BPEX

AHDB Agriculture & Horticulture DEVELOPMENT BOARD

Pig Pocketbook 2013

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Pig Pocketbook 2013

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Chapter 1 – Marketing chain

Table 1.1 UK pig meat supply balance (a)

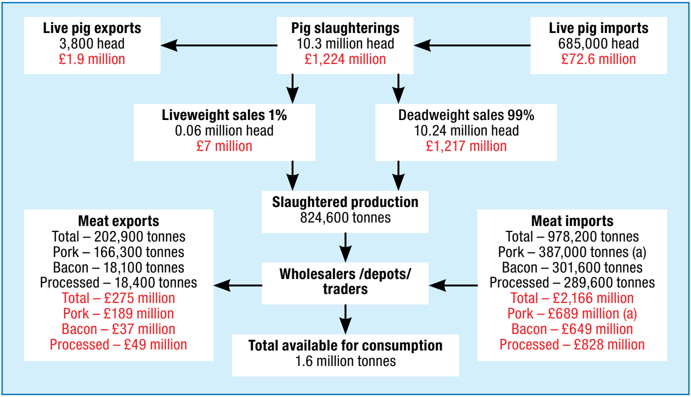
'000 tonnes	2009	2010	2011	2012	2013 (f)
Production	720	758	806	825	822
Imports (a)	951	941	960	978	915
(Fresh/frozen)	(402)	(402)	(410)	(387)	(360)
(Bacon (cwe)	(378)	(366)	(328)	(302)	(275)
(Processed)	(171)	(173)	(223)	(290)	(280)
Exports (a)	155	186	207	203	206
Total consumption	1,516	1,513	1,559	1,600	1,531
Self-sufficiency (%)	47.5	50.1	51.7	51.5	53.7

(a) Total imports and exports including processed meat. Includes re-exported pork. All fresh meat and processed products, including bacon, have been converted to carcase weight equivalent.

(f) Forecast

Source: Defra, GTIS/HMRC, AHDB Market Intelligence

Figure 1.1 UK product flows in the pig meat marketing chain in 2012



(a) Includes pork imports which are subsequently cured in the United Kingdom.

Volumes are carcase weight equivalent.

Source: AHDB Market Intelligence/BPEX

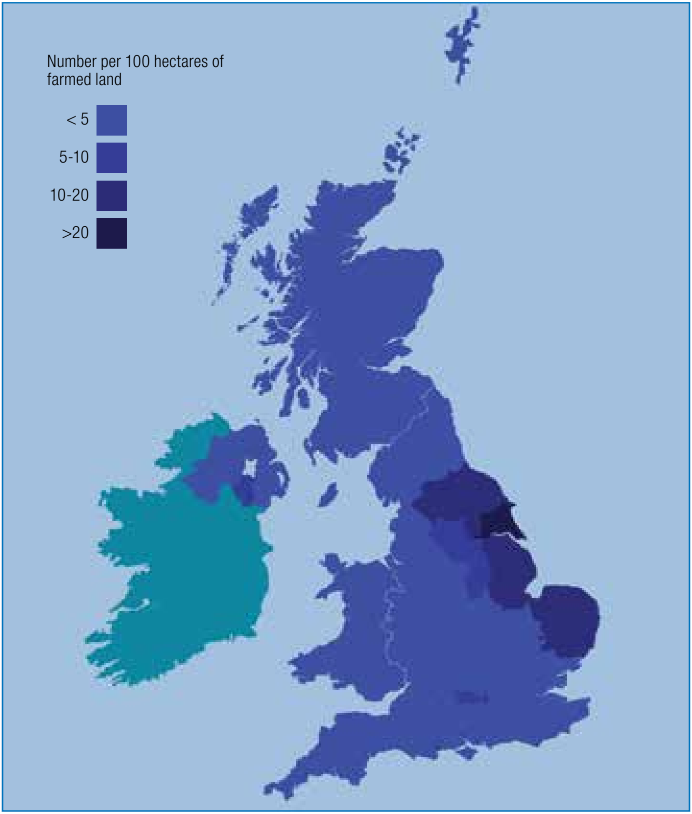
Table 1.2 **EU pig meat supply balance**

'000 tonnes	2009	2010	2011	2012 (e)
Net production	21,567	22,666	22,865	22,609
Imports	34	22	15	16
Exports	1,540	1,839	2,175	2,184
Consumption	19,943	20,849	20,706	20,442
Self-sufficiency (%)	108	109	110	111

All data is carcase weight equivalent
(e) Estimate
Source: EU Commission

Chapter 2 – Pig numbers

Figure 2.1 Density of breeding pigs, June 2010



Source: Defra

Table 2.1 **Pig numbers in the UK, June survey**

'000 head	2008	2009*	2010*	2011	2012
Sows in pig	299	304	281	279	293
Gilts in pig	55	48	67	70	69
Other sows	66	74	79	83	64
Total breeding sows	421	426	427	432	425
Gilts for breeding	57	64	75	75	82
Boars for service	17	17	17	16	16
Fattening pigs	4,219	4,033	3,942	3,917	3,958
Total pigs	4,714	4,540	4,460	4,441	4,481

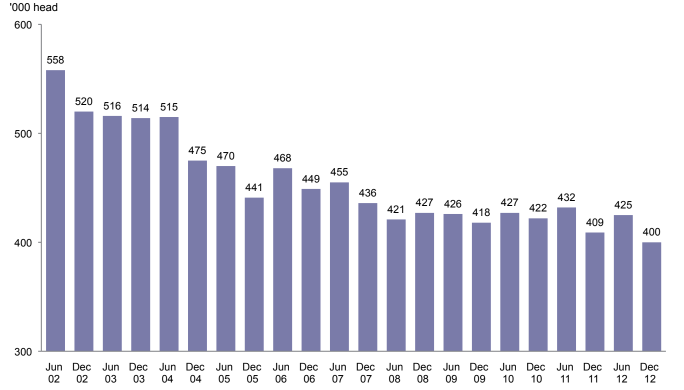
*Census methodology changed in June 2010 and data for 2009 was revised to be in line with the new method. As a result, smaller units were omitted from the survey.
Source: Defra June Agricultural Survey

Table 2.2 **UK female breeding pig herd and holding numbers, June survey**

	Breeding pigs ('000 head)	Number of holdings ('000)	Average breeding herd size (head)
1997	799	9.7	81
1998	778	9.9	78
1999	689	8.2	84
2000	610	7.2	85
2001	598	6.6	91
2002	558	6.1	92
2003	516	5.8	90
2004	515	6.0	85
2005	468	6.0	71
2006	468	6.2	76
2007	455	6.1	74
2008	421	6.1	75
2009	426	5.8	78
2010	427	6.0	71
2011	432	6.0	72
2012	425	n/a	n/a

Source: Defra June Agricultural Survey

Figure 2.2 **Breeding sow numbers, UK**



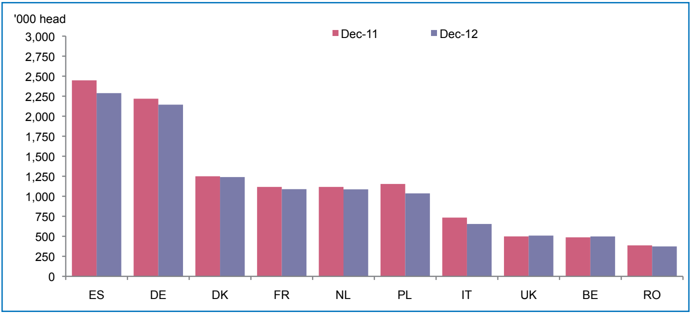
Source: Defra June Agricultural Survey, December census

Table 2.3 **Breeding pig numbers by region, June**

	2010	2011	2012
England	81%	83%	83%
Wales	1%	1%	1%
Scotland	9%	8%	7%
N Ireland	9%	8%	8%

Source: Defra June Agricultural Survey

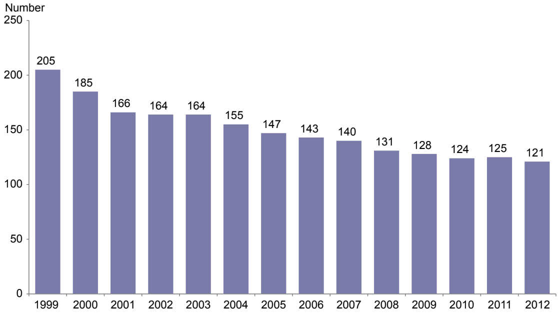
Figure 2.3 **Breeding pig numbers in the EU**



Source: Eurostat

Chapter 3 – Abattoirs

Figure 3.1 English pig abattoir numbers



Source: AHDB/BPEX

Table 3.1 Abattoirs slaughtering pigs in England

	Abattoir numbers	Of which specialist pig abattoir numbers	Average annual throughput (head)
1999	205	23	59,408
2000	185	24	53,003
2001	166	19	52,732
2002	164	20	50,105
2003	164	18	44,264
2004	155	20	47,110
2005	147	15	48,620
2006	143	16	50,505
2007	140	16	52,754
2008	131	16	56,234
2009	128	14	55,738
2010	124	15	59,237
2011	125	16	62,152
2012	121	14	67,967

Source: AHDB/BPEX data based on abattoirs operating in the calendar year.

Table 3.2 **Size profile of all England abattoirs slaughtering pigs, 2012**

Size group (head)	Number of abattoirs	Total throughput (head)	Average throughput (head)	Share of throughput (%)
1-10,000	79	250,398	3,170	3.0
10,001-30,000	21	396,203	18,867	4.8
30,001-100,000	7	368,116	52,588	4.5
100,001-500,000	7	1,668,544	238,363	20.3
> 500,001	7	5,540,798	791,543	67.4
Total	121	8,224,059	67,967	100.0

Source: AHDB/BPEX data based on abattoirs operating in the calendar year.

Table 3.3 **Size profile of specialist pig abattoirs in England, 2012**

Size group (head)	Number of abattoirs	Total throughput (head)	Average throughput (head)	Share of throughput (%)
1-100,000	5	80,752	16,150	1.4
100,001-500,000	3	793,994	264,665	14.1
> 500,001	6	4,747,000	791,167	84.4
Total	14	5,621,746	401,553	100.0

Note: Specialist pig abattoirs are defined as plants where 95 per cent of slaughterings are pigs.
Source: AHDB/BPEX data based on abattoirs operating in the calendar year.

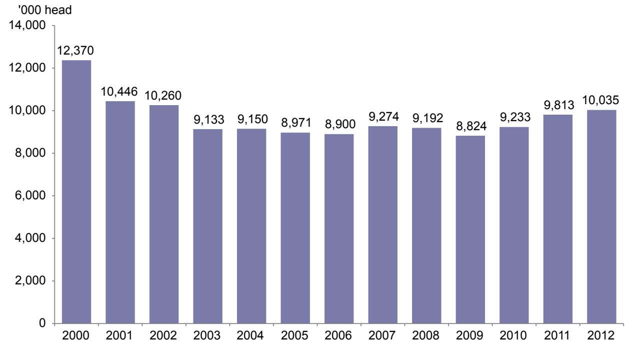
Chapter 4 – Slaughterings and production

Table 4.1 UK pig slaughterings

('000 head)	Sows and boars	Clean pigs	Total pigs
2000	321	12,370	12,692
2001	180	10,446	10,626
2002	314	10,260	10,575
2003	241	9,133	9,374
2004	240	9,150	9,390
2005	202	8,971	9,173
2006	196	8,900	9,097
2007	210	9,274	9,484
2008	235	9,192	9,427
2009	207	8,824	9,031
2010	221	9,233	9,454
2011	250	9,813	10,063
2012	265	10,035	10,299

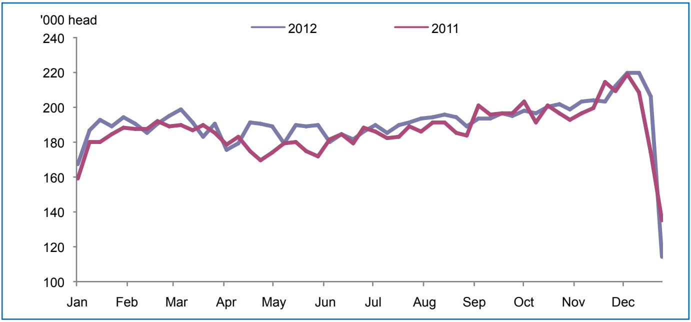
Source: Defra, AHDB Market Intelligence

Figure 4.1 Trends in UK clean pig slaughterings



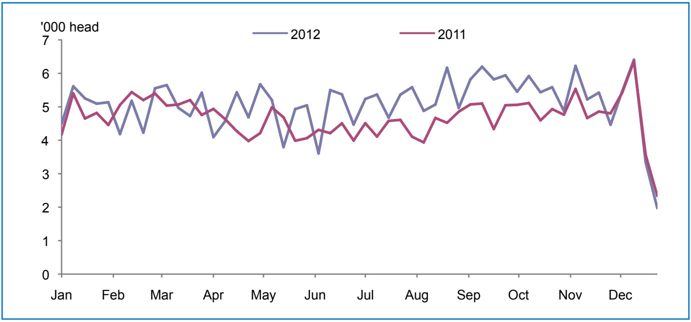
Source: Defra

Figure 4.2 Weekly clean pig slaughter, UK



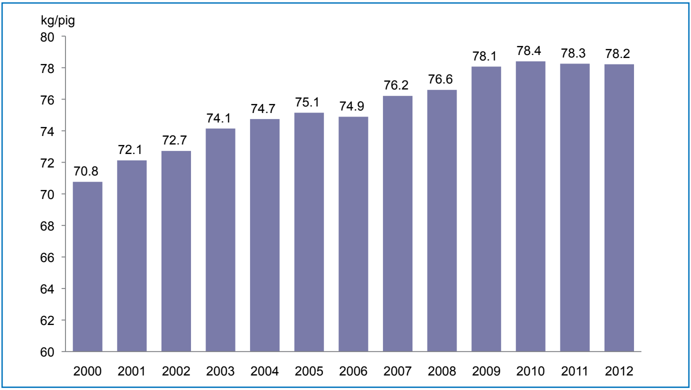
Source: AHDB Market Intelligence, Defra

Figure 4.3 Weekly sow culling, UK



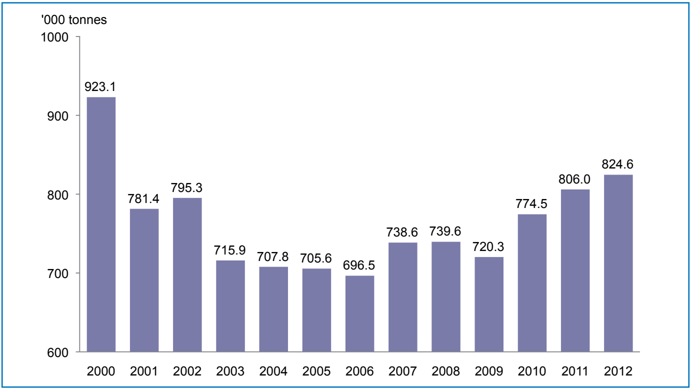
Source: AHDB Market Intelligence

Figure 4.4 Average carcase weights, UK



Source: Defra

Figure 4.5 Pig meat production trends, UK



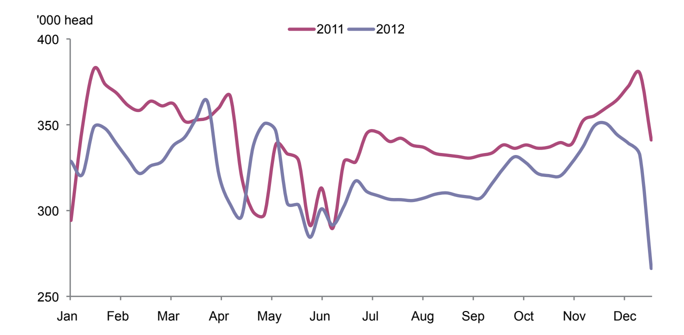
Source: Defra

Table 4.2 **Industry trends (productivity and production)**

	2000	2005	2008	2009	2010	2011	2012
UK ave sow productivity (a)							
Pigs per sow	19.0	17.7	20.0	19.5	20.2	21.7	22.3
Pig meat per sow (kg)	1,345	1,331	1,528	1,525	1,587	1,694	1,748
Slaughterings and production							
Clean pig slaughter ('000 head)	12,370	8,971	9,192	8,824	9,233	9,813	10,035
* ACW (kg)	70.8	75.1	76.6	78.1	78.4	78.3	78.2
= clean pig prod ('000 tonnes)	875	674	704	689	724	768	785
Sow slaughter ('000 head)	321	202	235	207	221	250	265
* ACW (kg)	148.3	155.5	151.3	151.7	154.5	151.3	150.2
= sow meat prod ('000 tonnes)	48	31	36	31	34	38	40
Total pig meat production	923	706	740	720	758	806	825

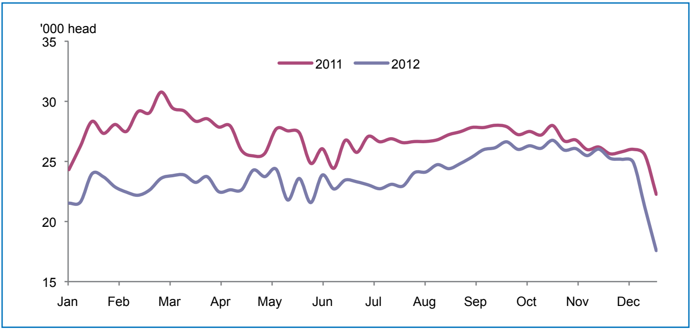
* ACW = Average carcase weight
(a) NOT survey results. Based on relationship between clean pig slaughter and lagged breeding herd.
Source: Defra, AHDB Market Intelligence

Figure 4.6 **Clean pig slaughterings: three-week rolling average, Denmark**



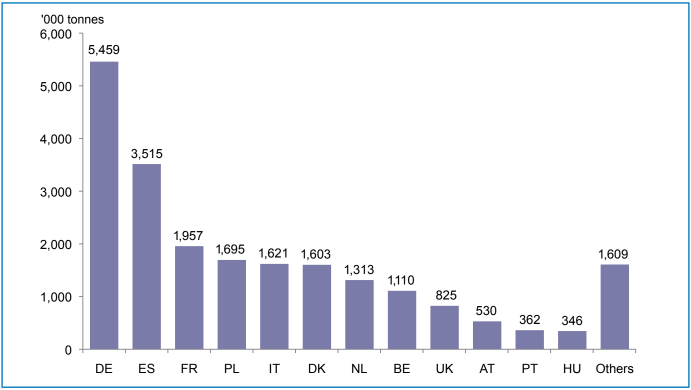
Source: Danish Agriculture & Food Council

Figure 4.7 Weekly sow slaughterings, Denmark/Germany



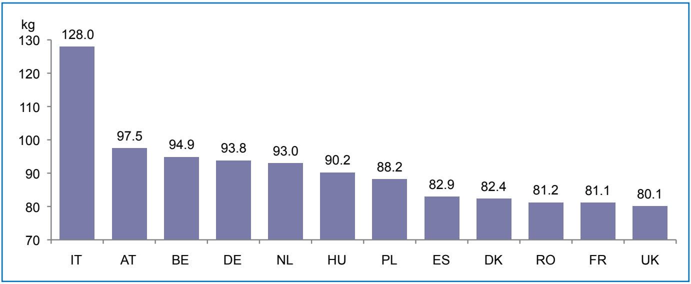
Source: Danish Agriculture & Food Council, AMI

Figure 4.8 EU pig meat production, 2012



Source: Eurostat

Figure 4.9 **Average pig carcase weights in the EU, 2012**



Source: Eurostat

Chapter 5 – Livestock and meat prices

Table 5.1 GB deadweight pig prices

	GB DAPP (EU Specification)				Cull sows			
	2010	2011	2012	2011-12 % change	2010	2011	2012	2011-12 % change
	p per kg dw				p per kg dw			
January	138.89	136.69	143.46	+5.0	92.94	79.88	109.69	+37.3
February	140.92	134.93	139.66	+3.5	96.28	86.20	115.12	+33.5
March	142.13	136.21	141.85	+4.1	101.56	94.57	121.33	+28.3
April	143.60	141.84	146.17	+3.1	98.04	104.06	122.05	+17.3
May	145.22	148.76	148.97	+0.1	96.64	101.52	116.94	+15.2
June	146.77	152.24	149.79	-1.6	96.53	96.97	115.47	+19.1
July	146.54	152.46	150.45	-1.3	94.37	100.06	108.83	+8.8
August	143.74	148.62	150.40	+1.2	95.57	103.67	109.21	+5.3
September	141.43	145.34	152.91	+5.2	100.16	106.32	112.94	+6.2
October	138.57	145.52	157.74	+8.4	96.31	108.15	113.56	+5.0
November	136.69	147.41	160.25	+8.7	92.75	114.28	112.41	-1.6
December	137.15	147.74	160.95	+8.9	90.01	113.75	105.08	-7.6

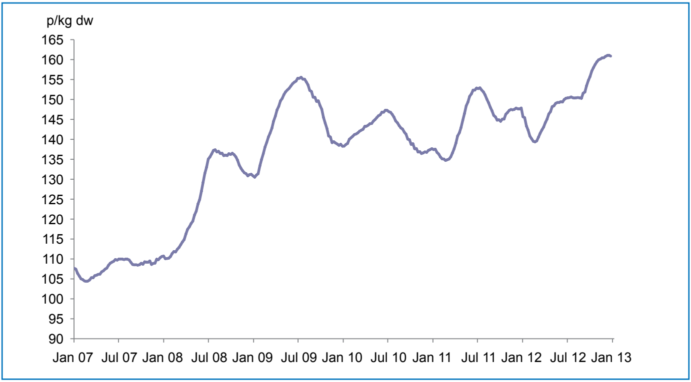
Source: AHDB Market Intelligence

Table 5.2 GB weaner prices

	GB weaner prices			
	2010	2011	2012	2011-12 % change
		£ per head		
January	49.96	41.81	44.76	+7.1
February	51.82	41.05	44.59	+8.6
March	53.03	41.09	45.62	+11.0
April	54.21	43.55	45.71	+5.0
May	54.56	45.58	44.45	-2.5
June	54.32	45.81	42.95	-6.2
July	52.43	45.58	40.93	-10.2
August	48.87	42.80	39.31	-8.2
September	46.24	40.63	39.02	-4.0
October	44.23	40.50	41.27	+1.9
November	42.61	42.28	44.99	+6.4
December	41.89	44.06	46.14	+4.7

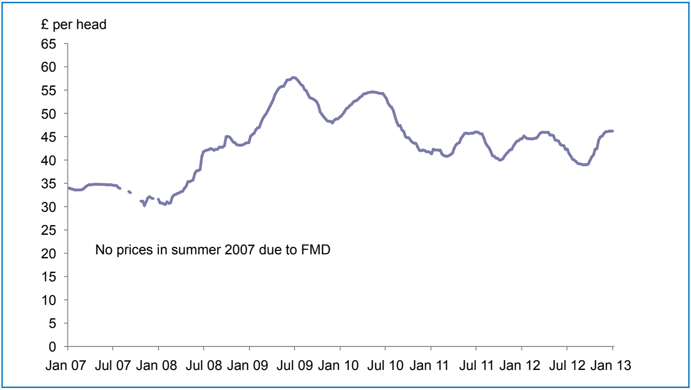
Source: AHDB Market Intelligence

Figure 5.1 **Monthly GB average producer pig prices**



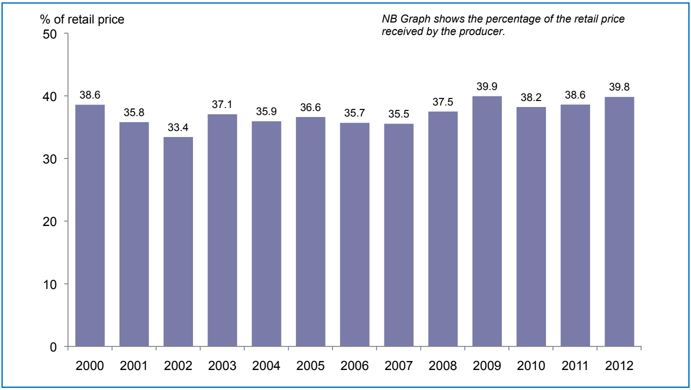
Source: AHDB Market Intelligence

Figure 5.2 **Monthly GB average weaner prices**



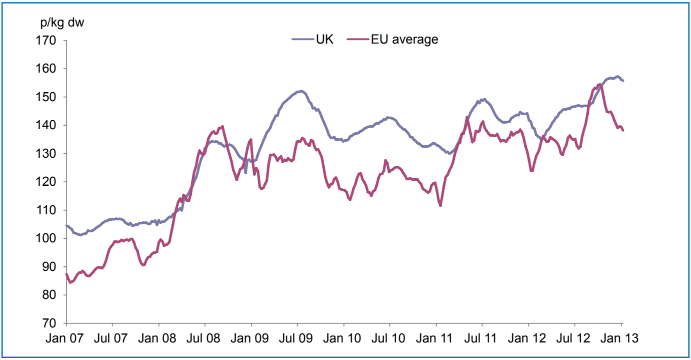
Source: AHDB Market Intelligence

Figure 5.3 GB retail: producer price spreads



Source: AHDB Market Intelligence

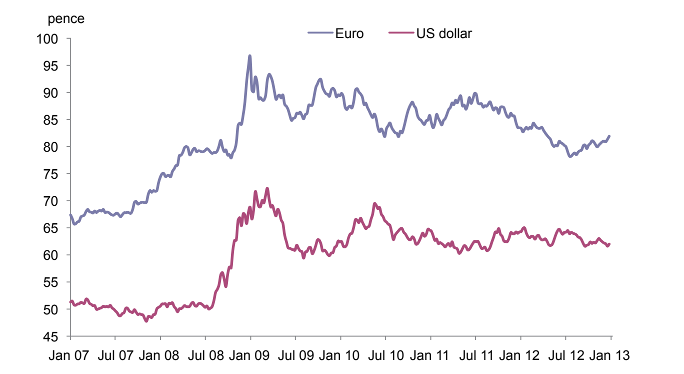
Figure 5.4 UK and EU pig meat reference prices



Source: EU Commission

Chapter 6 – Imports and exports

Figure 6.1 Sterling exchange rates



Source: PACIFIC Exchange Rate Service

Table 6.1 Volume of total UK pig meat imports

(tonnes, product weight)	2008	2009	2010	2011	2012
Fresh/frozen meat	393,468	360,180	363,158	372,768	349,068
Bacon	292,710	322,942	312,598	279,955	257,814
Sausages	87,806	83,988	81,580	99,137	107,085
Processed hams, shoulders and pieces *	77,060	88,008	91,687	121,607	171,487
Total	851,044	855,118	849,023	873,467	885,454
Live pigs (head)	438,821	497,638	652,799	696,282	684,918

* Including canned

Source: GTIS, HM Revenue and Customs

Table 6.2 Value of total UK pig meat imports

(£'000)	2008	2009	2010	2011	2012
Fresh/frozen meat	672,906	636,196	656,215	723,830	689,464
Bacon	687,358	765,954	718,475	676,902	648,578
Sausages	243,456	274,154	258,263	299,019	329,267
Processed hams, shoulders and pieces *	255,387	277,646	265,416	374,041	499,321
Total	1,859,107	1,953,950	1,898,369	2,073,792	2,166,630
Live pigs	42,394	50,061	62,023	69,452	72,569

* Including canned

Source: GTIS, HM Revenue and Customs

Table 6.3 UK fresh/frozen pork imports by source

(tonnes, product weight)	2008	2009	2010	2011	2012
Total	393,468	360,180	363,158	372,768	349,068
of which from:					
Denmark	148,688	100,345	99,759	117,567	99,543
Germany	55,695	48,604	48,386	53,438	66,731
Netherlands	41,992	52,778	64,489	58,864	49,009
Ireland	37,321	42,887	46,687	44,641	37,576
France	31,560	32,164	30,075	31,746	33,650
Belgium	34,715	43,934	48,616	36,474	28,043
Spain	21,957	25,856	16,275	17,666	23,355
Portugal	129	1,068	1,366	2,794	3,227
Italy	2,525	1,775	1,428	2,967	2,779
Poland	4,583	1,481	748	2,870	2,395
Chile	932	3,299	1,792	1,644	1,421
United States	8,938	5,017	2,838	1,120	673

Source: GTIS, HM Revenue and Customs

Table 6.4 UK bacon imports by source

(tonnes, product weight)	2008	2009	2010	2011	2012
Total	292,710	322,942	312,598	279,955	257,814
of which from:					
Denmark	112,597	146,915	136,659	116,261	105,960
Netherlands	129,795	117,961	116,303	106,216	104,472
Germany	25,918	33,967	38,973	39,837	32,170

Source: GTIS, HM Revenue and Customs

Table 6.5 Volume of total UK pig meat exports

(tonnes, product weight)	2008	2009	2010	2011	2012
Fresh/frozen meat	117,902	104,363	131,344	144,427	154,266
Bacon	31,363	21,199	24,492	34,082	15,509
Sausages	6,350	7,081	7,183	6,402	9,605
Processed hams, shoulders and pieces *	16,165	16,066	14,343	9,963	12,135
Total	171,780	148,709	177,362	194,874	191,515
Live pigs (head)	18,785	7,663	8,623	11,875	3,810

* Including canned

Source: GTIS, HM Revenue and Customs

Table 6.6 Value of total UK pig meat exports

(£'000)	2008	2009	2010	2011	2012
Fresh/frozen meat	132,210	115,685	148,938	171,274	189,285
Bacon	71,769	51,355	44,499	59,440	36,967
Sausages	13,977	14,699	14,910	13,951	16,851
Processed hams, shoulders and pieces *	43,484	43,562	35,564	27,267	32,502
Total	261,440	225,301	243,911	271,932	275,605
Live pigs	3,044	2,953	2,504	5,950	1,863

* Including canned

Source: GTIS, HM Revenue and Customs

Table 6.7 UK fresh/frozen pork exports by destination

(tonnes, product weight)	2008	2009	2010	2011	2012
Total	117,902	104,363	131,344	144,427	154,266
of which to:					
Germany	33,602	27,624	31,826	31,739	32,527
Ireland	17,278	16,525	27,461	25,381	26,148
Hong Kong	17,393	18,394	17,311	26,610	19,025
Netherlands	23,610	19,917	26,372	19,611	18,835
Denmark	4,812	3,321	6,763	6,452	12,255
China	2,398	1,633	1,969	4,003	11,458
Sweden	84	97	21	1,891	8,374
Belgium	2,223	2,887	3,800	6,146	5,648
United States	1,642	2,024	2,262	2,223	2,677
Korea, South	21	0	622	2,006	2,508
Italy	2,978	3,966	3,710	2,927	1,944
Japan	121	23	437	650	1,531
France	1,195	662	3,054	7,039	1,504

Source: GTIS, HM Revenue and Customs

Table 6.8 EU-27 fresh/frozen pig meat exports to third countries

000 tonnes	2010	2011	2012
Live animals	97.2	84.9	46.9
Fresh and frozen pork	1,162.8	1,432.8	1,437.7
Salted, dried, smoked pig meat	30.6	34.2	34.7
Offals	839.8	1,045.1	1,010.3
Sausages	105.5	125.7	130.8
Prepared and preserved	60.3	75.0	75.4
Pig fat	11.8	14.0	11.3
Lard	377.2	379.9	383.3
Total	2,685.2	3,191.5	3,130.3

Source: European Commission

Chapter 7 – Consumption

Table 7.1 GB retail value sales by type of outlet

(%)	Multiples	Freezer centres	Butchers	Other
Pork				
2010	85.5	2.8	9.2	2.5
2011	84.9	3.5	9.0	2.6
2012	85.0	3.6	8.6	2.8
Bacon				
2010	89.1	3.9	4.1	2.9
2011	88.1	5.0	4.1	2.8
2012	88.1	5.1	3.7	3.1

All data runs to 20 Jan 2013

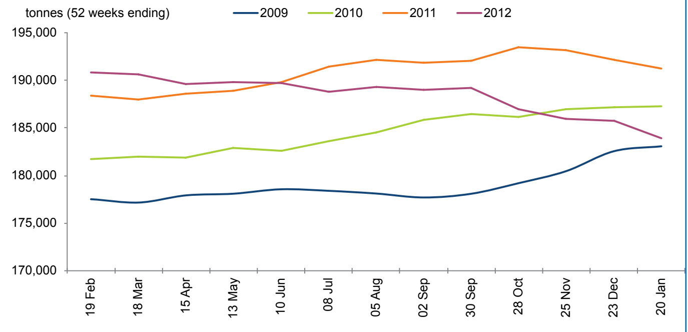
Source: Kantar WorldPanel

Table 7.2 UK per capita consumption of pig meat and all other meats

	Pig meat	Total meat (including poultry) kg/person/year
2000	23.6	78.8
2001	23.5	78.0
2002	24.0	80.2
2003	24.8	80.5
2004	24.6	82.4
2005	24.8	83.1
2006	25.0	82.8
2007	25.8	82.3
2008	24.7	79.4
2009	24.5	77.3
2010	24.3	78.7
2011	24.9	79.0
2012	25.4	79.3

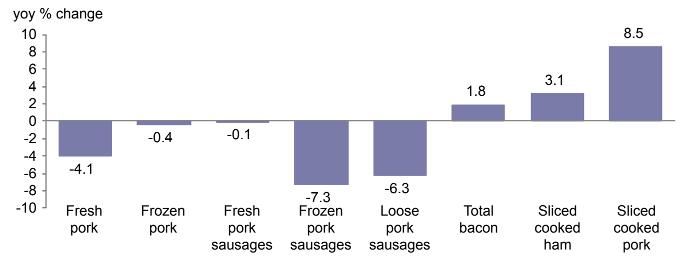
Source: AHDB MI calculations based on data from Defra, HMRC, ONS

Figure 7.1 Trends in GB household pork purchases by volume



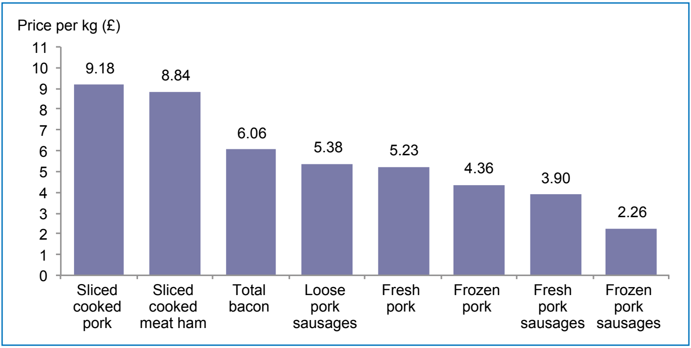
Source: Kantar WorldPanel

Figure 7.2 Change in GB retail volume sales of pig meat products, 2012



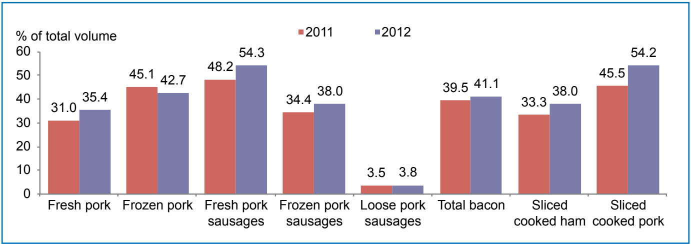
Source: Kantar WorldPanel

Figure 7.3 **Average GB retail price of pig meat products, 2012**



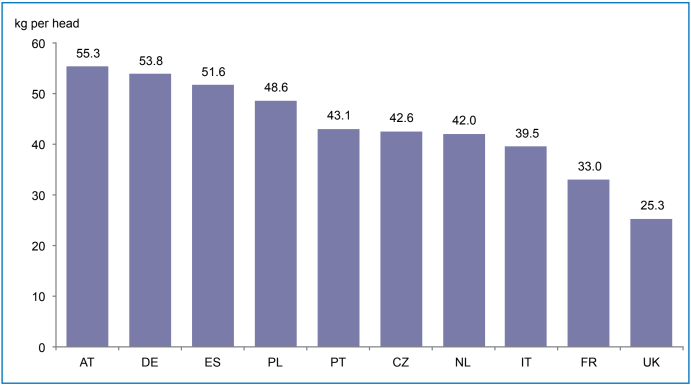
Source: Kantar WorldPanel

Figure 7.4 **Volume of pork products on promotion in GB retail outlets**



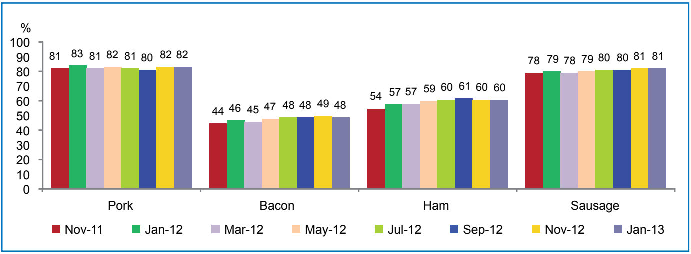
Source: Kantar WorldPanel

Figure 7.5 **Per capita consumption of pig meat in selected EU Member States, 2012**



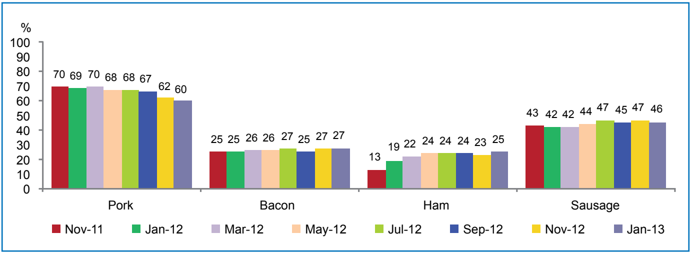
Source: AHDB/BPEX calculations using data from Eurostat

Figure 7.6 **Percentage of product facings with British logo sold in the total GB market**



Source: AHDB/ESA

Figure 7.7 **Percentage of product facings with Red Tractor quality standard mark sold in the total GB market**



Source: AHDB/ESA

Chapter 8 – Pig carcase classification data

The Meat and Livestock Commercial Services Independent Authentication Service

John Messenger
Quality Manager

The information provided by MLCSL's Pig Carcase Authentication Service is used widely as the basis for transactions between producers and slaughterers. The current service, which is UKAS Accredited, incorporates all of the mandatory requirements of the EU Pig Carcase Grading Scheme, which was introduced in GB in 1989. The service provides pig slaughterers with technically trained MLCSL staff who independently establish all of the important criteria for trade between pig suppliers and abattoirs.

The Service Includes

Identification – Carcases are individually serial-numbered and the slap marks are read and recorded to identify each consignment of pigs. The Pigs (Records, Identification and Movement) Order 2003 requires all pigs going to slaughter to be identified by a Defra allocated herdmark on both shoulders. This must be legible before and after slaughter to allow correct tracing of the pigs for both payment and biosecurity.

Weighing – Carcases are individually weighed. Hot weights are recorded, with hot weight rebates and dressing coefficients deducted to establish the payment weight. Regular scale and tare checks form an integral part of the service. Mature boars and sows are not covered by the mandatory scheme but a weighing service is available as part of the Authentication Service.

Backfat measurement and lean meat percentage – MLCSL classifiers are trained to operate all of the approved classification equipment.

Methods and Probes

MLCSL offers all methods of pig carcase classification for the prediction of lean meat percentage in accordance with EU legislation. Each method involves taking carcase measurements with EU approved equipment at specified positions on each carcase.

The following equipment is approved for use in the UK:

Optical Probe
Hennessey Grading Probe (HGP)
Fat-O-Meater (FOM)
AutoFOM
CSB Ultra-Meater

The HGP, FOM, AutoFOM and CSB Ultra-Meater are all automatic recording probes.

Method 1
Optical Probe is used to measure backfat and rind thickness at the P1 and P3 positions, level with the head of the last rib. The probe is inserted 4.5cm and 8cm from the dorsal midline respectively. The sum of the P1 and P3 measurements is recorded.

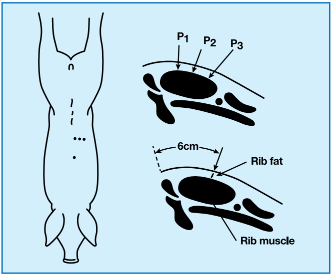
Method 2
Optical Probe is used to measure backfat and rind thickness at the P2 position, level with the head of the last rib. The probe is inserted 6.5cm from the dorsal midline.

Method 3
HGP or FOM are used to measure:

- Backfat and rind thickness at the P2 position as for Method 2. The HGP or FOM probes are inserted 6cm from the dorsal midline.

- Backfat and rind thickness at a point 6cm from the dorsal midline between the third and fourth last rib. This measurement is referred to as rib fat.
- Longissimus dorsi (eye muscle) depth at a point 6cm from the dorsal midline between the third and fourth last rib. This measurement is referred to as rib muscle.

Figure E.5 Locations of probing sites on a pig carcase



Lean Meat Percentage and EU Grade

Lean meat percentage is calculated as follows:

Optical probe
Cold carcase weight and P2 (or P1 + P3) fat depths are used to estimate lean meat percentage.

An EU grade can be allocated to a carcase by using the lean meat percentage figure.

Lean meat percentage	EU grade
60% and above	S
55-59%	E
50-54%	U
45-49%	R
40-44%	O
39% or less	P

Visual Appraisal

This is the identification of pigs with carcase faults. These are described as “Z” carcases. Carcases that are scraggy, deformed, blemished, pigmented and coarse skinned, those with soft fat or pale muscle and those devalued by being partially condemned are recorded as “Z” on the carcase record (PCC1 or computer equivalent). Young boars are identified and recorded. Carcases with poor conformation are recorded as “C” carcases at the request of the abattoir.

Dressing Specification

Carcase dressing specifications are closely monitored by MLCSL staff and provide a vital element of the carcase record.

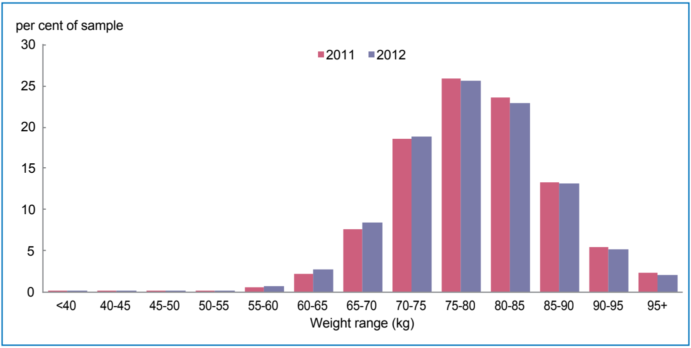
Classification Consistency

To ensure consistency of pig carcase classification standards by MLCSL staff, various procedures are strictly applied to the operation of the scheme. Extensive training programmes, both in-plant and centrally, ensure that classifiers maintain the required standards of proficiency. Classifiers are checked regularly by Divisional Managers and nominated checkers on a local basis, with the Quality Manager providing a GB link.

Each check requires the manager/checker separately to classify and record 20 carcases. The classification measurements assessed by the classifier are then checked against the manager’s measurements and an analysis of accuracy levels for the 20 carcases is made. This analysis measures both bias (the tendency of a classifier to measure higher or lower classifications than the checker) and consistency (the overall level of agreement between classifier and checker).

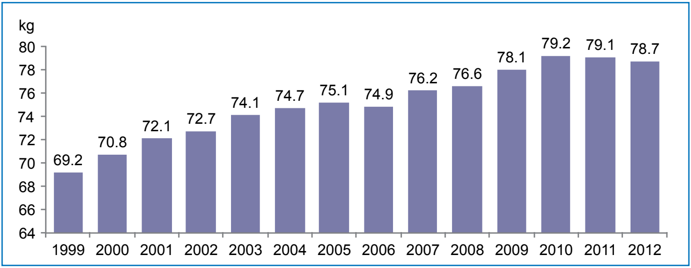
All checks are analysed at MLCSL’s HQ to ensure classifiers are meeting accuracy levels.

Figure 8.1 Distribution of the classified sample by carcase weight



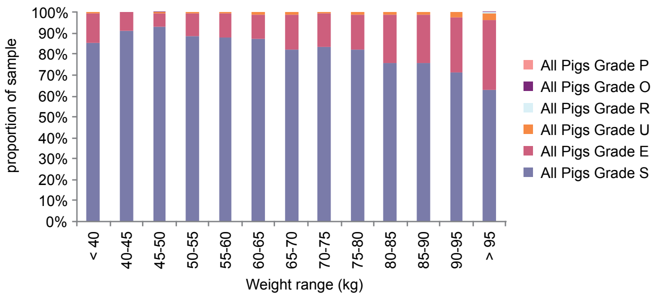
Source: AHDB/MLCSL

Figure 8.2 Average carcase weights of GB collected sample



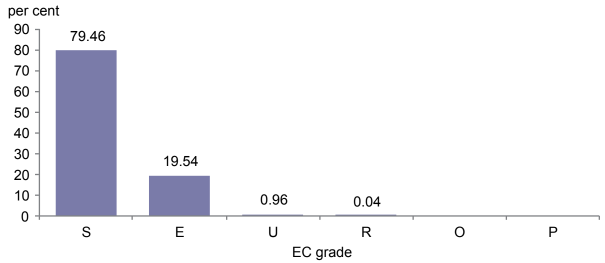
Source: AHDB/MLCSL

Figure 8.3 Distribution of classified sample in EC grade by weight band, 2012



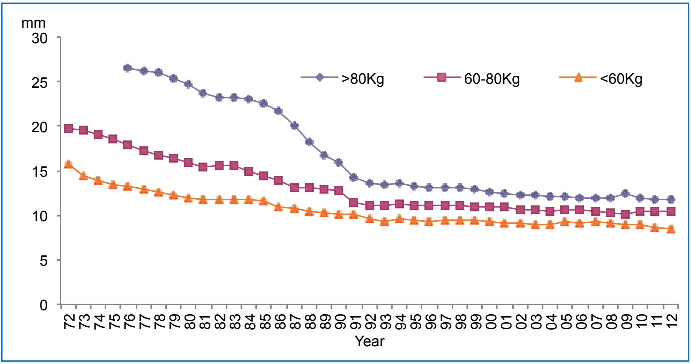
Source: AHDB/MLCSL

Figure 8.4 Distribution of the classified sample by EC grade, 2012



Source: AHDB/MLCSL

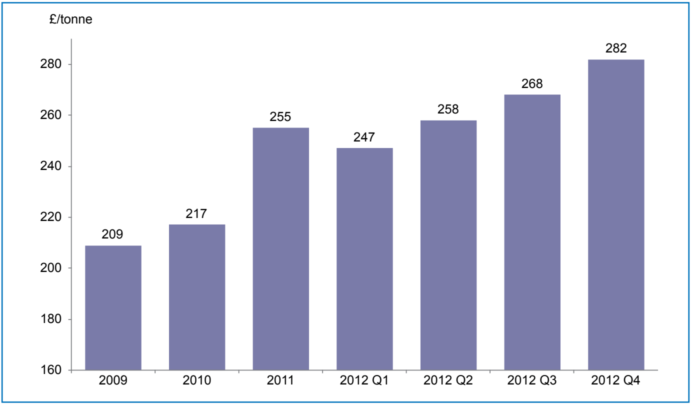
Figure 8.5 **Trends in P2 fat depth**



Source: AHDB/MLCSL

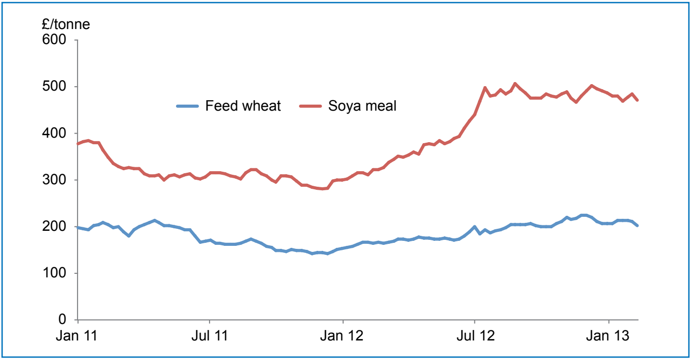
Chapter 9 – Feed prices

Figure 9.1 Average pig compound feed prices, GB



Source: Defra

Figure 9.2 Feed wheat and soya meal prices



Source: AHDB/HGCA