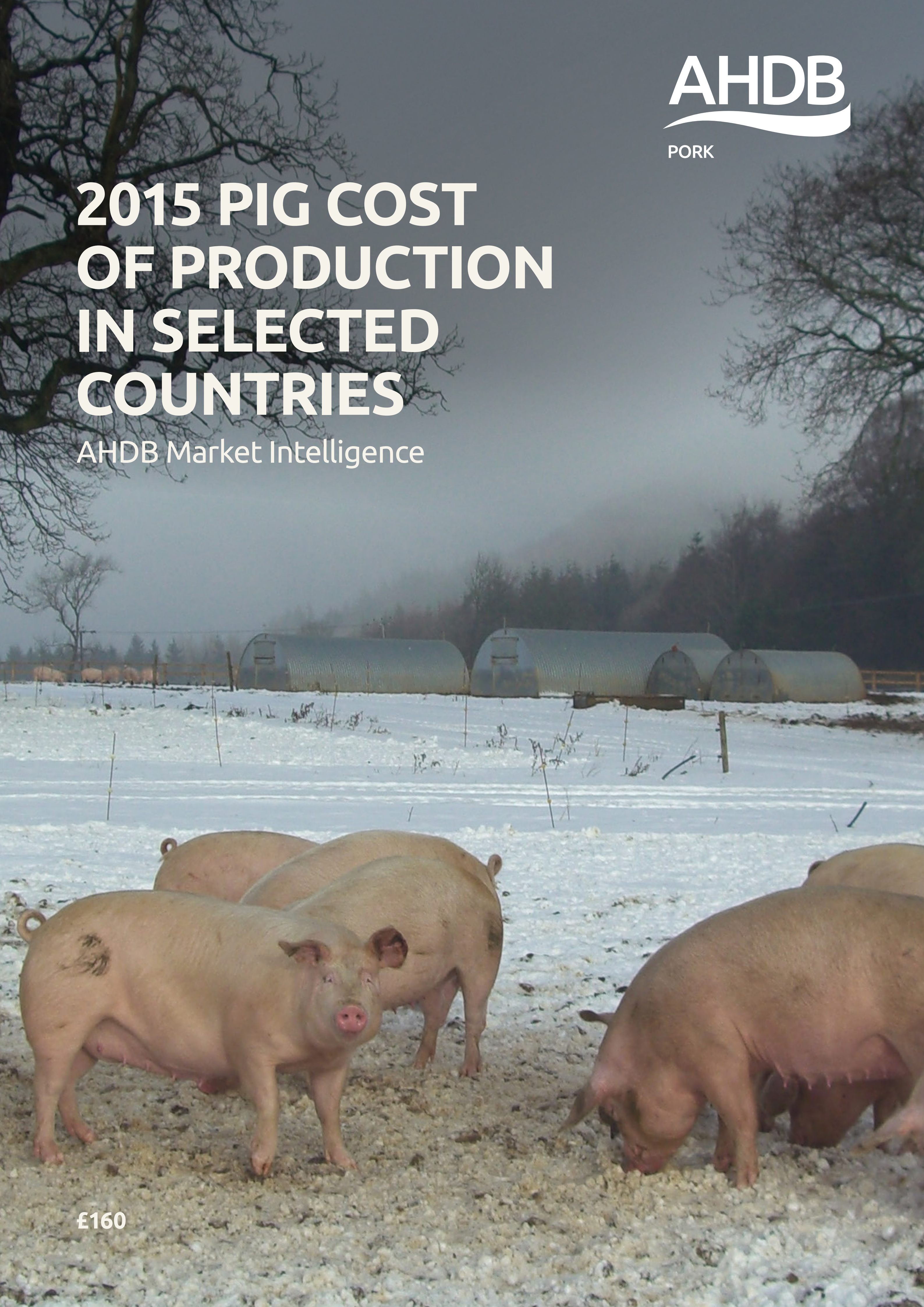
AHDB

PORK

2015 PIG COST OF PRODUCTION IN SELECTED COUNTRIES

AHDB Market Intelligence



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CONTENTS

Welcome to the latest in a series of annual reports examining the relative costs of pig meat production up to farmgate level in selected countries. All these figures relate to 2015.

With pig prices having fallen sharply across the EU in the second half of 2014, there was little optimism among producers about prospects for 2015. This was reinforced by the results of the December 2014 pig census, which showed a further rise in the EU breeding herd, suggesting increased pork production during the year. This pessimism proved to be well founded, with the average pig price during the year at its lowest level since 2007. This was partly due to a 4% rise in the amount of pig meat produced, due to more and heavier pigs.

The EU average pig price started 2015 at around €1.30 per kg and reached a near eight-year low in the early weeks of the year. As well as increased production, the market was subdued due to weak consumer demand for pork on most key EU markets and the ongoing effects of Russia's ban on imports of most pig meat products. Although export sales to many Asian markets were relatively strong, they were insufficient to offset the lower demand from elsewhere. Prices did recover seasonally during February, to reach a little over €1.40 per kg but then remained at around this level for most of the rest of the year. The difficult market situation led to the opening of a Private Storage Aid (PSA) scheme in March but this was not widely used and appeared to have little effect on prices. Over the spring and summer, prices began to rise on a number of occasions, only to fall back again and they never topped €1.50 per kg all year. This was 15% lower than the summer peak in 2014 and even further below the €1.95 of summer 2013. At the end of the year, a further drop in consumer demand led to pig prices falling further, to end the year at little over €1.25 per kg, the lowest level in over a decade.

The negative trends in the EU market were also reflected in Great Britain. Prices started the year at around 145p/kg and fell further at either end of the year, ending up below 130p/kg for the first time since 2008. In between, prices were largely stable, varying by just 3p/kg between late February and the end of September. Similar factors were involved as those in the rest of the EU, with higher production and weak consumer demand. However, despite the challenges faced by GB producers, prices remained significantly higher than those elsewhere in Europe. For the second year running, the UK reference price averaged nearly 30p/kg higher than the EU average, as retail buyers continued to prefer domestic pig meat over imports. The size of the gap was influenced by the strength of the pound during the year, with £1 being worth around €1.40 for most of the year, around 15 cents more than the previous year.

To assist producers in comparing their physical performance with other pig businesses in England, AHDB Pork has a Key Performance Indicators (KPIs) section on its website which is updated quarterly, based on Agrosoft data. The section provides average, top third and top 10 per cent performance for KPIs for indoor and outdoor breeding herds, rearing and finishing herds. For more information, visit **www.pork.ahdb.org.uk** and go to the 'Prices, Facts and Figures' section (Costings and Herd Performance).

METHODOLOGY

This report examines the relative costs of production in selected countries. This is a joint project currently involving the following organisations in 17 countries, which are known collectively as InterPIG.

- Great Britain – Agriculture and Horticulture Development Board (AHDB)
- Austria – VLV Upper Austria
- Belgium – Flemish Government and Boerenbond Belgie
- Brazil – Embrapa Swine and Poultry
- Canada – Canadian Pork Council
- Czech Republic – Institute of Agricultural Economics and Information (UZEI)
- Denmark – SEGES
- Finland – Atria
- France – IFIP
- Germany – Thuenen Institute and Interessengemeinschaft der Schweinehalter (ISN)
- Hungary – AKI Research Institute of Agricultural Economics
- Ireland – Teagasc
- Italy – Research Centre for Animal Production (CRPA)
- Netherlands – Wageningen Economic Research
- Spain – SIP Consultors
- Sweden – Svenska Pig
- USA – Iowa State University

Finland and Hungary have joined the InterPIG group since the last report. Czech Republic and Hungary data is excluded from this report due to data deadlines. We continue to work with other countries and organisations who wish to provide standardised results for international comparison.

The cost and performance data relates to average performance available from the national recording systems operating in the participating countries. Definitions have been standardised across countries. For example, the definition of a sow is from first insemination to slaughter and the results are based on average present sows (average daily number of sows in the year).

There will inevitably still be some national differences in definition but where this has occurred the data has been adjusted in the most appropriate way. The results are believed to provide a clear indication of the relative average costs of production within each country and to provide an accurate comparison. In an attempt to continue to improve the accuracy of the data provided, the glossary of terms and formulae used in calculations is monitored and updated. In some instances, previous years' data may be updated. As a result, there may be some discrepancies between previous publications as definitions and formulae are realigned.

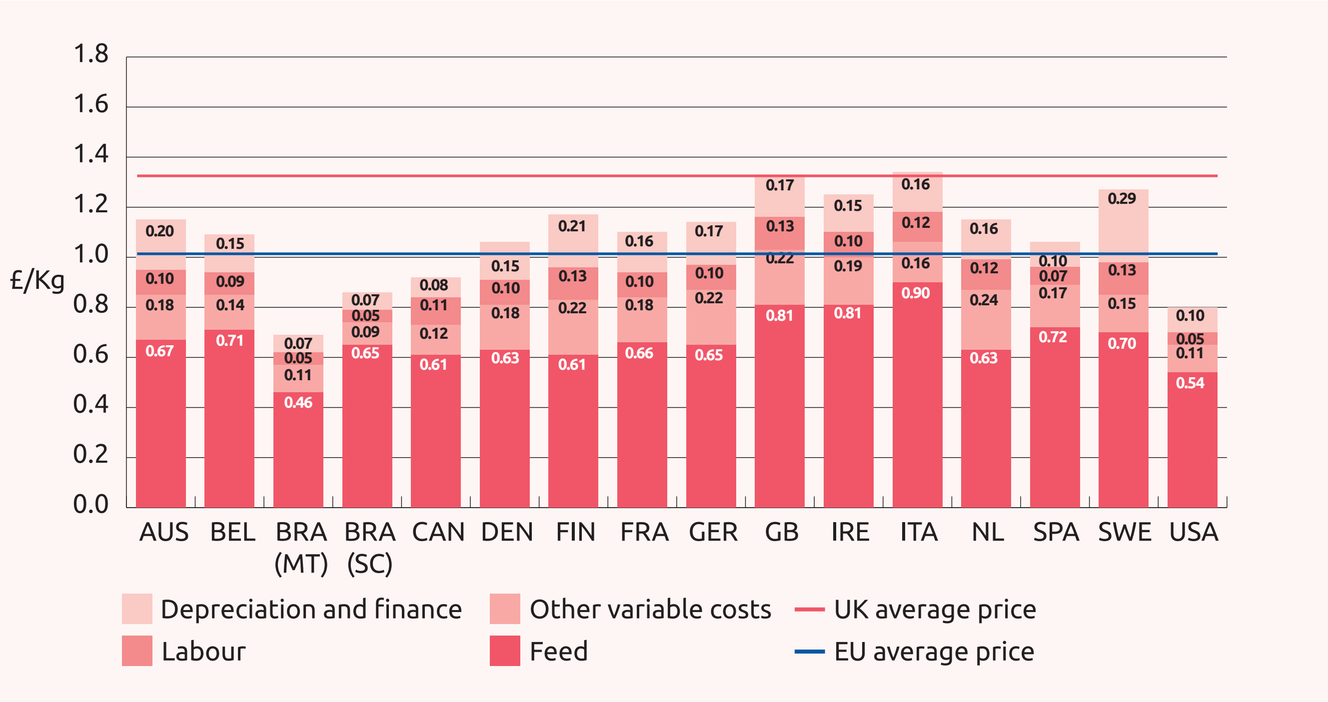
KEY POINTS

- The cost of pig meat production in Great Britain reduced by six per cent in 2015, to £1.33/kg. The average cost of production in the EU was £1.18/kg deadweight, a 13 per cent decrease in sterling terms compared to 2014.
- All EU countries experienced a decrease in the costs of production (in sterling terms) compared to 2014.
- Average producer prices were also lower in 2015 than in 2014, with no EU countries having production costs below the EU average reference price.
- Average feed prices were lower in 2015 than in 2014, falling by 15 per cent, on average, across the EU countries.
- In 2015 as a whole, EU feed costs per kg fell by 14 per cent compared with a year earlier, in sterling terms. The fall in Great Britain was five per cent, one of the lowest falls in the EU. All InterPIG member countries experienced a fall in feed costs compared to 2014.
- The overall average number of pigs weaned per sow per year in the European InterPIG countries showed a one per cent increase in 2015, up from 26.40 in 2014 to 26.81, with Denmark achieving 31. There was a one per cent increase in pigs weaned per sow in Great Britain to 24.38 overall. Indoor sow production achieved 26.0, an increase of one per cent compared to 2014.
- The main reason Great Britain has a below average number of pigs weaned per sow lies in the number of pigs born alive per litter, with Great Britain still performing below the EU average of 13.5. The 2015 Great Britain average at 12.3 (indoor sows 12.8, outdoor sows 11.5) was an increase compared to 12.1 in 2014.
- The average number of pigs finished per sow in Great Britain again increased in 2015. At 23.05 pigs per sow, average performance was 0.39 pigs higher than in 2014 but lower than the EU average of 25.38.
- Great Britain produced 1.87 tonnes of carcase meat per sow in 2015, nearly three per cent higher than in 2014 due to a combination of the increase in the number of pigs finished per sow and an increase in finishing weight.
- An AHDB Pork survey of pig businesses that have achieved the 2TS target identified two common factors affecting high performing success:
    - A weekly analysis and review of herd performance data and discussing with staff actual herd performance relative to targets
    - Engaging staff and delivering a structured approach to staff training and skills development

Aggregate results for 2015

The production costs of pig meat in 2015 for all the countries covered in this report are shown below in Figure 1. This data includes all variable costs (other than transport of pigs to abattoirs) and fixed costs. Fixed costs include depreciation and interest costs for capital items such as buildings and equipment. Costs for regular and casual labour are included but no allowances are made for directors' salaries or partners' drawings.

Figure 1 Cost of production in selected countries, 2015



The average cost of production in the EU in 2015 for the countries above was £1.18/kg deadweight, a 13 per cent decrease on the previous year, mainly due to continued reductions in feed costs. Costs of production in Great Britain were higher than the EU average at £1.33, a six per cent decrease on the previous year. In 2015, Italy continued to have the highest costs at £1.34. The two countries with the lowest production costs in the EU continued to be Spain and Denmark (£1.06).

The average UK reference price was 15 per cent lower during 2015 than in 2014, averaging £1.30/kg, but this was 29 per cent above the EU average of £1.01/kg. Although margins fluctuated throughout 2015, on average, the UK price was below the estimated costs of production for each of the twelve months. Across the EU countries which were sampled, there was a technical loss of 17 pence on every kg of pig meat produced, with no EU country having production costs below the EU average reference price.

Comparisons with previous years (sterling)

Costs of production in 2015, compared with results for the five previous years, are shown in Table 1. The average cost of production in the EU countries was 13 per cent lower than 2014 levels for the same countries and stood at £1.18/kg. All EU countries experienced a decrease in the costs of production.

Table 1 Average costs of production, 2010-2015 (£/kg deadweight)

Year	2010	2011	2012	2013	2014	2015	2015/14 % change
Austria	1.38	1.47	1.46	1.54	1.35	1.16	-14
Belgium	1.27	1.41	1.42	1.48	1.26	1.08	-14
Brazil (MT)	0.88	1.03	0.95	0.96	0.84	0.70	-18
Brazil (SC)	0.95	1.18	1.19	1.13	1.04	0.87	-16
Canada	0.95	1.13	1.18	1.20	0.98	0.92	-6
Denmark	1.22	1.39	1.37	1.44	1.24	1.06	-14
Finland	na	na	na	na	1.35	1.18	-13
France	1.22	1.44	1.39	1.49	1.29	1.10	-15
Germany	1.33	1.55	1.49	1.56	1.33	1.15	-14
Great Britain	1.41	1.51	1.55	1.61	1.41	1.33	-6
Ireland	1.30	1.50	1.47	1.63	1.40	1.25	-11
Italy	1.54	1.70	1.61	1.71	1.58	1.34	-16
Netherlands	1.22	1.40	1.36	1.50	1.32	1.14	-14
Spain	1.22	1.40	1.34	1.39	1.20	1.06	-12
Sweden	1.48	1.71	1.70	1.77	1.47	1.27	-13
USA	0.97	1.01	1.08	1.04	0.83	0.80	-3
EU	**1.33**	**1.50**	**1.47**	**1.55**	**1.35**	**1.18**	**-13**

Comparisons with previous years (euros)

During 2015, the pound continued to strengthen against the euro. Consequently, the decrease in average costs was lower in euro terms, as shown in Table 2, than in sterling terms. Historic exchange rates are given in Appendix 3, Table 9

Table 2 Average costs of production, 2010-2015 (€/kg deadweight)

Year	2010	2011	2012	2013	2014	2015	2015/14 % change
Austria	1.61	1.69	1.79	1.80	1.66	1.58	-5
Belgium	1.48	1.63	1.75	1.74	1.56	1.49	-5
Brazil (MT)	1.02	1.19	1.17	1.13	1.05	0.96	-9
Brazil (SC)	1.11	1.36	1.46	1.33	1.29	1.19	-7
Canada	1.11	1.30	1.46	1.42	1.22	1.27	4
Denmark	1.42	1.60	1.69	1.69	1.53	1.46	-5
Finland	na	na	na	na	1.67	1.60	-4
France	1.42	1.65	1.71	1.75	1.59	1.50	-5
Germany	1.55	1.78	1.84	1.84	1.65	1.58	-4
Great Britain	1.65	1.74	1.91	1.89	1.75	1.83	5
Ireland	1.52	1.73	1.81	1.92	1.74	1.72	-1
Italy	1.79	1.95	1.98	2.02	1.96	1.84	-6
Netherlands	1.42	1.62	1.68	1.77	1.64	1.58	-4
Spain	1.42	1.61	1.65	1.64	1.49	1.46	-2
Sweden	1.72	1.96	2.08	2.07	1.81	1.74	-4
USA	1.13	1.17	1.33	1.22	1.02	1.10	8
EU	**1.55**	**1.72**	**1.81**	**1.83**	**1.67**	**1.61**	**-3**

FINANCIAL PERFORMANCE SUMMARY

Table 3 contains financial performance data for 2015, while Table 4 presents comparisons with 2013 and 2014. Among the EU countries, there was a range of 28p/kg between the highest-cost and the lowest-cost producer, a 10 pence decrease in the range observed in 2014. The recorded differences are due to a combination of physical performance and input costs (eg feed, depreciation).

Table 3 Summary of financial performance, 2015 (£/kg deadweight)

	AUS	BEL	BRA (MT)	BRA (SC)	CAN	DEN	FIN	FRA	GER
Feed	0.67	0.71	0.46	0.65	0.61	0.63	0.61	0.66	0.65
Other variable costs	0.18	0.14	0.11	0.09	0.12	0.18	0.22	0.18	0.22
Total variable costs	0.85	0.85	0.57	0.74	0.73	0.81	0.83	0.84	0.87
Labour	0.10	0.09	0.05	0.05	0.11	0.10	0.13	0.10	0.10
Depreciation and finance	0.20	0.15	0.07	0.07	0.08	0.15	0.21	0.16	0.17
Total fixed costs	0.31	0.23	0.12	0.12	0.19	0.25	0.35	0.26	0.28
Total	**1.16**	**1.08**	**0.70**	**0.87**	**0.92**	**1.06**	**1.18**	**1.10**	**1.15**

	GB	IRE	ITA	NL	SPA	SWE	USA	AVE EU
Feed	0.81	0.81	0.90	0.63	0.72	0.70	0.54	0.71
Other variable costs	0.22	0.19	0.16	0.24	0.17	0.15	0.11	0.19
Total variable costs	1.02	0.99	1.06	0.87	0.89	0.85	0.65	0.89
Labour	0.13	0.10	0.12	0.12	0.07	0.13	0.05	0.11
Depreciation and finance	0.17	0.15	0.16	0.16	0.10	0.29	0.10	0.17
Total fixed costs	0.30	0.26	0.28	0.27	0.17	0.42	0.15	0.28
Total	**1.33**	**1.25**	**1.34**	**1.14**	**1.06**	**1.27**	**0.80**	**1.18**

*totals may not add up due to rounding

Feed costs

Market developments in 2015
After two years of good global grain harvests, cereals prices started 2015 at lower levels than in recent years. Nearby UK feed wheat futures prices started the year at around £130 per tonne, around £30 lower than a year before and more than £70 down on the start of 2013. They then generally followed a downward trend during the spring, aided by the strengthening pound, coupled with favourable weather conditions in the major producing regions, to reach a little over £110 per tonne pre-harvest. With a third consecutive strong global harvest realised, prices then remained at around this level for most of the rest of the year. The last time prices were consistently at such a low level was in the first half of 2010.

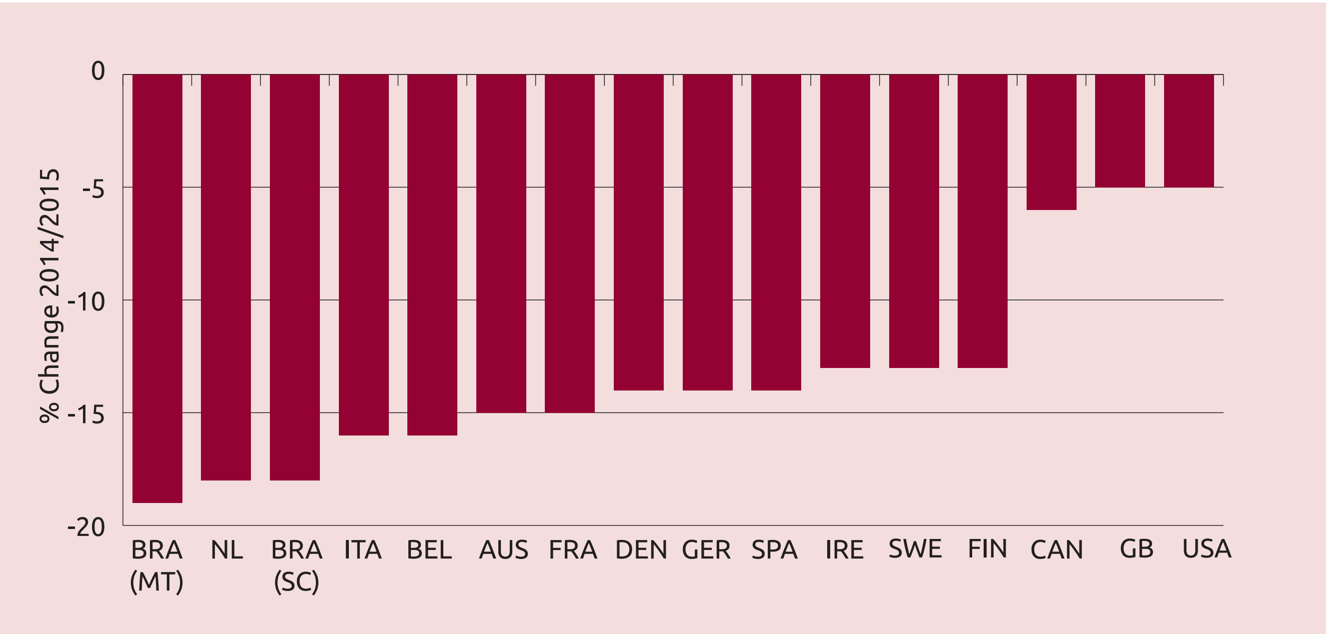
The downward trend was also apparent for oilseed and meal prices during the year, as the favourable weather conditions also ensured strong production in both North and South America. The price of imported Brazilian soyameal in the UK started the year at around £350 per tonne. From here, a combination of falling global markets and the strengthening pound meant that prices fell steadily. By the end of the year, the equivalent price was nearly £100 lower at around £260 per tonne, the lowest quote in around five years.

FINANCIAL PERFORMANCE SUMMARY

With both the main components of animal feed reducing in price, it was inevitable that compound pig feed would also be cheaper. However, in the UK, the fall was smaller than the decline in commodity markets might have suggested, partly because prices for some other minor ingredients were higher. The average price for compound pig feed in the final quarter of 2014 was £234 per tonne, while a year later it had fallen to £218 per tonne, a drop of 7%.

The impact on pig producers' feed costs in 2015
With lower prices for raw materials, on average, pig feed prices were lower in 2015 than in 2014. Across the EU members of InterPIG, prices fell (in sterling terms) by an average of 15 per cent compared to the previous year. There was a range of feed prices across the EU countries, with a difference of nearly £57 per tonne between the highest and lowest average feed price in 2015.

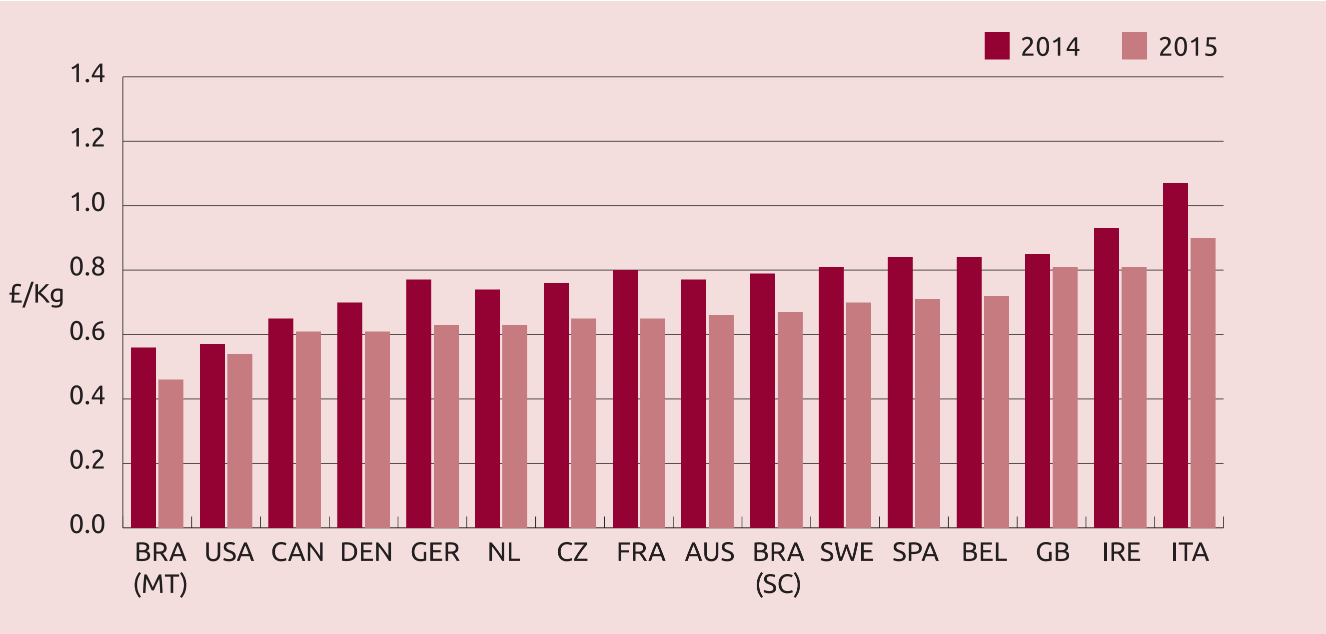
Figure 2 Changes in feed costs, 2015



The impact of feed prices on the feed cost per kg is also affected by physical performance. All countries experienced a fall in feed costs, the lowest fall of five per cent in the USA and the highest fall of 19 per cent in Brazil. Within the EU countries 2015 feed costs fell, on average, by 14 per cent compared to 2014, GB had the lowest fall at five per cent compared to the 18 per cent fall in the Netherlands.

FINANCIAL PERFORMANCE SUMMARY

Figure 3 Feed costs, 2015



Feed costs averaged 81p/kg in Great Britain, compared with the 85p recorded in 2014, a decrease of nearly five per cent. The decrease in feed costs in Great Britain during 2015 was among the lowest in the InterPIG group, compared to the average EU decrease of nearly 14 per cent. Feed costs in Great Britain were 14 per cent above the EU average of 71p/kg, higher than the two per cent difference in 2014.

FINANCIAL PERFORMANCE SUMMARY

Table 4 Summary of financial performance, 2013-2015 (£/kg deadweight)

	AUS			BEL			BRA (SC)		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Feed	0.93	0.79	0.67	1.01	0.84	0.71	0.87	0.80	0.65
Other variable costs	0.24	0.22	0.18	0.19	0.16	0.14	0.11	0.10	0.09
Total variable costs	1.17	1.01	0.85	1.20	1.00	0.85	0.98	0.90	0.74
Labour	0.12	0.11	0.10	0.11	0.10	0.09	0.07	0.06	0.05
Depreciation and finance	0.25	0.23	0.20	0.17	0.16	0.15	0.08	0.07	0.07
Total fixed costs	0.37	0.34	0.31	0.28	0.26	0.23	0.15	0.14	0.12
Total	**1.54**	**1.35**	**1.16**	**1.48**	**1.26**	**1.08**	**1.13**	**1.04**	**0.87**

	CAN			DEN			FIN		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Feed	0.85	0.65	0.61	0.91	0.74	0.63	na	0.70	0.61
Other variable costs	0.14	0.13	0.12	0.23	0.21	0.18	na	0.25	0.22
Total variable costs	0.99	0.78	0.73	1.13	0.95	0.81	na	0.95	0.83
Labour	0.11	0.12	0.11	0.12	0.11	0.10	na	0.16	0.13
Depreciation and finance	0.10	0.09	0.08	0.19	0.18	0.15	na	0.24	0.21
Total fixed costs	0.21	0.21	0.19	0.31	0.29	0.25	na	0.40	0.35
Total	**1.20**	**0.98**	**0.92**	**1.44**	**1.24**	**1.06**	**na**	**1.35**	**1.18**

	FRA			GER			GB		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Feed	0.93	0.77	0.66	0.97	0.76	0.65	1.06	0.85	0.81
Other variable costs	0.21	0.20	0.18	0.25	0.25	0.22	0.21	0.22	0.22
Total variable costs	1.14	0.97	0.84	1.22	1.02	0.87	1.27	1.07	1.02
Labour	0.13	0.12	0.10	0.12	0.12	0.10	0.13	0.14	0.13
Depreciation and finance	0.22	0.20	0.16	0.22	0.20	0.17	0.20	0.20	0.17
Total fixed costs	0.35	0.31	0.26	0.34	0.32	0.28	0.33	0.34	0.30
Total	**1.49**	**1.29**	**1.10**	**1.56**	**1.33**	**1.15**	**1.61**	**1.41**	**1.33**

	IRE			ITA			NL		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Feed	1.13	0.93	0.81	1.17	1.07	0.90	0.93	0.77	0.63
Other variable costs	0.20	0.20	0.19	0.19	0.20	0.16	0.27	0.26	0.24
Total variable costs	1.32	1.13	0.99	1.36	1.27	1.06	1.20	1.03	0.87
Labour	0.11	0.10	0.10	0.13	0.14	0.12	0.13	0.13	0.12
Depreciation and finance	0.20	0.17	0.15	0.22	0.17	0.16	0.17	0.17	0.16
Total fixed costs	0.31	0.27	0.26	0.36	0.32	0.28	0.30	0.30	0.27
Total	**1.63**	**1.40**	**1.25**	**1.71**	**1.58**	**1.34**	**1.50**	**1.32**	**1.14**

	SPA			SWE			USA			EU AVE		
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Feed	1.00	0.84	0.72	1.03	0.81	0.70	0.79	0.57	0.54	1.01	0.82	0.71
Other variable costs	0.17	0.16	0.17	0.19	0.17	0.15	0.10	0.11	0.11	0.21	0.21	0.19
Total variable costs	1.17	1.00	0.89	1.23	0.98	0.85	0.89	0.68	0.65	1.22	1.03	0.89
Labour	0.08	0.07	0.07	0.17	0.15	0.13	0.05	0.05	0.05	0.12	0.12	0.11
Depreciation and finance	0.14	0.13	0.10	0.38	0.34	0.29	0.10	0.05	0.10	0.21	0.20	0.17
Total fixed costs	0.22	0.20	0.17	0.54	0.49	0.42	0.15	0.10	0.15	0.34	0.32	0.28
Total	**1.39**	**1.20**	**1.06**	**1.77**	**1.47**	**1.27**	**1.04**	**0.78**	**0.80**	**1.56**	**1.35**	**1.18**

*totals may not add up due to rounding

PHYSICAL PERFORMANCE

Table 5 Summary of physical performance, 2013-2015 (Part 1)

	AUS			BEL			BRA (MT)		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Pigs weaned/sow/year	23.84	24.36	24.40	27.44	27.81	28.40	25.33	26.09	25.36
Pigs reared/sow/year	23.27	23.67	23.71	26.62	26.82	27.43	24.82	25.57	24.85
Pigs sold/sow/year	22.88	23.27	23.31	25.74	25.99	26.61	24.28	25.01	24.31
Litters/sow/year	2.29	2.30	2.30	2.33	2.32	2.33	2.41	2.41	2.41
Rearing mortality (%)	2.40%	2.80%	2.80%	2.97%	3.58%	3.40%	2.00%	2.00%	2.00%
Finishing mortality (%)	1.65%	1.73%	1.70%	3.32%	3.08%	3.00%	2.20%	2.20%	2.20%
Finishing Daily Liveweight Gain (g/day)	792	796	778	656	676	678	831	831	831
Finishing Feed Conversion Ratio	2.85	2.89	2.95	2.89	2.86	2.86	2.60	2.60	2.60
Average liveweight at slaughter (kg)	120	120	120	113	113	113	119	122	122
Average carcase weight - Cold (kg)	93.7	93.9	93.8	90.2	90.1	91.2	88.9	91.1	91.1
Carcase meat production/sow/year (kg)	2143	2185	2187	2323	2342	2428	2159	2279	2215

	BRA (SC)			CAN			DEN		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Pigs weaned/sow/year	25.51	25.73	26.66	22.95	22.73	23.97	30.00	30.46	31.26
Pigs reared/sow/year	25.00	25.22	26.13	22.49	22.28	23.49	29.13	29.58	30.29
Pigs sold/sow/year	24.45	24.66	25.55	21.70	21.50	22.66	28.11	28.48	29.17
Litters/sow/year	2.31	2.30	2.30	2.27	2.27	2.30	2.25	2.26	2.27
Rearing mortality (%)	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.90%	2.90%	3.10%
Finishing mortality (%)	2.20%	2.20%	2.20%	3.50%	3.50%	3.50%	3.50%	3.70%	3.70%
Finishing Daily Liveweight Gain (g/day)	820	820	820	878	870	876	916	931	947
Finishing Feed Conversion Ratio	2.60	2.60	2.60	3.02	3.00	3.00	2.68	2.70	2.67
Average liveweight at slaughter (kg)	119	120	120	123	124	126	108	111	110
Average carcase weight - Cold (kg)	88.8	89.6	89.6	96.8	97.9	98.9	81.8	83.5	83.3
Carcase meat production/sow/year (kg)	2170	2210	2289	2101	2105	2241	2299	2378	2429

	FIN			FRA			GER		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Pigs weaned/sow/year	na	24.68	25.82	27.19	27.69	27.86	27.07	27.36	28.64
Pigs reared/sow/year	na	24.20	25.28	26.56	27.03	27.17	26.37	26.76	27.90
Pigs sold/sow/year	na	23.62	24.62	25.64	26.06	26.19	25.68	26.09	27.17
Litters/sow/year	na	2.24	2.22	2.36	2.38	2.38	2.33	2.32	2.34
Rearing mortality (%)	na	1.92%	2.08%	2.32%	2.38%	2.48%	2.60%	2.20%	2.60%
Finishing mortality (%)	na	2.40%	2.60%	3.46%	3.59%	3.59%	2.60%	2.50%	2.60%
Finishing Daily Liveweight Gain (g/day)	na	914	956	797	803	810	794	805	817
Finishing Feed Conversion Ratio	na	2.79	2.70	2.78	2.75	2.73	2.84	2.83	2.82
Average liveweight at slaughter (kg)	na	119	122	117	118	120	121	121	122
Average carcase weight - Cold (kg)	na	89.0	90.6	89.5	90.4	91.6	93.7	93.7	94.1
Carcase meat production/sow/year (kg)	na	2101	2230	2296	2357	2398	2406	2444	2556

PHYSICAL PERFORMANCE

Table 5 Summary of physical performance, 2013-2015 (Part 2)

	GB			IRE			ITA		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Pigs weaned/sow/year	23.63	24.09	24.38	26.49	26.73	26.10	23.60	24.41	23.99
Pigs reared/sow/year	22.86	23.40	23.70	25.82	26.03	25.40	23.10	23.68	23.27
Pigs sold/sow/year	22.23	22.66	23.05	25.19	25.40	24.79	22.99	23.32	22.92
Litters/sow/year	2.29	2.27	2.27	2.36	2.37	2.27	2.25	2.25	2.22
Rearing mortality (%)	3.27%	2.84%	2.79%	2.54%	2.61%	2.68%	2.10%	3.00%	3.00%
Finishing mortality (%)	2.75%	3.17%	2.74%	2.44%	2.43%	2.38%	0.50%	1.50%	1.50%
Finishing Daily Liveweight Gain (g/day)	816	801	817	817	824	864	650	650	682
Finishing Feed Conversion Ratio	2.78	2.67	2.69	2.78	2.81	2.71	3.68	3.68	3.85
Average liveweight at slaughter (kg)	104	105	106	106	106	109	166	166	170
Average carcase weight - Cold (kg)	79.6	80.4	81.0	80.6	82.8	83.0	126.2	126.2	136.5
Carcase meat production/sow/year (kg)	1769	1823	1868	2030	2103	2058	2900	2942	3128

	NL			SPA			SWE		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
Pigs weaned/sow/year	28.97	29.18	29.52	25.29	25.84	26.29	24.02	24.16	25.03
Pigs reared/sow/year	28.31	28.45	28.76	24.50	25.04	25.40	23.54	23.68	24.53
Pigs sold/sow/year	27.68	27.79	28.09	23.63	24.17	24.42	23.17	23.30	24.16
Litters/sow/year	2.37	2.37	2.36	2.33	2.34	2.34	2.21	2.21	2.22
Rearing mortality (%)	2.30%	2.50%	2.60%	3.12%	3.10%	3.38%	2.00%	2.00%	2.00%
Finishing mortality (%)	2.20%	2.30%	2.30%	3.55%	3.45%	3.85%	1.60%	1.60%	1.50%
Finishing Daily Liveweight Gain (g/day)	795	800	804	676	681	695	912	905	923
Finishing Feed Conversion Ratio	2.60	2.59	2.60	2.60	2.57	2.52	2.81	2.88	2.84
Average liveweight at slaughter (kg)	118	119	119	108	108	108	121	121	120
Average carcase weight - Cold (kg)	91.7	92.3	92.6	80.9	81.4	81.2	90.4	90.1	89.8
Carcase meat production/sow/year (kg)	2539	2565	2601	1912	1969	1984	2094	2099	2170

	USA			EU AVE		
	2013	2014	2015	2013	2014	2015
Pigs weaned/sow/year	25.50	24.82	25.26	26.14	26.40	26.81
Pigs reared/sow/year	24.59	23.67	24.15	25.46	25.69	26.07
Pigs sold/sow/year	23.47	22.36	22.95	24.81	25.01	25.38
Litters/sow/year	2.40	2.41	2.41	2.31	2.30	2.29
Rearing mortality (%)	3.57%	4.65%	4.38%	2.59%	2.65%	2.74%
Finishing mortality (%)	4.58%	5.51%	5.01%	2.51%	2.62%	2.62%
Finishing Daily Liveweight Gain (g/day)	795	812	821	784	799	814
Finishing Feed Conversion Ratio	2.76	2.74	2.76	2.84	2.84	2.83
Average liveweight at slaughter (kg)	124	129	128	118	119	120
Average carcase weight - Cold (kg)	92.0	96.6	94.6	90.8	91.2	92.4
Carcase meat production/sow/year (kg)	2160	2160	2172	2247	2276	2336

Pigs weaned per sow per year

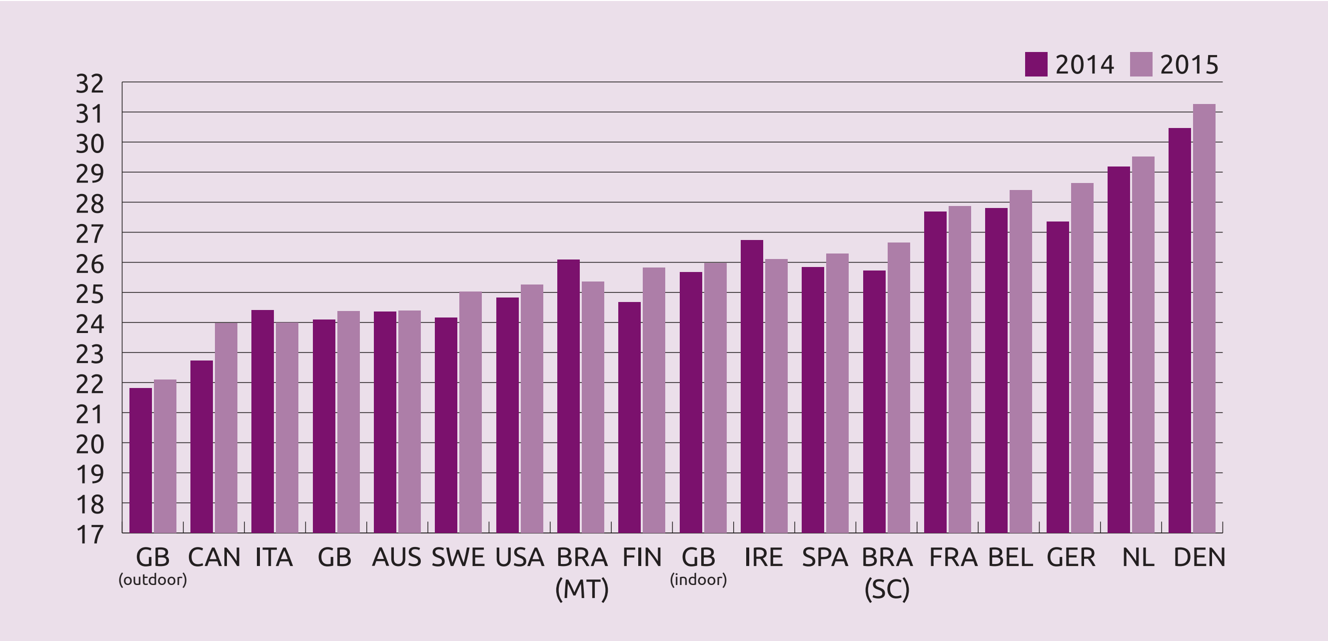
The overall average number of pigs weaned per sow per year in the European InterPIG countries showed over one per cent increase in 2015, up from 26.40 in 2014 to 26.81 in 2015. Performance improved in most EU countries, with Germany and Finland showing the greatest increase, up five per cent compared with 2014. Denmark and the Netherlands again had the best results for pigs weaned, with Denmark achieving an average of over 31 pigs weaned per sow per year. The non-EU countries all continued to perform below the EU average, with Canada increasing but still the lowest at 23.97.

The number of pigs weaned per sow per year in Great Britain increased by one per cent to 24.38 (indoor sows 26.0, outdoor sows 22.1). While Great Britain has a significant proportion of sows kept outdoors, the low number of pigs weaned per sow per year in all systems is still a major cause of the relatively high cost of production and needs to be addressed if costs are to be competitive with the rest of Europe.

Pigs weaned per sow per year is a result of three different elements: pigs born alive per litter, litters per sow per year and pre-weaning mortality.

- The Great Britain result for litters per sow per year was 2.27 (indoor sows 2.29, outdoor sows 2.22), a small decline compared to 2014. Indoor sow performance was equal to the EU average of 2.29
- Pre-weaning mortality, at 12.2 per cent (indoor sows 11.5, outdoor sows 13.4), was lower than 2014. Indoor sows were lower than the EU average of 13.3 per cent
- As in previous years, the main reason that Great Britain has a below average number of pigs weaned per sow per year lies in the number of pigs born alive per litter. The 2015 average at 12.3 (indoor sows 12.8, outdoor sows 11.5) was an increase compared to 12.1 in 2014 but lower than the EU average of 13.5.

Figure 4 Pigs weaned per sow per year, 2014-2015



PHYSICAL PERFORMANCE

Through its 'Breed +3' initiative to help pig producers wean more pigs, AHDB Pork continues to aim for the Two-Tonne Sow (2TS) target. To achieve these targets requires businesses to adopt the two most common factors affecting high performing success:

- A weekly analysis and review of herd performance data and discussing with staff actual herd performance relative to targets

- Engaging staff and delivering a structured approach to staff training and skills development.

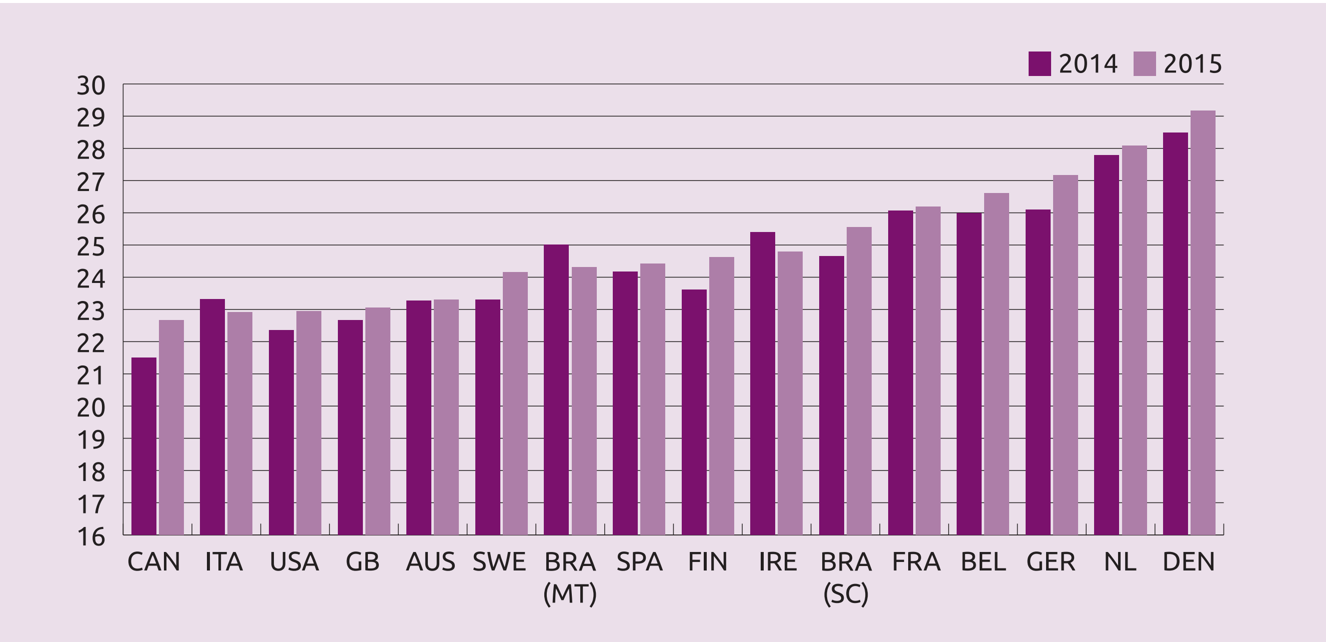
An AHDB Pork survey also examined other factors such as production systems, building design and age, herd health status, nutrition and genetics but there were no other factors common to the cohort of high-performing businesses

Pigs finished per sow per year

The average number of pigs finished per sow in Great Britain again increased in 2015. At 23.05, performance was 0.39 pigs (2%) higher than in 2014.

In 2015, there was an average 25.38 pigs finished per sow in the EU, one per cent higher than in 2014. Denmark has the highest numbers, finishing over 29 pigs per sow per year. Within the EU, Italy has the lowest number of pigs finished per sow per year in 2015, with Canada achieving a lower performance in the InterPIG group.

Figure 5 Pigs finished per sow per year, 2014-2015



MONITORING CHANGES IN COSTS OF PRODUCTION

The relative costs analysed in this report relate to the 2015 calendar year. The annual average cost of feed decreased between 2014 and 2015. With the favourable 2015 harvest, grain prices fell further resulting in lower compound feed prices.

This chapter examines how the changes in monthly average feed prices have affected relative costs of production in 2016. In these calculations, feed prices are the only factors that have been changed; all other variables have been left unchanged. For this reason and also because the current feed costs will not have applied throughout 2016, these figures should not be considered as provisional 2016 results.

Feed price movements

Table 6 Changes in feed prices, 2013-2016

	2013	2014	2015	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Jul-16 compared with 2015
Weighted average feed prices (€/tonne)											
Austria	293.2	266.8	254.4	na	na	na	na	na	na	na	na
Belgium	315.9	278.6	263.1	233.5	227.2	na	na	na	na	na	na
Brazil (SC)	280.1	270.8	248.7	na	na	na	na	na	na	na	na
Canada	255.1	207.1	217.5	na	na	na	na	na	na	na	na
Denmark	292.5	250.6	242.8	na	na	na	na	na	na	na	na
Finland	na	na	224.4	na	na	na	na	na	na	na	
France	298.6	268.0	252.1	249.8	246.8	243.8	240.7	na	na	na	na
Germany	304.5	253.2	242.9	na	na	na	na	na	na	na	na
GB	316.7	282.9	289.3	254.7	247.5	242.1	241.3	255.6	256.3	251.0	-13
Ireland	358.3	315.2	303.0	299.0	298.3	298.3	298.9	289.8	na	na	na
Italy	290.9	279.4	263.7	na	na	na	na	na	na	na	na
Netherlands	317.4	276.0	250.7	258.8	255.8	251.4	246.5	245.6	247.7	250.0	-0
Spain	314.0	280.9	272.6	265.6	262.6	261.2	na	na	na	na	na
Sweden	319.7	261.5	256.2	250.2	242.8	242.6	na	na	na	na	na
USA	253.6	194.3	185.7	na	na	na	na	na	na	na	
EU Average	**311.1**	**273.9**	**259.6**	**258.8**	**254.4**	**256.6**	**256.9**	**263.7**	**252.0**	**250.5**	**-4**
Weighted average feed prices (£/tonne)											
Austria	249.0	215.2	184.7	na	na	na	na	na	na	na	na
Belgium	268.3	224.7	191.1	176.2	176.3	na	na	na	na	na	na
Brazil (SC)	237.9	218.4	180.6	na	na	na	na	na	na	na	na
Canada	216.6	167.0	157.9	na	na	na	na	na	na	na	na
Denmark	248.4	202.1	176.3	na	na	na	na	na	na	na	na
Finland	na	na	163.0	na	na	na	na	na	na	na	na
France	253.6	216.2	183.1	188.5	191.6	190.4	190.8	na	na	na	na
Germany	258.6	204.2	176.4	na	na	na	na	na	na	na	na
GB	269.0	228.2	210.1	192.2	192.2	189.1	191.2	198.9	202.8	211.2	+1
Ireland	304.3	254.2	220.1	225.6	231.6	232.9	236.8	225.5	na	na	na
Italy	247.0	225.3	191.5	na	na	na	na	na	na	na	na
Netherlands	269.5	222.6	182.1	195.3	198.6	196.4	195.3	191.1	196.0	210.4	+16
Spain	266.6	226.6	198.0	200.5	203.9	203.9	na	na	na	na	na
Sweden	271.5	210.9	186.0	188.8	188.5	189.5	na	na	na	na	na
USA	215.4	156.7	134.9	na	na	na	na	na	na	na	na
EU Average	**264.2**	**220.9**	**188.5**	**195.3**	**197.5**	**200.4**	**203.5**	**205.1**	**199.4**	**210.8**	**+12**

The ability for producers to control their costs, such as feed, is paramount in obtaining a positive margin.

Total production costs

The estimates of total production costs in Table 7 are based on the changes in feed costs only, with all other factors being held constant. In reality, of course, there will be other changes affecting production costs. However, the dominance of feed in the cost of producing pig meat means that these other factors are likely to be dwarfed by the effects of feed price changes.

Table 7 Changes in total production costs, 2013-2016

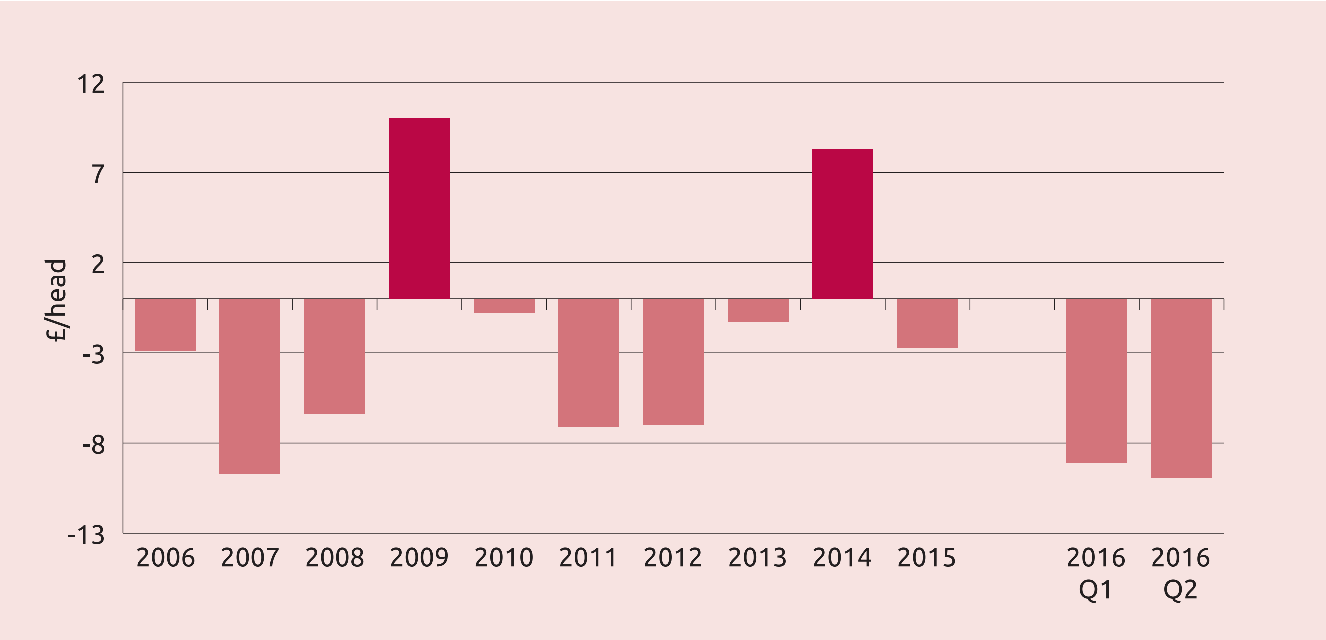
	2013	2014	2015	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Jul-16 compared with 2015
Pig meat production costs (€/kg)											
Austria	1.79	1.65	1.58	na	na	na	na	na	na	na	na
Belgium	1.74	1.56	1.49	1.38	1.35	na	na	na	na	na	na
Brazil (SC)	1.33	1.28	1.19	na	na	na	na	na	na	na	na
Canada	1.41	1.21	1.27	na	na	na	na	na	na	na	na
Denmark	1.68	1.53	1.46	na	na	na	na	na	na	na	na
Finland	na	na	1.60	na	na	na	na	na	na	na	na
France	1.71	1.56	1.50	1.49	1.48	1.47	1.46	na	na	na	na
Germany	1.82	1.63	1.58	na	na	na	na	na	na	na	na
GB	1.89	1.74	1.83	1.67	1.62	1.60	1.58	1.65	1.64	1.58	-13
Ireland	1.93	1.77	1.72	1.71	1.70	1.70	1.71	1.67	na	na	na
Italy	2.01	1.96	1.84	na	na	na	na	na	na	na	na
Netherlands	1.77	1.64	1.58	1.60	1.59	1.58	1.56	1.56	1.56	1.57	-0
Spain	1.64	1.49	1.46	1.44	1.43	1.42	na	na	na	na	na
Sweden	2.08	1.86	1.74	1.71	1.69	1.69	na	na	na	na	na
USA	1.49	1.21	1.10	na	na	na	na	na	na	na	na
EU Average	**1.75**	**1.61**	**1.56**	**1.57**	**1.55**	**1.58**	**1.58**	**1.63**	**1.60**	**1.58**	**+1**
Pig meat production costs (£/kg)											
Austria	1.52	1.33	1.15	na	na	na	na	na	na	na	na
Belgium	1.47	1.26	1.08	1.04	1.05	na	na	na	na	na	na
Brazil (SC)	1.13	1.03	0.87	na	na	na	na	na	na	na	na
Canada	1.20	0.98	0.92	na	na	na	na	na	na	na	na
Denmark	1.42	1.23	1.06	na	na	na	na	na	na	na	na
Finland	na	na	1.16	na	na	na	na	na	na	na	na
France	1.45	1.26	1.09	1.13	1.15	1.15	1.16	na	na	na	na
Germany	1.55	1.32	1.15	na	na	na	na	na	na	na	na
GB	1.60	1.41	1.33	1.26	1.26	1.25	1.25	1.28	1.30	1.33	+0
Ireland	1.64	1.43	1.25	1.29	1.32	1.33	1.35	1.30	na	na	na
Italy	1.71	1.58	1.34	na	na	na	na	na	na	na	na
Netherlands	1.50	1.32	1.14	1.21	1.24	1.23	1.24	1.21	1.24	1.32	+16
Spain	1.39	1.20	1.06	1.08	1.11	1.11	na	na	na	na	na
Sweden	1.76	1.50	1.26	1.29	1.31	1.32	na	na	na	na	na
USA	1.26	0.98	0.80	na	na	na	na	na	na	na	na
EU Average	**1.55**	**1.35**	**1.17**	**1.19**	**1.20**	**1.23**	**1.25**	**1.27**	**1.27**	**1.33**	**+13**

Net margins in Great Britain

The net margins shown in Figure 6 are based on the difference between the monthly Average Pig Price (APP) and the total cost of producing pig meat (including depreciation costs) for an average producer. The results shown in the chart should, however, only be considered as indicative of general trends because:

- Physical and financial performance levels can vary greatly between producers
- The assumptions used for feed costs using spot compound prices will not apply to all producers, due to the range of feed procurement strategies in the industry.

Figure 6 Estimated net margins in Great Britain, 2006-2016



During 2009, producers in Great Britain obtained a good positive margin per pig produced. This was following several years of negative returns and considerable losses in the industry. Higher costs in 2010, 2011 and 2012 also resulted in negative margins for each of these years. During prolonged periods of negative margins, specialist pig producers are particularly vulnerable and may leave the industry. Many other producers make little or no investment during these periods and some depopulate for a period of time. Many only survive due to income from other enterprises such as cash crops.

In 2013, rising pig prices, improved productivity and reducing feed prices returned negative margins in the first part of the year and positive margins in the second half of the year resulting in a slightly negative margin overall. In 2014, early higher pig prices were followed by declining pig prices resulting in a breakeven point at the end of 2014 and a positive average margin for 2014 overall. With lower feed costs but continued declining prices, 2015 resulted in an average negative margin, decreasing further into 2016.

APPENDIX 1

Pig industry trends, 2015

	AUS	BEL	BRA	CAN	CZE	DEN	FIN	FRA	GER
Breeding Sow numbers (000 head)	240	437	2,940	1,212	138	1,248	116	1,060	2024
Annual pig slaughterings (000 head)	5,414	11,887	37,928	21,350	2,508	18,717	2,080	23,680	59,292
Pig meat production (000 tonnes)	528	1,124	3,519	1,890	228	1,599	192	1,968	5,562
Pig meat imports (000 tonnes cwe)*	200	153	2	234	322	136	40	546	1,102
Pig meat exports (000 tonnes cwe)*	243	837	690	1,163	76	1,402	37	527	2,361
Pig meat consumption (000 tonnes cwe)*	485	440	2,830	961	474	333	195	1,987	4,303
Pig meat consumption (kg/head)*	56.4	39.0	13.6	26.9	46.0	59.0	35.6	30.0	53.1

	HUN	IRE	ITA	NL	POL	SP	SWE	UK	USA
Breeding Sow numbers (000 head)	292	148	584	1,103	947	2,408	146	492	5,926
Annual pig slaughterings (000 head)	4,459	3,226	11,304	15,485	21,243	46,380	2,560	10,848	115,414
Pig meat production (000 tonnes)	409	276	1,486	1,456	1,906	3,896	234	898	11,121
Pig meat imports (000 tonnes cwe)*	174	109	1,138	262	735	178	134	968	604
Pig meat exports (000 tonnes cwe)*	184	235	253	1,127	618	1,539	27	237	2,160
Pig meat consumption (000 tonnes cwe)*	399	150	2,371	591	2,023	2,535	341	1,629	9,565
Pig meat consumption (kg/head)*	45.7	32.0	39.1	36.8	55.0	54.3	35.0	24.4	29.7

*Estimated figures
Breeding sow numbers are for mid-2015 except for Brazil, Czech Republic (Dec 15)
Source: AHDB, Eurostat, USDA, Statistics Canada, GTIS

APPENDIX II

Additional tables and figures

Labels on bar charts are rounded and may indicate the same results when the bars do not appear equal

Table 8 Ranking of EU production costs, 2010-2015

Year	2010	2011	2012	2013	2014	2015	% of EU ave
Denmark	4	1	3	2	2	1	90.4
Spain	2	2	1	1	1	2	90.5
Belgium	5	4	5	3	3	3	92.0
France	1	5	4	4	4	4	92.9
Netherlands	3	3	2	5	5	5	97.5
Austria	8	6	6	6	7	6	98.1
Germany	7	9	8	7	6	7	98.1
Finland	na	na	na	na	8	8	99.3
Ireland	6	7	7	9	9	9	106.6
Sweden	10	11	11	11	11	10	107.5
Great Britain	9	8	9	8	10	11	113.2
Italy	11	10	10	10	12	12	113.9

Notes: Rankings – 1 = lowest cost, 12 = highest cost

Figure 7 Exchange rate movements, 2010-2016

APPENDIX II

Table 9 Annual exchange rates

Year	1€ =	€:£	$US:£	$C:£	Real:£
2010	85.8p	1.166	1.55	1.59	2.72
2011	86.7p	1.153	1.60	1.59	2.68
2012	81.1p	1.233	1.59	1.58	3.10
2013	84.9p	1.178	1.56	1.61	3.38
2014	80.6p	1.241	1.65	1.82	3.87
2015	72.6p	1.378	1.53	1.95	5.09

Table 10 Compound feed prices, 2015

	AUS	BEL	BRA (MT)	BRA (SC)	CAN	DEN	FIN	FRA	GER
£/tonne									
Sow	177.92	185.91	96.58	136.39	152.86	163.76	159.76	183.83	173.63
Rearer	246.91	275.23	308.66	386.53	230.65	241.27	225.12	256.38	255.48
Finisher	175.01	182.28	113.69	168.51	148.38	165.81	152.50	170.20	164.63

	GB	IRE	ITA	NL	SPA	SWE	USA	EU AVE
£/tonne								
Sow	184.77	201.59	193.39	180.39	175.40	183.87	135.26	180.35
Rearer	252.56	294.12	266.45	256.64	305.69	279.46	335.21	262.94
Finisher	205.56	203.34	184.16	173.44	191.78	171.39	121.94	178.34

APPENDIX II

Figure 8 Depreciation and finance costs, 2014-2015

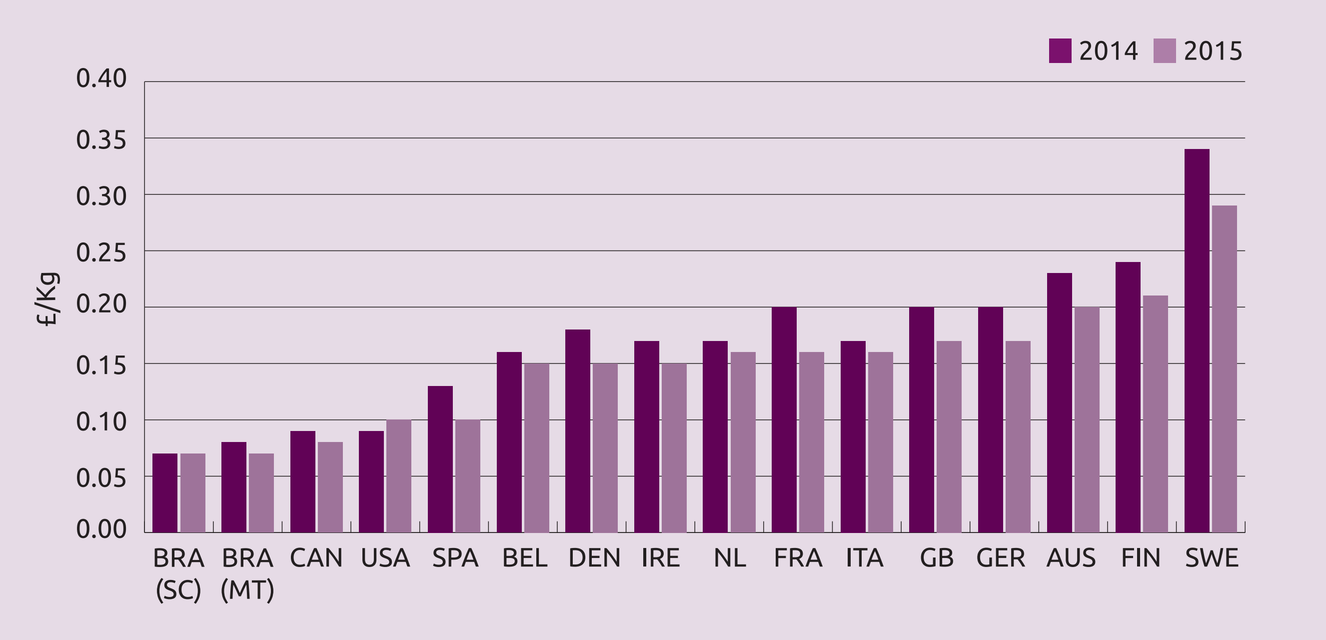
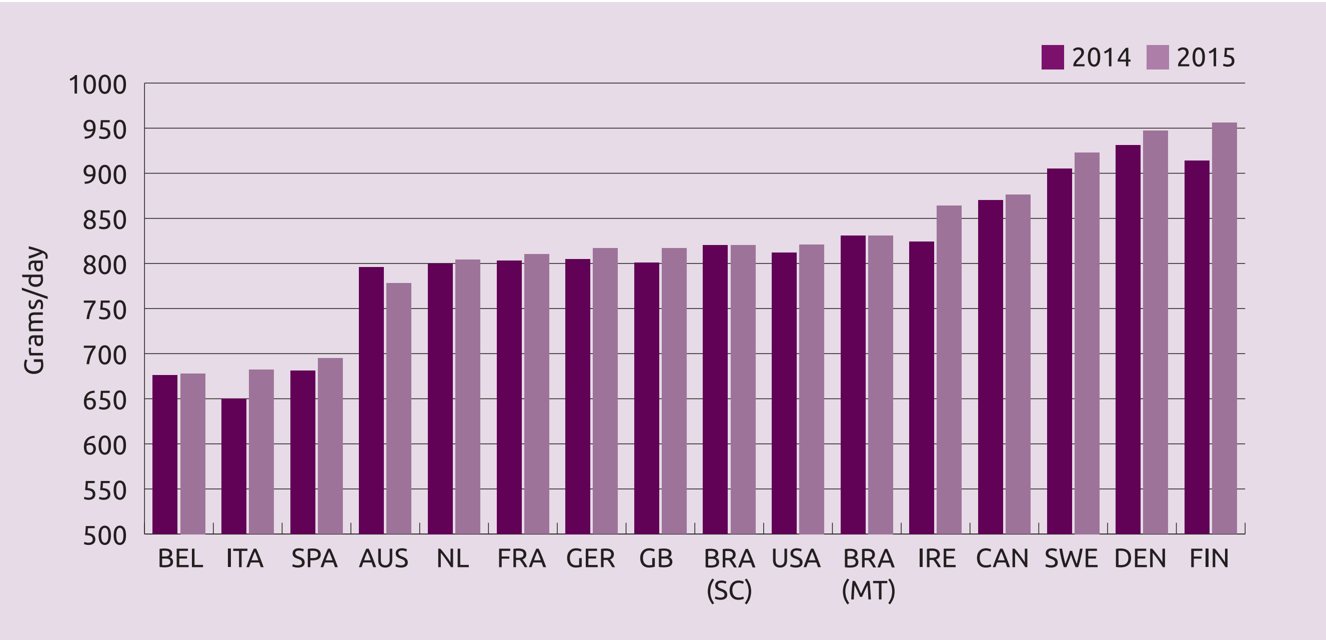


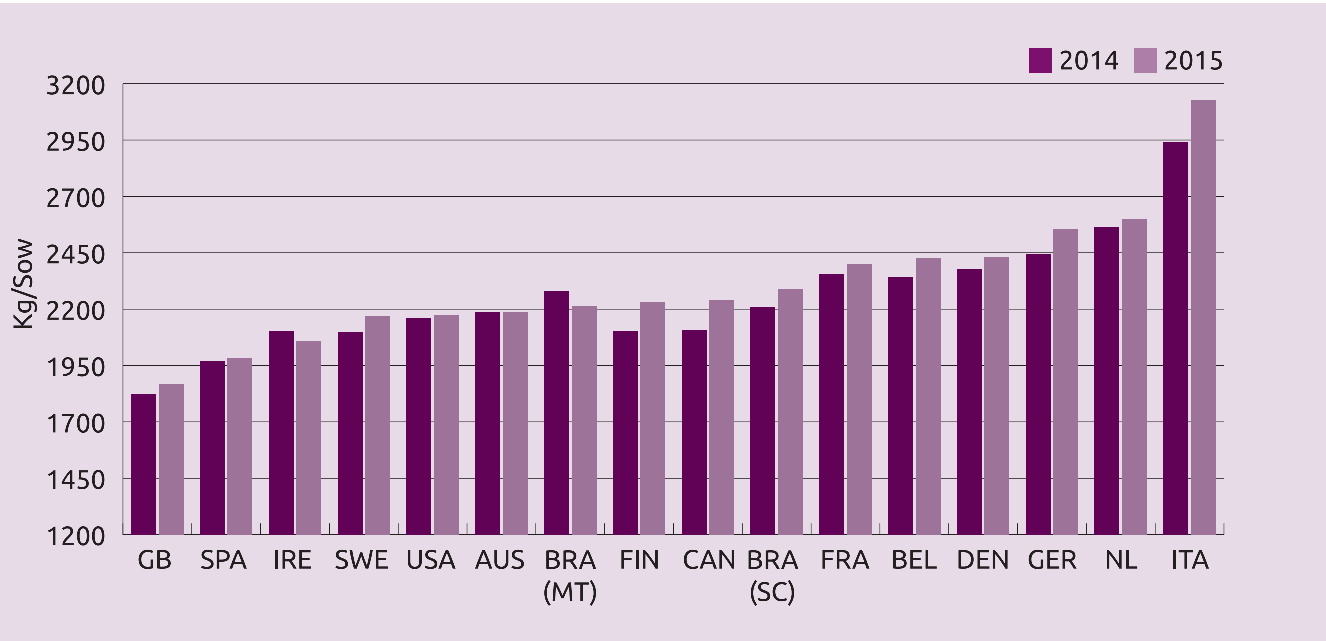
Figure 9 Daily Liveweight Gains (finishing herds), 2014-2015



APPENDIX II

Figure 10 Feed Conversion Ratios (finishing herds), 2014-2015

Figure 11 Carcase meat production/sow/year, 2014-2015



APPENDIX II

Standardising the physical results

Methodology

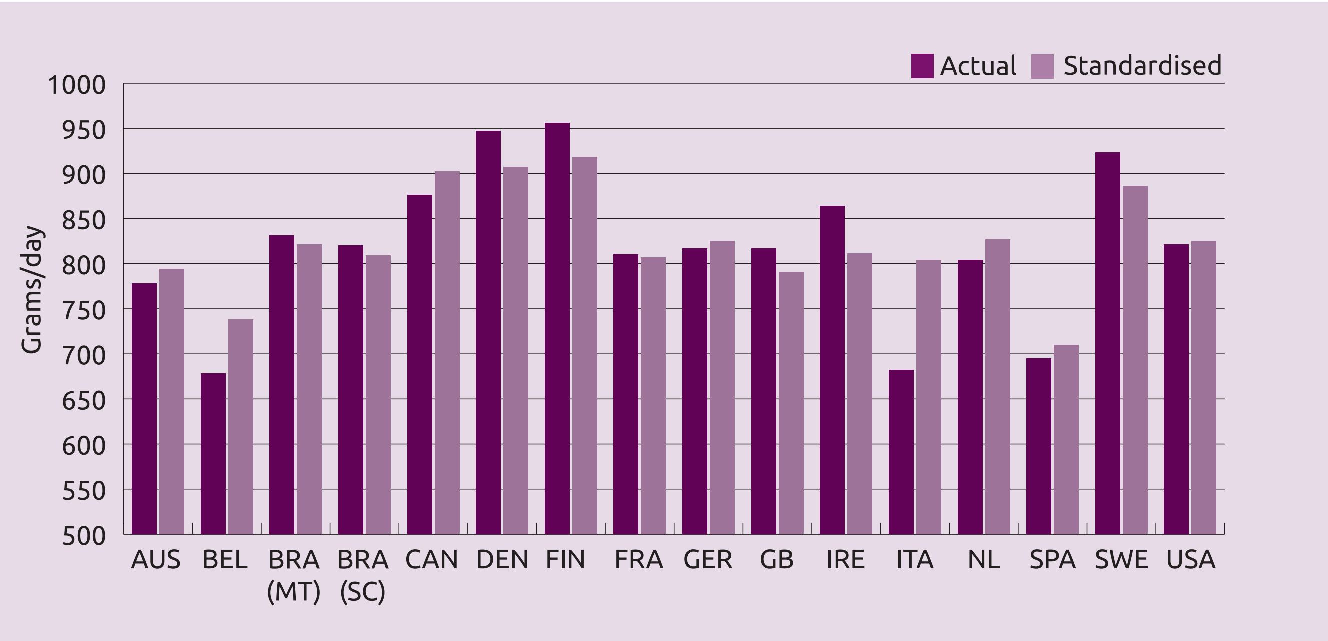
There is a wide variation in physical performance measures reported by InterPIG countries. Some of these variations could be due to differences between countries in the weight of animals produced. Other things being equal, an increase in slaughter weights and the length of time an animal is in the system will lead to a worsening in both the marginal daily liveweight gain (DLG) and the marginal feed conversion ratio (FCR).

Using methodology created by our French InterPIG partner, ITP, the figures have been standardised on the basis of three weights:

- Transfer from breeding unit to rearing unit: 8kg (GB = 7kg in 2015)
- Transfer from rearing unit to finishing unit: 30kg (GB = 36.9kg)
- Liveweight at slaughter: 120kg (GB = 106.2kg).

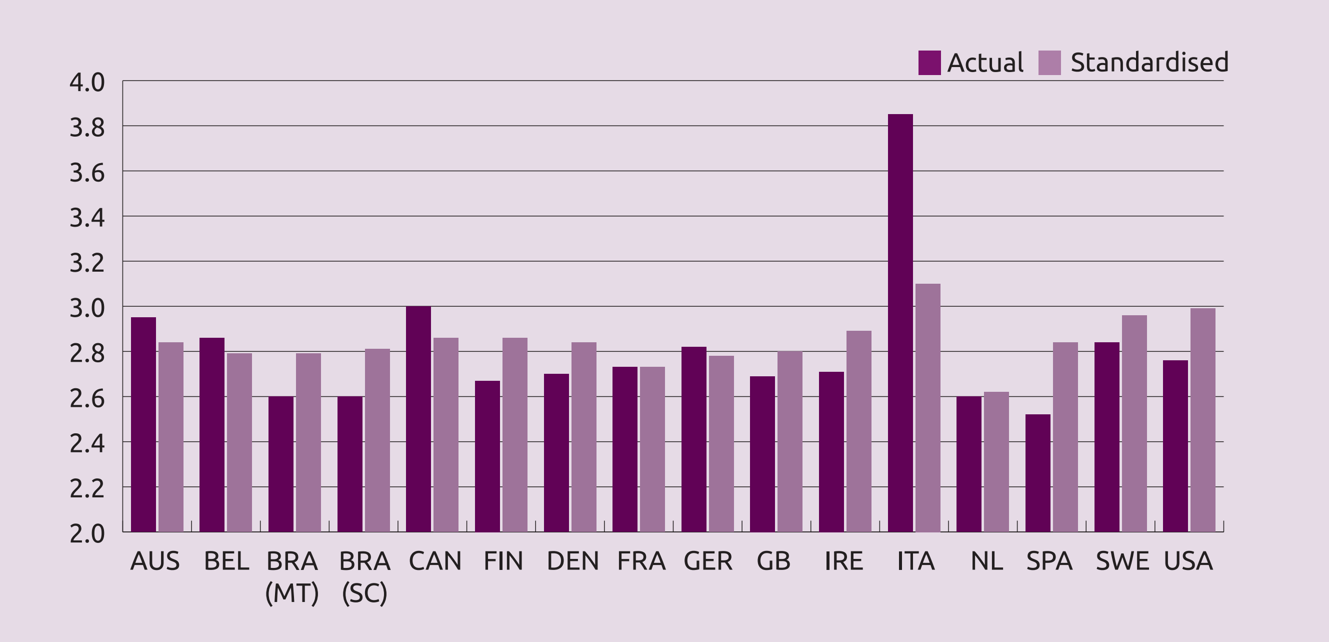
This section examines the adjustments that have been made to the finishing FCR and DLG figures in the European InterPIG countries to exclude the differences caused by variations in national transfer and slaughter weights.

Figure 12 Standardised Daily Liveweight Gains (finishing herds), 2015



APPENDIX II

Figure 13 Standardised Feed Conversion Ratios (finishing herds), 2015



APPENDIX II

Table 11 GB and EU physical results, 2015

	GB Overall	GB Indoor*	GB Outdoor*	EU average	GB overall difference with EU average 2014%
Pigs weaned/sow/year	24.4	26.0	22.1	26.8	-9
Pigs reared/sow/year	23.7	25.2	21.5	26.1	-9
Pigs sold/sow/year	23.1	24.6	20.9	25.4	-9
Pigs born alive/litter	12.3	12.8	11.5	13.5	-9
Pigs weaned/litter	10.8	11.3	9.9	11.7	-8
Litters/sow/year	2.27	2.29	2.22	2.29	-1
Sow mortality (%)	5.4%	6.2%	4.2%	6.2%	-13
Pre-weaning mortality (%)	12.2%	11.5%	13.4%	13.3%	-8
Rearing mortality (%)	2.8%			2.7%	+2
Finishing mortality (%)	2.7%			2.6%	+5
Transfer weight from breeding to rearing unit (kg)	7.0	7.2	6.8	7.3	-4
Lactation period (days)	26.4	26.4	26.4	26.6	-1
Transfer weight from rearing to finishing unit (kg)	36.9			29.9	+23
Rearing Daily Liveweight Gain (g/day)	463			416	+11
Rearing Feed Conversion Ratio	1.9			1.8	+5
Finishing Daily Liveweight Gain (g/day)	817			814	+0
Finishing Feed Conversion Ratio	2.7			2.8	-5
Average number of days in rearing unit	64			54	+20
Average number of days in finishing unit	85			113	-25
Empty finishing unit days per cycle	7			9	-20
Pigs/pig place/year (finishing)	4.0			3.2	+26
Average live weight at slaughter (kg)	106.2			119.8	-11
Average carcase weight - Cold (kg)	81.0			92.4	-12
Killing-out percentage (cold weight)	76.3%	76.3%	76.3%	77.0%	-1
Carcase meat production/sow/year (kg)	1868	2009	1693	2336	-20
Sow feed/sow/year (kg)	1478	1353	1666	1333	+11
Weaner/rearer feed/reared pig (kg)	57			41	+38
Finishing pigs feed consumption/slaughter (kg)	188			261	-28

*All pigs from indoor and outdoor sows are assumed to be reared in the same type of straw-based system after weaning.

APPENDIX III

List of tables and charts

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