Introduction

This report draws together a wide range of the latest information on the Scottish red meat sector and encompasses the whole production chain from producer to final consumer.

The data has been collated from a number of sources and, unless otherwise stated, covers the 2015 calendar year. The report’s objective is to provide users with a single source of key information on the shape and scale of Scotland’s red meat industry. This is the eleventh edition of this publication, and it highlights the continued importance of the red meat sector to Scotland’s economy.

2015 was a more difficult year for producers weather-wise, as rainfall levels were high for most of the year and a cold summer led to slower animal growth rates. In terms of animal numbers, there was a small recovery in beef cows while the dairy herd expansion continued into a fourth year. Reflecting an increased breeding herd, calf registrations rose. In the pig sector, breeding sow numbers surged, but the lack of abattoir capacity in Scotland meant that more weaner pigs were sold across the border. In the sheep sector, there were fewer lambs born in 2015 and the breeding ewe flock is estimated to have consolidated slightly.

For beef producers, lower purchased feed costs and increased productivity are likely to have helped reduce pressure on their margins, and although the average farmgate price per kilo fell back, the average price of a carcase was little different due to heavier carcases. The timing of sales may well have been key for beef producers, with prices much stronger in 2015 than in 2014 during the summer but down significantly for the remainder of the year. For lamb producers, prices were significantly lower than in the previous year throughout most of 2015 and productivity is estimated to have edged lower on average, indicating a difficult year. In the pig sector, sharp declines in producer prices due to an EU-wide imbalance between supply and demand potentially offset the gains from cheaper feed costs and rising productivity.

The volume of red meat available for consumption in the UK during 2015 increased by 3.5% on 2014 and reached an 8-year high. There were increases across the board, mainly as a result of increased domestic production, due to higher productivity and increased carcase weights, but also through a decline in export volumes. However, despite the recovery in both the wider UK economy and continued consumer confidence, retail consumption of the prime cuts of beef, lamb and pork fell back, suggesting that the volume of red meat used by the food manufacturing and foodservice trades increased and/or there was a build-up of meat in cold stores.

Rising domestic production and a strong sterling led to a reduction in the UK’s overall trade in red meat during 2015. Imports fell by 3.5% from 2014 and exports contracted by 9.5%. On the beef side, imports slipped back as higher domestic production and weak export demand led to reduced import requirements. It was a similar case for sheepmeat. While imports of pigmeat also declined, there was some growth in exports.

In summary, 2015 was a difficult year for Scotland’s livestock producers as farmgate prices spent significant periods at levels well below those of a year earlier, due to well supplied markets, exchange rate movements and competition in the retail sector. However, higher carcase weights and lower feed costs are – in many cases – likely to have limited the squeeze on margins. Cattle and pig producers also benefitted from increased productivity in 2015, though the sheep sector found it harder on this front.

In the processing sector, Scotland’s companies benefitted from lower raw material prices, but found it difficult to compete in price-sensitive markets, and exporting profitably was a challenge. Despite the continued recovery of the British economy, changing lifestyle habits resulted in a fall in the consumption of prime cuts of red meat.
Executive Summary

Farming of cattle, sheep and pigs made a smaller contribution to Scotland’s economic output in 2015. Excluding subsidy payments, combined output from the three species fell by 1.5% to £1.18bn. Since overall agricultural output contracted more significantly, livestock production increased its share of the total by a percentage point to reach 40%.

The Scottish beef breeding herd put four years of declines behind it, edging up by 0.4% to total 424,500 head in December 2015. Beef-sired calf registrations increased by 1.7%, indicating increased productivity. After going into autumn 2014 at a seven-year high, the breeding sheep flock is estimated to have contracted by around 1% to 3.011m head in the final month of 2015. Meanwhile, the Scottish sow herd grew considerably, up 12.5% at 37,300 head.

Scottish abattoirs handled fewer prime cattle in 2015, but this was partially offset by a higher mature cattle kill. With average carcase weights on the increase, annual beef production volumes were only 0.3% below 2014 levels at 169,200t. In the sheep sector, higher carcase weights offset lower slaughterings of prime sheep and prime production edged higher. However, a decline in mature sheep slaughter left overall production 1% lower at 27,600t. Both pig slaughterings and carcase weights increased at Scottish abattoirs in 2015, pushing pigmeat production 2.5% above 2014 levels to 24,700t.

Total sales revenues from the primary red meat processing sector are estimated to have fallen by 3% in 2015, slipping to £854.5m. This was mainly down to a fall in wholesale prices.

England and Wales remained the largest market for Scottish processors in 2015, with more than two-thirds of all revenues being generated there. Export sales are estimated to have risen by 4% to £76.5m with increased beef exports more than offsetting a decline in sheepmeat exports. Exports generated an estimated 9.5% of total turnover, up slightly from the previous two years but still a smaller share of sales than for the UK red meat industry as a whole.

A strong global harvest and heightened retailer competition resulted in food prices trading at below year-earlier levels during 2015. With farmgate cattle prices falling, beef retail prices stabilised. However, despite farmgate prices declining sharply, lamb became slightly more expensive on the shelves. Lower farmgate pig prices passed through the supply chain, resulting in lower pork and bacon retail prices.

The annual average agricultural input cost in the UK declined by 4.5% in 2015 and fell to its lowest level since 2010. The cost of energy and feed fell sharply, with fertilisers also proving cheaper than in 2014.

The total volume of red meat available for consumption in the UK during 2015 increased by 3.5% to an eight-year high of 2.8m tonnes. The increase was down to higher domestic production volumes and lower exports.

In 2015, the UK traded less red meat than in the previous year. Imports fell 3.5% to 927,500t, with exports down 9.5% at 378,000t. Rising domestic production reduced import requirements as exchange rate movements made it difficult to export profitably, leaving a greater proportion of domestic production on the home market.
Excluding subsidy payments, Scottish agricultural output fell for a second consecutive year in 2015, down 4.5% to £2.94bn. In monetary terms, this was a decline of £135m.

Combined output from cattle, sheep and pig farming fell more slowly than total agricultural output in 2015, sliding by around 1.5% to £1.18bn. This meant that livestock farming’s share of the total increased by one percentage point from a year earlier to reach 40% in 2015.

Although output from beef production fell for the second consecutive year, the decline was only marginal in 2015 and beef production remained the largest sector of Scottish farming. Output decreased by 0.1% and slipped to a three-year low of £849m. However, the beef production share of agricultural production grew by more than a percentage point to nearly 29%. Output from finished cattle and calves increased by 2%, due to a higher level of coupled support, and made a £680.6m contribution to Scottish agricultural output. Meanwhile, the cross-border trade in store cattle and calves also rose 2% to reach £51.4m. By contrast, capital formation (the asset value of replacement breeding cattle) declined by 17% to £116.5m.

Output in the sheep sector contracted by around 4.5% in 2015 to £241.8m. However, its share of agricultural output held constant at 8%. The decline in output was down to lower farmgate prices and fewer lamb slaughterings. Also falling were wool output and capital formation, but the cross-border store trade edged higher.

In the pig sector, output decreased by 8% in 2015. Although a rising herd and increased productivity boosted slaughter availability, this was more than offset by a considerable decline in farmgate prices. Capital formation also decreased. As a consequence, the pig sector accounted for a slightly smaller share of Scottish agricultural output, but it remained around 3%.

<table>
<thead>
<tr>
<th>Contribution to Scottish Agricultural Output</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£m</td>
<td>%</td>
<td>£m</td>
</tr>
<tr>
<td>Cattle</td>
<td>859.7</td>
<td>27.1</td>
<td>849.4</td>
</tr>
<tr>
<td>Sheep</td>
<td>230.2</td>
<td>7.4</td>
<td>252.9</td>
</tr>
<tr>
<td>Pigs</td>
<td>79.6</td>
<td>2.5</td>
<td>93.5</td>
</tr>
</tbody>
</table>

Source: Scottish Government (2016a)
Livestock continues to be of greater significance to agriculture in Scotland than it is either in the UK as a whole or, on average, in the EU.

Sheep production maintained its position as the most common farming activity in Scotland, with nearly 28.5% of Scottish holdings involved in sheep production during 2015. Twenty-three percent of holdings were involved in cattle production while less than 2.5% produced pigs. The total number of agricultural holdings in Scotland grew marginally to 52,303 in 2015. Cattle and pig farming saw declines of 0.7% and 2%, respectively, but the number of holdings with sheep rose by 0.5%.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>28.9</td>
<td>13.6</td>
<td>8.5</td>
</tr>
<tr>
<td>Sheep</td>
<td>8.2</td>
<td>5.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Pigs</td>
<td>2.9</td>
<td>4.9</td>
<td>9.6</td>
</tr>
</tbody>
</table>

Sources: Scottish Government (2016a); Defra (2016a); European Commission (2014)
Cattle Production
Scotland’s beef herd put an end to four years of declines in 2015, expanding by 0.4% in the year to December 2015, reaching 424,500 head. This was an increase of 1,600 head. Nevertheless, numbers were still down by more than 7.5% on 2010. The dairy herd increased in size for a fourth successive year, with another 2,800 cows taking the total to an eight-year high of 177,250 head. This was an annual increase of 1.6%; smaller than the 3–4% gains of the previous two years.

The regional spread of cattle across Scotland remained heavily concentrated in the South West and North East. In Scotland, livestock production is heavily influenced by land type. As a result, in the North West, Tayside, the Borders and Argyll & Bute the cattle population is skewed towards the beef herd. By contrast, in the South West, there is a heavier focus on finishing store cattle and dairy production. In the North East, producing beef calves and finishing beef cattle take place in relatively equal measure.

Scottish Cattle Population

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef breeding herd</td>
<td>428.5</td>
<td>422.9</td>
<td>424.5</td>
</tr>
<tr>
<td>Dairy breeding herd</td>
<td>167.4</td>
<td>174.4</td>
<td>177.3</td>
</tr>
<tr>
<td>Total cattle herd</td>
<td>1,724.6</td>
<td>1,730.9</td>
<td>1,736.1</td>
</tr>
</tbody>
</table>

Breeding herd comprises female cattle over two years of age with offspring

Herds of beef cattle in Scotland.

Regional distribution of cattle

Herd Size
In June 2015, the average size of a Scottish beef suckler herd edged up to 47 cows. This was once again well above the UK average, which stood at 27 in 2014.

Average herd sizes have fallen slightly across Scotland since decoupling of subsidy payments in 2005.

With crofting prominent in the Highlands and islands, average herd size is much smaller in the North West than elsewhere. Though Orkney herds averaged above the national level, the average holding in Shetland kept only eleven beef cows while there were just seven beef cows on the average Western Isles holding.

The largest average herd size was in the Scottish borders with 74 head. Lothian and Dumfries & Galloway followed closely with 65.5 and 66.5 head, respectively.

Scotland has a number of large cattle enterprises. As a consequence, 13.5% of holdings accounted for almost half of the beef herd in 2015, while 16.5% of holdings with cattle under 12 months of age kept 54% of the Scottish total. However, the beef sector was less concentrated than sheep or pig farming.

Herd Size

Compared to 2014, while the national average increased slightly, there were small decreases in the average number of beef cows per holding in Shetland, Tayside and East Central.
Calf Registrations

Calf registrations in Scotland increased for a second year in 2015. Following 2014’s increase of nearly 1.5%, numbers rose by just over 2% in 2015 to 570,500 head. However, this was insufficient to return registrations to 2012 levels.

Beef-sired registrations increased at a slower rate in 2015 than they had in the preceding year. Indeed, after an increase of more than 2% in 2014, numbers were up by 1.7% in 2015 at 461,200 head. Since dairy registrations rose by 4%, beef-sired calves accounted for a slightly smaller share of the total than in 2014, sliding from 81.1% to 80.8%.

Scottish calf registrations provide a leading indicator of potential beef production in the following couple of years. A sharp fall in beef calf registrations in 2013 was the principal contributor to the decline in prime cattle slaughterings during 2015. The recovery in registrations of 2015 and 2016, therefore, point to increased slaughter availability in 2016 and 2017.

Looking at potential supplies in 2016, the rising calf registrations from spring 2014 through to early 2015 point to increased availability throughout the year. Moving into 2017, a fall in registrations in the second quarter of 2015 suggests that numbers could tighten in early 2017, before picking up again in the second half of the year.

The Scottish Government reported that the number of calves born between December 2013 and November 2014 qualifying to receive support payments under the Scottish Beef Scheme was almost 1.5% higher than in the previous period, at 410,700 head. This accounted for 90.5% of the beef-sired calves born during the period, suggesting that 9.5% of the beef-sired calves born came from the dairy herd.

In 2015, 22% of the calves born in Scotland were sired by either a Limousin or Limousin Cross bull. Although this meant that Limousin retained its position as the most popular sire in Scotland, its share of the total continued to fall, slipping by half a percentage point. Back in 2010, it had held a 26% share of the total. Limousin-sired calf numbers were down by 0.2% to 126,750 head.

With dairy registrations rising strongly in 2015, there were 3% more black and white dairy calves (Friesians and Holsteins) registered than in 2014. At 100,400 head, they accounted for 17.5% of the total, up fractionally on 2014 to remain the second-most popular sire in Scotland.

While the popularity of Charolais continued to decrease, falling 1.5% in 2015, there was a second successive increase in registrations of Simmental-sired calves (1%). This meant that the share of Charolais in the total slipped from 16% in 2014 to 15.5% in 2015 while the Simmental share eased marginally for a second year to 13%.

Premia offered to producers selling finished cattle in recent years have led to an expansion in the popularity of the Aberdeen-Angus breed in Scotland.

Hearing increased by 6% in 2014, the rise in Aberdeen Angus-sired calves slowed to 1% in 2015, with numbers up to 89,800 head. However, this was insufficient to maintain its share of the total, which slipped back to 15.7% from 15.9% in 2014.

The popularity of other sires, in general, rose strongly. Of the native breeds, the number of Beef Shorthorn-sired calves rose by 16.5% while there was a 24% increase in Herefords. Meanwhile, Luing registrations lifted by a slower 4%. However, the increases were not across-the-board, as there was a further 3% decline in Highland calves. In terms of other popular breeds, British Blue registrations grew 5.5% while Saler registrations rose by 12.5% in 2015.

### Number of Scottish-born Calves Registered with BCMS

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calf registrations</td>
<td>551,500</td>
<td>558,800</td>
<td>570,500</td>
</tr>
<tr>
<td>Of which beef-sired</td>
<td>444,400 (80.5%)</td>
<td>453,500 (81%)</td>
<td>461,200 (81%)</td>
</tr>
</tbody>
</table>

Source: BCMS
Sheep Production

The 2015 December Survey of Agriculture used a different method of data capture than in the past, sourcing from the Sheep and Goat Inventory rather than through a survey of main holdings. This annual inventory is more comprehensive than the June census. Since the categories of sheep reported are different from the old December survey of main holdings, it is difficult to compare with previous years.

Adding the number of ewes that had been kept for breeding in the autumn of 2015 together with the number of lambs that had been put to the ram indicates that the Scottish breeding sheep flock contracted by just under 1% to 3.01m head in 2015. Nevertheless, this was still higher than any year between 2009 and 2013.

The total number of sheep on Scottish farms in December 2015 was estimated to have risen by nearly 2.5% year-on-year to 4.96m head. This consisted of 3.608m over 12 months of age plus a further 1.352m aged less than one year.

Just three regions accounted for 45% of the breeding flock in June 2015. The Scottish Borders had the largest flock, with 16.5% of the total, while Dumfries & Galloway had 15% of the total and Highland took a 13.5% share.

Regional variation in ewe performance due to factors such as weather and ground conditions led to a different distribution of lambs across Scotland. The Scottish Borders was home to 18% of Scotland’s lambs in 2015, while Dumfries & Galloway had 16% of the total and nearly 12% were in Highland region.

Ewe performance across Scotland was generally slightly lower in the 2014/15 breeding season than a year earlier. At just under 125%, the national lambing percentage was down slightly on the previous year, but remained ahead of its 10-year average of 124%.

The decline in lambing performance was slightly more pronounced in the North West than elsewhere in Scotland. This may suggest that weather conditions were relatively less favourable in the North West.

Looking deeper into the regional statistics shows that not every area of Scotland had a poorer lambing in 2015. Ayrshire, Dumfries & Galloway, Lothian and Tayside showed marginal improvements, and there were more significant gains of nearly 3 percentage points in Clyde Valley and nearly 6.5 percentage points in Fife. By contrast, the Western Isles and Argyll & Bute had the largest year-on-year declines of more than 4 percentage points. The largest lamb crop in Scotland was in the Borders, but each ewe produced an average of 1.37 lambs compared with 1.385 in 2014.

Fife extended its position as the top Scottish region for ewe performance, rising to nearly 157%. The North East remained second best at 146%, while Lothian was third on 139%. Although ewe performance in the North West was, in general, well below average, Orkney continued to exceed the national average with its lambing ratio of 134%.
Flock Size

The average Scottish breeding ewe flock fell marginally to 204.5 head in June 2015. This meant that the average Scottish flock remained smaller in size than the UK average, which stood at 229 in 2014.

Since decoupling of subsidy payments in 2005, average flock sizes have fallen significantly outside the North East.

Scottish sheep production has a significant number of large units. Indeed, just 21% of holdings accounted for nearly three-quarters of breeding ewes in 2015.

South East Scotland has the largest farms, with each having an average of 405 breeding ewes in June 2015 – almost double the Scottish average. Looking more closely at the data for the South East region shows that its higher average is largely due to the Borders. Indeed, during 2014, the average Borders sheep holding kept 526 ewes. At 364 ewes, Tayside had the second largest flocks in Scotland. East Central (South West) took third place with 334.

The North West has the smallest farms, averaging 97.5 ewes apiece in 2015. This average was held down by the Western Isles, which had an average of just 33.5 ewes per holding in 2015.

Between 2014 and 2015, the average breeding flock size increased in the Scottish Borders, Fife and in Dumfries & Galloway. While most other regions reported small declines, it was more significant in Lothian, falling from 301 to 288.5.

### Ewes Per Holding – Regional Average

<table>
<thead>
<tr>
<th></th>
<th>North West</th>
<th>North East</th>
<th>South East</th>
<th>South West</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>112</td>
<td>171.5</td>
<td>454</td>
<td>340</td>
<td>224</td>
</tr>
<tr>
<td>2014</td>
<td>97.5</td>
<td>169</td>
<td>406</td>
<td>296</td>
<td>205</td>
</tr>
<tr>
<td>2015</td>
<td>97.5</td>
<td>166.5</td>
<td>405</td>
<td>294</td>
<td>204.5</td>
</tr>
</tbody>
</table>

Source: Scottish Government (2016b)
Pig Production

The 2015 December Agricultural Survey reported a third consecutive year of growth, and a second successive significant expansion, in the Scottish sow herd. Following on from 2014’s 16.5% increase, the sow herd is estimated to have risen by a further 12.5% in 2015, adding 4,100 sows to reach a total of 37,300 head. Although this meant that it was now 32.5% above its 2012 low, the sow herd still fell nearly 13% short of its decade-earlier level.

The rise in the breeding herd came despite challenging market circumstances and is likely to have been linked to the expansion of capacity at Brechin abattoir.

In addition to a rise in breeding sow numbers, the December survey reported that gilt retentions for future breeding had risen by a quarter from the previous year to reach 6,900 head.

Although the number of prime pigs on Scottish farms increased for a second year, the rise by 1% to 285,250 head was a much smaller increase than in the sow herd. This reflects a growing cross-border trade in weaner pigs, sold to finishers in England due to the lack of slaughter capacity in Scotland. As a consequence, in December 2015, there were 7.7 prime pigs for every sow – down from 8.5 in 2014 and an average of 10 during the 2005–12 period.

North East Scotland is home to the vast majority of the country’s sows. The region’s share of the national herd edged up to 60% in 2015 from 59.5% a year earlier as sow numbers increased in line with the national average. There was an even more significant increase in the South West where numbers rose by almost a fifth, taking its regional share from 6% in June 2014 to 7% in June 2015. Meanwhile, the South East saw its share of the national herd contract by a percentage point to 27.5% as sow numbers fell by 2%. Sow numbers also declined in the North West, down 3.5%, resulting in a small decrease in this area’s share of the national herd.

Herd Size

The average Scottish sow herd increased by six sows in the year to June 2015, following an increase of four sows in the previous year. Nevertheless, the average Scottish holding continued to have fewer sows than the average UK holding, which had 68 in 2014.

In the North East, the average holding kept 201 sows in June 2015, a 10% increase on the previous year and more than three times the national average. This difference in scale was also true for fattening pigs, with the average North East holding keeping 652 in June 2015 compared to a national average of 251. However, the average for the North East fell back from 677 fattening pigs in June 2014. Both statistics reflect the concentration of commercial pig production in this area of Scotland. Pig production remains highly concentrated within a small number of businesses. In 2015, just 13% of holdings with breeding female pigs accounted for 94% of the sow herd, while 98% of fattening pigs lived on only 15.5% of holdings.

Concentration was down slightly from 2014 as there were fewer holdings with fewer than 100 sows.

During 2015 there were 46 holdings with 250 or more sows, averaging 571 each. This was up from 564 in 2014. Meanwhile, the number of holdings with between 100 and 249 sows rose from 14 to 16, averaging nearly 166 sows compared with 154 a year earlier. In the North East, the average holding with more than 249 sows had 609, up from 571 in 2014. However, in the South East, the largest holdings averaged 573 sows, down from 642 in 2014.

The 117 holdings in Scotland with 100 or more fattening pigs kept an average of 1,595 each in June 2015, down from 1,625 in 2014. Thirty-six of these holdings were in the South East, which includes Tayside, and they each had an average of 1,567 – up slightly on 2014. This was less than in the 1,665 average for the 65 North East holdings with at least 100 fattening pigs. However, this was down sharply from 1,781 in June 2014.
Supply of Product to the Processing Sector

Cattle
Prime cattle throughput at Scottish abattoirs totalled 397,650 head during 2015. This was down by 3% from 2014, making this the fifth consecutive year to show a decline.

By contrast, the slaughter of mature cattle rose by nearly 6.5% in 2015 to 61,500 head. Nevertheless, this remained below the levels of 2011–13.

During 2015, the total number of cattle killed at Scottish abattoirs and entering the food chain decreased by 2% to 459,300 head.

In 2014, the average prime cattle carcase weight reached a new record high of 371kg, a 2% increase on the previous year. By contrast, the average cow carcase weight edged down by 0.5% to 348kg.

Underpinning this increase in carcase weights was wide availability of supplementary feeds at the lowest prices for a number of years. This, combined with lower producer prices per kilo, gave producers an incentive to take cattle to heavier weights, in order to maintain income per animal.

Carcase weights reached levels where significant numbers of cattle, primarily steers, exceeded the weights specified by abattoirs in order to meet the product specifications of the multiple retailers for prime cuts of beef (steaks and roasting joints).

It is estimated that the increase in carcase weights almost fully offset the decline in cattle slaughterings, resulting in total beef production at Scottish abattoirs falling by just 0.3% to 169,200t in 2015.

During the year, the distribution of kill by gender changes. Steers and heifers are dominant throughout, averaging 79% between them, but this fell to less than three-quarters in July and August when young bull throughputs peaked. Peak cow culling occurs in the autumn, pushing up the share of cows in the total kill to 15% between August and November, compared with an annual average of 13% in 2015.

The share of the total kill by gender changed in 2015. With the cow kill rising while the prime kill contracted, cows took an increased share in 2015, up one percentage point at 13%. Both the steer and young bull shares slipped by 0.2 percentage points to 45.6% and 7.9% respectively. Meanwhile, heifer numbers tightened more significantly, resulting in their share of the total kill sliding from 34.2% in 2014 to 33.6% in 2015.
Age of Cattle at Slaughter

Although the share of young bulls in the male prime cattle kill fell slightly in 2015, there was a greater bulge in the age profile at 15 and 16 months, reflecting more stringent age limits on young bulls. Within the steer age profile, there was a small shift to 24–27 months from both 21–23 months and 28–30 months. The median male prime animal was killed at 24 months, with the most common age of slaughter being 25 months.

In terms of the heifer age at death profile, there was a shift from 21–23 months to 24–26 months. This may reflect that lower feed costs and producer prices gave producers an incentive to add weight in an attempt at protecting their revenue per carcase. The median heifer was slaughtered at 24 months, with the most common age at death being 23 months.

In the profile of over-30 month female cattle it can be seen that in the beef herd, cows tend to live for longer. In the dairy herd, cows appear to be culled mainly between four and seven years of age (48–84 months) while only very few will live past the age of 14 years (168 months). For beef cows, the profile is relatively stable from 4 years all the way up to 13–14 years where it begins to tail off. The age profile for beef cows approaches zero (<0.05% of the >30-month kill) at around 212 months, 3–4 years later than for dairy cows. However, there was a significant increase in the number of beef cows being culled at older than 18 years (216 months) in 2015, rising to 114 from only 18 in 2014.

The higher levels of female beef cattle being killed between 31 and 36 months of age will mostly reflect the slaughter of older heifers. It will also include heifers that have been served for the first time, but failed to conceive. This also helps to explain the slightly higher level of culling at 3–4 years.

The average age at death for a dairy cow in 2015 was just under 6 years; for beef it was around 8.5 years. This would suggest that the average dairy cow will have had three calves while the average beef cow will have had six calves. However, it should be noted that on the beef side, the flat age profile would suggest that 10 or 11 calves would be almost as common as six calves.
Sheep

Despite the country going into the autumn of 2014 with the largest breeding sheep flock for a number of years, Scotland’s June census indicated that there were fewer lambs born in the spring of 2015 than had been born during spring 2014. Numbers are reported to have fallen by just over 1%, suggesting that productivity declined.

Despite the smaller supply base to draw on, lamb slaughterings at Scottish abattoirs had initially run higher than in the 2014/15 season, up marginally between June and September. In part, this was down to the Islamic festival of Eid al-Adha falling two weeks earlier in 2015, pulling demand forward into September in 2015 compared with October in 2014. In addition to this seasonal demand factor, a combination of weak export demand and tight supplies pulled throughput back by 8.5% from a year earlier in the final quarter of 2015.

In the year as a whole, clean sheep slaughterings decreased by just over 1% to 1.325m head. The smaller supply of new season lambs was partially offset by a significantly larger hogg carryover at the beginning of the year, which saw throughput rise 4% year-on-year in the first third of 2015.

The number of ewes and rams handled by Scottish abattoirs fell by more than 40% in 2015 to just 16,550 head. The low level of slaughtering in Scotland continues to reflect that the majority of Scottish cull sheep are transported to abattoirs in England and Wales.

In its Economic Report on Scottish Agriculture, the Scottish Government estimates that 445,500 Scottish ewes were slaughtered in 2015. It then follows that perhaps 429,000 Scottish ewes will have been slaughtered in England and Wales during 2015.

The average prime sheep carcase at Scottish abattoirs increased by 1.5% in 2015, reaching an 8-year high of 20.4kg. Between January and April, hogg carcases were around 1–2% heavier than in 2014.

At the beginning of the 2015/16 season, carcases then averaged 3–4% heavier than a year earlier (in part due to a longer tail of hoggs), before slipping back to 1–2% higher again between August and October. In the final two months of the year, lamb carcases averaged slightly lighter than in late 2014.

Although prime sheepmeat production at Scottish abattoirs was marginally higher than in 2014, the sharp fall in mutton production meant that total sheepmeat production fell by 1% to 27,600t.

Carcase Quality

Of the 2015 GB lamb crop slaughtered at price-reporting abattoirs 63.8% achieved an R3L grade or better. This was 0.2 percentage points lower than in 2014/15, but slightly ahead of 2013/14. Historically, this was on the high side (though still 0.6 percentage points behind the 2010 lamb crop).

Although slightly below the previous season’s carcase quality on average, there were significant differences during the season. Indeed, carcase quality was generally lower from May until the end of September. Thereafter, carcase quality tended to exceed year-earlier levels, except for over the festive period.

A further proxy of carcase quality is the proportion of prime sheep sold at auction that qualify as ‘Standard Quality Quotation’ (SQQ). The SQQ covers prime sheep weighing from 25.5kg up to a maximum liveweight of 45.5kg. The proportion within the SQQ weight range trailed the levels of the previous season consistently from May 2015 until March 2016. The differential was at its widest at the beginning of the season, hovering...
around ten percentage points until the end of June, indicating a strong start to the season in terms of lamb growth rates. The gap with the 2014/15 season then narrowed to around 5% for the second half of 2015. At the beginning of 2016, the difference was again around the five percentage point level, though there were a number of weeks where there was a greater proportion of the 2015 lamb crop within the SQQ weight range. At the end of the 2015/16 season, five of the final seven weeks showed a higher proportion within the SQQ range, possibly as lowground supplies tightened more significantly than a year earlier, leaving the lighter hill lambs on the market.

**Pigs**
Scottish abattoirs slaughtered 301,350 clean pigs during 2015. This was up 2% on the previous year and represented a three-year high.

There continued to be little interest in slaughtering sows in Scotland as fewer than 1,700 sows and boars were slaughtered at Scottish abattoirs in 2015. This was down 19% from 2014 and marked a 4-year low. The majority of Scottish sows were slaughtered in English abattoirs.

The Scottish Government estimates that 12,000 Scottish sows will have been slaughtered during 2015. This suggests that 10,300 were slaughtered south of the border in 2015.

For a second consecutive year, pig producers took advantage of lower feed costs and increased feed availability by increasing carcase weights. Although this will have provided a partial shield against lower per-kilo prices, by adding to the volume of pigmeat on the market, heavier weights will have placed downwards pressure on farmgate prices.

After a strong start to the year, carcase weights started to fall back from July onwards, before exceeding year-earlier levels again in December.

A 0.5% increase in the annual average carcase weight turned a 2% increase in slaughter numbers into a 2.5% increase in prime pigmeat production at Scottish abattoirs. After accounting for a decline in sow meat, total pigmeat production volumes at Scottish abattoirs rose by just over 2% to 24,700t in 2015.
Scottish Red Meat Abattoir Sector

Twenty-four licensed red meat abattoirs operated in Scotland during 2015 and submitted levy returns to QMS – one more than in 2014. Of this total, 20 sites processed cattle, 19 processed sheep (18 in 2014), and 15 processed pigs. During the year, some 2,104m animals were processed by Scottish abattoirs, down 1.5% from 2014. This produced an estimated 221,550t of red meat, down only 0.1% on 2014 due to heavier carcases.

Scottish Abattoir Output

<table>
<thead>
<tr>
<th></th>
<th>Number of animals</th>
<th>Volume of meat (t)</th>
<th>Estimated value (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
<td>2014</td>
</tr>
<tr>
<td><strong>Cattle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>468,880</td>
<td>459,300</td>
<td>169,750</td>
</tr>
<tr>
<td></td>
<td>675</td>
<td>665</td>
<td></td>
</tr>
<tr>
<td><strong>Sheep</strong></td>
<td>1,370,410</td>
<td>1,341,520</td>
<td>27,890</td>
</tr>
<tr>
<td></td>
<td>149</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td><strong>Pigs</strong></td>
<td>297,730</td>
<td>303,040</td>
<td>24,220</td>
</tr>
<tr>
<td></td>
<td>24.5</td>
<td>23.5</td>
<td></td>
</tr>
<tr>
<td><strong>Skins &amp; hides</strong></td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Sources: QMS Processor Survey; Scottish Government

It is estimated that the total turnover of the primary processing sector during 2015 was £854.5m. Compared to the previous year, this was a decline of £29m, or 3%. However, employment is estimated to have been relatively steady in 2015 at approximately 2,700.

The combination of lower cattle throughput and slightly cheaper wholesale prices in 2015 is estimated to have led to a small decrease in abattoir sales revenues from beef of around 1.5% year-on-year to £665m, reversing the previous year’s increase.

Wholesale sheepmeat prices are estimated to have fallen significantly in 2015. Add to this a lower throughput at Scottish abattoirs, and turnover from sheepmeat processing is estimated to have decreased by 9% to £136m.

The lower price of pigmeat in 2015 is expected to have led to a reduction in processor sales revenues despite an increase in production volumes. Turnover was also reduced by an increase in the share of slaughtering at contract-kill abattoirs, a share which was already relatively high.

Sales of skins and hides were worth an estimated £30m to Scottish red meat processors in 2015. This was a significant annual decrease of around 13.5%, linked to a fall in slaughter numbers and to the fact that lower cattle hide prices more than offset higher sheepskin values.

Scottish Abattoir Sector Scale

<table>
<thead>
<tr>
<th></th>
<th>Cattle</th>
<th>Sheep</th>
<th>Pigs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abattoirs killing stock</td>
<td>20</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Proportion of kill in 5 largest abattoirs (%)</td>
<td>71.5</td>
<td>88.7</td>
<td>93.3</td>
</tr>
<tr>
<td>Proportion of kill in 10 smallest abattoirs (%)</td>
<td>4.1</td>
<td>2.2</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Source: QMS levy returns

The cattle processing sector is more evenly spread in terms of capacity than the sheep or pig sectors. There are a number of medium-sized plants working with cattle, whereas sheep and pig processors tend to be either very small or very large.

During 2015, the five largest cattle processing abattoirs saw their share of production stabilise, but it rose by around one percentage point for the five largest sheep plants and by half a percentage point for pigs.

Having increased in 2014, the share of the kill in the 10 smallest abattoirs fell across each of the three sectors – by around 0.5 percentage points in cattle and pigs, and by double this in sheep.

Distribution of Scottish Red Meat Sales in 2015 (at first point of sale)

<table>
<thead>
<tr>
<th></th>
<th>Scotland</th>
<th>Rest of UK</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (£m)</td>
<td>% by value</td>
<td>Value (£m)</td>
</tr>
<tr>
<td><strong>Beef</strong></td>
<td>152.5</td>
<td>23</td>
<td>470.5</td>
</tr>
<tr>
<td><strong>Sheepmeat</strong></td>
<td>17</td>
<td>12.5</td>
<td>84.5</td>
</tr>
<tr>
<td><strong>Pigmeat</strong></td>
<td>15.5</td>
<td>66</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Total red meat</strong></td>
<td>185</td>
<td>22.5</td>
<td>562.5</td>
</tr>
</tbody>
</table>

Source: QMS Processor Survey
England and Wales remained the largest market for Scottish processors in 2015, and it is estimated that more than two-thirds of all revenues were generated there. During 2015 there was a small rebalancing of total red meat sales away from Scotland to the EU.

The Scottish processing sector continued to send less of its produce overseas than the UK as a whole. Higher beef producer prices and a lower scale of production in Scotland than in the rest of the UK make it harder for Scottish processors to compete in price-sensitive export markets. This means that Scottish beef exports tend to be of higher value product, and survey results indicate that 2015 was a successful year. However, sheepmeat exports tend to be price sensitive and a stronger sterling against the euro made it harder to compete on the continent in 2015. Pigmeat exports are estimated to have remained at a negligible level.

Fifth-quarter products continued to play an important part for cattle and sheep processors, helping them to achieve better carcase balance. Fifth-quarter products are much more likely to be sold to independent retailers, food manufacturers and the foodservice sector than into the multiple retailers. They also make up a significant proportion of exports.

Multiple retailers continued their domination of the sales profile of Scottish red meat processors.

The higher proportion of sheepmeat sold to multiple retailers reflects the customer base of the small number of large plants killing sheep in Scotland. It may also reflect survey response levels.

Beef sales rebalanced back towards the multiple retailers in 2015. There was also a small lift in sales to independent retailers but a significant fall in the value derived from sales to retail wholesalers.

By contrast, sales of sheepmeat rebalanced away from multiple retailers, with retail wholesale customers accounting for an increased share of processor output in 2015.

<table>
<thead>
<tr>
<th>Distribution of Red Meat Sales by Market Outlet in 2015 (based on a sample of processors)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beef</strong></td>
</tr>
<tr>
<td><strong>Multiple retailers</strong></td>
</tr>
<tr>
<td><strong>Independent retailers</strong></td>
</tr>
<tr>
<td><strong>Retail wholesalers</strong></td>
</tr>
<tr>
<td><strong>Food manufacturers</strong></td>
</tr>
<tr>
<td><strong>Food service &amp; catering suppliers</strong></td>
</tr>
</tbody>
</table>

Source: QMS Processor Survey

Overseas Sales of Red Meat in 2015

During 2015, Scotland is estimated to have sold £76.5m of red meat to customers outside the UK; a 4% increase from 2014. Beef sales are estimated to have risen strongly, whereas exchange rate movements meant that lamb exporters faced significant headwinds. The value of exports made up around 9.5% of the processing sector’s total red meat sales during 2015. This was up slightly on the previous two years.

France maintained its position as the principal destination for overseas sales of Scottish red meat, accounting for 49% of sales revenues. This was fractionally lower on the year, as exports to France grew more slowly than the total. It is estimated that France bought around 35% of the beef exported by Scottish processors and 80% of the lamb. Fifth-quarter products have also traditionally sold well in France.

Belgium, the Netherlands and Luxembourg (Benelux) are also important markets for the Scottish industry, accounting for more than a quarter of 2015 sales. Beef shipments to Benelux rose strongly. The Italian economy began to show signs of recovery in 2015 and this may have underpinned Scotch Beef sales. As a consequence, an estimated 11.5% of total sales were made to Italian customers, up from 11% in 2014. Elsewhere in Europe, sales to the Nordic countries and Switzerland picked up, but trade with Germany and Iberia decreased. Further afield, sales to Hong Kong and Africa grew.

A key function of exports is to help Scottish processors balance the carcase by selling certain products overseas which they may not be able to sell easily in the home market. In particular, sales to Iberia, Belgium and Africa acted as a destination for lower-value beef, while France and Hong Kong acted as lower-value markets for sheepmeat. At the premium end of the value scale, Denmark, Sweden and Germany are estimated to have been the highest-value beef export markets while Sweden, Holland and Switzerland offered the highest prices for sheepmeat exports.
### General Economic Factors

#### Consumer Prices Index (CPI)

2015 was characterised by little inflationary pressure. Indeed, the general level of inflation averaged zero for the year as a whole and three months showed negative rates of inflation (deflation). Despite a growing economy, strong competition within industry sectors placed downwards pressure on consumer prices. In addition, falling commodity prices and a strong sterling exchange rate placed downwards pressure on the inflation rate.

Having risen at a faster pace than headline CPI in six out of the seven years to 2013, 2015 was the second successive year to see food prices decline. The lasting impact of two consecutive strong global harvests of arable crops, plus the expectation, and then the reality, of a third strong harvest maintained the pressure on farmgate prices, leading to lower retail prices across the food basket. Other factors lowering the cost of food included a stronger sterling, which made imports look competitively priced and profitable exporting harder, and heavy competition amongst UK retailers.

The downwards trend in food prices observed in 2014 continued throughout 2015. As a consequence, food price deflation was relatively stable at -2 to -3%.

Eight of the nine categories in the CPI food basket had a lower rate of inflation in 2015 than in 2014. All nine categories showed deflation.

Two food categories – fruit and sugary treats – showed only marginal rates of deflation in 2015. However, the remaining seven categories reported declines of 3–4.5%. The average fall in meat prices of just over 3% was initially driven by an imbalance between supply and demand plus exchange rate pressures. Intensified retail competition then meant that lower farmgate prices passed through the chain. Dairy prices faced similar headwinds.
**Exchange Rate Movements**

2015 was the second consecutive year to see a stronger sterling against the euro than a year earlier. On average, the euro bought 72.5p during 2015, compared with 80.5p in 2014 and nearly 85p in 2013. This meant that the pound averaged around 11% stronger than in 2014 and was up 17% on 2013 levels.

The year-on-year change in the sterling-to-euro exchange rate opened 2015 at around 7%, before widening to 13% in March after the European Central Bank expanded its monthly programme of asset purchases. It then eased to 10–11% between May and August, as sterling steadied at a time it had been rising in 2014. In September and October, the year-on-year differential then narrowed to around 7% as the prospects of a UK interest rate increase were pushed back after a weakening in economic indicators. November saw this reverse as financial markets expected a further loosening of monetary policy in the euro area, before it narrowed again to 8% in December as these expectations were dampened.

The stronger sterling against the euro made it difficult for UK exporters. To remain competitive on their euro price, a stronger sterling would mean having to accept a significantly lower return on each sale in sterling terms. As a consequence, export margins are likely to have tightened.

The other challenge of a stronger sterling comes from the import side. A stronger sterling means that it is cheaper to import meat from the continent, placing downwards pressure on prices in markets where price sensitivity is highest – most likely in the manufacturing trade. If export margins are tighter while prices fall in the manufacturing trade then the likely result is lower revenues on each carcase. This, in turn, makes it harder for processors to pay higher prices for livestock.

Having averaged around 50p in 2014, the New Zealand dollar (NZD) was worth an average of 46p during 2015. As a consequence of this 9% strengthening in sterling, downwards pressure will have been placed on the price of lamb imported from New Zealand.
Price Movements

Producer Prices

Cattle

2015 was the second consecutive year in which average farmgate prices for prime cattle fell back. At 362p/kg dwt in 2015, the annual average steer price was 2% below its 2014 level of 369p/kg dwt. Prices averaged lower than in the previous year despite prime cattle supplies also sliding.

During the first half of 2015, the main driver of the price was weak demand for lean manufacturing beef; in part this was down to the strength of the sterling exchange rate making it harder to compete in price-sensitive markets both at home and on the continent. The beginning of summer saw this situation reverse as processor chills cleared and slow grass growth led to a tightening of supply. However, by the end of the year, the previous imbalance reasserted itself as processors went into the festive period well supplied relative to expectations for demand.

Another factor placing downwards pressure on average prices will have been an increase in the proportion of prime cattle facing pricing penalties for carcase weights exceeding the level required to meet the product specifications of the multiple retailers.

Deadweight prime cattle prices averaged 6% higher in Scotland than they did in England and Wales in 2015. This was down slightly from 2014, but remained above 2013 levels.

At 240.5p/kg dwt, the average culled cow price at Scottish abattoirs was 0.5% above its 2014 level. Scottish abattoirs paid an average of 15% more for culled cows than their counterparts in England and Wales. In 2014, this premium had been a significantly smaller 11.5%.

The average price paid for a steer carcase in 2015 was £1,416.50, down marginally from £1,417.80 in 2014. For a cow, the average carcase price fell to £832.80 in 2015 from £841.50 in the previous year.

1 Real prices: Where inflation is greater than zero, the price that the producer receives is lower in real terms than the market (nominal) price. This is because the sales proceeds have less purchasing power in the wider economy due to the rise in the general level of prices. For example, a sales price of 350p/kg in period 2 would be equivalent to a price of 343p/kg in period 1 if the rate of inflation was 2%; with inflation at 4%, a price of 350p/kg in period 2 would be equivalent to just 336.5p/kg in period 1. The inflation rate used is the RPIJ – a measure of retail price inflation published by the ONS.
Sheep

Prime sheep producer prices followed a less traditional seasonal pattern in 2015. Prices rose more slowly than usual in the run-up to Easter and the new season peak was not as pronounced as in the past. The latter was, in part, down to a longer tail of hoggs leading to a slower transition to new season lambs by some retailers. As new season lambs began to reach the market in more significant quantities in June and July, prices fell sharply. However, the market was more stable than usual from late July to October. As demand firmed in advance of the festive season, prices then rose steadily during the final two months of the year.

The influence of festivals on the lamb trade was once again in evidence during 2015. With lamb a prominent ingredient of meals at Easter across Europe, prime sheep prices built on firmer demand from both the home and overseas markets. Then in June and July, prices were influenced by the Islamic festival of Ramadan. Indeed, since both Ramadan and the seasonal price decline occurred two weeks earlier than in 2014, it appears that the timing of the festival had underpinned prices for slightly longer in 2014 (this was also the case in 2013). In late September, a further Islamic festival – Eid al-Adha – saw lamb prices increase despite a significant rise in marketings. Ahead of Christmas and New Year, there was yet more evidence of firmer demand for lamb, with prices rising steadily from late October. The annual peak in exports to southern Europe will also have helped underpin the market in late 2015.

Producer prices spent much of the year trailing 2014 levels. As a consequence, the annual average price for an SQQ lamb (weighing 25.5 to 45.5kg lwt) at Scottish auctions was down by nearly 9% at 167.5p/kg lwt. The annual average price at GB-price reporting abattoirs was also down by 9% on 2014, at 375p/kg dwt. One of the main reasons keeping prices below 2014 levels was a rise in the value of sterling against the euro, which made it less profitable to export. For a third year, Scottish prime sheep auction prices averaged 1% below the England and Wales average.

At Scottish auctions, the annual average cull ewe price was £60.78/head in 2015. This was 4% higher than in the previous year. In Scotland, ewe prices averaged 7.5% below the levels of auctions in England and Wales. This was greater than the 4% differential in 2013.

When adjusted for an annual retail price inflation rate of 1%, real terms producer prices fell by just over 9% during 2015. This left them at their lowest real terms level for seven years.
Pigs

Prime pig producer prices followed their historic seasonal pattern during the first half of 2015, slipping back amidst the weak demand environment early in the year. The declines then slowed through the spring as slaughter numbers and carcase weights cooled, before rising slightly into the summer. However, in the second half of the year, prices fell steadily as supplies picked up and consumer demand remained weak.

The pig market was pressurised by an imbalance between supply and demand throughout much of 2015, bearing down heavily on producer prices. Rising production, helped by increasing productivity, and a decline in consumer demand were the main contributing factors. However, the general strength of supply across the EU will have had some influence, as this made imports cheap and forced UK prices down in order to remain competitive. These pressures were added to the strength of sterling against the euro which made it cheaper to import pigmeat and less profitable to export.

In April 2014, a new pig price, the SPP, was introduced to assuage industry concerns that the DAPP was failing to reflect true market conditions due to its inclusion of premia for specific traits. The SPP reports prices on a 'standard' basis, making it harder to compare with earlier years the average farmgate prices from September 2014 (when the DAPP was reported for the last time) onwards.

Producer prices averaged an estimated 17% lower than a year earlier in 2014, both in nominal and real terms.
Farm Assurance Premium at Scottish Auctions

Although individual sales may differ, there is a general pattern throughout the year in which the prices paid at Scottish auctions for Scotch Farm Assured cattle and sheep will be higher than for Non-Farm Assured stock. Each year, the premium for cattle tends to be larger than for sheep, averaging around 15% and 5%, respectively. In 2015, the average premium for cattle narrowed slightly to 15%, but for sheep, it widened from less than 5% in 2014 to over 6% in 2015.

### Farm Assurance Premium for Prime Cattle at Scottish Auctions

<table>
<thead>
<tr>
<th></th>
<th>Scotch Farm Assured Avg selling price p/kg lwt</th>
<th>Non-Farm Assured Avg selling price p/kg lwt</th>
<th>FA premium (p/kg lwt)</th>
<th>FA premium (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>224.0</td>
<td>198.0</td>
<td>26.0p</td>
<td>13.1%</td>
</tr>
<tr>
<td>2014</td>
<td>201.0</td>
<td>172.3</td>
<td>28.7p</td>
<td>16.6%</td>
</tr>
<tr>
<td>2015</td>
<td>200.3</td>
<td>174.1</td>
<td>26.2p</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Source: AHDB/IAAS

### Farm Assurance Premium for Prime Sheep at Scottish Auctions

<table>
<thead>
<tr>
<th></th>
<th>Scotch Farm Assured Avg selling price p/kg lwt</th>
<th>Non-Farm Assured Avg selling price p/kg lwt</th>
<th>FA premium (p/kg lwt)</th>
<th>FA premium (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>181.8</td>
<td>177.6</td>
<td>4.3</td>
<td>2.4%</td>
</tr>
<tr>
<td>2014</td>
<td>184.9</td>
<td>176.6</td>
<td>8.4</td>
<td>4.7%</td>
</tr>
<tr>
<td>2015</td>
<td>168.1</td>
<td>158.3</td>
<td>9.8</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

Source: AHDB/IAAS
Store Prices

Cattle

Store cattle prices followed a traditional pattern in 2015, peaking in the key selling periods of the spring and autumn, before dipping back in the summer and winter when demand is weaker. However, the summer downturn and autumn lift were not as pronounced as in recent years.

Store cattle prices made a strong start to 2015 and exceeded 2014 levels throughout much of the first half of the year. However, the difference was only marginal from March and April when prices for finished cattle were declining sharply. However, with prices for finished cattle trailing 2014 levels, the store trade appears to have rebalanced in the second half of 2015, running behind year earlier levels from September onwards.

In the year as a whole, the average selling price for store steers was little different from 2014, with the younger category up 0.5% but 12–18 month steers trading for 0.3% lower. The number of store cattle sold at Scottish auctions increased from 2014 levels. Indeed the total for the 6–12 month category of steers exceeded its year earlier level by 4.5%, while numbers in the 12–18 month group rose by 1.5%.

Sheep

Store lamb prices were more stable in the autumn of 2015 than in the previous year. As a consequence, the year-on-year price differential widened as the season progressed, slipping to a deficit of more than 10% in November and closer to 20% in December.

The average Blackface store lamb sold for nearly £37.50/head in 2015; down 6% from the 2014 average of nearly £40. Prices fell back despite a similar fall in marketings, indicating weak demand from finishers.
Producer Input Costs

2015 was the second consecutive year in which input costs for farmers fell significantly and left them at their lowest level since 2010. This was primarily down to well-supplied global markets for arable crops and oil.

Energy costs fell sharply during the first quarter of 2015, with the lagged impact of a falling oil price in late 2014 passing through to energy markets and lowering the cost of diesel, electricity and heating fuel. Further oil price declines then led on to another energy price slump in the summer. The energy cost category is reported to have risen towards the year-end, despite its constituent indicators continuing to decline.

Following a more stable 2014, the downwards trend of the second half of 2011 to the end of 2013 reasserted itself in the fertiliser market. This pressure has been linked to strong global inventory levels for nitrogen, phosphate and potash.

After a steady start to 2015, expectations of a third consecutive strong global arable harvest returned feed costs to a downwards trend in the second quarter of the year. Once the successful harvest materialised, prices fell further through the third quarter, before stabilising towards the year-end as some dry weather in the US and the Black Sea region led to caution over winter wheat plantings.

During a year of lower producer prices for many livestock producers, falling input costs are likely to have eased the pressure on margins.
Retail Prices

The Retail Prices Index (RPI) breaks food prices down into more detailed categories than the Consumer Prices Index (CPI). Within the RPI food basket, only lamb and processed fruit were significantly more expensive than in 2014, with marginal price increases for beef, milk products, biscuits and cakes. A well supplied global market for arable crops, a stronger sterling and increased domestic meat production placed downwards pressure on food prices.

The stable trend in the average retail price of beef that had commenced in the final third of 2013 continued through 2015. Reflecting this stability, the annual average retail price was fractionally higher than in 2014. With producer prices spending much of 2015 below 2014 levels, relatively flat retail prices may have given processors and retailers an opportunity to recover some of the margin lost between mid-2010 and mid-2013 when producer prices had risen sharply.

Lamb retail prices continued to fluctuate from month-to-month in 2015. After a sluggish start to the year, retail prices firmed to their annual peak in the second quarter before slipping back a little in the third quarter. They then dropped to their annual low-point in the final quarter, helping to underpin consumption. Prices for both home-killed and imported lamb showed a similar inverted-U trend during 2015 and averaged 1.5–2% higher than in 2014.

As with lamb, the average retail price for pork showed regular fluctuations in 2015, suggesting significant use of price promotions. Looking through this volatility, prices generally trended lower and averaged 2–3% below 2014 levels in most months. It was a similar case for bacon, although the declines were slightly stronger than for pork. Falling prices reflected the perfect storm: a well-supplied market coupled with weak consumer demand.
Consumption and Use

Product Available for Consumption
The total volume of beef available for consumption in the UK rose by 26,500t, or 2.5%, in 2015 to reach 1.09m tonnes – an eight year high. This was the result of a small increase in domestic production (3,000t) plus a rise in imports (15,000t) and decline in exports (7,900t). Imported beef accounted for 31.5% of total supply, up from just over 30.5% in 2014. Meanwhile, exports fell from 15.5% to 14.5% of production.

The total volume of sheepmeat available for consumption surged by 29,300t (nearly 10%) in 2015 to reach a 6-year high of 331,500t. As with beef, domestic production edged higher (1,100t), while imports increased by 2,800t and exports contracted by 24,400t. Imported sheepmeat accounted for less than 35% of annual supplies compared with 37% in 2014.

In 2015, the total volume of pigmeat available for consumption grew by 2.5% to reach 1.38m tonnes, its highest level since 2007. A 4.5% increase in domestic production (which reached a 15-year peak) accounted for all 36,700t of the rise in total supplies as higher exports fully offset a small increase in import volumes. Imports accounted for 53.5% of total supply, down a percentage point from 2014, while the proportion of domestic production exported slipped slightly to just under 25.5%.

The total volume of red meat available for consumption increased by 3.5% in 2015 to 2.8m tonnes, its highest level since 2007. With poultry supply rising even faster (by 7%), this meant that red meat took a smaller share of total meat supply, slipping back to equal its 2013 level of 59%. Total meat supplies increased by 5% to 4.75m tonnes, the highest on record.

Retail Consumption
Kantar Worldpanel estimates that the volume of prime beef cuts (e.g. steaks, roasts and mince) sold by multiple and independent retailers to UK households in the 52 weeks to January 3 2016 totalled 291,200t. This was down by 0.5% year-on-year. In Scotland, consumption fell by 3% to 28,000t. Given that total UK beef supplies rose by 2.5%, lower retail sales indicates that unless volumes used in food manufacturing and foodservice increased significantly, then product built up in cold stores.

Kantar Worldpanel figures indicate that UK lamb consumption fell by 0.1% on a year earlier to 80,700t during the 52 weeks to January 3 2016. However, Scottish consumption volumes fell by 1% to 4,100t. As with beef, lower consumption contrasts with higher sheepmeat supply, suggesting increased use in food manufacturing and/or a greater carryover of product into 2016.

The volume of pork retailed in GB is estimated to have fallen by a considerable 5.5% year-on-year to 167,700t in the 52 weeks to January 3 2016. North of the border, consumption is estimated to have fallen even more significantly, down 8.5% at 11,400t. Again, lower retail consumption indicates that product will have built up in cold stores unless the food manufacturing and food service trades increased their use of pigmeat. After adding in an estimate for pork sales in Northern Ireland, UK retail sales fell by 3% from the previous year to 172,400t.

It should be noted that according to Kantar Worldpanel, bacon sales in the UK are generally higher than those of pork. If this is factored in, retail sales of pigmeat could be around 30% of total pigmeat supply.

In the UK, the total volume of meat available for consumption per head of population is estimated to have risen by 3kg in 2015 as meat supply growth outpaced the population increase. In Scotland, the estimated increase was 2.2kg.
Per capita supply is estimated to have risen across the board with beef seeing the smallest proportionate increase and sheepmeat the largest. In Scotland, evidence from Kantar Worldpanel data and Defra’s annual Household Food Survey indicates that beef consumption per person is higher than in the rest of Britain, whereas it is lower for lamb and pork. However, for pigmeat the shortfall is much smaller once bacon and ham consumption has been accounted for.

**Self-sufficiency**

It is estimated that Scottish abattoir beef and sheepmeat production exceeded the volume of beef and sheepmeat available for consumption in Scotland by a considerable extent during 2015, whereas net imports of pigmeat were required to satisfy consumer demand. While abattoir beef production was estimated at 162% of potential consumption and sheepmeat production at 164%, pigmeat was estimated to have covered less than 23% of national supply.

At 81%, UK beef production was slightly lower as a share of estimated supplies during 2015 than in the previous year. Meanwhile, sheepmeat production fell sharply to 90%. By contrast, pigmeat production increased to 65% of potential consumption.

During 2015, Scottish self-sufficiency is estimated to have edged higher for beef, held steady for pigmeat, but fallen for sheepmeat. Beef edged higher as estimated consumption fell by more than production while increased pigmeat production was offset by a change in trade balance. However, the decline for sheepmeat was linked to a fall in sheepmeat production at Scottish abattoirs coupled with a change in the trade balance.
UK Overseas Trade

Details of imports and exports of red meat into and out of Scotland are unavailable separately from UK figures. Consequently, this section summarises trade data for the UK as a whole and reflects the trade environment in which Scottish producers and processors operate.

Total red meat imports decreased by 3.5% to 927,500t in 2015. As well as rising domestic production of beef, sheepmeat and pigmeat, this reflects a considerable fall in red meat exports – of 9.5% to 378,000t – as this left a greater share of domestic production on the home market.

Imports

Beef

Beef imports to the UK fell by 2.5% in 2015 to 249,000t. 5,800 fewer tonnes of beef were imported, with a sharp decline in the final quarter more than offsetting earlier increases.

Imports of fresh and frozen beef accounted for 31.5% of the total volume of beef available for consumption in the UK during 2015. This was up by around one percentage point on a year earlier.

Closer examination of the figures shows that whereas fresh imports actually rose fractionally to 187,700t, frozen beef shipments fell by 9% to 61,300t.

Deliveries from Ireland decreased by 5% year-on-year to 170,050t. Of this total, 134,300t (79%) was fresh beef, with frozen shipments totalling 35,750t. Ireland’s share of the UK’s beef imports slipped back in 2015, accounting for 68% of the total compared with 70% in the previous year.

Most other EU nations delivered more beef to the UK in 2015 than they had in the previous year. In particular, shipments from Poland rose by more than 50% to reach 12,800t. Imports from Holland, Germany, Spain and Italy also increased, but France was the main exception.
Sheepmeat

UK sheepmeat imports fell by around 1.5% in 2015, down to 91,400t. Increased domestic production for most of the year and a sharp decline in exports meant that the home market was well supplied, lowering import requirements.

Imported fresh and frozen sheepmeat accounted for 35% of the sheepmeat available for consumption in the UK during 2015. This was down by two percentage points on 2014.

Spring is the peak importing period for the UK as domestic product is less readily available and consumers like to buy leg roasts. Kantar Worldpanel data indicates that retail consumption of leg roasts in the four weeks to April 26 2015 totalled 5,300t. If a leg roast weighs an average of 2kg, this works out at a requirement of 1.325m prime sheep. Similarly, at Christmas, 4,800t of leg roasts were retailed in the 4 weeks to January 3 2016, requiring 1.2m lambs. In a four-week period during spring, UK abattoirs slaughter around 900,000 prime sheep, pushing up to perhaps 1.1m in December. With domestic supply unable to meet demand, imports are required.

Sheepmeat imports arrived earlier than in 2014, a reflection of Easter moving forward by two weeks. This was a contributing factor behind increased import volumes in February and March, but a subsequent decrease in April.

New Zealand (NZ) increased its dominance of UK sheepmeat imports in 2015. Annual volumes rose by 5.5% to 68,600t, meaning that it accounted for three-quarters of UK imports, up from 70% in 2014.

In contrast to NZ, Australia shipped 2.5% less sheepmeat to the UK than in the previous year. Deliveries totalled 14,000t and were one of the highest totals on record. For a second consecutive year, imports from Australia covered 15% of the UK total. It should be noted that deliveries from Australia are heavily restricted by an annual quota of approximately 19,200t for tariff-free access to the EU market.

Imports of sheepmeat to the UK from Ireland contracted by a third in 2015 to 4,200t. There were also sharp declines in trade with Spain and France.
Pigmeat
UK pigmeat import volumes fell back during 2015, despite the increased availability of cheaper pork for import from the EU. The total volume imported was down 4.5% at 587,000t.

With pigmeat supplies on the UK market rising, imports fell back to 42.5% of the total – compared with more than 45.5% in 2014.

Breaking pigmeat imports into fresh and frozen pork and bacon and ham shows that deliveries of the former decreased by 3.5% to 345,850t while shipments of the latter were 6% higher at 241,150t. As a result, pork accounted for a slightly greater 59% share of total pigmeat imports.

Denmark gained market share in the UK during 2015, as its pork shipments rose by 4% to 93,200t. This led to a two percentage point increase in its share of UK imports to 27%. The only other major supplier to increase deliveries to the UK was Spain, up 4% to 28,200t and an 8% market share.

Imports from the second and third-largest suppliers of pork to the UK, Germany and Holland, declined by 13% and 2%, respectively, to totals of 64,800t and 54,800t. While this meant that Holland’s share of UK imports flat-lined, Germany’s share was down 2 percentage points at less than 19%.

Elsewhere, imports from Belgium were down marginally, but deliveries from the Irish Republic were a fifth lower.

During 2015, Denmark maintained its position as the principal supplier of bacon and ham to the UK. However, volumes contracted by 17% to 95,300t, meaning that Denmark accounted for 39.5% of imports compared with 45% in the previous year.

The second largest supplier, Holland, also delivered less bacon and ham to the UK than in 2014. Volumes fell by 5% to 83,700t, giving it a relatively unchanged market share of 34.5%. By contrast, imports from Germany rose by nearly a quarter to reach 43,850t. This was 18% of total shipments compared with 14% in 2014.
Exports

Beef
UK beef exports fell significantly in 2015. Volumes were 11.5% lower than in 2014 at 99,000t, a six-year low.

Exports as a share of UK beef production fell by around 1.5 percentage points in 2015 to just under 11.5%.

In contrast to the overall downwards trend in UK beef exports, sales to the Irish Republic rose by nearly 1% year-on-year to 36,600t. As a consequence, Ireland increased its position as the principal export destination for UK beef, taking 37% of the 2015 total compared with 32% in 2014. In addition to product destined for retail, this also reflects cross-border movements of beef between Northern Irish abattoirs and cutting plants in the Republic for further processing.

Of the other significant European markets, exports to France, Belgium, Italy and Germany declined, but UK exports to Holland picked up. Of the smaller EU buyers, there was some growth in shipments to Denmark and Sweden, but trade with Poland and Spain contracted.

Overall UK exports to EU member states fell by 12.5% to 91,000t. Despite a stronger sterling, the average value per tonne increased. This reflected a shift towards higher-value cuts, which are less sensitive to price movements.

UK beef exports to non-EU countries showed a marginal decline in 2015, edging down to 8,050t. This pushed up the share of non-EU shipments to 8% from 7% in 2014.

Exports to Hong Kong nearly halved to 2,650t in 2015. Elsewhere, shipments to the high-value Swiss market increased and the Philippines became an important market for low-value products.
**Sheepmeat**

UK sheepmeat exports fell by 23% in 2015 to 78,900t, their lowest since the FMD-related disruptions of 2007. This meant that export volumes accounted for 25.5% of sheepmeat production in 2015, down considerably from just over one-third in 2014.

One of the main reasons driving UK exports lower was the rise in the value of sterling against the euro. This made it harder for UK exporters to compete on price. As a result, UK shipments to the EU fell by 13.5% to 74,900t.

The overall average price of UK sheepmeat exports to the EU fell back by 4% to around £3,850/t. However, there was some variation, with prices for carcases and half-carcases down 8–9%, while the average value of bone-in cuts rose by 6% thus indicating a lower degree of price sensitivity. Meanwhile, the average export price of boneless cuts edged higher.

The largest export market for UK sheepmeat is France. Sales fell by 16% in volume terms to 42,500t in 2015. This was equal to 54% of total shipments, up from just under half in 2014.

Elsewhere in the EU, trade with Belgium, Italy and Ireland was down by around 15%, while there was a smaller 2% contraction in sales to Germany. By contrast, exports to Holland rose by 3%. Of the smaller markets, Spain, Denmark and Austria all reported declines, but there was some growth into Sweden and Portugal.

UK exports to non-EU markets fell sharply in 2015, down by three-quarters to 4,100t. This meant that the share of non-EU markets in total sheepmeat exports fell by 10 percentage points to 5% in 2015.

Carcase balance is improved by selling higher-value sheepmeat cuts to the wealthy European (but non-EU members) countries of Norway and Switzerland. Whereas exports to Norway fell sharply for a second year to 600t, sales to Swiss buyers rose by 46% to 350t.

The declines in exports of low-value cuts to Hong Kong seen in the final four months of 2014 continued into 2015. Shipments fell from 11,400t in 2014 to just 1,850t in 2015. Exports to Ghana were also lower, down 10% at less than 640t.
Pigmeat

UK pigmeat exports increased by 2% in 2015 to 199,600t. With UK pigmeat production volumes rising by more, the share of exports in pigmeat production fell by around half a percentage point to 23%.

Exports of fresh and frozen pork rose by 2% in 2015 to 185,200t. Meanwhile, bacon and ham shipments, which are mostly to the Irish Republic, rose 4% to 14,400t but accounted for an unchanged 7% share of total pigmeat exports.

UK exporters managed to grow shipments of pork to EU member states slightly in 2015, up 1% at 128,200t. This equalled 69% of total pork exports. The majority of shipments were delivered to four nations: Germany, Ireland, Denmark and Holland. Each accounted for between 10 and 17% of pork exports.

Pork export prices had to fall significantly in 2015 in order to remain competitive in price-sensitive markets due to the rise in value of sterling and lower EU pig prices. The average value per tonne shipped to the EU decreased by 14% to approximately £1,060.

There was a 5% expansion in UK exports to non-EU countries in 2015, with volumes reaching 56,950t. This was despite sales to China and Hong Kong falling by 2.5% to a combined total of 38,300t. This was 24% of total UK pork exports and just over two-thirds of shipments outside the EU. Of the smaller markets, there were significant increases in trade with the US, South Africa and Cote d’Ivoire. Sales to most Asian markets disappointed, including Japan, the Philippines and Korea.

The 4% increase in UK exports of bacon and ham was driven by trade with Ireland. Ireland purchased 13.5% more bacon and ham from the UK than in 2014 and increased its share of exports to 76.5% from 72.5% in 2014. Of the smaller markets, Spain contracted slightly but some significant inroads were made into France.
References

Defra (2016a) - Agriculture in the United Kingdom 2015.  

Defra (2016b) – Agricultural price indices.  

Defra (2016c) – UK home-fed meat production, trade and supplies – quarterly dataset.  


FRED (2016) – Federal Reserve Bank of St Louis - Economic Data  
https://research.stlouisfed.org/fred2/

HM Revenue and Customs (2016) – UK trade data.  
https://www.uktradeinfo.com/Statistics/BuildYourOwnTables/Pages/Home.aspx

OANDA (2016) - Historical Exchange Rates.  
http://www.oanda.com/currency/historical-rates

http://www.ons.gov.uk/economy/inflationandpriceindices/datasets/consumerpriceinflation


