How important are cull sows to GB pig production costs?

Key Stats

- Sow prices are at risk under a no-deal Brexit, as most are exported as carcases to the EU. In the event of a no deal the UK would become a 'third country' and WTO tariffs would apply to imports and exports. This would devalue cull sows.
- A TRQ is available that reduces the WTO tariff rate, but this could not cover all trade
- For an average* 250 sow farrow to finish farm, income from cull sow sales ranged between £8,000 and £17,000 per annum, over the past five years
- For the same farm, income from finished pigs ranged between £550,000 and £830,000 per annum over the period
- Finished pig production costs (on a full economic basis) ranged between £630,000 and £830,000, or 129-160p/kg.
- Income from cull sows offsets finished pig production costs by 2-3p/kg. In comparison, overall feed costs typically alter production costs by around 9p/kg a year, due to fluctuations in feed prices and feed conversion rates.
- While a devaluation in cull sows would be unwelcome, movements in finished pig prices, feed costs and changes to physical performance will continue to be more important for producer margins whatever the outcome of Brexit

Current situation

Most cull sows are currently exported as carcases to Germany for further processing, due to a lack of domestic demand and processing capacity. The tariff rate on pig carcase and half-carcase imports into the EU under WTO rules is **€53.6/100kg**.

There is a Tariff Rate Quota (TRQ) for imports of carcases and half carcases into the EU. This enables 15,076 tonnes of fresh, chilled or frozen product to enter at a reduced tariff rate of **€26.8/100kg**. The quota is **managed by the importers** on a first come, first served basis, with the allocation period running from July to June the following year. This quota has not been used for a number of years, so the full volume could theoretically be accessible to UK suppliers. The UK typically exports nearly 35,000 tonnes of carcases to the EU annually, so the quota could cover around 44% of the volume. To read more about pig meat TRQs, click here.

The average cost of production for a farrow to finish operation during Q4 last year was 156p/kg. This meant producers were estimated to be losing 8p/kg on a full cost basis at the time. This has likely worsened in more recent months due to falling finished pig prices. The All Pig Price (APP) has declined around 5p/kg since Q4, so **losses are likely to be over 10p/kg** unless performance has improved.

Potential implications for pig production costs

Full tariff

If we assume that the UK sow price is around **€69/100kg**, based on other EU cull sow prices and industry reports, the full tariff rate equates to nearly 80% of the current price level. If sow carcase exports to Europe are to continue, the additional tariff burden would probably be borne by the producer. In order to overcome the full tariff, this would mean average farmgate sow prices in the UK **reduce to around €15/100kg**, or 13p/kg at the current exchange rate (£1:€1.16).

This might seem dramatic, but revenue from cull sow sales actually has relatively little impact on profitability. If cull sow prices during Q4 last year were reduced to 13p/kg, the average finished pig production cost would have been 158p/kg, **around 2p/kg higher** (+1%). Looking over the past five years, adjusting farmgate sow prices to account for the full tariff rate typically **raises pig production costs by 1-2p/kg**. Producers can work out what a devaluation in sow prices would mean for their individual business using AHDB's cost of production calculators, here.

Reduced tariff

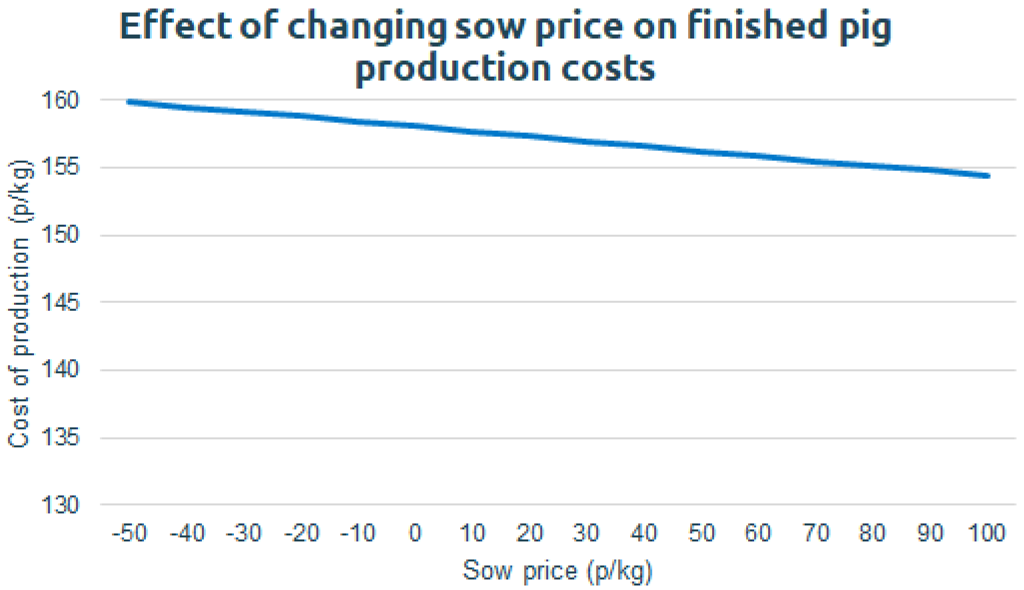
Of course, if UK processors can export under the available TRQ, this would somewhat protect the value of cull sows. The quota year runs from July-June, and as no allocations have been made so far this year, the full 15,076 tonnes would theoretically be available to use in April-June. Assuming UK sow exporters can export under this TRQ immediately after Brexit, there could initially be enough quota available for all sows to be exported at the lower tariff rate. This would mean sow prices might initially sustain at around **€42/100kg**, or 36p/kg, all other factors remaining equal**.**

From July though, there would only be 15,076 tonnes for the subsequent 12 months. Sow prices would be expected to drop again from this point. Assuming that 44% of sows could be exported at the reduced tariff rate, sow prices would average around **€22/100kg**, or 19p/kg, based on the current estimated sow price. However, the base market price will probably change before this point.

Looking over the past five years, adjusting farmgate sow prices to assume a mix of full and reduced tariff exports typically **adds around a penny** onto production costs.

Currency effect

It is also worth considering that under a no-deal Brexit scenario, the **pound is likely to fall** against the euro. This would mean that in sterling terms, the drop in sow prices needed to cover the tariff would not be quite as great. For example, if the pound reached parity with the euro, this would make GB sow prices around €10/100kg cheaper from an EU perspective. If this saving was passed on to producers, this could boost prices by around 7p/kg. However on the other hand, additional trade facilitation costs could place a little more downward pressure on domestic sow prices and cancel out this effect.



Source: AHDB, Agrosoft, Cost of production axis indicates range of production costs since 2014

No EU access

This analysis assumes that market access to the EU is still possible. However, the **UK is currently not an approved third country**, and, while preparations are in place to achieve the necessary certificates, it is not certain the UK will be approved before Brexit.

If the UK was not registered as a third country, there could be little or no market for sows, at least on a temporary basis. While producers would be expected to avoid culling sows at this time, depending on the duration of the disruption some producers could face additional costs. Based on current estimates for collection costs, this might add around 3p/kg onto finished pig production costs, compared to pre-Brexit levels. However, this is likely to vary geographically and there may also be costs associated with logistical difficulties under these circumstances.

Breeding units

Breeding units producing 7kg weaners would initially be most vulnerable to a weakening sow market, as proportionally more of their income comes from sow sales.

An average 250 sow breeding unit receives around £175,000 to £255,000 a year in income from selling 7kg weaners over the past five years, while income from sows is between £8,000 and £17,000 per annum.

A 7kg weaner pig cost approximately £35/head to produce in Q4 last year. Moving the sow price down to 13p/kg adds around £1.50 on to the cost of producing each weaner pig (+4%). Ultimately this additional cost would need to be passed along the supply chain, but initially breeders are likely to feel the brunt of any impact. However, previous analysis has indicated that on average the breeding stage has been more profitable, as it is less exposed to the feed price. Estimated production costs remained below the average 7kg weaner price in Q4, and prices haven't moved significantly since then. So, this stage may still be better placed to weather turbulence in the sow price than the finishing stage.

Overview

On the whole, while certainly not trivial, it seems reduced returns from cull sows post-Brexit should be taken in context. Movements in finished pig prices will be far more important, and with half of UK pig meat exports still destined for the EU, sow carcases aside, more pertinent questions are around balancing supply and demand for prime pork products.

*Based on average physical performance and costings figures, as used in the AHDB *cost of pig production model*