



Farm Business Survey

2013/2014

Pig Production in England



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RBR

independent research, data and analysis

Rural Business Research

Farm Business Survey

2013/14

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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 led 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 reports will make a valuable and useful contribution to the farming industry and we commend them to you.

Prof. Martin Seabrook

(Chief Executive of the Consortium)

Spring 2007

Foreword to the Ninth Series

As 2015 gets into swing the agricultural and horticultural sectors are met with both certainty and uncertainty at the same time. With respect to the revised Common Agricultural Policy (CAP) certainty, to some extent, now exists where it was previously lacking. For the most part, the process of implementation of the revised CAP is now available for farmers and their advisors to work with ahead of ensuring they submit their claims under the new Basic Payment Scheme (BPS) by the 15 May 2015 deadline. While this provides an element of certainty it also represents an evolution of policy that places increased emphasis on the management of the environment to attract the full BPS funding available per farm. Greening and Ecological Focus Areas (EFAs) represent new concepts and definitions to the industry, however, the rules of engagement are, by and large, now known.

However, while certainty exists with respect to policy, the wider agricultural and general economy continues to exhibit considerable uncertainty. The prices of many products, notably combinable crops and milk have been on a (largely downward) rollercoaster over the previous 12 months, while input costs driven in part by the falling cost of energy are exhibiting some considerable 'stickiness'. The wider political economy within Europe will also have an impact on the fortunes of agriculture and horticulture in the UK. As the European Central Bank has initiated a programme of Quantitative Easing (QE), the likely direction of travel for the Euro against Sterling will be downward – making UK exports more expensive to our European trading neighbours, decreasing the value of the BPS funding to UK farmers, but conversely reducing input costs from Europe. Within the UK, the economic recovery continues to hold on set against mixed signals, with many commentators now moving out any predictions of an interest rate rise to 2016 (at the earliest) as inflationary pressures have dissipated.

Against this wider background Rural Business Research (RBR) are proud to produce the ninth series of reports that focus on the economics of agriculture and horticulture. Our data are drawn from the 2013/14 financial year and hence relate to the 2013 harvest / production calendar. In the foreword to the eight series I noted the climatically atypical 2012/13 production year; the 2013 harvest was not immune to the knock-on impacts from '12/13 and the outcomes presented in these reports must be considered against this backdrop. In particular the impact on Cereal farms which have witnessed a fall in Farm Business Income (FBI) of 27% from 2012/13 to 2013/14 reflects a combination of lower yields and an increased area of spring cropping. Similar falls in FBI were witnessed in General Cropping (-24%), Less Favoured Area Grazing Livestock (-22%) and Mixed farms (-20%). Conversely the dairy sector witnessed a strong improvement in FBI during 2013/14 (+67%), flowing largely from increased milk prices - albeit that these price improvements have now gone into reverse. Horticulture witnessed an improved FBI of 31%, while Specialist Pigs and Specialist Poultry also saw increased income levels, flowing largely from improvements in output.

While certainty and uncertainty both exist, we continue to observe large variation between performance within and across farm types. Businesses seeking to position themselves for the future will need to closely examine the costs of production and benchmark their performance to identify areas for continued business success. RBR hopes that this ninth series of reports provides the basis for such analysis. I particularly thank all the FBS research programme co-operators in providing us with the opportunity to collect, analyse and present these data for the benefit of the industry as a whole.

Dr Paul Wilson
Chief Executive Officer, Rural Business Research
January 2015
www.ruralbusinessresearch.co.uk

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. Thanks also to Keith Robbins (Duchy College) for extracting the data.

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.

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Summary

This report presents the results collated from those farms with pig enterprises in the 2013/14 Farm Business Survey. They relate to farm businesses with financial year ends between 31st December 2013 and 31st March 2014. 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 2014. Between 2013 and 2014 there was a further fall in the number of breeding pigs (5%), and fattening pig numbers also fell by 2.5% which has resulted in an decrease in overall pig numbers (-2.8%), compared to the previous year.

The Yorkshire and the Humber and Eastern regions taken together account for 63% of the pigs in England. In consequence, the other six regions only account for the remaining 37%.

Slaughter statistics indicate that 8,000 head of pigs were killed in England and Wales in 2014, an increase of 2% on the previous year. This highlights that even though there has been a fall in pig numbers, more pigs are being slaughtered, suggesting improved productivity within the industry. In consequence of increasing slaughter numbers the percentage contribution made by home produced meat to total supply increased to 61% for the UK, continuing the trend seen in earlier 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. However in 2014 the average pig price fell to 158 pence per kg and is unlikely to improve until consumer demand increases.

The full sample of 75 Specialist pig farms recorded an average gross margin of just over £238,000 after deduction of variable costs amounting to £306,000. Feed costs accounted for 83% of total variable costs and just over half of all costs. Compared to the previous year, feed costs fell by 9%. Fixed costs amounted to just over £196,000 resulting in an average Management and Investment Income (MII) of nearly £42,000 (previous year £21,000). Average Net Farm Income (NFI) was £64,000 (£41,000). Average Farm Business Income (FBI) was £65,000.

There is always a great variation in economic performance between farms and it was noticeable that 15% of farms had a negative MII and 21% showed a negative FBI. The top 25% show an average MII of £197,965 whilst the bottom 25% shows an average negative MII of -£37,029. 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.

Enterprise Net Margins for pigs derived from the FBS sample are also presented in this report. From a sample of 69 Specialist Pig Farms there was an average Net Margin of £22,148 compared to an average of £3,500 in 2012/13. Within this figure there are 24 farms (35%) making a negative Net Margin. This is slightly less than the previous year; however the figures indicate that many specialist pig farms are still experiencing a sustained period of loss making. Breeding farms selling finished pigs made a Net Margin of £25,000. The contract rearing only farms and the 'other' farm type showed positive Net Margins of just over £18,000 and £26,000 respectively.

In the 2013/14 financial year, pig prices strengthened and feed prices fell and consequently there was considerable improvement in the compound feed price to pig price ratio. However since the middle of 2014 pig prices have fallen dramatically due to increased numbers from the UK plus heavier weights which were met by poor consumer demand. Furthermore the EU average pigmeat price is at its lowest level since October 2011 with the ban on EU pork products in Russia likely to be a contributory factor. Unfortunately industry reports have suggested these prices will remain until there is an improvement in consumer demand for pork and therefore it is expected that in the 2014/15 financial year profits will be down on 2013/14.

1 Commentary on the UK Pig Industry

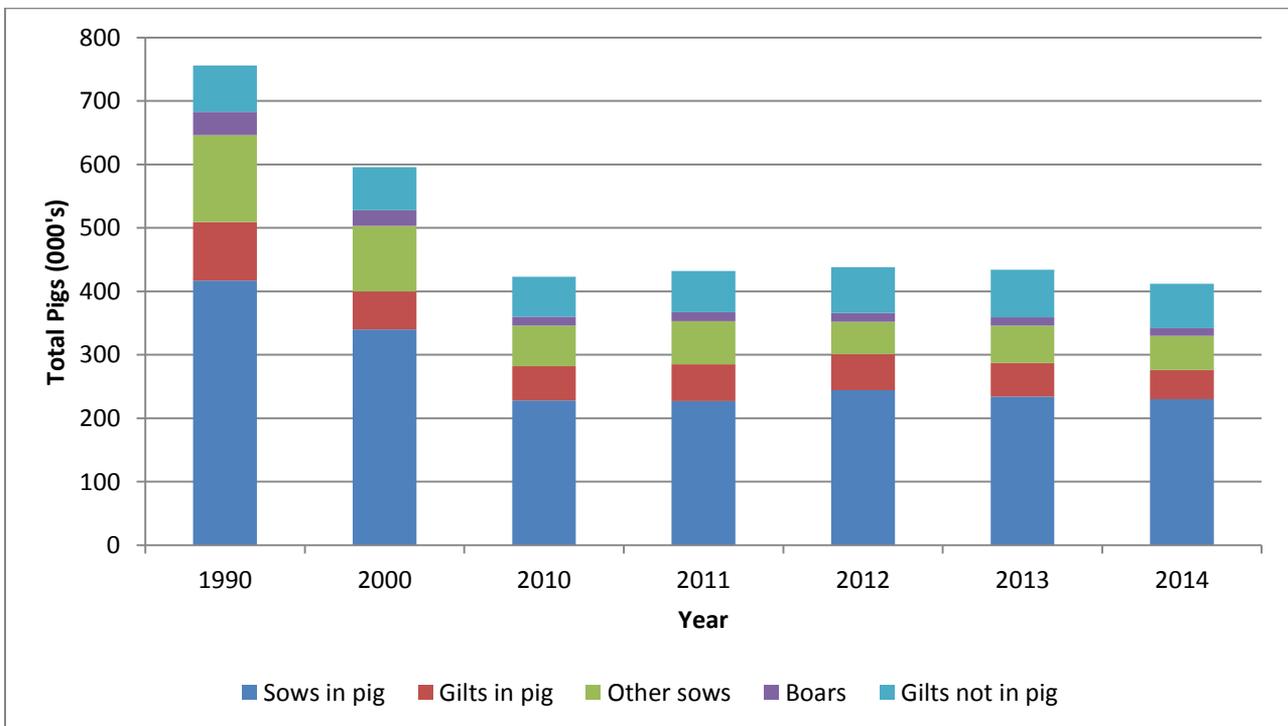
The purpose of this chapter is to collate relevant specialist pig farm data for England. Data has been presented for different time series in order to show the key changes. The following figures clearly portray the dramatic structural change that has taken place in the industry during the financial year 2013/14.

1.1 Pig Population June Survey

The total number of pigs in England fell by 2.8% from 4.1 million animals in 2013 to 4.0 million in June 2014. The main reason for this decrease in numbers was a fall (2.5%) in the number of fattening pigs (Figure 1.2), which account for 90% of all pigs in England. However it is important to comment that the decrease seen in fattening pig numbers is a result of a fall in the breeding herd, however due to fewer numbers in the breeding herd this is less obvious.

Figure 1.1 displays the trends in the number of breeding pigs on agricultural holdings in England from Defra's June survey data. In 2014 the English pig breeding herd consisted of 55% sows in pig, 18% gilts not in pig, 13% other sows including those not in pig, 11% gilts in pig and 3% boars. There has been a 5.3% fall in the number of breeding pigs over the last twelve months, with the greatest fall (14%) being for gilts in pig. The trend shows a steep fall in breeding pig numbers from 1990–2010 followed by a slow incline from 2010–2012 and subsequent slow decline.

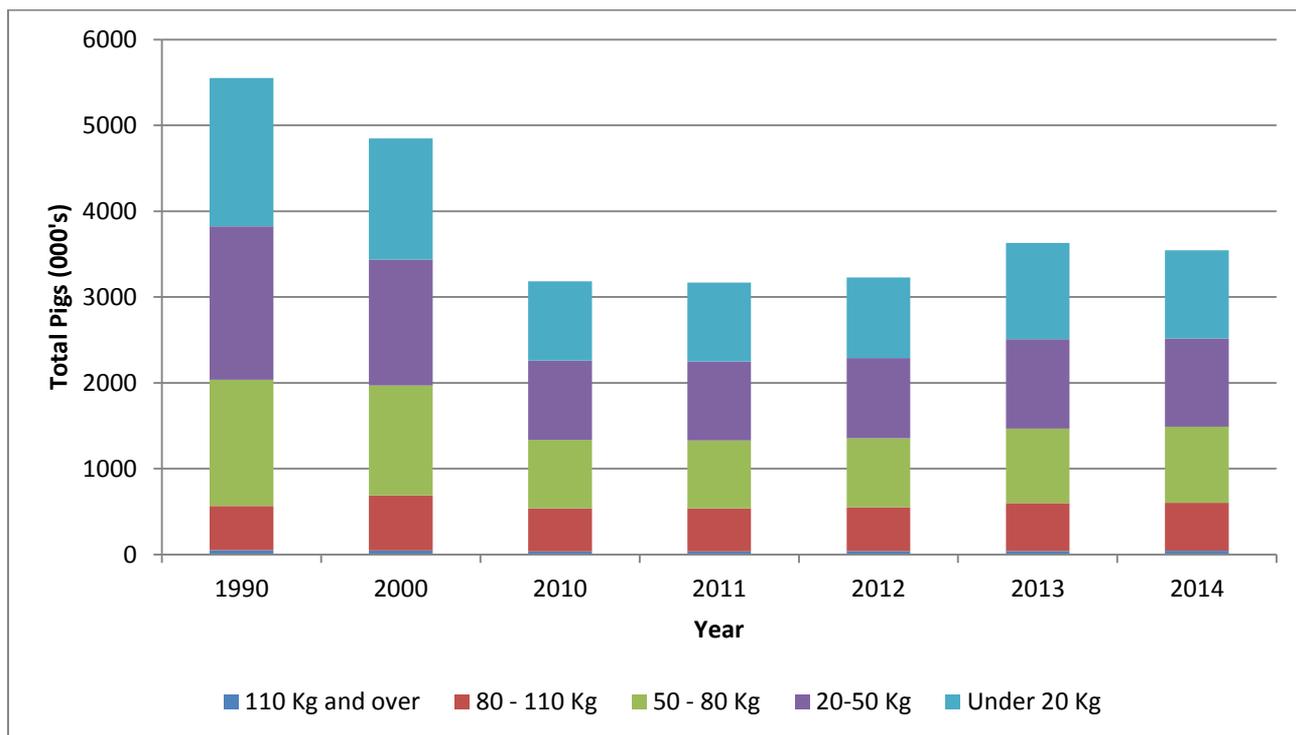
Figure 1.1 Breeding Pigs on Agricultural Holdings in England 1st June ('000)



Source: Defra, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/355868/structure-jun2014final-eng-18sep14.pdf

Figure 1.2 displays the number of fattening pigs on agricultural holdings in England according to the June survey data. The data shows there has been a slight decline (-2.5%) in the number of fattening pigs between 2013 and 2014, however numbers have not reverted back to the low levels seen between 2010 and 2012. The data highlights a substantial increase (5.9%) in the number of fattening pigs weighing 110kg and over, however there has been a large decrease (-8.4%) in the number of fattening pigs under 20kg which contributes to the overall decrease in total pig numbers.

Figure 1.2 Fattening Pigs on Agricultural Holdings in England 1st June ('000)



Source: Defra, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/355868/structure-jun2014final-eng-18sep14.pdf

1.2 Regional Specialist Pig Holdings and Number of Pigs

Table 1.1 shows the number of holdings in 2013 classified as specialist pig holdings in England. The methodology for classifying farms is based on Standard Outputs (SO). 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. Holdings on which pigs account for more than two thirds of their total SO are classified as Specialist Pig holdings.

In 2013, the number of holdings classified as pigs, using SO typology, fell by 2.5%. The greatest percentage decrease was seen in the South East, with a fall of 15%. In terms of absolute numbers the South East also had the largest decrease with a loss of 25 farms.

Table 1.1 Specialist Pig Holdings by Region 2010-2013

	2010 so	2011 so	2012 so	2013 so
North East	39	46	43	45
North West and Merseyside	110	125	127	114
Yorkshire and The Humber	410	464	464	485
East Midlands	159	174	178	167
West Midlands	133	161	153	137
Eastern	369	398	382	393
South East	137	159	159	134
South West	244	283	274	260
England	1,601	1,810	1,780	1,735

Source: Defra, June Survey

Table 1.2 shows the distribution of pigs by region in 2013. 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 28%. In contrast to other years there was an overall increase of 13% of the total number of pigs in 2013, compared with 2012. The Eastern region saw the biggest increase of 19%.

Table 1.2 Number of Pigs by Region 2010-2013

	2010	2011	2012	2013
North East	89,056	89,832	68,557	76,780
North West and Merseyside	138,284	141,882	115,782	122,932
Yorkshire and The Humber	1,222,505	1,257,909	971,222	1,112,342
East Midlands	344,131	332,655	276,616	301,143
West Midlands	188,840	193,304	145,102	164,078
Eastern	1,032,016	989,187	749,944	894,763
South East (incl. London)	204,756	201,053	140,746	136,977
South West	386,529	393,737	295,118	329,961
England	3,606,117	3,599,559	2,763,086	3,138,976

Source: Defra, June Survey

Collectively data from Table 1.1 and 1.2 suggests that in 2013, the number of pig holdings in England decreased and the average number of pigs on each holding increased.

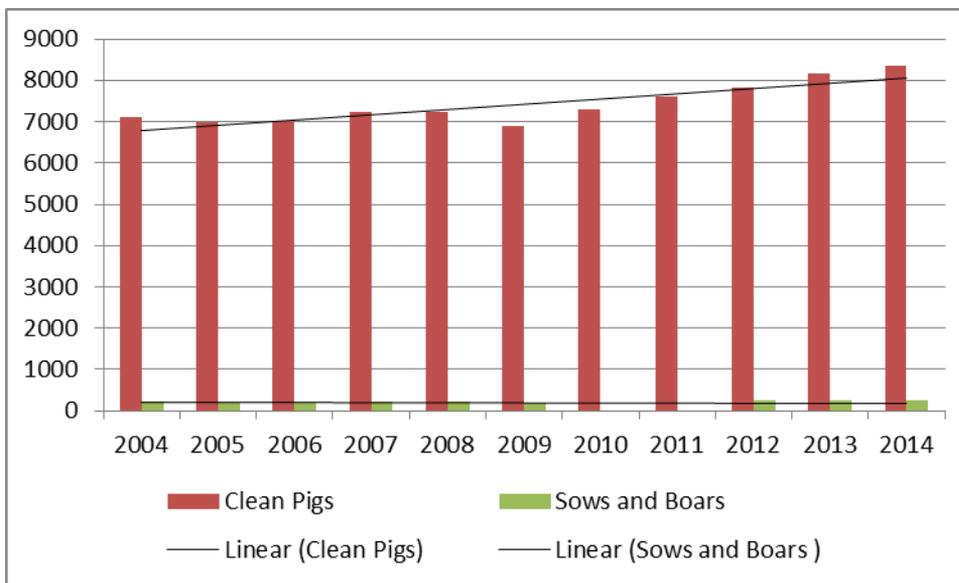
1.3 Structure of the Industry

1.3.1 Pig slaughter data for England

Figure 1.3 shows the number of clean pigs and sows and boars slaughtered in England for the period 2004-2014. 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 6,886 thousand. However, over the last couple of years we have seen a steady increase to 8,342 thousand pigs slaughtered in 2014, an increase of 21% compared to 2009.

Figure 1.3 Pigs Slaughtered in England 2004-2014 (thousand head)

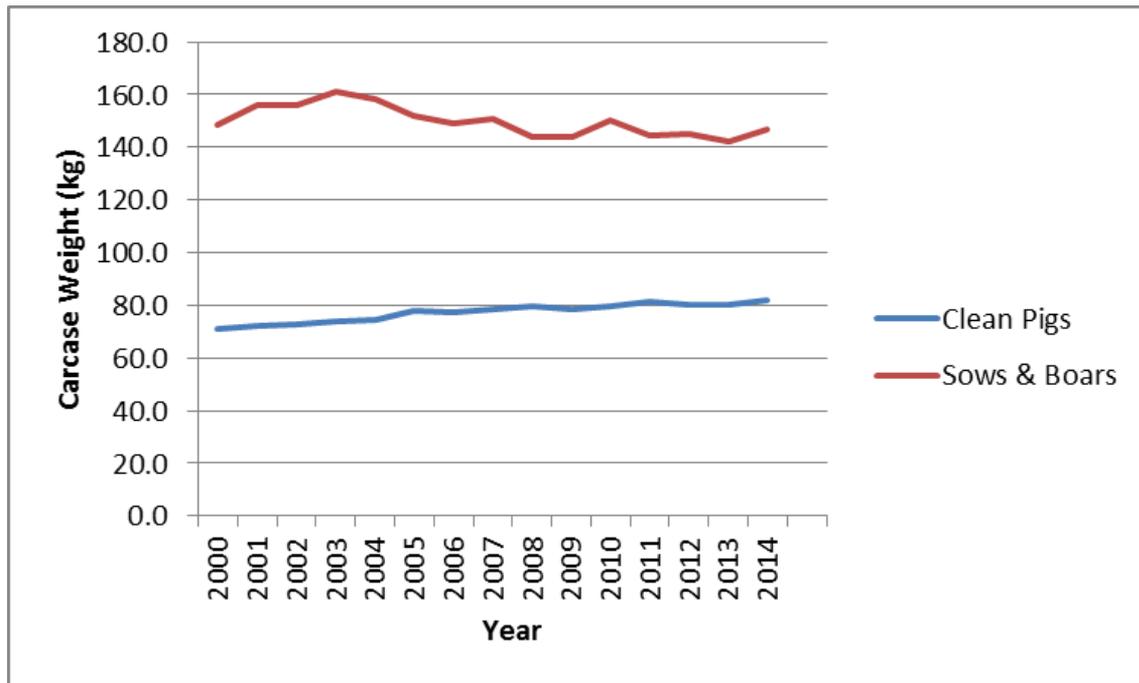


Footnotes:

Sow and boar data missing in years 2010 and 2011 due to confidentiality constraints.

Figure 1.4 shows 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 2014 at 81.8kg. In contrast sows and boars carcass weights seem to be on a downward trend, with a slight increase seen in 2014.

Figure 1.4 Average Carcass Weights 2000-2014



Source: Defra, <https://www.gov.uk/government/statistics/cattle-sheep-and-pig-slaughter>

1.3.2 UK Supply and use of Pork and Bacon

Table 1.3 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 at around 50% of total supply. In recent years there has been a modest improvement and in 2013 home production increased to 61% of total supply.

Imports from the EU fell by 1% during the year and imports from the rest of the world remained constant. It can be seen that from 2005 imports from the EU have fallen by almost 15%, however imports from the rest of the world have increased quite substantially by 66%.

During the past year exports to the EU have increased by 9% and 25% to the rest of the world. The table also demonstrates that between the years 2005-2013 exports to the EU have increased by 51% and threefold to the rest of the world which highlights the growth of UK export markets.

Table 1.3 Supply and Use of Pigmeat 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2012- 13
Home-fed production	669	667	707	706	681	712	759	781	791	1
Imports from:										
the EU (a)	836	837	864	801	804	801	770	719	712	1
the rest of the world	6	7	5	12	12	12	11	10	10	0
Exports to:										
the EU	101	110	113	130	109	146	154	140	153	9
the rest of the world	12	10	12	25	26	25	39	43	54	25
Total new supply	1,398	1,391	1,451	1,364	1,362	1,353	1,347	1,327	1,306	2
Home-fed production as % of total new supply for use in the UK	48%	48%	49%	52%	50%	53%	56%	59%	61%	3

Footnotes:

The figures for 2013 are provisional and have been adjusted from a 53-week to a 52-week basis where appropriate.

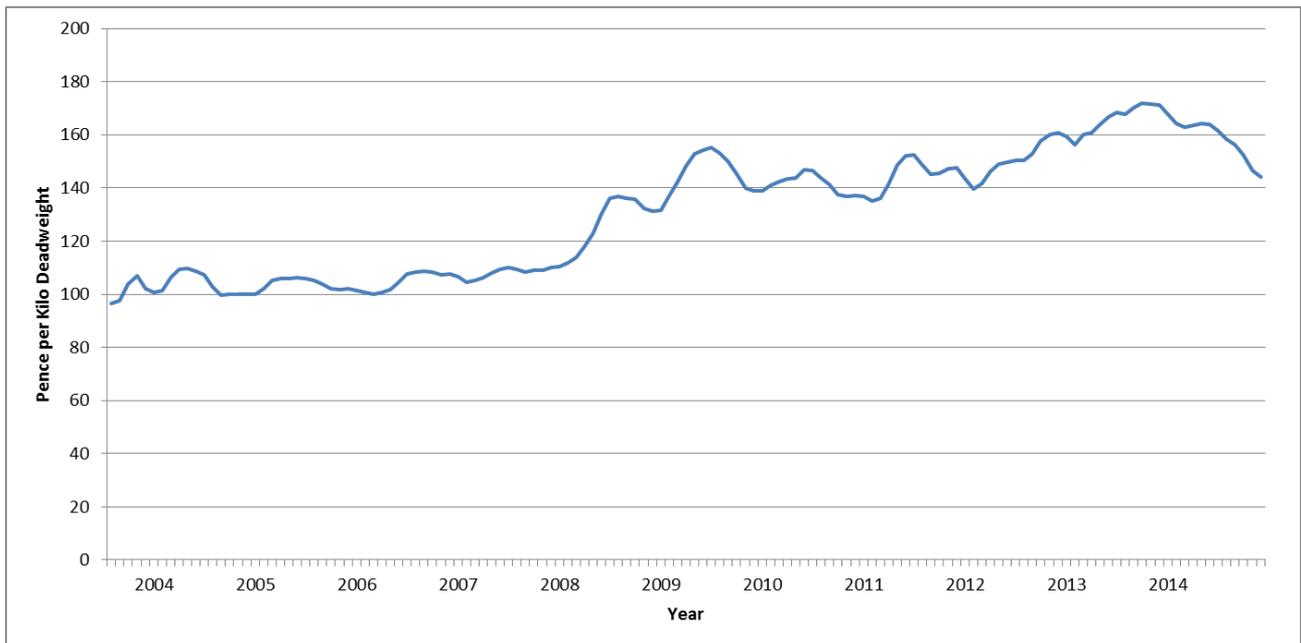
(a) Includes meat from imports of live finished animals.

Source: Agriculture in the United Kingdom 2013

1.3.3 UK Pig prices

Figure 1.5 shows pig prices for the period 2004-2014. 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. However in 2014 prices fell with the average pig price for the year being 158 pence per kg.

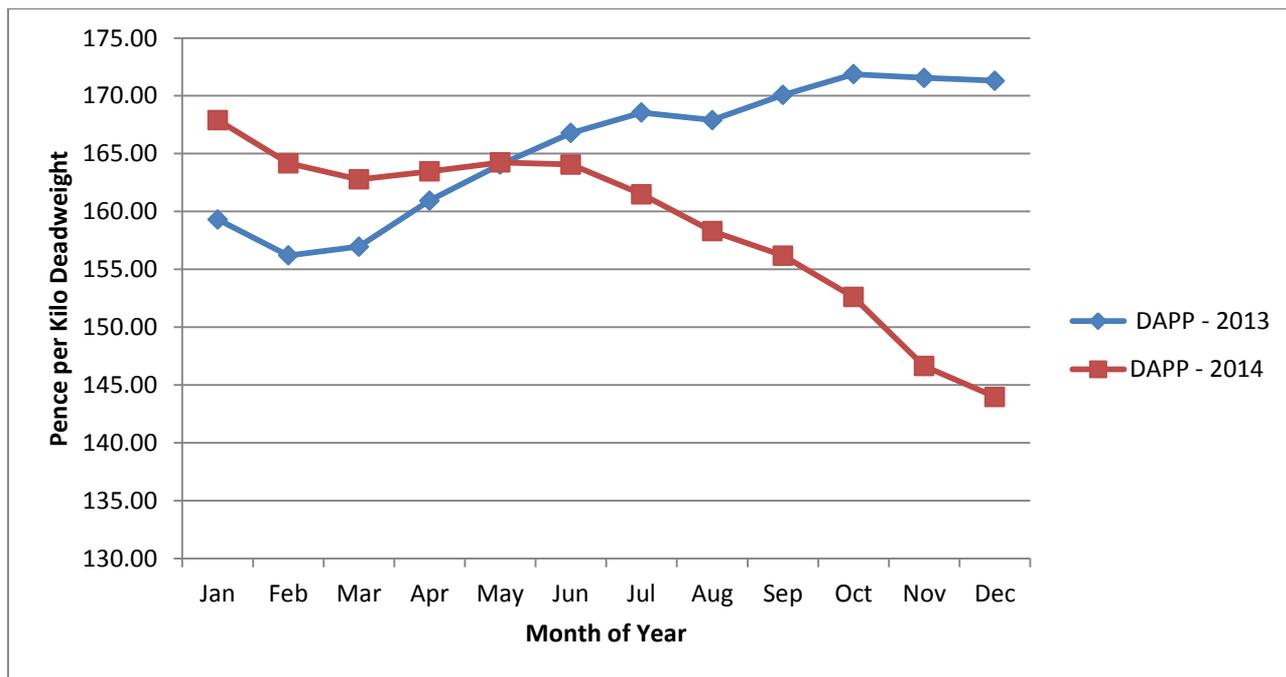
Figure 1.5 Deadweight Average Pig Price (DAPP) 2003-2014



Source: ADHB/Defra

Figure 1.6 shows pig prices for the period 2013-2014, highlighting changes in the past two years more clearly. In 2013 there was an upward trend in pig prices, however at the turn of the year this was reversed with a sharp decline to the end of 2014. Pig prices started out strong at 167 pence per Kg in January 2014; there was then a sharp decline to March 2014 with prices averaging 162 pence per kilo. This was followed again by a relatively constant price to June 2014, although since the middle of the year there has been a fall in pig prices by 21 pence per kilo to December 2014 where pig prices averaged 143 pence per kilo. This is the lowest pigmeat price seen since 2012.

Figure 1.6 Deadweight Average Pig Prices (DAPP) 2013-2014



Source: ADHB/Defra

2 Financial Performance of Specialist Pig Farms

The data in this report has been extracted from the 2013/14 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 2013/14 FBS there were 75 farm businesses that were classified as Specialist Pig farms. This is slightly higher than the previous year when there were 69 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.

2.1 Classification of farms

The 75 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	27	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.

2.2 Financial Results

For the full sample of 75 farms, total farm output amounted to £545,619 (Table 2.1) which was 4% higher than the previous year. Pig output accounted for 88% 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 £238,674 after deduction of variable costs amounting to £306,945. This margin is slightly higher than the one recorded last year, mainly due to an increase in total output and a reduction in feed costs by £6,000. Feed costs accounted for 82% of total variable costs which is the same as the previous year. Fixed costs amounted to £196,777 resulting in a Management and Investment Income (MII) of just under £42,000. Net Farm Income (NFI) averaged £64,383. Farm Business Income (FBI) was slightly higher at £65,216. In summary, 2013/14 was a positive year for pig producers with incomes increasing on average by 56%. This increase in income can be mainly explained by the average pig price for 2013 being on average 15 pence higher than 2012 prices and even though prices fell in 2014 they were still 8 pence above that of the 2012 average price. Furthermore there was a substantial fall in feed costs and this can be explained due to the decrease in wheat and barley price seen in the arable sector.

Table 2.2 shows the range in performance in terms of MII for Specialist Pig farms. There is always a great variation in profit performance between farms and it was noticeable that 11 farms, representing 15% of the sample showed a negative MII figure. The number of farms showing negative FBI figures was 16 representing 21% of the sample. Therefore even with an increased average pig price and reduced feed costs some pig specialist farms are still struggling to generate a profit. However it can be argued this is an

improvement on last year's figures where 50% of farms displayed a negative MII and 23% possessed a negative FBI figure. The top 25% recorded an average MII of £197,965 whilst the middle and bottom 25% recorded an MII of £1,244 and -£37,029 respectively. The high MII farms are significantly larger than the other farms with a pig output five times larger than the middle 50% band.

Table 2.3 shows the range in performance in terms of FBI for Specialist Pig Farms. The table demonstrates the range of incomes seen in the sector with the top 25% gaining an FBI of £197,661 and the bottom 25% gaining an FBI of -£16,046.

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 £107,418 compared to £28,469 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 £200,356; whilst the other two size groups record MII's of -£6,114 and £1,556. When these results are compared with those from previous years it appears that the gap in profitability between the different size groups is growing. The table also highlights that the medium sized farms did not perform as well as the largest and smallest farms. It could be that the smallest farms are family farms that are able to keep costs down whereas the medium sized farms, even though they have a considerably larger output, they are unable to keep control of both variable and fixed costs.

2.3 A note on 2014/15

We have seen how the 2013/14 results represented an increase in profitability compared to those of the previous year. Looking ahead, the profitability for pig farmers for the 2014/15 year is expected to fall. Similar to 2013, feed costs have dropped with feed wheat being valued at £132 per tonne in January 2015, compared to £145 per tonne in February 2014. However forward feed wheat prices for November 2015 are £143 per tonne indicating that feed prices may increase slightly towards the end of the year.

Figure 1.5 has shown the average deadweight price per kilo has been on a downward spiral throughout 2014, falling by 27 pence per kilo between December 2013 and December 2014. This has been explained due to increased supplies from the UK and heavier weights which have been met by poor consumer demand. Furthermore the EU average pigmeat price is at its lowest level since October 2011 due to the negative impacts of the Russian ban on EU pork products which has added to the downward pressure on prices. In addition the gap between UK and EU prices has recently been higher than ever, due to the weaker euro. This may increase the likelihood of imports rising, especially if the euro weakens further, however it is hoped that retailer's commitment to sourcing British pork remains strong. Unfortunately industry reports have suggested pig prices will remain low until there is an improvement in consumer demand for pork.

Table 2.1 Specialist Pig Farms – Financial Results

	2012/13	2013/14	% Change
Number of farms	69	75	
Output	£	£	
Pigs	452,123	481,127	6
Other livestock	6,782	8,016	18
Crops	30,198	22,050	-27
Miscellaneous	33,948	34,426	1
Total output	523,051	545,619	4
Variable costs			
Feed	260,229	254,140	-2
Vet and medicines	10,865	11,891	9
Other livestock costs	33,014	30,610	-7
Crop costs	11,459	10,303	-10
Total variable costs	315,567	306,945	-3
Farm gross margin	207,484	238,674	15
Fixed costs			
Labour			
- Paid	55,269	57,861	5
- Unpaid	20,394	22,669	11
Machinery			
- Contract	9,986	10,489	5
- Depreciation	21,491	21,146	-2
- Repairs	12,787	13,301	4
- Fuel and oil	13,377	14,061	5
Occupiers repairs	7,753	8,845	14
Rent and rates	24,002	26,417	10
Other farm costs	20,721	21,989	6
Total fixed costs	185,779	196,777	6
Management and investment income	21,705	41,897	93
Less management charges	257	183	-29
Plus farmer and spouse labour	20,394	22,669	11
Net farm income	41,841	64,383	54
Less net interest payments	6925	6,462	-7
Less building depreciation and insurance	10,587	10,331	-2
Less directors remuneration	580	932	61
Plus rental value and imputed rent	14,512	13,986	-4
Plus imputed labour	3,475	4,571	32
Farm business income	41,737	65,216	56

Table 2.2 Specialist Pig Farms 2013/14 – Grouped by MII per Farm

	Top 25%	Middle 50%	Bottom 25%
Number of farms	24	40	11
Output	£	£	£
Pigs	1,361,704	216,057	109,358
Other livestock	8,342	10,405	3,373
Crops	57,039	12,342	5,581
Miscellaneous	82,991	21,476	10,483
Total output	1,510,075	259,979	128,796
Variable costs			
Feed	714,498	110,949	69,293
Vet and medicines	34,923	4,616	2,872
Other livestock costs	79,650	16,830	7,885
Crop costs	21,781	6,469	6,240
Total variable costs	850,851	138,864	86,290
Farm gross margin	659,224	121,116	42,507
Fixed costs			
Labour			
- Paid	158,179	26,436	18,038
- Unpaid	23,456	23,090	20,981
Machinery			
- Contract	31,793	4,193	1,255
- Depreciation	49,971	12,655	8,590
- Repairs	33,981	7,550	3,594
- Fuel and oil	39,727	6,309	3,277
Occupiers repairs	16,555	6,998	4,614
Rent and rates	64,206	16,495	7,470
Other farm costs	43,390	16,146	11,717
Total fixed costs	461,258	119,872	79,536
Management and investment income	197,965	1,244	-37,029
Less management charges	716	2	0
Plus farmer and spouse labour	23,456	23,090	20,981
Net farm income	220,705	24,332	-16,048
Less net interest payments	14,155	4,428	2,633
Less building depreciation and insurance	23,751	6,567	4,096
Less directors remuneration	2,769	306	308
Plus rental value and imputed rent	28,802	10,421	5,886
Plus imputed labour	6,103	2,023	8,223
Farm business income	214,934	25,477	-8,976

Table 2.3 Specialist Pig Farms 2013/14 – Grouped by FBI per Farm

	Top 25%	Middle 50%	Bottom 25%
Number of farms	17	42	16
Output	£	£	£
Pigs	1,176,758	298,466	149,164
Other livestock	8,431	8,849	5,893
Crops	44,823	16,995	9,293
Miscellaneous	74,376	21,745	19,842
Total output	1,304,387	346,054	184,191
Variable costs			
Feed	595,217	161,891	96,870
Vet and medicines	29,001	7,186	4,160
Other livestock costs	69,241	21,456	10,153
Crop costs	16,904	7,456	9,430
Total variable costs	710,362	197,989	120,614
Farm gross margin	594,025	148,065	63,578
Fixed costs			
Labour			
- Paid	144,773	34,658	17,165
- Unpaid	21,338	24,796	19,670
Machinery			
- Contract	28,784	4,846	3,473
- Depreciation	45,569	14,099	10,785
- Repairs	31,359	8,107	5,611
- Fuel and oil	38,334	6,323	5,265
Occupiers repairs	14,771	6,880	6,852
Rent and rates	56,853	16,967	14,874
Other farm costs	34,941	18,103	16,798
Total fixed costs	416,722	134,780	100,493
Management and investment income	177,303	13,285	-36,915
Less management charges	688	21	0
Plus farmer and spouse labour	21,338	24,796	19,670
Net farm income	197,953	38,059	-17,245
Less net interest payments	12,012	4,194	5,469
Less building depreciation and insurance	20,333	7,165	6,660
Less directors remuneration	2,572	425	305
Plus rental value and imputed rent	25,226	10,082	10,571
Plus imputed labour	9,400	2,913	3,063
Farm business income	197,661	39,270	-16,046

Table 2.4 Financial Data for Specialist Pig Farms 2013/14 – Grouped by Type

	Predominantly sows	Predominantly growing/fattening pigs
Number of farms	48	27
Output	£/farm	£/farm
Pigs	892,110	123,278
Other livestock	10,120	6,184
Crops	37,609	8,503
Miscellaneous	45,295	24,963
Total output	985,134	162,927
Variable costs		
Feed	520,477	22,237
Vet and medicines	24,703	736
Other livestock costs	55,603	8,849
Crop costs	15,204	6,036
Total variable costs	615,987	37,858
Farm gross margin	369,148	125,069
Fixed costs		
Labour		
- Paid	88,796	30,926
- Unpaid	24,677	20,921
Machinery		
- Contract	19,240	2,869
- Depreciation	26,724	16,288
- Repairs	19,374	8,014
- Fuel and oil	21,162	7,878
Occupiers repairs	13,509	4,784
Rent and rates	35,913	18,149
Other farm costs	33,944	11,579
Total fixed costs	283,339	121,407
Management and investment income	85,809	3,662
Less management charges	23	322
Plus farmer and spouse labour	24,677	20,921
Net farm income	110,463	24,261
Less net interest payments	9,161	4,112
Less building depreciation and insurance	15,448	5,876
Less directors remuneration	1,673	287
Plus rental value and imputed rent	18,370	10,168
Plus imputed labour	4,867	4,313
Farm business income	107,418	28,469

Table 2.5 Financial Data for Specialist Pig Farms 2013/14 – Grouped by Standard Output per Farm

000 SO	0-200	200-500	500+
Number of farms	15	27	33
Output	£	£	£
Pigs	129,460	201,790	1,635,658
Other livestock	3,166	8,453	16,949
Crops	33	23,098	64,128
Miscellaneous	13,478	28,114	86,372
Total output	146,136	261,454	1,803,107
Variable costs			
Feed	42,169	110,939	909,029
Vet and medicines	1,209	5,498	43,553
Other livestock costs	9,593	14,963	97,904
Crop costs	340	13,656	24,653
Total variable costs	53,311	145,056	1,075,138
Farm gross margin	92,825	116,399	727,969
Fixed costs			
Labour			
- Paid	25,370	22,928	179,399
- Unpaid	20,685	23,873	24,653
Machinery			
- Contract	1,494	3,222	40,218
- Depreciation	11,656	14,438	50,948
- Repairs	5,654	7,186	38,475
- Fuel and oil	5,072	7,329	42,905
Occupiers repairs	1,417	7,191	26,313
Rent and rates	11,565	17,994	69,678
Other farm costs	8,356	18,352	55,024
Total fixed costs	91,269	122,513	527,613
Management and investment income	1,556	-6,114	200,356
Less management charges	399	2	46
Plus farmer and spouse labour	20,685	23,873	24,653
Net farm income	21,842	17,756	224,962
Less net interest payments	2,537	5,498	15,838
Less building depreciation and insurance	2,552	8,961	28,032
Less directors remuneration	0	213	3,958
Plus rental value and imputed rent	4,864	14,406	31,440
Plus imputed labour	2,995	4,798	7,335
Farm business income	24,612	22,289	215,910

Table 2.6 Financial Data for Specialist Pig Farms 2013/14 – Grouped by Performance Ratio

Ratio	High	Medium	Low
Number of farms	33	28	14
Output	£	£	£
Pigs	1,080,761	300,507	58,695
Other livestock	8,420	10,459	5,101
Crops	45,611	15,020	5,383
Miscellaneous	68,864	22,401	11,860
Total output	1,203,655	348,387	81,039
Variable costs			
Feed	548,162	185,065	27,011
Vet and medicines	27,337	7,056	1,197
Other livestock costs	64,649	22,239	4,700
Crop costs	17,222	7,301	6,372
Total variable costs	657,369	221,662	39,280
Farm gross margin	546,286	126,726	41,759
Fixed costs			
Labour			
- Paid	130,847	32,260	10,153
- Unpaid	24,437	21,340	22,242
Machinery			
- Contract	25,576	4,353	1,493
- Depreciation	42,167	13,257	7,933
- Repairs	28,556	7,819	3,465
- Fuel and oil	32,302	5,963	3,880
Occupiers repairs	14,057	9,125	3,276
Rent and rates	52,640	19,070	7,378
Other farm costs	37,785	18,527	9,531
Total fixed costs	388,366	131,713	69,351
Management and investment income	157,920	-4,988	-27,592
Less management charges	548	0	0
Plus farmer and spouse labour	24,437	21,340	22,242
Net farm income	181,808	16,352	-5,351
Less net interest payments	11,226	6,068	2,038
Less building depreciation and insurance	19,899	6,740	4,318
Less directors remuneration	2,110	677	0
Plus rental value and imputed rent	25,319	11,368	5,185
Plus imputed labour	5,438	2,922	5,384
Farm business income	179,331	17,157	-1,137

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 coefficients for each enterprise. Data on the validity of these coefficients 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.

3.1 Classification of farms

Net and gross margins were completed for 69 Specialist Pig farms. This is because of the 75 farms reported in Chapter 2 data for net margins were not available for six farms.

These were classified as follows:

Type	No of farms	Definition
111	4	Breeders selling weaners (rearsers)
112	36	Breeders selling fat pigs (finishers)
113	2	Buying weaners, selling fat pigs
114	24	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.

3.2 Net Margin results

Table 3.1 shows that the full sample of 69 Specialist Pig Farms recorded an average Net Margin of £22,148. This is a substantial increase when compared to the previous year where an average net margin of £3,563 was produced. This increase in margin seen can be attributed mainly to the reduction in variable costs, in particular feed costs. However, this average figure masks a huge variation in performance. Within this figure there are 24 farms (35%) making a negative Net Margin. Even though this is slightly less than the previous year, the figures indicate that many farms are still 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 (on average) a positive Net Margin. Breeding farms selling finished pigs made a profit of £25,125 and the contract rearing only farms and the 'other' farm type showed positive Net Margins of £18,617 and £26,274 respectively.

Table 3.3 presents the costs and margins per £100 output for 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 2013/14 there was a Net Margin of £112 per sow compared to a net margin of £67 in 2012/13. One of the reasons for this increase in profitability per sow is that output was higher at £2,621, compared to £2,102 the previous year. Variable costs per sow were higher at £1,835 compared with £1,526 the previous year and fixed costs were also higher at £566 compared to £448 in 2012/13.

Table 3.1 Specialist Pig Farms – Average Net Margins (£/farm)

	2012/13	2013/14	% Change
Number of farms	63	69	
Output	£ per farm 320,801	£ per farm 336,586	-27
Variable costs			
Feed	173,122	170,735	-35
Vet and medicines	8,284	8,755	-19
Other variable costs	25,508	21,112	-36
Total variable costs	206,914	200,603	-34
Gross Margin	113,887	135,983	-14
Fixed costs			
Paid labour	34,012	34,950	-26
Unpaid labour	3,387	3,615	7
Contract hire	2,913	3,100	-47
Machinery depreciation	10,725	11,112	-33
Machinery repairs	6,510	7,484	-14
Fuel and oil	5,982	6,028	-39
Electricity and heating fuel	4,928	5,107	3
Water	2,049	2,108	-4
Insurance	2,634	2,701	-7
Professional fees	2,448	2,653	-2
General farm costs	2,706	2,699	-11
Occupiers repairs	5,690	5,945	2
Rent and rates	9,694	8,627	-10
Total fixed costs	93,679	96,127	-22
Net farm income	20,208	39,856	13
Less farmer and spouse labour	16,925	17,899	6
Plus managerial input	280	192	-31
Net margin	3,563	22,148	18

Table 3.2 Specialist Pig Farms 2013/14 – Average Net Margins by Farm Type

Farm type	Breeders selling fat pigs	Others	Contract rearing
Number of farms	36	9	24
Average number of sows per farm	224	223	26
	£ per farm	£	£
Output	587,155	420,381	111,118
Variable costs			
Feed	355,550	248,827	0
Vet and medicines	18,486	12,003	1
Other variable costs	37,189	22,640	7,694
Total variable costs	411,227	283,471	7,694
Gross Margin	175,928	136,910	103,424
Fixed costs			
Paid labour	41,007	44,523	27,445
Unpaid labour	5,685	0	2,925
Contract hire	5,125	2,769	1,551
Machinery depreciation	10,165	9,209	12,395
Machinery repairs	9,138	8,169	5,960
Fuel and oil	6,835	3,638	6,027
Electricity and heating fuel	9,954	6,336	852
Water	3,473	1,931	1,052
Insurance	4,485	1,858	1,487
Professional fees	3,860	2,279	1,777
General farm costs	3,952	1,774	1,938
Occupiers repairs	9,829	8,040	2,233
Rent and rates	13,367	9,522	4,549
Total fixed costs	126,875	100,049	70,191
Net farm income	49,052	36,861	33,233
Less farmer and spouse labour	23,928	10,657	14,994
Plus managerial input	1	70	379
Net margin	25,125	26,274	18,617

Table 3.3 Specialist Pig Farms 2013/14 – Average Costs and Margins per £100 Pig Output

Farm type	Breeders selling fat pigs	Others except contract rearing
	£ per £100 output	
Feed	60.5	59.2
Other variable costs	9.5	8.2
Gross margin	30.0	32.6
Labour costs	12.0	13.1
Contract and machinery costs	5.3	5.7
Occupiers repairs	1.7	1.9
Rent and rates	2.3	2.3
Other fixed costs	4.4	3.4
Net margin	4.3	6.3

Table 3.4 Specialist Pig Farms – Average Net Margins per Sow (£/sow)

	2012/13	2013/14
Farm Type	Breeders selling fat pigs	
Number of farms	35	36
Number of sows	367	224
Output	£ per sow 2,103	£ per sow 2,621
Variable costs		
Feed	1,342	1,587
Vet and medicines	50	83
Other variable costs	135	166
Total variable costs	1,527	1,836
Gross Margin	576	785
Fixed costs		
Paid labour	176	183
Unpaid labour	16	25
Contract hire	29	23
Machinery depreciation	59	45
Machinery repairs	31	41
Fuel and oil	37	31
Electricity and heating fuel	19	44
Water	8	16
Insurance	11	20
Professional fees	9	17
General farm costs	11	18
Occupiers repairs	18	44
Rent and rates	23	60
Total fixed costs	449	566
Net farm income	127	219
Less farmer and spouse labour	61	107
Add Management	1	0.0
Net margin	67	112

4 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 2010. 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.

5 Appendix B: Reports in Series

Reports in this series:

Crop Production in England 2013/14

Dairying Farming in England 2013/14

Hill Farming in England 2013/14

Horticulture Production in England 2013/14

Lowland Grazing Livestock Production 2013/14

Organic Farming in England 2013/14

Pig Production in England 2013/14

Poultry Production in England 2013/14

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