpaid	18859	21949	22539
Machinery			
- Contract	1973	4732	36316
- Depreciation	10519	11724	61482
- Repairs	5432	7855	37348
- Fuel and oil	4618	6935	43113
Occupiers repairs	1861	5072	26450
Rent and rates	8921	17430	69081
Other farm costs	8900	21195	47026
Total fixed costs	82625	127856	513409
Management and investment income	-3353	966	109044
Less management charges	363	232	66
Plus farmer and spouse labour	18859	21949	22539
Net farm income	15143	22683	131517
Less net interest payments	2684	3870	21490
Less building depreciation and insurance	2639	9379	30402
Less directors remuneration	0	994	1194
Plus rental value and imputed rent	3330	14268	40488
Plus imputed labour	1421	4595	5711
Farm business income	14571	27304	124631

Table 2.6 Specialist Pig Farms 2012/13 – Grouped by Performance Ratio

Ratio	102-147	91-102	44-91
Number of farms	29	27	14
Output	£	£	£
Pigs	824338	431231	70789
Other livestock	6755	8388	7691
Crops	71972	22139	5544
Miscellaneous	48885	40345	1782
Total output	951950	502103	85805
Variable costs			
Feed	438589	280565	46386
Vet and medicines	16930	14198	1340
Other livestock costs	58583	33804	5273
Crop costs	17131	16459	1042
Total variable costs	531232	345027	54040
Farm gross margin	420717	157076	31765
Fixed costs			
Labour			
- Paid	109791	42309	9728
- Unpaid	20217	22579	19324
Machinery			
- Contract	18559	8569	1964
- Depreciation	42227	15794	4648
- Repairs	22538	11364	3746
- Fuel and oil	25914	10336	2687
Occupiers repairs	11555	10379	1618
Rent and rates	44066	22636	4572
Other farm costs	30766	23647	8050
Total fixed costs	325633	167612	56339
Management and investment income	95085	-10536	-24574
Less management charges	513	254	0
Plus farmer and spouse labour	20217	22579	19324
Net farm income	114788	11789	-5249
Less net interest payments	12092	6604	1681
Less building depreciation and insurance	15837	12733	3010
Less directors remuneration	1567	207	0
Plus rental value and imputed rent	23432	17662	2626
Plus imputed labour	2518	6086	1660
Farm business income	111242	15992	-5653

Chapter 3

Margins for Pig Enterprises

Since 2004 additional data has been collected from a sub-set of FBS farms to enable Gross and Net Margins to be calculated for specific enterprises. This was introduced as an alternative to the full survey approach previously undertaken as part of the Special Studies Programme commissioned by Defra. The last full Special Studies survey concerned with Pig production was published in 2004 and related to the financial year ending September 2003 (see Shepherd 2004 at <http://centres.exeter.ac.uk/crpr>). This was a comprehensive survey of over 300 farms recruited from a stratified sample.

The data presented in this section is not directly comparable to the Special Study report. This data comes from a smaller sample based on farms already participating in the FBS, no additional physical data was collected and, crucially, the methodology for calculating net margins is completely different. In the Special Studies approach fixed costs are estimated by the researcher in conjunction with the co-operator. In the FBS based approach, the variable costs are allocated to enterprises by estimation but some of the fixed costs are allocated econometrically. That is to say, the total fixed costs within the account are allocated to the different enterprises according to co-efficients for each enterprise. Data on the validity of these co-efficients is being accumulated with a view to improving them over time. For Specialist Pig farms, the net margins for the pig enterprise should be reasonably accurate. This is because these farms have few or no other enterprises and therefore the majority of fixed costs are rightly attributable to the pig enterprise.

Classification of farms

Net and gross margins were completed for 65 Specialist Pig farms. This is because of the 70 farms reported in Chapter 2 data for net margins were not available for five farms.

These were classified as follows:

Type	No of farms	Definition
111	6	Breeders selling weaners (rearsers)
112	35	Breeders selling fat pigs (finishers)
113	1	Buying weaners, selling fat pigs
114	20	Contract rearing
115	3	Other

Due to the small sample sizes it is not possible to show the results for each type listed above. Consequently, results have been presented for types 112, 114 and combined types 111, 113, and 115.

Net Margin results

Table 3.1 shows that the full sample of 65 Specialist Pig Farms recorded an average Net Margin of £17,124. In the previous year there was a negative Net Margin of £296. This average figure masks a huge variation in performance. Within this figure there are 34 farms (52%) making a negative Net Margin. This is very similar to the previous year indicating that many farms are experiencing a sustained period of loss making.

Table 3.2 presents the results split into three different categories, namely breeding farms selling finished pigs, contract rearing only farms and all other farms. The latter comprises both breeders selling weaners and also a number of farms that do not easily fit into one specific category. This analysis shows that the different farm types all recorded a positive Net Margin in contrast to the previous year when those breeding farms selling finished pigs showed a large negative margin. Breeding farms selling finished pigs made a profit of

£19,009. The contract rearing only farms and the 'other' farm type showed positive Net Margins of £15,670 and £15,042 respectively.

Table 3.3 presents the costs and margins per £100 output for two categories of farms – combined breeding and finishing units (type 112) and others (excluding contract rearing).

Table 3.4 presents the results in terms of Net Margins per sow. It is only possible to do this for the breeder-finisher farms because sample sizes are too small for the other groups. In 2012/13 there is a Net Margin of £58 per sow compared to a margin loss of £40 in 2011/12. One of the reasons for this increase in profitability per sow is that output was higher at £2,110, compared to £2,095 the previous year. Variable costs per sow were very similar at £1536. However, more importantly, fixed costs fell quite significantly from £525 in 2011/12 to £451 in 2012/13. This may be partly because average sow numbers per farm increased from 288 to 327 although it should be noted that it is not an identical sample.

Table 3.1 Specialist Pig Farms – Net Margins

	2011/12	2012/13
Number of farms	70	65
Output	420208	452065
Variable costs		
Feed	248400	255714
Vet and medicines	12031	10742
Other variable costs	26657	32278
Total variable costs	287088	298734
Gross Margin	133120	153331
Fixed costs		
Paid labour	45039	45751
Unpaid labour	2508	3264
Contract hire	4228	5592
Machinery depreciation	10011	15759
Machinery repairs	7034	8410
Fuel and oil	6799	9452
Electricity and heating fuel	5982	4923
Water	2272	2176
Insurance	3147	2910
Professional fees	2568	2704
General farm costs	3047	3060
Occupiers repairs	9387	5890
Rent and rates	14568	9610
Total fixed costs	116589	119500
Net farm income	16531	33831
Less farmer and spouse labour	16877	16982
Plus managerial input	49	275
Net margin	-296	17124

Table 3.2 Specialist Pig Farms 2012/13 – Net Margins by Farm Type

Farm type	Breeders selling fat pigs	Others	Contract rearing
Number of farms	35	10	20
Average number of sows	327	278	34
	£	£	£
Output	690206	574341	121030
Variable costs			
Feed	440987	346057	0
Vet and medicines	16760	20029	8
Other variable costs	44615	38428	15197
Total variable costs	502362	404514	15205
Gross Margin	187844	169827	105824
Fixed costs			
Paid labour	57371	53167	29045
Unpaid labour	5352	0	2021
Contract hire	9292	4130	1734
Machinery depreciation	18956	12648	13132
Machinery repairs	10126	9420	5976
Fuel and oil	11878	10815	6035
Electricity and heating fuel	6681	9867	935
Water	2694	3689	978
Insurance	3871	3237	1638
Professional fees	3213	3029	1972
General farm costs	3881	3783	1802
Occupiers repairs	6287	15168	1867
Rent and rates	7952	13157	10233
Total fixed costs	147554	142110	77367
Net farm income	40291	27716	28457
Less farmer and spouse labour	21476	12758	13231
Plus managerial input	195	84	443
Net margin	19009	15042	15670

Table 3.3 Specialist Pig Farms 2012/13 - Costs and Margins per £100 Pig Output

Farm type	Breeders selling fat pigs	Others except contract rearing
	£ per £100 output	
Feed	63.9	60.3
Other variable costs	8.9	10.2
Gross margin	27.2	29.6
Labour costs	12.2	11.5
Contract and machinery costs	7.3	6.4
Occupiers repairs	0.9	2.6
Rent and rates	1.2	2.3
Other fixed costs	3.0	4.1
Net margin	2.8	2.6

Table 3.4 Specialist Pig Farms – Net Margins per Sow

	2011/12	2012/13
Farm Type	Breeders selling fat pigs	
Number of farms	36	35
Number of sows	288.2	327.0
	£	£
Output	2095.0	2110.7
Variable costs		
Feed	1357.2	1348.6
Vet and medicines	59.3	51.3
Other variable costs	124.6	136.4
Total variable costs	1541.1	1536.3
Gross Margin	553.8	574.4
Fixed costs		
Paid labour	193.4	175.4
Unpaid labour	14.8	16.4
Contract hire	22.8	28.4
Machinery depreciation	44.0	58.0
Machinery repairs	34.1	31.0
Fuel and oil	23.8	36.3
Electricity and heating fuel	35.0	20.4
Water	10.5	8.2
Insurance	13.9	11.8
Professional fees	10.8	9.8
General farm costs	13.6	11.8
Occupiers repairs	34.9	19.2
Rent and rates	74.1	24.3
Total fixed costs	525.6	451.2
Net farm income	28.3	123.2
Less farmer and spouse labour	69.0	65.7
Add Management	0.0	0.6
Net margin	-40.7	58.1

Appendix A

Notes and Definitions

Classification of Farms in the FBS

Farms are classified by both type and size. Standard Outputs (SOs) are calculated per hectare of crops and per head of livestock and used to calculate the standard output associated with each part of the Farm Business. They are expressed in terms of euros per ha or per head of livestock. The SOs now in use are based on a five-year average centred on 2007. This is done in order to lessen the impact of yearly fluctuations on calculated SOs. Holdings on which pigs account for more than two thirds of their total SO are classified as Specialist Pig holdings.

Farms are classified by size by utilising the Standard Labour Requirements (SLR). These are based on standard figures for different enterprises – they are not based on the actual labour utilised on a particular farm. In order to be included in the FBS they generally require at least 0.5 SLR.

Further details on the classification system can be accessed at:

http://webarchive.nationalarchives.gov.uk/20130123162956/http://www.defra.gov.uk/statistics/files/defra-stats-foodfarm-farmmanage-fbs-UK_Farm_Classification.pdf/

Management and Investment Income (MII) is defined as the return to the farmer and spouse for their management and on the tenant-type capital of the business. Management and investment income is NFI minus an imputed cost for the manual labour of the farmer and spouse plus paid management.

Net Farm Income (NFI) assumes all farms are tenanted and that all tenant type assets are owned by the farmer. It represents the return to the farmer and spouse for their manual and managerial labour and on tenant type capital in livestock, crops, machinery, etc., but excluding land and buildings. It is calculated before deduction of interest payments on any farming loans and also excludes interest earned on any financial assets owned. (Breeding livestock appreciation (BLSA) is excluded from total farm output and, therefore, is not included in net farm income.)

Farm Business Income (FBI) for sole traders and partnerships represents the financial return to all unpaid labour (farmers and spouses, directors, non-principal partners and directors and their spouses and family workers) and on all their capital invested in the farm business, including land and buildings. For corporate businesses it represents the financial return on the shareholders capital invested in the farm business. It is used when assessing the impact of new policies or regulations on the individual farm business. Although Farm Business Income is equivalent to financial Net Profit, in practice they are likely to differ because Net Profit is derived from financial accounting principles whereas Farm Business Income is derived from management accounting principles. For example in financial accounting output stocks are usually valued at cost of production, whereas in management accounting they are usually valued at market price. In financial accounting depreciation is usually calculated at historic cost whereas in management accounting it is often calculated at replacement cost

Unpaid Labour costs are based on the time spent in manual work on the farm, valued at the appropriate prevailing hourly earnings of agricultural workers. Farmer and spouse unpaid labour costs are added back in order to calculate NFI from MII.

Weighting of results

All data presented in this report has been weighted to reflect the relative significance of each farm in the population. The weighting adopted has been the same as that used in the main FBS results (see <http://www.farmbusinesssurvey.co.uk>).

All FBS results are weighted so as to represent the whole population of farms rather than just the sample. The population in this case is all farms in England of size at least 0.5 SLR. Weighting of FBS data is a two-stage procedure. The first stage applies a multiple to each farm to bring the number of farms to population level and to correct for differing probabilities of selection from the June agricultural census sampling frame; the second stage readjusts these weights to correct for biases identified from a range of variables in external data sources.

Average number of sows

The average number of sows is an annual average calculated from the number of sows and in-pig gilts on the farm.

Appendix B: Reports in Series

Reports in this series:

Crop Production in England 2012/13

Dairying Farming in England 2012/13

Hill Farming in England 2012/13

Horticulture Production in England 2012/13

Lowland Grazing Livestock Production 2012/13

Organic Farming in England 2012/13

Pig Production in England 2012/13

Poultry Production in England 2012/13

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